BACKCALCULATION OF UNBOUND GRANULAR LAYER MODULI

Executive Summary

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16. Abstract

The state of Michigan is geographically located within the wet-freeze zone identified by the American Association of States and Highway Transportation Officials (AASHTO). The frost depth in the State ranges from 2.5 feet near the Ohio and Indiana borders to about 5.0 feet in parts of the Upper Peninsula. To minimize the impact of freeze-thaw cycles on pavement performance, granular subbase (typically sand) and base (typically gravel) layers are conventionally used to provide protection to the roadbed soils from the detrimental effects of freezing and to minimize the stresses delivered to the roadbed soils. In general, the strengths of the granular layers are lower than that of the asphalt or concrete surface layer and, in most cases, higher than the strength of the roadbed soils. The most common and available aggregate types used by the Michigan Department of Transportation (MDOT) in pavement construction include natural gravel, limestone/dolomite, slag, and crushed concrete. In this study, the value of the resilient modulus of commonly used granular materials were backcalculated using two- and three-layer systems and Nondestructive Deflection Test (NDT) data obtained by MDOT. The backcalculated resilient modulus values of the unbound granular layers were subjected to various to determine the most appropriate values to be used in the pavement design process. This final report provides details of the analyses and the resulting outcomes.

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BACKCALCULATION OF UNBOUND GRANULAR LAYER MODULI

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Amendment to the Final Report

PAVEMENT SUBGRADE MR DESIGN VALUES FOR MICHIGAN'S SEASONAL CHANGES

Gilbert Baladi, Ph.D., P.E
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August, 2011

EXECUTIVE SUMMARY

The Michigan Department of Transportation (MDOT) is preparing for the implementation of the new Mechanistic-Empirical Pavement Design Guide (M-E PDG). The M-E PDG and the 1993 AASHTO Pavement Design Guide require as input the resilient modulus of the pavement materials (surface, the base and subbase granular layers) and the roadbed soils. The resilient modulus of granular materials can be determined using many methods including backcalculation using deflection data, laboratory cyclic load tests, and from correlations with California Bearing Ratio (CBR), Dynamic Cone Penetrometer (DCP) index etc. The M-E PDG design level 1 requires the determination of the resilient modulus values from either backcalculation or from laboratory tests. This study was designed to assist MDOT in the implementation of the M-E PDG and to improve the accuracy of the inputs to the existing 1993 AASHTO Design Guide.

In this study, deflection data measured using the Falling Weight Deflectometer (FWD) were used to backcalculate the modulus of the base and subbase layers. The FWD tests were conducted by MDOT and are distributed along all regions and various State (M) and US labeled Roads and along the Interstate system. The measured deflection data and all available information regarding the pavement layer thicknesses and aggregate base type were also provided to the research team by MDOT. Such information indicated that the most common material types used by MDOT include natural gravel, crushed concrete, and dolomite and the aggregate bases could be either open or dense graded depending on the project requirements. At some locations, the material and layer thickness information were not available, hence, the deflection data for those locations were not included in the analysis.

The deflection data were used to backcalculate the moduli of the various pavement layers and roadbed soils. The backcalculated modulus values were then compared to those provided in the M-E PDG and then subjected to statistical analyses to determine the most reliable value to be used in the pavement design process. The results are tabulated in this report.

Finally, based on the inputs of the MDOT project manager and several MDOT Engineers, an Amendment to the final report of a previous study titled “Pavement Subgrade MR Design Values for Michigan’s Seasonal Changes” was written and is included in this report.

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CHAPTER 1
INTRODUCTION

1.1 BACKGROUND

The state of Michigan is geographically located within the AASHTO identified wet-freeze zone where frost depth ranges from 2.5 feet near the Ohio and Indiana borders to about 5.0 feet in parts of the Upper Peninsula. To minimize the impact of freeze-thaw cycles on pavement performance, granular subbase (typically sand) and base (typically gravel) layers are conventionally used to provide protection to the roadbed soils from freezing and to minimize the stresses delivered to the roadbed soils. In general, the strengths of the granular layers are lower than that of the asphalt or concrete surface layer and, in most cases, higher than the strength of the roadbed soils.

The most common aggregate types used by the Michigan Department of Transportation (MDOT) in pavement construction include natural gravel, limestone/dolomite, slag, and crushed concrete. In most cases, the types of aggregate used in pavement construction are those available in the aggregate queries near the construction site. Further, MDOT specifies open or dense graded aggregate bases. The angularity of the aggregates varies from rounded (river gravel) to angular (crushed stones). Finally, the thickness of the granular layer is a function of the pavement type (flexible versus concrete) and varies from 9 to about 36 inches.

The value of resilient modulus of a given granular layer depends on the type, angularity and gradation of the aggregates used. In this study, the values of the resilient moduli of the granular layers throughout the State of Michigan were backcalculated using Nondestructive Deflection Test (NDT) data obtained by MDOT using the KUAB Falling Weight Deflectometer (FWD). The backcalculated resilient modulus values of the surface and granular layers and those of the roadbed soil were compared to:

1) The resilient modulus values of the roadbed soils that were backcalculated in a previous study to document the distribution of the design modulus of the roadbed soils throughout the State of Michigan.
2) The resilient modulus values of granular base and subbase materials obtained from laboratory tests that were conducted at Michigan Technological University (MTU).
3) Typical resilient modulus values reported by other State Highway Agencies and those recommended by the new AASHTO Mechanistic-Empirical Pavement Design Guide (M-E PDG).

1.2 PROBLEM STATEMENT

The new Mechanistic Empirical Pavement Design Guide (M-EPDG) developed under NCHRP Project 1-37A, as well as most existing pavement design methods such as the 1993 AASHTO Design Guide require the resilient moduli of the Hot Mix Asphalt (HMA), aggregate base and sand subbase layers, and the resilient modulus of the roadbed soils as the primary input parameters. Said moduli could be measured in the laboratory or backcalculated using Falling Weight Deflectometer (FWD) data (deflection data). Many highway agencies and engineers believe that laboratory testing for determining the resilient moduli is too complicated, unreliable,

and very expensive to perform on a routine basis. In many cases, pavement designers either simply assume resilient modulus values or use various predictive or empirical equations to estimate them. For over 30 years researchers and practitioners have been developing methods to predict the laboratory resilient modulus of subgrade soils based on:

- Correlations to soil strength parameters such as unconfined compressive strength, Dynamic Cone Penetrometer data, California Bearing Ratio, Hveem Stabilometer R-value, and so forth.
- Empirical relationships with soil descriptive or physical properties such as grain size, aggregate angularity, Atterberg limits, moisture content, density, soil classification and so on.

Although a large number of these empirical correlations currently exist, their accuracy and robustness are highly variable and generally unknown to the users (the pavement designers). Backcalculation of resilient modulus using nondestructive deflection test (NDT) data has its own merit and advantages which include:

- The test is nondestructive in nature, quick, and could be conducted along and across the pavement structure to study the variability of the material moduli.
- The NDT requires minimum traffic control and traffic disruption.
- Tests could be conducted to simulate various traffic loads.
- The tests are conducted under insitu conditions such as temperature, moisture, and stress boundary values/conditions.

For the unbound base and subbase pavement layers, the M-E PDG Level 1 design of new pavements calls for laboratory material testing and for nondestructive testing using FWD for rehabilitation/reconstruction purposes. The Level 2 design, on the other hand, allows the use of correlations that describes the relationships between some material indices, strength parameters and resilient modulus. Finally, the Level 3 design calls for the use of the AASHTO recommended default resilient modulus values based on the AASHTO classification system or on the Unified Soil Classification System (USCS).

In this study, the FWD deflection data collected for the roadbed resilient modulus study (Dawson 2008) were used to backcalculate the resilient moduli of the various base and subbase layers.

1.2 OBJECTIVES

The main objective of this project is to characterize the resilient moduli of the various granular base and subbase materials used by MDOT for the purpose of designing new pavements or rehabilitating/reconstructing existing ones using the existing 1993 AASHTO design procedure or the new M-E PDG.

To accomplish the objective, a research plan consisting of five tasks was developed and is presented in the next section.

1.3 RESEARCH PLAN

As stated above, the research plan for this study consists of the five tasks detailed below.

Task 1 – Information Gathering – In this task, the research team has become familiar with the types and variations of the unbound aggregate base and subbase materials used by MDOT in the construction and rehabilitation of flexible and rigid pavements. In particular, the research team obtained from MDOT the specifications regarding dense- and open-graded aggregate bases. Further, the research team thoroughly reviewed the final report submitted by researchers at Michigan Technological University (MTU) to MDOT regarding the lab testing of unbound granular materials used in Michigan. The objectives of the review include:

- Getting familiar with the laboratory test procedure and the test parameters used by the research team at MTU. For all tests, each load cycle consisted of 0.1 second pulse period and 0.9 second relaxation (rest) time.
- Determine whether or not the types of materials tested by MTU cover the spectrum of the granular material types used by MDOT in the construction of open graded aggregate base.
- Establish a database for the purpose of developing relationships between the backcalculated resilient modulus of open graded materials and the laboratory obtained values that are listed in the MTU report.
- Scrutinize the impact of boundary conditions (test parameters) on the magnitude and variability of the laboratory obtained resilient modulus and their relationships to the field (in-situ) boundary conditions.
- Assess the applicability of the MTU laboratory test results to the various design levels of the M-EPDG.

The summary of the review of MTU report is presented in Chapter 2. Finally, the research team tabulated all information and existing data that are needed for the other tasks in this study. These include:

1. The locations of all FWD tests that were used in the roadbed characterization study. This would include FWD tests that were conducted in different environmental seasons prior to and during the roadbed study and new FWD tests that were conducted by MDOT through October of 2009. The tables will also include the pavement cross-section data (thickness and material type) and the type of roadbed soils. When possible, the locations of FWD tests that were conducted on pavements supported by dense- and open-graded bases will be identified and included in the table.
2. The information obtained from MDOT (Grand Region) regarding the depth of frost penetration especially in the northern part of the Lower Peninsula and in the Upper Peninsula.

Task 2 — Backcalculation of Layer Moduli - All deflection data collected during the roadbed study or obtained from MDOT was used to backcalculate the layer moduli of the various pavement layers and roadbed soils. Although the moduli of all pavement layers will be backcalculated, tabulated and reported to MDOT, only the resilient modulus of the granular bases, subbases and stabilized bases are subjected to the following analyses:

1. Possible correlations between the backcalculated and the laboratory measured resilient modulus values that are included in the MTU report.
2. Possible correlations between the physical characteristics of the aggregates (open- and dense-graded) and the backcalculated resilient modulus values as well as the laboratory obtained MR values.
3. The variability of the MR values along a given road/pavement project having similar layer types and thicknesses. This variability will be compared to that obtained in the laboratory and stated in the MTU report. It should be noted that the variability of the backcalculated MR values could be a function of the variability in the layer thicknesses, the degree of compaction and the moisture content.

Task 3 – Resilient modulus Design Values - The material parameters to be used in the design of pavements are dependent on the pavement type being designed and the design method being used. For example, in the 1993 AASHTO Pavement Design Guide, the coefficients and moduli of all pavement layers and the effective resilient modulus of the roadbed soils are some of the required material inputs for flexible pavements. For rigid pavement design, on the other hand, the modulus of subgrade reaction is one of the required inputs. For the M-EPDG, the modulus of all pavement layers and the roadbed soils are some of the required inputs.

For flexible pavements, the backcalculation of layer moduli using deflection data yield the modulus values of the various layers and roadbed soils. On the other hand, the backcalculation for rigid pavements yield the modulus of subgrade reaction and the elastic modulus and the radius of relative stiffness of the concrete slabs. Hence, further analysis is needed to obtain the modulus values of the granular materials.

After obtaining the backcalculated resilient modulus of the unbound granular materials and comparing these values to the MTU laboratory obtained values, one design resilient modulus value will be recommended for each of the following materials:

- Dense-graded bases
- Open-graded bases
- Stabilized bases
- Sand subbase

Task 4 — Typical Ranges – In this task, The resilient modulus data obtained from the backcalculation will be summarized (in table form) by the material type and gradation. The summary will include the range and the average resilient modulus values and the types of granular materials. The table can be used by MDOT personnel for information purposes and/or as reference materials.

1.5 REPORT LAYOUT

The report is composed of the following five chapters:

Chapter 1 – Introduction
Chapter 2 – Literature Review
Chapter 3 – Laboratory and Field Investigation
Chapter 4 – Data Analysis
Chapter 5 – Conclusions and Recommendations

CHAPTER 2
LITERATURE REVIEW

2.1 REVIEW OF MDOT PRACTICES

The Michigan Department of Transportation (MDOT) divides the State of Michigan into seven self administered regions: Superior, North, Grand, Bay, University, Southwest, and Metro, as shown in Figure 2.1. For some pavement projects, each region develops and uses its own practice to estimate the required engineering properties of the roadbed soils. These practices are mainly based on local conditions, experience, and past practices.

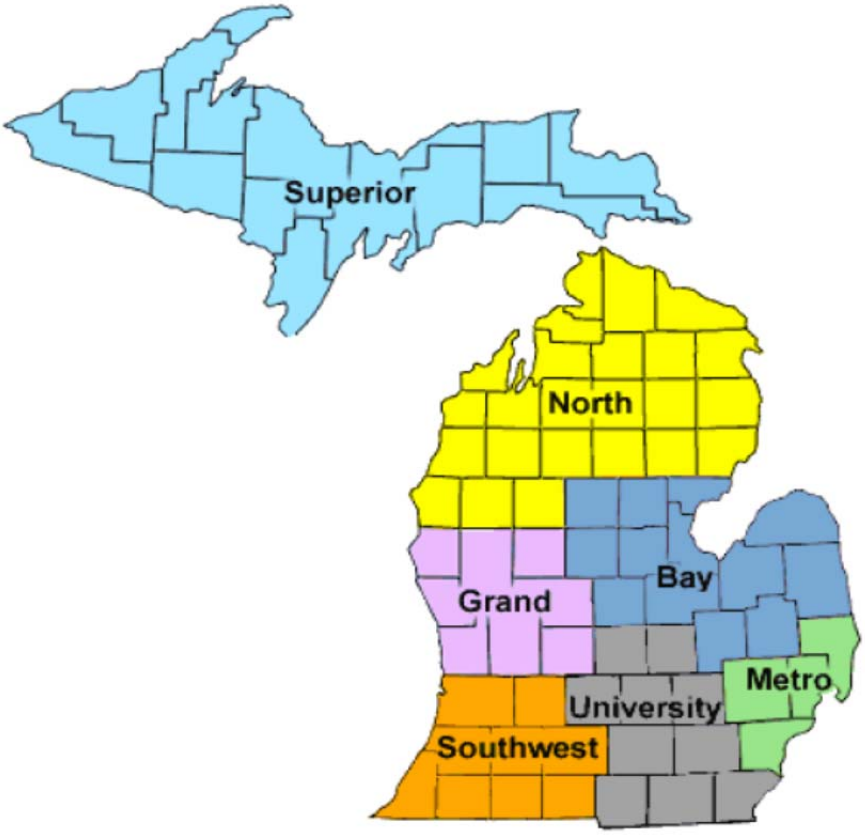

Figure 2.1 MDOT Regions (MDOT)

In each of the seven regions, various types of granular bases and subbases, stabilized granular materials, cemented and lean concrete, are used in their pavement construction. Most of the granular bases consist of natural gravel, dolomite, slag, or crushed concrete. The particular materials used in construction of the base layer depend on its availability near the construction site. In general, in the project plan, MDOT specifies the gradation of the unbound granular layer. Modulus values of 30,000 psi for dense graded granular bases and 24,000 psi for open graded granular bases are typically used by MDOT during the pavement design process.

2.2 CHARACTERIZATION OF THE UNBOUND GRANULAR MATERIALS

Soil classification systems are used to differentiate between the various types of soils. The Unified Soil Classification System (USCS), the United States Department of Agriculture (USDA), and the American Association of State Highway and Transportation Officials (AASHTO) soil classification systems are widely used by most of the transportation agencies. Michigan Department of Transportation (MDOT) follows a separate soil classification system called Uniform Field Soil Classification System (UFSCS). Detailed description of these systems can be found elsewhere (Sessions 2008).

The UFSCS is primarily based on visual and manual examination of soil samples with respect to texture, plasticity, color, structure and moisture. A few examples of determining the soil type based on UFSCS include: (a) identification of sand particles and (b) the assumption that all particles that can be seen by the naked eye can be retained on the No. 200 sieve. The AASHTO soil classification is based on the particle size distribution and Atterberg limits. Granular materials are defined as the materials for which less than 35% of the particles by weight pass through the No. 200 sieve (Holtz and Kovacs 1981). Granular materials are classified into 3 groups, A-1, A-2 and A-3, based on the differences in their grain size distributions. Finally, The USCS defines granular materials as those materials for which no more than 50% of the particles by weight pass through No. 200 sieve. If a greater percent of coarse fraction is retained on the No. 4 sieve it is considered as gravel or else it is treated as sand (Holtz and Kovacs 1981). A comparison between the USDA, the USCS and the AASHTO soil classification is presented in the Table 2.1.

2.3 ROLE OF THE RESILIENT MODULUS OF UNBOUND GRANULAR LAYER IN THE M-E PDG:

The new AASHTO Mechanistic-Empirical Pavement Design Guide (M-E PDG) is an analysis tool developed to predict the performance of newly constructed and rehabilitated pavements based on the design thicknesses and material properties taking into account the effect of climate at the construction site. The inputs to M-E PDG are classified into 4 different categories: traffic, climate, material, and inventory. For example, the traffic inputs include the Average Annual Daily Truck Traffic (AADTT), truck and axle load distribution, and so forth. Examples of material inputs include the modulus and Poisson's ratios of the pavement layers and roadbed soils. Climatic data include the maximum and minimum daily temperatures, precipitation for the past 30 years (the data could be obtained from weather station located near the construction site). The required inventory input data include the thicknesses of the pavement layers, the start and completion date of the project and so forth. It should be noted that the inputs for climatic and inventory data remain the same irrespective of the design level.

The same methodology is adopted by the M-E PDG to predict the pavement performance is used in the three design levels (Prozzi et al 2006). However, the degree of reliability varies from high for design level 1 to low for design level 3.

Table 2.1 Comparison between three soil classification systems (USDA 1992)

USDA texture	Classification		Percent Passing Sieve Number				Liquid Limit	Plastic Limit
	USCS	AASHTO	4	10	40	200		
Muck	PT	A-8	100	100	90-100	40-100	0-14	NP
Sand	SP-SM, SM, SP, GP, GP-GM, GM	A-2-4, A-3, A-1-b, A-2, A-3, A-2	40-100	25-100	15-90	0-35	<25	NP
Loamy Sand	SM, SC-SM, ML, CL-ML, SP-SM, SP	A-2, A-4, A-1-b, A-1, A-2-4, A-3	85-100	60-100	30-90	3-55	<30	NP
Silty Loam	ML, CL, CL-ML, SC, SM, CH	A-4, A-6, A-7, A-2	95-100	85-100	60-100	30-95	<45	NP/P
Sandy Loam	SM, SC-SM, ML, CL-ML, SC, CL	A-2-4, A-4, A-2, A-1, A-1-b, A-6	70-100	60-100	35-90	15-75	<35	NP
Clay Loam	CL, CL-ML, SC, SC-SM	A-6, A-4, A-7, A-2	95-100	75-100	70-100	35-90	25-45	NP/P
Loam	CL, CL-ML, ML	A-4, A-6, A-7	90-100	75-100	70-100	50-90	15-45	NP/P
Mucky Sand	SM, SP, SP-SM	A-1-b, A-2-4, A-3	95-100	75-100	30-70	0-15	0-14	NP
Clay	CH, CL	A-6, A-7-6	90-100	85-100	65-95	45-95	30-65	P
Silty Clay	CL, SC, CL-ML	A-4, A-6, A-7	85-100	60-100	50-100	30-90	25-50	NP/P
NP = non-plastic, plastic limit<10 P = plastic soil, plastic limit>10								

The accuracy of some of the input data depends upon the design level. Three design levels are specified in the M-E PDG. Design level 1 requires the most accurate and site specific data whereas design level 3 is based on default values and existing correlations.
The three design levels are detailed below.

2.3.1 The M-E PDG Design Level 1 – Laboratory Tests and NDT

For level 1 pavement design, the M-E PDG recommends that the resilient modulus values of unbound granular materials, subgrade, and bedrock be determined in the laboratory using cyclic load triaxial tests. The tests should be conducted on representative material samples according to one of two standard test procedures. These procedures are detailed in:

- The NCHRP 1-28A report titled, "Harmonized Test Methods for Laboratory Determination of Resilient Modulus for Flexible Pavement Design."
- The AASHTO test standard T307, "Determining the Resilient Modulus of Soil and Aggregate Materials."

The two test procedures describe the laboratory preparation, testing, and computation of the test results. For unbound granular materials, the stress conditions used in the test must represent the range of stress states likely to be developed beneath flexible or rigid pavements subjected to moving wheel loads. Stress states used for modulus testing are based upon the depth at which the material will be located within the pavement system. Hence, the stress states for specimens to be used as base or subbase or subgrade may differ considerably.

The M-E PDG includes the generalized NCHRP 1-28A MR constitutive model shown in equation 2.1. The model coefficients (k_1, k_2, and k_3) are estimated using laboratory generated MR data and linear or nonlinear regression analyses.

$$MR = k_1\left(\frac{\theta}{p_a}\right)^{k_2}\left(\frac{\tau_{oct}}{p_a}\right)^{k_3} \qquad \text{Equation 2.1}$$

Where, MR = resilient modulus, psi
θ = bulk stress (psi) = $\sigma_1 + \sigma_2 + \sigma_3$
σ_1 = major principal stress (axial stress, psi)
σ_2 = intermediate principal lateral stress (psi)
σ_3 = minor principal lateral stress (psi), in a triaxial test environment, the values of σ_2 and σ_3 are the same and equal to the confining pressure
τ_{oct} = octahedral shear stress (psi)
p_a = atmospheric pressure (psi)
k_1, k_2, k_3 = regression coefficients (obtained by fitting resilient modulus test data to the constitutive model of equation 2.1)

The constitutive model coefficients estimated for each test specimen should have a correlation coefficient (R^2) more than 0.90. Constitutive model coefficients from similar soils and test specimen conditions can be combined to obtain a "pooled" k_1, k_2, and k_3 values. If R^2 for a particular test specimen is less than 0.90, the test results and equipment should be checked for possible errors and/or test specimen disturbance. If no errors or disturbances are found, the use of a different constitutive relationship is recommended.

The value of the regression coefficient k_1 is proportional to Young's modulus. Thus, the values for k_1 should be positive since MR values are always positive. Increasing the bulk stress, θ, should produce stiffening or hardening of the material, which results in a higher MR values. Therefore, the exponent k_2, of the bulk stress term in the constitutive equation should also be positive. The value of the regression coefficient K_3 (the exponent of the octahedral shear stress term) should be negative since increasing the shear stress will produce material softening (i.e., lower MR values). It is very important to note that:

- The inputs to the M-E PDG include the values of the regression coefficients k_1, k_2, and k_3 (not the actual values of MR test data).
- The statistical analysis for the determination of the values of k_1, k_2, and k_3 is conducted outside the M-E PDG software.

Finally, level 1 design is applicable to new construction, reconstruction, and major rehabilitation. For new construction, the materials to be used by MDOT or by the contractor can be sampled and tested. For reconstruction, material samples can be obtained through destructive testing (i.e., coring and drilling). On the other hand, for rehabilitation and reconstruction of existing pavements, MR for level 1 design could be obtained by performing NDT using a falling weight deflectometer (FWD) and backcalculating the layer moduli.

2.3.2 The M-E PDG Design Level 2 – Correlations to Other Material Properties

In the M-E PDG design level 2, correlation equations that were developed to relate soil and unbound granular material index properties and strength to resilient modulus values can be used to estimate the MR values. The relationships could be direct or indirect. The direct relationships relate the index to the MR values directly. Whereas, the indirect relationships are based on two step correlations such as relating a known material parameter to California Bearing Ratio (CBR) and then estimating the MR values using the CBR values. Several correlation equations or models recommended in the M-E PDG for estimating MR are provided in Table 2.2. The Design Guide software allows the users the following two options:

Table 2.2 Correlation equations included in the M-E PDG for Design level 2

Strength/Index Properties	Model	Comments	Standard Test
CBR	$M_r = 2555\ (CBR)^{0.64}$ M_r in psi	CBR = California Bearing Ratio (percent)	AASHTO T193, "The California Bearing Ratio"
R-value	$M_r = 1155 + 555\ R$ M_r in psi	R = R-value	AASHTO T 190, "Resistance R-Value and Expansion Pressure of Compacted Soils"
AASHTO layer coefficient	$M_r = 10^{\frac{a_2+0.977}{0.249}}$ M_r in psi	a_2 = AASHTO layer coefficient for base layer	AASHTO Guide for the Design of Pavement Structures, 1993
PI and gradation	$CBR = \frac{75}{1+0.728(P_{200}*PI)}$	PI = plasticity index P_{200}= percent passing the no. 200 sieve size	AASHTO T27, "Sieve Analysis of Coarse and Fine Aggregates" AASHTO T90, "Determining the Plastic Limit and Plasticity Index of Soils"
DCP	$CBR = \frac{295}{DCP^{1.12}}$	CBR = California Bearing Ratio, percent DCP = Dynamic Cone Penetration index, mm/blow	ASTM D 6951, "Standard Test Method for Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications"

1. Input a representative value of MR values and use the Environment Integrated Climatic Model (EICM) to incorporate the seasonal climatic effects (such as the effects of freezing and thawing, and so on). In this option, the EICM estimates the temperature and moisture profiles within the pavement system throughout the pavements design life. The estimated temperature and moisture profiles within the unbound granular and subgrade layers are then used to estimate the effective and representative MR value that account for the climatic effects.
2. In this option, the users obtain representative samples and test them under the climatic conditions anticipated for each of the 12 months of the year and directly input the results to the EICM.

2.3.3 Level 3 – Pavement Design - Typical MR Values Based on Calibrations

For design level 3, the M-E PDG includes recommended MR input values as listed in table 2.3. The values are based on:

- The national averages of MR values adjusted to account for the effect of shallow bedrock and other in-situ conditions that influence the pavement foundation strength.
- Data obtained from the long-term pavement performance (LTPP) test sites.
- The MR values of subgrade, base, and subbase materials that were tested at their optimum moisture conditions.

Significant caution should be taken when using the M-E PDG level 3 recommended MR values as they are very approximate. Results of tests performed for pavement design levels 1 and 2 are strongly preferred, especially FWD tests and backcalculation. The reason for caution is that the representative MR value to be used by the pavement designer is a function of the thickness of the materials and the depth to stiff layer. For semi-infinite conditions (thickness of 20 ft or more), the M-E PDG recommended MR value of 40,000 psi can be justified. However, for a few feet thick materials overlaying weak or stiff materials, then the composite MR should be used. Hence, an extensive knowledge of the sub-layers on which the pavement is to be constructed must be obtained. Note that for new pavements, reconstruction, and rehabilitation; the material type may be obtained by reviewing historical boring records and material reports or county soil reports. The presence of bedrock is important and should always be investigated.

Finally, the above stated M-E PDG pavement design level 3 is applicable to new design, reconstruction, and rehabilitation.

Cyclic load triaxial tests were conducted at Michigan Technological University (MTU) to determine the resilient modulus of various granular materials (crushed concrete, natural gravel, slag, and dolomite), that are typically used in pavement construction projects in Michigan (Mayrberger et al 2007). During the study, which was sponsored by MDOT, the test samples were compacted using three gradations (4G lower bound, 4G upper bound, and 4G maximum density), and four moisture conditions (as compacted, wetting curve, drying curve, and fully saturated).

Table 2.3 Typical MR Values used in M-E PDG

Classification System	Material Classification	pounds/square inch	
		MR Range	Typical MR
AASHTO	A-1-a	38,500 - 42,000	40,000
	A-1-b	35,500 - 40,000	38,000
	A-2-4	28,000 - 37,500	32,000
	A-2-5	24,000 - 33,000	28,000
	A-2-6	21,500 - 31,000	26,000
	A-2-7	21,500 - 28,000	24,000
	A-3	24,500 - 35,500	29,000
	A-4	21,500 - 29,000	24,000
	A-5	17,000 - 25,500	20,000
	A-6	13,500 - 24,000	17,000
	A-7-5	8,000 - 17,500	12,000
	A-7-6	5,000 - 13,500	8,000
USCS	CH	5,000 - 13,500	8,000
	MH	8,000 - 17,500	11,500
	CL	13,500 - 24,000	17,000
	ML	17,000 - 25,500	20,000
	SW	28,000 - 37,500	32,000
	SP	24,000 - 33,000	28,000
	SW - SC	21,500 - 31,000	25,500
	SW - SM	24,000 - 33,000	28,000
	SP - SC	21,500 - 31,000	25,500
	SP - SM	24,000 - 33,000	28,000
	SC	21,500 - 28,000	24,000
	SM	28,000 - 37,500	32,000
	GW	39,500 - 42,000	41,000
	GP	35,500 - 40,000	38,000
	GW - GC	28,000 - 40,000	34,500
	GW - GM	35,500 - 40,500	38,500
	GP - GC	28,000 - 39,000	34,000
	GP - GM	31,000 - 40,000	36,000
	GC	24,000 - 37,500	31,000
	GM	33,000 - 42,000	38,500

2.4 RESILIENT MODULUS OF GRANULAR MATERIALS IN MICHIGAN

2.4.1 Gradation

The upper bound gradation is made of fine aggregate content, whereas the lower bound is made of coarse aggregate content. The maximum density gradation was developed using the Fuller's equation with a power of 0.45 [$PP = (D/D_{max})^{0.45}$].

Where, PP = percent passing sieve with D opening,
D = the opening of the sieve in question, and
D_{max} = the maximum particle size.

The gradation specifications used in preparation of the test samples are presented in Figure 2.2.

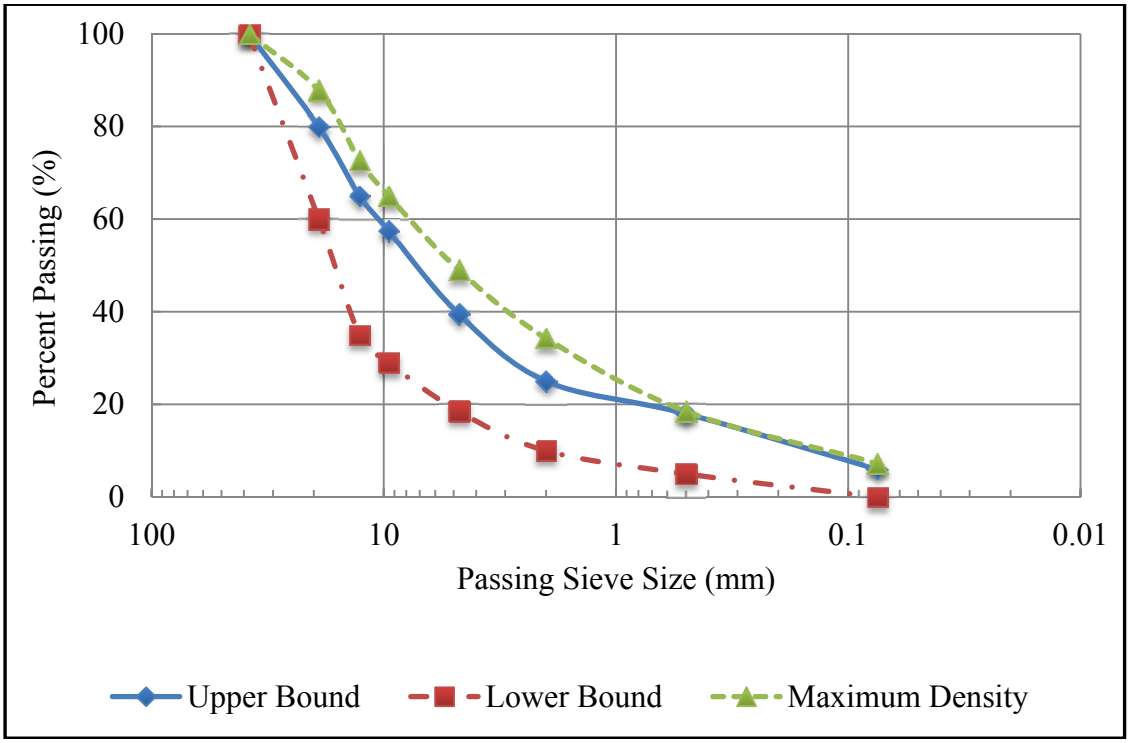

Figure 2.2 Gradations (Mayrberger et al 2007)

2.4.2 Moisture Condition

Each aggregate type was compacted at each of the four gradations and tested at the following four different moisture conditions:

1. As compacted – The moisture condition at which the specimen was compacted. The moisture contents and the unit weights of the samples are listed in Table 2.4.
2. Wetting curve – The wetting curve simulates movement of water upward through the granular material by capillary action which is captured by monitoring the weight of the water source at the bottom of the specimen. However, none of the test samples showed any

propensity for the capillary movement of water.

3. Drying curve – The drying curve simulates water draining from the base course. The weight of the drained water of a fully saturated specimen was monitored and later plotted against time until the water discharge reached equilibrium. The drying curves for different gradations of all material types can be found in (Mayrberger et al 2007).
4. Fully saturated – Fully saturated condition represents the situation where all available voids in the test sample are filled with water without any possible drainage.

Table 2.4 Granular material type, gradation designation, dry unit weight and moisture contents of the test samples (Mayrberger et al 2007)

Granular Material Type	Gradation	Dry Unit Weight (pcf)	Moisture Content (%)
Natural Gravel	4G Lower Bound	122	3.5
	4G Upper Bound	140	3.5
	Maximum Density	143	4.5
Dolomite	4G Lower Bound	128	2.6
	4G Upper Bound	148	3.2
	Maximum Density	150	3.5
Slag	4G Lower Bound	105	4.5
	4G Upper Bound	116	5.5
	Maximum Density	127.5	7.5
Crushed Concrete	4G Lower Bound	102	6
	4G Upper Bound	119	7
	Maximum Density	120	8.6

2.4.3 Laboratory Tests

The AASHTO's Standard Test Method T 307-99 (Modulus of Soils and Aggregate Materials) was used to determine the Resilient moduli of all test specimens except the fully saturated ones. The T 307-99 test protocol has the 15 different stages listed in Table 2.5. For the drained test, the drainage lines were open and water allowed to drain out of the sample, hence, no excess pore water pressure develops upon the application of deviatoric stresses. Whereas, for the undrained test, the drainage line are closed, increasing the deviatoric stress causes the excess pore water pressure to increases and the effective stress to decrease causing softening in the sample. The undrained tests were halted at each stage and the sample was allowed to drain to reduce the excess pore water pressure. Saturation of the test samples was achieved by a combination of high confining stress and pore water pressure. The effective stresses of the undrained test samples are listed in Table 2.6.

2.4.4 Summary of the Results

A summary of the effect of material type, gradation and moisture condition on the resilient modulus of granular materials is presented in this section. The detailed discussion can be found elsewhere (Mayrberger et al 2007).

The behavior of granular materials changed from over consolidation to normal consolidation at a bulk stress of 40 psi (Mayrberger et al 2003). Hence the resilient modulus and bulk stress were broken into two conditions, over and normal consolidation. When the behavior of the granular materials in each consolidation condition was treated separately, a linear relation between the resilient modulus and the bulk stress was found.

Effect of Gradation - For all materials, the lower bound gradation was found to be the stiffest and the upper bound gradation was stiffer than the maximum density gradation. This relation is found to be true in both normally and over consolidated samples. The stiffness of the granular material decreased as the ratio of fine to coarse aggregates increased.

Effect of Material type - Natural gravel was the softest of all material types in both the normal and the over consolidation regions. Slag and dolomite are stiffer than natural gravel by 15 – 50% and crushed concrete is stiffer by 7 – 29%. Dolomite and Slag are almost similar in stiffness and produced the stiffest responses. Crushed concrete lies in between slag and dolomite and Natural gravel. It is 4 – 15 % softer than slag and dolomite.

Effect of Moisture Content - For all the three gradations, fully saturated condition showed marginal softening; however, for some materials considerable softening was observed. There was marginal softening or no change in stiffness for drying curve moisture content. Wetting curve moisture content either caused stiffening or there was no effect on the stiffening. The effects of moisture conditions on the material stiffness are presented in Table 2.7.

Table 2.5 Different stages of the T 307-99 test protocol (Mayrberger et al 2007)

Sequence Number	Maximum Stress σ_1 (psi)	Confinement Stress $\sigma_3 = \sigma'$ (psi)	Deviator stress σ_d (psi)
1	6	3	3
2	9	3	6
3	12	3	9
4	10	5	5
5	15	5	10
6	20	5	15
7	20	10	10
8	30	10	20
9	40	10	30
10	25	15	10
11	30	15	15
12	45	15	30
13	35	20	15
14	40	20	20
15	60	20	40

Table 2.6 Effective stress for 15 stages of T 307-99 for a fully saturated condition (Mayrberger et al 2007)

Sequence Number	Confinement Stress σ3 (psi)	Pore Pressure u (psi)	Effective stress $\sigma' = \sigma_3 - u$ (psi)
1	115	112	3
2	115	112	3
3	115	112	3
4	115	110	5
5	115	110	5
6	115	110	5
7	115	105	10
8	115	105	10
9	115	105	10
10	115	100	15
11	115	100	15
12	115	100	15
13	115	95	20
14	115	95	20
15	115	95	20

2.4.5 Laboratory Resilient Modulus of Unbound Granular Materials

As stated earlier, the resilient modulus of several granular materials compacted at various gradations and moisture contents were measured using cyclic load triaxial tests. Since these modulus values are stress dependent, the laboratory tests should be conducted to simulate the state of stress in the field. For a typical pavement cross section, the vertical and radial stresses at the center of the base layer due to a 9000 pound load are about 12 and 2 psi, respectively. Hence, the laboratory cyclic load triaxial tests were conducted using confining pressure of 3 and axial stress of 12 psi. A summary of the laboratory measured resilient modulus values of the unbound granular materials is presented in Figure 2.3 (Mayrberger et al 2007).

Table 2.7 Effect of moisture conditions on the stiffness of granular materials (Mayrberger et al 2007)

Gradation	Moisture Condition	Natural Gravel	Dolomite	Slag	Crushed Concrete
4G Lower Bound Gradation	As-Compacted	Standard	Standard	Standard	Standard
	Wetting Curve	similar	NA	NA	similar
	Drying Curve	softer	similar	similar	softer
	Fully Saturated	softer	softer	similar	softer
4G Upper Bound Gradation	As-Compacted	Standard	Standard	Standard	Standard
	Wetting Curve	Stiffer	Stiffer	marginally stiffer	similar
	Drying Curve	similar	similar	marginally softer	similar
	Fully Saturated	marginally softer	similar	softer	similar
Maximum Density Gradation	As-Compacted	Standard	Standard	Standard	Standard
	Wetting Curve	marginally stiffer	similar	similar	Stiffer
	Drying Curve	similar	similar	similar	Stiffer
	Fully Saturated	similar	similar	softer	Stiffer

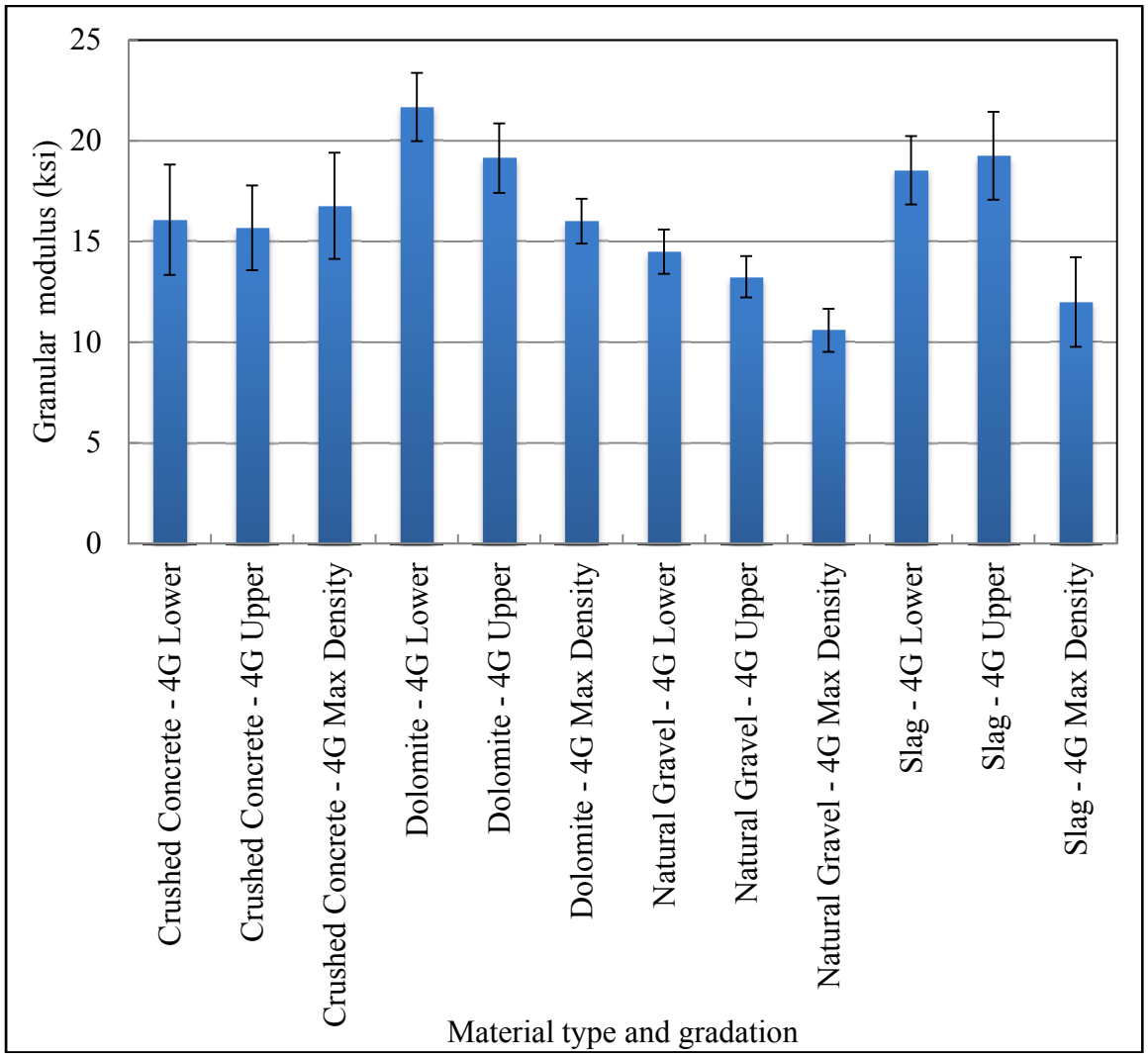

Figure 2.3 Laboratory modulus of several granular materials at different gradations (Mayrberger et al 2007)

The following conclusions were made from figure 2.3:

- The average range of the resilient modulus of all the granular materials irrespective of the material type was between 15,000 psi and 20,000psi.
- The variation in the resilient modulus was primarily due to changes in the moisture content.
- Gradation type had very little impact on the resilient modulus value of the unbound granular materials. Although insignificant, the resilient modulus value of all materials except crushed concrete was found to decrease as the gradation became denser. For the crushed concrete, the resilient modulus value was almost independent of the material gradation.

2.5 NONDESTRUCTIVE DEFLECTION TESTS (NDT)

Nondestructive deflection test (NDT) is one of many field tests used by Departments of Transportation (DOT)'s to evaluate the pavement structural capacity. The advantages of using NDTs include (a) their non destructive nature, and (b) insignificant lane closure with minimum impact on traffic flow. The results from the NDT's are used to:

1. Backcalculate the layer moduli for both flexible and rigid pavements.
2. Estimate the load transfer efficiency of the dowel bars in rigid pavements.
3. Evaluate the presence of voids beneath the slab.
4. Design the thickness of pavement layers for rehabilitation.
5. Design the thickness of the overlays.

Various types of NDT equipment such as the Benkelman Beam, la Croix Deflectograph, Road Rater, dynaflect, Cox Device, Falling Weight Deflectometer etc. are available. Detailed descriptions of the NDT devices can be found in (Mahmood, 1993).

In this study, NDTs were conducted using the MDOT KUAB falling weight deflectometer (FWD). The pavement surface deflection were measured at various distances from the center of the load and were used to backcalculate the unbound granular layer moduli.

2.5.1 The MDOT KUAB Falling Weight Deflectometer (FWD)

As stated above, the MDOT KUAB FWD was used to conduct the NDTs. The KUAB FWD is capable of delivering to the pavement surface various load levels. In all tests in this study, the 9000 pounds load level was used and the pavement surface deflections were measured at distances of 0, 8, 12, 18, 24, 36 and 60 inches from the center of the load. The 9000 pounds force was achieved through dropping a particular weight at a predetermine distance. The force of the impact is typically considered a static force at the point of contact. In most analysis procedures of the deflection data, the pavement layers and the roadbed soil are typically considered elastic materials.

The weight of the falling mass can be calculated as follows (Kim et al 2006);

$$W_1\left(H + \delta_{max}\right) - .5K\delta^2_{max} = 0 \qquad \text{Equation 2.2}$$

Where, W_1 = weight corresponding to the mass M (lbs)
H = height of drop (in)
δ_{max} = maximum pavement deflection (in)
K = spring constant (lb/in)

The impact factor (δ_{max}/δ_{st}) can be calculated using equation 2.3.

$$\delta_{\max} / \delta_{st} = 1 + \left(1 + \left(\frac{2H}{\delta_{st}} \right) \right)^{\frac{1}{2}}$$ Equation 2.3

Where, δ_{st} = static deflection (in)

The impact load is calculated using equation 2.4, by multiplying the static load by the impact factor.

$$P_{dyn} = W_1 \left(1 + \left(1 + \left(\frac{2H}{\delta_{st}} \right) \right)^{\frac{1}{2}} \right)$$ Equation 2.4

Where, P_{dyn} = impact load (lbs)

Because of the difficulties associated with measuring the impact load, the force (F) is calculated by multiplying the drop weight (W) by the height of drop H.

$$F = WH$$ Equation 2.5

The uniformly distributed load can be obtained from equation 2.6.

$$q = \frac{F}{A}$$ Equation 2.6

Where, q = applied load to plate (lbs)
A = loading plate area (in^2)

In order to backcalculate the moduli of the pavement layers with high accuracy, it is important to measure the deflections at the pavement surface with a very minimal error. Any random error in the measurement of deflection and variability in the thickness of the pavement layers leads to a high degree of pseudo variability in the backcalculated layer moduli. Hence, the following recommendations were made in order to reduce the errors in the measurement of deflections (Irwin et al, 1989):

- Taking the average of the deflections measured by the FWD by replicating the drop three to five times at the same load level.
- Making at least two drops before recording the deflections for the purpose of seating the pavement.
- Calibrating the FWD every six to twelve months to minimize the possible systematic errors.

2.6 BACKCALCULATION OF LAYER MODULI

The process of converting the measured pavement surface deflections to layer moduli is called backcalculation. Backcalculation routines use the pavement surface deflections to determine the layer moduli of the pavement using one or more of the following techniques:

1. Iterative approach – In this approach, the deflection basin is calculated based on a set of estimated seed moduli and used as input to the computer program. The software uses the estimated seed moduli and calculates the pavement surface deflections due to the same load level used by the FWD to measure the deflection data. The calculated deflections are then compared to the measured ones. Based on the comparison, the estimated seed modulus values are then incremented and a new set of pavement surface deflections are calculated. The process is repeated until the differences between the calculated and the measured deflections are equal to or less than the specified conversion criteria specified by the users. One of these criteria is the Root Mean Square (RMS) error between the measured deflection basin and the calculated one. The RMS is calculated for each iteration and the layer moduli corresponding to a calculated deflection basin with an RMS error of less than 2% are considered accepted for flexible pavements. Some of the backcalculation routines that use iterative approach are MODTAG, MICHBACK, EVERCALC, and so forth.
2. Database - Deflection basins for all possible combinations of the layer moduli are calculated and are stored in a database. The moduli values corresponding to the deflection basin that is closest to the measured deflection basin are considered as the layer moduli. Example of such computer program is MODULUS.
3. Empirical Equations – Backcalculation of the pavement layer moduli is based on a set of empirical equations, which gives a unique modulus for a given set of deflections. Examples of such method include the AREA, and the NUSBACK methods.

Some of the common assumptions made by the backcalculation routines include:

- The pavement materials are homogenous, isotropic, and linear elastic.
- The load is uniformly distributed over the circular loading plate.
- The pavement layers extend horizontally to infinity (no edge effects).
- The subgrade is considered to be a semi–infinite half-space.

Backcalculation can only determine the moduli of the pavement layers that have significant influence on the surface deflections. Deflections that are measured using the FWD are relatively insensitive to minor variations in the pavement moduli (Irwin 1994).

Various backcalculation programs are available in both the public and the private domains. Description of some of the backcalculation routines is presented in this section. A list of available backcalculation computer programs is presented in Table 2.8 at the end of this chapter.

2.6.1 Backcalculation of Flexible Pavement Layer Moduli

This section provides a summary of some available computer software and methods used in the backcalculation of flexible pavement layer moduli.

2.6.1.1 The AASHTO Method

This AASHTO method is based on Boussinesq equation (Equation 2.7). Equation 2.7 and the AASHTO method are based on the concept that pavement surface deflections measured at far distances from the center of the applied load are mainly due to deflections in the roadbed soils. Hence, Boussinesq equation is the most widely used equation to backcalculate the resilient modulus (MR) of the roadbed soils using a single pavement surface deflection (George 2003).

$$d_r = \frac{CP\left(1-\nu^2\right)}{\pi r MR} \; or \; MR = \frac{CP\left(1-\upsilon^2\right)}{\pi r d_r} \qquad \text{Equation 2.7}$$

Where, d_r = the surface deflection (in) at a distance r (in) from the load
P = applied load (lbs)
C = correlation/adjustment factor that accounts for the difference between the backcalculated and the laboratory obtained MR value
MR = resilient modulus (psi)
υ = poison's ratio of the asphalt layer
r = the radial distance from the center of the applied load (in).

Assuming a Poisson's ratio of 0.5, Equation 2.7 can be reduced to the following equation (AASHTO 1993).

$$MR = \frac{0.24CP}{d_r r} \qquad \text{Equation 2.8}$$

AASHTO recommends the use of a C value no greater than 0.33. The minimum distance (r) in Equations 2.7 and 2.8 is given by the following relationship.

$$r = 0.7\sqrt{a \; + \left(D \times \sqrt[3]{\frac{E_p}{MR}}\right)} \qquad \text{Equation 2.9}$$

Where, a = radius of load plate (in)
D = total thickness of pavement layers above the roadbed (in)
E_p = effective modulus of all layers above the roadbed (psi)

E_p in Equation 2.9 can be calculated using Equation 2.10.

$$\frac{MR \times d_o}{q \times a_1} = 1.5\left\{\frac{1}{\sqrt{1+\left[\frac{D}{a_1}\sqrt[3]{\frac{E_p}{MR}}\right]^2}} + \frac{1-\frac{1}{\sqrt{1+\left(\frac{D}{a_1}\right)^2}}}{\left(\frac{E_p}{MR}\right)}\right\} \quad \text{Equation 2.10}$$

Where, d_o = deflection measured at the center of the load plate (in)
a_1 = temperature of 68 ^oF
q = pressure on load plate (psi)
D = total thickness of pavement layers above the subgrade (in)
E_p = effective modulus of all layers above the subgrade (psi)

2.6.1.2 MICHBACK

The MICHBACK computer program for the backcalculation of layer moduli was developed at Michigan State University with support from the Michigan Department of Transportation (MDOT). The MICHBACK program uses an extended precision version of CHEVRON program, called CHEVRONX, as a forward calculation subroutine. The program uses three gradients modified Newtonian algorithm in its iteration to converge the calculated and the measured deflection basins (Harichandran et. al. 1993). In addition to the layer moduli, the depth to a stiff layer (e.g., bedrock, hard soil, or hard pan) or the thickness of one layer may also be backcalculated. However, the accuracy of the backcalculated thickness or depth to stiff layer is questionable. Hence, the program allows the user to specify the depth to the stiff layer during the backcalculation process. The MICHBACK software assumes the pavement layers to be homogeneous, isotropic and linearly elastic for its backcalculation routine.

The MICHBACK software is a menu driven and it allows the user to choose between English and SI units. It can accommodate up to ten FWD sensors. The inputs of the deflection data into the program could be achieved through reading of user created FWD files in ASCII format, typing the data using the keyboard, or reading the data arranged in the standard KUAB FWD files. The input to the program includes the thickness and Poisson's ratios of the various pavement layers and the measured deflections corresponding to the selected sensor configuration. The program also requires the user to input the maximum, minimum and the seed moduli for each pavement layer and the roadbed soil along with the estimated depth to stiff layer. After defining all input parameters the program performs the backcalculation and the results can be viewed on the screen or can be printed to a file. Detailed description of the program can be found in (Mahmood 1993).

2.6.1.3 MODTAG

MODTAG is a backcalculation software developed by the Virginia Department of Transportation (VDOT) and Cornell University. MODTAG follows an iterative method that adjusts the moduli of the pavement layers to match the deflection basin. It uses CHEVLAY2 computer code as a forward calculation engine, which is based on elastic layer system. The computed deflections using CHEVLAY2 are compared to the measured deflections and the seed moduli are adjusted to match the difference in the deflections (Irwin 1994). This program can handle two to fifteen layers, including the bottom layer for which the thickness is assumed to be semi-infinite. However, no more than five unknown layers are recommended for the analysis. (Von Quintas et al 2002) used MODTAG (which is also known as MODCOMP4) to backcalculate the layer moduli of rigid pavements. His results showed that the Root Mean Square (RMS) errors for most deflection basins were equal to or less than three percent. Hence, in this study, all backcalculated layer moduli where the RMS error was equal to or less than three percent were considered acceptable.

2.6.1.4 MODULUS 6.0

The computer program MODULUS 6.0 was developed at Texas Transportation Institute. The program uses WESLEA as the forward calculation subroutine. WESLEA is used to build a database of computed deflection basin. Once the database is built, a pattern search routine is used to match measured deflection basin with those in the database to determine the modulus of the layers in the pavement system (Scullion et al 1990). The maximum number of unknown layers is limited to 4. MODULUS 6.0 is generally used for the backcalculation of layer moduli of flexible pavements.

2.6.1.5 EVERCALC

The EVERCALC backcalculation software was written to estimate the elastic moduli of flexible pavement layers. The program uses an iterative approach to vary the modulus values of the pavement layers in order to match the calculated and the measured deflection basins within a pre-specified range of RMS error. EVERCALC program uses the WESLEA elastic layer computer program as the forward engine to calculate the deflection basin based on a given set of layer moduli. The program also uses a modified Augmented Gauss-Newton algorithm for optimization (Lee, 1988). Like the MICHBACK software, EVERCALC can handle up to ten deflection sensors. The program is capable of evaluating the moduli of pavement structure containing up to five layers.

2.6.2 Backcalculation of Rigid Pavement Layer Moduli

Most of the programs used for backcalculation of the moduli of rigid pavement layer are based on empirical equations. Two of these programs (the AREA Method and the NUS-BACK3) are briefly described below.

2.6.2.1 AREA Method

AREA method is used for backcalculation of the moduli of the subgrade and the concrete layers of rigid pavements (Frabizzio 1998). The method is based on the assumption of a slab on subgrade system. The term "AREA" references the area of the deflection basin where the deflections are measured at different radial distances from the center of the load. First, the measured deflections are normalized relative to the peak pavement deflection (δ_0). The AREA is then calculated using Equation 2.11. Second, the composite radius of relative stiffness of the slab is calculated using Equation 2.12 followed by the composite modulus of the concrete slab using Equation 2.13. The non dimensional deflection coefficient (δ_r^*) accounts for the dependence of pavement deflection on the distance from the load (pavement deflection decreases with increasing distance from the load) (Frabizzio 1998). The values for δ_r^* can be calculated using Equation 2.14 and the regression parameters listed in Table 2.8. Equation 2.15 can then be used to calculate the modulus of subgrade reaction; the latter is correlated to the resilient modulus of the roadbed soil through Equation 2.16 (AASHTO 1993). The AAHTO equation (Equation 2.16) is based on the assumption of slab placed on subgrade. Based on the backcalculated resilient modulus values of roadbed soils supporting rigid and flexible pavements throughout the State of Michigan, Dawson modified the AASHTO equation to account for slab on granular subbase (Dawson 2008). His data showed that the resilient modulus values of roadbed soils under flexible pavements are about four times higher than the resilient modulus values obtained using Equation 2.16 for the same roadbed soils supporting rigid pavements. His modified equation is included as Equation 2.17.

$$AREA = \left[4 + 6\left(\frac{\delta_8}{\delta_0}\right) + 5\left(\frac{\delta_{12}}{\delta_0}\right) + 6\left(\frac{\delta_{18}}{\delta_0}\right) + 9\left(\frac{\delta_{24}}{\delta_0}\right) + 18\left(\frac{\delta_{36}}{\delta_0}\right) + 12\left(\frac{\delta_{60}}{\delta_0}\right) \right] \quad \text{Equation 2.11}$$

$$l = \left[\frac{LN\left(\frac{60 - AREA}{289.708}\right)}{(-0.698)} \right]^{2.566} \quad \text{Equation 2.12}$$

$$E_c = \frac{12\left(1 - \nu^2\right) P l^2 \delta_r^*}{\delta_r h^3} \quad \text{Equation 2.13}$$

$$\delta_r^* = a e^{\left[-be^{(-cl)}\right]} \quad \text{Equation 2.14}$$

$$k = \frac{E_c h^3}{12\left(1-\nu^2\right) l^4} \quad \text{Equation 2.15}$$

$$MR = 19.4(k) \quad \text{Equation 2.16}$$

$$MR = (4)(19.4)k \quad \text{Equation 2.17}$$

Where, *AREA* = area of deflection basin, (in)

δ_r = deflection at radial distance of r inches from the application of load (mils)

l = radius of relative stiffness (in)

E_c = modulus of slab (psi)

P = load applied on the pavement (lbs)

ν = Poisson's ratio of concrete slab

δ_r^* = non – dimensional deflection coefficient at the radial distance r (in)

a, b, c = regression coefficients

k = modulus of Subgrade reaction (pci)

MR = Resilient modulus of subgrade, (psi)

Table 2.8 Regression coefficients for δ_r^* (Frabizzio 1998)

Radial Distance, r (inches)	a	b	c
0	0.12450	0.14707	0.07565
8	0.12323	0.46911	0.07209
12	0.12188	0.79432	0.07074
18	0.11933	1.38363	0.06909
24	0.11634	2.06115	0.06775
36	0.10960	3.62187	0.06568
60	0.09521	7.41241	0.06255

The use of fewer sensor locations to calculate the AREA of the deflection basin was found to provide more accurate results during the backcalculation of layer moduli (Shuo et al 2000). Hence, it was recommended to use the deflections at the radial distances of 0, 12, 24, and 36 inches from the center of the load (Hoffman et al, 1981). For the four deflection values measured at the stated radial distances, the $AREA_4$ and the radius of relative stiffness l_4 are calculated using Equations 2.18 and 2.19, respectively.

$$AREA_4 = \frac{6}{\delta_0}\left(\delta_0 + 2\delta_{12} + 2\delta_{24} + \delta_{36}\right) \quad \text{Equation 2.18}$$

$$l_4 = \left[\frac{\ln\left(\frac{36 - AREA_4}{1812.279} \right)}{-2.559} \right]^{4.387} \qquad \text{Equation 2.19}$$

Where, $AREA_4$ = area of the deflection basin under the first 4 deflections (in)
l_4 = radius of relative stiffness (in)

The backcalculation procedure presented above is based on the Westergaard's assumptions of interior loading on an infinite slab. This assumption causes the backcalculation procedure to overestimate the modulus of the finite dimension slab and under estimate the modulus of the subgrade. Crovetti 1994 conducted finite element analysis of concrete slab using ILLI-SLAB and developed Equations 2.20 and 2.21 to correct the deflection directly under the center of the load, δ_0 and the radius of relative stiffness, l.

$$\delta_0^* = \delta_0 * \left(1 - 1.15085 e^{-0.71878\left(\frac{L}{l_{est}} \right)^{0.80151}} \right) \qquad \text{Equation 2.20}$$

$$l^* = l_{est} * \left(1 - 0.89434 e^{-0.61662\left(\frac{L}{l_{est}} \right)^{1.04831}} \right) \qquad \text{Equation 2.21}$$

Where, L = length of square slab (in)
δ_0^* = corrected deflection (in)
l_{est} = radius of relative stiffness (in) backcalculated using equation 2.12
l^* = corrected radius of relative stiffness (in)

For concrete slabs with length equal to or less than twice the slab width the length of the square slab L, in Equations 2.20 and 2.21 is given by (Khazanovich et al 2001)

$$L = \sqrt{L_1 * L_2} \qquad \text{Equation 2.22}$$

Where, L = equivalent length (ft)
L_1 = slab width (ft)
L_2 = slab length (ft)

For slabs where the slab length is greater than twice the slab width, the length of the square slab is estimated using Equation 2.23.

$$L = \sqrt{2} * L_1 \qquad \text{Equation 2.23}$$

However, the errors in the backcalculated modulus values using Crovetti's corrections were higher when compared to those from the assumption of an infinite slab (Setiadji et al, 2007).

Once again, the concrete slab modulus calculated using the AREA method is based on the assumption that the slab is placed directly on subgrade. For PCC slabs placed on base layer, the PCC slab modulus calculated using the AREA method is, in reality, the composite modulus of the PCC slab and the base layer. Equations 2.24 through 2.26 are used to estimate the PCC slab and the base layer moduli from the composite PCC modulus from the AREA method based on the assumption that the flexural stiffness of the PCC and the base layers combined is equal to the sum of the flexural stiffness of the PCC and the base layer (Ioannides et al 1992).

$$E_{pcc} = \frac{h_{pcc}^3}{h_{pcc}^3 + \beta h_{base}^3} E_{effective} \qquad \text{Equation 2.24}$$

$$E_{base} = \frac{\beta h_{pcc}^3}{h_{pcc}^3 + \beta h_{base}^3} E_{effective} \qquad \text{Equation 2.25}$$

$$\beta = \frac{E_{base}}{E_{pcc}} \qquad \text{Equation 2.26}$$

Where, $E_{effective}$ = composite PCC modulus (psi)
β = modular ratio
E_{pcc} = modulus of the surface layer (PCC) (psi)
h_{pcc} = thickness of the concrete slab (in)
E_{base} = modulus of the base layer (psi)
h_{base} = thickness of the base layer (in)

The value of the modular ratio β is less than 1.0 and is defined as the ratio of the modulus of the base layer to the modulus of the PCC slab. The accuracy of the backcalculated modulus depends on the accuracy of the estimation of the modular ratio. Modular ratios for various types of unbound granular bases are presented in. For a typical unbound granular layer the modular ratio varied from 0.0067 to 0.004. (Smith et al 1995) in their study concluded that the granular layer modulus was more sensitive to the modular ratio. Hence, this methodology is not recommended for the backcalculation of the modulus of the granular bases (Khazanovich et al 2001).

2.6.2.2 NUS-BACK3

NUS-BACK3 is backcalculation software used to determine the layer moduli of rigid pavements **(**Shuo et al 1997). The method is based on a set of equations that are based on the following assumptions:

- Infinite slab
- Presence of a base or subbase layer in between the concrete slab and the subgrade.
- The base/subbase and subgrade are elastic layers.

Equations 2.27 through 2.30, which are based on the work of Burmister 1945 and (Panc 1975) are used for the backcalculation of layer moduli using measured pavement surface deflection data.

$$d_i = \frac{2(1-\vartheta_b)P}{\pi a E_b} F_E \qquad \text{Equation 2.27}$$

$$F_E = \frac{2l}{\pi a}\int_0^x \frac{J_0\left(\frac{r}{l}t\right)J_1\left(\frac{a}{l}t\right)}{t\left(1+t^3\right)}dt \qquad \text{Equation 2.28}$$

$$c = \frac{(1+\vartheta_b)E_s}{(1+\vartheta_s)E_b} \qquad \text{Equation 2.29}$$

$$l = \left(\frac{E_c h_c^3 (1-\vartheta_b^2)}{6(1-\vartheta_c^2)E_b}\right)^{(1/3)} \qquad \text{Equation 2.30}$$

Where, d_i = deflection at sensor location I (in)
ϑ_b = Poisson's ratio of base
P = load applied (lbs)
a = radius of FWD plate (in)
E_b = modulus of base (psi)
F_E = deflection factor
l = radius of relative stiffness (in)
J_0 = Bessel function of first kind of order zero
J_1 = Bessel function of first kind of order one
t = dummy variable
c = constant
r_i = radial distance i of the deflection sensor i from the center of the load (in)
ϑ_s = Poisson's ratio of subgrade

E_s = modulus of subgrade (psi)
E_c = modulus of the PCC slab (psi)
h_c = thickness of the PCC slab (in)

A minimum of three deflection values are required to backcalculate the modulus values of the three layers. Typically pavement surface deflections measured at radial distances of 0, 12 and 24in from the center of the load are used in the backcalculation (Setiadji et al, 2006).

2.6.2.3 ILLI-BACK

ILLI-BACK is a closed form backcalculation procedure based on the principles of dimension analysis and is applicable to two layer rigid pavement systems. The backcalculation method is based on the following two fundamental concepts:

1. For any particular loading plate and deflection sensor arrangement, there exist a unique relationship between the deflection basin area, AREA, and the radius of relative stiffness, *l,* of the slab-subgrade system (Ioannides 1990).
2. The deflections of a concrete slab placed on subgrade, are dependent on the dimensionless load size ratio (a/*l*) which is defined as the ratio of the plate radius (a) and the radius of relative stiffness of the concrete slab (*l*) (Ioannides 1987).

The backcalculation procedure involves the calculation of the area of the deflection basin, AREA, and the radius of relative stiffness. Based on the value of *l*, dimensionless deflection values are calculated. The modulus values of the concrete slab and subgrade are then calculated using the dimensionless deflections and the radius of relative stiffness (Ioannides 1994)

2.6.3 Forward calculation

Most of the backcalculated programs use a forward calculation program where the pavement deflections at various distances from the load are calculated based on assumed sets of resilient modulus values and Poisson's ratios. The calculated deflection basins are then compared to the measured ones and the assumed layer modulus values are changed incrementally and a new set of deflection basins are calculated. The iteration process continues until the differences between the calculated and the measured deflection basins meet certain input conversion criteria. A serious disadvantage of this method is that, an error in one of the backcalculated layer modulus leads to errors in the other backcalculated layer moduli.

Another empirical approach for the calculation of the flexible and rigid pavement layer moduli was developed (Stubstad et al 2006). The approach is called forward calculation and it involves estimating the modulus of the pavement layer moduli by using the following steps:

Step 1: Estimation of the modulus of the subgrade

The modulus of the subgrade is estimated using Equations 2.31 and 2.32 (the Hogg model (Hogg

A.H.A 1944), which is based on the hypothetical two-layer system with a thin elastic plate resting on elastic foundation). Implementation of Hogg modulus is described by (Wiseman et al 1983), which simplifies the multi layer system into a simple two-layer model for the following three cases:

Case 1 – The subgrade is assumed as an infinite elastic solid foundation.
Case 2 – The subgrade is assumed as a finite elastic solid foundation, with Poisson's ratio of 0.4.
Case 3 – The subgrade is assumed as a finite elastic solid foundation, with Poisson's ratio of 0.5

For the three cases the thickness of the foundation is 10 times the characteristic length, l_c, estimated from Equation 2.33. The values that each constant takes depend on case of the Hogg model used for determining subgrade model. Case 2 Hogg model was used in the LTPP study (Stubstad et al 2006).

$$E_s = I\frac{(1+\upsilon_0)(3-4\upsilon_0)}{2(1-\upsilon_0)}\left(\frac{S_0}{S}\right)\left(\frac{P}{\delta_0 l_c}\right) \qquad \text{Equation 2.31}$$

$$r_{50} = r\frac{(1/\alpha)^{1/\beta} - B}{\left[\frac{1}{\alpha}\left(\frac{\delta_0}{\delta_r}-1\right)\right]^{1/\beta} - B} \qquad \text{Equation 2.32}$$

$$l_c = y_0\frac{r_{50}}{2} + \left[(y_0 r_{50})^2 - 4mar_{50}\right]^{1/2};\ if\ \frac{a}{l_c} < 0.2,\ l_c = (y_o - 0.2m)r_{50}$$

Equation 2.33

$$\left(\frac{S_0}{S}\right) = 1 - \overline{m}\left(\frac{a}{l_c} - 0.2\right);\ if\ \frac{a}{l_c} < 0.2, \left(\frac{S_o}{S}\right) = 1.0 \qquad \text{Equation 2.34}$$

Where, E_s = Subgrade modulus under FWD load (psi)
υ_0 = Poisson's ratio for subgrade material
S_0 = theoretical point load stiffness (psi)
S = pavement stiffness (psi) = P/δ_0
P = applied FWD load (lbs)
δ_0 = deflection at center of the load (in)
δ_r = deflection at a distance r from the center of the load (in)
r = distance from the center of the load (in)
r_{50} = offset distance (in) where, $\frac{\delta_0}{\delta_r} \cong 0.5$

l_c = characteristic length (in)
h = thickness of subgrade above apparent hard layer (in)
I = influence factor
α, β, B = curve-fitting coefficients
$\underline{y_0}, m$ = characteristic length coefficient
$\overline{m}$ = stiffness ratio coefficient

Step 2: Estimation of the modulus of the surface layer

For both flexible and rigid pavement, the modulus of the surface layer is estimated from the composite modulus of the entire pavement and the AREA factor.

The composite modulus of the entire pavement is given by:

$$E_0 = (1.5 * a * \sigma_0)/\delta_0 \qquad \text{Equation 2.35}$$

Where, E_0 = composite modulus of the entire pavement system
a = radius of the load plate
σ_0 = pressure due to the impact load
δ_0 = deflection measured at the center of the load

Rigid Pavements - For rigid pavements, the area of the deflection basin of the first 6 sensors, denoted by $AREA_{36}$, is used to determine the AREA factor. The following equations could be used to estimate the modulus of the concrete slab.

$$AREA_{36} = 6\left[1 + 2\left(\frac{\delta_{12}}{\delta_0}\right) + 2\left(\frac{\delta_{24}}{\delta_0}\right) + \left(\frac{\delta_{36}}{\delta_0}\right)\right] \qquad \text{Equation 2.36}$$

$$\mathrm{AF_{pcc}} = \left[\frac{(\mathrm{k_2}\text{-}1)}{\left\{\mathrm{k_2}\text{-}\left(\frac{AREA_{36}}{\mathrm{k_1}}\right)\right\}}\right]^{1.79} \qquad \text{Equation 2.37}$$

$$\mathrm{E_{pcc}} = \frac{\left[(\mathrm{E_o})(\mathrm{AF_{pcc}})(\mathrm{k_3})^{\left(\frac{1}{\mathrm{AF_{pcc}}}\right)}\right]}{\mathrm{k_3}^{2.38}} \qquad \text{Equation 2.38}$$

Where, $AREA_{36}$ = AREA beneath first 36 in of deflection basin (in)
δ_0 = deflection measured at the center of load (in)
δ_{12} = deflection measured at 1ft from the center of load (in)
δ_{24} = deflection measured at 2ft from the center of load (in)
δ_{36} = deflection measured at 3ft from the center of load (in)

AF_{pcc} = AREA factor for PCC layer
k_1 = 11.04
k_2 = 3.262
E_{pcc} = modulus of the PCC layer (psi)
E_o = composite modulus (psi)
k_3 = thickness ratio of surface layer (h_1) to plate diameter = $h_1/(2*a)$
a = plate radius

Flexible Pavements - For flexible pavements, which generally have a steeper deflection basin compared to the rigid pavements, area of the deflection basin under the first 3 sensors, denoted by $AREA_{12}$, is used to calculate the AREA Factor. The following equations could be used to estimate the modulus of the HMA layer are:

$$AREA_{12} = 2\left[2 + 3\left(\frac{\delta_8}{\delta_0}\right) + \left(\frac{\delta_{12}}{\delta_0}\right)\right] \quad \text{Equation 2.39}$$

$$AF_{ac} = \left[\frac{(k_2 - 1)}{\left\{k_2 - \left(\frac{AREA_{12}}{k_1}\right)\right\}}\right]^{1.35} \quad \text{Equation 2.40}$$

$$E_{ac} = \frac{\left[(E_o)(AF_{pcc})(k_3)^{\left(\frac{1}{AF_{ac}}\right)}\right]}{k_3^2} \quad \text{Equation 2.41}$$

Where, $AREA_{12}$ = AREA beneath first 12 inches of deflection basin (in)
δ_0 = deflection measured at the center of load (in)
δ_8 = deflection measured 8 in from center of load (in)
δ_{12} = deflection measured at 1ft from center of load (in)
AF_{ac} = AREA factor for AC modulus
k_1 = 6.85
k_2 = 1.752
E_{pcc} = modulus of the PCC layer (psi)
E_{ac} = modulus of the AC layer (psi)
E_o = composite modulus (psi)
k_3 = thickness ratio of surface layer (h_1) to load – plate diameter = $h_1/(2*a)$
a = plate radius

Step 3: Modulus of the base layer

In order to determine the modulus of an intermediate layer, such as base layer, one must assume that the modulus of the subgrade and that of the surface layer (the PCC slab or the asphalt layer)

determined from the earlier steps to be correct. The base layer modulus is then estimated using the relationships developed by (Khazanovich et al 2001), which are based on estimating the PCC and base layer moduli from the composite PCC modulus using the modular ratio (see Equation 2.26) or the Dorman and Metcalf method (Stubstad et al 2006), where the modulus of the base layer is estimated as a function of the thickness of the base layer and the modulus of the subgrade.

Pavement layer moduli estimated using forward calculation produced a relatively less scatter than that from the backcalculation techniques (Stubstad et al 2006).The advantage of forward calculation is that the modulus of subgrade and the surface layers are determined independently and have a unique solution for each deflection basin. However, in determining the base layer modulus, which is dependent on the modulus of the surface layer and that of the subgrade. Errors in the two modulus values may cause significant error in the base modulus. Hence, this approach suffers the same drawback as the backcalculation.

2.7 COMPARISON OF LABORATORY AND BACKCALCULATED GRANULAR LAYER MODULI

Several researchers have studied the relationship between the backcalculated and the laboratory measured modulus values of the base layers. For example, the laboratory measured granular base layer moduli in the states of Washington and Nevada were found to be greater than the backcalculated moduli by an average of 28% (Newcomb et al 1989). The deflections measured by the FWD were not sensitive to the presence of a granular layer unless its thickness was1.5 times the thickness of the surface layer. Seasonal variations in deflections showed more impact on the granular bases than on the subgrade layer. On the contrary, in a study conducted on the instrumented test sections in Texas, the laboratory measured modulus values of the granular layer were found to be consistently lower than the backcalculated values (Akram et al., 1994). Since the stress conditions of the base layer vary from top to bottom; the laboratory modulus was computed at various stress levels. For the lower half of the base layer, the backcalculated and the laboratory measured modulus values of the granular layer were found to be in good agreement. Further, (Seeds et al 2000) reported that the backcalculated granular layer modulus values were at least two to three times higher than the laboratory obtained values. They concluded that the backcalculated layer modulus values are reasonable, while the laboratory ones are low. Nazarian et al 1998 reported that a unique relationship between the laboratory and the backcalculated modulus values could not be established from tests conducted on the pavement sections across Texas. The ratio between the two values varied from 40 to 90 percent. They added that aggregate samples obtained from the pavement sections and virgin samples from the same quarry did not exhibit the same properties (Nazarian et al 1998). Finally, (Zhou 2000) reported that the differences between the backcalculated and the laboratory obtained modulus values were negligible for granular materials under the flexible pavement sections tested in Oregon. The backcalculated modulus values showed stress dependency similar to that observed in the laboratory. That is the modulus value increases as the bulk stress increases.

Finally, the resilient modulus of the granular layer is found to be sensitive to the type of aggregates and not sensitive to their gradation and moisture content (Heydinger 1996). Natural gravel was found to have higher modulus than that of limestone and slag. Even though the

modulus value was found to be insensitive to the gradation type, the open graded limestone had higher modulus values than the dense graded ones.

Table 2.8 Backcalculation programs (Dawson 2008)

Program name	Develop By	Forward calculation method	Forward calculation subroutine	Backcalculation subroutine	Non-linear analysis	Seed modulus	Comments
BISDEF	A. Bush USACE-WES	Multi-Layer elastic theory	BISAR	ITERATIVE	Non-linear analysis	Required	Sensitive to seed modulus. Uses gradient search method
BOUSEDEF	Zhou, et al.	Equivalent layer thickness	MET	ITERATIVE	Yes	Required	Program logic similar to BISDEF
CHEVDEF	A. Bush USACE-WES	Multi-Layer elastic theory	CHEVRON	ITERATIVE	Non-linear analysis	Required	Sensitive to seed modulus.
COMDEF	M Anderson	Multi-Layer elastic theory	DELTA	DATA BASE	Non-linear analysis	Required	For composite pavements only.
DBCONPAS	M. Tia, et al.	Finite element	FEACONSIII	DATA BASE	Yes		For rigid pavements only.
ELMOD	P. Ulditz	Equivalent layer thickness	MET	ITERATIVE	Yes roadbed only	Not required	Fast, but has limitation inherent to MET program
ELSDEF	Texas A&M University	Multi-Layer elastic theory	ELSYM5	ITERATIVE	No	Required	Sensitive to seed modulus.
EMOD		Multi-Layer elastic theory	CHEVRON	ITERATIVE	Yes roadbed only	Required	

Table 2.8 (cont'd)

Program name	Develop By	Forward calculation method	Forward calculation subroutine	Backcalculation subroutine	Non-linear analysis	Seed modulus	Comments
EVERCALC	Mahoney, J., et al.	Multi-Layer elastic theory	CHEVRON	ITERATIVE	Yes	Not required for up to 3 layers	Primarily for flexible pavements.
FPEDDI	W. Uddin	Multi-Layer elastic theory	BASNIF	ITERATIVE	Yes	Not required	
ISSEM4	P. Ulidtz	Multi-Layer elastic theory	ELSYM5	ITERATIVE	Yes	Required	Uses deflections at five point to calculate moduli for three layers.
MICHBACK	Michigan State University	Multi-Layer elastic theory	CHEVRON	ITERATIVE	No	Required	
MODOMP2	L. Irvin	Multi-Layer elastic theory	CHEVRON	ITERATIVE	Yes	Required	More oriented for research work.
MODULUS	J. Uzan	Multi-Layer elastic theory	WESLEA	DATA BASE	Yes	Required	Used in an expert system frame work.
PADAL	S. F. Brown	Finite element		ITERATIVE	Yes	Required	
RPEDDI	W. Uddin	Multi-Layer elastic theory	BASINR	ITERATIVE	Yes	Not required	For rigid pavements only.

CHAPTER 3
LABORATORY AND FIELD INVESTIGATION

3.1 INTRODUCTION

The laboratory and field investigations consisted of the following steps:

- Partitioning the State of Michigan into various clusters and areas according to the type of the roadbed soils. This step was accomplished during a previous study to determine the values of the resilient modulus and the modulus of subgrade reaction of the roadbed soils.
- Obtaining all existing and available deflection data files from MDOT.
- Conducting new FWD tests at specific locations where deflection data were not available in the MDOT files.
- Using the laboratory cyclic load triaxial test results that were conducted on granular layers at various moisture contents, gradation and compaction at Michigan Technological University (MTU). The test results were used to compare the backcalculated and the laboratory measured modulus values.

3.2 PARTITIONING THE STATE OF MICHIGAN

During a previous study sponsored by MDOT, the State of Michigan was partitioned into fifteen clusters and ninety nine areas based on the types of roadbed soils and their engineering and physical characteristics. Details of the clusters and areas can be found in the final report of the roadbed soil study titled "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes" (Baladi et al, 2009 and Sessions, 2008).

3.3 LABORATORY TEST

During the pavement design process, the required unbound material input parameters for the 1993 AASHTO empirical design method are:

a) The resilient modulus values and the corresponding layer coefficients for asphalt pavements.
b) The resilient modulus values, which, the AASHTO program combine them with the resilient modulus of the roadbed soils and calculate the composite modulus of the roadbed soils.

On the other hand, the required unbound material input parameters for the M-EPDG are the resilient modulus and Poisson's ratio. The latter two parameters are used in the pavement response model to quantify the stress dependent stiffness of the materials (including the roadbed soils and shallow bedrock) under moving wheel loads. The resilient modulus is defined as the ratio of the repeated deviatoric stress (the difference between the axial and the radial stresses) to the recoverable axial strain as stated in Equation 3.1 and illustrated in Figure 3.1. In the laboratory, the resilient modulus is typically obtained using triaxial cell (see Figure 3.2) and a hydraulic system to generate the cyclic load.

$$MR = \frac{\sigma_1 - \sigma_3}{\varepsilon_R} = \frac{\sigma_d}{\varepsilon_R}$$ Equation 3.1

Where, MR = resilient modulus (psi)
σ_d = deviator stress (psi)
σ_1 = axial normal stress (psi)
σ_3 = confining pressure (lateral stress), (psi)
ε_z = recoverable axial strain (inch/inch)

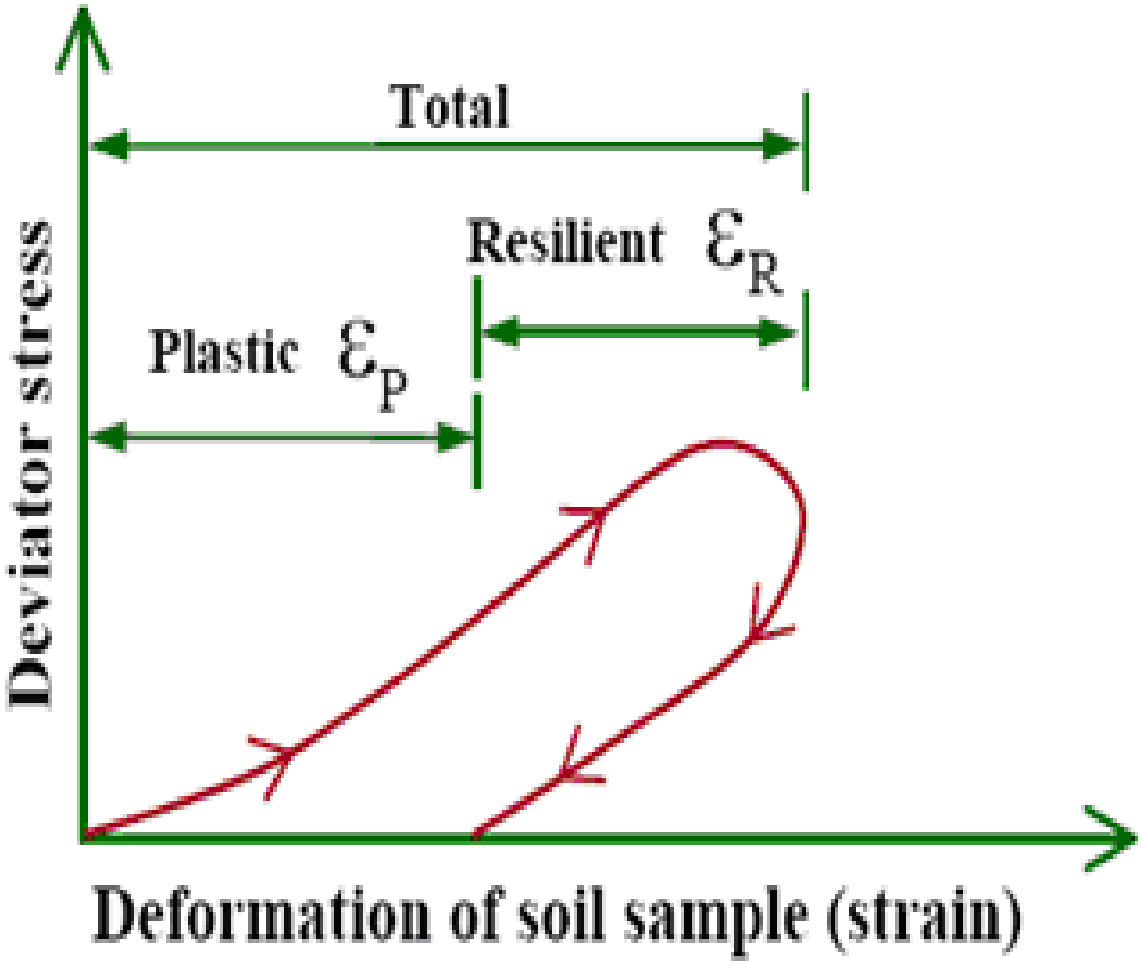

Figure 3.1 Stress-deformation loop (hysteresis loop) showing the deviatoric stress, and the resilient and plastic strains

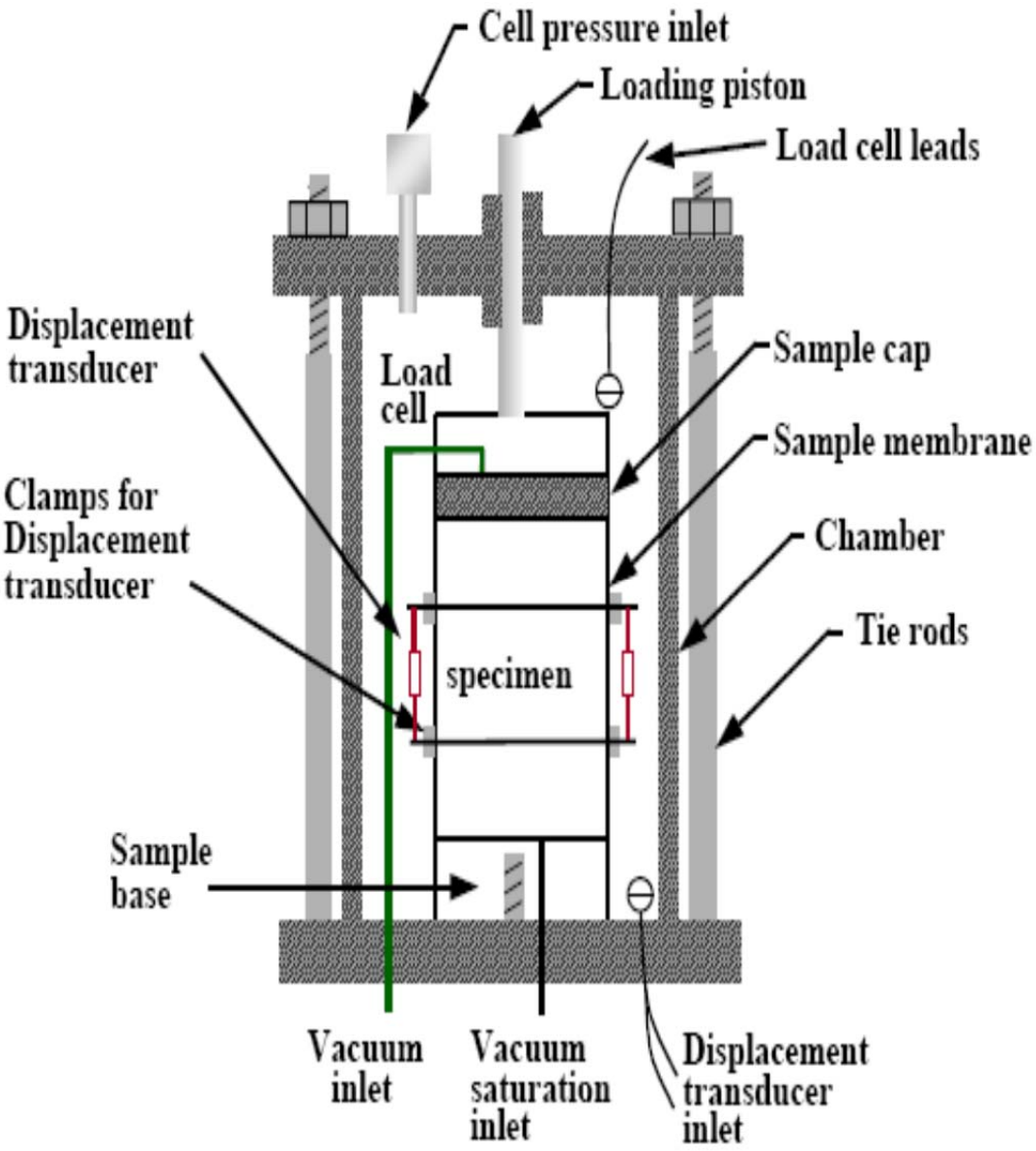

Figure 3.2 Triaxial cell for resilient modulus tests (NHI 1998)

In general, unbound materials display stress-dependent behavior, the value of the resilient modulus is dependent on the magnitude of the applied axial and lateral stresses. However, at low stress levels, the resilient modulus of the unbound materials is almost constant.

Laboratory based cyclic load triaxial tests were not conducted as a part of this research study. However, for comparison purposes, results of laboratory cyclic load triaxial tests that were conducted by MTU on four granular materials used in the pavement construction in Michigan were obtained and used. The four unbound granular materials are crushed concrete, natural gravel, slag, and dolomite. For each material, three different grades were used by MTU, 4G-lower bound, 4G-upper bound, and 4G-maximum density (see section 2.4.1 of this report). All samples were tested at four different moisture conditions, as compacted, drying curve, wetting curve, and fully saturated. Table 3.1 presents a summary of the cyclic load triaxial tests that were conducted by MTU.

Table 3.1 Summary of tests conducted by MTU (Mayrberger et al, 2007)

		Natural Gravel	Dolomite	Slag	Crushed Stone
Lower Bound Gradation	As Compacted MC	X	X	X	X
	Wetting Curve MC	X	X	X	X
	Drying Curve MC	X	X	X	X
	Fully Saturated	X	X	X	X
Upper Bound Gradation	As Compacted MC	X	X	X	X
	Wetting Curve MC	X	X	X	X
	Drying Curve MC	X	X	X	X
	Fully Saturated	X	X	X	X
Maximum Density Gradation	As Compacted MC	X	X	X	X
	Wetting Curve MC	X	X	X	X
	Drying Curve MC	X	X	X	X
	Fully Saturated	X	X	X	X

A summary of the MTU results and findings are included in chapter 2 (literature review). The detailed full report can be found in the final report titled "Resilient Modulus at the Limits of Gradation and Varying Degrees of Saturation", (Mayrberger et al 2007). The resilient modulus values obtained from the laboratory cyclic load triaxial tests were compared to those obtained through the backcalculation of the FWD data. Results of the comparison are presented in Chapter 4 of this report.

3.4 FIELD FWD TESTS

The required input parameters to the M-E PDG include the resilient modulus of the unbound granular layers. Cyclic load triaxial tests could be conducted in the laboratory to determine the resilient modulus of the unbound materials under different stress state and moisture contents. Such tests are laborious, time consuming, and expensive. The alternative is to conduct

nondestructive deflection tests (NDTs), measure the pavement surface deflections due to a given load level and use the deflection data to backcalculate the pavement layer moduli. NDTs and backcalculation of layer moduli procedures are quicker, require less time and cheaper. In addition, the NDT are conducted under insitu condition and could cover the entire pavement network. Nevertheless, the M-E PDG accepts the laboratory determined and the backcalculated modulus as inputs for design level 1. In this study, all NDTs were conducted by MDOT using a KUAB FWD. In each test, 9000 pound load was delivered to the pavement surface and the resulting pavement surface deflections were measured at radial distances of 0, 8, 12, 18, 24, 36, and 60 inches from the center of the load. For rigid pavements, the FWD tests are generally conducted at mid slab. However, in order to reduce the cost of traffic control and minimize traffic disruption, some NDTs were conducted on the pavement shoulder where the shoulder had the same cross section as that of the pavement.

Nevertheless, over the last 20 years period MDOT has been conducting NDTs along the entire pavement network. The tests were conducted on all roadways types (Interstate (I), United States (US), and Michigan (M)). Hence, when the research team requested the NDT data files, five hundred and five FWD data files (each file references the locations of various NDTs along one road segment) were received from MDOT. All files were examined and separated into two pools. One pool includes all FWD data files where the date of the test or the test location reference is missing or data regarding the pavement type and cross-section at the time of the FWD tests were not found in the MDOT project files. This pool was eliminated from any further analyses. The second pool of FWD data files consists of the remaining one hundred and one FWD data files containing six thousand two hundred and forty six FWD tests. This pool of data files was included in the analysis. [In addition, the research team requested from MDOT, under the roadbed soil study, to conduct additional FWD tests to populate certain regions along the roadways where the number of available FWD tests was low. Data from the new FWD tests were also included in this pool of FWD data files]. The locations of these new FWD tests are listed in the final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", (Baladi et al, 2009 and Dawson 2008) and are shown in Figure 3.7 at the end of this chapter.

In the next step, results of each FWD test were checked visually and the shape of the deflection basin was examined. Test data where the shape of the deflection basin was irregular were eliminated from further considerations. Examples of regular and irregular deflection basins are presented in Figures 3.3 and 3.4. After eliminating the irregular deflection basins, seven thousand three hundred and sixty eight deflection basins were used in this study to backcalculate the pavement layer moduli. The files are spread across the entire pavement network of Michigan covering all types of pavement (flexible and rigid) and the roadways (Interstate (I), United States (US), and Michigan (M). The number of files and tests for each roadway and the region for both rigid and flexible pavements are listed in Tables 3.2 and 3.3. It should be noted that the terms "files" refers to a pavement section where various FWD tests were conducted, whereas the term "test" reference one FWD test. Each FWD test consists of four drops, the first drop is used for pavement seating (no data are collected), the data from the other three drops are collected, averaged and used in the backcalculation.

In addition to the pavement cross-section data, the type and gradation of the aggregates used in the unbound granular layer are provided by MDOT. The aggregate types include natural gravel,

dolomite, and crushed concrete and are both open and dense graded. Figures 3.5 and 3.6 show the distribution of the aggregate types number of FWD tests, for each aggregate type, conducted on both flexible and rigid pavements. Note that pavement sections containing a layer of crushed asphalt and granular layer made up of natural gravel are labeled crushed asphalt – natural gravel and crushed asphalt – aggregate base for sections where the aggregate type is not known.

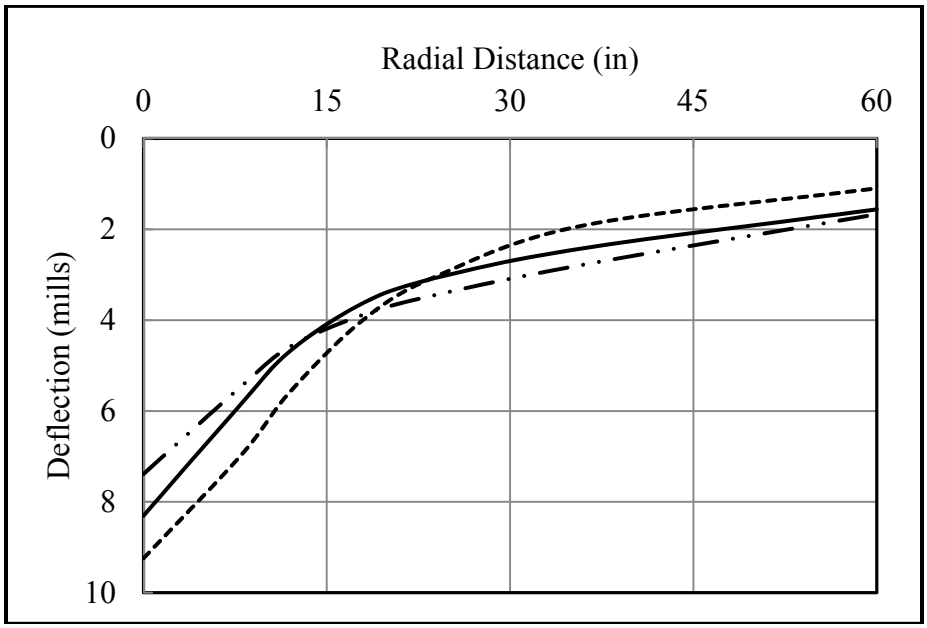

Figure 3.3 Examples of regular deflection basins

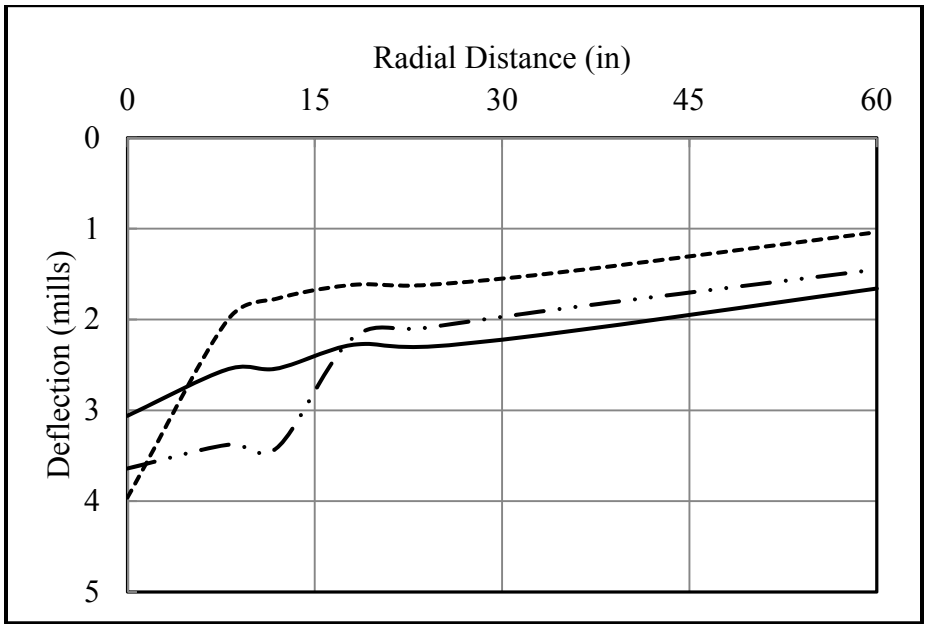

Figure 3.4 Examples of irregular deflection basins

The deflection data from these FWD files and test was used to determine the following:

- Backcalculate the moduli of the unbound granular layers
- Variation of the unbound granular layer moduli across the state
- Study the effect of the material used on the unbound granular layer moduli

The results of these analyses are presented and discussed in chapter 4.

Table 3.2: Number of files and tests conducted on rigid pavement

Region	Road Designation	Files	No. of. Tests
Bay	I-675	4	259
	I-75	4	159
	US-127	2	45
	US-23	8	290
	I-475	2	125
	US-10	1	5
	Total	21	883
Grand	US - 131	2	31
	I-96	1	21
	M-6	4	1534
	US-27	1	37
	Total	8	1623
Metro	I-69	2	54
	I-75	1	5
	I-94	8	589
	M-5	1	69
	Total	12	717
North	I-75	6	354
Southwest	I-196	1	33
	I-69	4	115
	I-94	3	162
	US-31	5	162
	Total	13	472
Superior	I-75	5	189
	M-28	3	143
	Total	8	332
University	I-69	3	125
	I-75	2	78
	US-23	1	79
	Total	6	282
Grand Total, Rigid Pavements		74	4663

Table 3.3: Number of files and tests conducted on the flexible pavement

Region	Road Designation	Files	No. of. Tests
Bay	M-57	5	400
	M-88	6	188
	Total	11	588
Grand	M-120	2	148
	M-20	1	68
	M-37	1	40
	M-57	6	404
	US-131	7	434
	Total	17	1094
Metro	I-94	1	29
	M-53	6	75
	Total	7	104
North	I-75	6	573
	M-55	1	76
	US-131	1	93
	US-23	4	44
	Total	12	786
Superior	I-75	1	11
	M-28	2	21
	M-38	1	11
	US-141	1	13
	US-2	2	22
	US-41	1	11
	Total	8	89
University	M-52	1	44
Grand Total, Flexible Pavements		56	2705

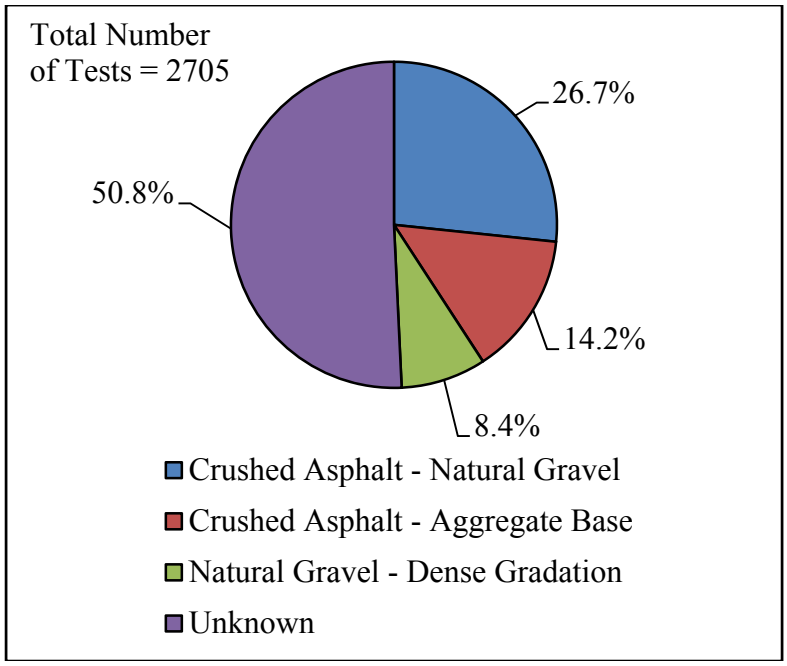

Figure 3.5 Distribution of base types in flexible pavements where FWD tests were conducted

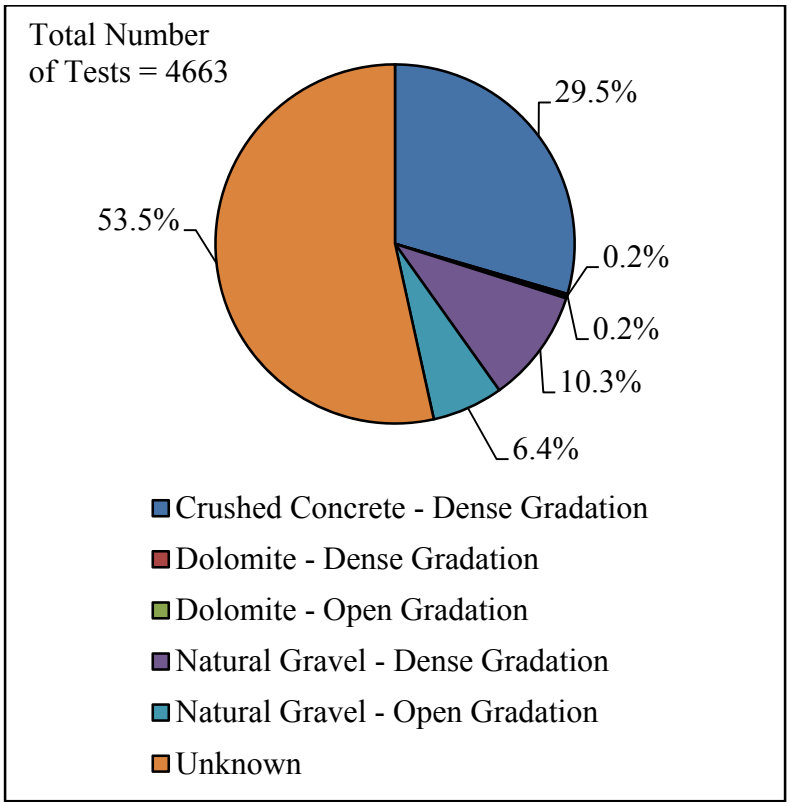

Figure 3.6 Distribution of base types in rigid pavements where FWD tests were conducted

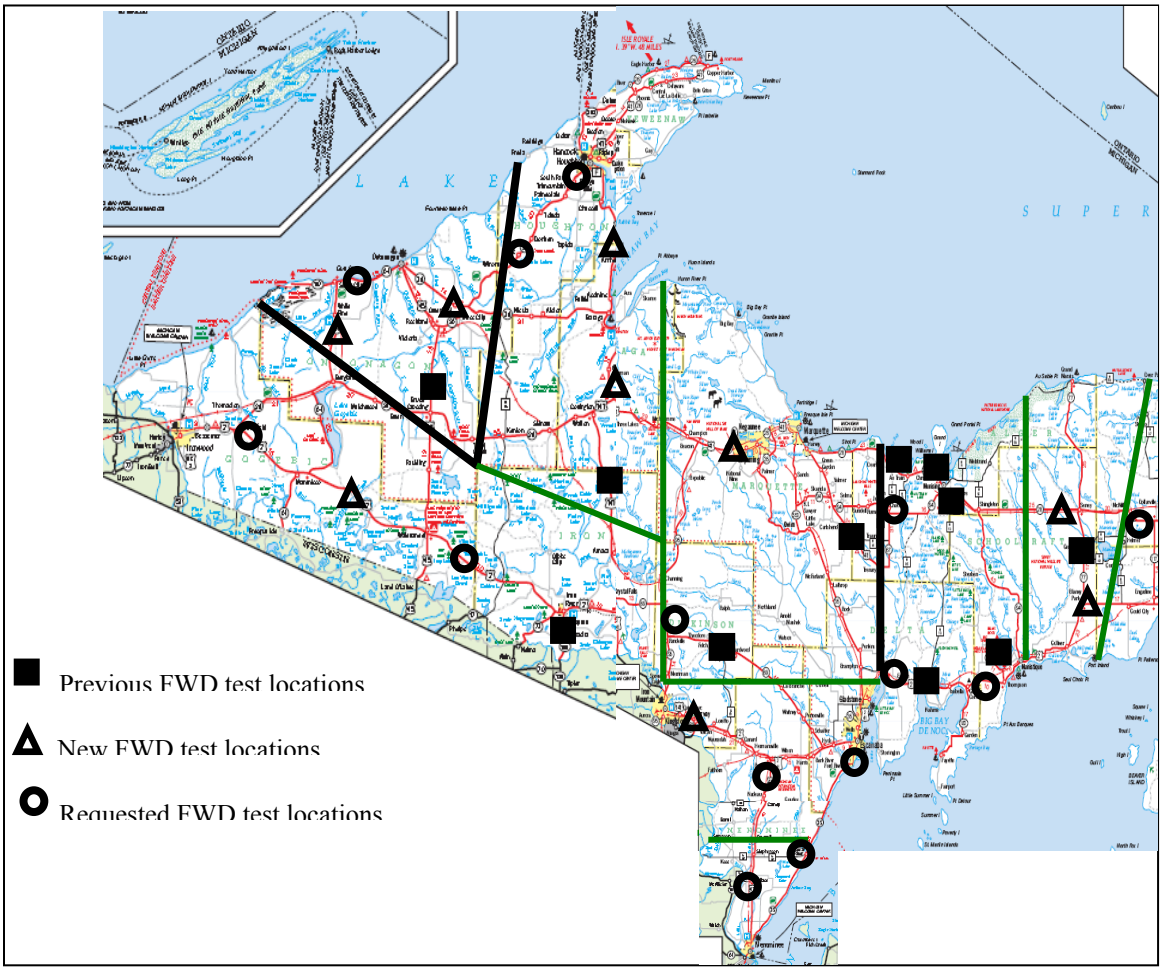

Figure 3.7 FWD test locations in the State of Michigan, final report titled "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", (Baladi et al, 2009)

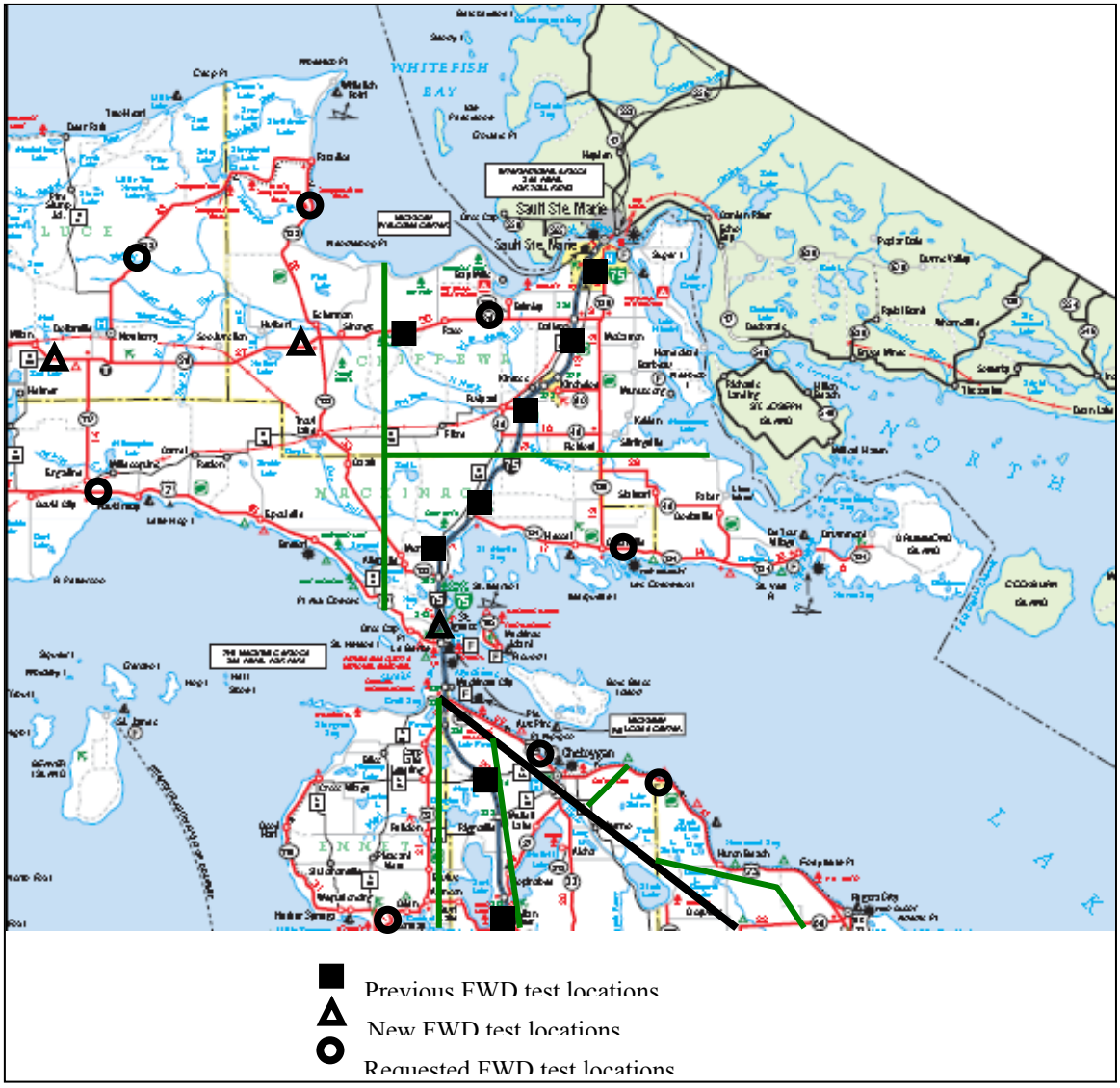

Figure 3.7 (cont'd)

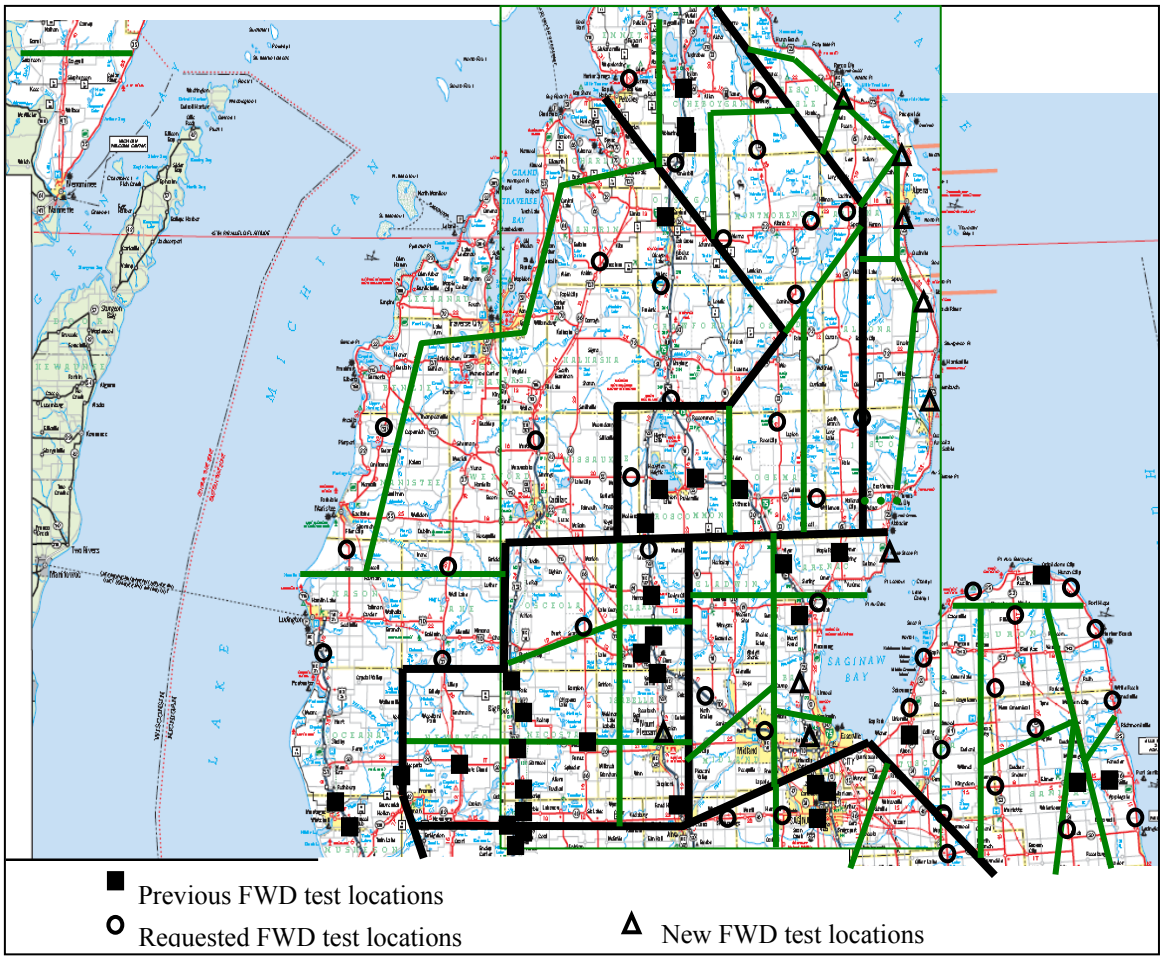

Figure 3.7 (cont'd)

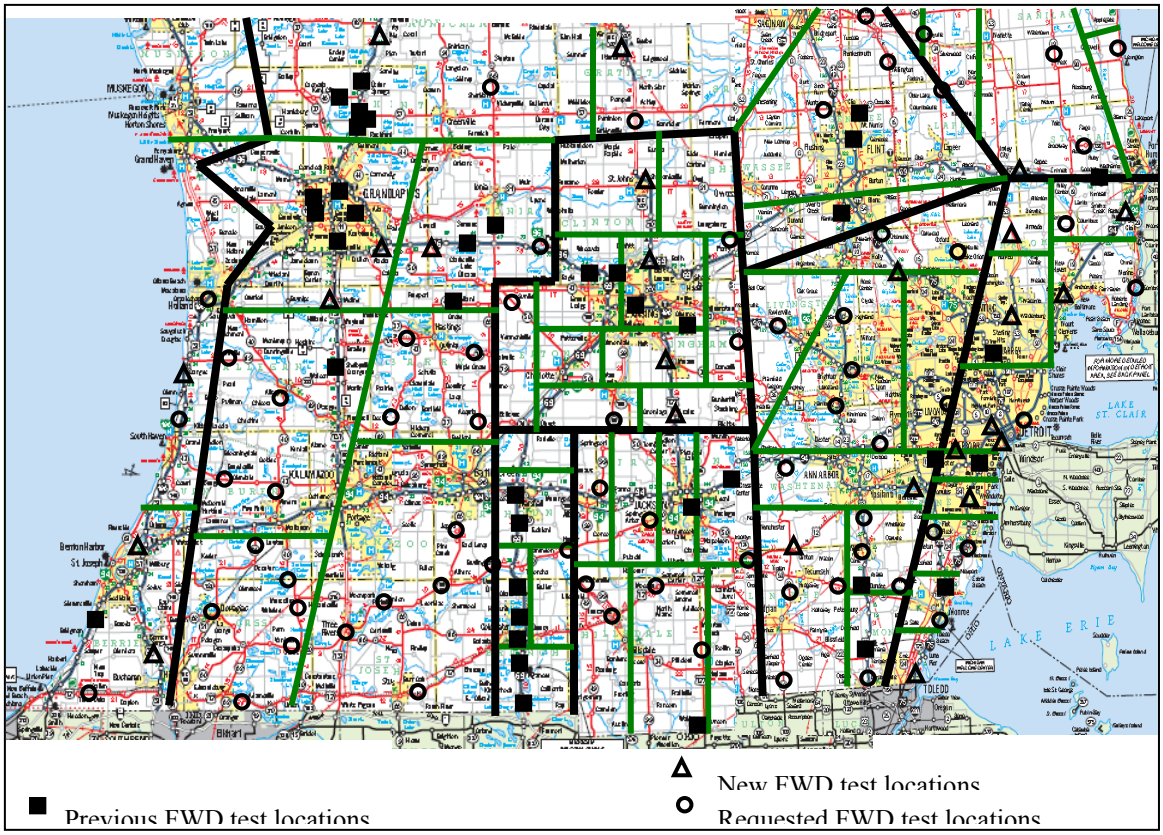

Figure 3.7 (cont'd)

CHAPTER 4
DATA ANALYSIS

4.1 INTRODUCTION

Deflection data obtained from the Michigan Department of Transportation (MDOT) falling weight deflectometer (FWD) files were used to backcalculate the resilient moduli of the unbound granular layer supporting both flexible and rigid pavements. Data obtained from FWD tests conducted on rigid pavements were used in the backcalculation procedure assuming a two layer pavement system (Portland cement concrete (PCC) and granular layer). On the other hand, data obtained from FWD tests conducted on flexible pavements were used in the backcalculation procedure assuming both two and three layer systems (asphalt concrete and granular layers and roadbed soils or asphalt concrete, base, and subbase layers and roadbed soils).

The backcalculated resilient modulus values of the pavement layers were then divided into three groups; two groups for flexible and one for rigid pavements as stated below.

Group 1 - The backcalculated resilient modulus values that were obtained using two layered system (the moduli of the asphalt and granular layers and the roadbed soils).
Group 2 - The backcalculated resilient modulus values that were obtained using three layered system (the moduli of the asphalt, aggregate base, and sand subbase layers and the roadbed soils).
Group 3 - The backcalculated resilient modulus values that were obtained using two layered system (the moduli of the concrete slab, the granular layer, and the roadbed soils).

For each of the three groups of resilient modulus values, the data were classified according to the following four cases:

- Case 1 - All backcalculated resilient modulus values.
- Case 2 - All backcalculated resilient modulus values except the upper and lower ten percent, which were considered outliers.
- Case 3 - All backcalculated resilient modulus values except the upper and lower twenty percent, which were considered outliers.
- Case 4 - All backcalculated resilient modulus values less than the 75^{th} percentile.

Finally, for each of the three groups of data and for each of the four cases, the data were divided into different categories based on three variables; pavement type, aggregate type and aggregate gradation. To statistically assess the impact of each variable on the backcalculated resilient modulus values, t-tests at the 95% confidence interval were conducted on the means of all data categories. The results are presented and discussed in this chapter. Further, the resilient modulus values that were determined in the laboratories of Michigan Technological University (MTU) and the backcalculated resilient modulus values of several aggregate and gradation types were compared and the relationships between the two sets of values were investigated. Results of the comparison and investigation are also presented and discussed in this chapter.

4.2 DEFLECTION DATA

As stated in Chapter 3, five hundred and five FWD data files were obtained from MDOT. Each file contained the results (the deflection data) of many tests that were conducted along a particular pavement section over the last 20 years period. Upon receiving the files, they were examined and separated into two pools. One pool (pool1) includes all FWD data files where the date of the test or the test location reference is missing or data regarding the pavement type and cross-section at the time of the FWD tests were not found in the MDOT project files. This pool was eliminated from any further analyses. The second pool (pool 2) of FWD data files consists of the remaining one hundred and one FWD data files containing six thousand two hundred and forty six FWD tests. This pool of data files was included in the analysis. In addition, during the roadbed soil study, the research team requested from MDOT to conduct additional FWD tests to populate certain regions along the roadways where the number of available FWD tests was low. Data from these new FWD tests were also included in this pool of FWD data files. The locations of these new FWD tests are listed in the final report titled "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", (Baladi et al, 2009 and Dawson 2008) and are shown in Figure 3.7 of Chapter 3.

The deflection data in all FWD tests of pool2 were plotted against the radial distance from the center of the load. The resulting deflection basins were examined. The FWD test files where the deflection basins were irregular were also eliminated from further analyses. Summary of the tests used in the analyses is presented in Table 4.1. Table 4.2 shows a summary of the FWD test reference location, the MDOT Region, the road designation, the control section and job number, the pavement layer thicknesses, the aggregate type and gradation, and the roadbed soil type. A similar summary for the FWD tests on flexible pavements is presented in Table 4.3.

Table 4.1 Distribution of FWD files and tests

MDOT region	Rigid pavement		Flexible pavement		Total	
	FWD Files	FWD Tests	FWD Files	FWD Tests	FWD Files	FWD Tests
Bay	21	883	11	588	32	1471
Grand	8	1623	17	1094	25	2717
Metro	12	717	7	104	19	821
North	6	354	12	786	18	1140
Southwest	13	472	0	0	13	472
Superior	8	332	8	89	16	421
University	6	282	1	44	7	326
Total	74	4663	56	2705	130	7368

Table 4.2 A summary of the FWD files for rigid pavements

FWD File Details						Material			Pavement Layer Thickness (in)		Number of Tests
Region	Road	Cluster - area	Control Section	Project No	File Name	Roadbed[1]	Granular Layer		PCC Slab	Granular	
							Material	Gradation			
Bay	I-675	09-08	73101		rigid-B-I675-CS73101-10-24-2003	SC	NA[2]	NA	9	20	72
Bay	I-675	09-08	73101		rigid-B-I675-CS73101-05-26-2004	SC	NA	NA	9	20	49
Bay	I-675	09-08	73101		rigid-B-I675-CS73101-10-14-2004	SC	NA	NA	9	20	75
Bay	I-675	09-08	73101		rigid-B-I675-CS73101-12-05-2005	SC	NA	NA	9	20	63
Bay	I-75	09-08	73101	46575	rigid-BI75-CS73101-08-15-2001	SC	NA	NA	9	20	47
Bay	I-75	09-08	73101	46575	rigid-BI75-CS73101-11-30-1999	SC	NA	NA	9	20	19
Bay	I-75	08-06	6111	c7	rigid-B-I75-CS6111-09-13-2001	SC-SM	NA	NA	9	20	57
Bay	I-75	08-04	9035		rigid-B-I75-CS9035-07-02-2008	SC	NA	NA	9	20	36
Bay	US-10	08-04	9101		rigid-B-US10-CS9101-12-18-2007	SC	NA	NA	7.3	35.4	5
Bay	US-127	09-08	29011		rigid-B-US127-CS29011-06-27-2008	SC	NA	NA	9	20	33
Bay	US-127	07-05	37014		rigid-B-US127-CS37014-12-19-2007	SC	NA	NA	8	24.3	12
Bay	US-23	09-10	25031		rigid-B-US23-CS25031-08-30-2005	SP2	NA	NA	10	20	19
Bay	US-23	09-10	25031	17717	rigid-B-US23-CS25031-08-23-2005	SM	NA	NA	10	20	27
Bay	US-23	09-10	25031		rigid-B-US23-CS25031-11-15-2005	SP2	NA	NA	10	20	68
Bay	US-23	09-10	25031		rigid-B-US23-CS25031-11-16-2005	SP2	NA	NA	10	20	31
Bay	US-23	09-10	25031		rigid-B-US23-CS25031-11-16-2005-(2)	SP2	NA	NA	10	20	48
Bay	US-23	09-09	25031		rigid-B-US23-CS25031-10-21-1998	SM	NA	NA	9	20	34
Bay	US-23	09-09	25031		rigid-B-US23-CS25031-05-30-2001	SM	NA	NA	9	20	46
Bay	US-23	09-09	25031	17717	rigid-B-US23-CS25031-08-23-2005-(2)	SM	NA	NA	9	20	17
Bay	I-475	09-09	25132	6577	rigid-B-I475-CS25132-06-26-1997	SM	NA	NA	9	20	60
Bay	I-475	09-09	25132	6582	rigid-B-I475-CS25132-06-24-2001	SM	NA	NA	9	20	65

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", (Baladi et al 2009); [2]Not available

Table 4.2 (Cont'd)

FWD File Details						Material			Pavement Layer Thickness (in)		Number of Tests
Region	Road	Cluster - area	Control Section	Project No	File Name	Roadbed[1]	Granular Layer		PCC Slab	Granular	
							Material	Gradation			
Grand	US-131	09-02	41131	21089	rigid-G-US131-CS41131-07-11-1996-(2)	SC-SM	Dolomite	Dense	9	24	9
Grand	US-131	07-03	59012	45792	rigid-G-US131-CS59012-04-09-1998	SP1	NA[2]	NA	9	24	22
Grand	I-96	09-07	34044	20730	rigid-G-I96-CS34044-06-27-2001	SM	Natural Gravel	Dense	9	24	21
Grand	M-6	09-02	41064	33335	rigid-G-M6-CS41064-09-15-2004	SC-SM	Crushed Concrete	Dense	10	24	57
Grand	M-6	09-02	41064	33335	rigid-G-M6-CS41064-09-29-2004	SC-SM	Crushed Concrete	Dense	10	24	653
Grand	M-6	09-02	41064	33335	rigid-G-M6-CS41064-09-08-2004	SC-SM	Crushed Concrete	Dense	10	24	665
Grand	M-6	09-02	41064	53508	rigid-G-M6-CS41064-11-15-2001	SC-SM	NA	NA	10	24	159
Grand	US-27		19033	33577	rigid-G-US27-CS19033-06-15-1998	SC-SM	NA	NA	10	24	37
Metro	I-69	14-09	77023	21586	rigid-M-I69-CS77023-07-02-1997	CL	Natural Gravel	Open	10	20	18
Metro	I-69	15-03	77024		rigid-M-I69-CS77024-04-02-2008	CL	NA	NA	12.25	16	36
Metro	I-75	14-06	82194		rigid-M-I75-CS82194-09-16-2008	SC	NA	NA	12	20	5
Metro	I-94	13-04	82021		rigid-M-I94-CS82021-11-19-2006	SP2	NA	NA	10	20	333
Metro	I-94	14-05	82022		rigid-M-I94-CS82022-10-06-2005	SC	NA	NA	10	14	35
Metro	I-94	14-05	82022		rigid-M-I94-CS82022-10-13-2005	SC	NA	NA	10	14	20
Metro	I-94	14-05	82022		rigid-M-I94-CS82022-10-26-2005	SC	NA	NA	10	14	30
Metro	I-94	14-05	82022		rigid-M-I94-CS82022-10-31-2005	SC	NA	NA	10	14	36
Metro	I-94	14-05	82022		rigid-M-I94-CS82022-09-30-2005	SC	NA	NA	10	14	69
Metro	I-94	14-05	82022		rigid-M-I94-CS82022-11-01-2005	SC	NA	NA	9	12	43
Metro	I-94	14-05	82022		rigid-M-I94-CS82022-09-16-2008	SC	NA	NA	12.5	16	11

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", (Baladi et al 2009); [2]Not available

Table 4.2 (Cont'd)

FWD File Details						Material			Pavement Layer Thickness (in)		Number of Tests
Region	Road	Cluster - area	Control Section	Project No	File Name	Roadbed[1]	Granular Layer		PCC Slab	Granular	
							Material	Gradation			
Metro	M-5	13-03	00000		rigid-M-M5-CS00000-11-29-2006	SC	NA[2]	NA	12	20	69
North	I-75	05-04	65041	947	rigid-N-I75-CS65041-08-30-2001	SP2	Natural Gravel	Dense	9	14	20
North	I-75	05-04	65041	947	rigid-N-I75-CS65041-09-14-2001	SP2	Natural Gravel	Dense	9	14	29
North	I-75	05-02	16091	c1,c2,c9	rigid-N-I75-CS16091-09-17-2001	SP1	Natural Gravel	Dense	9	14	68
North	I-75	05-02	16092	c5,c6,c9	rigid-N-I75-CS16092-09-18-2001	SP1	Natural Gravel	Dense	9	14	98
North	I-75	05-02	16092	c5,c6,c9	rigid-N-I75-CS16092-09-27-2001	SP1	Natural Gravel	Dense	9	14	86
North	I-75	05-02	16091		rigid-N-I75-CS16091-10-26-2001	SP1	NA	NA	9	14	53
South west	I-196	06-04	3033		rigid-So-I196-CS3033-05-14-2008	SP-SM	NA	NA	9	20	33
South west	I-69	11-03	12034	bc1	rigid-So-I69-CS12034-10-08-1998	SC-SM	Natural Gravel	Dense	9	20	7
South west	I-69	11-03	12034	bc1	rigid-So-I69-CS12034-10-09-1998	SC-SM	Natural Gravel	Dense	9	20	7
South west	I-69	11-03	12034	48582	rigid-So-I69-CS12034-09-11-2001	SC-SM	Natural Gravel	Open	9	20	36
South west	I-69	11-03	12033		rigid-So-I69-CS12033-12-18-2001	SC-SM	NA	NA	9	20	65
South west	I-94	12-05	11081		rigid-So-I94-CS11081-11-18-2002	SP-SM	NA	NA	9	20	84
South west	I-94	12-05	11081		rigid-So-I94-CS11081-10-28-2004	SP-SM	NA	NA	9	14	66
South west	I-94	12-05	11081		rigid-So-I94-CS11081-10-30-2001	SP-SM	NA	NA	9	14	12
South west	US-31	06-05	11057	16487	rigid-So-US31-CS11057-10-09-2001	SP-SM	Natural Gravel	Open	9	14	28

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", (Baladi et al 2009); [2]Not available

Table 4.2 (Cont'd)

FWD File Details						Material			Pavement Layer Thickness (in)		Number of Tests
Region	Road	Cluster - area	Control Section	Project No	File Name	Roadbed[1]	Granular Layer		PCC Slab	Granular	
							Material	Gradation			
Southwest	US-31	06-05	11057	16487	rigid-So-US31-CS11057-10-30-2001	SP-SM	Natural Gravel	Open	9	14	27
Southwest	US-31	06-05	11057	16487	rigid-So-US31-CS11057-06-06-2003	SP-SM	Natural Gravel	Open	9	14	16
Southwest	US-31	06-05	11057	16487	rigid-So-US31-CS11057-10-10-2002	SP-SM	Natural Gravel	Open	9	14	58
Southwest	US-31	06-05	11057		rigid-So-US31-CS11057-05-14-2008	SP-SM	NA[2]	NA	9	14	33
Superior	I-75	03-05	49025		rigid-Su-I75-CS49025-06-13-2000	SC	NA	NA	9	22	63
Superior	I-75	03-05	49025		rigid-Su-I75-CS49025-06-02-2000	SC	NA	NA	9	22	40
Superior	I-75	03-04	17033		rigid-Su-I75-CS17033-05-31-2000	SP1	NA	NA	9	24	49
Superior	I-75	03-04	17034		rigid-Su-I75-CS17034-05-25-2000	SP1	NA	NA	9	48	16
Superior	I-75	03-04	17034		rigid-Su-I75-CS17034-05-22-2000	SP1	NA	NA	9	48	21
Superior	M-28	03-01	2041	c1,c2,c3	rigid-Su-M28-CS02041-08-23-2001	SP-SM	Natural Gravel	Dense	10	25	21
Superior	M-28	03-01	2041	c1,c2,c3	rigid-Su-M28-CS02041-08-23-2001-(2)	SP-SM	Natural Gravel	Dense	10	25	42
Superior	M-28	03-04	17062	47046	rigid-Su-M28-CS17062-05-08-2001	SP1	NA	NA	8	24	80
University	I-69	10-08	19042	24680	rigid-U-I69-CS19042-09-18-1999	SC	Dolomite	Open	9	14	10
University	I-69	10-08	19043	18632	rigid-U-I69-CS19043-06-25-2001	SC	Natural Gravel	Open	9	14	17
University	I-69	10-08	19043	18632	rigid-U-I69-CS19043-05-14-2002	SC	Natural Gravel	Open	9	14	98
University	I-75	14-01	58151		rigid-U-I75-CS58151-03-31-2008	SC	NA	NA	10	0	57
University	I-75	14-06	58152	28352	rigid-U-I75-CS58152-10-06-2006	SC	NA	NA	10	20	21
University	US-23	13-06	58034	18877	rigid-U-US23-CS58034-09-14-2006	SP-SM	Natural Gravel	Dense	10	15	79

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes" [2]Not available

Table 4.3 A summary of the FWD files for flexible pavement

FWD File Details						Material Types			Pavement Layer Thickness (in)			Number of Tests
						Roadbed[1]	Granular Layer					
Region	Road	Cluster-area	Control Section	Project No	File Name	Soil Type	Material	Gradation	AC	Base	Subbase	
Bay	M-57	09-08	29022	20544	flex-B-M57-CS29022-01-28-1993	SC	CA-NG[3]	NA[2]	5.5	7	18	134
Bay	M-57	09-08	29022	20544	flex-B-M57-CS29022-08-30-1994	SC	CA-NG	NA	5.5	7	18	66
Bay	M-57	09-08	29022	20544	flex-B-M57-CS29022-08-30-1994-(2)	SC	CA-NG	NA	5.5	7	18	66
Bay	M-57	09-08	29022	20544	flex-B-M57-CS29022-08-30-1994-(3)	SC	CA-NG	NA	5.5	7	18	67
Bay	M-57	09-08	29022	20544	flex-B-M57-CS29022-08-30-1994-(4)	SC	CA-NG	NA	5.5	7	18	67
Bay	M-84	09-08	9011	31804	flex-B-M84-CS9011-05-17-2005	SC	NA	NA	4.0	7	18	39
Bay	M-84	09-08	9011	31804	flex-B-M84-CS9011-05-17-2005-(2)	SC	NA	NA	4.0	7	18	69
Bay	M-84	09-08	9011	31804	flex-B-M84-CS9011-09-11-2005	SC	NA	NA	4.0	7	18	32
Bay	M-84	09-08	9011	31804	flex-B-M84-CS9011-09-13-2005-(2)	SC	NA	NA	4.0	7	18	16
Bay	M-84	09-08	9011	31804	flex-B-M84-CS9011-10-03-2005	SC	NA	NA	4.0	7	18	16
Bay	M-84	09-08	9011	31804	flex-B-M84-CS9011-10-10-2005	SC	NA	NA	4.0	7	18	16
Grand	M-120	06-03	61012	45788	flex-G-M120-CS61012-07-23-1998	SP1	NA	NA	7	7	18	74
Grand	M-120	07-02	61012	45788	flex-G-M120-CS61012-07-24-1998	SP1	NA	NA	7	7	18	74
Grand	M-20	07-03	54041		flex-G-M20-CS54041-04-09-2002	SP1	NA	NA	6	7	18	68
Grand	M-37	07-03	62032	45802	flex-G-M37-CS62032-05-18-2000	SP1	NA	NA	8	7	18	40
Grand	M-57	09-01	41122	24638	flex-G-M57-CS41122-8-23-1994	SP1	CA-NG	NA	3.0	8	18	108
Grand	M-57	09-01	59021	24638	flex-G-M57-CS59021-08-23-1994	SP1	CA-NG	NA	3	8	18	53
Grand	M-57	09-01	59021	24638	flex-G-M57-CS59021-08-23-1994-(2)	SP1	CA-NG	NA	3	8	18	53
Grand	M-57	09-01	59021	24638	flex-G-M57-CS59021-08-23-1994-(3)	SP1	CA-NG	NA	3.0	8	18	54

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", [2]Not available, [3]CA-NG = Crushed asphalt/natural gravel

Table 4.3 (Cont'd)

FWD File Details						Material Types			Pavement Layer Thickness (in)			Number of Tests
						Roadbed[1]	Granular Layer					
Region	Road	Cluster - area	Control Section	Project No	File Name	Soil Type	Material	Gradation	AC	Base	Subbase	
Grand	M-57	09-01	59021	24638	flex-G-M57-CS59021-08-23-1994-(4)	SP1	CA-NG[3]	NA[2]	3	8	18	53
Grand	M-57	09-01	29021	33803	flex-G-M57-CS29021-5-23-1995	SP1	NA	NA	3.0	8	18	83
Grand	US-131	07-03	54013	28121	flex-G-US131-CS54013-08-18-1994	SP1	Natural Gravel	Dense	7.3	6	18	65
Grand	US-131	07-03	54013	28121	flex-G-US131-CS54013-08-18-1994-(2)	SP1	Natural Gravel	Dense	7.5	6	18	32
Grand	US-131	07-03	54013	28121	flex-G-US131-CS54013-08-18-1994-(3)	SP1	Natural Gravel	Dense	7.5	6	18	65
Grand	US-131	07-03	54013	28121	flex-G-US131-CS54013-08-18-1994-(4)	SP1	Natural Gravel	Dense	7.5	6	18	33
Grand	US-131	07-03	54013	28121	flex-G-US131-CS54013-08-18-1994-(5)	SP1	Natural Gravel	Dense	7.5	6	18	33
Grand	US-131	07-02	54014	NA	flex-G-US131-CS54014-05-13-1998	SP1	NA	NA	7.3	6	18	181
Grand	US-131	09-01	59012	26310	flex-G-US131-CS59012-06-25-1998	SP1	NA	NA	8	6	18	25
Metro	I-94	14-09	NA	NA	flex-M-I94-CS77111-04-02-2008	CL	NA	NA	4.2	6	18	29
Metro	M-53	14-08	NA	NA	flex-M-M53-CS50015-02-27-2009	CL	NA	NA	8	6	18	13
Metro	M-53	14-08	NA	NA	flex-M-M53-CS50015-03-06-2009	CL	NA	NA	8	6	18	13
Metro	M-53	14-08	NA	NA	flex-M-M53-CS50015-03-09-2009	CL	NA	NA	8	6	18	13
Metro	M-53	14-08	NA	NA	flex-M-M53-CS50015-03-13-2009	CL	NA	NA	8	6	18	13
Metro	M-53	14-08	NA	NA	flex-M-M53-CS50015-04-04-2008	CL	NA	NA	8.0	6	18	10
Metro	M-53	14-08	NA	NA	flex-M-M53-CS50015-04-09-2009	CL	NA	NA	8	6	18	13

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", [2]Not available, [3]CA-NG = Crushed concrete/natural gravel

Table 4.3 (Cont'd)

FWD File Details						Material Types			Pavement Layer Thickness (in)			Number of Tests
						Roadbed[1]	Granular Layer					
Region	Road	Cluster - area	Control Section	Project No	File Name	Soil Type	Material	Gradation	AC	Base	Subbase	
North	I-75	06-02	69014	44972	flex-N-I75-CS69014-08-03-1999	SP1	CA-AG[4]	NA	6.25	6	18	90
North	I-75	06-02	69014	44972	flex-N-I75-CS69014-08-03-1999-(2)	SP1	CA-AG	NA[2]	6.3	6	18	90
North	I-75	06-02	69014	44972	flex-N-I75-CS69014-08-04-1999	SP1	CA-AG	NA	6.25	6	18	92
North	I-75	06-02	69014	44972	flex-N-I75-CS69014-08-04-1999-(2)	SP1	CA-AG	NA	6.3	6	18	111
North	I-75	06-02	69014	NA	flex-N-I75-CS69014-11-12-1997	SP1	NA	NA	6.25	6	18	97
North	I-75	06-02	69014	NA	flex-N-I75-CS69014-11-23-1997	SP1	NA	NA	6.3	6	18	93
North	M-55	05-04	72022	NA	flex-N-M55-CS77022-8-20-2001-(2)	SP1	NA	NA	7.0	6	18	76
North	US-131	07-01	67017	18255	flex-N-US131-CS67017-05-01-2002	SM	NA	NA	7.25	6	18	93
North	US-23	04-02	1052	NA	flex-N-US23-CS1052-06-03-2008	SC-SM	NA	NA	3.5	8	18	11
North	US-23	04-02	4032	NA	flex-N-US23-CS4032-06-03-2008	SC-SM	NA	NA	5.0	8	18	11
North	US-23	04-02	71073	NA	flex-N-US23-CS71073-06-04-2008	SC-SM	NA	NA	6.5	8	18	11
North	US-23	04-02	71073	NA	flex-N-US23-CS71073-06-04-2008-(2)	SC-SM	NA	NA	5.5	8	18	11
Superior	I-75	03-05	49025	NA	flex-Su-I75-CS49025-05-22-2008	SC	NA	NA	7.5	6	18	11
Superior	M-28	03-03	17061	NA	flex-Su-M28-CS17061-05-22-2008	SP-SM	NA	NA	5.0	8	18	10

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", [2]Not available, [3]CA-NG = Crushed asphalt/natural gravel

[4]CA-AG = Crushed asphalt/aggregate base

Table 4.3 (Cont'd)

FWD File Details						Material Types			Pavement Layer Thickness (in)			Number of Tests
						Roadbed[1]	Granular Layer					
Region	Road	Cluster - area	Control Section	Project No	File Name	Soil Type	Material	Gradation	AC	Base	Subbase	
Superior	M-28	03-01	75061	NA	flex-Su-M28-CS75061-05-21-2008	SP-SM	NA	NA	5.5	8	18	11
Superior	M-38	01-01	66072	NA	flex-Su-M38-CS66042-05-20-2008	CL	NA	NA	3.5	8	24	11
Superior	US-141	02-02	7022	NA	flex-Su-US141-CS7022-05-19-2008	ML	NA[2]	NA	4.5	8	18	13
Superior	US-2	02-01	27022	NA	flex-Su-US2-CS27022-05-20-2008	SM	NA	NA	3.5	8	18	11
Superior	US-2	03-01	75021	NA	flex-Su-US2-CS75021-05-22-2008	SP-SM	NA	NA	5.5	8	18	11
Superior	US-41	02-04	7013	NA	flex-Su-US41-CS7013-05-19-2008	ML	NA	NA	2.5	8	18	11
University	M-52	10-10	33051	NA	flex-U-M52-CS33051-11-13-2002	SC	NA	NA	6.0	6	18	44

[1] Final report "Pavement Subgrade MR Design Values for Michigan's Seasonal Changes", [2]Not available

4.3 PAVEMENT STRUCTURES

In the design and construction of new pavements, two pavement cross-sections are typically used by MDOT and other State Highway Agencies. These are:

1. A flexible section consisting of hot-mix asphalt (HMA) surface, aggregate base, and a sand subbase layer supported on roadbed soil. This cross section could be labeled as a three layered system (HMA, base, and subbase layers) or two layered system if the aggregate base and sand subbase are combined as a granular layer.
2. A rigid section consisting of a PCC slab, an aggregate base, and a sand subbase layer supported on roadbed soil. This cross section could also be labeled as a three layered system (PCC, base, and subbase layers). However, because of the stiffness of the concrete slab relative to the aggregate base and the high ratio of the thickness of the PCC slab to that of the aggregate base (typically 2 or more), most existing backcalculation software combine the aggregate base (if any) and the sand subbase as one granular layers.

In this study, the two layered system was used to backcalculate the resilient modulus of all flexible and rigid pavement sections. Hence, the base and subbase layers were combined as one granular layer whose thickness was taken as the sum of the thicknesses of the base and subbase layers as shown in Figure 4.1. In addition, for each FWD test conducted on flexible pavement sections, a three layered system was also used and the modulus values of the HMA, base, and subbase layers and the roadbed soils were backcalculated. The three layered system is also shown in Figure 4.1.

Few of the flexible pavement sections that were subjected to FWD tests consisted of an HMA layer, crushed asphalt under the HMA layer, aggregate base, and sand subbase layer supported on roadbed soils as shown in Figure 4.2. This pavement structure is the result of crush and shape action and HMA overlay. The crushed HMA was left in place as an additional base layer. Unfortunately, the exact thickness of the crushed asphalt layer was not recorded, hence its thickness was assumed to be equal to the thickness of the HMA overlay. In the backcalculation of the layer moduli of these pavement sections, the thickness of the base layer was considered as the sum the thicknesses of the crushed asphalt layer and the existing aggregate base as shown in Figure 4.2. It should be noted that, in this study, pavement sections containing layers of crushed asphalt and a natural gravel aggregate base are labeled “crushed asphalt – natural gravel (CA-NG)”. Likewise, the label “crushed asphalt – aggregate base (CA-AG)” was used for sections where the aggregate base type is not known.

4.4 BACKCALCULATION OF UNBOUND GRANULAR LAYER MODULI

The MICHBACK software is a backcalculation program that was developed at Michigan State University for MDOT. It uses a linear elastic layered system, the Chevronx software as a forward engine, and a two gradient Newtonian based algorithm in the iteration process to converge the calculated and the measured deflection basins. The MICHBACK program was used in this study to backcalculate the pavement layer moduli for both flexible and rigid pavements. For each pavement layer, the inputs for the MICHBACK program are the thickness (provided by MDOT), Poisson’s ratios, and the seed modulus and its possible maximum and minimum values.

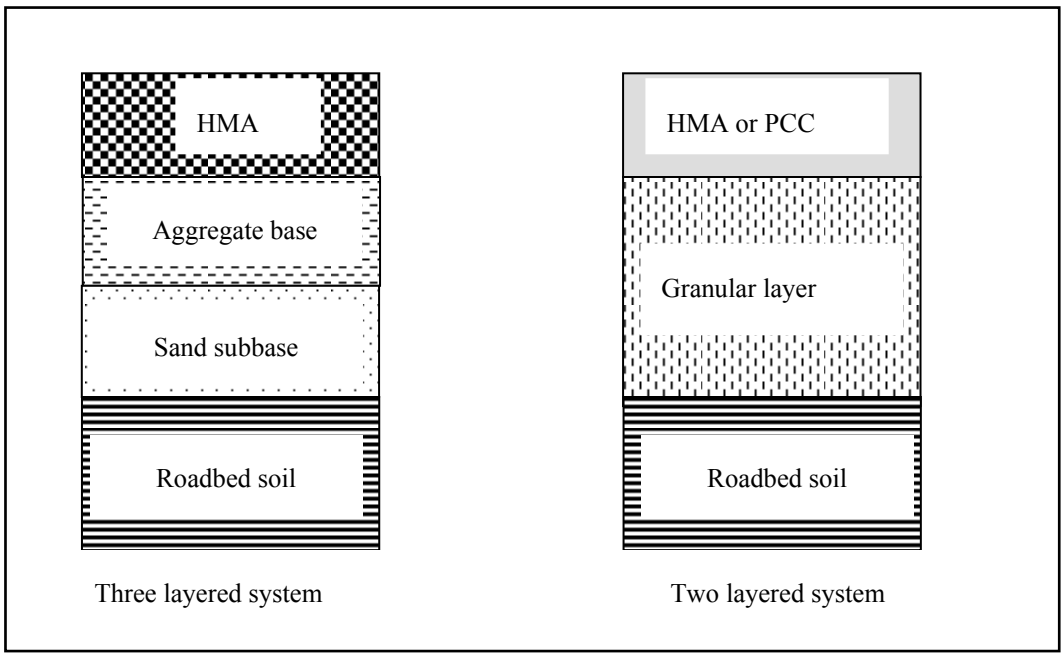

Figure 4.1 Pavement structures used for backcalculation

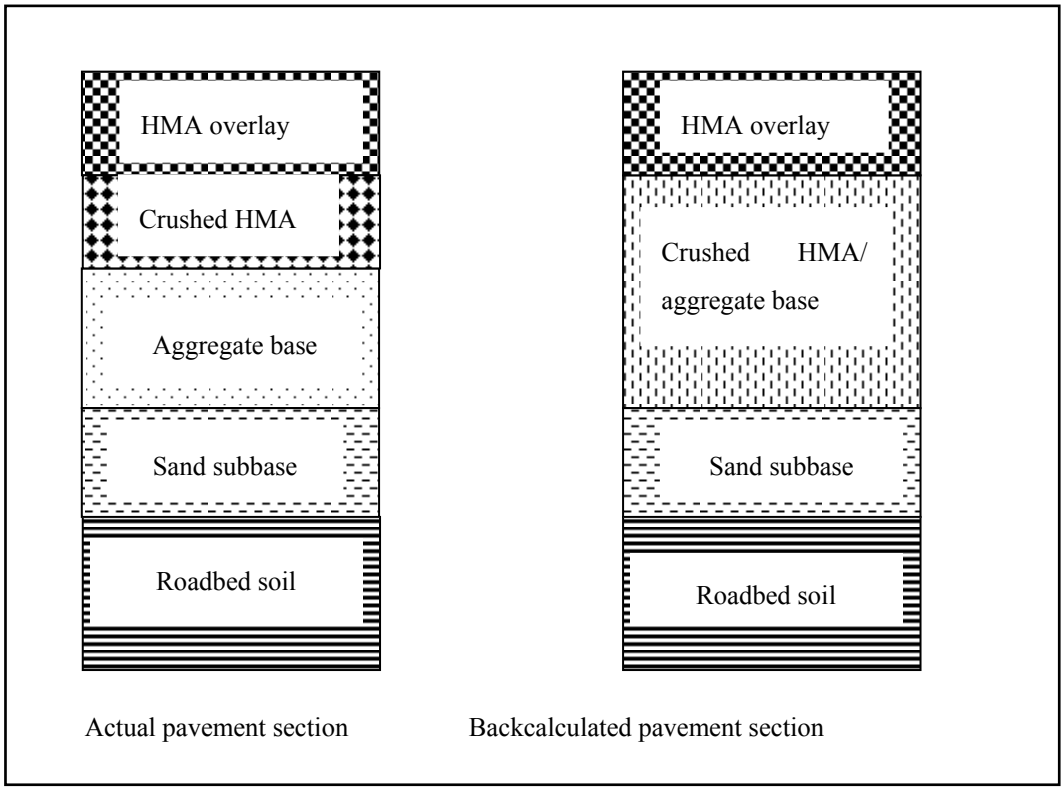

Figure 4.2 Pavement cross-sections for flexible pavements with a crushed asphalt layer

The default values for Poisson's ratios and the maximum, minimum, and seed resilient modulus values included in the software were used for most of the pavement sections. The program accepts convergence based on the following criteria, set by the user.

- The difference in each of the backcalculated modulus in two consecutive iterations is 2 percent.
- The difference in the Root Mean Square (RMS) error between the measured and the calculated deflection basins in two consecutive iterations is 2 percent.

4.4.1 Rigid Pavements

The AREA method is an empirical backcalculation method based on a PCC slab on grade system. The method is generally used to backcalculate the layer moduli of rigid pavements. The AREA method backcalculates the composite modulus of the PCC slab, which is a combined modulus of the PCC slab and the granular layer, and the modulus of the roadbed soils. The resilient modulus of the unbound granular layer can be estimated from the composite modulus of the PCC slab using the correlations developed by (Ioannides et al, 1992). Said correlations utilize the modular ratio β (which is the ratio of the modulus of the base layer to that of the PCC slab, see Equation 2.26). For any given granular base, the modular ratio is typically very small. This makes the estimate of the resilient modulus of the base layer highly sensitive to the estimated modular ratio. Hence, the method is not recommended to be used for estimating the modulus of the unbound granular layers (Smith et al, 1995).

In a study sponsored by the Federal Highway Administration (FHWA), Stubstad et al proposed an alternative backcalculation method that uses forward calculation (Stubstad et al 2006). The method involves backcalculation of the roadbed modulus using a modified Hogg model and of the slab using AREA factor. However, the modulus of the unbound granular layer has to be determined using the correlations developed by (Ioannides et al, 1992).

To study the impact of the unbound granular layer modulus on the surface deflections of rigid pavements, the ISLAB2000 software was used to calculate the surface deflection basins for different base thickness and modulus and for constant other variables. The resulting deflection basins are shown in Figure 4.3. Examination of the figure indicates that, as it was expected, the presence of an unbound granular layer does not have significant impact on the deflection basin. Hence, the development of empirical relations to estimate the granular layer modulus value based on the measured surface deflection is a difficult task. As an alternative, analysis of elastic layered system could be performed to backcalculate the layer moduli of rigid pavements. Indeed, in another study sponsored by FHWA, Von Quintas et al used the MODCOMP4 software to backcalculate the layer moduli of both rigid and flexible pavements (Von Quintas et al 2002). They reported that the RMS error between the measured and the calculated deflection basins was less than 3% for both pavements. They found that correct estimation of the depth to the stiff layer increases the accuracy of the backcalculated pavement layer moduli. Based on those findings, the MICHBACK software (which is based on elastic layered system with Chevronx as the forward engine) was used in this study to backcalculate the layer moduli of both rigid and flexible pavements. The maximum acceptable RMS error levels were set at 3 percent for rigid pavements and at 2 percent for flexible pavements.

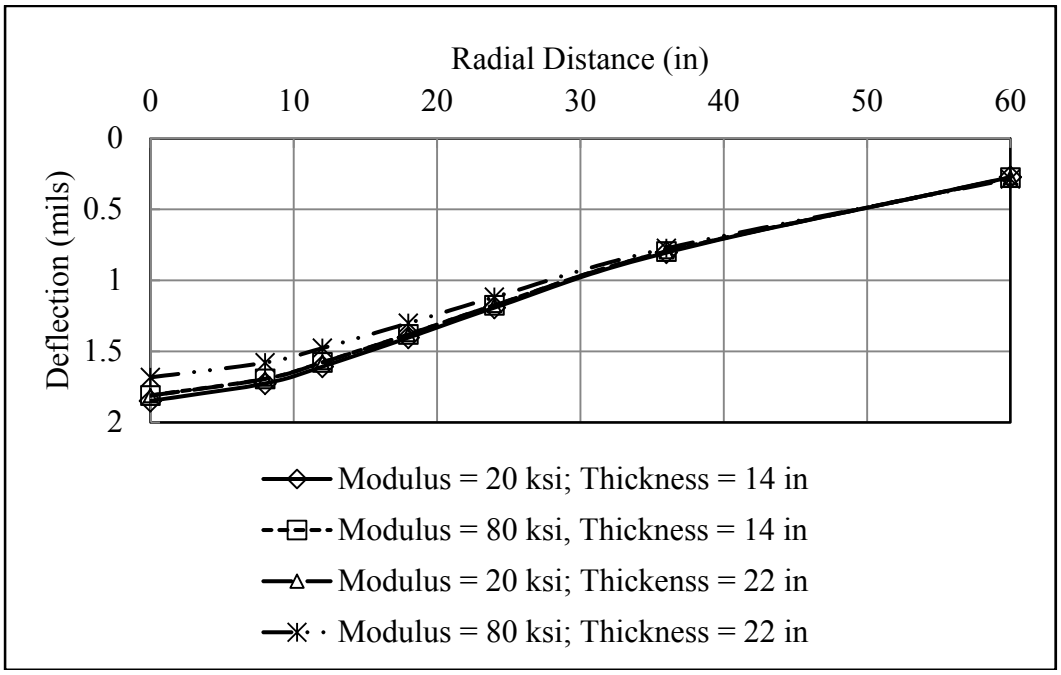

Figure 4.3 Impact of unbound granular layer modulus on the rigid pavement deflection basin

As mentioned in Table 4.1, a total of seventy four FWD files with four thousand six hundred sixty three FWD tests conducted on rigid pavements were used in this study. Pavement layer thicknesses were provided by the MDOT. The depth to stiff layer was first estimated using Boussinesq equation and then modified several times to minimize the RMS error. All tests with an RMS error greater than 3 percent were not included in further analyses. A total of two thousand nine hundred ninety five tests have an RMS error of less than 3 percent. The averages of the backcalculated resilient moduli for each aggregate type and gradation are shown in Figure 4.4. Irrespective of the unbound granular layer aggregate type, the average backcalculated modulus was found to vary between 30 and 40 ksi. A sample input (deflection data and layer thicknesses) and output (backcalculated layer moduli and the backcalculated modulus of the roadbed soil) data for I75 in North Region is presented in Table 4.4. The average backcalculated moduli for concrete slab, granular layer and the roadbed for all files is listed in Table 4.5. Details of the backcalculated granular layer modulus values for all tests conducted on rigid pavements are presented in Appendix A.

The backcalculated PCC resilient modulus results obtained from the MICHBACK software were compared to those obtained using the AREA method, as shown in Figure 4.5. The results indicate similarity between the two methods.

Figure 4.6 depicts the averages of the backcalculated modulus values of the granular layer and the roadbed soils under rigid pavements. It can be seen that the modulus values of the granular layer are not affected by those of the roadbed soils (no interaction). This observation indicates that the elastic layered analysis embedded in the MICHBACK software could be used to simulate rigid pavement response to loads.

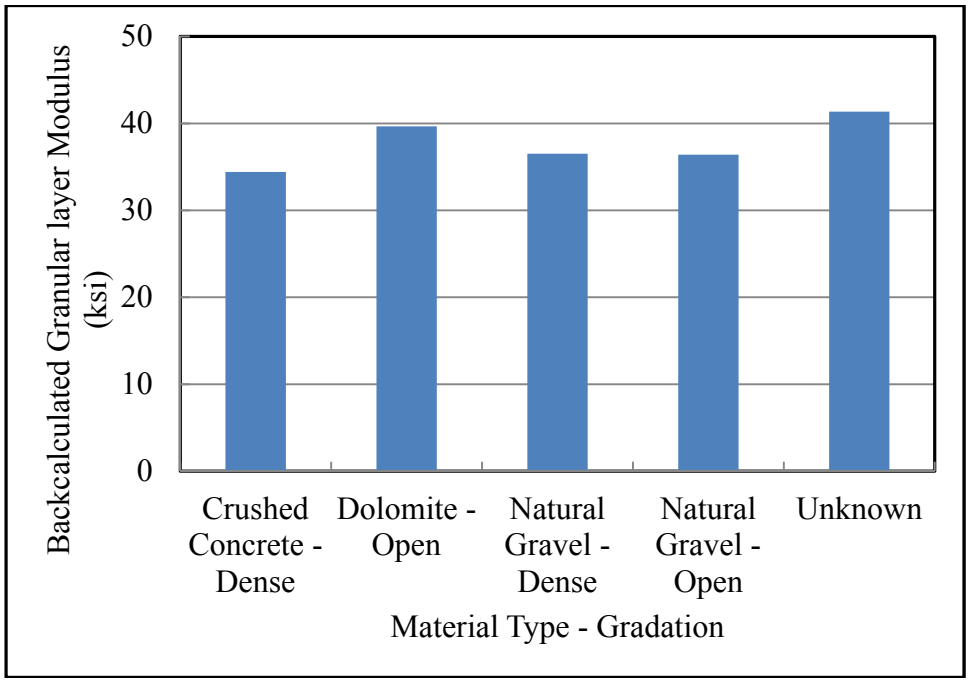

Figure 4.4 Unbound granular layer moduli for rigid pavements

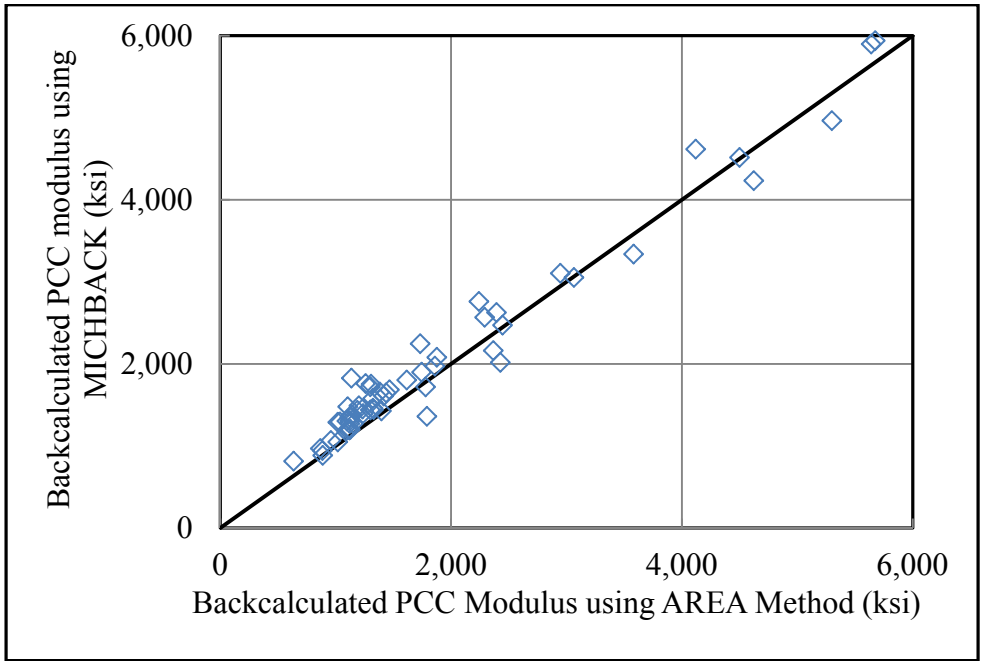

Figure 4.5 Backcalculated PCC modulus values obtained from the MICHBACK software versus those from the AREA method

Table 4.4 A sample backcalculated file for rigid pavement

Region	Road	Control Section	Project Number	FWD Date	Material Type			Pavement Layer Thicknesses (in)		Depth to Stiff layer (inch)[1]
North	I75	65041	947	7/2/1997	Roadbed	Aggregate Type	Gradation	PCC	Granular	
File Name	rigid-N-I75-CS65041-09-14-2001				SP2	Natural Gravel	Dense	9	14	700
Deflections (mils) measured by FWD at various radial distances (in)							RMS Error (%)	Backcalculated Moduli (ksi)		
0	8	12	18	24	36	60		PCC	Granular	Roadbed
8.54	7.13	6.46	5.71	5.00	3.82	2.13	1.81	931.5	35.4	18.5
7.36	6.10	5.51	4.80	4.13	3.11	1.65	1.91	1,077.6	32.2	24.2
7.95	6.81	6.30	5.63	5.00	3.94	2.20	1.97	1,389.3	24.4	18.4
8.15	6.97	6.46	5.75	5.04	4.02	2.24	2.00	1,270.9	26.9	17.8
7.56	6.22	5.67	4.92	4.29	3.23	1.73	2.06	1,053.8	33.0	22.9
7.01	5.87	5.31	4.69	4.06	3.07	1.61	2.10	1,283.2	25.6	24.8
6.97	5.83	5.31	4.65	4.06	3.07	1.61	2.12	1,311.5	25.5	25.0
7.56	6.26	5.67	4.92	4.25	3.19	1.65	2.15	1,079.6	25.8	23.8
7.56	6.22	5.63	4.92	4.29	3.23	1.73	2.16	1,042.1	34.4	23.0
8.15	6.73	6.14	5.43	4.76	3.66	2.01	2.24	991.0	36.4	19.5
7.72	6.38	5.79	5.04	4.37	3.31	1.73	2.28	1,351.4	28.0	22.6
8.15	6.73	6.14	5.39	4.76	3.66	2.01	2.28	983.6	37.4	19.6
7.91	6.73	6.26	5.55	4.92	3.90	2.13	2.29	1,377.6	23.0	18.9
7.32	6.06	5.47	4.76	4.09	3.11	1.61	2.31	1,120.0	28.7	24.7
10.24	8.43	7.72	6.77	5.91	4.37	2.24	2.33	896.8	14.7	17.9
9.88	8.15	7.44	6.54	5.67	4.25	2.17	2.41	955.0	15.4	18.9
9.92	8.19	7.44	6.54	5.71	4.25	2.17	2.45	945.3	15.2	18.8
7.09	5.91	5.39	4.72	4.09	3.15	1.61	2.60	1,257.8	24.7	24.3

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.5 A summary of the backcalculated granular layer modulus for rigid pavements

FWD File Details			Pavement Layer Thickness (in)		Depth to Stiff Layer (in)	Number of Tests	No. of. Tests Converged	Average RMS Error (%)	Average Backcalculated Resilient Modulus (ksi)		
Region	Road	File Name	PCC Slab	Granular					PCC	Granular	Roadbed
Bay	I-675	rigid-B-I675-CS73101-10-24-2003	9	20	250	72	65	1.49	1,136	34	18
Bay	I-675	rigid-B-I675-CS73101-05-26-2004	9	20	250	49	43	1.90	1,083	39	17
Bay	I-675	rigid-B-I675-CS73101-10-14-2004	9	20	250	75	56	1.78	875	24	13
Bay	I-675	rigid-B-I675-CS73101-12-05-2005	9	20	250	63	41	1.47	1,466	42	18
Bay	I-75	rigid-BI75-CS73101-08-15-2001	9	20	200	47	43	1.61	1,153	30	14
Bay	I-75	rigid-BI75-CS73101-11-30-1999	9	20	100	19	19	1.53	2,446	35	9
Bay	I-75	rigid-B-I75-CS6111-09-13-2001	9	20	700	57	51	1.93	1,353	39	21
Bay	I-75	rigid-B-I75-CS9035-07-02-2008	9	20	175	36	34	1.29	4,499	59	15
Bay	US-10	rigid-B-US10-CS9101-12-18-2007	7.3	35.4	700	5	0	NA	NA	NA	NA
Bay	US-127	rigid-B-US127-CS29011-06-27-2008	9	20	175	33	29	1.41	5,300	45	15
Bay	US-127	rigid-B-US127-CS37014-12-19-2007	8	24.3	NA	12	0	NA	NA	NA	NA
Bay	US-23	rigid-B-US23-CS25031-08-30-2005	10	20	700	19	19	2.05	1,123	62	28
Bay	US-23	rigid-B-US23-CS25031-08-23-2005	10	20	700	27	27	1.99	1,324	52	28
Bay	US-23	rigid-B-US23-CS25031-11-15-2005	10	20	700	68	42	1.76	1,101	45	27
Bay	US-23	rigid-B-US23-CS25031-11-16-2005	10	20	700	31	31	1.42	1,038	53	17
Bay	US-23	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	700	48	24	1.59	936	25	20
Bay	US-23	rigid-B-US23-CS25031-10-21-1998	9	20	500	34	20	1.55	4,246	56	31
Bay	US-23	rigid-B-US23-CS25031-05-30-2001	9	20	500	46	35	1.47	2,241	57	26
Bay	US-23	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	500	17	11	2.08	1,306	69	23
Bay	I-475	rigid-B-I475-CS25132-06-26-1997	9	20	500	60	48	0.67	2,948	32	25
Bay	I-475	rigid-B-I475-CS25132-06-24-2001	9	20	500	65	21	1.59	2,395	40	26
The granular layer thickness data were obtained from MDOT, higher thicknesses (more than 16”) could be due to possible fill sections.											

Table 4.5 (Cont'd)

FWD File Details			Pavement Layer Thickness (in)		Depth to Stiff Layer (in)	Number of Tests	No. of. Tests Converged	Average RMS Error (%)	Average Backcalculated Resilient Modulus (ksi)		
Region	Road	File Name	PCC Slab	Granular					PCC	Granular	Roadbed
Grand	US-131	rigid-G-US131-CS41131-07-11-1996-(2)	9	24	700	9	0	NA	NA	NA	NA
Grand	US-131	rigid-G-US131-CS59012-04-09-1998	9	24	700	22	14	1.22	1,358	31	22
Grand	I-96	rigid-G-I96-CS34044-06-27-2001	9	24	700	21	8	2.05	2,112	34	34
Grand	M-6	rigid-G-M6-CS41064-09-15-2004	10	24	700	57	41	2.09	2,284	38	38
Grand	M-6	rigid-G-M6-CS41064-09-29-2004	10	24	700	653	407	1.74	6,208	34	34
Grand	M-6	rigid-G-M6-CS41064-09-08-2004	10	24	700	665	419	1.74	6,234	34	34
Grand	M-6	rigid-G-M6-CS41064-11-15-2001	10	24	700	159	106	1.43	2,032	24	24
Grand	US-27	rigid-G-US27-CS19033-06-15-1998	10	24	400	37	19	1.02	1,397	30	20
Metro	I-69	rigid-M-I69-CS77023-07-02-1997	10	20	200	18	14	0.56	1,745	46	13
Metro	I-69	rigid-M-I69-CS77024-04-02-2008	12.25	16	NA	36	0	NA	NA	NA	NA
Metro	I-75	rigid-M-I75-CS82194-09-16-2008	12	20	700	5	2	1.54	3,065	85	18
Metro	I-94	rigid-M-I94-CS82021-11-19-2006	10	20	700	333	139	2.18	1,556	53	20
Metro	I-94	rigid-M-I94-CS82022-10-06-2005	10	14	NA	35	0	NA	NA	NA	NA
Metro	I-94	rigid-M-I94-CS82022-10-13-2005	10	14	NA	20	0	NA	NA	NA	NA
Metro	I-94	rigid-M-I94-CS82022-10-26-2005	10	14	NA	30	0	NA	NA	NA	NA
Metro	I-94	rigid-M-I94-CS82022-10-31-2005	10	14	NA	36	0	NA	NA	NA	NA
Metro	I-94	rigid-M-I94-CS82022-09-30-2005	10	14	NA	69	0	NA	NA	NA	NA
Metro	I-94	rigid-M-I94-CS82022-11-01-2005	9	12	NA	43	0	NA	NA	NA	NA
Metro	I-94	rigid-M-I94-CS82022-09-16-2008	12.5	16	NA	11	0	NA	NA	NA	NA
Metro	M-5	rigid-M-M5-CS00000-11-29-2006	12	20	175	69	66	1.28	1,791	37	16
North	I-75	rigid-N-I75-CS65041-08-30-2001	9	14	700	20	13	2.06	1,139	44	21
North	I-75	rigid-N-I75-CS65041-09-14-2001	9	14	700	29	18	2.19	1,129	27	21
The granular layer thickness data were obtained from MDOT, higher thicknesses (more than 16") could be due to possible fill sections.											

Table 4.5 (Cont'd)

FWD File Details			Pavement Layer Thickness (in)		Depth to Stiff Layer (in)	Number of Tests	No. of. Tests Converged	Average RMS Error (%)	Average Backcalculated Resilient Modulus (ksi)		
Region	Road	File Name	PCC Slab	Granular					PCC	Granular	Roadbed
North	I-75	rigid-N-I75-CS16091-09-17-2001	9	14	700	68	62	1.83	1,202	45	20
Grand	M-6	rigid-G-M6-CS41064-09-15-2004	10	24	700	57	41	2.09	2,284	38	38
North	I-75	rigid-N-I75-CS16092-09-18-2001	9	14	700	98	74	1.94	1,131	35	21
North	I-75	rigid-N-I75-CS16092-09-27-2001	9	14	700	86	62	1.77	1,238	32	21
North	I-75	rigid-N-I75-CS16091-10-26-2001	9	14	700	53	49	1.34	1,307	61	21
Southwest	I-196	rigid-So-I196-CS3033-05-14-2008	9	20	400	33	4	1.35	1,417	29	16
Southwest	I-69	rigid-So-I69-CS12034-10-08-1998	9	20	700	7	3	1.74	1,222	29	27
Southwest	I-69	rigid-So-I69-CS12034-10-09-1998	9	20	700	7	6	1.44	1,105	39	23
Southwest	I-69	rigid-So-I69-CS12034-09-11-2001	9	20	700	36	34	1.86	2,292	47	31
Southwest	I-69	rigid-So-I69-CS12033-12-18-2001	9	20	700	65	65	1.23	1,734	51	20
Southwest	I-94	rigid-So-I94-CS11081-11-18-2002	9	20	300	84	57	1.35	1,301	26	13
Southwest	I-94	rigid-So-I94-CS11081-10-28-2004	9	14	300	66	46	1.61	1,024	36	12
Southwest	I-94	rigid-So-I94-CS11081-10-30-2001	9	14	300	12	6	1.03	1,188	31	11
Southwest	US-31	rigid-So-US31-CS11057-10-09-2001	9	14	700	28	5	1.93	1,233	33	18
Southwest	US-31	rigid-So-US31-CS11057-10-30-2001	9	14	700	27	24	1.02	1,521	40	15
Southwest	US-31	rigid-So-US31-CS11057-06-06-2003	9	14	700	16	9	1.61	1,200	22	19
The granular layer thickness data were obtained from MDOT, higher thicknesses (more than 16") could be due to possible fill sections.											

Table 4.5 (Cont'd)

FWD File Details			Pavement Layer Thickness (in)		Depth to Stiff Layer (in)	Number of Tests	No. of. Tests Converged	Average RMS Error (%)	Average Backcalculated Resilient Modulus (ksi)		
Region	Road	File Name	PCC Slab	Granular					PCC	Granular	Roadbed
Southwest	US-31	rigid-So-US31-CS11057-10-10-2002	9	14	700	58	29	1.43	1,000	24	16
Southwest	US-31	rigid-So-US31-CS11057-05-14-2008	9	14	250	33	24	1.28	3,582	26	17
Superior	I-75	rigid-Su-I75-CS49025-06-13-2000	9	22	250	63	61	1.26	1,318	52	15
Superior	I-75	rigid-Su-I75-CS49025-06-02-2000	9	22	150	40	38	1.10	912	37	9
Superior	I-75	rigid-Su-I75-CS17033-05-31-2000	9	24	600	49	42	1.74	1,047	28	16
Superior	I-75	rigid-Su-I75-CS17034-05-25-2000	9	48	400	16	16	1.77	1,260	22	18
Superior	I-75	rigid-Su-I75-CS17034-05-22-2000	9	48	400	21	20	1.88	1,151	29	13
Superior	M-28	rigid-Su-M28-CS02041-08-23-2001	10	25	300	21	17	1.31	1,330	37	17
Superior	M-28	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	300	42	35	1.01	1,019	24	15
Superior	M-28	rigid-Su-M28-CS17062-05-08-2001	8	24	400	80	72	1.27	1,137	61	16
University	I-69	rigid-U-I69-CS19042-09-18-1999	9	14	700	10	10	1.04	1,384	40	26
University	I-69	rigid-U-I69-CS19043-06-25-2001	9	14	700	17	5	1.68	1,617	29	22
University	I-69	rigid-U-I69-CS19043-05-14-2002	9	14	700	98	60	1.54	1,876	36	25
University	I-75	rigid-U-I75-CS58151-03-31-2008	10	0	225	57	40	1.51	4,623	43	12
University	I-75	rigid-U-I75-CS58152-10-06-2006	10	20	500	21	21	2.15	959	38	16
University	US-23	rigid-U-US23-CS58034-09-14-2006	10	15	225	79	72	1.93	886	41	20
The granular layer thickness data were obtained from MDOT, higher thicknesses (more than 16") could be due to possible fill sections.											

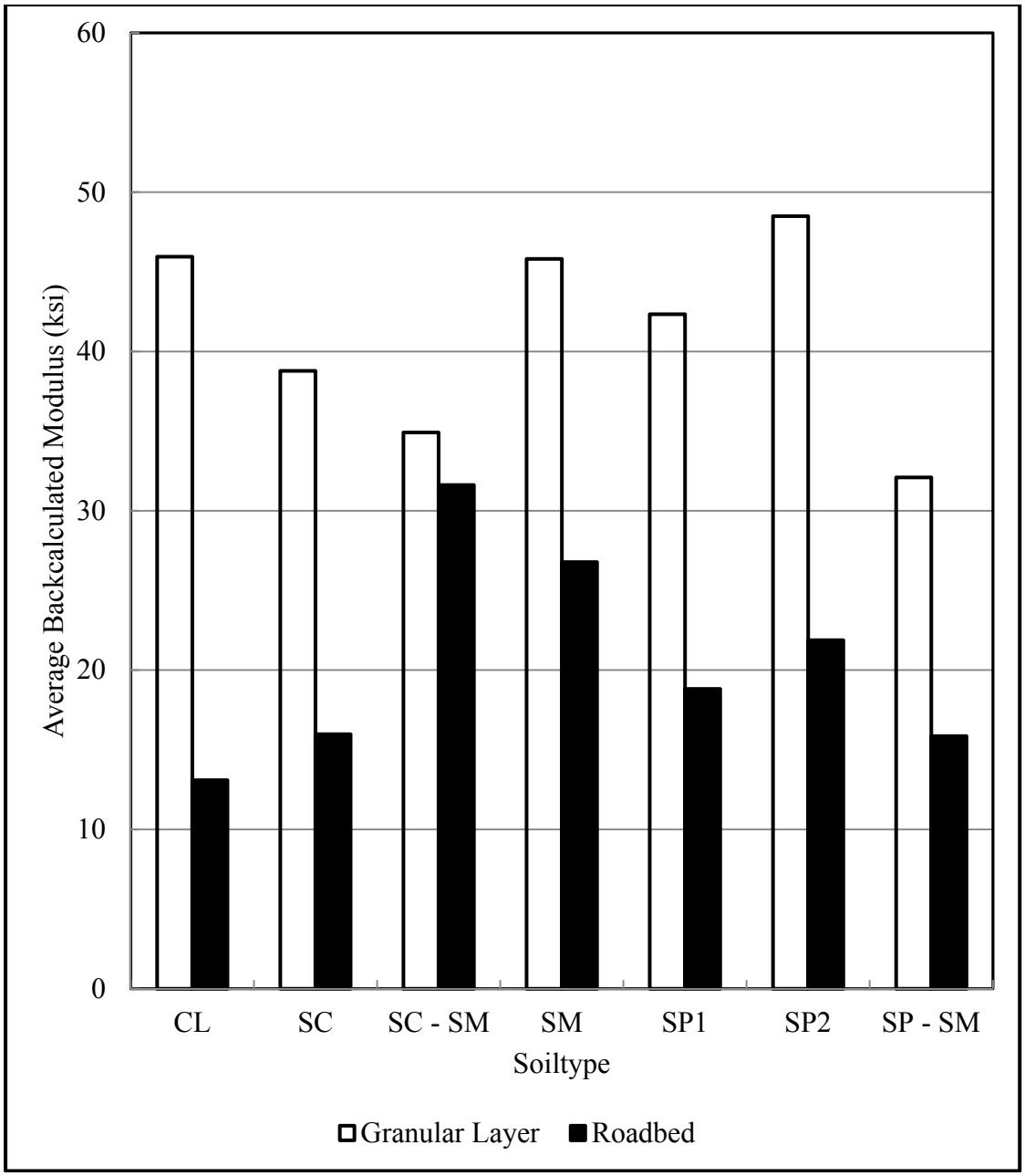

Figure 4.6 Average backcalculated granular layer and the roadbed modulus of rigid pavement obtained from the two layered system for various roadbed soils

Figure 4.7 shows the distribution of the backcalculated granular layer modulus for rigid pavement using a two layered system. The data from the figure indicate that the distribution is slightly skewed to the higher modulus possibly due to the outliers. Hence, it is important to remove all outliers before any further analysis. Table 4.6 list the statistical information including the average, maximum, minimum and standard deviation for the backcalculated granular layer modulus. The maximum backcalculated modulus for the granular layer is about 150 ksi and is definitely an outlier value. To eliminate the effects of the outlier and to reduce the data to a confidence interval of about 95 percent, the average value was reduced by 67 percent of the

standard deviation value. The resulting value corresponds to the 27 percentile of all resilient modulus values. That is 73 percent (100 – 27) of the backcalculated resilient modulus values is higher than the average minus 67 percent of the standard deviation value.

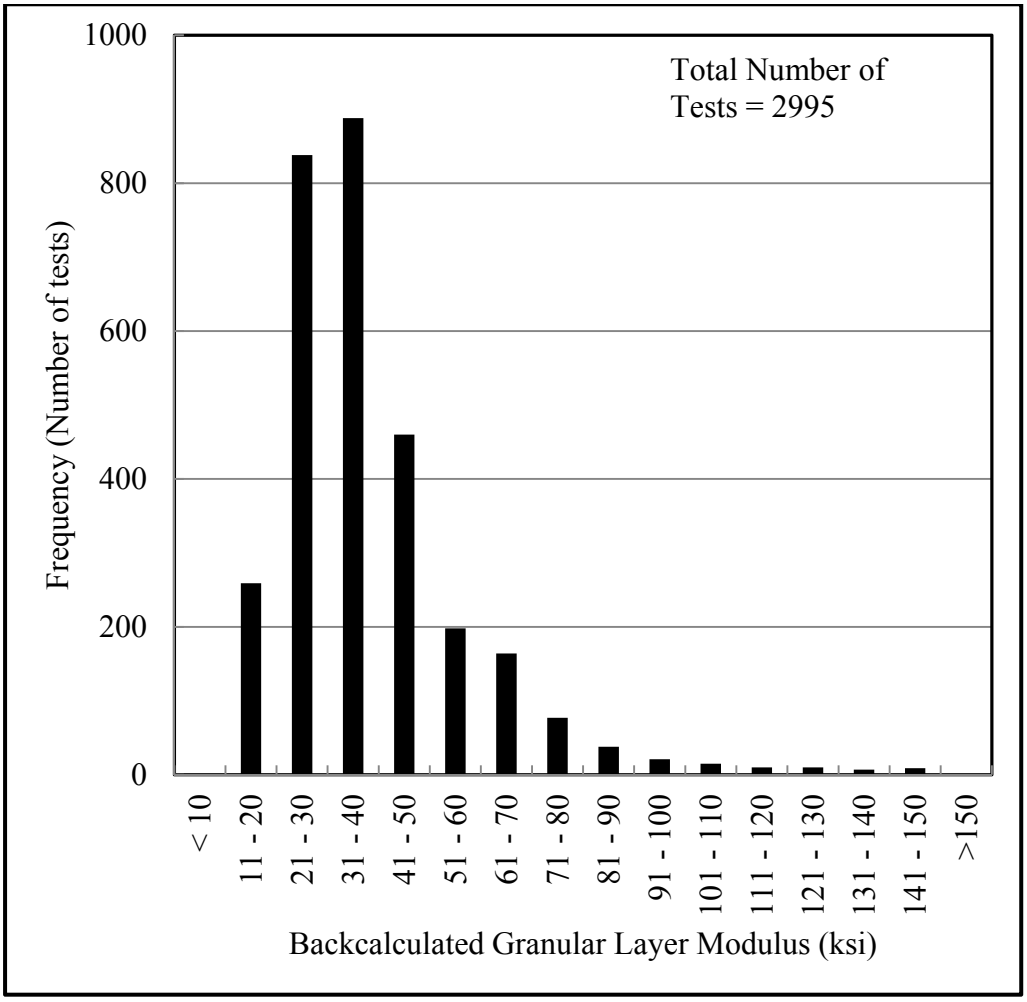

Figure 4.7 Backcalculated granular layer moduli distribution, rigid pavements, all case 1 data

Table 4.6 Descriptive statistics for backcalculated granular layer and roadbed modulus, rigid pavements, all case 1 data

Statistics	Backcalculated Layer Moduli (ksi)	
	Granular Layer	Roadbed
Average	38.44	23.49
Maximum	150.00	62.37
Minimum	10.00	6.55
Standard Deviation	19.07	9.50
Average minus 67 percent of the standard deviation	25.72	17.16

Figure 4.8 shows the distribution of the backcalculated granular layer modulus values for case 2 analysis (after deleting the upper and lower 10% of the data) which are considered outliers. The data in the figure indicate that the number of test results where the modulus values are higher than 40 ksi decreased relative to case 1 analysis. This was expected since case 1 involves all the test data. Table 4.7 lists the descriptive statistics (the average, maximum, and minimum modulus values and the standard deviation) of the backcalculated granular layer and roadbed modulus values.

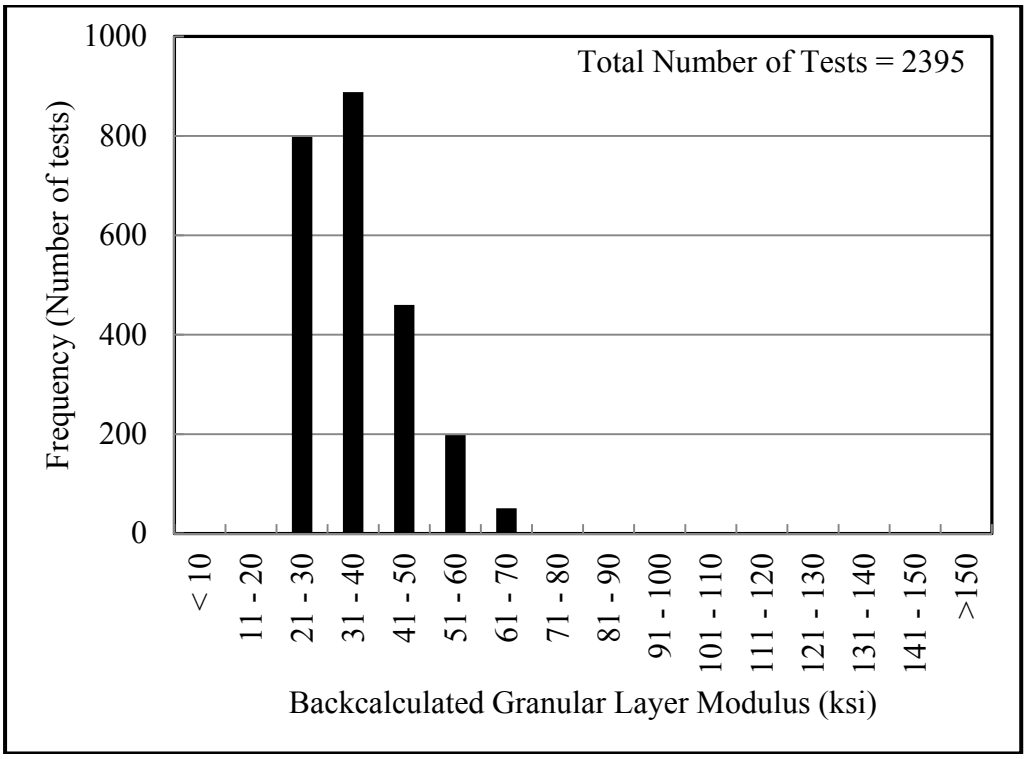

Figure 4.8 Distribution of the backcalculated granular layer modulus for rigid pavements after deleting the upper and lower 10% of the backcalculated moduli, case 2

Table 4.7 Descriptive statistics for backcalculated granular layer and roadbed modulus for rigid pavement after deleting the upper and lower 10% of the backcalculated moduli, case 2

Statistics	Backcalculated Layer Moduli (ksi)	
	Granular Layer	Roadbed
Average	35.65	24.96
Maximum	62.34	62.10
Minimum	20.81	6.76
Standard Deviation	9.75	9.59
Average minus 67 percent of the standard deviation	29.15	18.57

Figure 4.9 shows the distribution of the backcalculated granular layer modulus for case 3 analysis (after deleting the upper and lower 20% of the data, which are considered outliers). The data in the figure indicate that the majority of the modulus values are below 40 ksi and about 25 percent of the data are higher than 40 ksi. The significance of this is that the number of outliers (modulus higher than 40 ksi) still high even after eliminating 20 percent of the data on the high side. This reflects the uncertainty in the material characteristics (specifically thicknesses) that used in the backcalculation routine. Table 4.8 provides a list of descriptive statistics regarding the average, minimum and maximum backcalculated modulus values and their associated standard deviation.

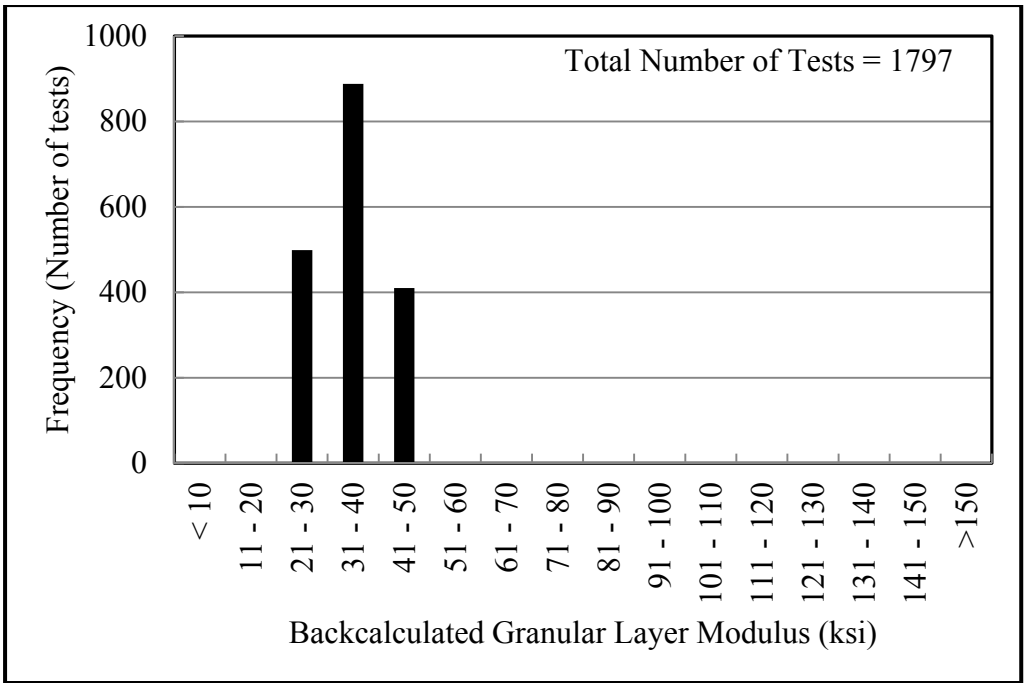

Figure 4.9 Distribution of the backcalculated granular layer modulus for rigid pavement after deleting the upper and lower 20% of the backcalculated moduli, case 3

Table 4.8 Descriptive statistics for backcalculated granular layer and roadbed modulus for rigid pavement after deleting the upper and lower 20% of the backcalculated moduli, case 3

Statistics	Backcalculated Layer Moduli (ksi)	
	Granular Layer	Roadbed
Average	34.58	26.25
Maximum	48.23	47.76
Minimum	25.57	6.76
Standard Deviation	6.01	9.57
Average minus 67 percent of the standard deviation	30.58	19.87

Results of the backcalculated modulus values using case 4 analyses (75 percentile) are shown in Figure 4.10. As it was expected, the lower modulus values were retained whereas the frequency at which the modulus value is higher than 40 ksi decreased to about 250. Table 4.9 provides a list of the statistical descriptive of the data of case 4. It can be seen that the average backcalculated modulus value is lower than the averages reported for analyses cases 1 through 3.This is mainly due to the 75 percentile statistics where the upper values were eliminated while the lower values were kept in the analyses. The recommended value and its equivalent percentile for the granular layer modulus for rigid pavement are listed at the bottom part of Table 4.9.

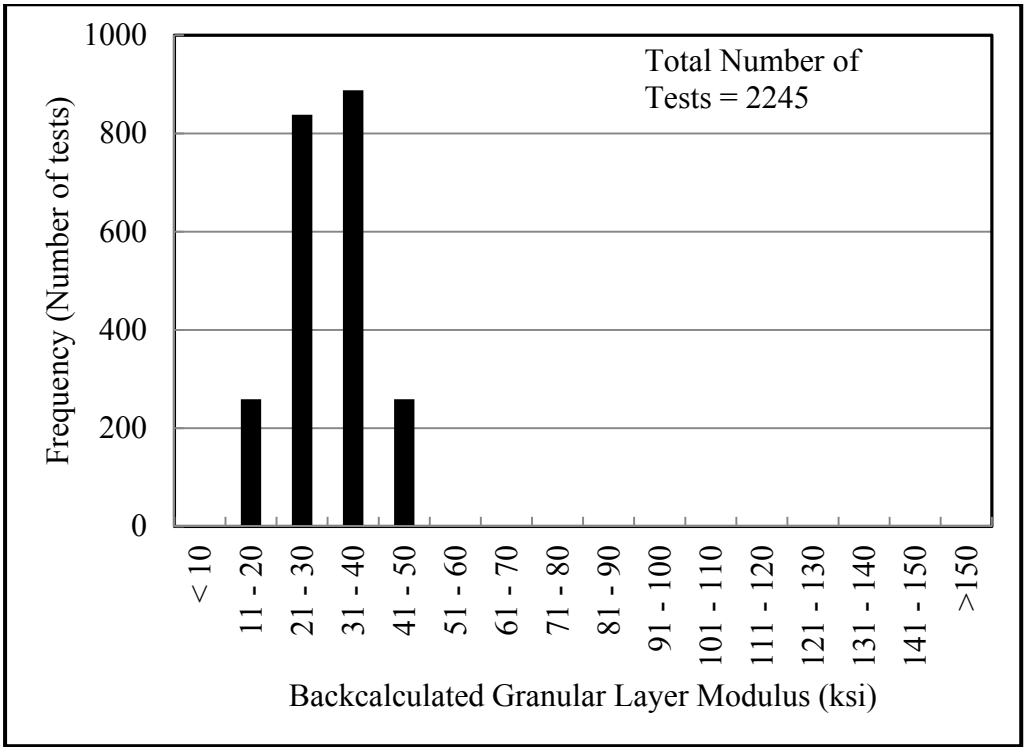

Figure 4.10 Distribution of the backcalculated granular layer modulus for rigid pavement for backcalculated moduli less than the 75th percentile value, case 4

Table 4.9 Descriptive statistics for backcalculated granular layer and roadbed modulus for rigid pavement for backcalculated moduli less than the 75th percentile value, case 4

Statistics	Backcalculated Layer Moduli (ksi)	
	Granular Layer	Roadbed
Average	29.95	23.75
Maximum	44.12	46.38
Minimum	10.00	6.55
Standard Deviation	7.65	9.24
Average minus 67 percent of the standard deviation	24.85	17.59
Equivalent percentile	82	68

4.4.2 Flexible Pavements

As stated earlier, the layer moduli of flexible pavements were backcalculated based using both two and three layered systems and the MICHBACK software. A total of fifty six FWD data files containing two thousand seven hundred five FWD tests conducted on flexible pavements were used for the backcalculation of layer moduli (see Table 4.1). The convergence criteria in MICHBACK remained the same as the one noted for rigid pavements. However, the maximum acceptable RMS error for flexible pavements was set at 2 percent. A sample input (deflection data and layer thicknesses) and output (backcalculated layer moduli and the backcalculated modulus of the roadbed soil) data for a segment of US 131 in Grand Region is presented in Table 4.10. A summary of the backcalculated granular layer moduli for all tests conducted on flexible pavements is presented in Appendix B.

First, a two-layer pavement system (where the aggregate base and the sand subbase were combined into one granular layer) was used in the backcalculation of layer moduli. One thousand seven hundred and sixty three test locations satisfied the convergence criteria. The averages of the backcalculated modulus values for each aggregate type along with the limits for a 95% confidence interval are presented in Figure 4.11. The averages of the backcalculated modulus values of the AC and granular layers and of the roadbed soils along each road segment of each FWD data files are listed in Table 4.11.

Second, a three-layer pavement system was used to backcalculate the moduli of the base and subbase layers separately. Note that the types of the aggregate base and sand subbase used in construction vary with location and the availability of the materials near the construction site. Having said that, the data indicate that similar sand is used for the subbase layer in all pavement sections in Michigan. The convergence criteria for the three layer system were set the same as that for the two layer system. A total of two thousand two hundred three tests satisfied the convergence criteria. A summary of the backcalculated moduli of the base and sand subbase layers are shown in Figure 4.12. The averages of the backcalculated modulus values of the AC, aggregate base, and sand subbase layers and of the roadbed soils along each road segment of each FWD data files are listed in Table 4.12.

All the backcalculated layer moduli using the two and the three layer systems that satisfied the convergence criteria were further scrutinized using the two concepts stated below.

1. For a given pavement section, the resilient modulus of the base layer should be greater than or equal to that of the subbase layer.
2. The modulus of the granular layer of the two layer system should be lower than the base modulus and higher than the subbase modulus from the three layer analysis.

The backcalculated modulus values that satisfied the two concepts were subjected to statistical analyses. Figure 4.13 shows a statistical summary in the form of a bar chart depicting the total number of FWD tests, the percent of the tests satisfied the conversion criteria for the two and the three layer systems, the percent of the tests satisfied the criteria for both systems, the percent of the tests satisfied the first concept, and the percent of tests satisfied the second concept. Table 4.13 provides a list of the statistical summary of Figure 4.13. It can be seen from Figure 4.13 and

Table 4.13 that FWD tests satisfying the convergence criteria based on the three layered system analysis is higher than that based on the two layered system. Likewise, the percent of the backcalculated layer moduli from the three layer system that passed the above two concepts is higher than that for the two layer system. This should not be interpreted that the results of the three layered system are better or more accurate than the results from the two layered system.

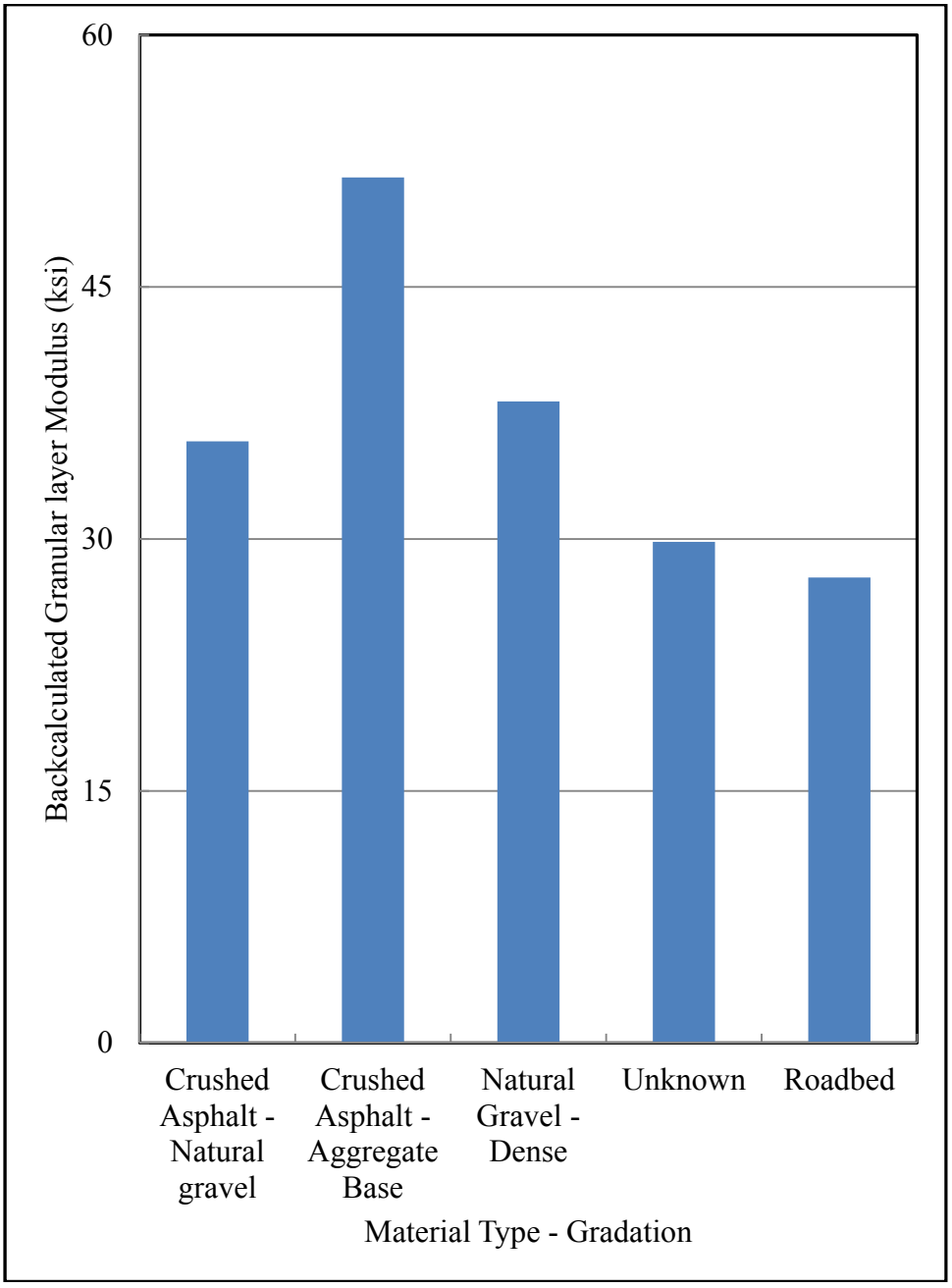

Figure 4.11 Unbound granular layer moduli for flexible pavements (two-layer system)

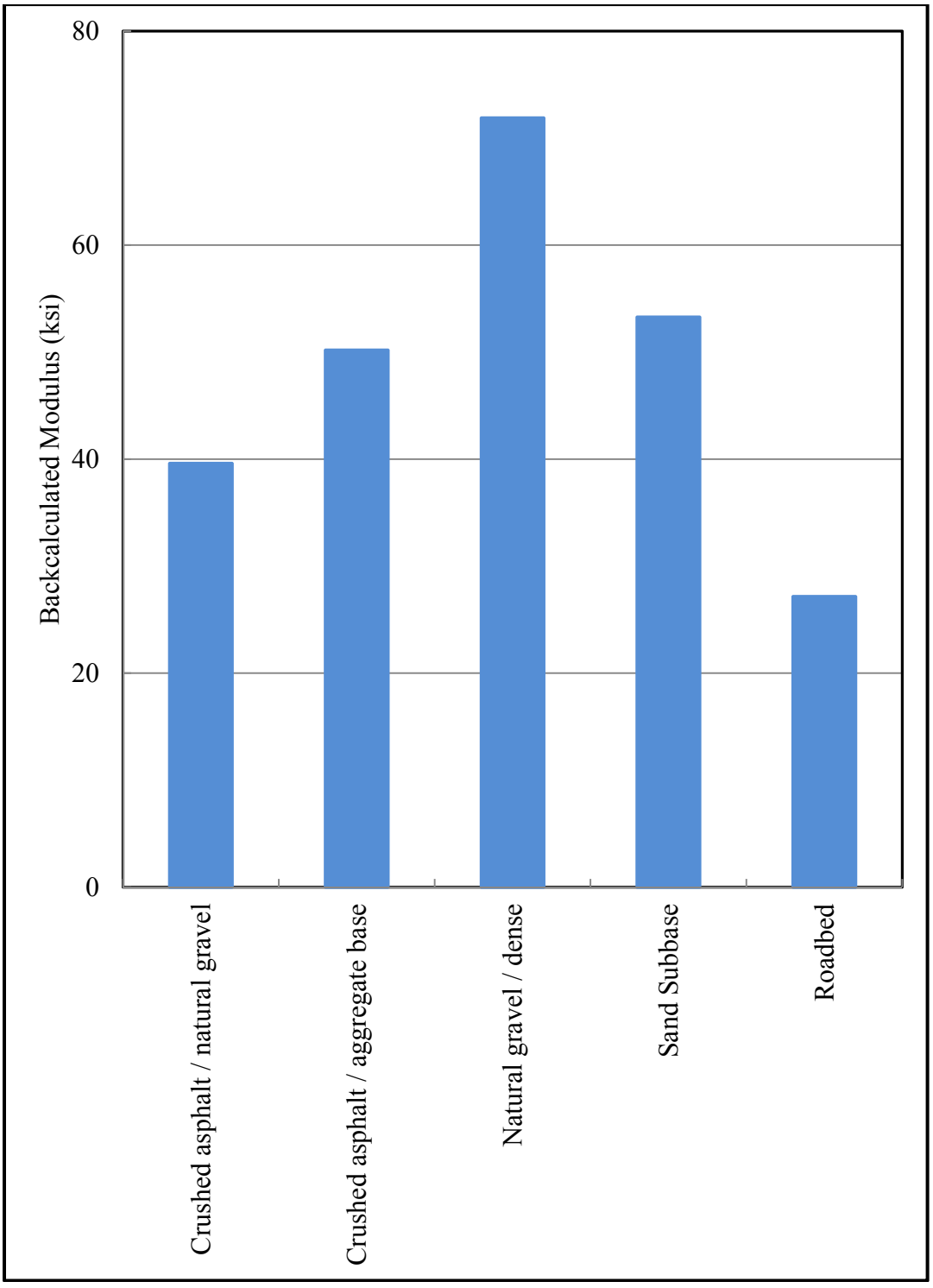

Figure 4.12 Unbound granular layer moduli for flexible pavements (three-layer system)

Table 4.10 Sample backcalculated file for a flexible pavement

Region	Road	Control Section	Project Number	FWD Date	Material Type			Pavement Layer Thicknesses (in)		Depth to Stiff layer (inch)[1]
Grand	US131	54013	28121	8/18/1994	Roadbed	Aggregate Type	Gradation	AC	Granular	
File Name	Flex-G-US131-CS54013-08-18-1994-(2)				SP1	Natural Gravel	Dense	7.5	25	700
Deflections (mils) measured by FWD at various radial distances (in)							RMS Error (%)	Backcalculated Moduli (ksi)		
0	8	12	18	24	36	60		AC	Granular	Roadbed
9.99	7.57	5.97	4.88	4.01	2.67	1.55	2.07	371.3	44.1	23.5
9.62	7.27	5.80	4.54	3.56	2.48	1.30	2.07	399.2	41.7	27.7
10.78	7.83	6.35	4.90	3.98	2.75	1.26	4.89	398.3	31.6	26.3
10.72	7.94	6.69	5.29	4.09	2.43	1.26	1.91	449.2	26.5	27.6
9.80	7.30	6.07	4.74	3.79	2.50	1.46	0.89	383.7	41.8	25.0
10.60	7.54	6.10	4.75	3.79	2.35	1.29	2.08	338.2	35.5	27.2
9.44	7.27	5.66	4.38	3.52	2.08	1.02	2.62	481.8	29.4	33.2
10.99	8.18	6.50	5.36	4.01	2.66	1.24	3.75	447.0	25.5	26.8
9.07	7.76	6.50	4.93	3.74	2.67	1.51	3.46	500.5	36.9	24.1
9.47	7.39	5.81	4.56	3.36	2.35	1.42	3.10	339.8	45.7	26.4
9.84	7.55	5.57	4.24	3.25	2.17	1.20	2.61	297.7	40.7	29.5
9.37	6.98	5.79	4.66	3.39	2.38	1.35	2.17	390.8	42.1	26.5
9.02	6.75	5.13	4.07	3.16	2.03	1.10	2.15	377.6	41.5	31.6
9.58	7.05	5.29	4.11	3.16	2.12	1.05	3.25	348.6	39.2	32.3
8.92	6.48	5.36	3.85	3.22	2.12	1.05	3.50	419.8	40.2	32.1
9.15	6.52	5.24	4.05	3.10	2.07	1.07	1.94	378.1	41.0	31.9
9.35	7.09	5.57	4.01	3.16	2.11	1.16	2.09	330.1	42.7	30.9
9.59	7.00	5.66	4.24	3.34	2.33	1.15	3.11	373.0	39.9	29.7
9.05	6.72	5.43	3.98	3.04	1.89	1.00	0.51	392.6	37.1	34.7

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.10 (Cont'd)

Region	Road	Control Section	Project Number	FWD Date	Material Type			Pavement Layer Thicknesses (in)		Depth to Stiff layer (in)
Grand	US131	54013	28121	8/18/1994	Roadbed	Aggregate Type	Gradation	AC	Granular	
File Name	Flex-G-US131-CS54013-08-18-1994-(2)				SP1	Natural Gravel	Dense	7.5	25	700
Deflections (mils) measured by FWD at various radial distances (in)							RMS Error (%)	Backcalculated Moduli (ksi)		
0	8	12	18	24	36	60		AC	Granular	Roadbed
9.13	6.89	5.55	4.14	3.23	2.17	1.29	1.80	341.2	46.8	28.4
8.58	6.01	4.59	3.32	2.48	1.51	0.85	1.22	310.1	46.2	41.9
10.49	7.66	6.07	4.52	3.47	2.20	1.07	2.28	346.7	31.1	31.2
10.69	7.51	5.88	4.35	3.33	2.17	1.14	1.40	279.9	36.7	30.3
9.52	6.79	5.39	4.07	3.15	2.07	1.07	1.79	342.7	40.0	31.9
9.69	6.83	5.34	3.93	3.11	1.99	1.04	1.89	310.9	40.5	32.8
9.81	7.32	5.96	4.43	3.51	2.25	1.13	1.84	399.1	33.4	30.0
9.25	6.88	5.56	4.23	3.34	2.23	1.20	1.17	390.6	40.7	29.1
9.20	7.05	5.78	4.48	3.62	2.51	1.51	1.03	372.7	49.2	24.1
9.65	7.19	5.70	4.20	3.23	2.04	1.02	1.70	383.6	33.2	33.3
9.73	7.36	5.86	4.36	3.34	2.06	0.99	1.76	421.3	29.4	33.7
9.08	6.71	5.33	3.91	3.04	1.93	1.01	1.15	378.4	38.5	34.2
9.55	7.33	5.85	4.42	3.44	2.21	1.10	1.83	429.2	32.4	30.8

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.11 A summary of the backcalculated granular layer modulus for flexible pavements (two – layered system)

FWD File Details			Pavement Layer Thickness (in)			Depth to Stiff Layer (in)[1]	Number of Tests	Number of Tests Converged	Average RMS Error (%)	Average Backcalculated Modulus (ksi)		
Region	Road	File Name	AC	Base	Subbase					AC	Granular	Roadbed
Bay	M-57	flex-B-M57-CS29022-01-28-1993	5.5	7	18	700	134	65	1.41	269	26	26
Bay	M-57	flex-B-M57-CS29022-08-30-1994	5.5	7	18	700	66	43	1.41	279	27	26
Bay	M-57	flex-B-M57-CS29022-08-30-1994-(2)	5.5	7	18	700	66	41	1.39	279	27	26
Bay	M-57	flex-B-M57-CS29022-08-30-1994-(3)	5.5	7	18	700	67	25	1.70	266	28	29
Bay	M-57	flex-B-M57-CS29022-08-30-1994-(4)	5.5	7	18	700	67	24	1.69	266	28	30
Bay	M-84	flex-B-M84-CS9011-05-17-2005	4.0	7	18	300	39	30	1.07	1058	25	19
Bay	M-84	flex-B-M84-CS9011-05-17-2005-(2)	4.0	7	18	400	69	52	1.15	1224	23	20
Bay	M-84	flex-B-M84-CS9011-09-11-2005	4.0	7	18	160	32	30	1.40	2959	47	20
Bay	M-84	flex-B-M84-CS9011-09-13-2005-(2)	4.0	7	18	250	16	16	0.91	774	32	27
Bay	M-84	flex-B-M84-CS9011-10-03-2005	4.0	7	18	200	16	8	1.52	413	36	22
Bay	M-84	flex-B-M84-CS9011-10-10-2005	4.0	7	18	275	16	16	0.97	1179	35	26
Grand	M-120	flex-G-M120-CS61012-07-23-1998	7	7	18	700	74	28	1.43	192	29	19
Grand	M-120	flex-G-M120-CS61012-07-24-1998	7	7	18	700	74	28	1.43	192	29	19
Grand	M-20	flex-G-M20-CS54041-04-09-2002	6	7	18	700	68	48	1.09	593	24	26
Grand	M-37	flex-G-M37-CS62032-05-18-2000	8	7	18	700	40	25	1.28	433	21	21
Grand	M-57	flex-G-M57-CS41122-8-23-1994	3.0	8	18	700	108	81	1.20	2447	44	29

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.11 (Cont'd)

FWD File Details			Pavement Layer Thickness (in)			Depth to Stiff Layer (in)[1]	Number of Tests	Number of Tests Converged	Average RMS Error (%)	Average Backcalculated Modulus (ksi)		
Region	Road	File Name	AC	Base	Subbase					AC	Granular	Roadbed
Grand	M-57	flex-G-M57-CS59021-08-23-1994	3	8	18	700	53	40	1.21	2756	43	30
Grand	M-57	flex-G-M57-CS59021-08-23-1994-(2)	3	8	18	700	53	43	1.27	2680	44	30
Grand	M-57	flex-G-M57-CS59021-08-23-1994-(3)	3.0	8	18	700	54	34	1.32	2658	44	32
Grand	M-57	flex-G-M57-CS59021-08-23-1994-(4)	3	8	18	700	53	33	1.27	2664	44	29
Grand	M-57	flex-G-M57-CS29021-5-23-1995	3.0	8	18	200	83	61	1.28	2331	38	23
Grand	US-131	flex-G-US131-CS54013-08-18-1994	7.3	6	18	700	65	64	0.89	311	70	30
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(2)	7.5	6	18	700	32	16	1.49	373	38	31
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(3)	7.5	6	18	700	65	47	1.51	355	38	28
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(4)	7.5	6	18	700	33	18	1.15	352	38	31
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(5)	7.5	6	18	700	33	18	1.52	352	38	31
Grand	US-131	flex-G-US131-CS54014-05-13-1998	7.3	6	18	700	181	130	1.26	937	31	34
Grand	US-131	flex-G-US131-CS59012-06-25-1998	8	6	18	700	25	20	1.46	530	38	29
Metro	I-94	flex-M-I94-CS77111-04-02-2008	4.2	6	18	100	29	5	1.78	1938	12	5
Metro	M-53	flex-M-M53-CS50015-02-27-2009	8	6	18	300	13	13	0.65	1511	7	25
Metro	M-53	flex-M-M53-CS50015-03-06-2009	8	6	18	300	13	13	0.95	979	9	24

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.11 (Cont'd)

FWD File Details			Pavement Layer Thickness (in)			Depth to Stiff Layer (in)[1]	Number of Tests	Number of Tests Converged	Average RMS Error (%)	Average Backcalculated Modulus (ksi)		
Region	Road	File Name	AC	Base	Subbase					AC	Granular	Roadbed
Metro	M-53	flex-M-M53-CS50015-03-09-2009	8	6	18	300	13	13	0.84	1350	9	25
Metro	M-53	flex-M-M53-CS50015-03-13-2009	8	6	18	300	13	13	0.83	1413	9	24
Metro	M-53	flex-M-M53-CS50015-04-04-2008	8.0	6	18	300	10	8	1.07	1122	16	22
Metro	M-53	flex-M-M53-CS50015-04-09-2009	8	6	18	300	13	11	1	553	11	23
North	I-75	flex-N-I75-CS69014-08-03-1999	6.25	6	18	700	90	62	1.34	460	49	31
North	I-75	flex-N-I75-CS69014-08-03-1999-(2)	6.3	6	18	700	90	61	1.36	516	55	40
North	I-75	flex-N-I75-CS69014-08-04-1999	6.25	6	18	700	92	65	1.36	364	49	30
North	I-75	flex-N-I75-CS69014-08-04-1999-(2)	6.3	6	18	700	111	63	1.53	441	53	40
North	I-75	flex-N-I75-CS69014-11-12-1997	6.25	6	18	700	97	61	1.09	1073	37	30
North	I-75	flex-N-I75-CS69014-11-23-1997	6.3	6	18	700	93	71	1.09	977	38	31
North	M-55	flex-N-M55-CS77022-8-20-2001-(2)	7.0	6	18	700	76	35	1.74	250	30	23
North	US-131	flex-N-US131-CS67017-05-01-2002	7.25	6	18	700	93	79	0.63	1696	27	23
North	US-23	flex-N-US23-CS1052-06-03-2008	3.5	8	18	200	11	6	1.77	1293	62	16
North	US-23	flex-N-US23-CS4032-06-03-2008	5.0	8	18	150	11	9	1.49	2127	60	14
North	US-23	flex-N-US23-CS71073-06-04-2008	6.5	8	18	700	11	11	0.91	552	31	21
North	US-23	flex-N-US23-CS71073-06-04-2008-(2)	5.5	8	18	300	11	8	1.60	2175	63	24

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.11(Cont'd)

FWD File Details			Pavement Layer Thickness (in)			Depth to Stiff Layer (in)[1]	Number of Tests	Number of Tests Converged	Average RMS Error (%)	Average Backcalculated Modulus (ksi)		
Region	Road	File Name	AC	Base	Subbase					AC	Granular	Roadbed
Superior	I-75	flex-Su-I75-CS49025-05-22-2008	7.5	6	18	150	11	4	1.41	784	35	55
Superior	M-28	flex-Su-M28-CS17061-05-22-2008	5.0	8	18	700	10	10	0.66	2256	23	22
Superior	M-28	flex-Su-M28-CS75061-05-21-2008	5.5	8	18	700	11	11	0.65	1720	27	21
Superior	M-38	flex-Su-M38-CS66042-05-20-2008	3.5	8	24	350	11	7	1.74	1569	31	18
Superior	US-141	flex-Su-US141-CS7022-05-19-2008	4.5	8	18	700	13	12	1.10	1075	17	21
Superior	US-2	flex-Su-US2-CS27022-05-20-2008	3.5	8	18	250	11	7	1.47	973	45	21
Superior	US-2	flex-Su-US2-CS75021-05-22-2008	5.5	8	18	300	11	10	1.28	3988	60	21
Superior	US-41	flex-Su-US41-CS7013-05-19-2008	2.5	8	18	150	11	11	1.28	2060	30	11
University	M-52	flex-U-M52-CS33051-11-13-2002	6.0	6	18	250	44	39	1.14	777	24	24

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.12 A summary of the backcalculated granular layer modulus for flexible pavements (three – layered system)

FWD File Information			Pavement Layer Thickness (in)			Depth to Stiff Layer (in)[1]	No. of Tests	Number of Tests Converged	Avg. RMS Error (%)	Average Backcalculated Modulus (ksi)			
Region	Road	File Name	AC	Base	Sub base					AC	Base	Subbase	Roadbed
Bay	M-57	flex-B-M57-CS29022-01-28-1993	5.5	7	18	700	134	65	1.16	261	26	26	26
Bay	M-57	flex-B-M57-CS29022-08-30-1994	5.5	7	18	700	66	60	1.12	275	27	27	26
Bay	M-57	flex-B-M57-CS29022-08-30-1994-(2)	5.5	7	18	700	66	54	1.09	287	27	27	26
Bay	M-57	flex-B-M57-CS29022-08-30-1994-(3)	5.5	7	18	700	67	55	1.10	284	28	28	26
Bay	M-57	flex-B-M57-CS29022-08-30-1994-(4)	5.5	7	18	700	67	60	1.12	274	25	28	26
Bay	M-84	flex-B-M84-CS9011-05-17-2005	4.0	7	18	300	39	39	0.67	858	37	22	19
Bay	M-84	flex-B-M84-CS9011-05-17-2005-(2)	4.0	7	18	400	69	69	0.68	987	38	22	20
Bay	M-84	flex-B-M84-CS9011-09-11-2005	4.0	7	18	160	32	32	1.23	2275	82	41	20
Bay	M-84	flex-B-M84-CS9011-09-13-2005-(2)	4.0	7	18	250	16	16	0.51	670	38	31	27
Bay	M-84	flex-B-M84-CS9011-10-03-2005	4.0	7	18	200	16	8	1.14	372	38	35	22
Bay	M-84	flex-B-M84-CS9011-10-10-2005	4.0	7	18	275	16	16	0.48	977	46	33	26
Grand	M-120	flex-G-M120-CS61012-07-23-1998	7	7	18	700	74	68	1.10	180	30	31	19
Grand	M-120	flex-G-M120-CS61012-07-24-1998	7	7	18	700	74	68	1.10	180	30	31	19
Grand	M-20	flex-G-M20-CS54041-04-09-2002	6	7	18	700	68	58	0.71	516	33	26	26
Grand	M-37	flex-G-M37-CS62032-05-18-2000	8	7	18	700	40	35	0.96	401	26	50	18
Grand	M-57	flex-G-M57-CS41122-8-23-1994	3.0	8	18	700	108	78	0.77	2088	52	38	30

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.12 (Cont'd)

FWD File Information			Pavement Layer Thickness (in)			Depth to Stiff Layer (in)[1]	No. of Tests	Number of Tests Converged	Avg. RMS Error (%)	Average Backcalculated Modulus (ksi)			
Region	Road	File Name	AC	Base	Sub base					AC	Base	Subbase	Roadbed
Grand	M-57	flex-G-M57-CS59021-08-23-1994	3	8	18	700	53	40	0.80	2571	45	46	30
Grand	M-57	flex-G-M57-CS59021-08-23-1994-(2)	3	8	18	700	53	43	0.84	2509	44	47	30
Grand	M-57	flex-G-M57-CS59021-08-23-1994-(3)	3.0	8	18	700	54	34	0.85	2558	41	54	28
Grand	M-57	flex-G-M57-CS59021-08-23-1994-(4)	3	8	18	700	53	33	0.72	2382	49	46	29
Grand	M-57	flex-G-M57-CS29021-5-23-1995	3.0	8	18	200	83	80	0.96	2157	41	41	23
Grand	US-131	flex-G-US131-CS54013-08-18-1994	7.3	6	18	700	65	63	0.72	326	58	34	28
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(2)	7.5	6	18	700	32	22	1.05	334	48	38	31
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(3)	7.5	6	18	700	65	64	0.76	319	53	34	28
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(4)	7.5	6	18	700	33	23	1.12	330	49	38	31
Grand	US-131	flex-G-US131-CS54013-08-18-1994-(5)	7.5	6	18	700	33	24	1.12	330	49	38	31
Grand	US-131	flex-G-US131-CS54014-05-13-1998	7.3	6	18	700	181	106	0.90	972	13	169	30
Grand	US-131	flex-G-US131-CS59012-06-25-1998	8	6	18	700	25	22	1.24	543	33	62	29
Metro	I-94	flex-M-I94-CS77111-04-02-2008	4.2	6	18	100	29	0	0.00	NA	NA	NA	NA
Metro	M-53	flex-M-M53-CS50015-02-27-2009	8	6	18	300	13	NA	NA	NA	NA	NA	NA
Metro	M-53	flex-M-M53-CS50015-03-06-2009	8	6	18	300	13	NA	NA	NA	NA	NA	NA
Metro	M-53	flex-M-M53-CS50015-03-09-2009	8	6	18	300	13	NA	NA	NA	NA	NA	NA

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.12 (Cont'd)

FWD File Information			Pavement Layer Thickness (in)			Depth to Stiff Layer (in)[1]	No. of Tests	Number of Tests Converged	Avg. RMS Error (%)	Average Backcalculated Modulus (ksi)			
Region	Road	File Name	AC	Base	Sub base					AC	Base	Subbase	Roadbed
Metro	M-53	flex-M-M53-CS50015-03-13-2009	8	6	18	300	13	NA	NA	NA	NA	NA	NA
Metro	M-53	flex-M-M53-CS50015-04-04-2008	8.0	6	18	300	10	NA	NA	NA	NA	NA	NA
Metro	M-53	flex-M-M53-CS50015-04-09-2009	8	6	18	300	13	NA	NA	NA	NA	NA	NA
North	I-75	flex-N-I75-CS69014-08-03-1999	6.25	6	18	700	90	88	1.09	440	56	50	31
North	I-75	flex-N-I75-CS69014-08-03-1999-(2)	6.3	6	18	700	90	86	1.26	549	39	86	36
North	I-75	flex-N-I75-CS69014-08-04-1999	6.25	6	18	700	92	90	1.07	354	52	47	30
North	I-75	flex-N-I75-CS69014-08-04-1999-(2)	6.3	6	18	700	111	76	1.32	472	47	68	36
North	I-75	flex-N-I75-CS69014-11-12-1997	6.25	6	18	700	97	62	0.76	968	47	58	30
North	I-75	flex-N-I75-CS69014-11-23-1997	6.3	6	18	700	93	75	0.73	1043	31	77	31
North	M-55	flex-N-M55-CS77022-8-20-2001-(2)	7.0	6	18	700	76	73	1.17	279	14	59	20
North	US-131	flex-N-US131-CS67017-05-01-2002	7.25	6	18	700	93	79	0.36	1506	49	27	23
North	US-23	flex-N-US23-CS1052-06-03-2008	3.5	8	18	200	11	8	1.65	1068	72	58	17
North	US-23	flex-N-US23-CS4032-06-03-2008	5.0	8	18	150	11	8	1.00	1184	174	43	13
North	US-23	flex-N-US23-CS71073-06-04-2008	6.5	8	18	700	11	11	0.45	461	49	35	21
North	US-23	flex-N-US23-CS71073-06-04-2008-(2)	5.5	8	18	300	11	9	1.00	1108	218	37	25
Superior	I-75	flex-Su-I75-CS49025-05-22-2008	7.5	6	18	150	11	6	0.88	761	41	55	54

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

Table 4.12 (Cont'd)

FWD file information			Pavement layer thickness (in)			Depth to stiff layer (in)[1]	No. of tests	Number of tests converged	Avg. RMS error (%)	Average backcalculated modulus (ksi)			
Region	Road	File Name	AC	Base	Sub base					AC	Base	Subbase	Roadbed
Superior	M-28	flex-Su-M28-CS17061-05-22-2008	5.0	8	18	700	10	10	0.39	1831	54	18	22
Superior	M-28	flex-Su-M28-CS75061-05-21-2008	5.5	8	18	700	11	11	0.41	1366	56	21	22
Superior	M-38	flex-Su-M38-CS66042-05-20-2008	3.5	8	24	350	11	11	0.67	920	57	25	18
Superior	US-141	flex-Su-US141-CS7022-05-19-2008	4.5	8	18	700	13	13	0.59	807	29	14	21
Superior	US-2	flex-Su-US2-CS27022-05-20-2008	3.5	8	18	250	11	10	0.82	855	43	33	22
Superior	US-2	flex-Su-US2-CS75021-05-22-2008	5.5	8	18	300	11	10	0.73	2035	282	30	23
Superior	US-41	flex-Su-US41-CS7013-05-19-2008	2.5	8	18	150	11	11	1.15	1802	34	30	11
University	M-52	flex-U-M52-CS33051-11-13-2002	6.0	6	18	250	44	42	0.51	963	7	140	24

[1] A depth to stiff layer of 700-inch implies no stiff layer exists, the MICHBACK and other elastic based programs require stiff layer depth.

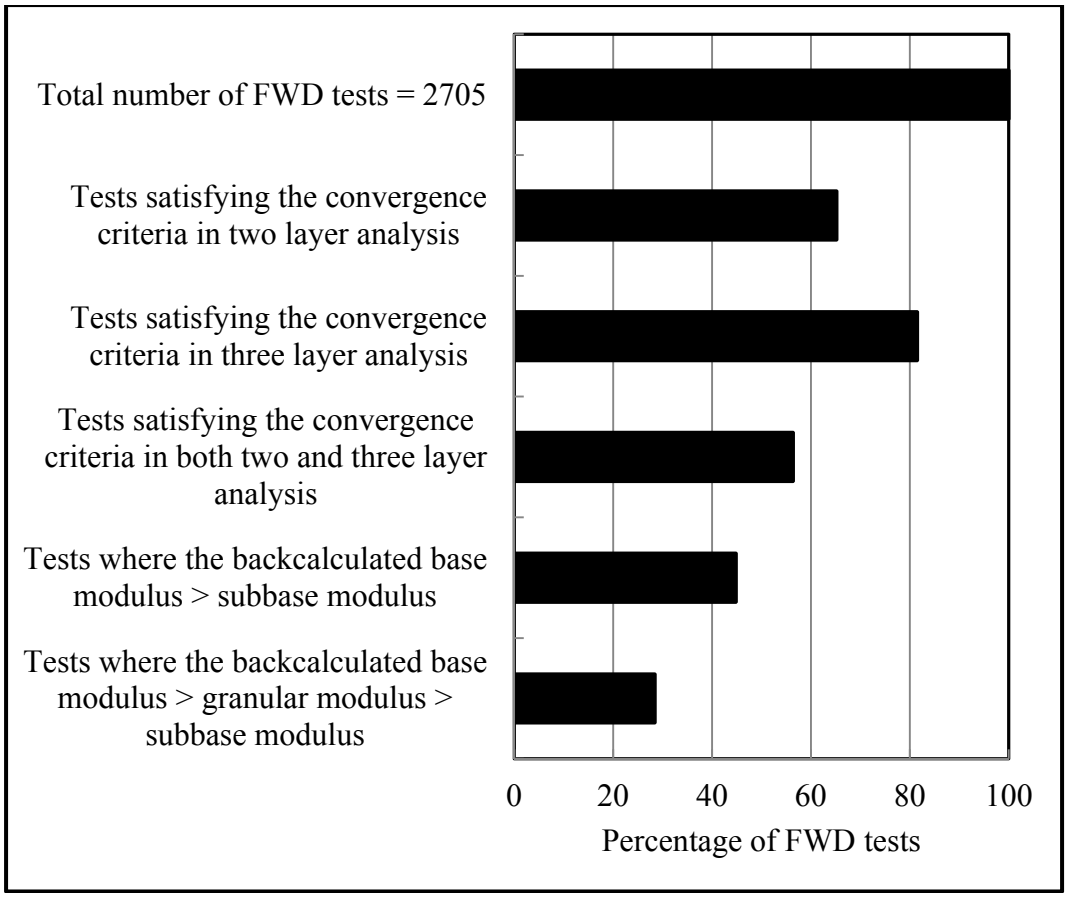

Figure 4.13 A summary of the tests converged in two and three layer analyses

Table 4.13 Statistical summary of the tests converged in two and three layered analyses

	Tests	Percent
Total number of FWD tests	2705	100
Tests satisfying the convergence criteria in two layer analysis	1763	65
Tests satisfying the convergence criteria in three layer analysis	2204	81
Tests satisfying the convergence criteria in both two and three layer analysis	1525	56
Tests where the backcalculated base modulus > subbase modulus	1212	45
Tests where the backcalculated base modulus > granular modulus > subbase modulus	768	28

Table 4.14 A summary of the average backcalculated moduli using two and three layer analyses for flexible pavements

Material Type	Pavement layer moduli for two layer system (ksi)		Pavement layer moduli for three layer system (ksi)		
	Granular layer	Roadbed	Roadbed	Sand subbase layer	Granular layer
Crushed asphalt - natural gravel	35.8	28.7	28.5	41.5	39.6
Crushed asphalt - aggregate base	51.5	35.4	33.7	77.6	50.2
Natural gravel - dense gradation	38.2	28.7	29.7	36.4	71.9
Unknown	29.8	25.0	23.5	55.8	46.3

Indeed, on the average, the results of the two layered system are more consistent than those of the three layered system. To illustrate, consider the data shown in Figures 4.11 and 4.12 and listed in Table 4.14. It can be seen that:

1. For all base types, the average backcalculated modulus values of the roadbed soils from the three layered system are almost the same as that from the two layered system.
2. For the crushed asphalt over natural gravel bases, the average backcalculated modulus of the granular layer (two layered system) is similar to that of the average backcalculated modulus of the base layer using the three layered system. However, the average backcalculated modulus of the sand subbase (three layered system) is very high relative to the aggregate base modulus.
3. For the crushed asphalt over aggregate base, the averages of the backcalculated modulus value of the aggregate base and sand subbase (three layered system) are consistent and almost equal. They are also almost equal to the average backcalculate modulus of the granular layer from the two layered system.
4. For the dense natural gravel, the average backcalculated granular layer modulus value is within the values reported by the AASHTO and the M-EPDG . However, the averages of the backcalculated modulus values of the base and subbase layers (three layered system) are very high.

Some of the reasons of the above observations include:

a. The number of unknowns (modulus and Poisson's ratio of each layer) in the three layered system is higher than that of the two layered system. Whereas the number of measured deflections in both systems is the same.
b. The uncertainty in the input data especially the layer thicknesses is higher in the three layered system than in the two layered system.

Perhaps, the other way to scrutinize the above observations is to examine the average backcalculated layers and roadbed moduli using the two and three layer systems shown in Figure 4.14. Once again, regardless of the type of the roadbed soils, the averages of the backcalculated

modulus values of the roadbed soils using two and three layered systems are almost the same. The data in Figure 4.14 also shows that the backcalculation of the layer moduli based on three layered system produces some high and inconsistent base and subbase moduli. Whereas, for all base and roadbed soil types, the two layered system, produces consistent modulus values.

Based on the above observations, one may conclude that the results from the two layered system are more consistent than those from the three layered system. Hence, the results of the two layered system should be considered first to be used in the flexible and rigid pavement design processes. However, if it is desirable to use different modulus values for the base and subbase layers, additional statistical analysis should be conducted. Results of such analyses are presented below.

Nevertheless, the backcalculated base and subbase moduli where bracketed in certain modulus ranges separated by 10 ksi intervals. The brackets are less than 10 ksi, 10 to 20, 20 to 30, 30 to 40, 40 to 50, 50 to 60, 60 to70, 70 to 80, 80 to 90, 90 to 100, and more than100 ksi.

The backcalculated base and subbase modulus values, using the three layered system, were independently listed in an increasing order. The frequency of the base or subbase modulus value that fall within a modulus bracket was calculated and the data are plotted in Figure 4.15. The data in the figure indicates that in more than 75 percent of all tests, the backcalculated subbase modulus is substantially higher than the base modulus. Further, the backcalculated modulus of the sand subbase varies from about 10 to about 80 ksi. The results are not reasonable and probably not accurate. In the other 25 percent of all tests, the backcalculate base modulus varied from about 50 to about 200 ksi. Certainly, the latter value is very high, not acceptable and perhaps not reasonable.

Figure 4.16 depicts the distribution of the backcalculated base modulus in flexible pavements using the three layered system. Once again, it can be seen from the figure that more than 70 percent (562 tests) showed a base modulus higher than 40 ksi. Likewise, figure 4.17 shows the distribution of the backcalculated subbase modulus in flexible pavements using the three layered system. The data in the figure indicate that about 15 percent of the test results are higher than 40 ksi. Once again, more than 40 ksi modulus values for the granular bases and subbases are very high and unacceptable unless data regarding their stability are available. In the above cases, no information or data were found suggesting that the bases and subbases were stabilized. Hence, the high values were not included in further analysis. Nevertheless, the descriptive statistics, (average, maximum and minimum values and the standard deviation) of the backcalculated base, subbase and roadbed moduli are listed in Table 4.15. For comparison purposes, similar descriptive statistics are also included for the granular layer and roadbed modulus values obtained from the two layered analysis. The data in the table show that the maximum, minimum and average roadbed modulus values obtained from the two and three layered analysis are more or either the same or very similar. Another observation was made is that the minimum, maximum and average modulus values of the granular layer (from the two layer analysis) are between the corresponding values of the base and subbase layers of the three layered system.

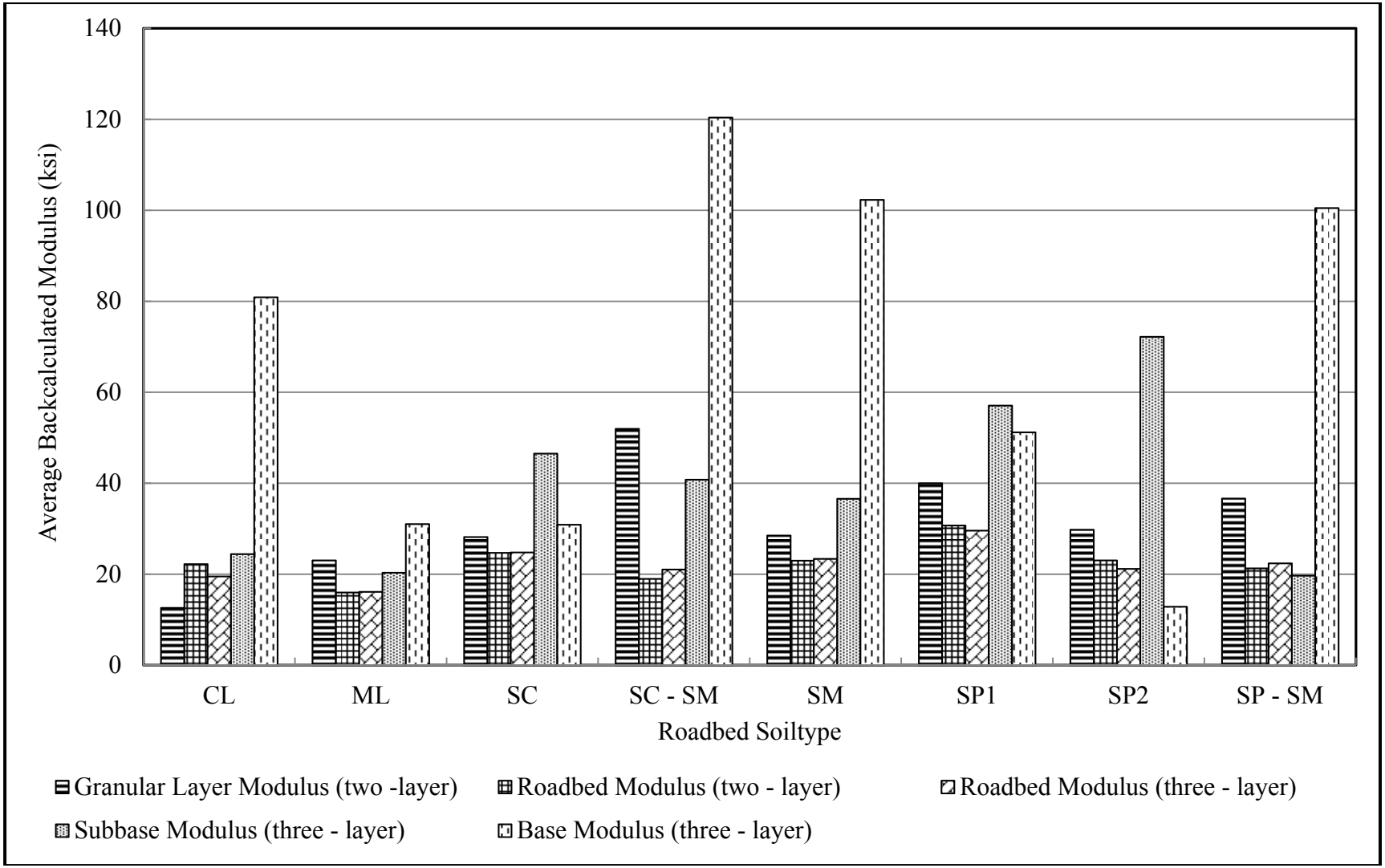

Figure 4.14 Average backcalculated layers and roadbed soil moduli obtained from two and three layered systems for various types of roadbed soils

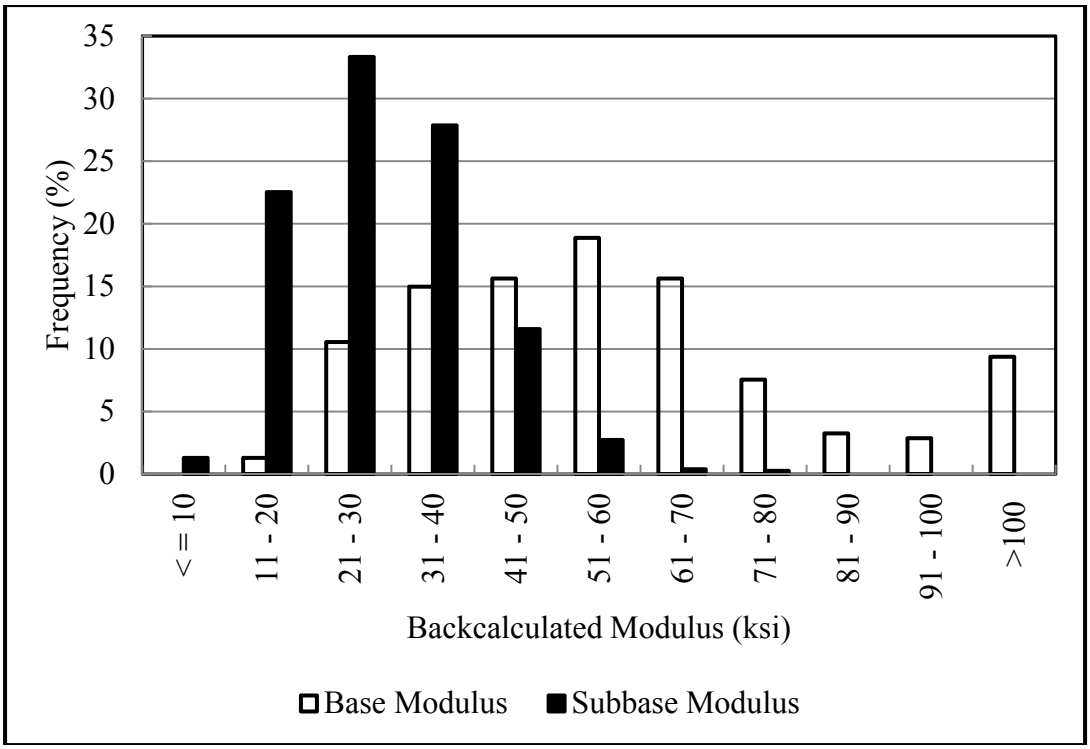

Figure 4.15 Distribution of backcalculated base and subbase moduli (three layered system)

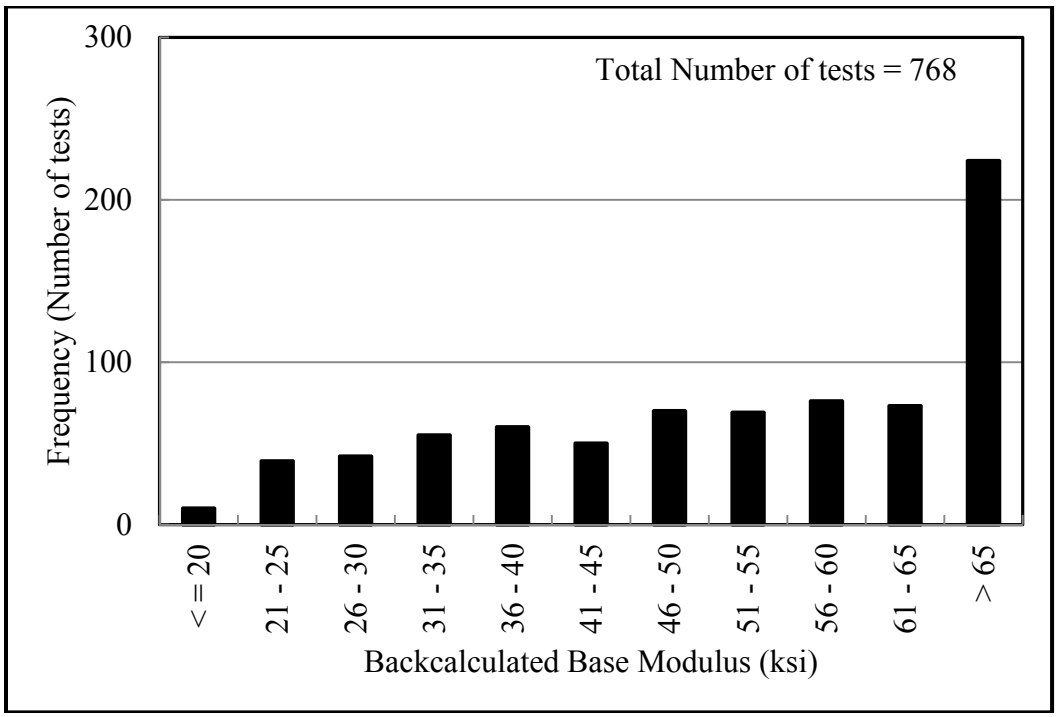

Figure 4.16 Distribution of the backcalculated base moduli of flexible pavements using three layered system, case 1

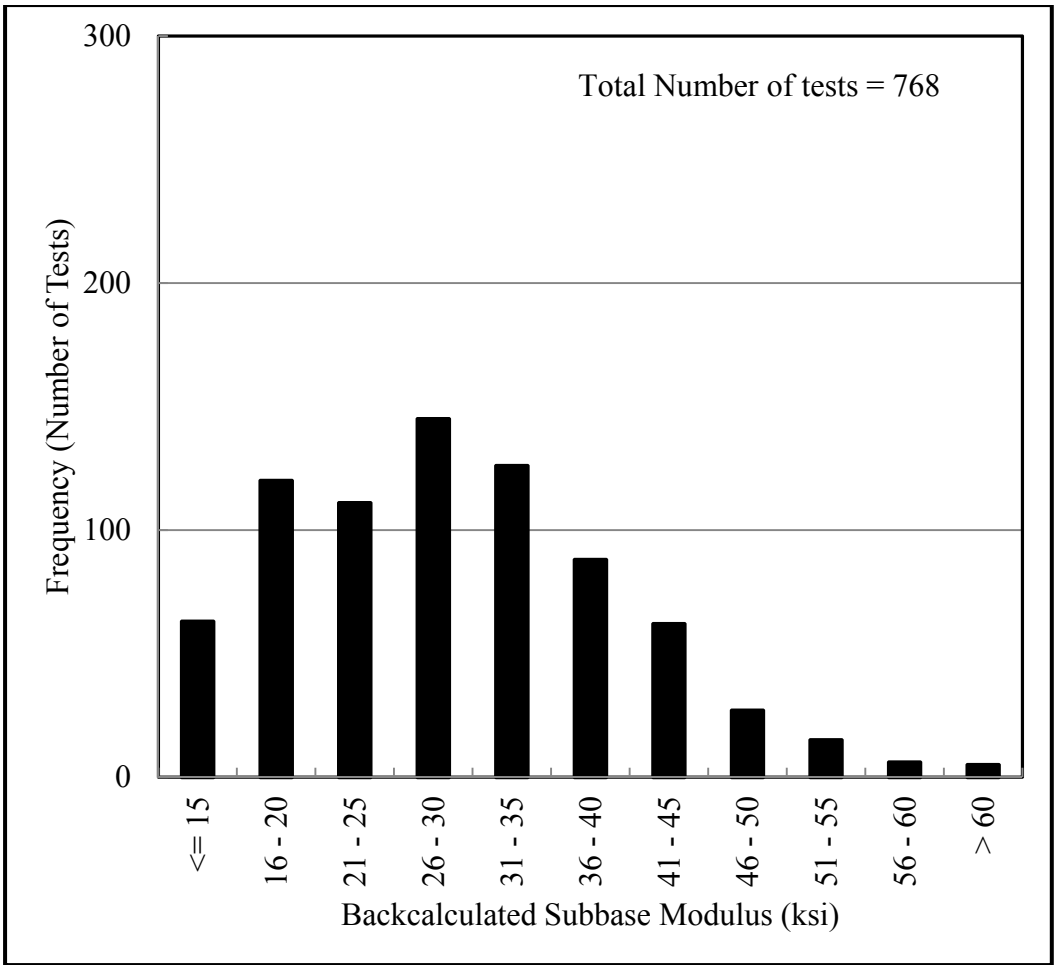

Figure 4.17 Distribution of the backcalculated subbase moduli of flexible pavements using three layered system, case 1

Table 4.15 Descriptive statistics for backcalculated pavement layer moduli for flexible pavements using both two and three layered systems, case 1

Statistics	Backcalculated pavement layer modulus (ksi)				
	Two layer analysis		Three layer analysis		
	Granular layer*	Roadbed	Roadbed	Subbase layer	Base
Average	34.00	25.95	26.10	28.77	63.49
Maximum	94.23	67.79	67.84	78.54	388.12
Minimum	11.12	7.09	7.34	8.34	16.94
Standard deviation	12.43	7.54	7.44	10.72	46.13
Average minus 67 percent of the standard deviation	25.71	20.92	21.14	21.62	32.74
*Combined base and subbase layers					

Both observations were expected because the roadbed soils are not influenced much by the applied load due to their depths. On the other hand, the granular layer modulus represents the combined moduli of the base and subbase layers.

Case 2 Analyses – In this case, the upper and lower ten percent of the backcalculated resilient modulus values were eliminated from the analyses and considered as outliers. The remaining 80 percent of the data were subjected to further analyses. Figure 4.18 shows the distribution of the backcalculated base modulus values for flexible pavements using the three layered system. The data in the figure shows that the modulus values of about 412 test results are more than 40 ksi. Figure 4.19 shows the distribution of the backcalculated subbase layer modulus values for case 2. There are only 49 backcalculated subbase modulus values higher than 40 ksi. Once again, the backcalculated base and subbase modulus values greater than 40 ksi were not accepted nor they were included in further analysis. The descriptive statistics, (average, maximum and minimum modulus values and the standard deviation) for the base, subbase and roadbed modulus and those obtained from the two layered system are listed in Table 4.16. The data in the table shows similar trends as those reported in Table 4.15.

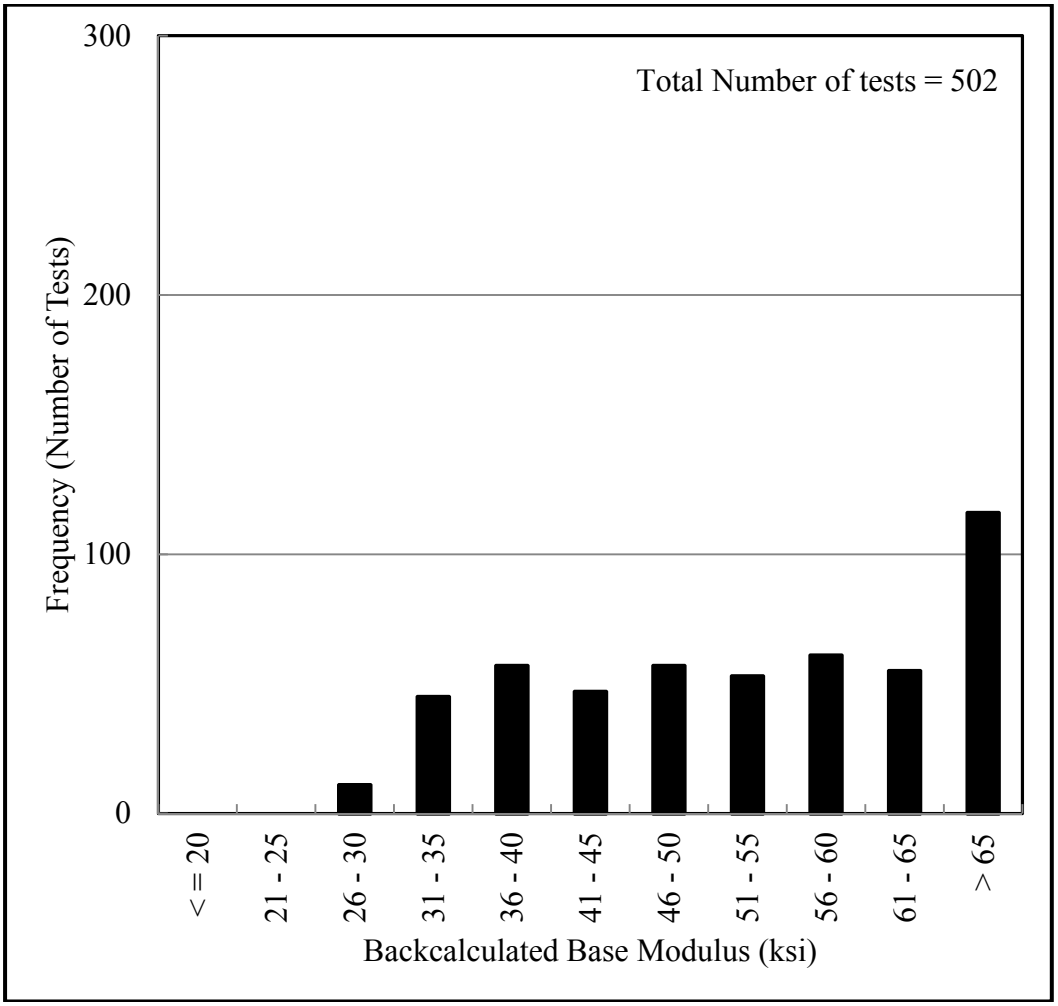

Figure 4.18 Distribution of the backcalculated base moduli of flexible pavements using three

layered system after deleting the upper and lower 10 percent of the backcalculated moduli, case 2

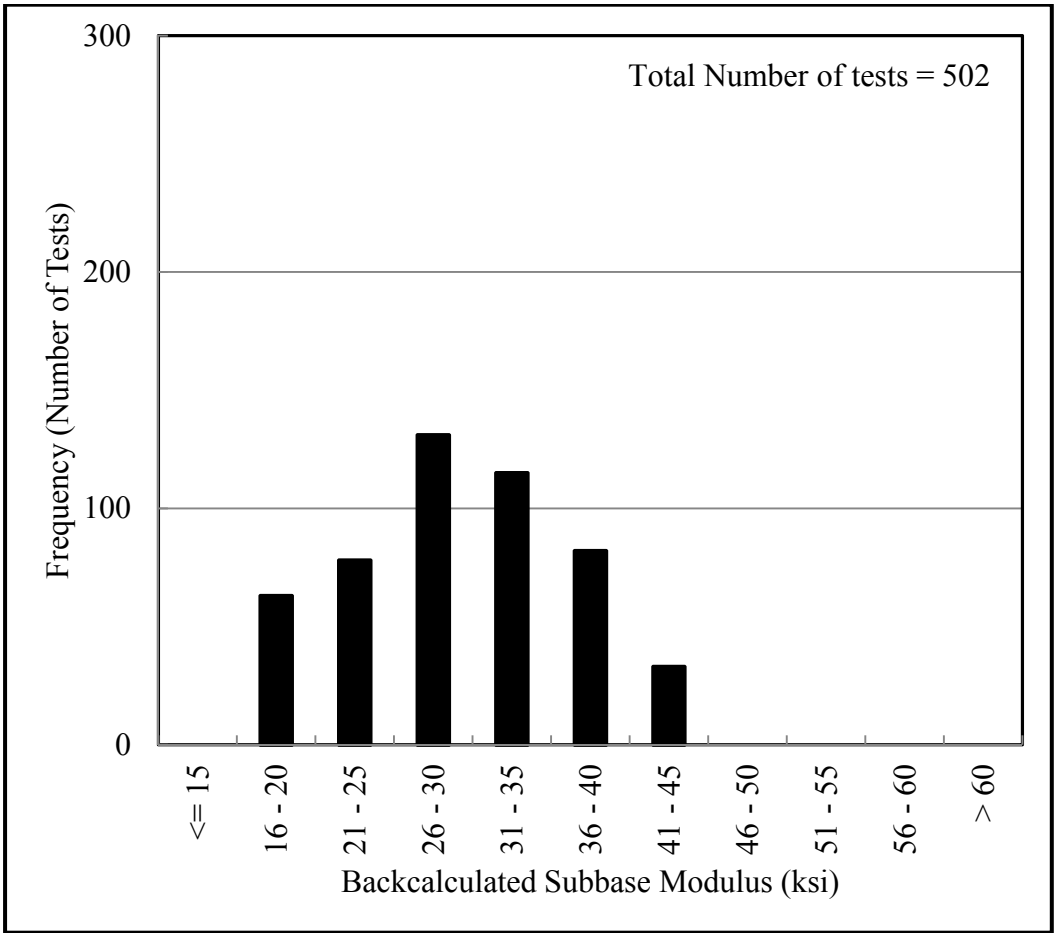

Figure 4.19 Distribution of the backcalculated subbase moduli of flexible pavements using three layered system after deleting the upper and lower 10 percent of the backcalculated moduli, case 2

Table 4.16 Descriptive statistics for backcalculated layer moduli for flexible pavements using both two and three layered systems after deleting the upper and lower 10 percent of the backcalculated modulus values, case 2

Statistics	Backcalculated pavement layer modulus (ksi)				
	Two layer analysis		Three layer analysis		
	Granular layer*	Roadbed	Roadbed	Subbase layer	Base
Average	33.79	26.96	27.02	29.16	54.43
Maximum	67.37	67.79	67.84	42.74	98.37
Minimum	18.73	8.71	8.71	16.02	27.95
Standard deviation	7.38	7.38	7.29	6.90	16.07
Average minus 67 percent of the standard deviation	28.87	22.04	22.16	24.56	43.72
*Combined base and subbase layers					

Case 3 Analyses – In this case, the upper and lower twenty percent of the backcalculated resilient modulus values were eliminated from the analyses and considered as outliers. The remaining 60 percent of the data were subjected to further analyses. Figure 4.20 shows the distribution of the backcalculated base modulus values after deleting the upper and lower 20% from the file. The data in the figure shows that about 226 backcalculated base modulus values are higher than 40 ksi. Figure 4.21 shows the distribution of the backcalculated subbase layer modulus values for analysis case 3. It can be seen that none of the backcalculated subbase layer modulus values is greater than 40 ksi. These results, as it was expected, are better than those reported for analysis case 1. However, the number of tests has decreased substantially. The descriptive statistics, (average, maximum and minimum modulus values and the standard deviation) for the base, subbase and roadbed modulus and those obtained from the two layered system are listed in Table 4.17. The data in the table shows similar trends as those reported in Table 4.15.

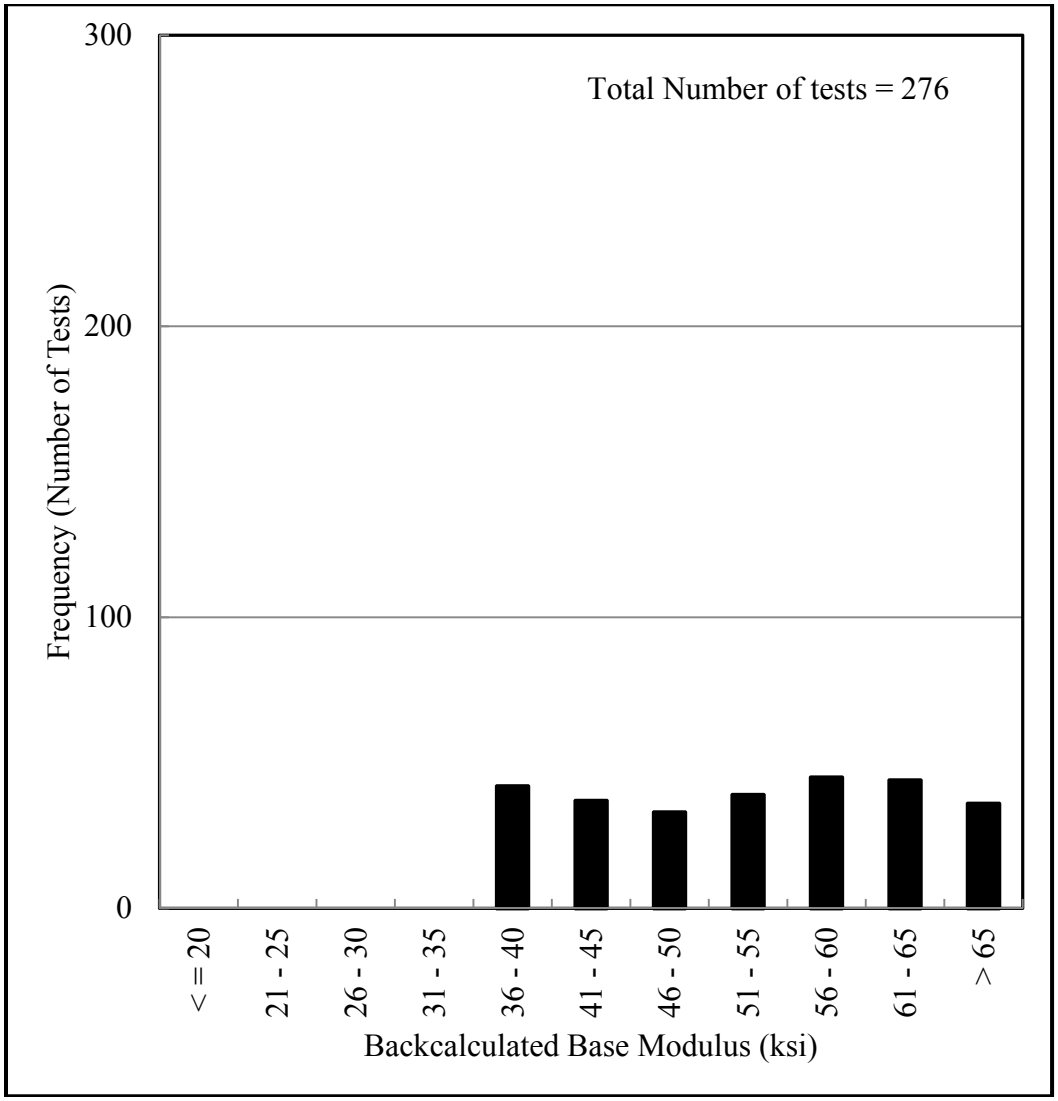

Figure 4.20 Distribution of the backcalculated base moduli of flexible pavements using three layered system after deleting the upper and lower 20 percent of the backcalculated moduli, case 3

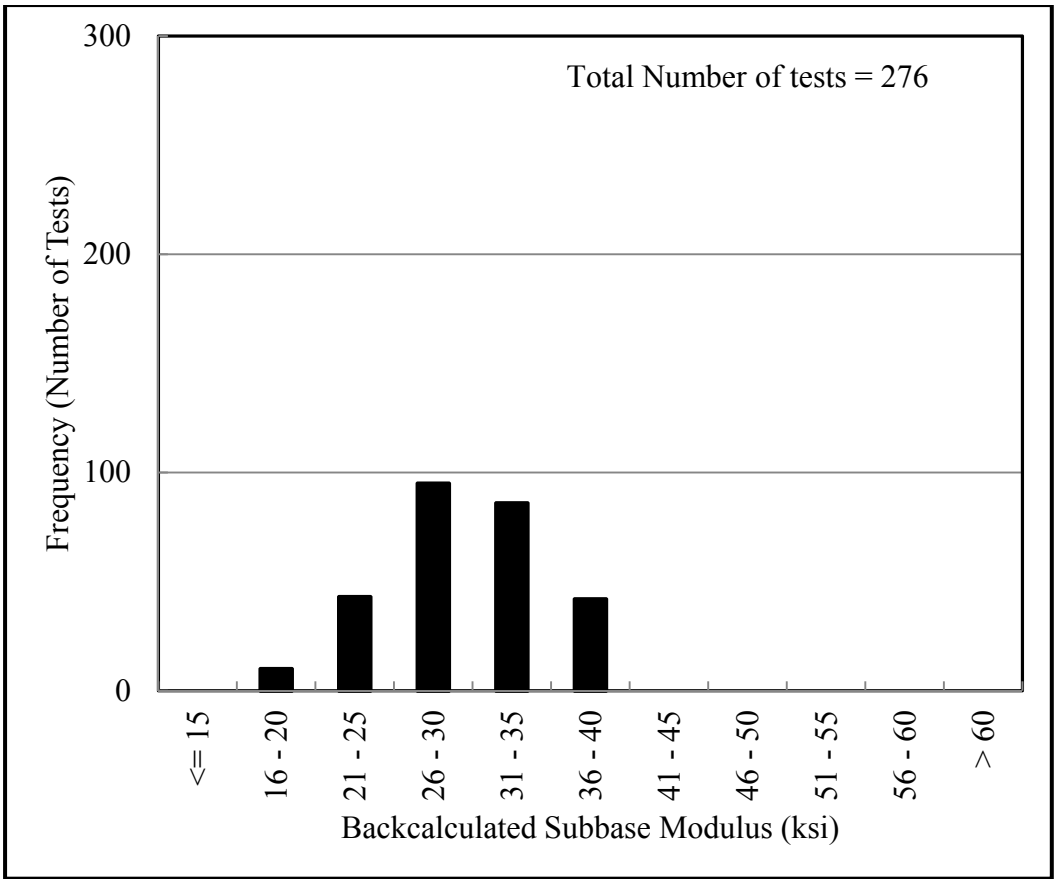

Figure 4.21 Distribution of the backcalculated subbase moduli of flexible pavements using three layered system after deleting the upper and lower 20 percent of the backcalculated moduli, case 3

Table 4.17 Descriptive statistics for backcalculated pavement layer moduli for flexible pavements using both two and three layered systems after deleting the upper and lower 20 percent of the backcalculated moduli, case 3

Statistics	Backcalculated pavement layer modulus (ksi)				
	Two layer analysis		Three layer analysis		
	Granular layer*	Roadbed	Roadbed	Subbase layer	Base
Average	34.01	27.46	27.55	29.33	52.84
Maximum	48.32	67.79	67.84	37.37	72.43
Minimum	22.10	11.95	11.99	18.93	35.54
Standard deviation	5.27	7.21	7.06	4.79	10.32
Average minus 67 percent of the standard deviation	30.50	22.66	22.84	26.14	45.96
*Combined base and subbase layers					

Case 4 Analysis – In this case, all backcalculated base and subbase modulus values less than the 75 percentile were analyzed. The upper 25 percent of the data were considered outliers. It should be noted that for any given FWD test, if the backcalculated moduli from both the base and the subbase were less than the corresponding 75th percentile, the data were included in this case. Otherwise, the data were excluded. The backcalculated layer moduli from 425 tests passed the test and are included in the analysis. The distributions of the backcalculated base and subbase moduli for this case are depicted in Figures 4.22 and 4.23 based on bracket interval of 5 ksi. It can be seen that the backcalculated base modulus value varies from a low of 20 ksi to a high of more than 65 ksi. Likewise the subbase modulus varies from less than 15 ksi to more than 60 ksi. Table 4.18 summarizes the maximum, minimum, and the average backcalculated modulus values and their standard deviation. The table also includes the maximum, minimum, and average modulus values and the standard deviation from the results of the two layered system. Examination of the data listed in Table 4.18 indicates that the average backcalculated base modulus for the 75 percentile data is 42.68 ksi, which is slightly higher than the 40 ksi limit stated in the 1993 AASHTO Design Guide for conversion to layer coefficient. Hence, the average base, subbase, and granular layer modulus values to be used in the design of flexible pavements was reduced by two thirds of the standard deviation. Such reduction yielded the equivalent percentile values listed at the bottom of the table. It should be noted that the design modulus value for the roadbed soil should be obtained from the subgrade report or from the amendment to the subgrade report, which is included at the end of this report.

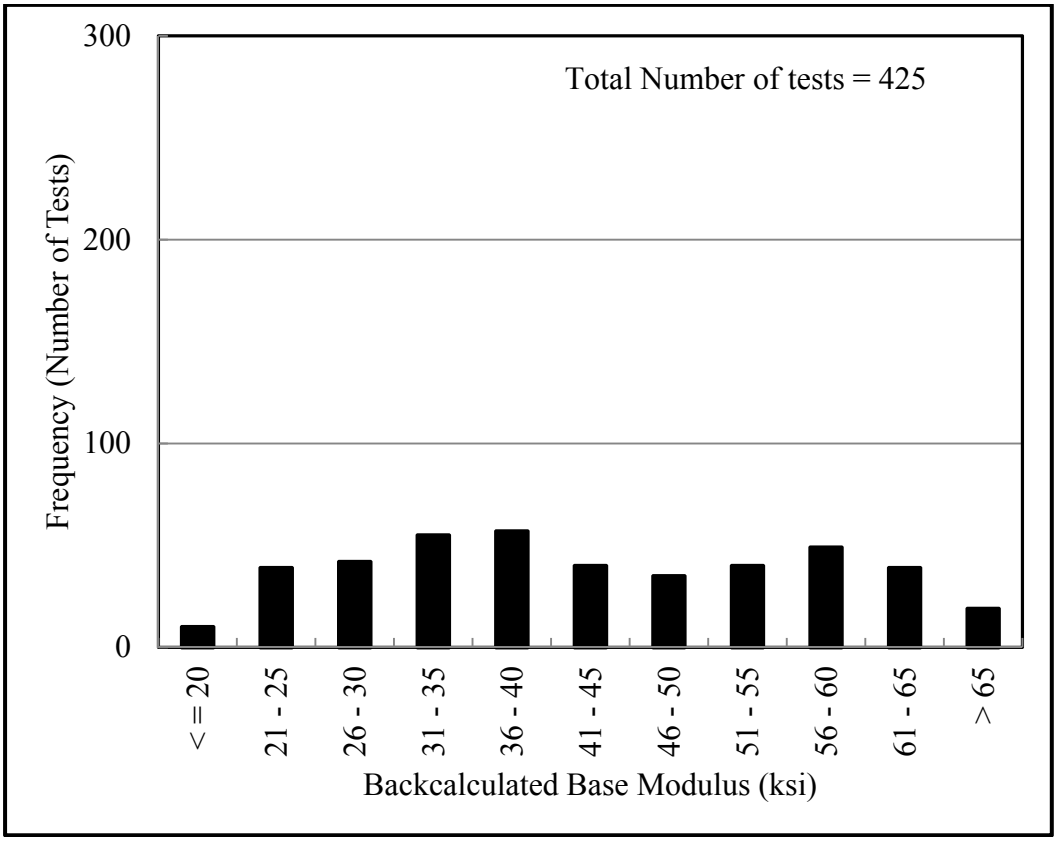

Figure 4.22 Distribution of the backcalculated base moduli of flexible pavements using three layered system for data less than the 75th percentile value of the backcalculated moduli, case 4

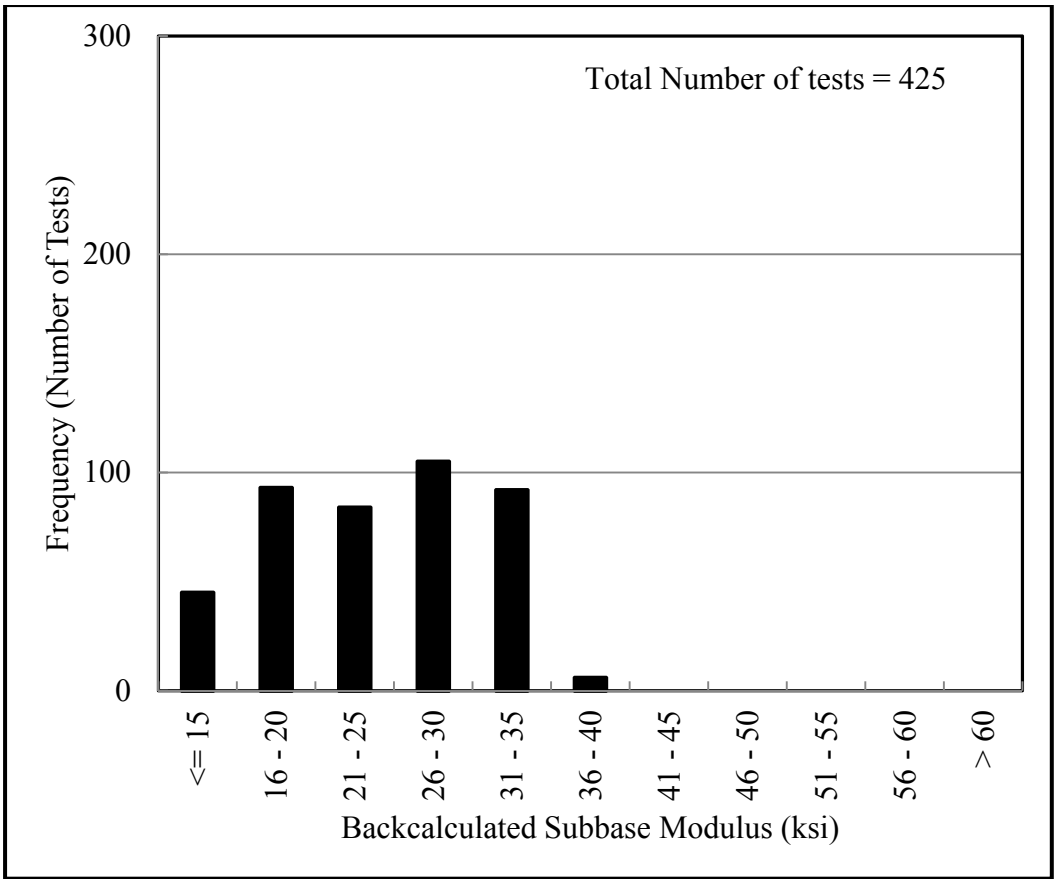

Figure 4.23 Distribution of the backcalculated subbase moduli of flexible pavements using three layered system for data less than the 75th percentile value of the backcalculated moduli, case 4

Table 4.18 Descriptive statistics for backcalculated pavement layer moduli for flexible pavements using both two and three layered systems for all data less than the 75th percentile value of the backcalculated moduli, case 4

Statistics	Backcalculated pavement layer modulus (ksi)				
	Two layer analysis		Three layer analysis		
	Granular Layer*	Roadbed	Roadbed	Subbase Layer	Base
Average	27.30	24.51	24.58	23.86	42.68
Maximum	46.44	67.79	67.84	35.85	67.71
Minimum	11.18	8.71	8.71	8.56	16.94
Standard deviation	7.48	7.27	7.22	6.62	13.78
Average minus 67 percent of the standard deviation	22.32	19.67	19.77	19.45	33.49
Equivalent percentile	85	69	85	84	54
*Combined base and subbase layers					

4.5 IMPACT OF PAVEMENT TYPE ON THE BACKCALCULATED MODULI

As stated earlier, MICHBACK was used to backcalculate the resilient modulus of both rigid and flexible pavements in a two layer pavement system. A total of two thousand nine hundred ninety three FWD tests conducted on rigid pavements and one thousand seven hundred and sixty three tests on flexible pavements satisfied the convergence criteria. The backcalculated granular layer moduli for both flexible and rigid pavements follow a similar distribution, as shown in Figure 4.24, which is slightly skewed towards the higher moduli. The granular layer modulus values varied from 3 to 150 ksi. However, the 75th percentile modulus value of the granular layer under both flexible and rigid pavements is about 50 ksi. Hence, one may conclude that the two sets of data (under rigid and flexible pavements) are similar. Indeed, t-tests at confidence level of 95 percent were conducted on all averages of cases 1 through 4. It was found that the two sets of data of cases 3 and 4 are similar whereas the data for cases 1 and 2 are statistically different. Results of the t-tests are summarized in Table 4.19. Figure 4.25 shows the averages of the backcalculated granular layer modulus, using two layered system, for both flexible and the pavement layer. The data in the figure indicate the average backcalculated granular layer moduli for flexible and rigid pavement correspond very well.

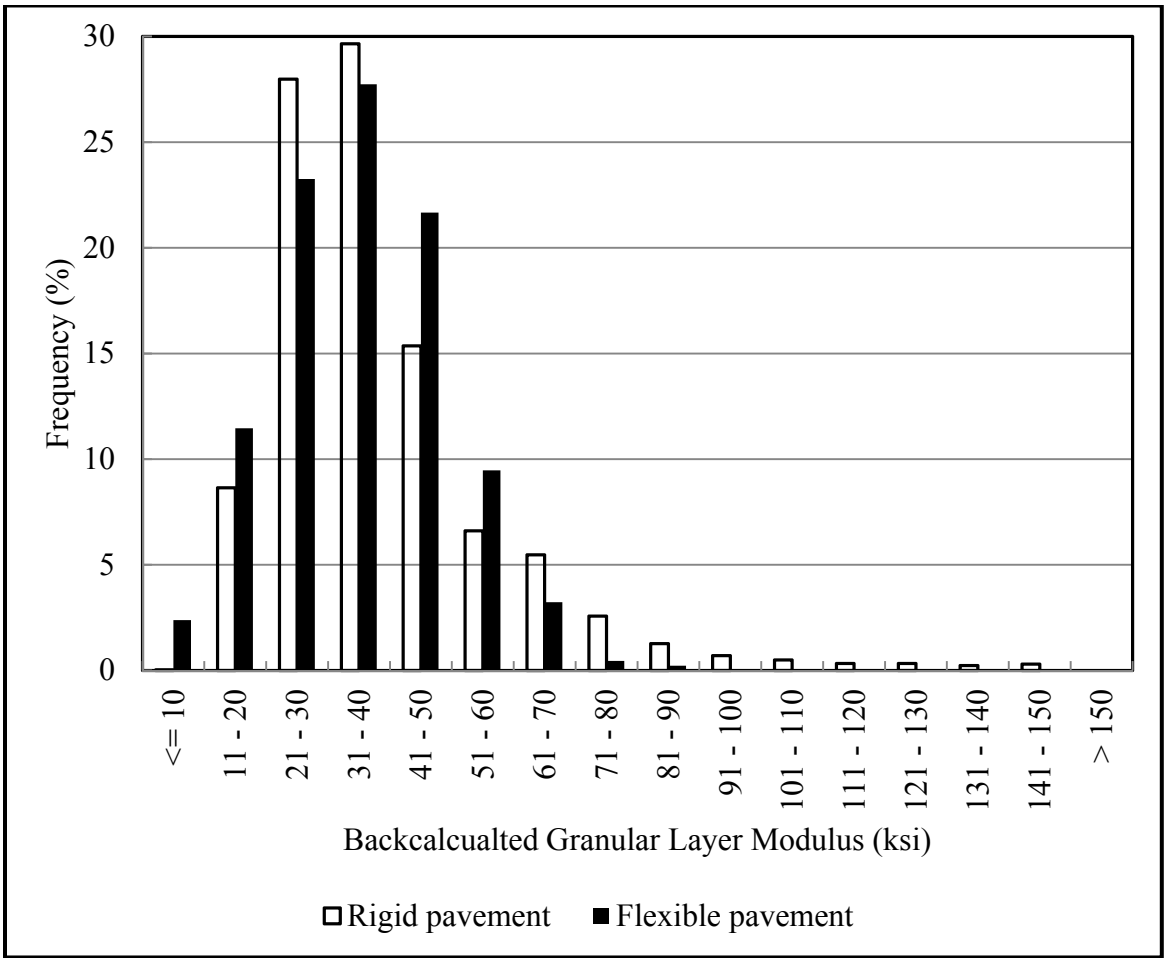

Figure 4.24 Distribution of the backcalculated granular layer moduli

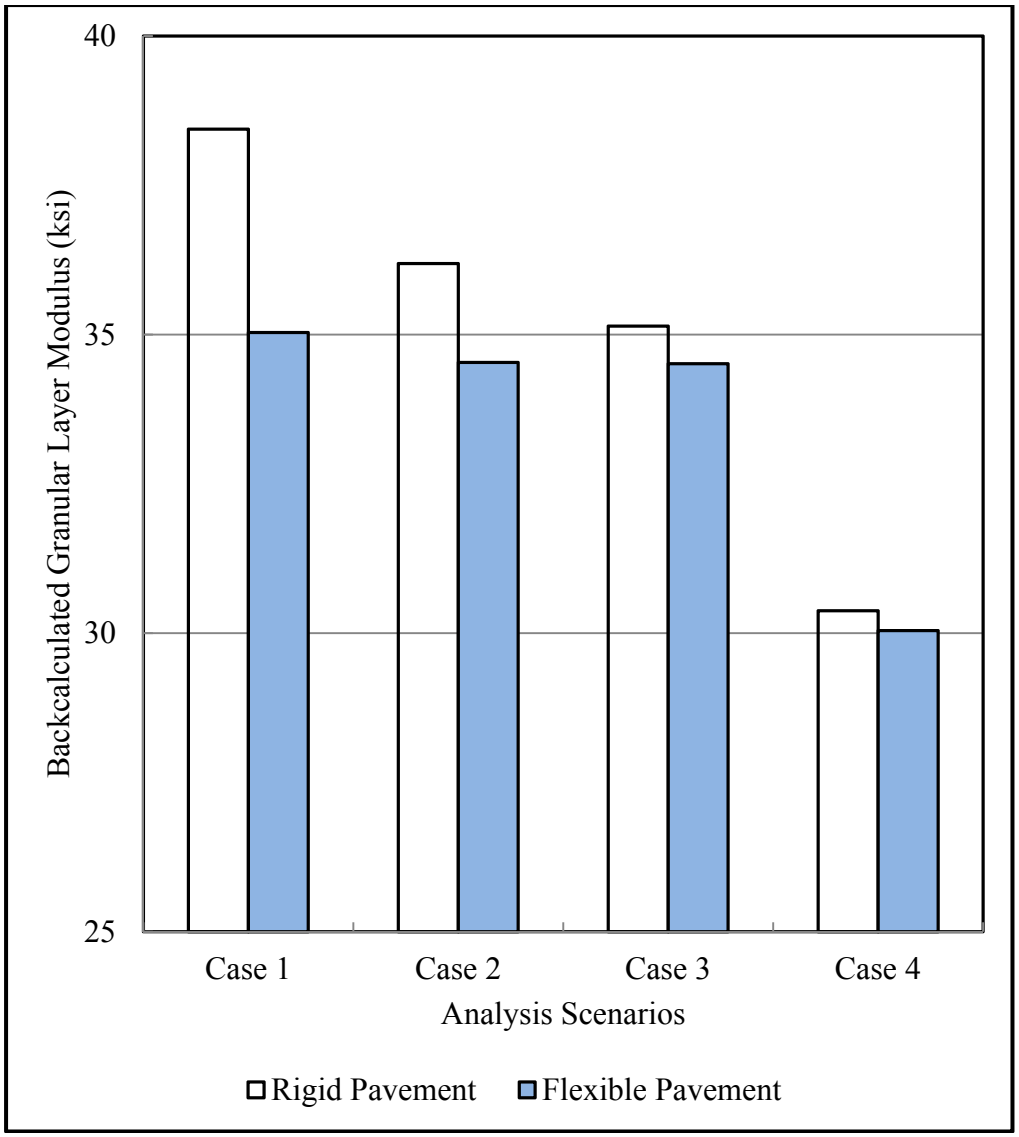

Figure 4.25 Comparison between backcalculated granular layer resilient moduli for flexible and rigid pavements

Table 4.19 A summary of the results of the statistical analysis of backcalculated granular modulus for rigid and flexible pavements

Analysis scenario	Mean difference (psi)	t - statistic	P - value	95% confidence interval for the difference (psi)		Statistically similar?
				Lower	Upper	
Case 1	3407.1	7.098	0.000	2466.0	4348.2	No
Case 2	1645.3	4.415	0.000	914.7	2375.8	No
Case 3	629.7	1.854	0.064	-36.3	1295.7	Yes
Case 4	333.0	0.944	0.345	-358.6	1024.6	Yes

Additionally, for cases 1 and 2, where the means are significantly different, the mean values of the granular layer modulus under flexible and rigid pavements vary between 30 and 40 ksi.

The pavement design software DNPS86 of the American Association of State Highway and Transportation Officials (AASHTO) was used to study the impact of the granular layer moduli on the thickness of the PCC slab and the HMA. The results are shown, respectively, in Figures 4.26. The data in Figure 4.26 indicate that the unbound granular layer modulus does not have much impact on the PCC slab thicknesses. This may be due to the very high modulus of the concrete slab. However, the granular layer modulus has a significant impact on the HMA thickness.

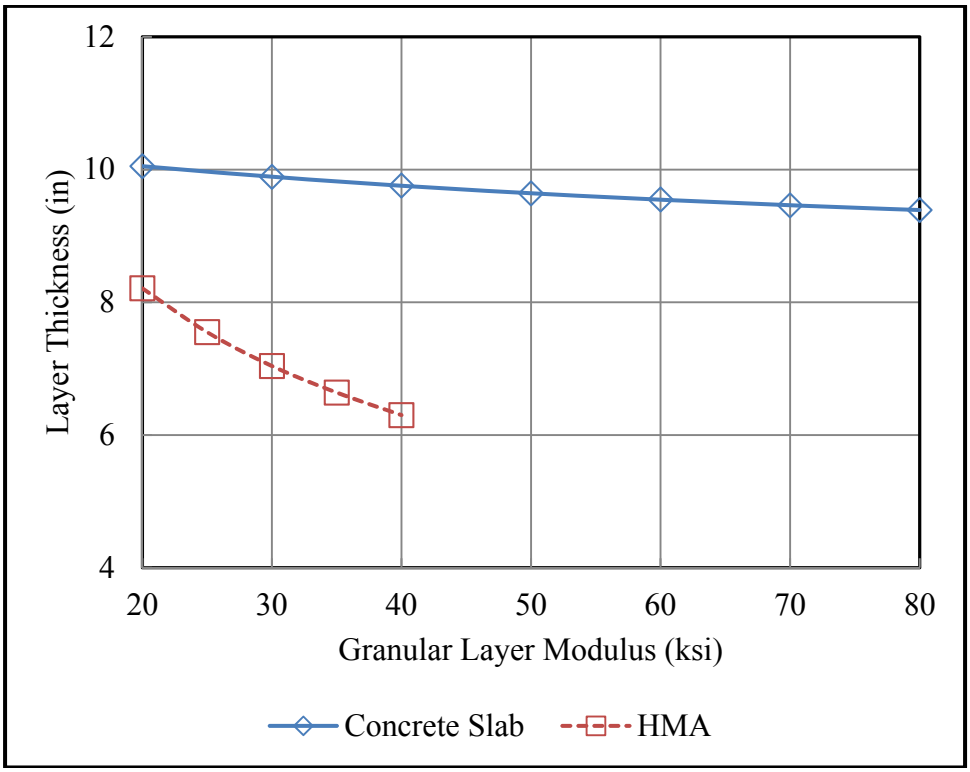

Figure 4.26 Impact of unbound granular layer moduli on the thicknesses of concrete slab and the HMA layer

4.6 IMPACT OF AGGREGATE CHARACTERISTICS ON THE MODULUS OF THE UNBOUND GRANULAR LAYER

Some aggregate characteristics such as type, gradation, angularity and moisture content have a significant impact on the resilient modulus. Some of the commonly used aggregates in Michigan include natural gravel, dolomite, and crushed concrete. The gradation of these aggregates, either open or dense, depends upon the type of pavement and its location. Table 4.20 lists the number of test for each aggregate type that converged in the backcalculation procedure. The impact of the type of aggregate and gradation is presented in the next few subsections.

Table 4.20 Number of tests for each aggregate type and gradation

Material type	Gradation	No of tests	
		Rigid pavement	Flexible pavement
Crushed Concrete	Dense	867	N/A
Dolomite	Open	10	N/A
Natural gravel	Dense	370	131
	Open	180	N/A
N/A - Not available			

4.6.1 Aggregate Type

The average of backcalculated resilient moduli for each material type and for the two and three layered analysis and for the four cases are shown in Figures 4.27 through 4.30. The data in the figures indicate that irrespective of the material type, the average backcalculated modulus was found to range from about 30 to about 40 ksi.

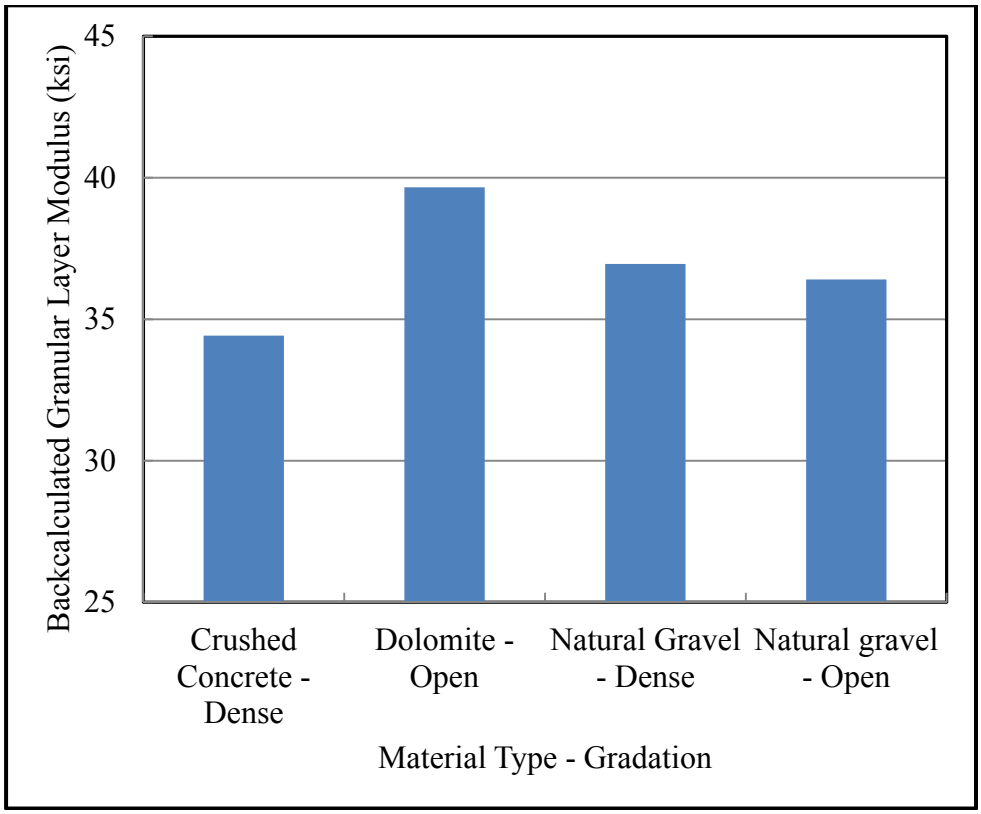

Figure 4.27 Averages of the backcalculated granular layer resilient modulus from two layered system for each material type for all backcalculated moduli data, case 1

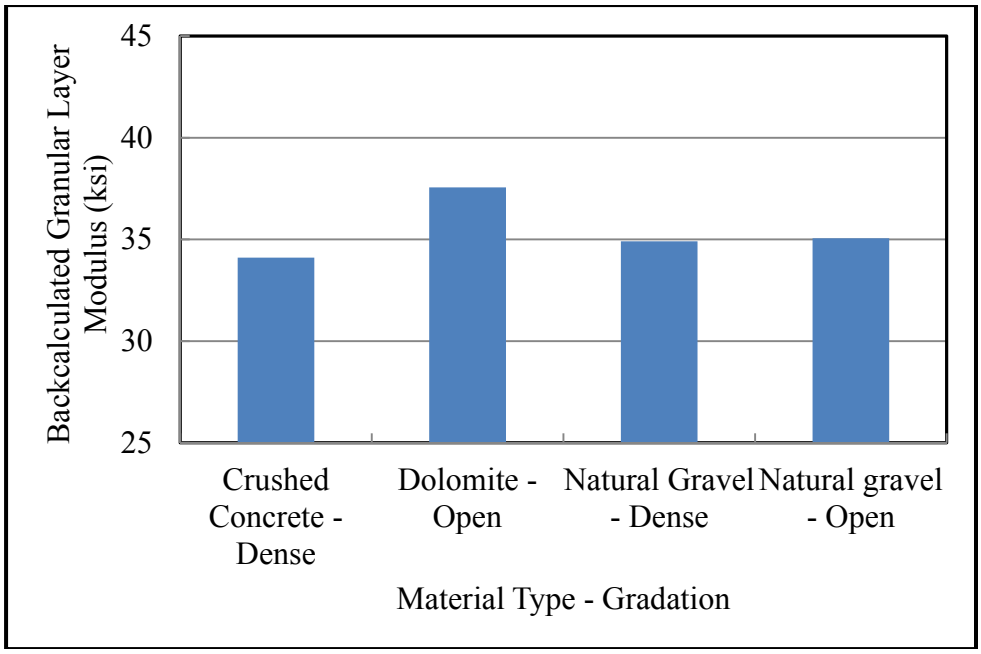

Figure 4.28 Averages of the backcalculated granular layer resilient modulus from two layered system for each material type after deleting the upper and lower 10 percent of the backcalculated moduli, case 2

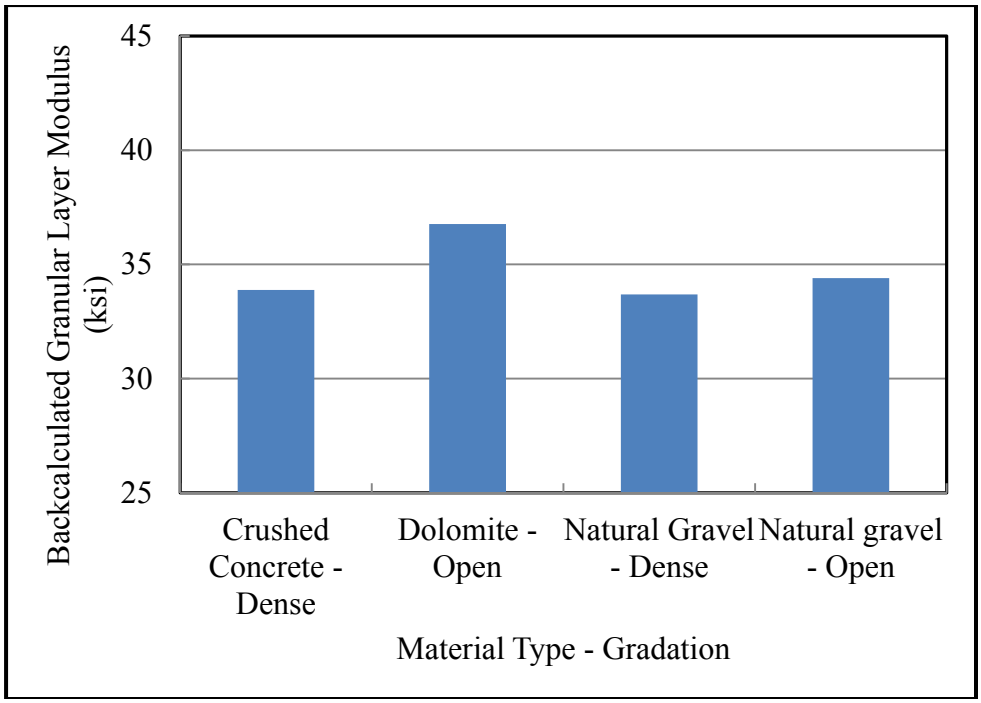

Figure 4.29 Averages of the backcalculated granular layer resilient modulus from two layered system for each material type after deleting the upper and lower 20 percent of the backcalculated moduli, case 3

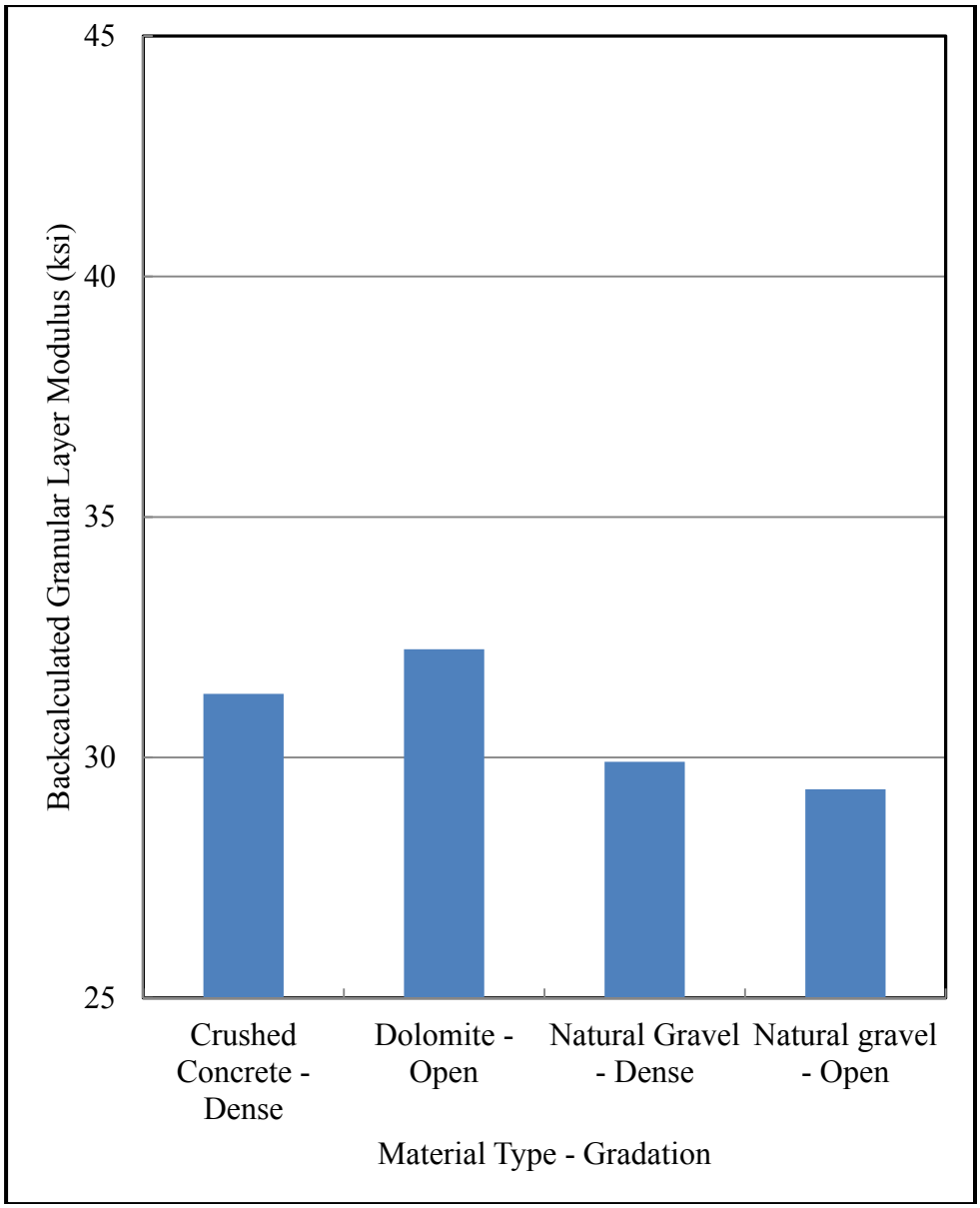

Figure 4.30 Averages of the backcalculated granular layer resilient modulus from two layered system for each material type for moduli less than the 75th percentile value, case 4.

4.6.2 Aggregate Gradation

Granular bases are classified as either open or dense graded. Base layers with an aggregate gradation of 21AA, 21A, 22A are dense graded and 2G and 4G are open graded bases per MDOT specifications. The primary purpose of the open graded base is to provide better drainage facilities and hence is typically referred to as Open Graded Drainable Course (OGDC). The grading requirements for dense (22A) and open (4G) graded aggregates are listed in Table 4.21. In the pavement design process, MDOT typically uses 30 and 24 ksi as the design moduli for dense and open graded bases, respectively. Comparison of the average backcalculated resilient modulus for open and dense graded bases, for all analysis scenarios, is presented in Figure 4.31.

The data in the figure indicate that the differences in the means are negligible. An independent sample t-test conducted on the means of the backcalculated granular layer moduli for open and dense graded bases proved that the results are statistically similar. The results of the independent sample t-test at 95% confidence interval, for all analysis scenarios, are listed in Table 4.22. The data in the table indicate that it can be concluded that the aggregate gradation does not have much impact on the backcalculated granular layer modulus.

Table 4.21 Grading requirements for dense and open graded aggregates (MDOT 2003)

Sieve sizes	Total percent passing	
	Dense gradation (22A)	Open gradation (4G)
1.5 in		100
1 in	100	
¾ in	90-100	60-80
½ in		35-65
3/8 in	65-85	
No. 4		
No. 8	30-50	10-25
No. 30		5-18
Passing No. 200	4-8	6.0 Max

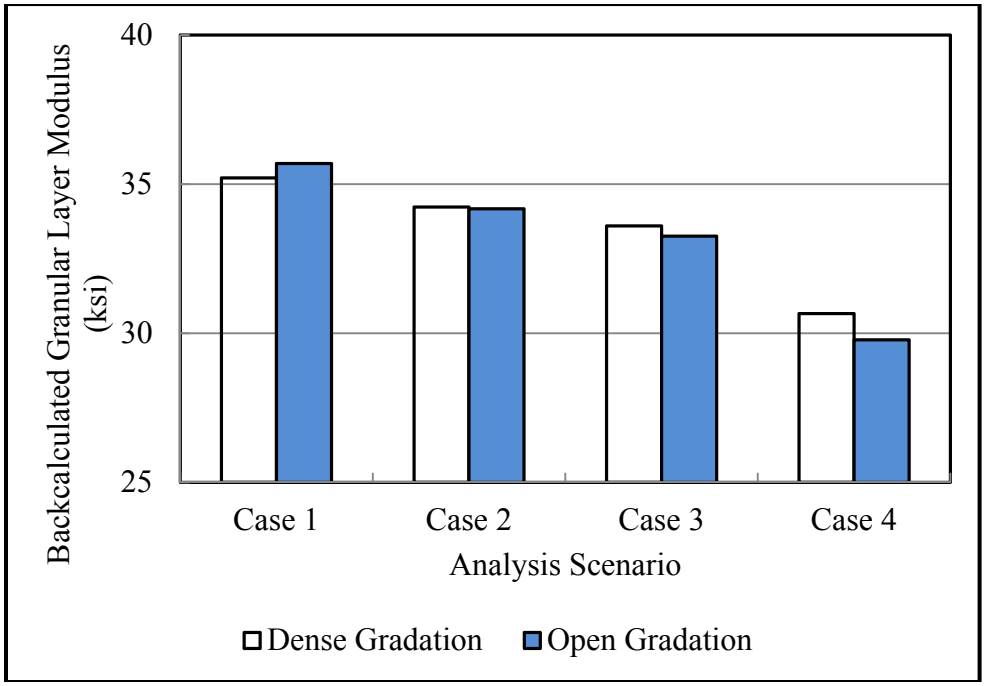

Figure 4.31 Comparison of backcalculated granular layer resilient modulus for dense and open graded bases from two layered pavement system

Table 4.22 Summary of the results of statistical analysis of backcalculated granular moduli for dense and open graded unbound granular layer moduli

Analysis scenario	Mean difference (psi)	t - statistic	P - value	95% confidence interval for the difference (psi)		Statistically similar?
				Lower	Upper	
Case a	-1230.7	-1.079	0.282	-3477.9	1016.5	Yes
Case b	-788.8	-0.910	0.364	-2500.0	922.4	Yes
Case c	-716.0	-1.000	0.319	-2133.2	701.3	Yes
Case d	1320.0	1.748	0.082	-171.9	2813.9	Yes

4.7 COMPARISON BETWEEN LABORATORY AND BACKCALCULATED GRANULAR LAYER MODULI

Some of the most commonly used aggregate in the granular layer include crushed concrete, natural gravel, and dolomite. As stated earlier, the results from the laboratory tests conducted on unbound granular materials by researchers at the Michigan Technological University were used to compare the laboratory measured and the backcalculated modulus values. The resilient modulus of the granular materials is stress dependent. For a given interstate pavement section in the State of Michigan, the estimated principal stresses (vertical and radial) at the center of 16-inch granular layer due to a 9000-pound (one side of a standard single axle load) are 12 and 2 psi respectively. Since some of the laboratory tests were not conducted at the same stress boundary conditions, the laboratory modulus corresponding to principal stresses of 12 and 3 psi only were used for comparison purposes. The mean of the laboratory determined moduli for each aggregate type is presented in Figure 4.32. Statistical t-tests were conducted on all means using 95% confidence level. The results indicate that the laboratory determined aggregate base modulus values except those for the dolomite aggregate, are statistically similar and represent similar population.

For flexible pavements in three layered system, the average of 120 backcalculated modulus values of dense graded natural gravel base layer of the four analyses cases and the average laboratory determined dense graded natural gravel base modulus are listed in Table 4.23. It should be noted that MTU conducted laboratory tests on different aggregate types, however, in this study, field information regarding one aggregate type only were available. Once again, Table 4.23 provides a list of the laboratory determined and the backcalculated modulus values for dense graded natural gravel. The data in the table indicate that the average backcalculated modulus value is about 4 to 5 times higher than the laboratory obtained value depending on the analysis case. This was expected although the ratio is higher than the 2 to 3 reported in the literature. One reason for the higher ratios is that the FWD tests; were dense natural gravel was and still is the base material, were conducted in Grand region only. The source from which MTU obtained their aggregate is stated in their report as from selected quarries. Nevertheless, no additional information or data regarding the type of aggregate base are available to compare the backcalculated and the laboratory determined modulus values. Further, Table 4.24 provides a list of the averages of the granular layer modulus obtained from 2-layered system analysis and the average laboratory modulus of the base. The ratios between the two sets of data vary from 2.2 to

2.4 depending on the analysis case. These ratios are more or less parallel to those reported in the next section (Table 4.25) for rigid pavements.

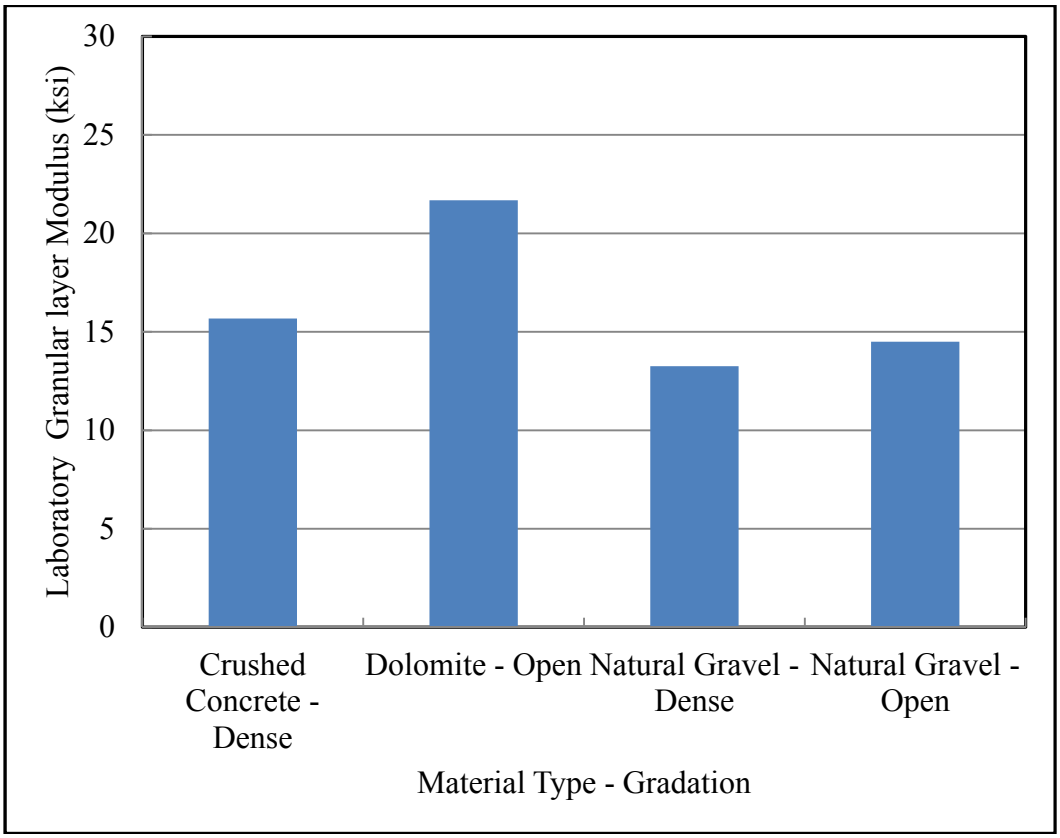

Figure 4.32 Laboratory measured resilient modulus of various granular materials (Mayrberger and Hodek, 2007)

Table 4.23 Summary of backcalculated and laboratory determined base layer modulus for flexible pavement

Material type	Average backcalculated modulus (ksi)	Average laboratory modulus (ksi)	Ratio of backcalculated to laboratory determined modulus values
Case 1	67.0	13.3	5.1
Case 2	65.5	13.3	4.9
Case 3	59.2	13.3	4.5
Case 4	57.8	13.3	4.4
Average			4.75

Table 4.24 A summary of backcalculated and laboratory determined granular layer modulus for flexible pavements

Analysis cases	Average backcalculated modulus (ksi)	Average laboratory modulus (ksi)	Ratio of backcalculated and laboratory modulus
Case 1	32.2	13.3	2.4
Case 2	31.6	13.3	2.4
Case 3	29.8	13.3	2.3
Case 4	28.7	13.3	2.2

A typical cross section of rigid pavement consists of a concrete slab, a 4-inch thick aggregate base and a 9 to 14 inch thick sand subbase supported by roadbed soil. Because of the thickness ratio between the base and the subbase, the modulus of the subbase layer tends to have larger role on pavement response to load than the base layer. Hence, the modulus of the subbase controls the composite modulus of all materials between the concrete slab and the roadbed soils; the base layer has insignificant impact on the granular layer modulus. Having said that and recall that all backcalculation of the layer moduli for rigid pavements were conducted using the two layered system, the backcalculated granular layer modulus represents the composite modulus of the base and subbase layers combined. Hence, if the backcalculated composite granular layer modulus is compared to the laboratory determined modulus of the base layer, one should expect the ratio between the two modulus values to be slightly lower than those listed in Table 4.24 for flexible pavements. Such comparison was conducted and the results are listed in Table 4.25. As can be seen, the ratios for all cases are slightly lower than those of Table 4.24.

Table 4.25 Comparison of the backcalculated granular layer modulus with laboratory determined base modulus for all analyses cases.

Material type	Gradation	Average laboratory modulus (ksi)	Average backcalculated composite granular layer modulus for all analyses cases (ksi)				Ratio of backcalculated and laboratory determined modulus for all analyses cases			
			1	2	3	4	1	2	3	4
Natural Gravel	Dense	13.3	36.5	33.8	32.3	27.9	2.8	2.6	2.4	2.1
Natural Gravel	Open	14.5	36.4	35.1	34.4	29.3	2.5	2.4	2.4	2.0
Dolomite	Open	21.7	39.7	37.6	36.8	32.3	1.8	1.7	1.7	1.5
Crushed Concrete	Dense	15.7	34.4	34.1	33.9	31.3	2.2	2.2	2.2	2.0
Average ratio							2.3	2.2	2.2	1.9

4.8 EQUIVALENT GRANULAR LAYER RESILIENT MODULUS

In general, a typical flexible pavement section consists of a surface (HMA) layer, base layer, and subbase layer supported by the roadbed soil. Most DOTs including MDOT specifies the aggregate type, gradation and density and other requirements in its construction proposals. Unfortunately, the modulus values of the base, subbase and roadbed soils are not specified. For asphalt pavement design, most DOTs including the MDOT estimate the moduli of the base, subbase and roadbed soils based on experience and/or correlations. For rigid pavement design, three scenarios can be found:

1. The concrete layer is supported directly on the subbase layer (no base layer is used). In this scenario, the modulus of the subbase layer is estimated.
2. The concrete layer is supported directly on a base layer, which is supported by a subbase layer. For this scenario, most agencies estimate the combined modulus of the two layers based on experience and past practice. Some agencies estimate the modulus values of the base and subbase layers and then they calculate the weighted or equivalent average modulus of the granular layer using Equation 4.1. Others estimate the combined modulus value of the two layers based on experience and past practice.

$$E_g = \frac{(\alpha)(T_b)(E_b) + (T_{sbB})(E_{sb})}{T_b + T_{sb}} \qquad \text{Equation 4.1}$$

Where, E_g = weighted or equivalent average granular layer modulus (psi)
T_b = thickness of base layer (in)
E_b = modulus of the base layer (psi)
T_{sb} = thickness of the subbase layer (in)
E_{sb} = modulus of the subbase layer (psi)
α = correction factor for base modulus = 0.825

It should be noted that, in general, the modulus of the granular layer (the composite modulus of the base and subbase layers) should be less than the base layer and greater than the subbase layer. In this study, this scenario was used to test and accept or reject the backcalculated base, subbase, and granular layers modulus values.

Recall that, in this study, the deflection data measured along each flexible pavement section was used to backcalculate the moduli of the asphalt concrete, the aggregate base, the sand subbase and the roadbed soils using three layered analysis. The same deflection data were also used to backcalculate the moduli of the asphalt concrete, the granular layer and the roadbed soils using two layered system. The backcalculated moduli of the base and subbase layers from the three layered system were then used as inputs to Equation 4.1 and the weighted or equivalent average granular layer moduli (E_g) were calculated. For each deflection basin, the error between the backcalculated granular layer modulus (two layered system) and the calculated E_g was calculated as the ratio of the difference between the backcalculated granular layer modulus and E_g to the backcalculated granular layer modulus. During the calculation of E_g, the value of the correction factor α of Equation 4.1 was determined by trial and error with the objective function to

minimize the cumulative error (the sum of the error of all backcalculated deflection basins between the values of E_g and the backcalculated granular layer moduli). The objective function was accomplished when the correction factor α was assigned a value of 0.825.

Figures 4.34 through 4.37 show, for all four cases of analysis, the relationship between the backcalculated granular layer modulus using the two layered system and the E_g values estimated using Equation 4.1. Examination of the data depicted in Figures 4.34 through 4.37 indicates that the spread of the data points around the line of equality decreases as more outliers are eliminated. Stated differently, the spread of the data decreases from analysis case 1 to analysis case 2 to analysis case 3 and finally to analysis case 4. Indeed, for case 3 analyses and case 4 analyses, the spread in the data is so insignificant that one can conclude that the two sets of data are almost the same. The cumulative error and the standard deviation of the errors for both cases 3 and 4 analyses are about 0.94 and 0.08 respectively. Such error is smaller than a typical error incurred in the measurement or estimation of the thicknesses of the aggregate base and sand subbase.

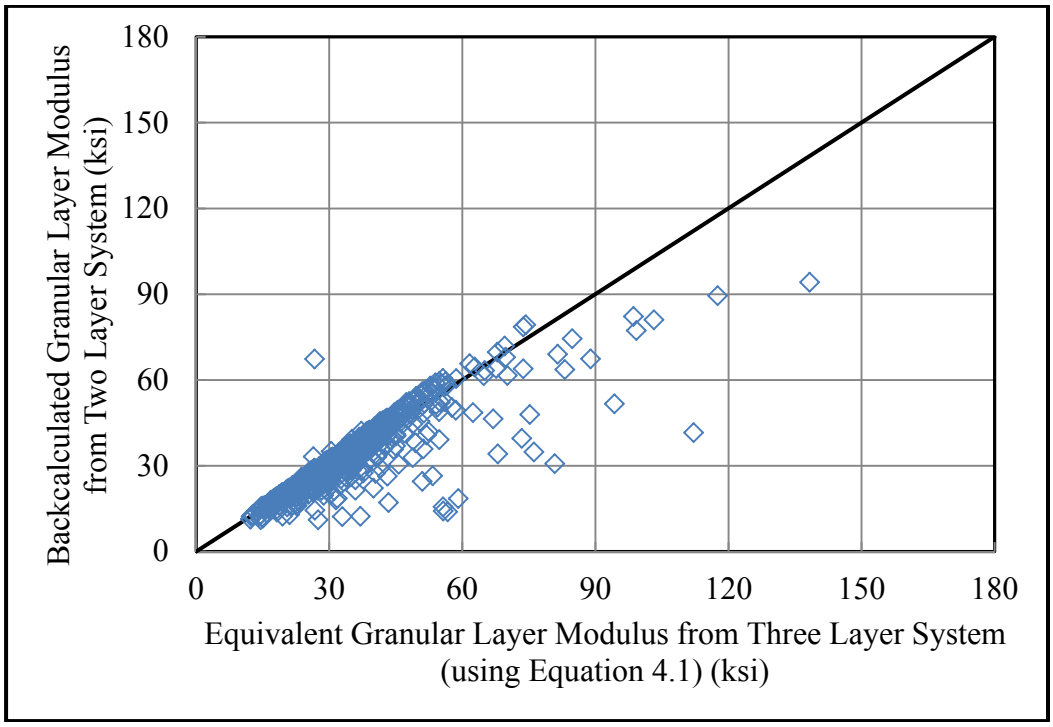

Figure 4.34 Comparison between equivalent and backcalculated granular layer resilient modulus for all tests, case 1

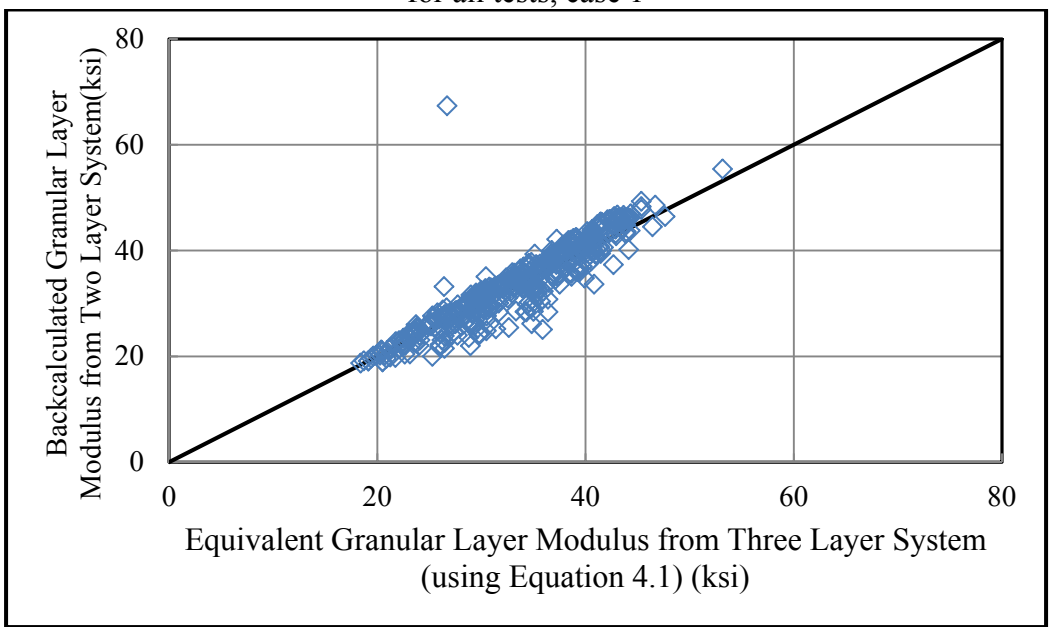

Figure 4.35 Comparison between equivalent and backcalculated granular layer resilient modulus for after deleting the upper and lower 10% of the backcalculated moduli, case 2

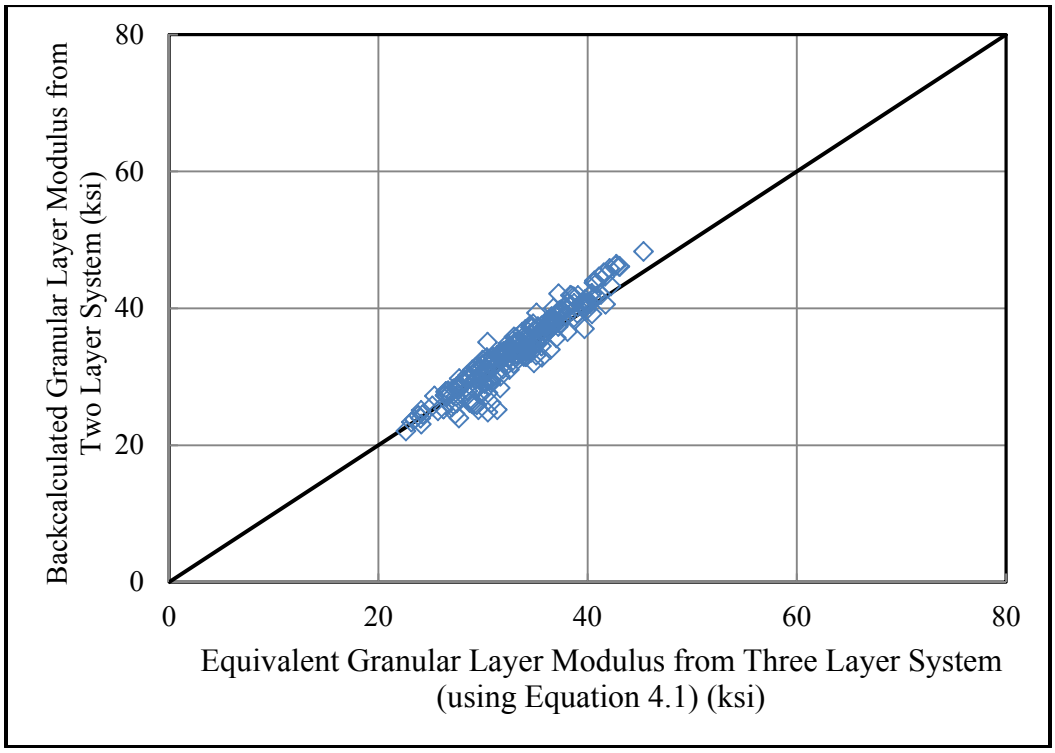

Figure 4.36 Comparison between equivalent and backcalculated granular layer resilient modulus for after deleting the upper and lower 20% of the backcalculated moduli, case 3

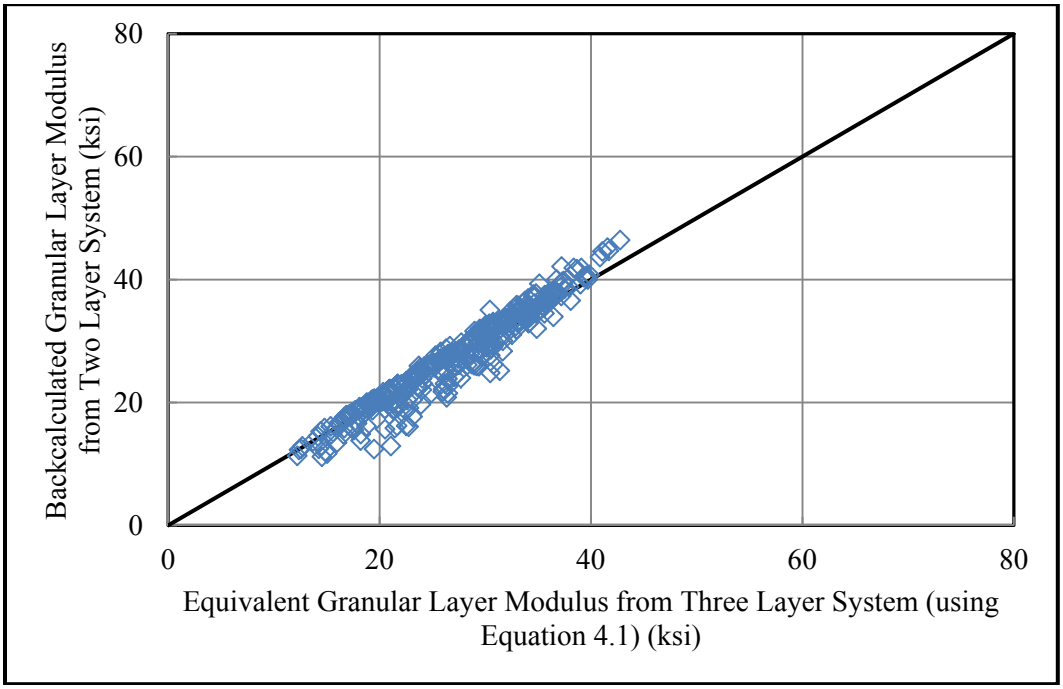

Figure 4.37 Comparison between equivalent and backcalculated granular layer resilient modulus for all values less than the 75th Percentile value for the backcalculated modulus, case 4

CHAPTER 5
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY

The new M-E PDG, the 1993 AASHTO Pavement Design Guide, and some other existing pavement design procedures require the resilient modulus of the pavement materials (surface, base and subbase layers) and the roadbed soils as input. The resilient modulus of granular materials can be determined by using many methods including backcalculation using deflection data, laboratory cyclic load tests, and from correlations with California Bearing Ratio (CBR), Dynamic Cone Penetrometer (DCP) index etc. The M-E PDG design level 1 requires, as inputs, the resilient modulus values determined from either backcalculation or from laboratory tests.

In this study, FWD measured deflections data were used to backcalculate the modulus of the base and subbase layers. Deflections at the surface of the pavement are measured at distances of 0, 8, 12, 18, 24, 36 and 60 inches from the center of the application of a 9000 pound load. All deflection data used in this study were provided by MDOT. The FWD tests were conducted over the last 20 years. The MICHBACK software was used to backcalculate the moduli of the base and subbase layers and the roadbed soils for both rigid and flexible pavements. For rigid pavement, the pavement layer moduli were backcalculated using two layered system (PCC slab and granular base) and the roadbed soils. For flexible pavements, two (asphalt surface and granular base) and three (asphalt surface, granular base, and sand subbase) layered systems were used.

Some of the flexible pavement sections, at the time of the FWD tests, consist of a layer of crushed asphalt on top of the aggregate base. Unfortunately, the thickness of the crushed asphalt layer is not known, hence, its thickness was assumed to be the same as that of asphalt surface layer. Information regarding the aggregate base type and gradation were provided by MDOT. The most common material types used by MDOT include natural gravel, crushed concrete, and dolomite. Aggregates could be either open or dense graded depending on the project requirements.

5.2 CONCLUSIONS

Based upon the FWD test results and the backcalculated layer moduli and on the existing and future pavement design procedures, the following conclusions were drawn:

- The average modulus value of the granular layer (combination of the aggregate base and sand subbase) is independent of the material type.
- Backcalculation of the pavement layer moduli using three layered system produces some unreasonable results (high aggregate base and sand subbase moduli).
- Backcalculation of the roadbed soil modulus using two or three layered system produces almost the same results.
- The backcalculated modulus values of the roadbed soils are independent of the pavement types.
- For some flexible pavement sections, backcalculation of the pavement layers using three

layered systems produce unreasonably high or low modulus values. The average modulus value of the 75 percentile modulus values tends to reduce the number of outliers considerably. Whereas, backcalculation using two layered system produces more consistent and reasonable results.

- For rigid pavements, existing empirical backcalculation procedures yield highly variable and unreasonable modulus values for the granular layers. The MICHBACK software produces consistent and reasonable results.
- For rigid pavements, the use of three layer system in the backcalculation may cause more than tenfold error in the backcalculated layer moduli.
- The average backcalculated base layer modulus is about four times higher than the average laboratory determined value.
- The backcalculated moduli of the granular layer under rigid and flexible pavements are found to be statistically similar.
- The unbound granular layer moduli have little impact on the PCC surface thickness and significant impact on the asphalt surface layer thickness.
- The backcalculated moduli for dense and open graded granular bases were found to be similar.

5.3 RECOMMENDATIONS

Based on the results and the conclusions of the study it is strongly recommended that:

1. In the design of flexible pavement sections using design levels 2 or 3 of the M-E PDG, the materials beneath the HMA surface layer should consists of the following two layers:

   1.1 Layer 1 - An aggregate base whose modulus value is 33,000 psi.
   1.2 Layer 2 - A sand subbase whose modulus is 20,000 psi.

2. In the design of rigid pavement sections using design levels 2 or 3 of the M-E PDG, the materials beneath the PCC slab could be either:

   2.1 An aggregate base layer whose modulus value is 33,000 psi supported by sand subbase whose modulus value is 20,000 psi.
   2.2 A granular layer made up of aggregate and sand mix whose composite modulus value is 25,000 psi.
   2.3 A sand subbase whose modulus value is 20,000 psi.

3. For the design of flexible or rigid pavement sections using Design level 1 of the M-E PDG, it is recommended that:

   - For an existing pavement structure where the PCC slabs or the HMA surface will be replaced, FWD tests be conducted every 500 feet along the project and the deflection data be used to backcalculate the moduli of the aggregate base and sand subbase or the granular layer. The modulus values to be used in the design should correspond to the 33 percentile of all values. The 33 percentile value is the same as the average value minus half the value of the standard deviation.

- For a total reconstruction or for a new pavement section, the modulus values of the aggregate base and the sand subbase or the granular layer could be estimated as twice the average laboratory determined modulus value.

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4. Additional FWD tests and backcalculation analyses should be conducted when information regarding the types of the aggregate bases under rigid and flexible pavements become known and no previous FWD tests were conducted.
5. MDOT should keep all information regarding the various pavement layers. The information should include the mix design parameters of the HMA and the PCC, the type, source, gradation and angularity of the aggregate and the subbase material type, source, gradation and angularity. The above information should be kept in easily searchable electronic files.

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Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	7.19	6.56	6.19	5.61	5.03	3.96	2.37	0.27	500	3,450,876	27,208	27,876
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	7.92	7.17	6.72	6.08	5.36	4.20	2.54	0.28	500	2,590,968	35,779	24,639
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.87	6.31	5.97	5.52	4.98	4.07	2.62	0.34	500	3,846,517	43,819	23,309
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.46	5.96	5.59	5.10	4.65	3.77	2.41	0.36	500	3,826,677	50,769	25,335
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	8.36	7.61	7.14	6.47	5.82	4.65	2.85	0.36	500	2,764,159	33,421	22,071
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.72	6.05	5.72	5.18	4.67	3.70	2.32	0.36	500	3,213,703	51,354	26,327
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.31	8.55	8.10	7.48	6.81	5.49	3.50	0.37	500	4,056,610	34,205	24,309
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.46	5.96	5.62	5.10	4.64	3.77	2.40	0.40	500	3,850,299	47,055	25,599
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.87	6.29	5.97	5.50	5.01	4.09	2.63	0.40	500	3,970,247	41,790	23,285
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.28	8.48	8.07	7.45	6.76	5.47	3.52	0.40	500	3,874,789	39,878	23,293
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.68	6.02	5.70	5.16	4.60	3.69	2.29	0.41	500	3,223,390	49,913	26,705
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	7.41	6.69	6.30	5.71	5.08	4.03	2.42	0.42	500	3,042,954	33,629	26,318
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.28	8.50	8.07	7.48	6.81	5.51	3.54	0.47	500	4,115,376	36,117	23,714
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	8.29	7.52	7.06	6.38	5.77	4.61	2.83	0.49	500	2,764,508	35,574	22,138
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	8.42	7.58	7.14	6.49	5.75	4.52	2.65	0.51	500	2,780,340	23,312	25,085
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.56	8.70	8.19	7.43	6.59	5.22	3.04	0.52	500	2,550,109	17,642	22,229
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	7.88	7.06	6.64	5.97	5.27	4.17	2.45	0.61	500	2,655,593	32,286	25,769
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.78	9.59	9.06	8.14	7.28	5.61	3.28	0.63	500	2,666,369	27,478	26,332
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.78	9.64	9.02	8.16	7.27	5.64	3.26	0.63	500	2,733,247	25,263	26,918
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.84	9.65	9.08	8.21	7.30	5.68	3.32	0.64	500	2,670,014	27,730	26,050
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	8.14	7.30	6.85	6.19	5.44	4.26	2.55	0.64	500	2,436,792	36,358	24,467
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.98	6.40	6.04	5.63	5.11	4.17	2.68	0.64	500	4,043,412	35,687	23,068
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.02	8.95	8.49	7.68	6.89	5.39	3.20	0.66	500	3,202,083	29,576	28,008
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	11.30	10.15	9.52	8.63	7.79	6.16	3.72	0.66	500	2,727,513	32,430	23,155
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	11.34	10.14	9.55	8.66	7.82	6.18	3.76	0.69	500	2,706,340	34,482	22,857
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.13	8.24	7.76	7.03	6.39	5.00	2.97	0.70	500	3,672,624	27,707	30,122
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	11.30	10.10	9.55	8.66	7.83	6.18	3.75	0.72	500	2,759,932	31,531	22,739
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	7.45	6.67	6.30	5.68	5.04	3.98	2.31	0.73	500	3,069,102	27,755	28,224
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.24	8.31	7.79	7.06	6.40	5.03	3.02	0.75	500	3,385,159	36,143	28,286
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.09	9.00	8.44	7.68	6.89	5.38	3.20	0.75	500	3,049,180	32,850	27,608
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.93	8.85	8.36	7.61	6.80	5.33	3.14	0.78	500	3,185,965	28,098	28,312
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	6.83	6.19	5.81	5.24	4.72	3.74	2.28	0.78	500	3,280,187	39,687	27,246
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	9.18	8.21	7.76	7.03	6.36	5.01	2.99	0.79	500	3,532,404	32,534	29,341
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	8.46	7.65	7.14	6.49	5.88	4.69	2.84	0.80	500	2,743,560	30,283	22,059
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.24	9.12	8.58	7.72	6.92	5.41	3.12	0.82	500	2,998,118	26,595	28,754
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	13.72	12.04	11.08	9.84	8.69	6.60	3.69	0.83	500	1,709,141	26,289	23,013
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	7.71	6.88	6.51	5.81	5.20	4.06	2.35	0.84	500	2,832,084	29,418	27,351
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	11.58	10.33	9.76	8.74	7.91	6.17	3.59	0.84	500	2,713,657	23,419	25,019
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.09	8.98	8.49	7.63	6.87	5.36	3.10	0.85	500	3,138,262	25,439	29,303
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	11.73	10.47	9.84	8.85	7.99	6.24	3.60	0.89	500	2,702,961	22,051	25,227
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	7.56	6.74	6.30	5.65	5.06	4.01	2.35	0.91	500	2,797,632	35,424	26,989
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	13.79	12.04	11.16	9.87	8.79	6.70	3.81	0.92	500	1,688,056	28,893	21,980
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.34	9.07	8.38	7.44	6.59	5.07	2.86	0.95	500	1,726,811	27,020	21,985
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	11.62	10.33	9.71	8.81	7.93	6.20	3.60	0.97	500	2,746,318	22,342	24,998
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.34	9.07	8.40	7.43	6.62	5.07	2.83	1.04	500	1,786,015	24,484	22,577
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	13.89	12.04	11.21	9.91	8.86	6.72	3.84	1.04	500	1,679,450	29,401	21,867
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	8.57	7.61	7.14	6.49	5.80	4.57	2.63	1.05	500	2,736,762	21,937	25,290
Bay	I-475	09-09	25132	6577	SM	NA	NA	Summer	6/26/1997	rigid-B-I475-CS25132-06-26-1997	9	20	10.29	8.99	8.30	7.39	6.56	5.01	2.77	1.15	500	1,786,836	23,221	22,988
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	3.46	3.15	2.95	2.72	2.48	2.05	1.30	0.97	500	4,335,778	54,295	27,130
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.02	3.58	3.31	2.99	2.68	2.13	1.26	1.07	500	2,901,908	45,422	28,597
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	3.70	3.31	3.07	2.83	2.52	2.05	1.26	1.09	500	3,290,228	57,249	27,654
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	3.70	3.31	3.07	2.80	2.56	2.05	1.26	1.18	500	3,423,188	53,714	27,955
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.29	3.86	3.54	3.15	2.87	2.24	1.30	1.23	500	2,707,281	36,281	27,990
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.06	3.62	3.35	3.03	2.72	2.20	1.30	1.37	500	3,005,114	44,118	27,615
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	3.82	3.43	3.19	2.91	2.72	2.24	1.46	1.38	500	3,257,158	87,380	23,165

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.33	3.78	3.46	3.03	2.68	2.05	1.10	1.42	500	2,344,113	32,747	34,145
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.76	4.17	3.86	3.50	3.15	2.52	1.50	1.48	500	2,400,765	43,401	23,631
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.61	4.13	3.86	3.54	3.27	2.72	1.73	1.50	500	3,007,083	56,365	19,918
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	6.02	5.24	4.69	4.17	3.66	2.83	1.57	1.61	500	1,477,888	34,019	22,828
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	5.98	5.20	4.69	4.13	3.66	2.83	1.57	1.61	500	1,500,954	34,269	22,807
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	5.98	5.24	4.69	4.17	3.66	2.80	1.50	1.65	500	1,592,526	26,433	24,452
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	6.06	5.28	4.69	4.17	3.70	2.80	1.54	1.69	500	1,480,600	31,139	23,450
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	5.04	4.29	3.94	3.43	2.99	2.28	1.18	1.84	500	1,912,271	28,822	32,184
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	9.49	8.15	7.40	6.46	5.71	4.29	2.20	1.85	500	1,029,356	13,739	17,215
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.72	4.21	3.86	3.46	3.11	2.52	1.42	1.93	500	2,653,271	29,510	26,171
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	6.38	5.51	4.96	4.37	3.90	2.99	1.61	2.00	500	1,431,582	27,808	22,138
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.06	3.50	3.23	2.83	2.48	1.97	1.06	2.07	500	2,524,738	40,760	35,189
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	4.06	3.46	3.19	2.80	2.48	1.93	1.02	2.19	500	2,523,765	37,135	36,724
Bay	I-475	09-09	25132	6582	SM	NA	NA	Summer	6/24/2001	rigid-B-I475-CS25132-06-24-2001	9	20	6.14	5.24	4.69	4.17	3.66	2.80	1.46	2.28	500	1,487,546	26,621	24,913
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.42	5.47	5	4.41	3.86	2.99	1.77	0.51	250	1,044,951	63,564	15,326
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.57	5.55	5	4.41	3.86	2.99	1.77	0.67	250	906,216	66,967	15,075
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.42	5.47	4.96	4.41	3.82	2.99	1.77	0.71	250	1,008,847	66,189	15,213
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.5	5.67	5.24	4.65	4.06	3.11	1.69	0.87	250	1,527,117	33,020	17,533
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.99	6.85	6.22	5.47	4.76	3.58	1.93	0.96	250	984,394	31,949	14,500
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.01	6.02	5.51	4.88	4.21	3.23	1.77	1.00	250	1,175,775	37,597	15,821
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.17	6.18	5.63	4.96	4.33	3.31	1.81	1.01	250	1,137,845	37,724	15,558
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.97	5.91	5.39	4.8	4.17	3.23	1.85	1.03	250	1,017,435	50,818	14,590
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.17	6.18	5.63	4.96	4.29	3.31	1.81	1.06	250	1,115,800	38,844	15,529
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.09	6.06	5.47	4.88	4.21	3.27	1.85	1.09	250	1,019,950	48,348	14,867
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.54	5.55	4.96	4.41	3.82	2.99	1.73	1.10	250	957,276	62,169	15,473
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	9.29	8.07	7.32	6.42	5.55	4.21	2.2	1.11	250	905,192	23,201	12,907
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	9.21	7.91	7.24	6.34	5.47	4.09	2.09	1.11	250	931,674	20,246	13,661
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.17	6.14	5.63	4.96	4.29	3.31	1.81	1.11	250	1,100,668	39,125	15,357
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.95	6.81	6.18	5.47	4.72	3.62	1.97	1.13	250	982,968	34,207	14,072
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.3	5.39	4.88	4.29	3.66	2.8	1.5	1.14	250	1,201,838	43,270	18,921
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	9.76	8.27	7.56	6.54	5.59	4.09	2.01	1.15	250	835,019	18,145	14,487
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.09	6.06	5.51	4.92	4.25	3.27	1.81	1.16	250	1,115,399	41,096	15,390
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.34	5.39	4.88	4.33	3.7	2.8	1.5	1.16	250	1,230,960	40,817	18,962
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.54	5.71	5.24	4.69	4.09	3.15	1.69	1.17	250	1,582,660	30,420	17,729
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.38	5.47	4.96	4.41	3.82	3.03	1.73	1.26	250	1,131,440	57,559	15,679
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.91	6.81	6.18	5.43	4.72	3.62	1.93	1.30	250	1,023,657	31,384	14,441
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.73	5.67	5.2	4.53	3.86	2.8	1.34	1.35	250	1,282,645	22,660	22,535
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.11	6.81	6.18	5.43	4.65	3.54	1.89	1.35	250	882,632	34,968	14,669
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.36	6.26	5.67	4.96	4.17	3.11	1.54	1.36	250	1,103,295	26,547	19,205
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.73	5.67	5.2	4.53	3.9	2.83	1.38	1.36	250	1,302,046	23,466	21,792
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.15	6.85	6.18	5.47	4.72	3.54	1.89	1.36	250	894,779	33,657	14,719
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.93	5.87	5.35	4.76	4.17	3.23	1.81	1.38	250	1,075,774	47,306	14,958
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.5	5.67	5.2	4.57	4.02	3.11	1.65	1.39	250	1,518,141	32,456	17,992
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.32	6.22	5.63	4.92	4.17	3.11	1.54	1.42	250	1,122,362	26,519	19,174
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.1	5.16	4.69	4.13	3.54	2.64	1.34	1.43	250	1,371,857	33,293	21,820
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.14	5.16	4.65	4.13	3.54	2.6	1.34	1.43	250	1,288,372	36,164	21,623
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.56	6.38	5.75	5	4.29	3.19	1.61	1.44	250	1,010,374	28,929	17,741
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.26	5.31	4.84	4.25	3.66	2.76	1.42	1.44	250	1,312,857	35,395	20,288
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.07	6.73	6.14	5.31	4.53	3.27	1.57	1.45	250	987,683	21,000	18,620
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.11	6.81	6.14	5.47	4.65	3.5	1.85	1.45	250	905,052	32,117	15,043
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.73	5.71	5.2	4.53	3.9	2.83	1.34	1.46	250	1,340,722	20,560	22,888
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.01	5.91	5.39	4.72	4.13	3.03	1.54	1.52	250	1,203,208	27,803	18,770
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.17	6.06	5.47	4.76	4.13	3.03	1.5	1.56	250	1,130,138	26,312	19,259
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.8	6.57	5.94	5.16	4.45	3.27	1.61	1.56	250	1,056,761	24,240	18,339
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.07	6.77	6.1	5.31	4.49	3.31	1.61	1.57	250	953,223	23,702	17,910
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.18	5.28	4.72	4.17	3.62	2.76	1.46	1.58	250	1,260,385	42,016	19,303

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.56	6.34	5.71	5.04	4.29	3.19	1.61	1.61	250	995,846	29,004	17,452
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.18	5.28	4.76	4.21	3.66	2.76	1.42	1.62	250	1,376,567	34,963	20,364
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.07	6.77	6.1	5.28	4.45	3.23	1.5	1.62	250	981,828	19,589	19,663
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.1	5.12	4.65	4.09	3.5	2.6	1.3	1.62	250	1,337,961	32,829	22,362
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.17	6.02	5.39	4.76	4.09	3.03	1.54	1.66	250	1,039,116	31,723	18,200
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.14	5.28	4.76	4.21	3.62	2.72	1.34	1.66	250	1,483,932	27,063	22,288
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.05	5.91	5.39	4.72	4.09	2.99	1.46	1.73	250	1,228,450	23,611	20,212
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.4	6.22	5.59	4.96	4.17	3.11	1.54	1.73	250	1,084,907	27,412	19,026
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.77	5.75	5.2	4.57	3.9	2.95	1.46	1.79	250	1,295,120	28,204	20,541
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.2	6.02	5.43	4.8	4.09	3.03	1.5	1.79	250	1,097,099	27,552	19,052
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.13	5.94	5.43	4.76	4.13	3.03	1.5	1.82	250	1,187,280	25,583	19,427
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.73	5.71	5.16	4.57	3.86	2.91	1.42	1.83	250	1,318,687	26,064	21,251
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.83	6.61	5.98	5.2	4.49	3.31	1.57	1.89	250	1,144,765	19,801	19,441
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.98	7.4	6.69	5.94	5.16	3.9	2.09	1.90	250	1,050,097	44,180	17,521
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.56	6.34	5.71	5.08	4.37	3.27	1.65	1.92	250	1,143,910	27,830	18,065
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.6	6.38	5.75	5.08	4.33	3.23	1.57	1.97	250	1,083,730	23,930	18,378
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.48	6.3	5.67	5.04	4.33	3.23	1.57	2.08	250	1,211,014	23,121	19,262
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.8	6.61	5.94	5.2	4.45	3.31	1.54	2.11	250	1,151,580	18,970	19,851
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.77	5.75	5.2	4.57	3.86	2.95	1.42	2.12	250	1,303,132	25,755	21,111
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	7.52	6.26	5.71	5.04	4.33	3.27	1.61	2.20	250	1,179,964	25,855	18,576
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	8.94	7.36	6.61	5.91	5.12	3.94	2.05	2.53	250	867,259	29,406	13,482
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.57	5.24	4.8	4.29	3.74	2.91	1.57	2.86	250	952,583	58,640	17,006
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/24/2003	rigid-B-I675-CS73101-10-24-2003	9	20	6.65	5.55	5.08	4.57	4.02	3.19	1.65	2.93	250	1,412,738	34,511	16,963
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	5.35	4.88	4.53	4.06	3.7	3.03	1.85	1.05	250	2,194,307	58,838	14,610
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	5.35	4.88	4.53	4.02	3.7	2.99	1.81	1.15	250	2,190,438	55,155	15,118
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.38	5.51	4.96	4.25	3.74	2.8	1.46	1.35	250	1,194,167	37,122	19,262
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.54	5.59	5.08	4.37	3.9	2.95	1.61	1.35	250	1,147,859	44,674	17,322
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	5.31	4.84	4.45	4.02	3.66	2.99	1.77	1.38	250	2,339,872	49,115	15,649
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.3	5.47	4.88	4.25	3.7	2.8	1.46	1.41	250	1,233,720	36,953	19,201
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.42	5.35	4.8	4.09	3.58	2.64	1.38	1.43	250	1,004,513	43,810	20,032
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	9.13	7.91	7.2	6.22	5.51	4.17	2.17	1.47	250	956,923	23,080	13,201
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	11.34	9.76	8.9	7.64	6.73	5.12	2.68	1.48	250	701,192	20,299	10,271
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	9.88	8.46	7.64	6.57	5.75	4.29	2.17	1.51	250	801,700	21,231	13,038
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.17	5.94	5.43	4.72	4.25	3.35	1.97	1.55	250	810,224	67,555	13,234
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.34	5.47	4.96	4.25	3.74	2.83	1.46	1.55	250	1,275,142	34,904	19,422
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.61	5.63	5.08	4.33	3.82	2.87	1.5	1.55	250	1,089,256	40,206	18,677
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.5	5.55	5.08	4.37	3.9	2.95	1.57	1.56	250	1,230,931	39,248	17,842
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	10.55	9.17	8.39	7.28	6.42	4.88	2.48	1.56	250	892,777	16,169	11,673
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.57	5.59	5.08	4.33	3.9	2.91	1.57	1.57	250	1,108,983	43,504	17,684
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	8.82	7.64	6.93	5.98	5.28	4.02	2.09	1.58	250	964,770	23,554	13,399
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.46	5.39	4.84	4.13	3.58	2.68	1.38	1.60	250	1,009,216	43,061	20,094
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.81	5.75	5.16	4.41	3.9	2.95	1.57	1.65	250	980,902	44,161	17,447
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.69	5.67	5.12	4.33	3.82	2.91	1.54	1.71	250	1,031,601	43,537	18,029
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.36	6.3	5.67	4.88	4.25	3.23	1.65	1.72	250	1,017,023	32,473	16,881
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.1	4.92	4.49	3.86	3.46	2.68	1.54	1.81	250	892,867	75,315	17,106
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.42	5.35	4.8	4.06	3.54	2.64	1.34	1.81	250	1,006,448	41,694	20,565
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.93	5.94	5.35	4.61	4.06	3.03	1.5	1.85	250	1,208,160	26,929	19,180
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.24	5.98	5.43	4.72	4.25	3.35	1.93	1.86	250	807,398	64,867	13,632
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.93	5.94	5.31	4.57	4.06	3.03	1.54	1.89	250	1,138,390	31,159	18,251
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.81	5.75	5.2	4.41	3.94	2.99	1.57	1.99	250	1,038,510	40,560	17,386
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.4	6.3	5.67	4.88	4.25	3.23	1.61	2.02	250	1,056,124	29,151	17,497
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.32	6.26	5.63	4.84	4.25	3.23	1.61	2.10	250	1,109,421	28,345	17,628
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.06	4.92	4.45	3.86	3.46	2.68	1.5	2.14	250	914,780	71,906	17,486
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.24	5.98	5.47	4.72	4.29	3.39	1.93	2.19	250	834,404	62,553	13,544
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.93	5.91	5.35	4.53	4.02	2.95	1.38	2.21	250	1,250,251	20,630	21,356
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	6.93	5.94	5.35	4.57	4.02	2.99	1.38	2.33	250	1,299,848	18,574	21,621

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.36	6.14	5.51	4.72	4.17	3.15	1.57	2.46	250	983,739	32,585	17,511
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	10.04	8.58	7.91	7.05	6.42	5.08	2.76	2.48	250	1,035,834	22,682	9,975
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.48	6.22	5.59	4.76	4.25	3.23	1.65	2.53	250	962,844	35,008	16,639
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.72	6.34	5.67	4.84	4.25	3.19	1.57	2.62	250	883,175	32,401	17,513
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.4	6.14	5.51	4.72	4.21	3.19	1.61	2.64	250	970,722	34,409	16,943
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	8.07	6.57	5.91	5	4.45	3.35	1.69	2.70	250	791,464	36,012	16,057
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	8.94	7.17	6.5	5.59	4.96	3.74	1.93	2.71	250	727,022	34,508	14,071
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	8.07	6.57	5.91	5	4.49	3.35	1.69	2.78	250	819,183	34,258	16,082
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	7.68	6.3	5.63	4.8	4.25	3.19	1.57	2.79	250	890,671	32,550	17,396
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	5/26/2004	rigid-B-I675-CS73101-05-26-2004	9	20	8.07	6.57	5.91	4.96	4.45	3.35	1.69	2.84	250	783,919	36,145	15,968
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	13.86	12.13	11.14	9.69	8.54	6.57	3.66	0.80	250	595,859	19,265	7,497
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.84	8.62	7.99	7.01	6.34	4.92	2.87	0.93	250	905,481	32,052	9,478
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.88	8.58	7.99	7.01	6.3	4.92	2.87	0.97	250	906,141	32,114	9,489
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	16.81	14.72	13.54	11.81	10.31	7.6	3.86	1.00	250	809,848	13,427	10,725
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	14.02	12.2	11.22	9.8	8.58	6.54	3.46	1.07	250	654,109	14,711	8,292
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.92	8.62	7.99	6.97	6.3	4.96	2.91	1.12	250	833,847	35,986	9,234
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	17.8	15.51	14.17	12.44	10.91	8.27	4.33	1.14	250	515,113	10,694	6,550
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.51	9.21	8.5	7.4	6.57	5	2.64	1.16	250	927,806	17,571	10,935
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.47	9.17	8.43	7.32	6.5	4.96	2.64	1.20	250	893,588	19,256	10,790
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	17.6	15.08	13.94	12.05	10.47	7.8	3.9	1.26	250	743,473	13,268	10,824
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.47	9.17	8.43	7.32	6.5	5	2.68	1.27	250	881,278	20,806	10,566
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	6.69	5.63	5.16	4.49	3.98	3.03	1.69	1.27	250	1,085,387	48,553	16,273
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.08	8.62	7.91	6.89	6.1	4.57	2.4	1.37	250	860,845	21,210	11,826
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.25	7.91	7.2	6.22	5.43	4.13	2.17	1.37	250	839,849	26,825	12,870
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.51	9.02	8.19	7.01	6.1	4.57	2.32	1.38	250	750,882	20,193	12,226
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.12	8.66	7.91	6.89	6.1	4.57	2.4	1.39	250	839,800	22,038	11,823
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.87	9.33	8.5	7.32	6.46	4.8	2.44	1.43	250	776,235	17,757	11,670
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.44	6.34	5.71	4.84	4.21	3.07	1.5	1.46	250	1,016,798	25,587	19,069
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.01	6.02	5.47	4.69	4.09	3.11	1.61	1.48	250	1,111,759	33,975	17,572
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.91	9.37	8.54	7.32	6.5	4.84	2.48	1.52	250	766,535	18,488	11,425
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.04	8.58	7.87	6.81	6.02	4.57	2.4	1.52	250	839,517	22,706	11,719
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.51	9.02	8.15	6.97	6.14	4.57	2.32	1.54	250	752,827	20,144	12,191
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.91	9.37	8.54	7.36	6.5	4.84	2.44	1.54	250	791,140	16,815	11,724
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.09	6.02	5.51	4.69	4.13	3.11	1.61	1.57	250	1,088,672	33,824	17,533
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.55	9.02	8.19	7.01	6.14	4.57	2.28	1.58	250	773,329	18,558	12,568
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.48	6.38	5.71	4.88	4.25	3.15	1.57	1.62	250	1,002,432	28,256	18,025
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	13.46	11.57	10.63	9.17	8.07	6.02	2.95	1.63	250	712,525	10,687	10,142
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.03	6.97	6.34	5.43	4.76	3.58	1.77	1.64	250	1,113,580	21,052	16,642
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.68	6.54	5.91	5.08	4.45	3.31	1.65	1.69	250	1,049,149	25,566	17,274
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.17	7.87	7.13	6.1	5.39	4.13	2.17	1.72	250	840,539	27,595	12,739
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.07	6.97	6.3	5.43	4.76	3.58	1.77	1.76	250	1,065,294	22,482	16,365
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.52	6.42	5.75	4.92	4.29	3.19	1.57	1.80	250	1,061,396	25,816	18,405
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	6.69	5.59	5.12	4.41	3.94	2.99	1.61	1.82	250	1,090,062	45,225	17,153
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.09	6.02	5.47	4.69	4.13	3.11	1.57	1.86	250	1,134,137	30,543	18,121
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.21	7.87	7.17	6.14	5.43	4.17	2.17	1.86	250	855,803	26,866	12,796
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.09	7.72	7.01	5.91	5.2	3.86	1.89	1.91	250	854,297	21,574	14,993
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	11.14	9.53	8.54	7.28	6.38	4.72	2.28	1.92	250	723,821	16,280	12,646
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.13	7.76	7.01	5.91	5.2	3.86	1.89	1.96	250	840,467	21,704	14,948
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	7.76	6.61	5.98	5.12	4.53	3.39	1.69	1.96	250	1,077,889	24,953	16,987
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.94	9.37	8.35	7.2	6.26	4.65	2.2	2.08	250	769,574	14,704	13,265
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.94	7.68	6.85	5.91	5.12	3.78	1.73	2.11	250	998,371	14,642	17,557
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	6.65	5.55	5.12	4.41	3.94	3.03	1.61	2.13	250	1,197,217	40,701	17,176
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.98	9.41	8.35	7.17	6.26	4.65	2.2	2.21	250	748,688	15,324	13,172
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.94	7.64	6.85	5.87	5.08	3.78	1.73	2.25	250	969,095	15,593	17,223
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.07	6.97	6.26	5.39	4.72	3.58	1.69	2.36	250	1,152,130	17,620	17,734
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.11	6.93	6.26	5.39	4.76	3.58	1.69	2.42	250	1,134,519	18,343	17,637

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	14.29	11.69	10.87	9.53	8.39	6.38	3.27	2.51	250	599,233	15,694	8,578
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.57	7.8	7.13	6.18	5.55	4.33	2.36	2.53	250	672,744	40,278	11,286
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.9	7.6	6.81	5.83	5.08	3.78	1.69	2.54	250	1,030,607	13,413	18,201
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.62	7.17	6.5	5.59	4.96	3.74	1.85	2.55	250	945,146	24,545	15,339
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.62	7.17	6.54	5.63	5	3.78	1.85	2.65	250	989,169	22,739	15,477
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.57	7.76	7.09	6.14	5.51	4.33	2.36	2.68	250	680,656	40,297	11,287
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	8.74	7.28	6.57	5.67	5.04	3.82	1.89	2.69	250	951,105	23,966	15,041
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	9.61	7.76	7.13	6.14	5.55	4.33	2.36	2.73	250	658,235	41,263	11,267
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	10.2	8.19	7.4	6.38	5.63	4.25	2.17	2.74	250	633,723	29,737	12,499
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	10/14/2004	rigid-B-I675-CS73101-10-14-2004	9	20	15.24	12.28	11.22	9.84	8.66	6.54	3.31	2.87	250	500,000	16,873	8,342
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.5	5.67	5.31	4.72	4.21	3.39	2.09	0.67	250	1,300,522	66,583	12,806
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.63	4.96	4.61	4.09	3.7	3.03	1.93	0.70	250	1,427,826	92,536	13,492
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.87	5.16	4.8	4.21	3.78	2.95	1.69	0.94	250	1,638,814	47,283	16,658
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.47	4.84	4.53	4.06	3.62	2.87	1.65	0.96	250	2,142,395	44,792	17,917
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.83	4.96	4.61	4.02	3.5	2.72	1.54	0.98	250	1,311,660	57,503	18,214
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.57	5.75	5.35	4.72	4.25	3.43	2.09	0.98	250	1,276,700	65,366	12,813
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.87	4.96	4.61	4.02	3.54	2.68	1.5	1.04	250	1,342,404	52,567	18,985
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.2	6.18	5.75	5.04	4.45	3.5	2.01	1.08	250	1,132,294	47,568	13,746
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.54	5.75	5.35	4.72	4.25	3.35	1.93	1.09	250	1,545,057	43,677	14,677
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.24	6.38	5.91	5.12	4.57	3.62	2.09	1.11	250	1,174,899	45,777	13,180
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.2	6.22	5.83	5.08	4.45	3.5	1.97	1.13	250	1,203,247	41,355	14,261
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.2	6.22	5.79	5	4.45	3.5	2.01	1.13	250	1,119,173	47,855	13,776
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.2	4.53	4.21	3.7	3.31	2.64	1.54	1.16	250	1,726,826	66,557	18,057
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.65	5.83	5.43	4.8	4.33	3.39	1.93	1.18	250	1,575,803	38,980	14,833
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.87	5	4.61	4.02	3.54	2.72	1.5	1.20	250	1,375,000	50,793	18,944
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.02	5.12	4.69	4.06	3.54	2.68	1.42	1.24	250	1,341,912	43,048	20,530
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.91	5.2	4.84	4.25	3.82	3.03	1.73	1.25	250	1,682,261	48,131	16,313
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.01	6.06	5.63	4.92	4.41	3.46	1.97	1.28	250	1,262,629	44,412	14,128
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.98	5.2	4.84	4.25	3.82	2.99	1.69	1.29	250	1,612,315	46,284	16,728
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.48	6.38	5.94	5.12	4.53	3.35	1.73	1.29	250	1,239,519	24,750	17,199
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.06	5.12	4.72	4.06	3.54	2.68	1.42	1.30	250	1,300,859	43,799	20,421
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.69	5.83	5.47	4.84	4.33	3.43	1.93	1.39	250	1,608,325	36,886	14,879
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.48	6.38	5.94	5.16	4.49	3.39	1.73	1.42	250	1,229,029	25,325	17,098
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.44	6.34	5.94	5.12	4.49	3.35	1.69	1.43	250	1,299,025	22,147	17,934
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.47	4.8	4.53	4.02	3.62	2.91	1.65	1.54	250	2,211,414	43,041	17,812
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.1	5.16	4.72	4.09	3.58	2.72	1.42	1.60	250	1,345,954	41,318	20,541
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.55	4.84	4.57	4.09	3.7	2.99	1.73	1.64	250	2,188,382	49,069	16,825
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.28	6.14	5.67	4.88	4.25	3.11	1.46	1.78	250	1,318,198	17,963	21,607
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.89	5.79	5.24	4.49	3.94	2.95	1.5	1.82	250	1,130,570	36,077	19,581
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.47	4.65	4.37	3.78	3.35	2.6	1.38	1.82	250	1,745,322	40,051	20,978
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.17	6.22	5.75	5	4.41	3.39	1.69	1.84	250	1,484,956	19,246	18,109
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.39	4.65	4.33	3.78	3.35	2.6	1.34	1.85	250	1,947,765	31,672	22,284
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.51	4.72	4.37	3.82	3.35	2.6	1.34	1.87	250	1,811,364	33,534	22,154
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	5.31	4.61	4.29	3.74	3.35	2.6	1.34	1.92	250	2,108,378	27,280	22,517
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.24	6.1	5.63	4.84	4.21	3.11	1.46	1.93	250	1,324,337	18,408	21,476
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.34	5.16	4.72	4.09	3.58	2.72	1.46	1.94	250	1,045,910	53,750	19,174
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.17	6.22	5.75	5	4.41	3.43	1.73	1.97	250	1,493,987	20,664	17,543
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.38	5.16	4.72	4.13	3.62	2.76	1.5	2.08	250	1,018,219	57,157	18,504
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.2	6.22	5.71	5	4.41	3.43	1.69	2.28	250	1,557,747	17,277	18,500
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	6.46	5.2	4.8	4.13	3.66	2.76	1.46	2.37	250	1,041,354	51,035	19,127
Bay	I-675	09-08	73101	NA	SC	NA	NA	Summer	12/5/2005	rigid-B-I675-CS73101-12-05-2005	9	20	7.36	6.14	5.75	5.04	4.57	3.58	1.85	2.94	250	1,483,549	25,533	15,946
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	5.28	4.72	4.33	3.86	3.43	2.68	1.57	0.41	200	1,761,032	65,991	15,636
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	5.28	4.69	4.29	3.82	3.39	2.68	1.57	0.69	200	1,713,411	69,332	15,608
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.03	6.77	6.06	5.2	4.41	3.15	1.5	0.95	200	885,261	26,817	17,033
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	3.98	3.58	3.39	2.99	2.72	2.17	1.26	0.99	200	3,209,997	61,675	20,061
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	9.72	8.5	7.87	7.01	6.18	4.72	2.48	1.07	200	1,127,620	20,310	10,721

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.03	6.73	6.02	5.16	4.37	3.11	1.46	1.10	200	881,366	26,362	17,565
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	3.94	3.54	3.35	2.99	2.68	2.17	1.22	1.22	200	3,460,359	50,118	21,273
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.91	6.65	6.02	5.31	4.65	3.5	1.89	1.25	200	909,255	42,246	12,919
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.27	6.97	6.3	5.47	4.72	3.54	1.81	1.30	200	891,405	35,157	14,041
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.66	7.28	6.61	5.75	5.04	3.74	1.93	1.37	200	884,104	32,717	13,121
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	9.8	8.35	7.6	6.69	5.79	4.21	2.01	1.38	200	951,251	16,389	13,375
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.03	6.73	6.02	5.2	4.37	3.15	1.46	1.38	200	910,787	24,979	17,593
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	9.88	8.66	7.91	7.09	6.22	4.84	2.56	1.39	200	1,032,791	24,058	10,055
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	9.8	8.39	7.64	6.69	5.79	4.25	2.01	1.43	200	967,543	15,712	13,457
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.07	6.81	6.22	5.47	4.76	3.62	1.89	1.47	200	999,538	35,386	13,292
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	11.14	9.49	8.66	7.64	6.65	5	2.52	1.50	200	816,631	20,021	10,341
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	6.42	5.47	5.08	4.45	3.94	3.03	1.61	1.50	200	1,411,971	42,257	15,669
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	6.42	5.47	5.08	4.45	3.94	3.03	1.61	1.50	200	1,410,283	42,351	15,667
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.15	6.93	6.3	5.59	4.88	3.74	1.97	1.54	200	1,029,142	33,785	12,554
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.44	6.3	5.75	5	4.37	3.31	1.69	1.56	200	1,099,572	35,631	15,061
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	9.76	8.54	7.8	6.93	6.18	4.76	2.48	1.58	200	1,109,840	21,028	10,614
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	12.32	10.59	9.61	8.54	7.36	5.47	2.6	1.59	200	810,879	11,594	10,427
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.44	6.3	5.75	5	4.41	3.31	1.69	1.60	200	1,108,512	35,371	15,100
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	10.59	9.06	8.23	7.24	6.3	4.72	2.32	1.60	200	883,609	18,612	11,430
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	9.69	8.27	7.56	6.65	5.71	4.25	2.01	1.61	200	968,898	16,825	13,313
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.31	6.97	6.3	5.47	4.72	3.58	1.81	1.68	200	891,877	34,840	13,963
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.31	7.05	6.46	5.67	4.96	3.78	1.93	1.68	200	1,022,015	30,643	13,021
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	8.07	6.81	6.26	5.43	4.72	3.62	1.85	1.69	200	996,978	33,733	13,552
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	12.44	10.67	9.72	8.58	7.44	5.51	2.56	1.72	200	820,874	10,298	10,810
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	6.42	5.47	5.08	4.45	3.9	3.03	1.57	1.75	200	1,440,419	38,757	16,181
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.44	6.26	5.75	5	4.33	3.27	1.61	1.79	200	1,168,305	29,295	16,097
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	12.13	10.2	9.29	8.11	6.93	5	2.2	1.82	200	770,227	10,322	12,699
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.44	6.3	5.79	5	4.41	3.39	1.73	1.90	200	1,141,796	36,010	14,722
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	10.63	9.06	8.19	7.24	6.3	4.76	2.32	1.96	200	887,153	18,896	11,463
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	10.83	9.25	8.46	7.48	6.34	4.84	2.28	2.00	200	875,919	15,510	11,669
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	10.83	9.29	8.39	7.4	6.38	4.84	2.28	2.07	200	906,441	14,635	11,824
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.36	6.22	5.71	4.96	4.29	3.27	1.57	2.08	200	1,243,220	26,122	16,732
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.44	6.26	5.71	5	4.33	3.27	1.57	2.09	200	1,220,925	26,063	16,752
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.87	6.65	6.1	5.31	4.65	3.66	1.89	2.15	200	1,033,308	37,032	12,947
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	10.91	9.25	8.43	7.48	6.38	4.88	2.28	2.30	200	906,499	14,149	11,795
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.95	6.5	5.94	5.28	4.61	3.5	1.81	2.30	200	999,881	37,586	13,847
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.95	6.5	5.94	5.24	4.61	3.5	1.77	2.53	200	1,004,023	35,624	14,106
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	8/15/2001	rigid-BI75-CS73101-08-15-2001	9	20	7.95	6.5	5.94	5.28	4.65	3.5	1.77	2.55	200	1,027,989	34,399	14,169
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	3.70	3.43	3.23	3.03	2.72	2.24	1.34	0.68	100	4,963,351	86,870	8,068
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	3.90	3.74	3.54	3.31	3.07	2.48	1.54	0.76	100	6,484,074	42,712	7,395
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	3.46	3.23	3.07	2.91	2.60	2.13	1.30	0.77	100	6,064,315	75,998	8,527
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	3.43	3.19	3.03	2.87	2.56	2.09	1.26	0.79	100	5,987,689	73,405	8,958
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	3.62	3.43	3.23	3.03	2.72	2.20	1.30	0.81	100	5,902,737	53,583	9,155
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	3.66	3.39	3.19	3.03	2.72	2.20	1.34	0.88	100	5,075,560	86,218	8,052
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	6.89	6.26	5.67	5.04	4.33	3.07	1.42	0.92	100	1,474,802	30,904	9,249
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	6.81	6.26	5.71	5.04	4.29	3.03	1.42	1.41	100	1,454,687	31,587	9,196
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	11.50	10.39	9.41	8.15	6.77	4.49	1.85	1.71	100	731,462	15,219	7,105
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	10.28	9.13	8.31	7.20	5.91	3.90	1.61	1.78	100	777,106	18,989	8,114
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	11.34	10.28	9.37	8.15	6.73	4.49	1.85	1.81	100	771,112	14,327	7,220
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	11.38	10.31	9.29	8.19	6.73	4.49	1.85	1.83	100	764,221	14,332	7,175
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	10.39	9.21	8.31	7.24	5.98	3.94	1.69	1.92	100	734,950	21,965	7,574
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	9.69	8.62	7.80	6.93	5.63	3.70	1.50	1.99	100	882,182	17,600	9,043
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	10.24	9.13	8.27	7.24	5.91	3.94	1.69	2.02	100	764,691	21,670	7,630
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	9.72	8.70	7.87	7.01	5.71	3.74	1.50	2.04	100	927,221	15,188	9,351
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	9.61	8.70	7.87	6.97	5.71	3.74	1.50	2.06	100	954,203	14,443	9,464
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	9.09	8.19	7.36	6.34	5.12	3.23	1.22	2.40	100	859,134	17,023	11,258

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-75	09-08	73101	46575	SC	NA	NA	Summer	11/30/1999	rigid-BI75-CS73101-11-30-1999	9	20	9.09	8.23	7.40	6.42	5.16	3.27	1.22	2.41	100	904,361	15,065	11,654
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	4.06	3.66	3.43	3.11	2.80	2.28	1.42	0.83	700	3,275,029	51,489	28,094
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.22	5.31	4.88	4.37	3.90	3.07	1.93	1.04	700	1,323,374	59,463	19,760
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.89	5.91	5.35	4.76	4.21	3.23	1.93	1.08	700	1,149,934	42,711	19,670
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	5.67	5.00	4.57	4.02	3.58	2.80	1.61	1.25	700	1,795,777	34,986	24,634
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.06	5.20	4.80	4.29	3.82	3.07	1.89	1.33	700	1,440,156	58,492	20,264
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	5.71	4.96	4.61	4.06	3.58	2.80	1.57	1.39	700	1,851,671	29,832	25,565
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.05	6.10	5.59	4.96	4.41	3.43	1.97	1.42	700	1,389,328	29,875	19,838
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.06	5.20	4.80	4.29	3.82	3.11	1.93	1.42	700	1,411,868	63,513	19,726
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.89	5.98	5.47	4.92	4.33	3.39	1.93	1.51	700	1,525,987	27,888	20,758
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.20	6.10	5.55	4.92	4.29	3.27	1.81	1.61	700	1,243,036	28,189	21,794
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	5.83	5.08	4.65	4.09	3.66	2.83	1.57	1.61	700	1,825,925	27,726	25,781
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.69	5.71	5.20	4.65	4.06	3.23	1.89	1.65	700	1,269,590	42,988	20,249
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	5.94	5.08	4.61	4.09	3.54	2.76	1.54	1.65	700	1,475,970	37,866	25,431
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.61	5.59	5.16	4.53	4.02	3.11	1.77	1.70	700	1,361,882	35,418	21,995
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.68	6.50	5.91	5.20	4.53	3.46	1.89	1.70	700	1,132,504	26,000	20,655
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.50	5.59	5.20	4.61	4.13	3.27	1.89	1.75	700	1,640,752	32,511	20,905
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.81	5.75	5.28	4.65	4.09	3.19	1.81	1.77	700	1,258,972	36,167	21,210
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.93	5.98	5.51	4.92	4.33	3.43	1.93	1.78	700	1,542,151	26,848	20,767
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.61	5.55	5.12	4.53	4.09	3.31	2.05	1.80	700	1,133,074	64,243	18,062
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.32	6.02	5.47	4.76	4.17	3.15	1.77	1.81	700	1,001,293	36,968	21,739
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.32	6.06	5.51	4.84	4.17	3.19	1.77	1.81	700	1,050,715	34,222	21,872
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	5.87	4.96	4.57	4.02	3.50	2.72	1.50	1.82	700	1,596,595	34,694	26,714
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.61	5.55	5.08	4.53	4.06	3.31	2.05	1.85	700	1,098,377	67,237	18,063
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.57	5.71	5.24	4.69	4.21	3.35	1.93	1.85	700	1,644,483	31,093	20,259
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	5.83	4.92	4.53	3.98	3.50	2.68	1.46	1.86	700	1,622,913	32,239	27,458
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.50	5.63	5.20	4.65	4.13	3.31	1.89	1.88	700	1,694,687	30,093	20,967
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.48	6.18	5.63	4.92	4.29	3.27	1.81	1.94	700	1,048,754	32,104	21,245
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.61	5.67	5.12	4.53	3.98	3.15	1.77	2.00	700	1,319,697	36,726	21,735
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.28	6.22	5.67	5.04	4.41	3.43	1.85	2.02	700	1,368,561	22,634	21,522
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.20	6.06	5.51	4.88	4.25	3.27	1.77	2.04	700	1,260,076	26,903	22,315
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.09	6.02	5.51	5.00	4.49	3.62	2.20	2.04	700	1,279,752	47,613	17,095
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.13	6.06	5.55	4.92	4.29	3.35	1.81	2.07	700	1,395,676	24,325	22,201
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.17	6.10	5.55	4.92	4.29	3.35	1.81	2.11	700	1,357,095	24,876	22,067
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.24	5.98	5.43	4.72	4.09	3.07	1.61	2.13	700	1,128,883	25,513	24,126
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.13	6.02	5.51	5.00	4.49	3.62	2.20	2.14	700	1,224,271	49,219	16,957
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.91	6.65	6.14	5.55	5.08	4.13	2.60	2.16	700	1,067,801	54,341	14,136
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.17	5.94	5.39	4.69	4.06	3.07	1.61	2.17	700	1,138,481	26,226	24,028
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.61	5.51	5.04	4.45	3.90	3.07	1.73	2.18	700	1,254,228	40,427	22,245
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.28	6.10	5.51	4.80	4.17	3.15	1.61	2.26	700	1,192,825	21,572	24,344
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.93	5.71	5.28	4.65	4.06	3.11	1.69	2.27	700	1,278,981	29,771	23,262
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.65	5.51	5.08	4.45	3.94	3.11	1.77	2.28	700	1,230,008	42,417	21,523
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.76	6.57	6.10	5.51	5.04	4.17	2.60	2.32	700	1,164,972	54,273	14,187
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.93	5.79	5.28	4.69	4.13	3.27	1.85	2.33	700	1,197,177	40,135	20,637
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.36	6.22	5.67	5.16	4.61	3.74	2.24	2.35	700	1,269,370	41,552	16,693
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.73	5.67	5.16	4.61	4.06	3.23	1.81	2.42	700	1,369,691	35,536	21,393
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.97	5.75	5.31	4.65	4.06	3.15	1.69	2.49	700	1,290,132	29,088	23,358
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.72	6.54	6.06	5.47	4.96	4.17	2.56	2.56	700	1,157,321	54,313	14,363
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	7.20	5.94	5.43	4.80	4.21	3.27	1.77	2.61	700	1,196,746	30,975	21,802
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.93	5.59	5.12	4.57	3.98	3.19	1.85	2.67	700	1,016,141	52,944	20,320
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.73	5.43	4.96	4.41	3.86	3.11	1.81	2.69	700	1,001,889	58,735	20,733
Bay	I-75	08-06	6111	c7	SC-SM	NA	NA	Summer	9/13/2001	rigid-B-I75-CS6111-09-13-2001	9	20	6.73	5.39	4.92	4.41	3.90	3.11	1.81	2.96	700	1,036,382	57,815	20,752
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.10	3.69	3.50	3.26	3.03	2.53	1.71	0.82	175	3,070,923	148,259	10,542
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	5.10	4.67	4.36	4.06	3.69	2.99	1.78	0.92	175	3,141,678	41,461	12,314
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.97	3.61	3.44	3.19	2.92	2.40	1.46	0.95	175	4,521,693	52,331	14,967
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.58	3.30	3.15	2.96	2.72	2.26	1.37	0.99	175	6,787,681	16,651	19,333

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.04	3.70	3.51	3.31	3.02	2.55	1.63	1.00	175	4,534,073	76,210	12,365
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.98	3.61	3.44	3.22	2.89	2.34	1.35	1.05	175	4,920,045	20,011	19,290
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.04	3.66	3.51	3.28	3.00	2.50	1.56	1.08	175	4,554,981	61,145	13,423
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.15	3.73	3.54	3.30	3.06	2.53	1.64	1.09	175	3,415,876	110,458	11,787
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	5.12	4.63	4.37	4.04	3.68	2.98	1.74	1.10	175	3,284,488	33,103	13,092
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.90	3.48	3.26	3.03	2.75	2.22	1.35	1.12	175	3,362,386	85,710	15,560
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	5.10	4.70	4.38	4.07	3.75	3.04	1.79	1.12	175	3,653,871	26,967	13,107
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.51	3.19	3.00	2.79	2.53	2.04	1.16	1.15	175	5,287,342	27,062	22,048
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.92	3.52	3.32	3.09	2.81	2.28	1.37	1.15	175	3,955,332	64,112	15,928
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.14	3.72	3.54	3.31	3.07	2.59	1.71	1.15	175	3,521,036	125,628	10,895
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.71	3.34	3.18	2.99	2.74	2.26	1.42	1.20	175	4,610,070	77,707	14,557
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.00	3.61	3.46	3.25	3.00	2.48	1.57	1.21	175	4,670,863	64,715	13,126
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.70	3.32	3.18	2.97	2.70	2.25	1.40	1.22	175	4,470,076	80,616	14,772
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.15	3.80	3.64	3.42	3.22	2.71	1.76	1.24	175	5,388,856	58,144	11,355
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.61	3.22	3.03	2.81	2.53	2.05	1.20	1.27	175	4,092,569	65,632	18,644
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.02	3.62	3.43	3.25	2.95	2.42	1.50	1.28	175	4,348,051	61,316	14,222
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.99	3.62	3.45	3.23	2.96	2.51	1.57	1.34	175	4,686,233	68,031	13,083
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.98	3.59	3.46	3.22	2.97	2.50	1.55	1.41	175	4,891,615	58,213	13,509
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.97	3.56	3.40	3.20	2.95	2.48	1.59	1.41	175	4,374,305	88,333	12,375
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.06	3.67	3.46	3.22	2.92	2.39	1.36	1.44	175	4,705,280	22,774	18,536
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.61	3.22	3.04	2.82	2.54	2.07	1.19	1.46	175	4,458,294	50,764	19,394
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.25	3.84	3.69	3.48	3.26	2.75	1.78	1.50	175	5,067,985	64,525	11,217
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.71	3.34	3.21	2.99	2.79	2.29	1.39	1.51	175	5,832,674	32,512	16,707
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.76	3.35	3.15	2.95	2.68	2.17	1.27	1.56	175	4,269,603	53,940	17,636
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.69	3.29	3.08	2.88	2.61	2.10	1.20	1.60	175	4,436,029	44,977	19,576
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.68	3.34	3.15	2.99	2.75	2.28	1.37	1.61	175	6,108,309	24,602	17,705
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.89	3.46	3.28	3.07	2.76	2.28	1.34	1.62	175	4,201,447	56,389	16,582
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.23	3.84	3.64	3.45	3.25	2.72	1.75	1.62	175	5,012,274	61,887	11,467
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	4.08	3.64	3.43	3.22	2.95	2.41	1.42	1.73	175	4,475,663	39,791	16,102
Bay	I-75	08-04	9035	NA	SC	NA	NA	Summer	7/2/2008	rigid-B-I75-CS9035-07-02-2008	9	20	3.72	3.32	3.13	2.89	2.65	2.16	1.21	1.85	175	4,871,029	30,524	20,398
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.52	4.14	3.96	3.77	3.51	2.99	2.1	0.83	175	3,814,582	131,182	8,085
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.52	4.19	4	3.83	3.55	3.04	2.03	1.01	175	5,445,546	57,563	9,578
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.65	4.29	4.08	3.89	3.58	2.99	1.91	1.02	175	4,985,024	35,279	11,266
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.54	4.16	3.96	3.75	3.53	3	2.06	1.06	175	3,981,914	114,798	8,511
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.03	3.69	3.51	3.33	3.02	2.5	1.5	1.17	175	5,825,979	14,804	17,944
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.86	3.53	3.34	3.17	2.89	2.41	1.49	1.21	175	5,348,235	44,635	14,743
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.15	3.8	3.64	3.47	3.2	2.7	1.73	1.22	175	5,832,676	38,998	12,326
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.13	3.77	3.57	3.38	3.14	2.63	1.7	1.22	175	4,652,669	74,264	11,637
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.78	3.43	3.28	3.07	2.8	2.34	1.42	1.27	175	5,362,389	41,355	15,762
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.6	4.24	3.99	3.81	3.51	2.97	1.89	1.32	175	4,786,673	45,357	10,974
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.56	3.19	3	2.79	2.53	2	1.11	1.38	175	5,001,505	23,765	24,072
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.62	4.3	4.03	3.86	3.59	3.02	1.9	1.38	175	5,679,836	17,806	12,313
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.02	3.65	3.46	3.3	3.01	2.49	1.53	1.39	175	5,332,214	34,881	14,854
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.12	3.74	3.56	3.36	3.1	2.6	1.62	1.40	175	5,043,742	47,281	13,082
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.8	3.45	3.26	3.13	2.83	2.36	1.48	1.42	175	5,104,486	59,102	14,253
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.92	3.54	3.39	3.22	2.95	2.47	1.55	1.43	175	5,433,178	50,821	13,885
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.9	3.56	3.36	3.22	2.97	2.45	1.53	1.44	175	5,726,820	37,701	14,609
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.14	3.8	3.64	3.46	3.21	2.74	1.72	1.45	175	6,819,769	13,937	14,450
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.87	3.52	3.33	3.17	2.91	2.44	1.52	1.46	175	5,446,782	48,986	14,142
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.4	3.05	2.85	2.67	2.44	1.98	1.18	1.47	175	4,638,697	69,713	18,588
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.01	3.62	3.44	3.27	3	2.47	1.5	1.53	175	5,365,287	30,777	15,459
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.83	3.46	3.29	3.09	2.82	2.37	1.43	1.55	175	5,205,986	43,442	15,450
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.91	3.57	3.37	3.2	2.97	2.48	1.52	1.58	175	6,134,322	24,067	15,583
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.19	3.84	3.63	3.5	3.24	2.75	1.73	1.68	175	6,492,638	19,156	13,567
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	3.53	3.2	2.94	2.73	2.52	1.98	1.09	1.74	175	4,863,170	26,061	23,879
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008	9	20	4.12	3.76	3.53	3.38	3.14	2.63	1.63	1.74	175	5,671,261	31,682	13,638

Location					Material Type			FWD File Information				Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer															RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title		PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008		9	20	3.84	3.46	3.28	3.07	2.82	2.37	1.41	1.78	175	5,200,398	40,725	15,903
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008		9	20	3.44	3.09	2.89	2.7	2.5	2.03	1.16	1.90	175	5,671,194	27,854	21,581
Bay	US-127	09-08	29011	NA	SC	NA	NA	Summer	6/27/2008	rigid-B-US127-CS29011-06-27-2008		9	20	3.41	3.02	2.83	2.65	2.45	1.98	1.16	1.98	175	4,841,086	60,160	19,260
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	6.10	5.21	4.72	4.07	3.64	2.78	1.72	0.71	700	909,096	50,295	21,613
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.12	4.24	3.82	3.40	3.06	2.46	1.56	1.36	700	996,063	88,804	23,212
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.55	4.55	4.16	3.58	3.23	2.49	1.50	1.46	700	963,662	60,154	24,599
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.27	4.33	3.98	3.45	3.13	2.50	1.55	1.59	700	973,518	76,672	22,994
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.67	4.68	4.30	3.72	3.37	2.71	1.67	1.67	700	941,903	71,153	21,800
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.75	4.76	4.33	3.81	3.45	2.75	1.69	1.68	700	957,531	65,560	21,303
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.52	3.67	3.38	2.94	2.64	2.08	1.26	1.71	700	1,186,117	79,981	29,005
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.93	4.02	3.66	3.19	2.89	2.26	1.37	1.77	700	1,070,254	74,166	26,609
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.76	4.73	4.27	3.67	3.25	2.50	1.40	1.89	700	977,316	43,952	26,591
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.51	3.66	3.35	2.95	2.62	2.09	1.23	2.15	700	1,223,574	74,964	29,605
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.76	4.71	4.25	3.69	3.25	2.50	1.37	2.15	700	1,010,760	40,260	27,179
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.50	3.61	3.29	2.91	2.59	2.00	1.15	2.34	700	1,289,777	64,565	32,513
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.64	4.56	4.14	3.60	3.22	2.49	1.40	2.39	700	1,016,867	47,514	26,403
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.30	3.48	3.19	2.75	2.46	1.88	1.03	2.42	700	1,428,653	52,849	36,781
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.29	3.43	3.15	2.73	2.43	1.89	1.06	2.53	700	1,328,342	65,026	35,178
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.31	3.48	3.11	2.74	2.45	1.93	1.10	2.68	700	1,331,796	70,102	34,007
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.79	3.88	3.58	3.10	2.75	2.15	1.16	2.72	700	1,363,632	43,992	32,759
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	5.60	4.53	4.15	3.58	3.18	2.52	1.38	2.83	700	1,020,020	47,271	26,496
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	8/30/2005	rigid-B-US23-CS25031-08-30-2005		10	20	4.47	3.59	3.26	2.89	2.60	2.05	1.16	2.96	700	1,355,318	64,525	31,959
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	3.40	2.97	2.77	2.48	2.27	1.83	1.15	1.13	700	2,499,722	76,321	32,474
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	5.62	4.63	4.26	3.73	3.33	2.56	1.52	1.44	700	1,063,744	49,278	24,290
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	3.34	2.93	2.74	2.43	2.21	1.81	1.10	1.50	700	2,655,960	66,045	34,437
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	6.93	5.90	5.44	4.82	4.32	3.35	1.91	1.52	700	1,146,619	24,799	20,452
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	7.22	6.11	5.64	4.99	4.47	3.48	2.01	1.54	700	1,009,765	27,672	18,623
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	6.35	5.46	4.99	4.40	3.95	3.08	1.74	1.60	700	1,216,595	26,280	22,017
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.90	3.97	3.59	3.16	2.77	2.10	1.21	1.64	700	1,129,929	55,453	30,854
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	8.23	6.89	6.24	5.47	4.83	3.71	2.08	1.64	700	735,102	27,262	17,690
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.95	4.07	3.74	3.31	3.00	2.35	1.44	1.73	700	1,168,216	68,214	24,894
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	6.88	5.86	5.42	4.79	4.29	3.35	1.87	1.75	700	1,184,347	22,737	21,045
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.84	3.92	3.63	3.20	2.84	2.21	1.32	1.77	700	1,198,672	63,042	27,756
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	3.96	3.17	2.92	2.55	2.23	1.75	1.03	1.83	700	1,316,452	81,956	35,393
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	3.98	3.20	2.95	2.55	2.28	1.73	1.00	1.92	700	1,389,177	69,250	36,743
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	5.14	4.14	3.82	3.31	2.92	2.21	1.23	2.01	700	1,115,291	44,403	29,735
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	6.67	5.42	4.98	4.34	3.82	2.85	1.53	2.02	700	975,904	26,232	25,114
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	5.70	4.69	4.29	3.77	3.38	2.60	1.48	2.03	700	1,127,834	41,349	25,294
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	8.05	6.73	6.11	5.34	4.74	3.67	1.98	2.19	700	853,029	22,503	19,301
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.86	3.91	3.55	3.10	2.73	2.08	1.15	2.23	700	1,170,376	50,282	32,346
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	3.96	3.25	2.98	2.61	2.36	1.88	1.10	2.32	700	1,543,402	75,123	33,109
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	3.35	2.88	2.61	2.28	2.06	1.61	0.86	2.33	700	2,419,930	38,752	46,378
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	5.92	4.85	4.44	3.96	3.55	2.75	1.57	2.34	700	1,081,892	41,367	23,349
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	8.01	6.70	6.07	5.28	4.70	3.64	1.93	2.39	700	882,653	20,525	20,052
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.25	3.50	3.10	2.70	2.43	1.88	1.06	2.42	700	1,298,758	62,344	34,103
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.81	3.98	3.59	3.14	2.86	2.19	1.23	2.42	700	1,296,415	49,057	30,045
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.09	3.31	2.99	2.68	2.41	1.95	1.18	2.43	700	1,273,941	102,991	30,527
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	4.14	3.38	3.05	2.70	2.46	2.02	1.23	2.51	700	1,243,155	105,881	28,743
Bay	US-23	09-10	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005		10	20	3.92	3.20	2.94	2.59	2.34	1.90	1.09	2.94	700	1,749,160	68,179	33,968
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005		10	20	7.78	6.51	5.99	5.28	4.62	3.58	2.14	0.90	700	813,027	36,126	18,063
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005		10	20	7.44	6.15	5.66	4.92	4.27	3.19	1.81	0.97	700	835,380	29,905	21,709
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005		10	20	5.72	4.81	4.52	3.98	3.46	2.64	1.53	1.02	700	1,289,382	34,068	26,180
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005		10	20	7.79	6.46	5.98	5.26	4.61	3.57	2.13	1.09	700	805,952	36,515	18,093
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005		10	20	7.43	6.13	5.67	4.92	4.24	3.25	1.86	1.15	700	822,061	32,925	20,911
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005		10	20	5.38	4.42	4.09	3.56	3.13	2.37	1.39	1.16	700	1,127,692	49,884	27,941
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005		10	20	6.21	5.08	4.76	4.22	3.72	2.94	1.86	1.24	700	939,182	63,177	20,362

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.42	4.43	4.10	3.62	3.13	2.37	1.39	1.26	700	1,124,493	48,525	28,004
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	7.70	6.41	5.88	5.19	4.54	3.54	2.08	1.26	700	828,701	35,211	18,532
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	7.66	6.34	5.89	5.23	4.59	3.57	2.14	1.30	700	864,671	36,344	18,048
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.77	4.85	4.53	4.02	3.48	2.67	1.47	1.40	700	1,388,590	25,842	28,117
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	7.66	6.34	5.92	5.23	4.59	3.61	2.15	1.44	700	867,466	36,798	17,923
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.32	4.28	3.99	3.49	3.05	2.33	1.39	1.50	700	1,066,674	58,482	27,586
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	6.18	5.10	4.78	4.24	3.73	2.94	1.77	1.52	700	1,057,584	49,019	21,606
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	7.72	6.40	5.99	5.30	4.60	3.62	2.11	1.54	700	887,869	32,169	18,372
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.08	4.18	3.91	3.40	2.97	2.31	1.33	1.55	700	1,284,157	48,322	29,166
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.77	4.83	4.54	4.00	3.46	2.66	1.44	1.59	700	1,380,956	24,873	28,762
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	6.54	5.49	5.14	4.59	4.02	3.08	1.69	1.62	700	1,326,113	20,234	25,060
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	7.42	6.04	5.61	4.93	4.20	3.19	1.77	1.63	700	833,281	29,878	22,061
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.44	4.39	4.00	3.55	3.11	2.37	1.39	1.71	700	1,071,077	53,945	27,671
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	6.25	5.07	4.81	4.22	3.77	2.97	1.83	1.78	700	1,003,426	55,863	20,775
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.32	4.25	3.95	3.51	3.03	2.35	1.40	1.81	700	1,081,285	59,575	27,330
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.14	4.12	3.82	3.29	2.88	2.15	1.19	1.84	700	1,161,182	44,435	32,642
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	4.98	4.03	3.72	3.30	2.86	2.19	1.23	1.97	700	1,276,318	47,439	31,553
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	4.91	3.87	3.57	3.16	2.77	2.18	1.32	1.99	700	1,044,513	80,741	28,491
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.17	4.21	3.96	3.47	3.07	2.37	1.35	2.01	700	1,346,485	44,233	28,993
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.14	4.09	3.77	3.29	2.84	2.14	1.18	2.02	700	1,142,557	46,219	32,902
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.35	4.28	4.02	3.50	3.07	2.36	1.35	2.07	700	1,137,336	50,128	28,470
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.19	4.19	3.95	3.45	3.02	2.35	1.34	2.09	700	1,269,736	47,782	29,007
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.17	4.14	3.82	3.29	2.84	2.15	1.15	2.10	700	1,197,620	39,839	34,329
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	4.82	3.87	3.57	3.20	2.77	2.19	1.29	2.11	700	1,191,930	68,246	29,232
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.34	4.21	3.92	3.39	2.93	2.17	1.18	2.12	700	1,115,847	40,476	33,167
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.26	4.21	3.88	3.38	2.93	2.19	1.17	2.13	700	1,197,437	37,361	33,637
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.12	4.10	3.77	3.26	2.79	2.10	1.10	2.13	700	1,200,576	37,602	35,867
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.24	4.17	3.93	3.50	3.13	2.48	1.54	2.20	700	1,117,441	75,917	24,282
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.32	4.22	3.82	3.38	2.88	2.12	1.12	2.23	700	1,121,870	36,625	34,944
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.17	4.09	3.82	3.31	2.90	2.16	1.19	2.24	700	1,185,057	43,456	32,822
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.17	4.12	3.84	3.47	3.06	2.44	1.50	2.27	700	1,114,990	77,219	24,962
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.24	4.20	3.93	3.55	3.15	2.48	1.50	2.37	700	1,230,282	62,802	25,167
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.27	4.15	3.84	3.32	2.88	2.15	1.15	2.37	700	1,140,075	40,152	33,947
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.12	4.06	3.73	3.28	2.82	2.12	1.10	2.62	700	1,309,237	32,982	36,478
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/15/2005	rigid-B-US23-CS25031-11-15-2005	10	20	5.38	4.18	3.87	3.41	3.00	2.27	1.29	2.67	700	1,050,461	53,267	29,520
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	8.93	7.59	7.09	6.34	5.55	4.28	2.59	0.85	700	829,793	27,136	15,179
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	9.01	7.63	7.16	6.41	5.62	4.32	2.59	1.02	700	858,355	24,314	15,402
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	8.99	7.62	7.15	6.39	5.60	4.29	2.53	1.03	700	880,007	21,886	15,907
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.66	5.58	5.20	4.72	4.23	3.41	2.25	1.09	700	969,622	67,992	16,669
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	5.99	5.06	4.76	4.38	3.96	3.31	2.29	1.12	700	1,110,621	100,077	15,948
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.37	5.34	5.06	4.55	4.06	3.26	2.12	1.18	700	1,090,132	61,886	17,894
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.63	5.61	5.21	4.82	4.29	3.55	2.39	1.19	700	1,013,522	76,773	15,539
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	8.03	6.92	6.55	5.97	5.43	4.47	2.93	1.22	700	1,086,050	46,623	12,996
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.61	5.52	5.21	4.69	4.19	3.40	2.22	1.23	700	1,007,417	65,677	16,978
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	8.76	7.56	7.09	6.54	5.82	4.66	2.92	1.24	700	1,068,986	26,717	13,485
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	7.54	6.29	5.86	5.33	4.68	3.77	2.41	1.29	700	869,636	52,228	15,775
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.35	5.28	4.98	4.49	3.99	3.22	2.09	1.29	700	1,024,245	67,419	18,102
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.75	5.70	5.34	4.95	4.39	3.65	2.47	1.29	700	1,014,248	76,684	14,999
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	8.87	7.64	7.17	6.58	5.87	4.72	2.92	1.33	700	1,060,575	25,892	13,571
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	8.86	7.60	7.15	6.57	5.86	4.70	2.94	1.34	700	1,033,978	27,707	13,325
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	7.53	6.25	5.85	5.32	4.68	3.79	2.45	1.35	700	852,192	55,876	15,360
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	7.57	6.34	5.88	5.37	4.72	3.82	2.43	1.36	700	866,474	52,086	15,528
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	5.92	4.98	4.67	4.33	3.92	3.25	2.23	1.39	700	1,144,851	96,185	16,374
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	5.92	4.90	4.60	4.20	3.77	3.11	2.09	1.40	700	1,031,146	92,998	17,608
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	5.46	4.46	4.13	3.71	3.36	2.65	1.74	1.41	700	1,023,902	89,894	21,665
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.50	5.40	5.02	4.57	4.07	3.29	2.12	1.43	700	990,461	66,321	17,775

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	5.98	5.02	4.75	4.40	3.99	3.35	2.31	1.51	700	1,184,363	97,895	15,690
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	5.67	4.63	4.29	3.86	3.41	2.71	1.70	1.53	700	1,052,348	70,689	22,418
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.71	5.67	5.33	4.89	4.37	3.62	2.35	1.54	700	1,111,700	63,015	15,961
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	7.14	6.00	5.59	5.10	4.45	3.50	2.07	1.61	700	1,141,364	30,268	19,292
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	7.21	6.05	5.65	5.11	4.46	3.56	2.07	1.81	700	1,141,888	28,918	19,275
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	7.23	6.04	5.65	5.10	4.45	3.51	2.01	1.85	700	1,142,213	26,762	20,143
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.99	5.84	5.46	4.99	4.38	3.45	2.01	1.94	700	1,234,322	27,649	20,091
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.86	5.75	5.34	4.91	4.31	3.39	1.97	1.98	700	1,269,726	27,298	20,526
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	10.03	8.38	7.84	7.20	6.47	5.17	3.17	2.05	700	855,063	25,971	12,240
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005	10	20	6.90	5.72	5.33	4.86	4.30	3.35	1.92	2.18	700	1,229,033	27,183	21,076
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	11.90	10.23	9.55	8.67	7.66	6.02	3.65	1.03	700	736,189	18,265	11,138
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	11.78	10.10	9.44	8.54	7.57	5.96	3.62	1.06	700	729,280	19,107	11,107
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	11.85	10.08	9.44	8.58	7.60	5.96	3.63	1.26	700	725,085	19,516	11,131
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	11.88	10.20	9.55	8.63	7.66	5.92	3.35	1.33	700	836,304	10,064	13,043
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	6.50	5.25	4.87	4.24	3.67	2.75	1.59	1.34	700	902,737	40,916	24,760
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	6.81	5.68	5.30	4.68	4.05	3.06	1.68	1.35	700	1,125,576	23,644	24,752
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	9.42	7.96	7.47	6.76	5.94	4.65	2.78	1.35	700	886,089	23,113	14,522
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	6.56	5.33	4.94	4.31	3.73	2.79	1.57	1.44	700	964,822	34,594	25,449
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	7.75	6.50	6.06	5.39	4.72	3.58	1.97	1.47	700	1,059,119	19,260	21,317
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	6.50	5.31	4.86	4.32	3.72	2.79	1.57	1.52	700	994,859	34,073	25,416
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	7.28	5.94	5.52	4.88	4.24	3.19	1.82	1.55	700	930,006	30,801	22,120
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	7.28	5.98	5.54	4.93	4.25	3.20	1.79	1.55	700	970,217	26,862	22,683
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	6.51	5.32	4.91	4.33	3.71	2.82	1.57	1.57	700	1,005,062	33,224	25,440
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	7.68	6.44	5.97	5.34	4.68	3.58	1.99	1.57	700	1,071,841	20,589	20,932
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	9.54	8.01	7.55	6.82	5.98	4.71	2.78	1.59	700	885,394	22,079	14,578
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	9.48	7.95	7.51	6.76	5.94	4.69	2.78	1.59	700	883,139	23,194	14,537
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	7.77	6.34	5.81	5.10	4.37	3.20	1.66	1.66	700	876,792	20,296	24,952
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	7.27	5.98	5.50	4.93	4.26	3.23	1.79	1.77	700	991,777	26,595	22,734
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	6.51	5.26	4.87	4.27	3.66	2.77	1.52	1.80	700	979,034	33,506	26,271
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	8.59	7.08	6.64	6.00	5.36	4.14	2.52	1.84	700	878,467	32,087	15,720
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	6.75	5.45	5.05	4.41	3.78	2.85	1.51	2.01	700	998,910	26,930	26,910
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	7.75	6.42	5.95	5.37	4.69	3.60	1.97	2.05	700	1,075,866	19,509	21,191
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	8.67	7.17	6.69	6.07	5.40	4.22	2.47	2.10	700	931,009	26,544	16,213
Bay	US-23	09-10	25031	17717	SP2	NA	NA	Summer	11/16/2005	rigid-B-US23-CS25031-11-16-2005-(2)	10	20	8.59	7.13	6.66	6.00	5.33	4.20	2.33	2.41	700	1,033,364	18,932	17,738
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.54	3.27	3.11	2.95	2.64	2.20	1.42	0.89	500	6,112,151	31,226	28,738
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	2.99	2.76	2.60	2.44	2.20	1.85	1.18	0.96	500	6,796,731	43,425	34,305
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	4.17	3.70	3.50	3.19	2.76	2.28	1.46	1.11	500	2,658,731	85,149	25,747
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.62	3.43	3.19	2.99	2.64	2.13	1.42	1.29	500	4,330,365	61,833	27,184
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.74	3.23	3.03	2.72	2.40	1.89	1.10	1.30	500	3,013,997	57,905	35,161
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.58	3.31	3.19	2.99	2.60	2.17	1.42	1.32	500	5,020,028	48,815	27,523
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.03	2.83	2.68	2.56	2.24	1.81	1.18	1.40	500	6,265,440	41,025	34,877
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.03	2.72	2.60	2.48	2.20	1.81	1.14	1.44	500	6,542,374	37,196	36,453
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	4.45	3.78	3.50	3.19	2.72	2.13	1.26	1.45	500	2,096,601	63,863	30,300
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	4.37	3.74	3.46	3.19	2.76	2.13	1.26	1.51	500	2,387,023	55,342	30,597
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	4.17	3.66	3.46	3.15	2.68	2.24	1.42	1.57	500	2,437,480	91,943	26,460
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.58	3.23	3.11	2.99	2.64	2.24	1.46	1.60	500	6,055,172	37,681	27,273
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.86	3.31	3.11	2.87	2.44	1.93	1.14	1.67	500	2,806,719	61,816	33,917
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.03	2.72	2.56	2.48	2.17	1.77	1.14	1.71	500	5,682,778	60,860	34,508
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.86	3.27	3.11	2.83	2.44	1.93	1.14	1.72	500	2,833,946	62,091	33,751
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	4.37	3.78	3.50	3.23	2.76	2.20	1.26	1.74	500	2,599,764	47,167	30,997
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	4.25	3.74	3.50	3.23	2.72	2.28	1.42	1.83	500	2,466,891	81,774	26,494
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.54	3.19	3.07	2.95	2.56	2.20	1.42	1.88	500	5,713,784	45,458	27,695
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	2.95	2.87	2.80	2.44	2.24	1.81	1.22	2.25	500	6,053,812	58,904	32,540
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	10/21/1998	rigid-B-US23-CS25031-10-21-1998	9	20	3.78	3.23	3.03	2.83	2.40	1.97	1.14	2.38	500	3,052,858	54,196	32,341
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.31	4.45	4.02	3.50	3.03	2.28	1.34	0.64	500	1,223,232	61,937	26,830
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.28	4.41	4.02	3.46	3.03	2.24	1.34	0.66	500	1,179,226	63,609	26,755

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.02	3.66	3.43	3.19	2.91	2.44	1.65	0.75	500	3,346,100	96,568	20,675
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	3.50	3.23	3.07	2.87	2.64	2.24	1.50	0.81	500	5,499,583	64,491	23,629
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	3.58	3.27	3.07	2.83	2.60	2.17	1.42	0.87	500	4,228,977	78,782	25,135
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	3.54	3.23	3.07	2.87	2.64	2.24	1.50	0.95	500	5,037,160	74,791	23,410
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	3.46	3.15	2.99	2.76	2.52	2.17	1.46	1.03	500	4,241,526	108,579	23,278
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.13	3.82	3.58	3.31	3.03	2.60	1.73	1.06	500	3,800,531	76,457	19,999
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.02	3.66	3.43	3.19	2.91	2.48	1.65	1.08	500	3,539,081	88,265	20,679
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	3.03	2.72	2.56	2.36	2.17	1.81	1.18	1.16	500	4,704,597	101,164	29,935
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.83	5.04	4.65	4.13	3.66	2.99	1.85	1.22	500	1,351,950	68,742	18,674
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.28	4.37	3.98	3.43	2.99	2.28	1.30	1.34	500	1,243,496	60,084	27,311
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.98	5.12	4.69	4.13	3.70	3.03	1.89	1.38	500	1,180,253	77,043	18,172
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	6.14	5.20	4.76	4.17	3.70	2.95	1.77	1.41	500	1,212,448	60,633	19,990
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	3.62	3.31	3.11	2.87	2.64	2.28	1.50	1.43	500	4,363,233	86,044	22,963
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.98	5.08	4.69	4.13	3.70	3.03	1.89	1.43	500	1,182,512	77,849	18,162
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.87	4.92	4.49	3.90	3.43	2.60	1.46	1.44	500	1,308,466	44,962	24,798
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.69	4.02	3.66	3.23	2.80	2.13	1.14	1.45	500	1,971,513	37,470	32,999
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.72	3.98	3.66	3.23	2.80	2.17	1.22	1.52	500	1,827,649	50,344	29,938
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.24	4.41	4.09	3.58	3.15	2.44	1.38	1.59	500	1,615,796	47,780	26,067
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.80	3.94	3.58	3.07	2.64	1.97	1.06	1.60	500	1,399,692	53,306	33,778
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	6.42	5.43	4.92	4.25	3.70	2.72	1.38	1.64	500	1,314,339	25,162	27,133
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.24	4.41	4.06	3.58	3.11	2.44	1.38	1.69	500	1,587,652	49,365	25,986
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.76	3.94	3.54	3.03	2.64	1.97	1.06	1.73	500	1,455,554	52,445	33,933
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.91	4.96	4.53	3.90	3.43	2.64	1.46	1.75	500	1,309,793	44,283	24,834
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.24	4.45	4.09	3.58	3.15	2.44	1.34	1.76	500	1,693,585	41,169	27,157
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.69	3.98	3.62	3.19	2.76	2.13	1.14	1.84	500	1,918,149	41,221	32,678
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.80	3.98	3.58	3.11	2.68	2.01	1.06	1.89	500	1,536,447	46,998	34,167
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.59	4.76	4.41	3.86	3.43	2.64	1.42	1.89	500	1,870,446	29,951	27,260
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.69	3.94	3.66	3.19	2.80	2.17	1.18	1.95	500	1,919,124	44,513	31,099
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.47	4.69	4.33	3.78	3.35	2.60	1.38	1.99	500	1,914,430	28,431	27,865
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	7.68	6.50	5.91	5.00	4.37	3.27	1.65	1.99	500	1,106,934	22,777	23,165
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.55	4.69	4.37	3.86	3.39	2.64	1.42	2.05	500	1,922,182	30,228	27,324
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	4.69	3.98	3.62	3.23	2.76	2.13	1.10	2.10	500	2,060,657	33,290	34,831
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	5/30/2001	rigid-B-US23-CS25031-05-30-2001	9	20	5.91	4.88	4.49	3.94	3.43	2.68	1.46	2.32	500	1,381,086	42,506	24,751
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	7.06	5.93	5.44	4.76	4.23	3.24	2.25	1.43	500	741,336	78,500	15,103
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	7.11	5.96	5.48	4.80	4.28	3.27	2.35	1.97	500	675,276	88,475	14,418
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	4.74	3.98	3.64	3.22	2.90	2.29	1.35	1.98	500	1,643,968	69,928	25,506
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	12.60	10.56	9.86	8.80	7.88	6.08	3.46	2.04	500	1,562,423	35,714	21,127
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	4.76	3.99	3.64	3.21	2.91	2.29	1.35	2.08	500	1,585,249	71,572	25,323
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	4.15	3.28	2.97	2.55	2.26	1.75	1.02	2.13	500	1,212,596	102,648	32,953
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	12.79	10.67	9.94	8.85	7.96	6.16	3.54	2.14	500	1,455,155	40,200	20,394
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	6.90	5.78	5.29	4.67	4.22	3.27	1.87	2.18	500	1,195,098	38,906	18,407
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	3.38	2.65	2.39	2.05	1.82	1.42	0.83	2.26	500	1,402,081	137,075	40,760
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	6.93	5.81	5.32	4.71	4.24	3.31	1.87	2.32	500	1,210,637	37,904	18,450
Bay	US-23	09-09	25031	17717	SM	NA	NA	Summer	8/23/2005	rigid-B-US23-CS25031-08-23-2005-(2)	9	20	4.72	3.91	3.60	3.18	2.88	2.25	1.30	2.38	500	1,686,588	61,888	26,053
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	7.48	6.22	5.55	4.69	3.98	2.83	1.57	0.67	700	828,765	27,125	27,125
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	7.52	6.26	5.55	4.72	3.98	2.87	1.61	0.86	700	852,024	26,789	26,789
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	7.52	6.26	5.47	4.69	3.94	2.83	1.61	1.25	700	856,841	26,892	26,892
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	3.78	3.27	2.95	2.64	2.28	1.81	0.98	2.51	700	2,380,731	43,361	43,361
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	3.78	3.27	2.95	2.60	2.28	1.81	0.98	2.57	700	2,359,943	43,288	43,288
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	3.82	3.27	2.95	2.60	2.24	1.81	0.98	2.79	700	2,318,692	43,414	43,414
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	3.50	3.15	2.91	2.64	2.40	2.05	1.38	2.83	700	5,014,134	34,548	34,548
Grand	I-96	09-07	34404	20730	SM	Natural Gravel	Dense	Summer	6/27/2001	rigid-G-I96-CS34044-06-27-2001	9	24	5.43	4.69	4.25	3.78	3.43	2.72	1.73	2.94	700	2,281,889	26,979	26,979
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.45	3.82	3.46	3.03	2.68	2.05	1.18	1.21	infinite	1,512,049	37,261	37,261
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.74	3.39	3.19	2.87	2.64	2.20	1.46	1.32	infinite	3,369,058	31,704	31,704
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.46	3.03	2.76	2.40	2.17	1.69	1.02	1.36	infinite	2,254,742	43,927	43,927
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.50	3.03	2.80	2.44	2.20	1.73	1.02	1.43	infinite	2,238,587	43,631	43,631

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.31	2.99	2.83	2.56	2.32	1.97	1.30	1.45	infinite	3,902,076	35,483	35,483
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.35	2.83	2.56	2.20	1.97	1.50	0.87	1.60	infinite	1,958,506	50,541	50,541
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.53	4.02	3.66	3.15	2.83	2.20	1.26	1.63	infinite	1,564,219	34,937	34,937
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.82	3.39	3.11	2.76	2.52	2.05	1.26	1.70	infinite	2,549,770	36,445	36,445
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.37	3.86	3.50	3.03	2.72	2.17	1.30	1.77	infinite	1,811,874	34,521	34,521
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.49	3.86	3.50	2.99	2.68	2.09	1.22	1.79	infinite	1,566,414	36,627	36,627
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.58	2.95	2.72	2.36	2.09	1.61	0.94	1.84	infinite	1,911,236	46,846	46,846
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.82	3.39	3.11	2.76	2.52	2.05	1.22	1.87	infinite	2,419,002	37,086	37,086
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.35	2.91	2.68	2.32	2.13	1.69	1.02	1.91	infinite	2,499,745	43,721	43,721
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.03	2.60	2.40	2.09	1.89	1.50	0.87	1.91	infinite	2,557,447	50,501	50,501
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	2.87	2.52	2.32	2.05	1.85	1.50	0.87	1.98	infinite	2,938,649	50,851	50,851
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.25	3.70	3.39	2.99	2.72	2.20	1.34	1.98	infinite	2,096,588	33,253	33,253
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.53	4.02	3.66	3.19	2.87	2.24	1.26	2.02	infinite	1,583,992	34,653	34,653
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.53	3.86	3.50	3.03	2.68	2.13	1.22	2.04	infinite	1,545,656	35,901	35,901
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.72	4.13	3.78	3.27	2.91	2.36	1.42	2.04	infinite	1,660,701	31,373	31,373
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	5.51	4.88	4.53	4.02	3.70	3.07	1.97	2.09	infinite	2,005,163	23,151	23,151
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.35	2.87	2.60	2.20	1.97	1.54	0.91	2.10	infinite	2,069,326	48,970	48,970
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	5.12	4.49	4.13	3.62	3.31	2.68	1.69	2.11	infinite	1,872,961	26,872	26,872
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.23	2.91	2.72	2.44	2.28	1.93	1.30	2.15	infinite	4,258,141	35,600	35,600
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.43	2.99	2.76	2.36	2.13	1.73	1.02	2.21	infinite	2,314,891	43,034	43,034
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.39	2.87	2.60	2.24	1.97	1.54	0.94	2.23	infinite	2,141,406	48,655	48,655
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.43	2.87	2.64	2.24	2.01	1.57	0.94	2.30	infinite	2,117,850	48,283	48,283
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.43	2.91	2.64	2.28	2.05	1.61	0.98	2.33	infinite	2,229,226	45,972	45,972
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.70	3.23	2.99	2.60	2.36	1.93	1.22	2.37	infinite	2,616,496	37,878	37,878
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.62	3.11	2.83	2.44	2.20	1.77	1.02	2.38	infinite	2,074,918	42,911	42,911
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.72	4.13	3.82	3.35	3.07	2.52	1.61	2.40	infinite	2,184,182	28,448	28,448
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.35	2.83	2.60	2.24	2.01	1.57	0.98	2.40	infinite	2,360,421	46,688	46,688
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	5.59	4.96	4.61	4.06	3.70	3.11	2.01	2.42	infinite	1,980,235	22,705	22,705
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.35	2.87	2.60	2.24	2.01	1.57	0.98	2.43	infinite	2,341,923	46,854	46,854
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	5.55	4.88	4.53	4.02	3.70	3.07	2.01	2.43	infinite	2,043,886	22,805	22,805
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.74	3.23	3.03	2.64	2.40	1.93	1.26	2.43	infinite	2,615,903	36,946	36,946
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.72	4.21	3.86	3.43	3.11	2.60	1.69	2.44	infinite	2,346,384	27,465	27,465
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.54	2.95	2.68	2.28	2.05	1.61	0.94	2.55	infinite	1,967,351	47,212	47,212
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.09	3.46	3.19	2.83	2.60	2.09	1.30	2.58	infinite	2,291,947	34,645	34,645
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	5.94	5.28	4.96	4.41	4.09	3.46	2.36	2.62	infinite	2,318,799	19,964	19,964
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	4.33	3.82	3.54	3.15	2.95	2.48	1.65	2.81	infinite	2,904,894	27,695	27,695
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/15/2004	rigid-G-M6-CS41064-09-15-2004	10	infinite	3.82	3.31	3.03	2.68	2.44	1.97	1.30	2.88	infinite	2,645,979	35,733	35,733
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.40	2.28	2.13	2.01	1.73	1.22	0.65	infinite	7,358,083	36,661	36,661
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.20	2.05	1.93	1.81	1.69	1.42	0.98	0.68	infinite	7,376,687	47,203	47,203
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.68	2.48	2.36	2.01	1.42	0.68	infinite	6,292,689	32,096	32,096
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.36	2.24	2.09	1.97	1.69	1.18	0.70	infinite	7,219,490	38,098	38,098
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.28	2.17	2.01	1.85	1.57	1.06	0.71	infinite	5,931,151	42,534	42,534
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.52	2.44	2.24	2.09	1.81	1.26	0.74	infinite	6,638,555	36,300	36,300
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.83	2.72	2.52	2.40	2.05	1.46	0.76	infinite	6,300,476	31,234	31,234
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.60	2.52	2.40	2.24	2.13	1.85	1.34	0.77	infinite	7,983,922	32,930	32,930
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.56	2.44	2.28	2.17	1.85	1.30	0.79	infinite	6,779,047	34,652	34,652
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.76	2.56	2.44	2.13	1.54	0.79	infinite	6,972,413	29,037	29,037
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.58	3.46	3.31	3.15	2.99	2.68	1.97	0.84	infinite	7,100,495	22,260	22,260
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.72	2.52	2.40	2.05	1.46	0.88	infinite	6,050,345	30,911	30,911
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.95	2.80	2.68	2.52	2.24	1.65	0.89	infinite	7,786,609	27,311	27,311
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.72	2.48	2.36	2.01	1.42	0.89	infinite	5,869,297	31,876	31,876
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.24	2.09	1.97	1.69	1.22	0.91	infinite	7,518,460	36,906	36,906
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.17	2.01	1.89	1.77	1.61	1.34	0.87	0.93	infinite	5,893,450	51,682	51,682
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.32	2.20	2.01	1.89	1.61	1.10	0.94	infinite	6,625,413	41,902	41,902
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	3.07	2.95	2.72	2.60	2.28	1.65	0.95	infinite	6,699,601	26,891	26,891
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.20	2.09	1.93	1.85	1.57	1.10	0.96	infinite	7,605,168	40,345	40,345

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.17	2.05	1.89	1.77	1.50	1.06	0.97	infinite	7,227,908	43,349	43,349
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.87	2.76	2.56	2.48	2.17	1.61	0.97	infinite	7,788,526	27,133	27,133
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.28	2.17	2.01	1.85	1.61	1.10	0.97	infinite	6,747,656	41,766	41,766
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.24	2.05	1.89	1.61	1.06	0.98	infinite	5,632,707	43,163	43,163
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.28	2.17	1.97	1.85	1.57	1.06	0.98	infinite	6,147,824	42,834	42,834
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.39	3.31	3.15	2.95	2.83	2.52	1.89	1.00	infinite	7,582,185	23,158	23,158
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.64	2.48	2.28	2.17	1.81	1.26	1.01	infinite	5,734,377	36,151	36,151
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.07	2.95	2.76	2.64	2.32	1.65	1.02	infinite	6,763,823	27,303	27,303
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.32	2.17	2.01	1.89	1.61	1.14	1.02	infinite	7,228,750	39,703	39,703
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.56	2.44	2.28	2.13	2.01	1.73	1.22	1.03	infinite	7,066,899	36,929	36,929
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.60	2.40	2.32	2.01	1.46	1.03	infinite	7,514,002	30,270	30,270
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.76	2.56	2.40	2.13	1.50	1.04	infinite	6,547,090	29,656	29,656
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.95	2.83	2.64	2.52	2.24	1.61	1.04	infinite	7,306,608	27,257	27,257
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.95	2.80	2.60	2.48	2.17	1.54	1.06	infinite	6,624,329	29,157	29,157
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.83	2.68	2.52	2.40	2.13	1.54	1.07	infinite	7,783,188	28,571	28,571
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.64	2.52	2.32	2.24	1.93	1.38	1.08	infinite	7,265,146	32,435	32,435
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.72	2.52	2.44	2.13	1.57	1.08	infinite	7,613,590	27,964	27,964
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.68	2.48	2.36	2.05	1.46	1.09	infinite	6,560,529	31,202	31,202
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.80	2.64	2.48	2.32	2.01	1.38	1.09	infinite	5,997,056	32,120	32,120
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.95	2.80	2.60	2.48	2.17	1.57	1.10	infinite	6,791,284	28,783	28,783
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.91	2.80	2.56	2.44	2.13	1.54	1.10	infinite	6,651,645	29,260	29,260
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.56	2.44	2.28	2.13	1.85	1.26	1.12	infinite	6,124,632	35,174	35,174
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.24	2.13	1.97	1.85	1.61	1.14	1.13	infinite	7,637,149	39,366	39,366
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.60	2.40	2.28	2.01	1.42	1.13	infinite	7,010,277	30,901	30,901
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.44	2.32	2.17	2.05	1.77	1.26	1.14	infinite	7,324,361	36,470	36,470
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.91	2.83	2.60	2.48	2.20	1.57	1.14	infinite	6,979,684	28,222	28,222
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.80	2.68	2.48	2.36	2.05	1.42	1.14	infinite	6,251,190	31,911	31,911
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.13	2.01	1.89	1.73	1.61	1.34	0.87	1.14	infinite	6,105,889	51,437	51,437
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.76	2.60	2.40	2.28	1.97	1.38	1.15	infinite	6,256,558	32,881	32,881
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.27	3.11	2.95	2.76	2.64	2.32	1.65	1.15	infinite	6,483,700	27,211	27,211
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.32	2.17	1.97	1.85	1.54	1.02	1.15	infinite	5,517,461	44,029	44,029
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.40	2.28	2.01	1.46	1.15	infinite	7,440,809	30,803	30,803
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.40	2.28	2.01	1.46	1.15	infinite	7,419,115	30,712	30,712
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.39	3.31	3.15	2.95	2.80	2.48	1.77	1.16	infinite	6,441,640	25,143	25,143
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.40	2.28	2.01	1.42	1.16	infinite	6,955,524	31,427	31,427
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.28	2.17	1.97	1.89	1.57	1.10	1.16	infinite	6,597,736	41,269	41,269
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.07	2.91	2.72	2.60	2.28	1.61	1.18	infinite	6,375,871	27,903	27,903
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.56	2.40	2.24	2.05	1.93	1.61	1.06	1.18	infinite	5,360,461	42,718	42,718
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.80	2.72	2.48	2.32	2.05	1.46	1.18	infinite	6,809,863	30,936	30,936
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.68	2.56	2.36	2.24	1.97	1.38	1.18	infinite	6,862,005	32,556	32,556
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.95	2.80	2.60	2.48	2.20	1.61	1.19	infinite	7,275,732	27,294	27,294
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.36	2.24	2.05	1.97	1.69	1.22	1.19	infinite	7,972,153	36,687	36,687
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.07	2.91	2.72	2.56	2.28	1.65	1.20	infinite	6,697,537	27,134	27,134
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.68	2.44	2.36	2.01	1.42	1.20	infinite	6,350,350	32,179	32,179
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.91	2.80	2.60	2.52	2.20	1.57	1.21	infinite	7,068,977	28,257	28,257
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.36	2.24	2.13	1.93	1.85	1.57	1.10	1.21	infinite	7,208,137	40,869	40,869
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.13	2.05	1.89	1.77	1.54	1.06	1.21	infinite	7,499,987	42,735	42,735
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.20	2.09	1.97	1.81	1.69	1.46	0.98	1.21	infinite	7,139,227	46,078	46,078
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.15	3.03	2.87	2.68	2.56	2.28	1.69	1.21	infinite	7,614,449	26,189	26,189
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.32	2.20	2.01	1.89	1.61	1.10	1.21	infinite	6,217,952	41,416	41,416
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.28	2.13	1.97	1.85	1.57	1.10	1.21	infinite	6,863,484	42,316	42,316
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.40	2.32	2.01	1.42	1.22	infinite	6,995,950	31,557	31,557
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.36	2.20	2.09	1.93	1.81	1.57	1.06	1.22	infinite	6,907,933	42,055	42,055
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	2.99	2.91	2.68	2.56	2.28	1.65	1.23	infinite	7,058,143	26,831	26,831
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.36	2.24	2.05	1.97	1.69	1.22	1.23	infinite	7,781,581	36,860	36,860
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.40	2.28	2.13	2.01	1.73	1.22	1.23	infinite	7,591,894	35,771	35,771

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.91	2.76	2.60	2.48	2.20	1.57	1.23	infinite	7,309,159	28,857	28,857
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.95	2.80	2.60	2.48	2.20	1.57	1.24	infinite	6,873,813	28,003	28,003
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.99	2.83	2.64	2.52	2.24	1.61	1.24	infinite	7,032,578	27,345	27,345
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.50	3.39	3.27	3.03	2.95	2.60	1.89	1.24	infinite	6,819,189	23,129	23,129
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.76	2.60	2.40	2.28	1.97	1.42	1.25	infinite	6,563,122	31,729	31,729
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.40	2.28	2.09	2.01	1.73	1.26	1.25	infinite	7,867,723	35,254	35,254
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	2.99	2.87	2.68	2.56	2.28	1.65	1.26	infinite	7,144,338	26,796	26,796
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.95	2.80	2.56	2.44	2.09	1.42	1.26	infinite	5,300,193	31,520	31,520
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.40	2.32	2.13	2.01	1.77	1.22	1.26	infinite	7,270,452	35,878	35,878
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.80	2.56	2.44	2.17	1.54	1.27	infinite	6,965,401	28,773	28,773
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.28	2.09	1.93	1.69	1.22	1.27	infinite	7,415,555	37,059	37,059
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.66	3.50	3.39	3.15	3.03	2.76	2.09	1.28	infinite	7,907,654	20,872	20,872
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.83	2.72	2.52	2.36	2.13	1.57	1.28	infinite	7,890,237	28,296	28,296
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.32	2.20	2.05	1.93	1.65	1.10	1.28	infinite	6,487,805	41,211	41,211
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.56	2.40	2.28	2.01	1.46	1.28	infinite	7,577,821	30,898	30,898
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.13	1.97	1.85	1.69	1.57	1.34	0.91	1.29	infinite	6,973,660	50,194	50,194
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.32	2.20	2.01	1.89	1.61	1.06	1.29	infinite	5,952,822	42,721	42,721
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.31	3.11	2.95	2.76	2.64	2.32	1.65	1.29	infinite	6,391,313	27,416	27,416
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.95	2.83	2.60	2.52	2.20	1.57	1.29	infinite	6,645,725	27,937	27,937
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.83	2.68	2.44	2.32	2.01	1.42	1.29	infinite	6,170,308	31,711	31,711
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.64	2.48	2.36	2.09	1.54	1.31	infinite	7,702,212	28,633	28,633
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.80	2.68	2.48	2.40	2.09	1.50	1.32	infinite	7,198,940	30,300	30,300
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.09	1.93	1.85	1.69	1.57	1.34	0.87	1.32	infinite	6,675,525	51,250	51,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.28	2.13	1.97	1.81	1.57	1.10	1.32	infinite	6,835,698	41,138	41,138
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.46	3.31	3.15	2.91	2.83	2.48	1.81	1.32	infinite	6,594,455	24,636	24,636
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.83	2.68	2.48	2.36	2.05	1.42	1.33	infinite	5,948,374	31,456	31,456
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.62	3.50	3.35	3.11	3.03	2.72	2.05	1.33	infinite	7,741,130	21,470	21,470
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.27	3.11	2.95	2.76	2.64	2.36	1.73	1.33	infinite	7,349,067	25,832	25,832
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.91	2.80	2.60	2.52	2.24	1.61	1.33	infinite	7,658,642	26,906	26,906
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.28	2.17	1.97	1.89	1.57	1.06	1.33	infinite	6,089,954	43,257	43,257
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.60	2.36	2.28	1.97	1.42	1.34	infinite	7,116,638	31,879	31,879
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.99	2.87	2.64	2.56	2.28	1.69	1.34	infinite	7,853,895	25,684	25,684
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.43	3.31	3.15	2.91	2.80	2.48	1.77	1.35	infinite	6,307,955	24,992	24,992
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.28	2.20	2.01	1.89	1.57	1.02	1.35	infinite	5,538,862	44,221	44,221
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.68	2.52	2.32	2.24	1.89	1.30	1.36	infinite	5,858,630	34,039	34,039
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.56	2.44	2.24	2.13	1.89	1.34	1.36	infinite	7,576,481	33,333	33,333
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.76	2.60	2.40	2.28	2.01	1.42	1.36	infinite	6,888,319	31,693	31,693
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.32	2.20	2.01	1.89	1.61	1.06	1.37	infinite	5,849,109	43,058	43,058
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.52	2.40	2.20	2.09	1.81	1.26	1.37	infinite	6,599,666	36,246	36,246
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.52	2.40	2.24	2.13	1.85	1.26	1.37	infinite	6,738,144	35,370	35,370
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.64	2.56	2.36	2.24	2.01	1.42	1.38	infinite	7,659,042	31,250	31,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.32	2.20	2.05	1.93	1.65	1.10	1.38	infinite	6,535,889	40,445	40,445
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	2.91	2.76	2.44	2.28	1.89	1.22	1.38	infinite	3,809,927	37,714	37,714
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.64	2.56	2.32	2.20	1.93	1.34	1.38	infinite	6,453,403	33,429	33,429
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.68	2.56	2.36	2.24	1.97	1.42	1.38	infinite	7,164,498	31,888	31,888
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.56	2.36	2.24	1.97	1.42	1.39	infinite	7,225,974	31,944	31,944
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.52	2.40	2.20	2.13	1.85	1.30	1.39	infinite	7,417,806	34,306	34,306
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.72	2.48	2.40	2.13	1.54	1.40	infinite	7,476,524	27,945	27,945
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.87	2.76	2.56	2.48	2.17	1.54	1.40	infinite	6,895,146	28,723	28,723
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.76	2.64	2.44	2.36	2.09	1.50	1.40	infinite	7,732,673	29,802	29,802
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.40	2.24	2.01	1.42	1.40	infinite	7,031,083	31,819	31,819
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.07	2.91	2.72	2.60	2.32	1.65	1.41	infinite	6,747,344	26,742	26,742
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.07	2.91	2.72	2.60	2.32	1.65	1.41	infinite	6,709,365	26,590	26,590
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.64	2.44	2.36	2.05	1.46	1.43	infinite	6,974,607	31,304	31,304
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.60	2.48	2.28	2.20	1.93	1.38	1.43	infinite	7,419,015	31,828	31,828
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.32	2.20	2.05	1.93	1.69	1.14	1.44	infinite	7,118,705	38,786	38,786

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.20	2.13	1.93	1.85	1.57	1.06	1.44	infinite	7,089,663	42,502	42,502
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.64	2.40	2.32	2.05	1.46	1.44	infinite	7,476,628	29,856	29,856
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.20	2.05	1.93	1.77	1.69	1.42	0.94	1.45	infinite	6,841,280	48,623	48,623
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.36	2.24	2.05	1.97	1.73	1.22	1.45	infinite	7,982,942	35,737	35,737
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.20	2.09	1.93	1.81	1.57	1.06	1.46	infinite	6,767,198	42,362	42,362
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.27	3.15	2.99	2.76	2.64	2.36	1.69	1.46	infinite	6,589,324	25,824	25,824
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.39	3.27	3.15	2.91	2.83	2.56	1.89	1.46	infinite	7,842,496	22,917	22,917
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.52	2.40	2.20	2.13	1.81	1.26	1.46	infinite	6,615,194	36,258	36,258
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.56	2.36	2.24	1.93	1.30	1.46	infinite	5,746,605	33,825	33,825
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.83	2.64	2.48	2.40	2.09	1.50	1.46	infinite	7,394,768	30,357	30,357
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.56	2.44	2.24	2.17	1.89	1.34	1.46	infinite	7,409,584	33,410	33,410
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.20	2.01	1.89	1.61	1.06	1.47	infinite	5,679,700	42,596	42,596
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.54	3.43	3.27	3.03	2.95	2.64	1.93	1.47	infinite	7,088,018	22,767	22,767
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.27	3.07	2.91	2.76	2.68	2.36	1.77	1.47	infinite	8,000,000	25,193	25,193
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.99	2.83	2.64	2.56	2.28	1.65	1.47	infinite	7,518,813	26,330	26,330
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.56	2.36	2.24	1.97	1.38	1.47	infinite	6,707,792	33,208	33,208
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.68	2.48	2.36	2.13	1.54	1.47	infinite	7,780,374	28,697	28,697
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.11	2.95	2.72	2.64	2.32	1.65	1.48	infinite	6,583,694	26,848	26,848
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.52	2.36	2.20	2.09	1.85	1.34	1.48	infinite	8,000,000	33,250	33,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.83	2.68	2.48	2.40	2.13	1.54	1.49	infinite	7,571,330	28,287	28,287
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.76	2.60	2.40	2.32	2.05	1.50	1.49	infinite	7,980,017	29,272	29,272
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.62	3.50	3.35	3.11	2.99	2.72	2.09	1.50	infinite	7,961,818	20,635	20,635
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.32	2.17	1.97	1.85	1.57	1.02	1.50	infinite	5,438,005	43,700	43,700
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.60	2.48	2.28	2.20	1.89	1.30	1.50	infinite	6,454,637	34,870	34,870
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.32	2.17	2.01	1.89	1.65	1.14	1.51	infinite	7,011,322	39,594	39,594
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.52	2.36	2.17	2.05	1.77	1.26	1.52	infinite	6,777,694	36,566	36,566
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.28	2.13	2.05	1.85	1.77	1.54	1.06	1.52	infinite	7,644,309	41,945	41,945
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	1.93	1.81	1.69	1.54	1.42	1.14	0.71	1.53	infinite	5,496,489	62,374	62,374
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.56	2.40	2.32	2.05	1.50	1.54	infinite	8,000,000	29,312	29,312
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.68	2.60	2.36	2.28	1.97	1.38	1.54	infinite	6,482,609	32,672	32,672
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.80	2.64	2.44	2.36	2.09	1.50	1.54	infinite	7,546,271	28,893	28,893
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.91	2.76	2.56	2.48	2.20	1.61	1.55	infinite	7,602,579	27,387	27,387
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.83	2.72	2.48	2.44	2.13	1.54	1.55	infinite	7,506,516	28,426	28,426
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.28	2.20	2.01	1.89	1.61	1.06	1.55	infinite	6,373,054	42,555	42,555
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.32	2.20	2.01	1.89	1.65	1.10	1.56	infinite	6,470,706	40,969	40,969
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.27	3.11	2.95	2.72	2.60	2.32	1.65	1.56	infinite	6,431,738	26,857	26,857
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.36	2.20	2.01	1.93	1.65	1.14	1.56	infinite	6,808,862	39,622	39,622
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.72	2.56	2.48	2.20	1.57	1.56	infinite	7,745,222	28,690	28,690
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.64	2.48	2.28	2.20	1.89	1.30	1.56	infinite	6,230,887	34,273	34,273
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.24	2.09	2.01	1.81	1.73	1.50	1.02	1.56	infinite	7,568,877	44,315	44,315
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.24	2.09	2.01	1.81	1.73	1.50	1.02	1.56	infinite	7,383,243	43,223	43,223
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.64	2.52	2.28	2.17	1.89	1.30	1.57	infinite	6,197,512	35,258	35,258
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.76	2.60	2.40	2.28	2.01	1.38	1.57	infinite	6,304,885	32,402	32,402
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.80	2.64	2.48	2.36	2.09	1.54	1.58	infinite	7,791,660	29,731	29,731
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.80	2.68	2.44	2.36	2.05	1.42	1.58	infinite	6,332,740	32,109	32,109
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.76	2.60	2.40	2.32	2.05	1.46	1.59	infinite	7,346,557	30,210	30,210
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.60	2.48	2.40	2.17	2.09	1.85	1.30	1.59	infinite	7,780,618	34,189	34,189
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.24	2.13	2.01	1.81	1.69	1.46	1.02	1.60	infinite	7,173,925	44,369	44,369
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.24	2.13	2.01	1.81	1.69	1.46	1.02	1.60	infinite	7,206,571	44,611	44,611
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.24	2.09	1.93	1.81	1.57	1.10	1.60	infinite	7,071,144	40,886	40,886
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.52	2.40	2.24	2.17	1.89	1.34	1.60	infinite	7,685,864	33,459	33,459
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.60	2.48	2.32	2.17	2.05	1.73	1.14	1.60	infinite	5,727,348	38,621	38,621
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.60	2.48	2.32	2.17	2.05	1.73	1.14	1.60	infinite	5,739,402	38,672	38,672
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.28	2.09	2.05	1.85	1.77	1.54	1.06	1.61	infinite	7,871,491	42,230	42,230
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.36	2.20	2.09	1.89	1.81	1.54	1.02	1.61	infinite	6,440,100	44,156	44,156
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.91	2.76	2.52	2.44	2.13	1.54	1.61	infinite	6,798,866	29,280	29,280

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.17	3.62	3.27	2.83	2.56	1.97	1.14	1.61	infinite	1,703,687	39,023	39,023
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.44	2.32	2.13	2.05	1.77	1.26	1.61	infinite	7,362,550	36,346	36,346
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.68	2.44	2.28	2.01	1.42	1.62	infinite	6,098,859	32,134	32,134
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.56	2.36	2.28	2.01	1.42	1.62	infinite	7,320,687	31,572	31,572
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.76	2.64	2.40	2.32	2.01	1.46	1.62	infinite	6,966,727	31,232	31,232
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.56	2.44	2.24	2.13	1.89	1.30	1.62	infinite	6,928,162	34,333	34,333
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.76	2.64	2.44	2.36	2.09	1.54	1.62	infinite	8,000,000	29,163	29,163
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.72	2.48	2.40	2.13	1.57	1.62	infinite	7,820,506	28,488	28,488
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.24	2.01	1.93	1.65	1.14	1.62	infinite	6,528,701	39,627	39,627
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.52	2.40	2.17	2.09	1.77	1.26	1.63	infinite	6,551,894	36,686	36,686
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.31	3.07	2.95	2.72	2.64	2.32	1.69	1.63	infinite	6,822,731	26,463	26,463
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	2.91	2.72	2.44	2.28	1.89	1.18	1.63	infinite	3,629,887	38,465	38,465
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.24	2.09	1.89	1.77	1.50	0.98	1.64	infinite	5,814,756	45,326	45,326
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.56	2.44	2.24	2.13	1.89	1.30	1.64	infinite	7,164,110	33,703	33,703
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.48	2.32	2.13	2.01	1.69	1.14	1.65	infinite	6,114,928	39,941	39,941
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.68	2.44	2.36	2.05	1.42	1.65	infinite	6,141,094	31,541	31,541
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.28	2.13	1.93	1.77	1.54	1.02	1.65	infinite	5,866,027	44,089	44,089
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.56	2.44	2.28	2.09	1.97	1.73	1.18	1.65	infinite	6,579,004	37,664	37,664
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.36	2.28	2.01	1.42	1.66	infinite	7,043,901	31,609	31,609
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.46	3.39	3.23	2.99	2.95	2.60	1.89	1.66	infinite	7,041,029	22,917	22,917
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.72	2.56	2.36	2.24	1.97	1.38	1.66	infinite	6,504,429	32,988	32,988
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.24	2.05	1.97	1.73	1.22	1.66	infinite	7,653,886	36,285	36,285
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.24	2.05	1.97	1.73	1.22	1.67	infinite	7,709,782	36,653	36,653
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.36	2.20	2.01	1.93	1.65	1.18	1.67	infinite	7,338,217	38,640	38,640
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.68	2.48	2.40	2.13	1.57	1.67	infinite	7,919,736	28,434	28,434
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.35	3.27	3.11	2.91	2.80	2.56	1.85	1.67	infinite	7,601,001	23,145	23,145
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.95	2.80	2.56	2.48	2.20	1.57	1.67	infinite	6,925,927	28,016	28,016
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.94	3.39	3.11	2.68	2.40	1.89	1.10	1.68	infinite	1,831,252	39,629	39,629
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.28	2.17	1.97	1.89	1.65	1.14	1.68	infinite	7,356,782	39,308	39,308
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.99	2.83	2.60	2.56	2.24	1.65	1.68	infinite	7,685,156	27,296	27,296
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.36	2.28	2.01	1.46	1.68	infinite	7,384,387	30,352	30,352
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.83	2.68	2.48	2.36	2.13	1.50	1.68	infinite	7,388,279	30,131	30,131
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.56	2.48	2.24	2.17	1.89	1.30	1.69	infinite	6,899,271	33,758	33,758
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.36	2.20	2.01	1.93	1.65	1.14	1.70	infinite	7,066,220	38,919	38,919
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.44	2.28	2.17	1.97	1.89	1.57	1.02	1.70	infinite	5,687,824	43,525	43,525
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.60	2.36	2.32	2.01	1.46	1.70	infinite	7,360,217	30,178	30,178
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	1.93	1.77	1.65	1.54	1.42	1.14	0.71	1.70	infinite	5,660,957	62,099	62,099
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.72	2.48	2.40	2.17	1.57	1.70	infinite	8,000,000	27,613	27,613
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.56	2.36	2.24	2.01	1.42	1.70	infinite	7,273,262	31,409	31,409
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.60	2.44	2.24	2.13	1.89	1.34	1.70	infinite	7,268,150	33,475	33,475
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.72	2.52	2.48	2.17	1.57	1.71	infinite	7,425,540	27,765	27,765
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.32	2.17	1.97	1.89	1.57	1.02	1.71	infinite	5,485,722	43,842	43,842
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.68	2.52	2.36	2.24	1.97	1.34	1.71	infinite	6,732,405	32,962	32,962
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.20	2.13	1.93	1.85	1.61	1.10	1.71	infinite	7,343,872	40,808	40,808
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.56	2.40	2.24	2.01	1.93	1.61	1.06	1.71	infinite	5,437,696	43,068	43,068
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.20	2.01	1.93	1.65	1.14	1.72	infinite	6,731,860	40,248	40,248
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.48	2.36	2.13	2.05	1.69	1.10	1.72	infinite	5,258,802	41,190	41,190
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.36	2.20	2.05	1.89	1.77	1.54	1.02	1.72	infinite	6,536,461	44,251	44,251
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.28	2.05	2.01	1.73	1.22	1.72	infinite	7,558,958	36,336	36,336
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.56	2.44	2.28	2.20	1.93	1.34	1.72	infinite	7,344,668	33,378	33,378
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.52	2.40	2.20	2.13	1.85	1.26	1.73	infinite	6,831,310	35,618	35,618
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.91	2.80	2.60	2.52	2.24	1.57	1.73	infinite	7,053,199	28,258	28,258
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.80	2.64	2.44	2.36	2.09	1.46	1.73	infinite	7,028,123	30,102	30,102
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.80	2.68	2.48	2.36	2.13	1.57	1.74	infinite	7,946,788	28,168	28,168
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.54	3.46	3.31	3.03	2.95	2.64	1.89	1.75	infinite	6,575,270	23,266	23,266
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.95	2.80	2.56	2.48	2.20	1.57	1.77	infinite	6,926,145	28,682	28,682

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.60	2.40	2.20	2.09	1.81	1.26	1.78	infinite	6,591,508	35,702	35,702
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.56	2.40	2.24	2.05	1.93	1.65	1.06	1.79	infinite	5,507,278	42,762	42,762
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.17	1.97	1.89	1.57	1.06	1.79	infinite	5,682,708	43,038	43,038
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.64	2.44	2.36	2.09	1.46	1.79	infinite	7,105,105	31,183	31,183
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.36	2.20	2.09	1.93	1.77	1.54	0.98	1.80	infinite	5,925,546	45,589	45,589
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.91	2.76	2.52	2.44	2.13	1.54	1.81	infinite	6,675,522	29,438	29,438
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.64	2.52	2.32	2.24	2.01	1.42	1.81	infinite	7,797,339	31,094	31,094
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.64	2.48	2.28	2.20	1.93	1.34	1.81	infinite	6,863,139	33,702	33,702
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.68	2.56	2.32	2.20	1.97	1.38	1.81	infinite	6,893,117	32,512	32,512
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	2.87	2.68	2.40	2.24	1.85	1.18	1.82	infinite	3,556,188	38,273	38,273
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.28	2.17	2.01	1.81	1.65	1.42	0.91	1.82	infinite	5,385,299	48,899	48,899
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.24	2.01	1.93	1.65	1.18	1.83	infinite	7,002,629	38,510	38,510
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.72	2.56	2.32	2.24	1.93	1.30	1.83	infinite	5,780,776	33,807	33,807
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.68	2.56	2.32	2.24	1.97	1.38	1.83	infinite	6,882,808	33,221	33,221
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	3.11	2.95	2.68	2.64	2.32	1.69	1.84	infinite	7,107,176	26,009	26,009
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.98	3.43	3.11	2.68	2.40	1.89	1.10	1.84	infinite	1,784,928	39,702	39,702
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.80	2.64	2.44	2.40	2.13	1.54	1.85	infinite	8,000,000	28,159	28,159
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.52	2.36	2.17	2.09	1.81	1.22	1.85	infinite	6,356,180	36,630	36,630
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.50	3.39	3.23	2.99	2.91	2.64	1.89	1.85	infinite	7,018,971	22,938	22,938
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.60	2.48	2.28	2.20	1.97	1.38	1.85	infinite	7,743,309	32,424	32,424
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.80	2.64	2.40	2.36	2.05	1.46	1.86	infinite	6,987,523	30,393	30,393
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.76	2.56	2.28	2.09	1.73	1.06	1.86	infinite	3,216,421	41,603	41,603
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.44	2.36	2.13	2.09	1.81	1.30	1.89	infinite	7,781,019	34,481	34,481
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.15	3.03	2.87	2.64	2.56	2.32	1.69	1.90	infinite	7,690,297	25,677	25,677
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.56	2.36	2.24	2.01	1.46	1.90	infinite	7,597,571	30,780	30,780
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.21	3.62	3.31	2.83	2.56	2.01	1.18	1.91	infinite	1,770,139	38,066	38,066
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.95	2.76	2.52	2.40	2.09	1.38	1.92	infinite	5,036,335	32,016	32,016
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.60	2.48	2.32	2.20	1.97	1.34	1.93	infinite	7,304,021	31,998	31,998
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.48	2.32	2.09	2.01	1.73	1.18	1.93	infinite	6,049,807	37,642	37,642
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.83	2.72	2.44	2.32	2.05	1.46	1.93	infinite	6,373,178	31,308	31,308
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.72	2.48	2.44	2.13	1.50	1.93	infinite	6,645,113	29,259	29,259
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.76	2.64	2.40	2.32	2.09	1.50	1.95	infinite	7,765,757	29,757	29,757
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.83	2.68	2.48	2.40	2.17	1.57	1.95	infinite	8,000,000	28,247	28,247
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.64	2.44	2.17	2.05	1.69	1.10	1.96	infinite	4,129,583	41,520	41,520
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.64	2.44	2.17	2.05	1.69	1.10	1.96	infinite	4,094,811	41,300	41,300
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.62	3.31	2.99	2.56	2.36	1.85	1.14	1.96	infinite	2,283,487	39,301	39,301
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.60	2.44	2.28	2.20	1.89	1.38	1.98	infinite	7,276,605	32,900	32,900
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.15	2.87	2.72	2.44	2.28	1.97	1.34	1.98	infinite	4,766,293	33,882	33,882
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.64	2.52	2.28	2.24	1.97	1.38	1.98	infinite	7,578,150	31,941	31,941
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.62	3.15	2.91	2.52	2.28	1.81	1.14	1.98	infinite	2,431,247	40,415	40,415
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.37	3.78	3.39	2.95	2.68	2.09	1.22	1.98	infinite	1,677,635	36,109	36,109
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.27	3.15	2.95	2.76	2.68	2.44	1.77	2.00	infinite	7,876,323	24,951	24,951
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.46	3.27	3.07	2.87	2.72	2.48	1.77	2.00	infinite	6,612,514	25,420	25,420
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.28	2.17	1.97	1.93	1.65	1.14	2.01	infinite	7,178,565	39,323	39,323
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.60	2.48	2.24	2.20	1.93	1.38	2.01	infinite	7,546,993	32,114	32,114
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.03	2.83	2.64	2.52	2.20	1.65	2.01	infinite	6,860,151	27,482	27,482
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.64	2.48	2.40	2.17	2.13	1.85	1.26	2.02	infinite	7,075,973	35,098	35,098
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	3.07	2.87	2.64	2.56	2.28	1.69	2.02	infinite	7,328,411	26,068	26,068
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.91	2.80	2.60	2.56	2.28	1.61	2.04	infinite	7,565,590	27,273	27,273
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.60	2.44	2.24	2.17	1.89	1.30	2.04	infinite	6,465,914	34,249	34,249
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.72	2.56	2.32	2.24	1.97	1.42	2.04	infinite	7,114,215	32,048	32,048
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.61	3.98	3.66	3.15	2.87	2.28	1.38	2.05	infinite	1,788,336	32,744	32,744
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.36	2.20	2.05	1.89	1.77	1.57	1.10	2.06	infinite	7,866,480	42,130	42,130
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.64	2.52	2.32	2.24	1.97	1.46	2.07	infinite	7,992,961	31,186	31,186
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.83	2.64	2.36	2.20	1.89	1.30	2.07	infinite	4,891,236	35,495	35,495
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.54	3.15	2.83	2.48	2.24	1.81	1.10	2.07	infinite	2,381,627	40,418	40,418

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.60	2.48	2.32	2.24	1.97	1.34	2.07	infinite	7,354,426	32,250	32,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.09	1.97	1.81	1.65	1.54	1.34	0.87	2.08	infinite	6,686,475	51,331	51,331
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.40	2.24	2.13	1.89	1.85	1.57	1.10	2.09	infinite	7,105,661	41,112	41,112
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.68	2.48	2.28	2.20	1.89	1.26	2.11	infinite	5,691,603	36,261	36,261
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.91	2.76	2.48	2.44	2.13	1.50	2.12	infinite	6,354,754	29,491	29,491
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.24	2.09	1.85	1.77	1.50	0.98	2.12	infinite	5,858,183	45,357	45,357
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.60	2.44	2.32	2.05	1.97	1.69	1.10	2.12	infinite	5,531,009	40,763	40,763
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.28	2.17	2.05	1.85	1.73	1.46	0.91	2.12	infinite	5,355,766	47,755	47,755
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.80	2.60	2.36	2.24	1.89	1.34	2.13	infinite	5,274,614	34,327	34,327
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.95	2.76	2.52	2.40	2.13	1.42	2.13	infinite	5,583,799	31,284	31,284
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.46	3.27	3.11	2.83	2.72	2.44	1.81	2.13	infinite	6,820,576	25,009	25,009
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.60	2.48	2.28	2.20	1.97	1.34	2.14	infinite	7,428,358	32,389	32,389
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.83	2.60	2.36	2.17	1.85	1.26	2.14	infinite	4,516,377	36,828	36,828
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.23	3.03	2.83	2.60	2.52	2.20	1.61	2.16	infinite	6,563,772	28,197	28,197
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.99	2.76	2.48	2.32	1.97	1.34	2.16	infinite	4,792,054	33,322	33,322
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.80	2.64	2.40	2.36	2.09	1.46	2.18	infinite	7,067,874	30,053	30,053
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.80	2.64	2.36	2.28	1.97	1.30	2.18	infinite	5,379,571	34,260	34,260
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.17	2.05	1.85	1.73	1.50	0.94	2.18	infinite	5,649,135	46,412	46,412
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.52	2.36	2.20	2.01	1.93	1.65	1.06	2.20	infinite	5,823,024	42,444	42,444
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.74	3.23	2.95	2.56	2.32	1.85	1.14	2.20	infinite	2,244,179	39,548	39,548
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.27	3.11	2.95	2.68	2.64	2.36	1.73	2.21	infinite	7,508,515	26,018	26,018
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.43	2.99	2.80	2.44	2.28	1.81	1.18	2.22	infinite	2,982,071	38,819	38,819
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.54	3.27	2.95	2.52	2.32	1.85	1.14	2.23	infinite	2,389,876	39,032	39,032
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.17	2.05	1.93	1.73	1.65	1.46	0.98	2.23	infinite	7,751,893	46,414	46,414
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.43	3.23	3.03	2.80	2.76	2.44	1.73	2.23	infinite	6,461,998	25,812	25,812
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.28	2.13	2.05	1.81	1.77	1.54	1.06	2.24	infinite	7,844,873	42,802	42,802
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.61	3.98	3.66	3.19	2.91	2.32	1.46	2.25	infinite	1,980,163	31,675	31,675
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.15	3.19	2.95	2.68	2.56	2.20	1.61	2.26	infinite	6,068,128	27,987	27,987
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.80	2.60	2.36	2.28	1.93	1.26	2.26	infinite	5,136,445	35,202	35,202
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.24	2.09	1.97	1.77	1.73	1.50	1.02	2.27	infinite	7,762,808	44,308	44,308
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.31	3.07	2.91	2.64	2.52	2.24	1.61	2.27	infinite	6,069,140	27,951	27,951
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.58	3.23	2.95	2.48	2.28	1.81	1.10	2.27	infinite	2,231,500	40,249	40,249
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.15	3.19	2.95	2.68	2.60	2.20	1.61	2.27	infinite	6,067,153	27,945	27,945
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.87	2.68	2.40	2.20	1.85	1.30	2.28	infinite	4,502,670	36,040	36,040
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.80	2.60	2.36	2.20	1.89	1.26	2.29	infinite	4,546,087	36,291	36,291
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.72	2.52	2.32	2.24	1.97	1.38	2.29	infinite	6,737,227	33,440	33,440
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.48	2.28	2.13	1.97	1.85	1.61	1.02	2.30	infinite	5,726,771	43,279	43,279
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.70	3.23	2.95	2.60	2.40	1.93	1.22	2.30	infinite	2,602,267	37,206	37,206
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	5.04	4.41	4.02	3.50	3.19	2.56	1.61	2.31	infinite	1,812,661	28,676	28,676
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.99	2.83	2.56	2.52	2.28	1.65	2.31	infinite	7,910,895	26,672	26,672
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.43	3.07	2.80	2.44	2.20	1.81	1.14	2.31	infinite	2,712,419	39,439	39,439
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.20	2.05	1.89	1.73	1.65	1.42	0.91	2.32	infinite	6,427,704	48,703	48,703
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.43	3.27	2.95	2.64	2.44	2.05	1.38	2.33	infinite	3,702,174	33,501	33,501
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.60	2.48	2.24	2.20	1.97	1.38	2.35	infinite	7,844,440	32,590	32,590
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.74	3.66	3.35	2.91	2.68	2.17	1.38	2.36	infinite	2,713,658	32,947	32,947
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.32	2.20	2.09	1.85	1.77	1.57	1.10	2.37	infinite	7,739,746	40,549	40,549
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.76	2.60	2.48	2.20	2.13	1.89	1.30	2.37	infinite	6,547,027	34,255	34,255
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	5.04	4.69	4.45	4.09	3.86	3.46	2.60	2.38	infinite	4,590,869	17,507	17,507
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.91	2.72	2.60	2.36	2.32	2.09	1.50	2.39	infinite	8,000,000	29,409	29,409
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.09	3.50	3.19	2.76	2.48	1.93	1.06	2.39	infinite	1,605,344	40,008	40,008
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.20	2.09	1.97	1.77	1.73	1.46	0.94	2.40	infinite	6,536,274	46,732	46,732
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.66	3.23	2.95	2.64	2.44	2.01	1.30	2.43	infinite	3,065,762	35,807	35,807
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.68	2.56	2.44	2.17	2.13	1.89	1.30	2.44	infinite	7,058,809	33,648	33,648
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.87	2.72	2.44	2.44	2.13	1.54	2.44	infinite	7,160,249	28,803	28,803
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.99	2.76	2.44	2.32	1.93	1.34	2.44	infinite	4,759,238	33,662	33,662
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.36	2.20	2.05	1.85	1.77	1.54	1.10	2.45	infinite	7,664,417	41,665	41,665

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.64	2.40	2.36	2.13	1.54	2.47	infinite	7,878,036	28,176	28,176
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.80	2.60	2.36	2.17	1.89	1.30	2.47	infinite	4,932,173	35,729	35,729
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.80	2.64	2.36	2.24	1.97	1.38	2.48	infinite	5,697,900	32,985	32,985
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	5.08	4.37	4.02	3.50	3.23	2.60	1.61	2.48	infinite	1,827,135	28,489	28,489
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.72	2.60	2.48	2.20	2.20	1.93	1.38	2.50	infinite	7,802,182	32,090	32,090
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.70	3.15	2.87	2.52	2.28	1.85	1.10	2.55	infinite	2,294,473	41,075	41,075
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.96	4.61	4.37	3.98	3.82	3.39	2.56	2.56	infinite	4,700,609	17,832	17,832
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.80	2.60	2.24	2.13	1.77	1.14	2.57	infinite	3,749,044	40,014	40,014
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.70	3.66	3.35	2.91	2.68	2.17	1.38	2.58	infinite	2,758,723	32,955	32,955
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.57	3.98	3.62	3.15	2.87	2.32	1.46	2.60	infinite	2,030,117	31,857	31,857
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.74	3.27	3.03	2.60	2.40	1.97	1.22	2.61	infinite	2,508,298	36,777	36,777
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.15	3.15	2.95	2.60	2.52	2.20	1.57	2.62	infinite	5,835,323	28,284	28,284
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.87	2.87	2.68	2.36	2.17	1.77	1.14	2.63	infinite	3,871,242	39,446	39,446
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.35	3.31	2.99	2.64	2.52	2.09	1.42	2.63	infinite	3,984,613	32,269	32,269
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	5.16	4.49	4.09	3.54	3.23	2.64	1.61	2.63	infinite	1,715,796	28,048	28,048
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.02	3.74	3.46	3.19	2.95	2.64	1.89	2.66	infinite	4,702,177	24,641	24,641
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	3.03	2.76	2.44	2.32	1.97	1.34	2.67	infinite	4,678,052	33,559	33,559
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.94	4.06	3.74	3.39	3.19	2.80	1.97	2.67	infinite	4,585,574	23,039	23,039
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	1.93	1.81	1.65	1.50	1.42	1.18	0.71	2.67	infinite	5,779,454	61,766	61,766
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.82	3.43	3.15	2.80	2.60	2.17	1.46	2.67	infinite	3,212,309	31,570	31,570
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.72	4.88	4.57	4.13	3.94	3.50	2.64	2.68	infinite	4,887,046	16,765	16,765
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.72	2.60	2.32	2.24	2.01	1.42	2.69	infinite	6,766,823	31,789	31,789
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	3.11	2.91	2.60	2.44	2.09	1.50	2.69	infinite	5,666,343	30,471	30,471
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.69	4.06	3.66	3.15	2.87	2.32	1.38	2.70	infinite	1,721,154	32,429	32,429
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.99	2.80	2.44	2.28	1.89	1.18	2.71	infinite	3,678,072	37,782	37,782
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.37	3.90	3.58	3.15	2.95	2.44	1.61	2.72	infinite	2,672,817	28,816	28,816
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.61	3.98	3.62	3.11	2.87	2.28	1.42	2.72	infinite	1,874,859	32,200	32,200
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.06	3.74	3.46	3.15	2.99	2.64	1.85	2.72	infinite	4,459,201	25,013	25,013
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.80	2.60	2.24	2.17	1.77	1.14	2.74	infinite	3,696,153	40,246	40,246
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.07	2.99	2.80	2.40	2.28	1.89	1.18	2.75	infinite	3,610,330	37,678	37,678
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.83	2.83	2.64	2.32	2.13	1.73	1.10	2.75	infinite	3,771,553	40,773	40,773
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	2.99	2.87	2.60	2.36	2.01	1.30	2.77	infinite	4,498,578	34,607	34,607
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.99	2.68	2.40	2.28	1.89	1.30	2.78	infinite	4,730,685	35,326	35,326
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.19	2.91	2.72	2.48	2.36	2.05	1.50	2.78	infinite	6,005,195	30,712	30,712
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.50	3.07	2.83	2.48	2.28	1.81	1.22	2.80	infinite	2,944,901	38,316	38,316
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.54	3.11	2.87	2.48	2.32	1.89	1.22	2.80	infinite	2,904,364	37,316	37,316
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.39	2.95	2.76	2.36	2.20	1.81	1.14	2.81	infinite	2,967,518	39,987	39,987
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.99	3.11	2.87	2.60	2.44	2.09	1.50	2.81	infinite	5,853,267	30,399	30,399
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.86	3.43	3.19	2.80	2.60	2.17	1.46	2.83	infinite	3,144,124	31,624	31,624
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.70	3.70	3.35	2.91	2.72	2.20	1.42	2.83	infinite	2,884,426	32,099	32,099
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.86	4.02	3.74	3.39	3.19	2.76	1.93	2.84	infinite	4,508,783	23,348	23,348
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.11	2.80	2.56	2.28	2.17	1.81	1.22	2.86	infinite	4,249,063	37,881	37,881
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	3.07	2.83	2.56	2.40	2.09	1.46	2.89	infinite	5,793,387	30,836	30,836
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.39	2.99	2.76	2.40	2.20	1.85	1.18	2.89	infinite	3,184,953	39,545	39,545
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.80	2.83	2.64	2.32	2.13	1.77	1.14	2.89	infinite	4,108,861	39,175	39,175
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	3.03	2.91	2.64	2.44	2.01	1.30	2.93	infinite	4,311,684	34,743	34,743
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.95	2.80	2.64	2.36	2.28	1.97	1.22	2.94	infinite	4,622,155	35,710	35,710
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	4.57	3.98	3.62	3.11	2.87	2.32	1.46	2.95	infinite	2,031,734	31,797	31,797
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	2.56	2.44	2.28	2.20	2.13	1.81	1.18	2.97	infinite	6,787,232	37,378	37,378
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.98	3.82	3.46	2.99	2.68	2.05	1.18	2.97	infinite	1,755,496	36,378	36,378
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.03	2.99	2.80	2.40	2.28	1.89	1.18	2.97	infinite	3,718,537	38,003	38,003
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-29-2004	10	infinite	3.31	3.31	3.03	2.60	2.40	1.93	1.26	2.99	infinite	3,115,611	36,397	36,397
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.40	2.28	2.13	2.01	1.73	1.22	0.65	infinite	7,358,108	36,661	36,661
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.20	2.05	1.93	1.81	1.69	1.42	0.98	0.68	infinite	7,376,682	47,203	47,203
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.68	2.48	2.36	2.01	1.42	0.68	infinite	6,292,689	32,096	32,096
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.36	2.24	2.09	1.97	1.69	1.18	0.70	infinite	7,219,502	38,098	38,098

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.28	2.17	2.01	1.85	1.57	1.06	0.71	infinite	5,931,151	42,534	42,534
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.52	2.44	2.24	2.09	1.81	1.26	0.74	infinite	6,638,555	36,300	36,300
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.83	2.72	2.52	2.40	2.05	1.46	0.76	infinite	6,300,476	31,234	31,234
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.60	2.52	2.40	2.24	2.13	1.85	1.34	0.77	infinite	7,983,927	32,930	32,930
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.56	2.44	2.28	2.17	1.85	1.30	0.79	infinite	6,779,047	34,652	34,652
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.76	2.56	2.44	2.13	1.54	0.79	infinite	6,972,410	29,037	29,037
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.58	3.46	3.31	3.15	2.99	2.68	1.97	0.84	infinite	7,100,495	22,260	22,260
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.72	2.52	2.40	2.05	1.46	0.88	infinite	6,050,345	30,911	30,911
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.95	2.80	2.68	2.52	2.24	1.65	0.89	infinite	7,786,609	27,311	27,311
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.72	2.48	2.36	2.01	1.42	0.89	infinite	5,869,246	31,876	31,876
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.24	2.09	1.97	1.69	1.22	0.91	infinite	7,518,489	36,906	36,906
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.17	2.01	1.89	1.77	1.61	1.34	0.87	0.93	infinite	5,893,455	51,682	51,682
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.32	2.20	2.01	1.89	1.61	1.10	0.94	infinite	6,625,403	41,902	41,902
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	3.07	2.95	2.72	2.60	2.28	1.65	0.95	infinite	6,699,601	26,891	26,891
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.20	2.09	1.93	1.85	1.57	1.10	0.96	infinite	7,605,192	40,345	40,345
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.17	2.05	1.89	1.77	1.50	1.06	0.97	infinite	7,227,920	43,349	43,349
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.87	2.76	2.56	2.48	2.17	1.61	0.97	infinite	7,788,530	27,133	27,133
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.28	2.17	2.01	1.85	1.61	1.10	0.97	infinite	6,747,653	41,766	41,766
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.24	2.05	1.89	1.61	1.06	0.98	infinite	5,632,709	43,163	43,163
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.28	2.17	1.97	1.85	1.57	1.06	0.98	infinite	6,147,846	42,834	42,834
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.39	3.31	3.15	2.95	2.83	2.52	1.89	1.00	infinite	7,582,256	23,158	23,158
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.64	2.48	2.28	2.17	1.81	1.26	1.01	infinite	5,734,377	36,151	36,151
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.07	2.95	2.76	2.64	2.32	1.65	1.02	infinite	6,763,823	27,303	27,303
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.32	2.17	2.01	1.89	1.61	1.14	1.02	infinite	7,228,775	39,703	39,703
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.56	2.44	2.28	2.13	2.01	1.73	1.22	1.03	infinite	7,066,899	36,930	36,930
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.60	2.40	2.32	2.01	1.46	1.03	infinite	7,514,014	30,270	30,270
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.76	2.56	2.40	2.13	1.50	1.04	infinite	6,547,079	29,656	29,656
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.95	2.83	2.64	2.52	2.24	1.61	1.04	infinite	7,306,627	27,257	27,257
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.95	2.80	2.60	2.48	2.17	1.54	1.06	infinite	6,624,329	29,157	29,157
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.83	2.68	2.52	2.40	2.13	1.54	1.07	infinite	7,783,175	28,571	28,571
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.64	2.52	2.32	2.24	1.93	1.38	1.08	infinite	7,265,146	32,435	32,435
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.72	2.52	2.44	2.13	1.57	1.08	infinite	7,613,590	27,964	27,964
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.68	2.48	2.36	2.05	1.46	1.09	infinite	6,560,523	31,202	31,202
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.80	2.64	2.48	2.32	2.01	1.38	1.09	infinite	5,997,056	32,120	32,120
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.95	2.80	2.60	2.48	2.17	1.57	1.10	infinite	6,791,284	28,783	28,783
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.91	2.80	2.56	2.44	2.13	1.54	1.10	infinite	6,651,645	29,260	29,260
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.56	2.44	2.28	2.13	1.85	1.26	1.12	infinite	6,124,632	35,174	35,174
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.24	2.13	1.97	1.85	1.61	1.14	1.13	infinite	7,637,160	39,366	39,366
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.60	2.40	2.28	2.01	1.42	1.13	infinite	7,010,315	30,901	30,901
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.44	2.32	2.17	2.05	1.77	1.26	1.14	infinite	7,324,361	36,470	36,470
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.91	2.83	2.60	2.48	2.20	1.57	1.14	infinite	6,979,740	28,222	28,222
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.80	2.68	2.48	2.36	2.05	1.42	1.14	infinite	6,251,190	31,911	31,911
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.13	2.01	1.89	1.73	1.61	1.34	0.87	1.14	infinite	6,105,883	51,437	51,437
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.76	2.60	2.40	2.28	1.97	1.38	1.15	infinite	6,256,558	32,881	32,881
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.27	3.11	2.95	2.76	2.64	2.32	1.65	1.15	infinite	6,483,700	27,211	27,211
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.32	2.17	1.97	1.85	1.54	1.02	1.15	infinite	5,517,461	44,029	44,029
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.40	2.28	2.01	1.46	1.15	infinite	7,440,809	30,803	30,803
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.40	2.28	2.01	1.46	1.15	infinite	7,419,115	30,712	30,712
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.39	3.31	3.15	2.95	2.80	2.48	1.77	1.16	infinite	6,441,640	25,143	25,143
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.40	2.28	2.01	1.42	1.16	infinite	6,955,524	31,427	31,427
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.28	2.17	1.97	1.89	1.57	1.10	1.16	infinite	6,597,733	41,269	41,269
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.07	2.91	2.72	2.60	2.28	1.61	1.18	infinite	6,375,871	27,903	27,903
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.56	2.40	2.24	2.05	1.93	1.61	1.06	1.18	infinite	5,360,461	42,718	42,718
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.80	2.72	2.48	2.32	2.05	1.46	1.18	infinite	6,809,878	30,936	30,936
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.68	2.56	2.36	2.24	1.97	1.38	1.18	infinite	6,861,957	32,556	32,556
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.95	2.80	2.60	2.48	2.20	1.61	1.19	infinite	7,275,732	27,294	27,294

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.36	2.24	2.05	1.97	1.69	1.22	1.19	infinite	7,972,166	36,687	36,687
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.07	2.91	2.72	2.56	2.28	1.65	1.20	infinite	6,697,537	27,134	27,134
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.68	2.44	2.36	2.01	1.42	1.20	infinite	6,350,350	32,179	32,179
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.91	2.80	2.60	2.52	2.20	1.57	1.21	infinite	7,068,977	28,257	28,257
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.36	2.24	2.13	1.93	1.85	1.57	1.10	1.21	infinite	7,208,158	40,869	40,869
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.13	2.05	1.89	1.77	1.54	1.06	1.21	infinite	7,499,994	42,735	42,735
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	3.03	2.87	2.68	2.56	2.28	1.69	1.21	infinite	7,614,449	26,189	26,189
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.20	2.09	1.97	1.81	1.69	1.46	0.98	1.21	infinite	7,139,221	46,078	46,078
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.32	2.20	2.01	1.89	1.61	1.10	1.21	infinite	6,217,962	41,416	41,416
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.28	2.13	1.97	1.85	1.57	1.10	1.21	infinite	6,863,484	42,316	42,316
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.40	2.32	2.01	1.42	1.22	infinite	6,995,950	31,557	31,557
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.36	2.20	2.09	1.93	1.81	1.57	1.06	1.22	infinite	6,907,933	42,055	42,055
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	2.99	2.91	2.68	2.56	2.28	1.65	1.23	infinite	7,058,143	26,831	26,831
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.36	2.24	2.05	1.97	1.69	1.22	1.23	infinite	7,781,572	36,860	36,860
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.40	2.28	2.13	2.01	1.73	1.22	1.23	infinite	7,591,852	35,771	35,771
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.91	2.76	2.60	2.48	2.20	1.57	1.23	infinite	7,309,782	28,855	28,855
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.95	2.80	2.60	2.48	2.20	1.57	1.24	infinite	6,873,813	28,003	28,003
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.99	2.83	2.64	2.52	2.24	1.61	1.24	infinite	7,032,578	27,345	27,345
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.50	3.39	3.27	3.03	2.95	2.60	1.89	1.24	infinite	6,819,204	23,129	23,129
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.76	2.60	2.40	2.28	1.97	1.42	1.25	infinite	6,563,122	31,729	31,729
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.40	2.28	2.09	2.01	1.73	1.26	1.25	infinite	7,867,691	35,254	35,254
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	2.99	2.87	2.68	2.56	2.28	1.65	1.26	infinite	7,144,338	26,796	26,796
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.95	2.80	2.56	2.44	2.09	1.42	1.26	infinite	5,300,193	31,520	31,520
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.40	2.32	2.13	2.01	1.77	1.22	1.26	infinite	7,270,482	35,879	35,879
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.80	2.56	2.44	2.17	1.54	1.27	infinite	6,965,443	28,773	28,773
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.28	2.09	1.93	1.69	1.22	1.27	infinite	7,415,579	37,059	37,059
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.66	3.50	3.39	3.15	3.03	2.76	2.09	1.28	infinite	7,907,572	20,872	20,872
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.83	2.72	2.52	2.36	2.13	1.57	1.28	infinite	7,890,222	28,296	28,296
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.32	2.20	2.05	1.93	1.65	1.10	1.28	infinite	6,487,805	41,211	41,211
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.56	2.40	2.28	2.01	1.46	1.28	infinite	7,577,821	30,898	30,898
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.13	1.97	1.85	1.69	1.57	1.34	0.91	1.29	infinite	6,973,650	50,195	50,195
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.32	2.20	2.01	1.89	1.61	1.06	1.29	infinite	5,952,822	42,721	42,721
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.31	3.11	2.95	2.76	2.64	2.32	1.65	1.29	infinite	6,391,313	27,416	27,416
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.95	2.83	2.60	2.52	2.20	1.57	1.29	infinite	6,645,725	27,937	27,937
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.83	2.68	2.44	2.32	2.01	1.42	1.29	infinite	6,170,302	31,711	31,711
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.64	2.48	2.36	2.09	1.54	1.31	infinite	7,702,212	28,633	28,633
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.28	2.17	1.97	1.89	1.61	1.10	1.31	infinite	6,796,700	40,220	40,220
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.80	2.68	2.48	2.40	2.09	1.50	1.32	infinite	7,198,938	30,300	30,300
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.09	1.93	1.85	1.69	1.57	1.34	0.87	1.32	infinite	6,675,528	51,250	51,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.28	2.13	1.97	1.81	1.57	1.10	1.32	infinite	6,835,695	41,138	41,138
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.46	3.31	3.15	2.91	2.83	2.48	1.81	1.32	infinite	6,594,455	24,636	24,636
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.83	2.68	2.48	2.36	2.05	1.42	1.33	infinite	5,948,374	31,456	31,456
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.62	3.50	3.35	3.11	3.03	2.72	2.05	1.33	infinite	7,740,953	21,470	21,470
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.27	3.11	2.95	2.76	2.64	2.36	1.73	1.33	infinite	7,349,067	25,832	25,832
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.91	2.80	2.60	2.52	2.24	1.61	1.33	infinite	7,658,651	26,905	26,905
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.28	2.17	1.97	1.89	1.57	1.06	1.33	infinite	6,089,954	43,257	43,257
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.32	2.17	2.01	1.89	1.65	1.14	1.33	infinite	7,167,987	39,403	39,403
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.60	2.36	2.28	1.97	1.42	1.34	infinite	7,116,638	31,879	31,879
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.99	2.87	2.64	2.56	2.28	1.69	1.34	infinite	7,853,895	25,684	25,684
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.43	3.31	3.15	2.91	2.80	2.48	1.77	1.35	infinite	6,307,955	24,992	24,992
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.28	2.20	2.01	1.89	1.57	1.02	1.35	infinite	5,538,862	44,221	44,221
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.68	2.52	2.32	2.24	1.89	1.30	1.36	infinite	5,858,648	34,038	34,038
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.56	2.44	2.24	2.13	1.89	1.34	1.36	infinite	7,576,459	33,333	33,333
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.76	2.60	2.40	2.28	2.01	1.42	1.36	infinite	6,888,319	31,693	31,693
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.32	2.20	2.01	1.89	1.61	1.06	1.37	infinite	5,849,109	43,058	43,058
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.52	2.40	2.20	2.09	1.81	1.26	1.37	infinite	6,599,666	36,246	36,246

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.52	2.40	2.24	2.13	1.85	1.26	1.37	infinite	6,738,156	35,370	35,370
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.64	2.56	2.36	2.24	2.01	1.42	1.38	infinite	7,658,964	31,250	31,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.32	2.20	2.05	1.93	1.65	1.10	1.38	infinite	6,535,868	40,445	40,445
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	2.91	2.76	2.44	2.28	1.89	1.22	1.38	infinite	3,809,933	37,714	37,714
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.64	2.56	2.32	2.20	1.93	1.34	1.38	infinite	6,453,403	33,429	33,429
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.68	2.56	2.36	2.24	1.97	1.42	1.38	infinite	7,164,498	31,888	31,888
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.56	2.36	2.24	1.97	1.42	1.39	infinite	7,225,974	31,944	31,944
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	3.03	2.87	2.68	2.56	2.28	1.61	1.39	infinite	6,718,456	27,152	27,152
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.52	2.40	2.20	2.13	1.85	1.30	1.39	infinite	7,417,795	34,306	34,306
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.72	2.48	2.40	2.13	1.54	1.40	infinite	7,476,524	27,945	27,945
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.87	2.76	2.56	2.48	2.17	1.54	1.40	infinite	6,895,146	28,723	28,723
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.76	2.64	2.44	2.36	2.09	1.50	1.40	infinite	7,732,673	29,802	29,802
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.40	2.24	2.01	1.42	1.40	infinite	7,031,083	31,819	31,819
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.07	2.91	2.72	2.60	2.32	1.65	1.41	infinite	6,747,344	26,742	26,742
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.07	2.91	2.72	2.60	2.32	1.65	1.41	infinite	6,709,365	26,590	26,590
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	2.99	2.87	2.68	2.60	2.28	1.61	1.43	infinite	6,768,232	26,844	26,844
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.64	2.44	2.36	2.05	1.46	1.43	infinite	6,974,647	31,304	31,304
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.60	2.48	2.28	2.20	1.93	1.38	1.43	infinite	7,419,015	31,828	31,828
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.32	2.20	2.05	1.93	1.69	1.14	1.44	infinite	7,118,684	38,786	38,786
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.20	2.13	1.93	1.85	1.57	1.06	1.44	infinite	7,089,663	42,502	42,502
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.64	2.40	2.32	2.05	1.46	1.44	infinite	7,476,627	29,856	29,856
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.20	2.05	1.93	1.77	1.69	1.42	0.94	1.45	infinite	6,841,277	48,623	48,623
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.36	2.24	2.05	1.97	1.73	1.22	1.45	infinite	7,982,898	35,737	35,737
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.27	3.15	2.99	2.76	2.64	2.36	1.69	1.46	infinite	6,589,244	25,824	25,824
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.20	2.09	1.93	1.81	1.57	1.06	1.46	infinite	6,767,198	42,362	42,362
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.39	3.27	3.15	2.91	2.83	2.56	1.89	1.46	infinite	7,842,516	22,917	22,917
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.52	2.40	2.20	2.13	1.81	1.26	1.46	infinite	6,615,194	36,258	36,258
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.56	2.36	2.24	1.93	1.30	1.46	infinite	5,746,599	33,825	33,825
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.83	2.64	2.48	2.40	2.09	1.50	1.46	infinite	7,394,854	30,357	30,357
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.56	2.44	2.24	2.17	1.89	1.34	1.46	infinite	7,409,628	33,410	33,410
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.20	2.01	1.89	1.61	1.06	1.47	infinite	5,679,700	42,596	42,596
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.54	3.43	3.27	3.03	2.95	2.64	1.93	1.47	infinite	7,088,018	22,767	22,767
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.27	3.07	2.91	2.76	2.68	2.36	1.77	1.47	infinite	8,000,000	25,193	25,193
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.99	2.83	2.64	2.56	2.28	1.65	1.47	infinite	7,518,813	26,330	26,330
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.56	2.36	2.24	1.97	1.38	1.47	infinite	6,707,792	33,208	33,208
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.99	2.83	2.60	2.52	2.20	1.61	1.47	infinite	7,258,207	27,295	27,295
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.68	2.48	2.36	2.13	1.54	1.47	infinite	7,780,339	28,697	28,697
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.11	2.95	2.72	2.64	2.32	1.65	1.48	infinite	6,583,720	26,848	26,848
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.52	2.36	2.20	2.09	1.85	1.34	1.48	infinite	8,000,000	33,250	33,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.83	2.68	2.48	2.40	2.13	1.54	1.49	infinite	7,571,330	28,287	28,287
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	3.03	2.87	2.68	2.60	2.28	1.61	1.49	infinite	6,717,770	27,109	27,109
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.76	2.60	2.40	2.32	2.05	1.50	1.49	infinite	7,980,017	29,272	29,272
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.62	3.50	3.35	3.11	2.99	2.72	2.09	1.50	infinite	7,961,779	20,635	20,635
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.32	2.17	1.97	1.85	1.57	1.02	1.50	infinite	5,438,005	43,700	43,700
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.60	2.48	2.28	2.20	1.89	1.30	1.50	infinite	6,454,637	34,870	34,870
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.32	2.17	2.01	1.89	1.65	1.14	1.51	infinite	7,011,287	39,595	39,595
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.52	2.36	2.17	2.05	1.77	1.26	1.52	infinite	6,777,694	36,566	36,566
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.28	2.13	2.05	1.85	1.77	1.54	1.06	1.52	infinite	7,644,280	41,945	41,945
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	1.93	1.81	1.69	1.54	1.42	1.14	0.71	1.53	infinite	5,496,481	62,374	62,374
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.56	2.40	2.32	2.05	1.50	1.54	infinite	8,000,000	29,312	29,312
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.68	2.60	2.36	2.28	1.97	1.38	1.54	infinite	6,482,609	32,672	32,672
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.80	2.64	2.44	2.36	2.09	1.50	1.54	infinite	7,546,310	28,892	28,892
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.91	2.76	2.56	2.48	2.20	1.61	1.55	infinite	7,602,518	27,387	27,387
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.83	2.72	2.48	2.44	2.13	1.54	1.55	infinite	7,506,516	28,426	28,426
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.28	2.20	2.01	1.89	1.61	1.06	1.55	infinite	6,373,057	42,555	42,555
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.32	2.20	2.01	1.89	1.65	1.10	1.56	infinite	6,470,706	40,969	40,969

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.27	3.11	2.95	2.72	2.60	2.32	1.65	1.56	infinite	6,431,738	26,857	26,857
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.36	2.20	2.01	1.93	1.65	1.14	1.56	infinite	6,808,871	39,622	39,622
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.72	2.56	2.48	2.20	1.57	1.56	infinite	7,745,260	28,690	28,690
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.64	2.48	2.28	2.20	1.89	1.30	1.56	infinite	6,230,887	34,273	34,273
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.24	2.09	2.01	1.81	1.73	1.50	1.02	1.56	infinite	7,568,853	44,315	44,315
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.24	2.09	2.01	1.81	1.73	1.50	1.02	1.56	infinite	7,383,258	43,223	43,223
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.64	2.52	2.28	2.17	1.89	1.30	1.57	infinite	6,197,512	35,258	35,258
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.76	2.60	2.40	2.28	2.01	1.38	1.57	infinite	6,304,885	32,402	32,402
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.80	2.64	2.48	2.36	2.09	1.54	1.58	infinite	7,791,681	29,731	29,731
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.80	2.68	2.44	2.36	2.05	1.42	1.58	infinite	6,332,740	32,109	32,109
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.76	2.60	2.40	2.32	2.05	1.46	1.59	infinite	7,346,557	30,210	30,210
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.60	2.48	2.40	2.17	2.09	1.85	1.30	1.59	infinite	7,780,620	34,189	34,189
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.24	2.13	2.01	1.81	1.69	1.46	1.02	1.60	infinite	7,173,932	44,369	44,369
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.24	2.13	2.01	1.81	1.69	1.46	1.02	1.60	infinite	7,206,574	44,611	44,611
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.24	2.09	1.93	1.81	1.57	1.10	1.60	infinite	7,071,144	40,886	40,886
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.52	2.40	2.24	2.17	1.89	1.34	1.60	infinite	7,685,821	33,459	33,459
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.60	2.48	2.32	2.17	2.05	1.73	1.14	1.60	infinite	5,727,351	38,621	38,621
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.60	2.48	2.32	2.17	2.05	1.73	1.14	1.60	infinite	5,739,390	38,672	38,672
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.28	2.09	2.05	1.85	1.77	1.54	1.06	1.61	infinite	7,871,495	42,230	42,230
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.36	2.20	2.09	1.89	1.81	1.54	1.02	1.61	infinite	6,440,100	44,156	44,156
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.91	2.76	2.52	2.44	2.13	1.54	1.61	infinite	6,798,866	29,280	29,280
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.17	3.62	3.27	2.83	2.56	1.97	1.14	1.61	infinite	1,703,687	39,023	39,023
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.44	2.32	2.13	2.05	1.77	1.26	1.61	infinite	7,362,550	36,346	36,346
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.28	2.17	2.05	1.89	1.77	1.57	1.06	1.61	infinite	7,582,740	41,970	41,970
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.68	2.44	2.28	2.01	1.42	1.62	infinite	6,098,864	32,134	32,134
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.56	2.36	2.28	2.01	1.42	1.62	infinite	7,320,687	31,572	31,572
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.76	2.64	2.40	2.32	2.01	1.46	1.62	infinite	6,966,727	31,232	31,232
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.56	2.44	2.24	2.13	1.89	1.30	1.62	infinite	6,928,162	34,333	34,333
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.76	2.64	2.44	2.36	2.09	1.54	1.62	infinite	8,000,000	29,163	29,163
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.72	2.48	2.40	2.13	1.57	1.62	infinite	7,820,506	28,488	28,488
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.24	2.01	1.93	1.65	1.14	1.62	infinite	6,528,678	39,627	39,627
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.52	2.40	2.17	2.09	1.77	1.26	1.63	infinite	6,551,894	36,686	36,686
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.99	2.83	2.60	2.52	2.24	1.61	1.63	infinite	7,245,604	27,319	27,319
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.31	3.07	2.95	2.72	2.64	2.32	1.69	1.63	infinite	6,822,731	26,463	26,463
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	2.91	2.72	2.44	2.28	1.89	1.18	1.63	infinite	3,629,894	38,465	38,465
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.24	2.09	1.89	1.77	1.50	0.98	1.64	infinite	5,814,756	45,326	45,326
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.56	2.44	2.24	2.13	1.89	1.30	1.64	infinite	7,164,107	33,703	33,703
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.48	2.32	2.13	2.01	1.69	1.14	1.65	infinite	6,114,928	39,941	39,941
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.68	2.44	2.36	2.05	1.42	1.65	infinite	6,141,094	31,541	31,541
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.28	2.13	1.93	1.77	1.54	1.02	1.65	infinite	5,866,027	44,089	44,089
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.56	2.44	2.28	2.09	1.97	1.73	1.18	1.65	infinite	6,579,037	37,664	37,664
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.36	2.28	2.01	1.42	1.66	infinite	7,043,901	31,609	31,609
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.46	3.39	3.23	2.99	2.95	2.60	1.89	1.66	infinite	7,041,000	22,917	22,917
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.72	2.56	2.36	2.24	1.97	1.38	1.66	infinite	6,504,429	32,988	32,988
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.24	2.05	1.97	1.73	1.22	1.67	infinite	7,709,770	36,653	36,653
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.24	2.05	1.97	1.73	1.22	1.67	infinite	7,653,857	36,285	36,285
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.36	2.20	2.01	1.93	1.65	1.18	1.67	infinite	7,338,247	38,640	38,640
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.68	2.48	2.40	2.13	1.57	1.67	infinite	7,919,746	28,434	28,434
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.35	3.27	3.11	2.91	2.80	2.56	1.85	1.67	infinite	7,600,934	23,145	23,145
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.95	2.80	2.56	2.48	2.20	1.57	1.67	infinite	6,925,927	28,016	28,016
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.94	3.39	3.11	2.68	2.40	1.89	1.10	1.68	infinite	1,831,251	39,629	39,629
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.28	2.17	1.97	1.89	1.65	1.14	1.68	infinite	7,356,773	39,308	39,308
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.99	2.83	2.60	2.56	2.24	1.65	1.68	infinite	7,685,156	27,296	27,296
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.36	2.28	2.01	1.46	1.68	infinite	7,384,348	30,352	30,352
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.83	2.68	2.48	2.36	2.13	1.50	1.68	infinite	7,388,304	30,131	30,131
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.56	2.48	2.24	2.17	1.89	1.30	1.69	infinite	6,899,260	33,758	33,758

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.36	2.20	2.01	1.93	1.65	1.14	1.70	infinite	7,066,211	38,919	38,919
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.28	2.17	1.97	1.89	1.57	1.02	1.70	infinite	5,687,824	43,525	43,525
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.60	2.36	2.32	2.01	1.46	1.70	infinite	7,360,231	30,178	30,178
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	1.93	1.77	1.65	1.54	1.42	1.14	0.71	1.70	infinite	5,660,952	62,099	62,099
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.72	2.48	2.40	2.17	1.57	1.70	infinite	8,000,000	27,613	27,613
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.56	2.36	2.24	2.01	1.42	1.70	infinite	7,273,262	31,409	31,409
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.60	2.44	2.24	2.13	1.89	1.34	1.70	infinite	7,268,178	33,475	33,475
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.72	2.52	2.48	2.17	1.57	1.71	infinite	7,425,540	27,765	27,765
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.32	2.17	1.97	1.89	1.57	1.02	1.71	infinite	5,485,722	43,842	43,842
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.68	2.52	2.36	2.24	1.97	1.34	1.71	infinite	6,739,401	32,952	32,952
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.20	2.13	1.93	1.85	1.61	1.10	1.71	infinite	7,343,841	40,808	40,808
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.56	2.40	2.24	2.01	1.93	1.61	1.06	1.71	infinite	5,437,696	43,068	43,068
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.20	2.01	1.93	1.65	1.14	1.72	infinite	6,731,860	40,248	40,248
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.48	2.36	2.13	2.05	1.69	1.10	1.72	infinite	5,258,802	41,190	41,190
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.36	2.20	2.05	1.89	1.77	1.54	1.02	1.72	infinite	6,536,461	44,251	44,251
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.28	2.05	2.01	1.73	1.22	1.72	infinite	7,558,954	36,336	36,336
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.56	2.44	2.28	2.20	1.93	1.34	1.72	infinite	7,344,668	33,378	33,378
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.52	2.40	2.20	2.13	1.85	1.26	1.73	infinite	6,831,323	35,618	35,618
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.91	2.80	2.60	2.52	2.24	1.57	1.73	infinite	7,053,199	28,258	28,258
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.80	2.64	2.44	2.36	2.09	1.46	1.73	infinite	7,028,123	30,102	30,102
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.80	2.68	2.48	2.36	2.13	1.57	1.74	infinite	7,946,788	28,168	28,168
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.54	3.46	3.31	3.03	2.95	2.64	1.89	1.75	infinite	6,575,270	23,266	23,266
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.95	2.80	2.56	2.48	2.20	1.57	1.77	infinite	6,926,145	28,682	28,682
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.60	2.40	2.20	2.09	1.81	1.26	1.78	infinite	6,591,508	35,702	35,702
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.20	2.01	1.89	1.81	1.54	1.06	1.78	infinite	7,254,234	42,090	42,090
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.56	2.40	2.24	2.05	1.93	1.65	1.06	1.79	infinite	5,507,278	42,762	42,762
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.17	1.97	1.89	1.57	1.06	1.79	infinite	5,682,708	43,038	43,038
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.64	2.44	2.36	2.09	1.46	1.79	infinite	7,105,166	31,183	31,183
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.36	2.20	2.09	1.93	1.77	1.54	0.98	1.80	infinite	5,925,546	45,589	45,589
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.91	2.76	2.52	2.44	2.13	1.54	1.81	infinite	6,675,522	29,438	29,438
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.64	2.52	2.32	2.24	2.01	1.42	1.81	infinite	7,797,358	31,094	31,094
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.64	2.48	2.28	2.20	1.93	1.34	1.81	infinite	6,863,139	33,702	33,702
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.68	2.56	2.32	2.20	1.97	1.38	1.81	infinite	6,893,110	32,512	32,512
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	2.87	2.68	2.40	2.24	1.85	1.18	1.82	infinite	3,556,215	38,274	38,274
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.28	2.17	2.01	1.81	1.65	1.42	0.91	1.82	infinite	5,385,297	48,899	48,899
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.24	2.01	1.93	1.65	1.18	1.83	infinite	7,002,624	38,510	38,510
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.72	2.56	2.32	2.24	1.93	1.30	1.83	infinite	5,780,741	33,807	33,807
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.68	2.56	2.32	2.24	1.97	1.38	1.83	infinite	6,882,803	33,221	33,221
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	3.11	2.95	2.68	2.64	2.32	1.69	1.84	infinite	7,107,167	26,009	26,009
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.98	3.43	3.11	2.68	2.40	1.89	1.10	1.84	infinite	1,784,928	39,702	39,702
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.80	2.64	2.44	2.40	2.13	1.54	1.85	infinite	8,000,000	28,159	28,159
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.52	2.36	2.17	2.09	1.81	1.22	1.85	infinite	6,356,225	36,629	36,629
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.50	3.39	3.23	2.99	2.91	2.64	1.89	1.85	infinite	7,018,930	22,938	22,938
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.60	2.48	2.28	2.20	1.97	1.38	1.85	infinite	7,743,309	32,424	32,424
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.80	2.64	2.40	2.36	2.05	1.46	1.86	infinite	6,987,523	30,393	30,393
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.76	2.56	2.28	2.09	1.73	1.06	1.86	infinite	3,216,416	41,603	41,603
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.44	2.36	2.13	2.09	1.81	1.30	1.89	infinite	7,781,057	34,481	34,481
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	3.03	2.87	2.64	2.56	2.32	1.69	1.90	infinite	7,690,297	25,677	25,677
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.56	2.36	2.24	2.01	1.46	1.90	infinite	7,597,571	30,780	30,780
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.21	3.62	3.31	2.83	2.56	2.01	1.18	1.91	infinite	1,770,139	38,066	38,066
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.99	2.83	2.56	2.48	2.20	1.61	1.91	infinite	7,239,112	27,725	27,725
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.95	2.76	2.52	2.40	2.09	1.38	1.92	infinite	5,036,335	32,016	32,016
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.60	2.48	2.32	2.20	1.97	1.34	1.93	infinite	7,304,021	31,998	31,998
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.48	2.32	2.09	2.01	1.73	1.18	1.93	infinite	6,049,810	37,642	37,642
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.83	2.72	2.44	2.32	2.05	1.46	1.93	infinite	6,373,127	31,308	31,308
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.72	2.48	2.44	2.13	1.50	1.93	infinite	6,645,113	29,259	29,259

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.76	2.64	2.40	2.32	2.09	1.50	1.95	infinite	7,765,757	29,757	29,757
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.83	2.68	2.48	2.40	2.17	1.57	1.95	infinite	8,000,000	28,247	28,247
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.64	2.44	2.17	2.05	1.69	1.10	1.96	infinite	4,129,591	41,520	41,520
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.64	2.44	2.17	2.05	1.69	1.10	1.96	infinite	4,094,808	41,299	41,299
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.62	3.31	2.99	2.56	2.36	1.85	1.14	1.96	infinite	2,283,491	39,301	39,301
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.60	2.44	2.28	2.20	1.89	1.38	1.98	infinite	7,276,605	32,900	32,900
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	2.87	2.72	2.44	2.28	1.97	1.34	1.98	infinite	4,766,293	33,882	33,882
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.64	2.52	2.28	2.24	1.97	1.38	1.98	infinite	7,578,106	31,941	31,941
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.62	3.15	2.91	2.52	2.28	1.81	1.14	1.98	infinite	2,431,247	40,415	40,415
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.37	3.78	3.39	2.95	2.68	2.09	1.22	1.98	infinite	1,677,635	36,109	36,109
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.27	3.15	2.95	2.76	2.68	2.44	1.77	2.00	infinite	7,876,323	24,951	24,951
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.46	3.27	3.07	2.87	2.72	2.48	1.77	2.00	infinite	6,612,514	25,420	25,420
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.28	2.17	1.97	1.93	1.65	1.14	2.01	infinite	7,178,586	39,323	39,323
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.60	2.48	2.24	2.20	1.93	1.38	2.01	infinite	7,546,993	32,114	32,114
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.03	2.83	2.64	2.52	2.20	1.65	2.01	infinite	6,860,151	27,482	27,482
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.64	2.48	2.40	2.17	2.13	1.85	1.26	2.02	infinite	7,075,957	35,098	35,098
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	3.07	2.87	2.64	2.56	2.28	1.69	2.02	infinite	7,328,411	26,068	26,068
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.28	2.13	2.01	1.85	1.77	1.57	1.06	2.04	infinite	7,862,728	41,497	41,497
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.91	2.80	2.60	2.56	2.28	1.61	2.04	infinite	7,565,590	27,273	27,273
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.60	2.44	2.24	2.17	1.89	1.30	2.04	infinite	6,465,914	34,249	34,249
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.72	2.56	2.32	2.24	1.97	1.42	2.04	infinite	7,114,215	32,048	32,048
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.61	3.98	3.66	3.15	2.87	2.28	1.38	2.05	infinite	1,788,337	32,744	32,744
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.44	2.28	2.13	1.97	1.89	1.65	1.10	2.06	infinite	6,910,277	40,275	40,275
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.36	2.20	2.05	1.89	1.77	1.57	1.10	2.06	infinite	7,866,437	42,130	42,130
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.64	2.52	2.32	2.24	1.97	1.46	2.07	infinite	7,992,961	31,186	31,186
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.83	2.64	2.36	2.20	1.89	1.30	2.07	infinite	4,891,236	35,495	35,495
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.54	3.15	2.83	2.48	2.24	1.81	1.10	2.07	infinite	2,381,625	40,418	40,418
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.60	2.48	2.32	2.24	1.97	1.34	2.07	infinite	7,354,426	32,250	32,250
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.09	1.97	1.81	1.65	1.54	1.34	0.87	2.08	infinite	6,686,453	51,331	51,331
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.40	2.24	2.13	1.89	1.85	1.57	1.10	2.09	infinite	7,105,635	41,112	41,112
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.68	2.48	2.28	2.20	1.89	1.26	2.11	infinite	5,691,603	36,261	36,261
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.91	2.76	2.48	2.44	2.13	1.50	2.12	infinite	6,354,754	29,491	29,491
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.24	2.09	1.85	1.77	1.50	0.98	2.12	infinite	5,858,183	45,357	45,357
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.60	2.44	2.32	2.05	1.97	1.69	1.10	2.12	infinite	5,531,009	40,763	40,763
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.28	2.17	2.05	1.85	1.73	1.46	0.91	2.12	infinite	5,355,765	47,755	47,755
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.80	2.60	2.36	2.24	1.89	1.34	2.13	infinite	5,274,614	34,327	34,327
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.95	2.76	2.52	2.40	2.13	1.42	2.13	infinite	5,583,799	31,284	31,284
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.46	3.27	3.11	2.83	2.72	2.44	1.81	2.13	infinite	6,820,576	25,009	25,009
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.60	2.48	2.28	2.20	1.97	1.34	2.14	infinite	7,428,358	32,389	32,389
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.83	2.60	2.36	2.17	1.85	1.26	2.14	infinite	4,516,377	36,828	36,828
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.23	3.03	2.83	2.60	2.52	2.20	1.61	2.16	infinite	6,563,772	28,197	28,197
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.99	2.76	2.48	2.32	1.97	1.34	2.16	infinite	4,792,054	33,322	33,322
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.80	2.64	2.40	2.36	2.09	1.46	2.18	infinite	7,067,874	30,053	30,053
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.80	2.64	2.36	2.28	1.97	1.30	2.18	infinite	5,379,571	34,260	34,260
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.17	2.05	1.85	1.73	1.50	0.94	2.18	infinite	5,649,136	46,412	46,412
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.52	2.36	2.20	2.01	1.93	1.65	1.06	2.20	infinite	5,823,004	42,444	42,444
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.74	3.23	2.95	2.56	2.32	1.85	1.14	2.20	infinite	2,244,179	39,548	39,548
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.27	3.11	2.95	2.68	2.64	2.36	1.73	2.21	infinite	7,508,515	26,018	26,018
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.43	2.99	2.80	2.44	2.28	1.81	1.18	2.22	infinite	2,982,066	38,819	38,819
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.54	3.27	2.95	2.52	2.32	1.85	1.14	2.23	infinite	2,389,879	39,032	39,032
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.17	2.05	1.93	1.73	1.65	1.46	0.98	2.23	infinite	7,751,896	46,414	46,414
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.43	3.23	3.03	2.80	2.76	2.44	1.73	2.23	infinite	6,461,998	25,812	25,812
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.28	2.13	2.05	1.81	1.77	1.54	1.06	2.24	infinite	7,844,877	42,802	42,802
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.61	3.98	3.66	3.19	2.91	2.32	1.46	2.25	infinite	1,980,163	31,675	31,675
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	3.19	2.95	2.68	2.56	2.20	1.61	2.26	infinite	6,068,128	27,987	27,987
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.80	2.60	2.36	2.28	1.93	1.26	2.26	infinite	5,136,445	35,202	35,202

Location					Material Type			FWD File Information				Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer															RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.24	2.09	1.97	1.77	1.73	1.50	1.02	2.27	infinite	7,762,801	44,308	44,308
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.31	3.07	2.91	2.64	2.52	2.24	1.61	2.27	infinite	6,069,140	27,951	27,951
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.58	3.23	2.95	2.48	2.28	1.81	1.10	2.27	infinite	2,231,502	40,249	40,249
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	3.19	2.95	2.68	2.60	2.20	1.61	2.27	infinite	6,067,153	27,945	27,945
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.87	2.68	2.40	2.20	1.85	1.30	2.28	infinite	4,502,670	36,040	36,040
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.80	2.60	2.36	2.20	1.89	1.26	2.29	infinite	4,546,087	36,291	36,291
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.72	2.52	2.32	2.24	1.97	1.38	2.29	infinite	6,737,257	33,440	33,440
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.48	2.28	2.13	1.97	1.85	1.61	1.02	2.30	infinite	5,726,771	43,279	43,279
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.70	3.23	2.95	2.60	2.40	1.93	1.22	2.30	infinite	2,602,268	37,206	37,206
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	5.04	4.41	4.02	3.50	3.19	2.56	1.61	2.31	infinite	1,812,661	28,676	28,676
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.99	2.83	2.56	2.52	2.28	1.65	2.31	infinite	7,910,895	26,672	26,672
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.43	3.07	2.80	2.44	2.20	1.81	1.14	2.31	infinite	2,712,422	39,439	39,439
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.20	2.05	1.89	1.73	1.65	1.42	0.91	2.32	infinite	6,427,689	48,703	48,703
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.43	3.27	2.95	2.64	2.44	2.05	1.38	2.33	infinite	3,702,174	33,501	33,501
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.60	2.48	2.24	2.20	1.97	1.38	2.35	infinite	7,844,440	32,590	32,590
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.74	3.66	3.35	2.91	2.68	2.17	1.38	2.36	infinite	2,713,658	32,947	32,947
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.32	2.20	2.09	1.85	1.77	1.57	1.10	2.37	infinite	7,739,688	40,549	40,549
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.76	2.60	2.48	2.20	2.13	1.89	1.30	2.37	infinite	6,547,027	34,255	34,255
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	5.04	4.69	4.45	4.09	3.86	3.46	2.60	2.38	infinite	4,590,869	17,507	17,507
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.91	2.72	2.60	2.36	2.32	2.09	1.50	2.39	infinite	8,000,000	29,409	29,409
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.09	3.50	3.19	2.76	2.48	1.93	1.06	2.39	infinite	1,605,404	40,007	40,007
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.20	2.09	1.97	1.77	1.73	1.46	0.94	2.40	infinite	6,536,286	46,732	46,732
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.66	3.23	2.95	2.64	2.44	2.01	1.30	2.43	infinite	3,065,762	35,807	35,807
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.68	2.56	2.44	2.17	2.13	1.89	1.30	2.44	infinite	7,058,737	33,648	33,648
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.87	2.72	2.44	2.44	2.13	1.54	2.44	infinite	7,160,249	28,803	28,803
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.99	2.76	2.44	2.32	1.93	1.34	2.44	infinite	4,759,238	33,662	33,662
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.36	2.20	2.05	1.85	1.77	1.54	1.10	2.45	infinite	7,664,417	41,665	41,665
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.64	2.40	2.36	2.13	1.54	2.47	infinite	7,878,036	28,176	28,176
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.80	2.60	2.36	2.17	1.89	1.30	2.47	infinite	4,932,173	35,729	35,729
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.80	2.64	2.36	2.24	1.97	1.38	2.48	infinite	5,697,900	32,985	32,985
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	5.08	4.37	4.02	3.50	3.23	2.60	1.61	2.48	infinite	1,827,135	28,489	28,489
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.72	2.60	2.48	2.20	2.20	1.93	1.38	2.50	infinite	7,802,182	32,090	32,090
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.70	3.15	2.87	2.52	2.28	1.85	1.10	2.55	infinite	2,294,473	41,075	41,075
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.96	4.61	4.37	3.98	3.82	3.39	2.56	2.56	infinite	4,700,632	17,832	17,832
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.80	2.60	2.24	2.13	1.77	1.14	2.57	infinite	3,749,050	40,014	40,014
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.70	3.66	3.35	2.91	2.68	2.17	1.38	2.58	infinite	2,758,723	32,955	32,955
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.57	3.98	3.62	3.15	2.87	2.32	1.46	2.60	infinite	2,030,117	31,857	31,857
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.74	3.27	3.03	2.60	2.40	1.97	1.22	2.61	infinite	2,508,300	36,777	36,777
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.15	3.15	2.95	2.60	2.52	2.20	1.57	2.62	infinite	5,835,323	28,284	28,284
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.87	2.87	2.68	2.36	2.17	1.77	1.14	2.63	infinite	3,871,257	39,446	39,446
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.35	3.31	2.99	2.64	2.52	2.09	1.42	2.63	infinite	3,984,613	32,269	32,269
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	5.16	4.49	4.09	3.54	3.23	2.64	1.61	2.63	infinite	1,715,796	28,048	28,048
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.02	3.74	3.46	3.19	2.95	2.64	1.89	2.66	infinite	4,702,193	24,641	24,641
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	3.03	2.76	2.44	2.32	1.97	1.34	2.67	infinite	4,678,052	33,559	33,559
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.94	4.06	3.74	3.39	3.19	2.80	1.97	2.67	infinite	4,585,611	23,039	23,039
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	1.93	1.81	1.65	1.50	1.42	1.18	0.71	2.67	infinite	5,779,474	61,766	61,766
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.82	3.43	3.15	2.80	2.60	2.17	1.46	2.67	infinite	3,212,311	31,571	31,571
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.72	4.88	4.57	4.13	3.94	3.50	2.64	2.68	infinite	4,886,991	16,765	16,765
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.72	2.60	2.32	2.24	2.01	1.42	2.69	infinite	6,766,823	31,789	31,789
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	3.11	2.91	2.60	2.44	2.09	1.50	2.69	infinite	5,666,343	30,471	30,471
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.69	4.06	3.66	3.15	2.87	2.32	1.38	2.70	infinite	1,721,151	32,429	32,429
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.99	2.80	2.44	2.28	1.89	1.18	2.71	infinite	3,678,074	37,782	37,782
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.37	3.90	3.58	3.15	2.95	2.44	1.61	2.72	infinite	2,672,810	28,816	28,816
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.61	3.98	3.62	3.11	2.87	2.28	1.42	2.72	infinite	1,874,859	32,200	32,200
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.06	3.74	3.46	3.15	2.99	2.64	1.85	2.72	infinite	4,459,178	25,013	25,013
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.80	2.60	2.24	2.17	1.77	1.14	2.74	infinite	3,696,150	40,247	40,247

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.07	2.99	2.80	2.40	2.28	1.89	1.18	2.75	infinite	3,610,336	37,678	37,678
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.83	2.83	2.64	2.32	2.13	1.73	1.10	2.75	infinite	3,771,541	40,773	40,773
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	2.99	2.87	2.60	2.36	2.01	1.30	2.77	infinite	4,498,597	34,607	34,607
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.99	2.68	2.40	2.28	1.89	1.30	2.78	infinite	4,730,685	35,326	35,326
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.19	2.91	2.72	2.48	2.36	2.05	1.50	2.78	infinite	6,005,195	30,712	30,712
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.50	3.07	2.83	2.48	2.28	1.81	1.22	2.80	infinite	2,944,901	38,316	38,316
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.54	3.11	2.87	2.48	2.32	1.89	1.22	2.80	infinite	2,904,365	37,316	37,316
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.39	2.95	2.76	2.36	2.20	1.81	1.14	2.81	infinite	2,967,519	39,987	39,987
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.99	3.11	2.87	2.60	2.44	2.09	1.50	2.81	infinite	5,853,267	30,399	30,399
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.86	3.43	3.19	2.80	2.60	2.17	1.46	2.83	infinite	3,144,131	31,624	31,624
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.70	3.70	3.35	2.91	2.72	2.20	1.42	2.83	infinite	2,884,426	32,099	32,099
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.86	4.02	3.74	3.39	3.19	2.76	1.93	2.84	infinite	4,508,796	23,348	23,348
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.11	2.80	2.56	2.28	2.17	1.81	1.22	2.86	infinite	4,249,063	37,881	37,881
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	3.07	2.83	2.56	2.40	2.09	1.46	2.89	infinite	5,793,387	30,836	30,836
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.39	2.99	2.76	2.40	2.20	1.85	1.18	2.89	infinite	3,184,953	39,545	39,545
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.80	2.83	2.64	2.32	2.13	1.77	1.14	2.89	infinite	4,108,860	39,175	39,175
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	3.03	2.91	2.64	2.44	2.01	1.30	2.93	infinite	4,311,686	34,743	34,743
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.95	2.80	2.64	2.36	2.28	1.97	1.22	2.94	infinite	4,622,155	35,710	35,710
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	4.57	3.98	3.62	3.11	2.87	2.32	1.46	2.95	infinite	2,031,734	31,797	31,797
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	2.56	2.44	2.28	2.20	2.13	1.81	1.18	2.97	infinite	6,787,232	37,378	37,378
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.98	3.82	3.46	2.99	2.68	2.05	1.18	2.97	infinite	1,755,493	36,378	36,378
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.03	2.99	2.80	2.40	2.28	1.89	1.18	2.97	infinite	3,718,528	38,003	38,003
Grand	M-6	09-02	41064	33335	SC-SM	Crushed Concrete	Dense	Summer	9/8/2004	rigid-G-M6-CS41064-09-08-2004	10	infinite	3.31	3.31	3.03	2.60	2.40	1.93	1.26	2.99	infinite	3,115,611	36,397	36,397
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	18.98	17.56	16.81	15.63	14.49	12.05	8.31	0.35	infinite	1,898,207	12,224	12,224
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	15.31	14.09	13.58	12.60	11.65	9.69	6.69	0.44	infinite	1,834,558	11,872	11,872
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.18	5.55	5.24	4.76	4.29	3.46	2.20	0.45	infinite	1,830,542	20,722	20,722
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.02	5.43	5.04	4.57	4.09	3.31	2.09	0.73	infinite	1,798,020	21,811	21,811
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.10	5.51	5.16	4.69	4.17	3.39	2.09	0.76	infinite	1,732,313	21,709	21,709
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.69	4.17	3.90	3.50	3.19	2.52	1.57	0.76	infinite	2,194,645	28,810	28,810
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	8.39	7.56	6.97	6.14	5.43	4.29	2.60	0.79	infinite	1,063,569	17,499	17,499
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	11.89	10.67	10.12	9.17	8.31	6.61	4.09	0.82	infinite	1,562,963	19,229	19,229
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	8.15	7.60	7.13	6.61	6.06	5.08	3.31	0.83	infinite	1,709,394	13,653	13,653
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.61	6.02	5.59	5.08	4.61	3.70	2.28	0.86	infinite	1,620,656	19,864	19,864
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	14.84	13.39	12.64	11.54	10.43	8.35	5.16	0.89	infinite	1,615,739	19,304	19,304
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	8.43	7.60	7.01	6.18	5.43	4.29	2.64	0.92	infinite	1,068,327	17,337	17,337
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.71	5.12	4.80	4.37	3.90	3.19	1.97	0.92	infinite	1,899,840	22,961	22,961
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	3.31	3.11	2.99	2.80	2.60	2.28	1.57	0.93	infinite	5,856,168	28,797	28,797
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	3.31	3.11	2.99	2.80	2.60	2.28	1.57	0.93	infinite	5,918,204	29,064	29,064
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.32	6.77	6.34	5.91	5.43	4.57	2.99	0.95	infinite	1,975,103	15,183	15,183
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.75	5.12	4.80	4.37	3.90	3.19	2.01	0.96	infinite	1,939,082	22,712	22,712
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.06	5.47	5.08	4.69	4.17	3.39	2.09	0.96	infinite	1,772,539	21,547	21,547
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.06	5.47	5.08	4.69	4.21	3.43	2.13	0.98	infinite	1,839,568	21,144	21,144
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.14	5.55	5.16	4.76	4.29	3.54	2.24	1.01	infinite	1,948,765	20,286	20,286
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.46	5.87	5.47	5.08	4.53	3.78	2.44	1.02	infinite	1,946,732	18,672	18,672
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.05	6.42	6.06	5.63	5.12	4.33	2.91	1.02	infinite	2,123,330	15,793	15,793
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.10	5.55	5.16	4.76	4.25	3.54	2.28	1.03	infinite	2,028,649	20,112	20,112
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.71	5.12	4.80	4.41	4.02	3.31	2.13	1.05	infinite	2,199,473	21,413	21,413
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	8.46	7.60	7.01	6.14	5.43	4.25	2.64	1.05	infinite	1,056,288	17,374	17,374
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.69	6.02	5.67	5.12	4.65	3.74	2.28	1.06	infinite	1,599,896	19,947	19,947
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.69	4.17	3.86	3.50	3.19	2.52	1.54	1.08	infinite	2,132,787	28,967	28,967
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	3.98	3.62	3.35	3.07	2.76	2.28	1.42	1.10	infinite	1,779,814	19,749	19,749
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	8.82	8.15	7.68	7.20	6.65	5.71	3.82	1.11	infinite	1,862,450	11,902	11,902
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.28	6.73	6.34	5.91	5.39	4.57	2.95	1.12	infinite	1,950,928	15,301	15,301
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.24	6.69	6.30	5.87	5.39	4.65	3.15	1.13	infinite	2,274,780	14,471	14,471
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.69	6.06	5.67	5.08	4.53	3.50	2.09	1.14	infinite	1,308,306	20,998	20,998
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.50	5.83	5.43	4.84	4.33	3.35	1.97	1.16	infinite	1,307,013	22,370	22,370

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.61	5.94	5.63	5.08	4.57	3.70	2.24	1.16	infinite	1,579,322	20,004	20,004
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.10	5.43	5.08	4.69	4.17	3.43	2.13	1.17	infinite	1,835,836	21,200	21,200
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.87	5.28	4.92	4.57	4.13	3.43	2.20	1.17	infinite	2,167,038	20,770	20,770
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	3.70	3.46	3.35	3.11	2.87	2.44	1.61	1.19	infinite	4,285,700	28,021	28,021
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.75	5.12	4.80	4.37	3.90	3.23	2.01	1.23	infinite	1,961,556	22,631	22,631
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.38	5.75	5.35	4.96	4.49	3.74	2.44	1.24	infinite	2,071,613	18,908	18,908
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	3.66	3.43	3.31	3.07	2.83	2.44	1.61	1.24	infinite	4,540,267	28,445	28,445
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.50	5.71	5.20	4.69	4.17	3.31	2.01	1.25	infinite	1,420,180	22,458	22,458
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	3.31	3.11	3.03	2.80	2.60	2.28	1.54	1.26	infinite	5,626,357	29,578	29,578
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.71	5.08	4.76	4.41	4.02	3.31	2.13	1.28	infinite	2,234,518	21,458	21,458
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.57	4.06	3.74	3.43	3.03	2.48	1.54	1.30	infinite	2,318,311	29,560	29,560
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.20	4.61	4.25	3.86	3.46	2.80	1.77	1.30	infinite	2,068,764	25,847	25,847
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.20	4.61	4.25	3.86	3.46	2.80	1.77	1.30	infinite	2,079,158	25,982	25,982
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.46	5.83	5.43	4.88	4.33	3.35	1.97	1.31	infinite	1,327,226	22,371	22,371
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.65	4.06	3.78	3.43	3.07	2.48	1.54	1.34	infinite	2,242,782	29,466	29,466
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.12	4.53	4.21	3.82	3.43	2.72	1.61	1.34	infinite	1,826,673	27,366	27,366
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.83	5.24	4.88	4.57	4.09	3.43	2.20	1.35	infinite	2,208,968	20,719	20,719
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.54	5.87	5.43	4.88	4.33	3.39	1.97	1.37	infinite	1,308,622	22,335	22,335
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.87	5.24	4.92	4.53	4.09	3.43	2.20	1.37	infinite	2,194,124	20,851	20,851
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.65	6.02	5.63	5.12	4.61	3.78	2.28	1.37	infinite	1,627,144	19,818	19,818
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	3.62	3.43	3.31	3.07	2.83	2.44	1.61	1.38	infinite	4,596,518	28,272	28,272
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.80	4.17	3.86	3.54	3.15	2.52	1.54	1.39	infinite	2,062,784	29,135	29,135
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.54	5.67	5.20	4.69	4.17	3.31	2.01	1.40	infinite	1,416,181	22,387	22,387
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.32	6.77	6.34	5.91	5.39	4.61	2.95	1.40	infinite	1,938,964	15,286	15,286
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.96	4.41	4.09	3.74	3.35	2.76	1.69	1.41	infinite	2,175,938	26,513	26,513
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.25	3.70	3.46	3.15	2.83	2.28	1.38	1.45	infinite	2,396,910	32,576	32,576
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.75	5.12	4.76	4.41	3.98	3.31	2.13	1.47	infinite	2,182,773	21,415	21,415
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.25	3.70	3.46	3.15	2.80	2.28	1.38	1.49	infinite	2,396,211	32,683	32,683
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.80	4.21	3.86	3.54	3.15	2.52	1.50	1.49	infinite	1,960,136	29,483	29,483
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.12	4.49	4.17	3.82	3.39	2.72	1.61	1.50	infinite	1,857,262	27,480	27,480
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.85	6.10	5.63	5.08	4.45	3.43	1.97	1.50	infinite	1,163,242	22,182	22,182
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.69	4.17	3.90	3.58	3.27	2.68	1.65	1.51	infinite	2,453,180	27,218	27,218
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.57	5.71	5.24	4.69	4.17	3.31	2.05	1.51	infinite	1,433,934	22,245	22,245
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.81	6.06	5.63	5.04	4.45	3.43	1.97	1.51	infinite	1,174,408	22,060	22,060
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.84	4.21	3.86	3.54	3.19	2.52	1.54	1.52	infinite	2,008,234	29,005	29,005
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.84	4.29	3.94	3.58	3.19	2.56	1.50	1.53	infinite	1,921,016	29,672	29,672
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.80	4.21	3.98	3.58	3.19	2.56	1.50	1.56	infinite	1,960,747	29,585	29,585
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.76	4.33	4.06	3.78	3.46	2.99	1.97	1.58	infinite	3,229,423	23,107	23,107
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.61	4.06	3.74	3.39	3.03	2.48	1.54	1.58	infinite	2,298,858	29,637	29,637
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.84	4.25	3.94	3.54	3.19	2.56	1.50	1.63	infinite	1,929,885	29,503	29,503
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.63	5.00	4.65	4.13	3.66	2.83	1.61	1.63	infinite	1,406,856	27,000	27,000
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.65	4.17	3.90	3.54	3.15	2.60	1.54	1.64	infinite	2,192,936	28,804	28,804
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.63	5.00	4.61	4.13	3.66	2.83	1.61	1.65	infinite	1,405,188	26,883	26,883
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.65	4.13	3.86	3.58	3.27	2.68	1.65	1.67	infinite	2,521,194	27,161	27,161
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.80	4.33	4.06	3.82	3.46	2.99	1.97	1.68	infinite	3,183,676	23,162	23,162
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.96	4.45	4.06	3.74	3.39	2.80	1.73	1.69	infinite	2,272,468	25,973	25,973
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.63	4.96	4.61	4.13	3.66	2.83	1.61	1.70	infinite	1,420,774	26,921	26,921
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.43	4.84	4.53	4.06	3.58	2.87	1.65	1.70	infinite	1,622,465	26,404	26,404
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.20	4.57	4.21	3.82	3.43	2.80	1.77	1.71	infinite	2,104,350	25,982	25,982
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.96	4.37	4.09	3.74	3.35	2.76	1.65	1.74	infinite	2,107,546	26,811	26,811
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.06	3.54	3.23	2.83	2.48	1.85	1.02	1.76	infinite	1,637,016	41,879	41,879
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.69	4.13	3.86	3.58	3.23	2.68	1.65	1.76	infinite	2,494,969	27,275	27,275
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.84	4.33	4.06	3.82	3.46	2.91	2.01	1.78	infinite	3,186,084	23,049	23,049
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.43	5.12	4.69	4.49	4.06	3.58	2.44	1.79	infinite	1,938,094	11,322	11,322
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.72	4.21	3.94	3.58	3.19	2.52	1.46	1.80	infinite	1,898,510	29,776	29,776
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.12	4.53	4.21	3.86	3.39	2.72	1.57	1.83	infinite	1,750,211	27,792	27,792

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.43	4.88	4.57	4.09	3.66	2.87	1.65	1.85	infinite	1,593,954	26,449	26,449
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.69	6.06	5.71	5.12	4.53	3.54	2.05	1.86	infinite	1,281,696	21,250	21,250
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.72	4.25	3.94	3.62	3.19	2.52	1.46	1.86	infinite	1,872,678	29,726	29,726
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.96	4.53	4.21	3.82	3.43	2.76	1.61	1.88	infinite	1,930,797	27,249	27,249
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.25	3.70	3.46	3.15	2.83	2.32	1.38	1.88	infinite	2,423,963	32,380	32,380
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.13	3.54	3.31	2.87	2.52	1.93	1.06	1.90	infinite	1,698,513	40,786	40,786
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.00	4.49	4.17	3.82	3.39	2.72	1.57	1.98	infinite	1,852,299	27,695	27,695
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.85	6.14	5.63	5.04	4.45	3.46	1.93	2.11	infinite	1,119,407	22,232	22,232
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.80	4.25	3.98	3.58	3.23	2.56	1.46	2.12	infinite	1,862,905	29,856	29,856
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	6.69	6.06	5.67	5.08	4.53	3.54	2.01	2.23	infinite	1,250,062	21,447	21,447
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.96	4.49	4.21	3.78	3.43	2.80	1.61	2.29	infinite	1,967,135	27,040	27,040
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.39	4.84	4.53	4.09	3.58	2.87	1.61	2.36	infinite	1,569,125	26,802	26,802
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	4.09	3.54	3.27	2.87	2.48	1.93	1.02	2.75	infinite	1,638,838	41,442	41,442
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.52	6.73	6.26	5.59	4.88	3.66	2.01	2.83	infinite	939,297	20,816	20,816
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.52	6.77	6.26	5.55	4.88	3.70	2.01	2.89	infinite	927,340	20,867	20,867
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	5.71	5.12	4.76	4.25	3.78	2.87	1.57	2.93	infinite	1,295,808	26,999	26,999
Grand	M-6	09-02	41064	53508	SC-SM	NA	NA	Summer	11/15/2001	rigid-G-M6-CS41064-11-15-2001	10	infinite	7.52	6.77	6.26	5.59	4.88	3.70	2.01	2.96	infinite	926,945	20,893	20,893
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	9.45	7.68	6.65	5.59	4.61	3.15	1.73	0.62	700	1,672,239	51,787	25,978
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	9.33	7.56	6.57	5.59	4.57	3.11	1.65	0.86	700	1,220,812	27,646	27,233
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	9.57	7.76	6.65	5.63	4.61	3.15	1.73	0.90	700	1,756,411	48,626	26,669
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	8.27	7.05	6.26	5.39	4.41	3.03	1.61	0.93	700	1,527,055	44,665	27,656
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	8.27	7.05	6.22	5.31	4.41	2.99	1.61	0.97	700	921,155	19,596	14,489
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	8.35	7.05	6.26	5.39	4.41	2.99	1.57	0.97	700	1,196,015	26,524	27,471
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	10.31	8.27	7.24	6.10	4.92	3.23	1.69	1.07	700	903,906	19,828	14,491
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	10.24	8.19	7.17	6.10	4.84	3.23	1.65	1.16	700	1,519,064	45,634	27,826
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	7.91	6.54	5.71	4.72	3.82	2.52	1.38	1.35	700	1,405,714	27,947	13,412
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	7.83	6.50	5.71	4.72	3.82	2.52	1.38	1.45	700	989,484	32,251	17,362
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	7.72	6.46	5.71	4.76	3.82	2.48	1.30	1.58	700	2,408,618	24,105	26,361
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	7.64	6.42	5.63	4.76	3.82	2.48	1.30	1.63	700	1,172,847	19,050	21,563
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	7.76	6.50	5.71	4.76	3.86	2.52	1.38	1.74	700	937,859	20,299	14,445
Grand	US-131	07-03	59012	45792	SP1	NA	NA	Summer	4/9/1998	rigid-G-US131-CS59012-04-09-1998	9	24	7.64	6.42	5.67	4.72	3.82	2.48	1.34	1.81	700	1,378,079	32,980	21,565
Grand	US-131	09-02	41131	NA	SC-SM	NA	NA	Summer	11/7/1996	rigid-G-US131-CS41131-07-11-1996-(2	9	infinite	6.12	5.37	4.99	4.38	3.90	3.06	2.00	2.58	infinite	2,231,996	24,165	24,165
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	8.35	7.68	7.20	6.77	6.18	5.04	3.27	0.66	400	1,607,327	15,200	10,340
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	8.31	7.60	7.13	6.69	6.06	5.00	3.23	0.71	400	1,535,383	17,514	10,227
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	5.51	4.76	4.45	4.02	3.54	2.80	1.73	0.75	400	1,376,301	43,811	18,304
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	4.37	3.94	3.66	3.35	3.03	2.32	1.38	0.79	400	2,408,618	24,105	26,361
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	8.27	7.44	7.09	6.61	5.98	4.92	3.15	0.82	400	1,511,702	16,797	10,426
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	4.49	3.82	3.50	3.15	2.72	2.05	1.18	0.85	400	1,510,153	44,460	28,681
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	4.29	3.70	3.39	3.07	2.72	2.09	1.26	0.88	400	1,672,239	51,787	25,978
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	5.55	4.72	4.29	3.82	3.31	2.40	1.30	0.88	400	1,220,812	27,646	27,233
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	4.17	3.62	3.35	3.03	2.60	2.05	1.22	0.93	400	1,756,411	48,626	26,669
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	7.01	6.22	5.79	5.39	4.84	3.86	2.44	0.96	400	1,405,714	27,947	13,412
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	6.77	5.87	5.35	4.84	4.21	3.23	1.89	0.97	400	989,484	32,251	17,362
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	8.27	7.20	6.54	5.98	5.24	4.02	2.32	1.07	400	937,859	20,299	14,445
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	8.39	7.28	6.61	6.06	5.28	4.06	2.32	1.14	400	921,155	19,596	14,489
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	8.46	7.28	6.65	6.06	5.31	4.06	2.32	1.15	400	903,906	19,828	14,491
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	6.65	5.71	5.20	4.72	4.09	3.07	1.65	1.25	400	1,172,847	19,050	21,563
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	5.63	4.80	4.41	4.02	3.54	2.72	1.57	1.31	400	1,378,079	32,980	21,565
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	4.49	3.86	3.50	3.19	2.80	2.05	1.22	1.35	400	1,527,055	44,665	27,656
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	5.71	4.84	4.33	3.94	3.35	2.44	1.30	1.37	400	1,196,015	26,524	27,471
Grand	US-27	NA	19033	33577	SC-SM	NA	NA	Summer	6/15/1998	rigid-G-US27-CS19033-06-15-1998	10	24	4.49	3.86	3.50	3.23	2.76	2.05	1.22	1.45	400	1,519,064	45,634	27,826
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	10.82	9.65	9.10	8.21	7.40	5.85	3.58	0.26	200	1,993,986	63,717	15,826
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	7.84	7.04	6.64	5.97	5.33	4.27	2.64	0.36	200	1,922,914	69,567	15,338
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	10.89	9.67	9.15	8.23	7.42	5.85	3.62	0.42	200	1,889,780	69,630	15,498
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	6.57	6.09	5.81	5.37	4.86	3.98	2.58	0.45	200	3,333,275	61,697	15,418
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	7.92	7.06	6.67	6.02	5.36	4.28	2.65	0.52	200	1,863,091	70,489	15,120

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	11.10	9.77	9.26	8.37	7.52	5.94	3.63	0.52	200	1,872,771	65,170	15,488
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	17.14	14.94	13.86	12.31	10.79	8.28	4.49	0.54	200	780,684	20,030	9,513
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	6.72	6.19	5.94	5.45	4.94	4.04	2.60	0.54	200	3,139,010	59,822	15,572
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	6.53	6.02	5.83	5.32	4.85	3.98	2.57	0.55	200	3,509,560	57,960	15,670
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	17.03	14.80	13.81	12.26	10.71	8.22	4.46	0.57	200	789,352	19,915	9,596
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	20.93	18.17	17.12	15.00	13.42	10.08	5.58	0.70	200	851,374	21,995	10,103
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	20.86	18.15	17.12	14.92	13.39	10.04	5.54	0.76	200	859,116	21,593	10,235
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	17.10	14.80	13.88	12.28	10.74	8.21	4.45	0.80	200	777,313	19,469	9,753
Metro	I-69	14-09	77023	21586	CL	Natural Gravel	Open	Summer	7/2/1997	rigid-M-I69-CS77023-07-02-1997	10	20	20.91	18.17	17.18	14.97	13.47	10.07	5.61	0.85	200	854,723	22,221	10,067
Metro	I-75	14-06	82194	NA	SC	NA	NA	Summer	9/17/2008	rigid-M-I75-CS82194-09-16-2008	12	20	3.55	3.10	2.97	2.84	2.64	2.30	1.60	1.79	700	2,651,833	85,490	22,357
Metro	I-75	14-06	82194	NA	SC	NA	NA	Summer	9/19/2008	rigid-M-I75-CS82194-09-16-208	12	20	4.32	3.95	3.83	3.69	3.53	3.20	2.43	1.28	700	3,477,238	83,839	13,282
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.57	4.13	3.95	3.64	3.29	2.76	1.82	0.70	700	2,859,768	45,921	22,116
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.05	6.57	6.42	5.94	5.42	4.57	3.16	0.74	700	2,480,928	18,803	13,025
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.60	4.16	3.97	3.69	3.31	2.77	1.82	0.76	700	2,883,268	41,215	22,246
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.06	6.49	6.39	5.91	5.40	4.56	3.12	0.86	700	2,524,896	16,730	13,361
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.06	6.51	6.41	5.91	5.39	4.56	3.14	0.89	700	2,446,062	19,847	13,045
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.60	4.12	3.99	3.66	3.29	2.75	1.80	0.94	700	2,849,905	42,455	22,641
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.21	2.75	2.63	2.41	2.19	1.81	1.20	1.41	700	2,837,212	120,496	31,948
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.23	6.30	6.17	5.77	5.30	4.55	3.21	1.59	700	1,617,568	64,940	11,331
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.24	6.28	6.15	5.76	5.29	4.54	3.24	1.61	700	1,558,606	71,684	11,197
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.63	6.41	6.20	5.59	4.98	4.00	2.55	1.62	700	1,094,657	39,964	15,178
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	11.81	10.22	9.80	9.05	8.24	6.84	4.42	1.62	700	945,761	22,524	8,811
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.57	9.10	8.78	8.05	7.36	6.08	3.95	1.64	700	1,024,180	26,337	9,779
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.22	2.73	2.63	2.41	2.18	1.83	1.22	1.69	700	2,733,165	134,580	31,018
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.65	9.20	8.81	8.13	7.42	6.15	3.95	1.71	700	1,053,670	23,814	9,865
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.78	9.15	8.70	7.90	7.09	5.62	3.36	1.71	700	922,231	16,387	12,204
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.66	6.43	6.20	5.59	5.03	4.08	2.60	1.72	700	1,116,130	41,592	14,860
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.66	6.44	6.20	5.61	5.02	4.08	2.58	1.73	700	1,126,469	39,241	14,933
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.72	9.25	8.84	8.17	7.45	6.15	3.93	1.73	700	1,051,290	22,476	9,982
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.43	6.15	5.77	5.20	4.64	3.61	2.19	1.74	700	1,025,735	36,042	17,997
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.25	6.30	6.19	5.84	5.30	4.55	3.22	1.74	700	1,674,881	62,632	11,479
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.82	9.18	8.84	8.03	7.13	5.69	3.40	1.75	700	957,251	14,655	12,183
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.86	9.22	8.85	8.05	7.18	5.72	3.40	1.78	700	971,036	13,785	12,261
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	11.94	10.28	9.86	9.12	8.31	6.92	4.47	1.79	700	936,489	22,739	8,687
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	6.61	5.50	5.29	4.82	4.37	3.63	2.43	1.79	700	1,144,580	74,300	15,350
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.68	6.51	6.09	5.59	4.99	4.01	2.43	1.81	700	1,195,887	29,730	16,398
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.15	2.69	2.57	2.39	2.14	1.81	1.19	1.82	700	2,923,627	128,221	31,910
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	11.95	10.24	9.80	9.07	8.29	6.88	4.48	1.82	700	873,396	26,171	8,526
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	6.76	5.60	5.25	4.74	4.21	3.35	2.03	1.84	700	1,116,034	43,398	19,309
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.89	9.20	8.82	8.01	7.16	5.68	3.38	1.84	700	945,074	14,750	12,304
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.15	5.95	5.59	5.08	4.49	3.61	2.20	1.85	700	1,104,348	40,621	17,873
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	6.69	5.62	5.31	4.98	4.46	3.65	2.43	1.86	700	1,230,886	62,952	15,575
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.33	6.09	5.72	5.13	4.55	3.59	2.11	1.87	700	1,074,641	32,085	18,723
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	11.72	10.02	9.65	8.84	8.00	6.48	3.95	1.89	700	1,014,528	12,494	10,573
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.68	6.44	6.04	5.50	4.85	3.88	2.30	1.89	700	1,128,336	28,552	17,394
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.35	2.85	2.71	2.53	2.29	1.96	1.32	1.90	700	2,575,603	150,000	27,930
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.65	6.42	6.05	5.44	4.84	3.85	2.24	1.92	700	1,156,882	25,310	18,011
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.62	6.49	6.04	5.55	4.95	4.02	2.41	1.94	700	1,239,449	28,325	16,588
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	11.75	10.02	9.63	8.88	7.98	6.46	3.93	1.94	700	989,341	12,676	10,537
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.96	3.96	3.74	3.18	2.90	2.16	1.33	1.95	700	1,111,360	71,319	29,195
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	8.33	6.99	6.70	6.14	5.43	4.35	2.64	1.96	700	1,146,909	25,230	15,253
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	6.76	5.59	5.25	4.78	4.20	3.33	1.99	1.98	700	1,164,950	37,599	19,810
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.44	6.16	5.72	5.23	4.62	3.63	2.17	1.98	700	1,033,440	34,853	18,112
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	10.87	9.16	8.70	7.90	7.10	5.69	3.40	1.98	700	898,408	17,672	11,883
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	6.84	5.67	5.34	4.94	4.44	3.61	2.34	1.99	700	1,110,557	58,890	16,111
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.64	3.85	3.71	3.45	3.11	2.61	1.79	2.00	700	1,621,499	123,357	20,603

Location					Material Type			FWD File Information				Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer															RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title		PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.65	6.50	6.07	5.59	4.97	4.00	2.36	2.01	700	1,240,138	25,896	17,109
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	10.84	9.15	8.75	7.97	7.12	5.74	3.41	2.03	700	948,715	15,922	12,021
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	10.90	9.17	8.80	7.99	7.16	5.68	3.34	2.03	700	939,706	14,230	12,404
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.68	6.45	6.07	5.51	4.86	3.90	2.26	2.05	700	1,179,082	24,556	17,921
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	11.75	9.97	9.69	8.88	8.00	6.51	4.00	2.05	700	994,992	13,879	10,284
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.33	6.94	6.66	6.09	5.42	4.35	2.67	2.08	700	1,094,373	29,205	14,785
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.91	4.86	4.54	4.11	3.61	2.86	1.68	2.10	700	1,303,107	42,871	23,735
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.40	7.04	6.77	6.19	5.48	4.41	2.64	2.10	700	1,191,554	22,324	15,484
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.89	7.37	6.97	6.35	5.68	4.49	2.70	2.12	700	983,509	25,739	14,725
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.12	6.85	6.49	6.01	5.34	4.35	2.64	2.13	700	1,237,457	26,139	15,232
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.69	5.60	5.31	4.94	4.43	3.67	2.36	2.14	700	1,306,801	54,606	16,145
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.96	5.78	5.43	4.94	4.39	3.46	2.02	2.15	700	1,246,820	29,981	20,048
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	4.60	3.80	3.61	3.36	3.04	2.55	1.71	2.15	700	1,587,087	119,541	21,638
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.82	7.32	6.96	6.32	5.66	4.47	2.66	2.16	700	1,014,563	23,772	14,994
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.42	4.39	4.16	3.71	3.30	2.54	1.50	2.17	700	1,353,338	46,952	26,456
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.22	5.97	5.62	5.12	4.53	3.65	2.20	2.17	700	1,055,660	41,865	17,652
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.45	4.43	4.13	3.74	3.27	2.55	1.49	2.17	700	1,314,094	47,213	26,477
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.08	5.86	5.59	5.10	4.52	3.64	2.21	2.18	700	1,226,089	36,784	17,967
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.98	5.78	5.54	5.04	4.48	3.61	2.20	2.18	700	1,217,850	38,276	17,763
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.82	5.64	5.33	4.90	4.43	3.63	2.32	2.19	700	1,118,819	58,487	16,154
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.06	5.84	5.57	5.09	4.50	3.65	2.23	2.20	700	1,211,635	38,973	17,640
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.58	4.58	4.28	3.86	3.43	2.70	1.58	2.22	700	1,345,226	46,112	24,876
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.18	5.93	5.60	5.07	4.54	3.64	2.19	2.22	700	1,128,174	38,424	17,878
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.94	4.90	4.55	4.13	3.68	2.88	1.68	2.22	700	1,334,061	39,492	23,721
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	3.97	3.40	3.32	3.13	2.91	2.49	1.73	2.22	700	2,946,839	120,686	21,141
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.51	4.58	4.37	3.97	3.50	2.78	1.60	2.23	700	1,735,393	29,001	25,910
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	4.20	3.46	3.27	3.04	2.68	2.20	1.40	2.23	700	1,808,384	91,950	27,268
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.04	6.76	6.41	5.91	5.30	4.31	2.61	2.24	700	1,254,814	26,491	15,388
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.02	5.82	5.45	4.95	4.40	3.54	2.09	2.27	700	1,165,733	36,482	18,915
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.14	4.20	3.97	3.61	3.21	2.60	1.60	2.27	700	1,445,887	66,429	24,154
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.12	6.85	6.46	5.96	5.31	4.35	2.60	2.28	700	1,228,657	25,677	15,466
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	4.57	4.06	3.91	3.88	3.55	3.15	2.26	2.29	700	4,158,345	74,464	16,036
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	8.86	7.34	6.96	6.34	5.67	4.47	2.62	2.30	700	1,031,969	21,494	15,374
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.98	4.92	4.56	4.15	3.68	2.90	1.69	2.30	700	1,320,229	40,130	23,589
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	11.77	9.90	9.59	8.86	7.95	6.49	3.97	2.33	700	964,840	14,800	10,211
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.23	5.99	5.75	5.25	4.69	3.72	2.21	2.34	700	1,338,254	25,907	18,379
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.99	5.76	5.40	4.90	4.31	3.42	1.96	2.34	700	1,212,811	28,555	20,622
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.22	4.20	3.93	3.56	3.12	2.51	1.52	2.34	700	1,268,071	67,377	25,463
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	4.75	4.10	4.07	3.89	3.58	3.14	2.24	2.34	700	3,058,576	97,769	16,005
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.52	4.56	4.38	3.98	3.49	2.78	1.61	2.34	700	1,723,504	30,709	25,767
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.66	5.53	5.25	4.79	4.26	3.42	2.01	2.35	700	1,396,551	30,133	20,061
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	4.65	3.73	3.55	3.15	2.78	2.16	1.26	2.36	700	1,556,041	55,124	31,637
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.67	5.52	5.26	4.79	4.26	3.42	2.02	2.37	700	1,382,227	30,755	19,845
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.72	5.57	5.20	4.80	4.23	3.42	2.04	2.37	700	1,227,892	38,958	19,183
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.62	5.46	5.22	4.76	4.20	3.36	1.98	2.37	700	1,385,332	30,848	20,477
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.59	4.56	4.30	3.87	3.42	2.69	1.55	2.37	700	1,411,685	40,075	25,683
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	11.71	9.86	9.62	8.86	7.96	6.52	3.97	2.38	700	1,023,577	13,121	10,399
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	4.26	3.50	3.30	3.07	2.73	2.22	1.40	2.38	700	1,855,665	83,724	27,454
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.96	5.77	5.35	4.91	4.31	3.42	1.95	2.40	700	1,260,336	26,664	20,941
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	4.80	4.13	4.09	3.93	3.64	3.17	2.29	2.40	700	2,989,312	104,481	15,468
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	6.86	5.65	5.35	4.93	4.41	3.61	2.25	2.41	700	1,178,981	49,011	16,915
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	3.99	3.39	3.32	3.14	2.90	2.53	1.77	2.42	700	2,850,540	138,000	20,333
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	3.68	3.06	2.95	2.76	2.51	2.13	1.43	2.43	700	2,378,486	136,744	25,862
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	7.21	6.00	5.78	5.30	4.71	3.77	2.20	2.43	700	1,467,451	20,467	19,040
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	5.58	4.54	4.24	3.85	3.40	2.68	1.56	2.45	700	1,356,849	44,541	25,178
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006		10	20	3.41	2.79	2.66	2.47	2.20	1.81	1.16	2.45	700	2,308,313	117,422	32,971

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.37	4.38	4.16	3.83	3.41	2.77	1.73	2.45	700	1,437,843	66,048	22,217
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.05	5.82	5.47	5.00	4.43	3.55	2.07	2.46	700	1,254,565	30,368	19,464
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.03	3.42	3.33	3.18	2.92	2.55	1.79	2.47	700	2,661,528	146,318	19,844
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.87	4.20	4.07	3.95	3.68	3.22	2.31	2.48	700	2,782,291	113,854	15,207
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.98	3.97	3.75	3.34	2.94	2.32	1.36	2.51	700	1,346,892	60,911	28,855
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.67	3.84	3.72	3.47	3.14	2.64	1.77	2.51	700	1,709,140	112,499	20,856
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.19	4.24	4.01	3.69	3.27	2.66	1.63	2.51	700	1,500,033	63,042	23,676
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.19	4.13	3.86	3.44	3.05	2.33	1.34	2.52	700	1,285,608	49,703	29,125
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.64	3.03	2.89	2.72	2.47	2.08	1.37	2.54	700	2,449,306	123,711	27,304
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.32	4.35	4.13	3.81	3.38	2.75	1.69	2.55	700	1,518,255	60,544	22,986
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.68	4.57	4.27	3.82	3.38	2.59	1.45	2.56	700	1,294,149	37,044	27,445
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.59	4.03	3.93	3.88	3.57	3.20	2.30	2.56	700	4,037,476	90,818	15,364
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.04	3.42	3.34	3.16	2.94	2.53	1.75	2.57	700	2,800,507	125,229	20,634
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.09	5.80	5.44	5.00	4.39	3.51	2.05	2.58	700	1,187,379	31,921	19,450
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.43	4.37	4.12	3.68	3.23	2.55	1.45	2.60	700	1,359,589	44,546	27,420
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.50	4.53	4.30	3.91	3.49	2.77	1.58	2.61	700	1,749,693	29,455	26,239
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.94	4.34	3.61	3.28	2.89	2.31	1.41	2.62	700	1,077,674	80,169	27,400
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.22	4.16	3.87	3.48	3.04	2.37	1.35	2.63	700	1,303,011	49,454	29,089
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.24	4.28	4.00	3.72	3.29	2.69	1.65	2.66	700	1,454,103	65,863	23,256
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.85	3.30	3.25	3.14	2.92	2.58	1.85	2.68	700	3,575,845	150,000	18,798
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.18	4.12	3.87	3.46	3.04	2.35	1.33	2.68	700	1,340,650	46,264	29,473
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.12	5.82	5.50	5.00	4.47	3.54	2.04	2.69	700	1,248,834	27,749	19,785
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.38	4.38	4.13	3.82	3.38	2.74	1.66	2.70	700	1,484,251	56,765	23,423
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.37	2.74	2.62	2.42	2.16	1.81	1.15	2.73	700	2,251,456	127,044	32,667
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	3.66	3.03	2.92	2.71	2.51	2.11	1.39	2.74	700	2,508,004	124,631	26,891
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.59	4.03	3.82	3.84	3.53	3.13	2.26	2.75	700	3,328,698	115,991	15,263
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.70	4.59	4.32	3.87	3.37	2.63	1.44	2.75	700	1,289,883	36,273	27,596
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.21	4.19	3.92	3.55	3.14	2.51	1.46	2.80	700	1,366,982	56,738	26,736
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.73	3.76	3.55	3.18	2.75	2.16	1.20	2.86	700	1,530,845	47,836	33,349
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.67	3.68	3.49	3.14	2.73	2.12	1.21	2.87	700	1,492,627	54,089	32,667
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	6.82	5.47	5.16	4.74	4.21	3.41	2.07	2.87	700	1,065,096	51,184	18,565
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.98	3.95	3.72	3.36	2.94	2.35	1.37	2.88	700	1,371,943	61,035	28,410
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	7.14	5.80	5.46	5.04	4.45	3.54	2.05	2.88	700	1,219,294	30,065	19,604
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.21	3.47	3.25	3.05	2.76	2.26	1.40	2.91	700	2,036,433	79,475	27,271
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.70	4.57	4.33	3.93	3.48	2.76	1.60	2.91	700	1,374,977	43,316	24,611
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.19	4.20	3.90	3.53	3.14	2.53	1.46	2.91	700	1,402,029	55,641	26,651
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	6.76	5.44	5.11	4.69	4.19	3.40	2.05	2.94	700	1,088,538	50,818	18,743
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	5.03	3.97	3.77	3.40	2.94	2.35	1.36	2.95	700	1,352,473	58,555	28,752
Metro	I-94	13-04	82021	NA	SP2	NA	NA	Summer	11/19/2006	rigid-M-I94-CS82021-11-19-2006	10	20	4.97	4.35	3.59	3.29	2.88	2.33	1.40	3.00	700	1,073,817	78,887	27,478
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.04	4.48	4.23	4.03	3.65	3.07	2.03	0.93	175	1,677,816	66,688	9,516
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.46	3.89	3.63	3.38	2.98	2.32	1.30	0.94	175	1,679,725	22,877	19,824
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.47	3.87	3.61	3.33	2.96	2.34	1.31	0.95	175	1,629,041	28,262	18,784
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.00	4.45	4.18	4.00	3.64	3.05	2.05	0.97	175	1,658,995	74,130	9,190
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.22	4.63	4.40	4.15	3.78	3.12	1.96	0.98	175	1,814,307	35,003	10,961
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.17	4.60	4.33	4.09	3.74	3.08	1.93	0.98	175	1,782,449	34,551	11,197
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.56	4.02	3.82	3.58	3.23	2.62	1.56	1.01	175	2,010,852	22,450	15,594
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.99	4.35	4.08	3.80	3.33	2.63	1.47	1.01	175	1,545,546	19,580	17,686
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.45	3.84	3.58	3.32	2.91	2.26	1.23	1.05	175	1,621,407	21,948	21,487
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.47	3.90	3.67	3.44	3.07	2.45	1.44	1.05	175	1,791,322	29,865	16,491
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.02	4.44	4.20	4.02	3.66	3.05	2.06	1.06	175	1,653,047	75,431	9,171
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.25	3.66	3.45	3.20	2.84	2.25	1.29	1.07	175	1,740,570	33,671	18,651
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.47	3.88	3.68	3.43	3.08	2.45	1.44	1.09	175	1,807,041	29,699	16,560
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.20	4.63	4.38	4.16	3.75	3.10	1.90	1.10	175	1,921,270	21,294	12,348
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.54	4.00	3.76	3.56	3.19	2.61	1.59	1.11	175	1,876,256	36,981	14,065
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.15	3.57	3.37	3.14	2.80	2.22	1.31	1.12	175	1,745,507	42,574	17,456
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.00	4.39	4.10	3.86	3.37	2.67	1.51	1.14	175	1,594,853	18,782	17,295

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.19	4.62	4.41	4.19	3.77	3.11	1.89	1.15	175	2,040,502	13,232	13,533
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.21	3.66	3.44	3.22	2.86	2.24	1.26	1.16	175	1,935,452	19,458	21,438
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.96	4.32	4.04	3.79	3.34	2.63	1.47	1.16	175	1,580,936	18,031	17,770
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.44	3.87	3.63	3.42	3.04	2.43	1.43	1.16	175	1,783,841	32,169	16,503
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.30	3.69	3.48	3.23	2.90	2.28	1.33	1.16	175	1,698,994	38,140	17,593
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.34	3.74	3.53	3.28	2.96	2.36	1.39	1.16	175	1,756,944	38,774	16,586
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.13	4.53	4.27	4.07	3.68	3.03	1.91	1.17	175	1,718,813	41,410	11,117
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.72	4.16	3.93	3.70	3.36	2.74	1.64	1.18	175	1,970,250	23,804	14,481
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.73	4.08	3.91	3.62	3.27	2.60	1.54	1.19	175	1,714,500	30,319	15,290
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.36	3.77	3.55	3.32	2.93	2.30	1.30	1.19	175	1,763,972	23,867	19,527
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.24	4.58	4.33	4.07	3.75	3.09	1.96	1.20	175	1,581,338	51,652	10,428
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.26	3.67	3.46	3.24	2.86	2.31	1.37	1.20	175	1,696,618	46,134	16,392
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.73	4.15	3.89	3.64	3.27	2.63	1.49	1.21	175	1,887,967	15,227	18,329
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.31	3.74	3.51	3.29	2.88	2.27	1.26	1.22	175	1,810,644	19,336	21,173
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.56	4.00	3.82	3.60	3.23	2.66	1.61	1.22	175	2,046,158	27,783	14,494
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.30	3.73	3.51	3.32	2.98	2.47	1.55	1.24	175	1,737,664	69,051	13,284
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.73	4.12	3.91	3.68	3.28	2.64	1.55	1.24	175	1,818,401	23,683	15,729
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	3.81	3.25	3.02	2.83	2.49	1.99	1.17	1.27	175	1,708,658	61,106	19,270
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.34	3.75	3.51	3.30	2.94	2.33	1.35	1.29	175	1,771,299	31,821	17,704
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.70	4.06	3.89	3.63	3.20	2.57	1.50	1.29	175	1,695,984	27,048	15,890
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.22	3.61	3.42	3.17	2.84	2.23	1.27	1.29	175	1,805,033	29,991	19,382
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.78	4.15	3.95	3.69	3.33	2.64	1.51	1.30	175	1,875,844	14,924	18,086
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.36	3.76	3.54	3.35	2.98	2.45	1.52	1.31	175	1,655,696	64,367	13,791
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.32	3.72	3.51	3.31	2.99	2.46	1.54	1.31	175	1,700,400	68,935	13,356
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.16	4.53	4.29	4.09	3.72	3.07	1.94	1.32	175	1,746,646	40,814	10,813
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.03	3.43	3.26	3.05	2.73	2.22	1.37	1.33	175	1,720,509	71,339	15,449
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	3.85	3.27	3.06	2.86	2.51	2.06	1.24	1.34	175	1,620,608	77,527	17,210
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.59	3.99	3.76	3.54	3.17	2.52	1.44	1.34	175	1,893,820	17,595	18,381
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.63	4.07	3.86	3.65	3.32	2.77	1.71	1.35	175	2,035,689	36,499	12,783
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	3.79	3.23	3.02	2.81	2.51	1.99	1.14	1.36	175	1,851,331	45,814	20,502
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.64	3.98	3.79	3.52	3.12	2.53	1.46	1.37	175	1,687,303	31,169	16,237
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.20	3.61	3.38	3.18	2.78	2.20	1.24	1.40	175	1,767,161	29,442	19,994
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.10	4.51	4.27	4.05	3.72	3.10	1.92	1.40	175	1,980,697	27,502	11,500
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.67	4.10	3.89	3.70	3.33	2.76	1.68	1.41	175	2,042,850	28,634	13,618
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.34	3.75	3.52	3.32	2.96	2.34	1.34	1.42	175	1,868,312	23,806	18,721
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.38	3.78	3.54	3.32	2.96	2.33	1.29	1.42	175	1,855,416	17,897	21,030
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	3.84	3.27	3.08	2.89	2.59	2.07	1.23	1.47	175	1,852,143	56,883	18,219
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.03	3.40	3.25	3.03	2.71	2.19	1.33	1.52	175	1,701,227	67,539	16,198
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.65	4.08	3.87	3.69	3.36	2.78	1.71	1.52	175	2,123,395	28,255	13,167
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.79	4.17	3.95	3.76	3.37	2.76	1.64	1.57	175	1,929,661	23,386	14,567
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.26	3.68	3.44	3.26	2.93	2.33	1.35	1.58	175	1,918,100	28,052	17,896
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.87	4.20	3.97	3.74	3.41	2.75	1.64	1.60	175	1,752,729	31,258	13,990
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.62	3.95	3.77	3.54	3.12	2.50	1.42	1.61	175	1,768,314	22,084	17,740
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	3.76	3.18	3.04	2.82	2.53	2.05	1.20	1.64	175	1,976,035	51,445	18,857
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	3.81	3.25	3.04	2.85	2.59	2.08	1.22	1.70	175	1,969,009	50,736	18,557
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	5.15	4.49	4.27	4.11	3.70	3.10	1.94	1.72	175	1,842,339	36,922	10,934
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.80	4.05	3.90	3.62	3.25	2.61	1.52	1.73	175	1,629,085	32,712	15,284
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.04	3.38	3.17	3.01	2.71	2.17	1.38	1.74	175	1,498,328	95,306	14,622
Metro	M-5	13-03	00000	NA	SC	NA	NA	Summer	11/29/2006	rigid-M-M5-CS00000-11-29-2006	12	20	4.24	3.62	3.38	3.16	2.86	2.26	1.26	1.77	175	1,844,045	26,485	19,825
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	5.63	4.96	4.61	4.09	3.62	2.87	1.65	1.21	700	1,970,058	36,070	24,289
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	5.67	5.00	4.65	4.09	3.62	2.87	1.65	1.21	700	1,940,643	37,036	24,596
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	8.50	7.09	6.38	5.59	4.84	3.54	1.81	1.95	700	998,282	18,381	21,796
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	7.95	6.73	6.10	5.43	4.80	3.74	2.09	2.04	700	1,116,635	33,711	18,568
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	8.62	7.13	6.46	5.59	4.92	3.54	1.81	2.08	700	988,655	17,604	21,902
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	7.87	6.65	6.06	5.35	4.76	3.70	2.05	2.13	700	1,105,047	33,430	18,660
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	7.36	5.83	5.31	4.69	4.13	3.19	1.85	2.22	700	722,363	78,463	20,618

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	7.36	5.79	5.31	4.69	4.09	3.23	1.89	2.23	700	726,583	82,583	20,246
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	8.58	7.24	6.57	5.79	5.04	3.86	2.01	2.24	700	1,069,717	18,995	19,403
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	8.50	7.20	6.54	5.71	5.00	3.82	1.97	2.24	700	1,097,999	17,041	19,842
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	6.81	5.67	5.12	4.53	4.02	3.19	1.81	2.31	700	1,026,392	63,917	20,986
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	6.85	5.67	5.12	4.53	4.02	3.19	1.81	2.38	700	989,443	66,224	20,962
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	8/30/1997	rigid-N-I75-CS65041-08-30-2001	9	14	6.81	5.59	5.08	4.53	4.02	3.19	1.81	2.58	700	1,059,403	62,566	20,908
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	8.54	7.13	6.46	5.71	5.00	3.82	2.13	1.81	700	931,490	35,467	18,461
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.36	6.10	5.51	4.80	4.13	3.11	1.65	1.91	700	1,077,616	32,221	24,192
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.95	6.81	6.30	5.63	5.00	3.94	2.20	1.97	700	1,389,317	24,384	18,377
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	8.15	6.97	6.46	5.75	5.04	4.02	2.24	2.00	700	1,270,964	26,875	17,768
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.56	6.22	5.67	4.92	4.29	3.23	1.73	2.06	700	1,053,817	33,070	22,932
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.01	5.87	5.31	4.69	4.06	3.07	1.61	2.10	700	1,283,213	25,627	24,836
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	6.97	5.83	5.31	4.65	4.06	3.07	1.61	2.12	700	1,311,459	25,520	24,940
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.56	6.26	5.67	4.92	4.25	3.19	1.65	2.15	700	1,079,612	25,864	23,798
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.56	6.22	5.63	4.92	4.29	3.23	1.73	2.16	700	1,042,103	34,403	22,933
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	8.15	6.73	6.14	5.43	4.76	3.66	2.01	2.24	700	991,886	36,436	19,522
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.72	6.38	5.79	5.04	4.37	3.31	1.73	2.28	700	1,351,425	28,025	22,601
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	8.15	6.73	6.14	5.39	4.76	3.66	2.01	2.28	700	983,675	37,443	19,553
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.91	6.73	6.26	5.55	4.92	3.90	2.13	2.29	700	1,377,649	23,060	18,882
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.32	6.06	5.47	4.76	4.09	3.11	1.61	2.31	700	1,119,988	28,729	24,687
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	10.24	8.43	7.72	6.77	5.91	4.37	2.24	2.33	700	896,834	14,681	17,957
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	9.88	8.15	7.44	6.54	5.67	4.25	2.17	2.41	700	955,071	15,400	18,889
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	9.92	8.19	7.44	6.54	5.71	4.25	2.17	2.45	700	945,328	15,272	18,822
North	I-75	05-04	65041	947	SP2	Natural Gravel	Dense	Summer	9/14/2001	rigid-N-I75-CS65041-09-14-2001	9	14	7.09	5.91	5.39	4.72	4.09	3.15	1.61	2.60	700	1,257,826	24,654	24,364
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.26	5.51	5.24	4.69	4.25	3.46	2.20	0.92	700	1,709,497	72,855	17,752
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.02	5.20	4.76	4.17	3.66	2.83	1.61	1.12	700	1,461,265	43,989	24,418
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.22	5.51	5.16	4.69	4.21	3.50	2.20	1.21	700	1,748,918	74,434	17,670
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.34	5.35	4.92	4.25	3.74	2.91	1.69	1.22	700	1,117,648	64,059	23,021
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.06	5.24	4.80	4.21	3.70	2.83	1.57	1.23	700	1,526,374	34,395	25,112
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.34	5.31	4.92	4.25	3.74	2.91	1.69	1.33	700	1,128,646	64,220	23,053
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	8.90	7.52	6.93	6.10	5.35	4.17	2.40	1.41	700	917,245	38,643	16,375
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.09	7.76	7.13	6.26	5.51	4.29	2.44	1.43	700	938,829	32,775	15,988
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.69	5.59	5.16	4.49	3.94	3.07	1.77	1.46	700	1,070,533	57,967	21,624
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	4.37	3.86	3.62	3.23	2.91	2.40	1.46	1.47	700	2,569,766	81,973	27,003
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	8.62	7.32	6.69	5.91	5.20	3.98	2.24	1.47	700	1,008,609	31,204	17,611
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	4.53	3.98	3.70	3.31	2.99	2.40	1.42	1.49	700	2,462,937	60,860	27,691
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.97	5.94	5.43	4.76	4.17	3.23	1.81	1.50	700	1,217,522	37,979	21,400
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.95	6.77	6.18	5.39	4.69	3.54	1.89	1.51	700	1,159,710	21,015	21,114
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	8.90	7.52	6.89	6.10	5.39	4.17	2.40	1.51	700	918,926	38,454	16,296
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	5.75	4.92	4.49	3.98	3.46	2.72	1.54	1.54	700	1,497,866	50,970	25,452
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.99	6.85	6.30	5.59	4.88	3.74	2.01	1.63	700	1,326,557	17,601	20,421
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.69	8.39	7.76	6.93	6.22	4.88	2.80	1.63	700	1,077,753	24,534	13,988
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.21	7.99	7.36	6.57	5.91	4.65	2.68	1.65	700	1,153,581	26,996	14,860
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.52	6.06	5.63	4.96	4.41	3.54	2.17	1.65	700	684,746	100,592	17,475
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.81	5.83	5.31	4.69	4.09	3.19	1.77	1.66	700	1,301,212	36,295	22,070
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.52	6.54	5.94	5.24	4.61	3.54	1.89	1.68	700	1,381,841	18,230	21,412
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.80	6.50	5.91	5.20	4.53	3.46	1.93	1.68	700	956,569	39,002	19,752
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.30	5.43	4.92	4.37	3.82	2.95	1.61	1.69	700	1,500,605	31,292	24,500
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.13	7.72	7.09	6.22	5.55	4.25	2.40	1.69	700	923,786	31,615	16,115
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	8.74	7.40	6.77	5.98	5.31	4.06	2.28	1.70	700	1,009,876	30,800	17,293
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.72	6.54	5.98	5.20	4.57	3.46	1.85	1.76	700	1,184,889	23,778	21,514
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.21	7.95	7.36	6.54	5.91	4.65	2.68	1.76	700	1,142,740	27,174	14,704
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	5.79	4.96	4.53	4.02	3.50	2.76	1.54	1.76	700	1,529,271	45,240	25,124
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	5.79	4.92	4.57	4.02	3.50	2.76	1.54	1.77	700	1,587,212	44,233	25,633
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.09	7.80	7.20	6.50	5.79	4.57	2.64	1.79	700	1,112,484	29,716	14,736
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.52	6.02	5.55	4.92	4.37	3.50	2.13	1.81	700	667,000	100,497	17,735

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.13	6.06	5.59	4.88	4.29	3.35	1.85	1.82	700	1,277,178	34,103	21,334
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.72	6.57	5.98	5.16	4.53	3.46	1.85	1.82	700	1,138,767	26,325	21,421
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	5.98	5.00	4.61	4.02	3.50	2.68	1.46	1.82	700	1,335,670	43,261	26,376
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.01	5.91	5.47	4.76	4.21	3.23	1.77	1.84	700	1,272,924	32,000	21,994
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.57	8.15	7.48	6.77	5.98	4.72	2.72	1.88	700	960,975	31,029	13,971
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.29	7.83	7.20	6.38	5.63	4.33	2.40	1.88	700	990,135	25,066	16,307
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	4.41	3.86	3.62	3.23	2.91	2.40	1.42	1.90	700	2,560,744	70,475	27,580
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.76	6.30	5.75	5.08	4.53	3.66	2.20	1.90	700	678,073	90,871	17,002
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.65	8.15	7.48	6.61	5.87	4.49	2.48	1.91	700	945,146	23,699	15,685
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	8.15	7.01	6.42	5.67	4.92	3.82	2.01	1.91	700	1,254,535	16,905	19,997
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.48	6.22	5.67	4.96	4.33	3.31	1.81	1.92	700	1,040,829	36,855	21,282
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.33	7.91	7.24	6.38	5.63	4.37	2.40	1.97	700	982,715	24,791	16,301
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.85	5.87	5.31	4.72	4.13	3.23	1.77	1.97	700	1,330,780	34,377	22,157
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.17	6.02	5.59	4.88	4.33	3.35	1.85	2.01	700	1,287,621	34,214	21,479
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	9.09	7.80	7.20	6.46	5.79	4.61	2.64	2.03	700	1,138,083	28,953	14,766
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.52	6.22	5.67	4.96	4.37	3.31	1.81	2.07	700	1,026,141	37,069	21,206
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	10.83	8.98	8.23	7.24	6.42	5.04	2.87	2.08	700	655,773	36,243	12,939
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.73	5.47	5.08	4.49	4.02	3.19	1.89	2.17	700	952,777	86,681	20,324
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	11.26	9.29	8.50	7.52	6.65	5.20	2.95	2.18	700	633,090	33,873	12,565
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	5.79	4.84	4.45	3.86	3.39	2.60	1.38	2.21	700	1,504,009	36,763	28,449
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	10.98	9.02	8.31	7.32	6.54	5.12	2.91	2.36	700	659,946	36,532	12,874
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.91	6.14	5.59	4.80	4.13	3.15	1.73	2.43	700	639,284	59,527	21,841
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.89	5.91	5.47	5.04	4.57	3.82	2.32	2.46	700	1,465,082	72,539	16,465
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	8.15	6.34	5.75	4.96	4.29	3.23	1.77	2.47	700	613,562	55,709	20,993
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.93	5.91	5.51	5.04	4.61	3.82	2.32	2.48	700	1,534,209	67,263	16,680
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.65	5.43	5.00	4.45	3.94	3.19	1.85	2.49	700	985,104	84,573	20,669
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.24	6.22	5.79	5.31	4.84	4.02	2.40	2.58	700	1,605,638	50,218	16,052
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	5.79	4.76	4.41	3.82	3.35	2.60	1.38	2.61	700	1,479,257	39,188	28,084
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	6.93	5.67	5.20	4.61	4.09	3.31	1.89	2.67	700	938,652	77,233	19,968
North	I-75	05-02	16091	c1,c2,c9	SP1	Natural Gravel	Dense	Summer	9/17/2001	rigid-N-I75-CS16091-09-17-2001	9	14	7.95	6.10	5.55	4.80	4.13	3.15	1.73	2.68	700	624,651	61,206	21,777
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	8.11	6.93	6.38	5.63	4.96	3.86	2.40	0.33	700	884,604	65,855	16,797
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.97	6.06	5.67	5.08	4.53	3.62	2.28	0.65	700	1,282,456	71,424	17,360
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	4.33	3.82	3.54	3.19	2.83	2.28	1.42	0.69	700	2,212,266	100,727	27,750
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.35	4.65	4.33	3.82	3.43	2.72	1.69	0.69	700	1,590,714	90,537	23,507
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.20	6.22	5.83	5.24	4.65	3.66	2.32	0.69	700	1,187,024	68,375	16,855
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.32	6.30	5.83	5.20	4.65	3.70	2.32	0.72	700	1,064,015	77,001	17,002
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.52	6.46	6.02	5.28	4.72	3.66	2.24	0.78	700	1,062,847	58,348	17,342
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	8.31	7.01	6.50	5.75	5.04	3.90	2.40	0.83	700	853,781	59,718	16,535
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	4.33	3.82	3.58	3.15	2.87	2.28	1.42	0.86	700	2,241,082	96,279	27,700
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	8.07	6.81	6.34	5.55	4.88	3.86	2.36	0.88	700	870,463	66,585	16,821
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.83	5.04	4.69	4.21	3.70	2.87	1.69	1.00	700	1,701,131	45,120	23,398
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.98	5.16	4.76	4.29	3.78	2.91	1.73	1.00	700	1,530,920	50,167	22,430
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.83	5.04	4.69	4.17	3.74	3.07	1.93	1.05	700	1,363,483	102,378	19,919
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.08	4.45	4.13	3.70	3.31	2.60	1.54	1.07	700	2,058,960	53,089	25,530
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.83	5.04	4.69	4.21	3.74	2.87	1.69	1.08	700	1,747,413	42,909	23,521
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	4.37	3.86	3.54	3.19	2.87	2.28	1.38	1.10	700	2,287,366	77,571	28,106
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.35	4.61	4.29	3.82	3.39	2.72	1.65	1.14	700	1,627,723	83,827	23,935
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	4.96	4.33	4.02	3.58	3.19	2.56	1.54	1.14	700	1,962,638	72,952	25,596
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.17	6.02	5.51	4.88	4.33	3.35	2.01	1.16	700	984,630	67,090	19,504
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.05	6.14	5.71	5.16	4.65	3.78	2.36	1.18	700	1,336,235	72,071	16,588
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.97	6.10	5.67	5.16	4.61	3.78	2.36	1.19	700	1,389,276	71,150	16,516
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.40	6.22	5.71	5.00	4.41	3.46	2.05	1.20	700	927,750	63,763	18,870
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.20	6.06	5.59	4.92	4.37	3.39	2.01	1.25	700	1,037,739	60,984	19,532
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.39	4.61	4.29	3.82	3.43	2.72	1.65	1.29	700	1,574,581	82,798	23,483
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.36	6.22	5.79	5.16	4.61	3.70	2.28	1.30	700	1,032,866	76,650	17,078
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	9.61	8.07	7.48	6.54	5.67	4.25	2.32	1.39	700	936,272	20,725	17,311

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	9.41	7.91	7.32	6.38	5.55	4.17	2.28	1.40	700	950,963	22,748	17,779
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	9.33	7.87	7.24	6.34	5.51	4.13	2.24	1.41	700	978,606	21,451	18,219
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.18	5.08	4.61	4.02	3.50	2.60	1.46	1.46	700	1,107,951	52,838	26,509
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.09	6.22	5.75	5.20	4.69	3.82	2.32	1.51	700	1,481,444	55,874	16,987
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.13	6.22	5.75	5.24	4.69	3.82	2.32	1.55	700	1,462,216	55,962	16,993
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	7.28	6.34	5.87	5.35	4.76	3.86	2.32	1.56	700	1,395,514	51,500	16,794
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.55	4.76	4.41	3.94	3.50	2.80	1.65	1.58	700	1,661,243	67,483	23,931
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.18	5.31	4.92	4.37	3.90	3.07	1.77	1.60	700	1,608,579	44,207	22,325
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.18	5.08	4.65	4.02	3.46	2.64	1.46	1.64	700	1,102,276	53,377	26,370
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.55	4.76	4.41	3.90	3.50	2.80	1.65	1.66	700	1,619,704	70,151	23,791
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	11.26	9.49	8.86	7.76	6.77	5.16	2.80	1.67	700	881,427	15,541	14,538
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	11.50	9.76	9.13	7.99	6.93	5.31	2.83	1.68	700	883,853	12,780	14,363
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.59	4.76	4.41	3.94	3.50	2.80	1.65	1.69	700	1,613,070	66,122	23,508
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	11.30	9.53	8.90	7.80	6.81	5.20	2.80	1.75	700	894,850	14,767	14,624
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.42	5.55	5.12	4.57	4.06	3.27	1.89	1.81	700	1,488,064	49,834	20,539
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.30	5.16	4.72	4.09	3.54	2.68	1.46	1.88	700	1,112,725	46,152	25,920
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.87	4.69	4.29	3.82	3.39	2.72	1.65	1.88	700	823,482	132,524	22,890
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	10.51	8.82	8.19	7.20	6.26	4.76	2.52	1.92	700	929,638	15,100	16,003
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.83	4.65	4.25	3.78	3.35	2.72	1.65	1.93	700	800,679	145,281	23,221
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	10.12	8.54	7.83	6.93	6.02	4.57	2.40	1.94	700	1,008,892	14,311	17,297
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	5.79	4.65	4.21	3.78	3.35	2.72	1.65	1.97	700	822,520	144,269	23,126
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	10.12	8.50	7.80	6.89	5.98	4.57	2.36	2.23	700	1,009,951	13,771	17,574
North	I-75	05-02	16091	NA	SP1	NA	NA	Summer	10/26/2001	rigid-N-I75-CS16091-10-26-2001	9	14	6.18	5.31	4.92	4.37	3.90	3.15	1.77	2.28	700	1,676,220	41,732	22,216
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	4.13	3.58	3.35	2.99	2.64	2.09	1.34	0.76	700	2,068,106	128,662	29,206
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.38	5.51	5.08	4.53	4.02	3.15	1.89	0.95	700	1,377,996	59,316	20,868
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.20	5.87	5.31	4.57	3.94	2.91	1.65	1.06	700	843,493	51,993	23,675
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.26	5.24	4.80	4.21	3.70	2.83	1.65	1.17	700	1,131,413	61,305	23,233
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.01	5.71	5.20	4.45	3.82	2.87	1.61	1.25	700	881,438	55,372	24,680
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.94	7.68	7.01	6.22	5.47	4.21	2.40	1.25	700	997,840	30,499	16,452
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.97	5.63	5.20	4.41	3.82	2.83	1.61	1.27	700	881,318	56,544	24,717
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.38	5.51	5.08	4.53	4.02	3.19	1.89	1.27	700	1,424,122	55,162	20,584
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.25	7.87	7.20	6.42	5.63	4.33	2.48	1.37	700	958,099	29,754	15,800
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.94	7.60	7.01	6.22	5.43	4.21	2.40	1.38	700	989,011	31,562	16,398
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.05	5.98	5.51	4.84	4.21	3.27	1.85	1.39	700	1,228,057	40,694	21,570
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.83	6.69	6.10	5.43	4.72	3.58	1.97	1.39	700	1,227,605	24,809	20,631
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.38	5.47	5.04	4.49	3.98	3.15	1.85	1.43	700	1,391,518	56,948	21,282
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.91	6.73	6.22	5.51	4.80	3.66	2.01	1.47	700	1,228,300	23,769	19,961
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.09	6.02	5.55	4.88	4.25	3.27	1.81	1.50	700	1,268,245	33,714	22,038
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.17	6.14	5.59	4.96	4.29	3.31	1.81	1.57	700	1,295,661	28,301	21,942
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.44	6.42	5.94	5.28	4.61	3.62	2.01	1.59	700	1,420,336	25,983	20,268
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.95	6.73	6.18	5.51	4.76	3.62	1.97	1.61	700	1,202,504	23,057	20,385
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.54	5.59	5.16	4.61	4.06	3.15	1.77	1.63	700	1,593,662	31,812	22,944
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.89	5.83	5.35	4.69	4.06	3.15	1.73	1.69	700	1,291,220	35,734	23,291
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.48	6.42	5.94	5.31	4.65	3.66	2.05	1.71	700	1,417,797	27,886	19,808
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.18	5.16	4.72	4.13	3.62	2.83	1.61	1.71	700	1,159,293	62,202	23,839
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.50	5.59	5.16	4.61	4.06	3.15	1.73	1.72	700	1,688,646	25,720	23,788
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	5.55	4.72	4.41	3.90	3.43	2.68	1.50	1.72	700	1,819,992	40,231	26,838
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.76	6.61	6.06	5.39	4.69	3.62	1.97	1.76	700	1,283,650	24,329	20,639
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.10	5.12	4.69	4.09	3.58	2.83	1.61	1.76	700	1,182,833	64,076	23,842
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.53	7.99	7.32	6.46	5.67	4.37	2.44	1.80	700	878,735	29,132	15,875
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.99	6.65	6.06	5.43	4.69	3.70	2.13	1.82	700	907,486	50,769	18,028
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.83	6.46	5.94	5.28	4.61	3.62	2.09	1.88	700	929,845	54,003	18,571
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.43	7.13	6.61	5.91	5.20	4.09	2.32	1.89	700	1,145,318	32,166	17,098
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.83	6.65	6.10	5.43	4.72	3.62	1.93	1.89	700	1,303,384	20,043	21,170
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.35	7.13	6.54	5.87	5.20	4.09	2.32	1.90	700	1,180,975	31,633	17,099
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.09	5.98	5.51	4.84	4.17	3.23	1.73	1.92	700	1,295,119	28,477	23,113

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.53	8.03	7.32	6.50	5.67	4.41	2.44	1.93	700	894,424	28,359	15,913
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	5.67	4.76	4.37	3.82	3.35	2.56	1.38	1.95	700	1,575,920	37,029	28,603
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	5.55	4.72	4.41	3.90	3.43	2.68	1.46	1.97	700	1,943,003	30,728	27,978
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.74	7.40	6.85	6.10	5.39	4.25	2.40	1.97	700	1,103,183	29,359	16,250
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.69	5.71	5.28	4.72	4.09	3.23	1.77	2.00	700	1,444,320	32,847	22,228
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.93	5.83	5.35	4.72	4.06	3.15	1.69	2.00	700	1,319,828	31,434	23,954
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.43	7.05	6.38	5.63	4.88	3.70	1.97	2.02	700	1,025,545	24,610	20,086
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.68	6.46	5.91	5.16	4.49	3.46	1.85	2.03	700	1,084,685	30,060	20,896
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.80	6.61	6.10	5.39	4.69	3.66	1.97	2.04	700	1,289,901	23,591	20,600
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.64	6.38	5.87	5.08	4.41	3.43	1.85	2.09	700	1,075,499	33,101	21,080
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.84	8.23	7.56	6.65	5.83	4.53	2.48	2.12	700	886,334	24,676	15,561
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.43	7.09	6.42	5.63	4.88	3.74	1.97	2.13	700	1,049,209	23,324	20,161
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.66	7.17	6.54	5.71	4.96	3.74	1.97	2.13	700	987,372	21,655	19,774
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	10.51	8.78	7.99	7.05	6.10	4.61	2.40	2.13	700	861,870	15,782	16,484
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.62	7.20	6.57	5.79	5.00	3.82	2.01	2.14	700	1,029,291	21,889	19,583
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	10.47	8.78	7.99	7.01	6.10	4.65	2.44	2.15	700	872,003	16,885	16,268
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.80	6.46	5.91	5.28	4.65	3.62	2.05	2.17	700	994,853	47,112	18,852
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.27	7.05	6.38	5.67	5.00	3.90	2.13	2.17	700	1,048,342	30,708	17,970
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.17	5.94	5.39	4.76	4.13	3.15	1.69	2.19	700	1,161,276	34,202	23,435
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.11	6.85	6.26	5.55	4.88	3.82	2.09	2.20	700	1,129,769	29,842	18,743
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.54	6.97	6.38	5.55	4.84	3.66	1.97	2.21	700	882,571	30,496	19,312
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.50	6.85	6.18	5.43	4.65	3.50	1.89	2.22	700	785,395	36,809	20,236
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.62	7.09	6.42	5.59	4.84	3.66	1.93	2.24	700	884,562	27,246	19,798
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.46	6.81	6.18	5.43	4.65	3.50	1.89	2.24	700	803,389	35,439	20,099
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.64	6.42	5.87	5.08	4.45	3.46	1.85	2.24	700	1,104,148	31,394	21,099
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.82	7.24	6.57	5.71	4.96	3.74	1.97	2.27	700	858,992	26,030	19,197
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.11	6.93	6.26	5.55	4.88	3.82	2.05	2.31	700	1,171,009	25,417	19,273
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	5.79	4.84	4.41	3.86	3.35	2.60	1.38	2.32	700	1,434,873	39,579	27,895
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.39	6.93	6.30	5.51	4.80	3.62	1.89	2.33	700	1,020,936	23,163	20,821
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.13	5.91	5.43	4.72	4.09	3.15	1.65	2.37	700	1,210,358	29,854	24,047
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	6.54	5.24	4.65	3.94	3.35	2.40	1.18	2.38	700	1,001,103	30,045	31,996
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	10.83	9.09	8.23	7.24	6.30	4.84	2.52	2.39	700	819,533	16,791	15,415
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.49	7.64	7.01	6.14	5.35	4.09	2.24	2.43	700	745,100	35,231	17,107
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.35	6.93	6.30	5.51	4.80	3.62	1.85	2.44	700	1,078,580	19,525	21,521
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	5.67	4.76	4.33	3.78	3.27	2.56	1.34	2.50	700	1,527,582	37,062	29,158
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.21	7.44	6.77	5.94	5.20	3.98	2.17	2.53	700	765,342	38,289	17,924
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.21	7.44	6.77	5.94	5.20	4.02	2.20	2.58	700	763,027	40,009	17,666
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	8.74	6.97	6.38	5.63	4.84	3.66	1.97	2.61	700	815,149	32,876	19,222
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	7.40	6.10	5.59	4.88	4.25	3.31	1.73	2.79	700	1,103,266	33,355	22,354
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.92	7.80	7.09	6.18	5.43	4.13	2.24	2.93	700	623,399	40,621	17,090
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/18/2001	rigid-N-I75-CS16092-09-18-2001	9	14	9.92	7.80	7.05	6.18	5.39	4.09	2.20	2.98	700	619,832	39,173	17,336
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	5.98	5.16	4.72	4.25	3.74	2.87	1.69	1.05	700	1,537,919	48,272	23,307
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.81	5.75	5.31	4.69	4.09	3.19	1.89	1.05	700	1,098,228	60,360	20,599
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	5.87	5.12	4.65	4.17	3.70	2.91	1.73	1.13	700	1,527,971	60,525	22,744
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.65	5.59	5.16	4.57	4.06	3.15	1.89	1.22	700	1,122,957	69,039	20,756
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.23	7.09	6.61	5.94	5.28	4.09	2.40	1.26	700	1,272,164	29,168	16,449
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.81	5.94	5.51	4.92	4.37	3.54	2.13	1.28	700	1,431,378	56,706	18,635
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	5.47	4.72	4.33	3.90	3.43	2.72	1.61	1.30	700	1,638,336	65,592	24,299
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.36	6.30	5.83	5.20	4.65	3.62	2.13	1.40	700	1,300,035	43,379	18,731
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.85	5.79	5.31	4.65	4.06	3.07	1.69	1.42	700	1,268,348	30,969	23,060
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.69	5.63	5.16	4.57	4.06	3.19	1.89	1.46	700	1,112,255	69,292	20,713
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.24	6.02	5.55	4.84	4.17	3.11	1.69	1.47	700	1,167,357	30,096	23,784
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.60	6.50	6.02	5.35	4.72	3.70	2.13	1.48	700	1,290,590	34,571	18,644
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.77	5.71	5.20	4.57	4.02	3.07	1.73	1.51	700	1,184,265	43,249	22,407
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.36	6.30	5.79	5.08	4.45	3.43	1.89	1.51	700	1,278,884	28,302	21,036
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.13	7.68	7.01	6.18	5.39	4.17	2.36	1.54	700	861,877	35,214	16,471

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.81	5.91	5.51	4.92	4.41	3.54	2.09	1.55	700	1,604,686	42,731	19,132
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.53	7.99	7.36	6.38	5.63	4.29	2.40	1.57	700	858,318	30,031	16,436
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.52	6.34	5.83	5.16	4.49	3.39	1.85	1.58	700	1,243,586	25,573	21,693
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.36	6.34	5.79	5.12	4.49	3.46	1.89	1.59	700	1,340,139	25,455	21,277
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.40	6.30	5.83	5.12	4.49	3.43	1.85	1.65	700	1,373,398	21,826	22,036
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.15	6.89	6.30	5.51	4.80	3.62	1.93	1.66	700	1,140,588	21,639	20,955
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.36	6.34	5.87	5.20	4.65	3.66	2.09	1.66	700	1,376,251	35,970	19,149
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	10.00	8.50	7.83	6.93	6.10	4.69	2.60	1.67	700	919,206	22,976	15,035
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.49	7.95	7.28	6.34	5.59	4.25	2.36	1.67	700	850,150	29,785	16,609
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	5.47	4.72	4.33	3.90	3.43	2.76	1.61	1.68	700	1,692,528	63,344	24,273
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.23	7.01	6.50	5.75	5.08	3.94	2.20	1.69	700	1,229,333	24,764	18,102
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.69	8.11	7.52	6.54	5.71	4.37	2.40	1.71	700	886,764	24,619	16,347
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.49	7.99	7.32	6.46	5.63	4.37	2.44	1.72	700	890,532	29,247	15,986
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.69	8.19	7.52	6.61	5.91	4.45	2.48	1.73	700	947,090	24,020	16,032
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.50	7.20	6.61	5.83	5.08	3.82	2.01	1.74	700	1,144,578	17,534	20,139
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.97	5.79	5.28	4.61	4.02	2.99	1.61	1.75	700	1,187,933	32,056	24,689
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.77	5.71	5.20	4.57	3.98	3.07	1.69	1.75	700	1,230,457	37,571	22,949
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.52	6.42	5.94	5.20	4.57	3.54	1.93	1.75	700	1,240,890	27,350	20,259
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.07	7.01	6.50	5.79	5.16	4.13	2.36	1.76	700	1,344,094	28,819	16,756
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.97	5.91	5.43	4.76	4.17	3.23	1.77	1.80	700	1,327,241	33,486	22,762
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.24	6.02	5.51	4.80	4.17	3.11	1.65	1.80	700	1,183,005	27,934	24,317
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.15	6.89	6.34	5.51	4.84	3.66	1.93	1.85	700	1,194,260	20,080	21,292
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	5.71	4.88	4.45	3.98	3.50	2.80	1.61	1.86	700	1,509,005	60,363	23,967
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.11	7.01	6.46	5.83	5.16	4.13	2.36	1.88	700	1,328,535	29,250	16,726
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.93	5.87	5.39	4.76	4.13	3.23	1.77	1.89	700	1,348,487	33,311	22,692
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.69	8.15	7.52	6.65	5.87	4.53	2.52	1.90	700	951,907	25,304	15,653
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.32	6.18	5.67	5.00	4.41	3.35	1.81	1.90	700	1,325,473	25,363	22,298
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.13	7.68	7.05	6.22	5.43	4.25	2.36	1.93	700	938,862	31,284	16,639
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.03	6.85	6.34	5.59	4.96	3.90	2.17	1.95	700	1,260,021	27,989	18,434
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.24	6.14	5.71	5.00	4.41	3.39	1.81	1.95	700	1,480,630	20,459	22,953
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.24	6.14	5.71	5.00	4.41	3.39	1.81	1.95	700	1,475,346	20,832	22,954
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	10.20	8.43	7.72	6.69	5.79	4.25	2.17	1.96	700	861,201	14,607	18,477
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.32	6.18	5.63	5.00	4.37	3.35	1.81	1.99	700	1,302,278	26,984	22,236
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.65	7.91	7.28	6.26	5.39	3.98	2.05	1.99	700	864,291	18,273	19,464
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.52	6.38	5.83	5.12	4.49	3.43	1.81	2.00	700	1,321,429	20,052	22,333
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	6.97	5.79	5.31	4.61	3.98	2.99	1.54	2.06	700	1,283,510	22,975	26,034
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.01	5.79	5.31	4.61	4.02	3.03	1.61	2.07	700	1,204,886	31,317	24,771
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.32	6.18	5.67	5.00	4.37	3.35	1.77	2.08	700	1,375,582	21,541	23,084
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.09	5.98	5.51	4.88	4.25	3.27	1.73	2.09	700	1,437,030	21,302	23,457
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.20	5.94	5.43	4.72	4.09	3.07	1.61	2.10	700	1,140,618	28,523	24,363
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.56	6.30	5.75	5.08	4.41	3.31	1.73	2.10	700	1,255,248	20,908	23,512
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.13	6.02	5.51	4.84	4.25	3.27	1.73	2.18	700	1,396,827	22,463	23,334
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	9.72	7.99	7.32	6.34	5.47	4.06	2.05	2.25	700	913,771	15,715	19,760
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	8.03	6.81	6.30	5.55	4.92	3.90	2.13	2.35	700	1,282,969	26,298	18,863
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.13	6.02	5.55	4.88	4.25	3.35	1.77	2.45	700	1,334,430	27,202	22,275
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	5.83	4.84	4.33	3.78	3.31	2.52	1.30	2.70	700	1,453,194	33,333	30,102
North	I-75	05-02	16092	c5,c6,c9	SP1	Natural Gravel	Dense	Summer	9/27/2001	rigid-N-I75-CS160992-09-27-2001	9	14	7.32	6.18	5.63	5.00	4.37	3.46	1.81	2.78	700	1,432,614	21,688	22,439
Southwest	I-196	06-04	3033	NA	SP-SM	NA	NA	Summer	5/15/2008	rigid-So-I196-CS3033-05-14-2008	9		9.25	8.15	7.52	6.77	6.02	4.76	2.72	1.32		1,246,506	21,109	13,104
Southwest	I-196	06-04	3033	NA	SP-SM	NA	NA	Summer	5/15/2008	rigid-So-I196-CS3033-05-14-2008	9		5.08	4.41	4.09	3.62	3.19	2.56	1.50	1.33		1,880,757	56,275	23,051
Southwest	I-196	06-04	3033	NA	SP-SM	NA	NA	Summer	5/15/2008	rigid-So-I196-CS3033-05-14-2008	9		9.25	8.23	7.56	6.81	6.02	4.80	2.72	1.36		1,272,578	19,445	13,156
Southwest	I-196	06-04	3033	NA	SP-SM	NA	NA	Summer	5/15/2008	rigid-So-I196-CS3033-05-14-2008	9		9.29	8.19	7.60	6.77	6.06	4.80	2.72	1.40		1,268,450	19,771	13,194
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/8/1998	rigid-So-I69-CS12034-10-08-1998	9	20	13.03	10.67	9.84	8.54	7.28	5.43	2.95	1.65	700	936,035	26,709	21,074
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/8/1998	rigid-So-I69-CS12034-10-08-1998	9	20	9.09	7.48	6.97	5.94	5.12	3.82	2.05	1.69	700	1,408,824	36,579	31,160
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/8/1998	rigid-So-I69-CS12034-10-08-1998	9	20	10.71	8.82	8.15	7.09	6.06	4.49	2.32	1.89	700	1,320,253	24,305	28,291
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/9/1998	rigid-So-I69-CS12034-10-09-1998	9	20	3.07	2.60	2.44	2.17	1.89	1.46	0.94	0.99	700	1,224,477	61,384	20,202
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/9/1998	rigid-So-I69-CS12034-10-09-1998	9	20	9.69	8.15	7.60	6.77	5.94	4.69	2.87	1.32	700	1,354,502	57,784	21,600

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/9/1998	rigid-So-I69-CS12034-10-09-1998	9	20	3.58	2.95	2.72	2.36	1.97	1.46	0.79	1.37	700	1,000,255	29,017	24,061
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/9/1998	rigid-So-I69-CS12034-10-09-1998	9	20	11.73	9.61	8.90	7.64	6.50	4.80	2.60	1.46	700	1,016,008	29,731	24,127
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/9/1998	rigid-So-I69-CS12034-10-09-1998	9	20	7.76	6.38	5.79	5.08	4.33	3.15	1.69	1.57	700	981,445	26,375	23,274
Southwest	I-69	11-03	12034	bc1	SC-SM	Natural Gravel	Dense	Summer	10/9/1998	rigid-So-I69-CS12034-10-09-1998	9	20	11.77	9.61	8.86	7.68	6.61	4.96	2.68	1.92	700	1,054,730	30,062	23,269
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.71	5.12	4.88	4.33	3.90	3.07	1.97	0.61	700	2,066,725	45,784	20,345
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.26	5.71	5.39	4.84	4.29	3.50	2.20	0.69	700	2,074,552	35,605	18,120
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.34	5.79	5.43	4.92	4.37	3.58	2.24	0.69	700	2,170,931	33,514	18,190
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.71	5.16	4.84	4.37	3.86	3.15	1.97	0.72	700	2,173,462	42,270	20,321
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.51	5.00	4.65	4.21	3.74	3.03	1.89	0.75	700	2,237,525	43,720	20,819
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.26	5.75	5.39	4.84	4.33	3.54	2.20	0.76	700	2,224,631	31,608	18,608
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.87	5.12	4.80	4.29	3.82	3.07	1.93	0.84	700	1,716,251	56,661	20,470
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.87	5.12	4.76	4.25	3.78	3.03	1.89	0.85	700	1,622,957	55,942	20,539
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.94	5.28	4.92	4.53	4.06	3.31	2.13	0.91	700	2,033,190	50,236	18,187
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.14	5.39	5.08	4.61	4.13	3.39	2.20	0.92	700	1,771,173	60,540	17,575
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.61	5.83	5.47	4.96	4.45	3.66	2.36	0.93	700	1,675,680	54,780	16,493
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.39	4.69	4.45	4.02	3.54	2.87	1.85	0.94	700	1,881,239	65,810	20,995
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.34	5.63	5.31	4.84	4.29	3.58	2.32	1.01	700	1,791,308	55,076	16,416
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.42	5.63	5.31	4.76	4.25	3.50	2.24	1.01	700	1,620,288	57,014	17,279
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.94	5.24	4.96	4.53	4.06	3.35	2.17	1.01	700	2,042,164	56,146	17,932
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.65	5.71	5.35	4.76	4.21	3.39	2.13	1.02	700	1,312,508	55,318	17,968
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.85	5.87	5.55	4.88	4.29	3.35	2.01	1.05	700	1,406,747	37,997	19,836
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.87	5.08	4.76	4.29	3.82	3.07	1.93	1.06	700	1,715,097	58,292	20,442
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.34	5.59	5.24	4.80	4.29	3.54	2.28	1.07	700	1,813,280	53,624	16,869
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.43	4.76	4.49	4.09	3.66	3.03	1.97	1.07	700	2,041,221	69,463	19,528
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.91	5.08	4.80	4.29	3.82	3.03	1.89	1.09	700	1,673,390	51,882	20,543
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.51	4.84	4.61	4.13	3.74	3.07	1.97	1.11	700	2,069,771	60,423	19,463
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.51	4.76	4.49	4.06	3.58	2.91	1.85	1.12	700	1,798,948	62,803	20,728
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.61	5.79	5.43	4.96	4.45	3.66	2.36	1.13	700	1,686,247	55,269	16,440
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.79	4.96	4.65	4.17	3.70	2.99	1.89	1.15	700	1,571,063	65,143	20,388
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.98	5.28	4.92	4.53	4.02	3.35	2.17	1.16	700	1,860,738	63,108	17,791
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.47	4.72	4.41	3.98	3.54	2.87	1.81	1.18	700	1,767,257	66,196	21,409
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.10	5.31	4.88	4.41	3.90	3.11	1.89	1.18	700	1,601,660	46,960	20,555
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.61	5.83	5.51	4.96	4.45	3.70	2.36	1.19	700	1,700,433	51,538	16,212
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.34	5.43	5.08	4.49	3.94	3.11	1.85	1.20	700	1,452,922	42,646	21,070
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.38	5.51	5.12	4.53	3.98	3.15	1.85	1.24	700	1,531,679	38,867	21,481
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.87	5.04	4.72	4.21	3.78	3.03	1.89	1.26	700	1,640,157	58,911	20,672
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.18	5.35	5.00	4.45	3.94	3.15	1.89	1.26	700	1,644,741	43,494	20,925
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.55	4.80	4.53	4.06	3.62	2.95	1.85	1.26	700	1,852,327	60,158	20,968
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.14	5.31	4.96	4.53	4.06	3.31	2.13	1.26	700	1,649,145	62,984	18,030
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.85	5.91	5.47	4.84	4.25	3.31	1.89	1.27	700	1,462,569	30,801	21,413
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.02	5.16	4.80	4.29	3.82	3.03	1.85	1.27	700	1,614,237	50,295	21,328
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.02	5.28	4.88	4.37	3.90	3.11	1.85	1.27	700	1,830,522	39,503	21,751
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.22	5.43	5.08	4.61	4.09	3.35	2.09	1.28	700	1,711,155	50,509	18,431
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.91	5.12	4.76	4.29	3.78	3.07	1.89	1.28	700	1,666,107	54,916	20,739
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.26	5.43	5.08	4.61	4.09	3.39	2.17	1.28	700	1,575,521	63,443	17,657
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.50	5.71	5.39	4.92	4.41	3.70	2.40	1.30	700	1,758,949	58,718	15,888
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.94	5.12	4.76	4.25	3.74	3.03	1.85	1.32	700	1,577,097	54,929	21,141
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.39	4.72	4.49	4.09	3.66	3.03	1.93	1.32	700	2,279,659	58,036	20,239
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.31	4.57	4.33	3.86	3.50	2.87	1.85	1.33	700	1,822,381	79,587	20,781
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.06	5.35	4.96	4.53	4.02	3.31	2.05	1.36	700	1,862,085	48,855	19,040
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.94	5.12	4.76	4.29	3.78	3.07	1.89	1.36	700	1,630,025	56,336	20,763
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.38	5.47	5.08	4.53	3.94	3.11	1.81	1.37	700	1,517,037	38,036	22,028
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.18	5.43	5.08	4.61	4.13	3.46	2.20	1.44	700	1,791,019	59,192	17,503
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.18	5.31	4.96	4.45	3.94	3.15	1.89	1.45	700	1,671,424	44,176	21,044
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.87	5.04	4.72	4.21	3.78	3.03	1.85	1.48	700	1,707,725	52,689	21,193
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.69	5.75	5.31	4.72	4.13	3.27	1.89	1.48	700	1,460,197	35,109	21,014

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.81	5.83	5.47	4.80	4.21	3.31	1.89	1.49	700	1,492,972	31,992	21,581
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.77	5.79	5.35	4.72	4.17	3.27	1.89	1.49	700	1,415,309	36,308	21,200
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.67	4.92	4.65	4.17	3.70	3.03	1.85	1.51	700	1,889,914	50,670	20,920
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.10	5.28	4.92	4.37	3.90	3.15	1.89	1.52	700	1,691,463	46,229	20,963
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.26	5.35	5.00	4.45	3.90	3.15	1.89	1.53	700	1,523,908	48,188	20,898
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.14	5.35	5.04	4.57	4.06	3.39	2.13	1.54	700	1,778,383	55,237	17,987
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.14	5.24	4.88	4.33	3.86	3.03	1.77	1.60	700	1,635,356	38,559	22,313
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.98	5.12	4.76	4.25	3.74	3.03	1.81	1.66	700	1,607,111	50,515	21,758
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.26	5.35	5.00	4.45	3.90	3.15	1.85	1.74	700	1,604,222	42,151	21,481
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	5.59	4.80	4.49	4.09	3.66	2.99	1.85	1.75	700	1,913,827	57,974	20,982
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.65	5.63	5.28	4.72	4.21	3.39	2.05	1.81	700	1,443,524	48,407	19,024
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.85	5.79	5.39	4.80	4.25	3.31	1.89	1.83	700	1,446,019	32,520	21,023
Southwest	I-69	11-03	12033	NA	SC-SM	NA	NA	Summer	12/18/2001	rigid-So-I69-CS12033-12-18-2001	9	20	6.61	5.63	5.24	4.72	4.17	3.43	2.09	1.87	700	1,406,854	53,899	18,448
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.94	3.46	3.27	2.95	2.64	2.09	1.26	1.05	700	3,142,977	46,197	31,573
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	5.98	5.31	4.96	4.49	4.06	3.39	2.17	1.27	700	1,884,190	56,373	17,150
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.94	3.50	3.27	2.95	2.64	2.13	1.26	1.28	700	3,288,521	41,337	31,848
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.13	3.62	3.35	3.03	2.72	2.17	1.30	1.38	700	2,760,429	51,531	29,892
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	5.83	5.12	4.80	4.37	3.94	3.31	2.13	1.45	700	1,870,663	64,234	17,380
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	5.43	4.69	4.29	3.82	3.39	2.60	1.46	1.48	700	1,851,775	32,660	27,072
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.13	3.54	3.31	2.99	2.68	2.13	1.30	1.53	700	2,433,313	64,829	28,841
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	7.72	6.57	5.98	5.24	4.65	3.58	2.05	1.53	700	1,059,456	31,851	18,331
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.69	4.06	3.78	3.35	3.03	2.40	1.42	1.59	700	2,288,929	50,383	27,877
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.98	3.43	3.11	2.80	2.44	1.89	1.06	1.59	700	2,392,091	46,258	36,439
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.17	3.66	3.35	3.03	2.64	2.17	1.30	1.64	700	2,282,706	64,092	28,476
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.09	3.54	3.31	2.95	2.68	2.13	1.26	1.72	700	2,782,704	49,703	30,772
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.13	3.58	3.31	2.95	2.64	2.13	1.26	1.73	700	2,387,825	59,936	29,623
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.90	3.31	3.03	2.68	2.36	1.85	1.06	1.73	700	2,203,690	61,481	35,449
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.29	3.74	3.50	3.11	2.76	2.24	1.30	1.74	700	2,581,208	46,090	29,730
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	5.47	4.72	4.33	3.82	3.39	2.64	1.46	1.76	700	1,865,542	31,302	27,141
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	7.44	6.34	5.79	5.04	4.45	3.43	1.89	1.76	700	1,171,702	27,207	20,257
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.06	3.46	3.19	2.80	2.48	1.89	1.02	1.77	700	2,523,676	36,492	39,857
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.98	3.46	3.19	2.87	2.56	2.05	1.18	1.84	700	2,806,528	45,980	32,875
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	7.44	6.34	5.75	5.04	4.41	3.43	1.89	1.86	700	1,135,505	28,915	20,123
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.09	3.58	3.31	2.99	2.68	2.17	1.26	1.89	700	2,974,026	43,547	31,360
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.21	3.54	3.27	2.87	2.52	1.97	1.10	1.97	700	2,105,879	50,556	34,588
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.41	3.74	3.35	2.95	2.60	1.97	1.06	2.05	700	1,937,298	41,632	36,064
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.94	3.43	3.15	2.83	2.52	2.05	1.18	2.09	700	2,777,925	50,184	32,432
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.98	3.43	3.11	2.80	2.44	1.93	1.06	2.10	700	2,470,688	44,957	36,525
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.25	3.62	3.31	2.91	2.56	2.01	1.10	2.10	700	2,164,138	44,002	34,580
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.69	4.06	3.70	3.35	2.95	2.40	1.38	2.17	700	2,180,930	46,576	27,456
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.74	3.19	2.91	2.56	2.28	1.81	1.02	2.19	700	2,378,625	61,542	36,744
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.37	3.66	3.31	2.91	2.56	1.93	1.02	2.21	700	1,995,436	38,994	37,835
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.29	3.74	3.46	3.11	2.76	2.28	1.30	2.32	700	2,737,385	42,592	29,932
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.09	3.50	3.23	2.91	2.60	2.09	1.18	2.38	700	2,715,045	44,367	32,839
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.33	3.66	3.31	2.91	2.56	1.97	1.02	2.50	700	2,172,917	34,288	38,384
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	3.78	3.19	2.91	2.60	2.32	1.89	1.10	2.53	700	2,320,187	77,164	33,579
Southwest	I-69	11-03	12034	48582	SC-SM	Natural Gravel	Open	Summer	9/11/2001	rigid-So-I69-CS12034-09-11-2001	9	20	4.21	3.58	3.27	2.87	2.52	2.05	1.10	2.93	700	2,282,980	44,617	34,743
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.72	6.85	6.34	5.75	5.08	4.02	2.36	0.86	300	1,443,472	31,835	13,419
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.13	8.15	7.64	6.89	6.14	5.00	3.07	0.87	300	1,290,169	35,289	10,030
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.87	6.97	6.46	5.87	5.24	4.13	2.44	0.92	300	1,450,896	31,986	12,920
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.17	6.34	5.79	5.24	4.61	3.62	2.09	1.00	300	1,438,759	35,996	15,219
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.91	6.97	6.46	5.87	5.20	4.13	2.44	1.00	300	1,388,256	33,891	12,832
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	8.70	7.72	7.17	6.50	5.83	4.65	2.76	1.03	300	1,340,521	29,694	11,319
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	8.66	7.68	7.13	6.50	5.79	4.61	2.72	1.03	300	1,358,852	28,137	11,525
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.76	6.85	6.38	5.75	5.12	4.09	2.40	1.07	300	1,451,891	33,360	13,090
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	8.70	7.68	7.17	6.54	5.83	4.65	2.76	1.08	300	1,364,545	28,852	11,345

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.17	6.30	5.79	5.20	4.65	3.62	2.09	1.08	300	1,462,400	35,828	15,258
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.80	6.93	6.42	5.83	5.20	4.13	2.40	1.09	300	1,547,066	27,758	13,254
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	6.46	5.71	5.28	4.76	4.25	3.35	1.93	1.11	300	1,769,922	35,538	16,619
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.39	9.17	8.50	7.72	6.85	5.35	3.03	1.11	300	1,186,131	17,829	10,936
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.76	6.85	6.34	5.75	5.12	4.06	2.36	1.15	300	1,472,738	31,024	13,417
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.37	8.15	7.52	6.73	5.98	4.61	2.60	1.16	300	1,100,737	24,522	12,279
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	6.42	5.71	5.24	4.76	4.25	3.35	1.93	1.17	300	1,832,432	34,393	16,728
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.13	8.11	7.52	6.89	6.14	5.00	3.03	1.17	300	1,274,792	34,365	10,251
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.39	9.17	8.54	7.72	6.85	5.39	3.03	1.18	300	1,209,980	17,011	10,980
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.35	9.13	8.50	7.68	6.85	5.39	3.03	1.26	300	1,227,680	16,676	10,945
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.96	8.66	8.03	7.09	6.18	4.76	2.52	1.27	300	1,076,185	17,007	13,300
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.83	6.81	6.30	5.67	5.00	3.86	2.13	1.28	300	1,421,616	24,617	15,494
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.17	8.15	7.56	6.89	6.18	5.04	3.03	1.28	300	1,298,763	33,067	10,317
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.76	6.77	6.30	5.59	4.92	3.86	2.13	1.30	300	1,390,450	26,515	15,250
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.88	8.50	7.83	6.93	6.10	4.65	2.52	1.30	300	1,005,204	21,140	12,964
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.99	6.97	6.46	5.79	5.08	3.98	2.20	1.30	300	1,368,892	25,296	14,784
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	6.50	5.75	5.31	4.80	4.25	3.39	1.93	1.31	300	1,795,084	33,612	16,710
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.43	9.13	8.39	7.56	6.61	5.12	2.76	1.33	300	1,095,459	16,119	12,199
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.80	8.46	7.83	6.93	6.06	4.65	2.48	1.34	300	1,057,624	18,676	13,294
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.92	8.62	7.99	7.05	6.18	4.76	2.52	1.35	300	1,081,445	16,954	13,193
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.95	6.93	6.42	5.79	5.16	4.06	2.32	1.37	300	1,395,233	29,790	13,775
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.37	8.15	7.52	6.69	5.94	4.65	2.60	1.38	300	1,091,744	25,113	12,199
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	8.50	7.40	6.81	6.10	5.39	4.17	2.28	1.38	300	1,303,679	22,474	14,552
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.64	6.69	6.18	5.59	4.92	3.90	2.20	1.39	300	1,480,545	28,799	14,728
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.99	7.01	6.46	5.75	5.08	4.02	2.24	1.40	300	1,325,914	28,532	14,336
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.87	6.89	6.42	5.79	5.12	4.06	2.28	1.40	300	1,504,903	25,126	14,241
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.88	8.50	7.83	6.97	6.14	4.65	2.48	1.41	300	1,056,866	18,208	13,369
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	6.77	5.87	5.47	4.88	4.33	3.39	1.89	1.42	300	1,614,661	31,370	17,068
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	6.77	5.87	5.47	4.88	4.33	3.39	1.89	1.42	300	1,617,303	31,419	17,096
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.64	6.69	6.18	5.55	4.92	3.90	2.20	1.42	300	1,435,807	30,175	14,543
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	8.43	7.36	6.85	6.06	5.35	4.17	2.24	1.42	300	1,356,762	19,891	14,958
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.37	8.15	7.48	6.73	5.94	4.65	2.60	1.43	300	1,100,073	24,813	12,208
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.91	6.93	6.46	5.75	5.16	4.09	2.32	1.43	300	1,455,262	28,078	13,870
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.99	6.97	6.42	5.75	5.08	3.98	2.20	1.43	300	1,347,960	26,504	14,704
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	8.43	7.36	6.81	6.10	5.35	4.17	2.24	1.44	300	1,383,749	19,459	15,117
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.80	6.77	6.26	5.59	4.96	3.86	2.13	1.45	300	1,390,206	26,536	15,273
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.68	6.73	6.18	5.55	4.92	3.90	2.20	1.46	300	1,399,003	31,136	14,543
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.43	9.13	8.39	7.56	6.61	5.16	2.76	1.52	300	1,099,127	16,199	12,179
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.39	9.09	8.31	7.52	6.57	5.12	2.76	1.53	300	1,098,621	16,730	12,155
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.63	9.13	8.46	7.48	6.50	5.04	2.68	1.55	300	953,353	18,550	12,258
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	7.17	6.30	5.79	5.16	4.61	3.66	2.05	1.58	300	1,507,276	32,630	15,595
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	6.77	5.83	5.43	4.88	4.29	3.39	1.89	1.63	300	1,586,902	33,042	16,928
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.55	9.09	8.31	7.40	6.42	4.96	2.60	1.67	300	966,128	17,577	12,738
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	9.96	8.62	7.83	7.05	6.18	4.76	2.52	1.75	300	1,074,585	17,780	13,171
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.63	9.17	8.35	7.48	6.50	5.04	2.64	1.82	300	976,317	17,274	12,552
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.04	8.35	7.68	6.85	6.06	4.69	2.64	1.95	300	808,382	31,870	11,586
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.08	8.39	7.68	6.85	6.06	4.69	2.60	2.10	300	811,705	30,500	11,816
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	11/18/2002	rigid-So-I94-CS11081-11-18-2002	9	20	10.08	8.35	7.68	6.85	6.06	4.69	2.60	2.18	300	820,343	30,250	11,820
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	12.80	11.26	10.47	9.21	8.19	6.38	3.62	0.92	300	760,758	17,953	8,437
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.86	7.72	7.09	6.22	5.51	4.29	2.44	1.03	300	964,009	31,444	12,359
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.07	7.05	6.50	5.71	5.08	3.98	2.28	1.08	300	1,116,814	34,109	13,304
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.33	8.35	7.72	6.85	6.22	5.00	2.99	1.15	300	1,109,183	32,401	10,013
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.41	8.35	7.72	6.89	6.22	5.04	3.03	1.21	300	1,080,745	34,321	9,825
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.96	8.78	8.07	7.17	6.46	5.20	3.11	1.23	300	914,719	34,550	9,445
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	6.77	5.94	5.47	4.84	4.41	3.46	2.05	1.25	300	1,318,326	48,402	14,469
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.33	8.23	7.56	6.69	5.98	4.69	2.64	1.27	300	1,071,182	25,033	11,686

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	6.73	5.94	5.47	4.84	4.37	3.46	2.01	1.28	300	1,432,455	41,542	14,922
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	7.28	6.30	5.75	5.12	4.57	3.62	2.13	1.28	300	1,132,993	48,911	14,033
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.86	7.68	7.05	6.18	5.51	4.33	2.48	1.29	300	942,380	34,333	12,028
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.35	7.28	6.65	5.91	5.28	4.13	2.36	1.31	300	1,084,760	33,333	12,801
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.45	8.35	7.76	6.89	6.26	5.04	2.99	1.36	300	1,095,407	31,918	10,006
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	7.28	6.30	5.79	5.12	4.57	3.62	2.09	1.40	300	1,186,451	44,231	14,432
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.25	8.11	7.44	6.50	5.83	4.49	2.44	1.45	300	1,068,562	21,408	12,833
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.66	7.56	6.97	6.10	5.43	4.21	2.28	1.46	300	1,140,800	22,783	13,703
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.25	8.15	7.52	6.65	5.98	4.69	2.60	1.48	300	1,168,169	21,704	12,079
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.70	7.60	6.97	6.10	5.51	4.25	2.36	1.49	300	1,111,402	25,965	13,110
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.09	8.03	7.40	6.57	5.91	4.76	2.76	1.50	300	1,122,928	31,205	11,036
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.70	7.60	6.97	6.14	5.51	4.25	2.32	1.51	300	1,150,910	22,945	13,436
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.62	7.52	6.89	6.02	5.39	4.17	2.28	1.52	300	1,110,479	24,966	13,611
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.96	8.78	8.07	7.17	6.42	5.20	3.03	1.53	300	946,346	31,259	9,787
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.31	7.28	6.69	5.91	5.28	4.17	2.32	1.58	300	1,186,529	28,277	13,223
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.11	7.01	6.42	5.67	5.04	3.98	2.24	1.59	300	1,081,690	34,971	13,461
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	7.36	6.26	5.79	5.08	4.61	3.62	2.13	1.59	300	1,123,521	48,200	14,015
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.23	7.05	6.50	5.71	5.12	4.02	2.28	1.64	300	1,052,018	36,214	13,226
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.19	7.05	6.46	5.71	5.12	4.02	2.28	1.64	300	1,076,308	35,471	13,213
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.25	8.15	7.48	6.61	5.91	4.69	2.60	1.65	300	1,128,224	23,414	11,956
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.35	7.28	6.69	5.91	5.31	4.17	2.32	1.65	300	1,192,739	27,771	13,272
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.50	7.36	6.73	5.87	5.24	4.02	2.13	1.74	300	1,128,037	22,303	14,733
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.70	7.60	6.97	6.06	5.47	4.25	2.32	1.74	300	1,109,411	25,171	13,365
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	7.44	6.18	5.67	5.00	4.49	3.54	2.09	1.74	300	895,166	58,500	13,914
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.54	7.44	6.81	5.91	5.24	4.06	2.13	1.78	300	1,127,265	21,536	14,794
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	7.05	5.94	5.47	4.80	4.37	3.50	2.09	1.83	300	1,003,853	63,909	13,842
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.37	8.19	7.48	6.57	5.91	4.61	2.48	1.90	300	1,060,743	21,991	12,572
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.90	7.52	6.97	6.22	5.71	4.69	2.91	1.92	300	812,818	61,801	9,722
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.94	7.44	6.93	6.14	5.63	4.65	2.91	1.94	300	722,001	68,744	9,663
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.39	7.24	6.65	5.71	5.08	3.90	2.01	1.95	300	1,117,711	21,554	15,766
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	7.52	6.22	5.71	5.00	4.49	3.54	2.05	1.97	300	887,133	55,150	14,225
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.45	7.72	7.09	6.22	5.51	4.29	2.44	2.00	300	681,354	41,347	11,953
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	11.57	10.04	9.13	7.99	7.05	5.39	2.68	2.02	300	890,718	10,752	12,183
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	8.82	7.44	6.89	6.14	5.71	4.65	2.87	2.20	300	816,302	61,867	9,781
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.45	7.68	7.01	6.14	5.47	4.25	2.40	2.22	300	675,921	42,087	12,276
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	7.48	6.22	5.67	5.00	4.49	3.58	2.05	2.26	300	911,290	54,807	14,138
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.53	7.68	7.05	6.14	5.51	4.25	2.40	2.36	300	655,966	42,161	12,215
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/28/2004	rigid-So-I94-CS11081-10-28-2004	9	20	9.96	8.23	7.64	6.89	6.26	5.04	3.03	2.37	300	725,928	46,315	9,189
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/30/2001	rigid-So-I94-CS11081-10-30-2001	9	14	8.58	7.48	7.01	6.22	5.59	4.37	2.60	0.89		1,165,672	35,388	11,991
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/30/2001	rigid-So-I94-CS11081-10-30-2001	9	14	8.58	7.52	7.05	6.26	5.63	4.41	2.60	0.92		1,228,209	32,379	12,066
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/30/2001	rigid-So-I94-CS11081-10-30-2001	9	14	9.88	8.66	8.19	7.36	6.61	5.28	3.19	1.01		1,119,537	30,042	9,583
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/30/2001	rigid-So-I94-CS11081-10-30-2001	9	14	9.69	8.58	7.99	7.17	6.50	5.16	3.07	1.07		1,183,300	28,633	10,256
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/30/2001	rigid-So-I94-CS11081-10-30-2001	9	14	8.70	7.60	7.09	6.34	5.67	4.49	2.64	1.09		1,186,571	32,199	11,642
Southwest	I-94	12-05	11081	NA	SP-SM	NA	NA	Summer	10/30/2001	rigid-So-I94-CS11081-10-30-2001	9	14	9.65	8.50	7.99	7.17	6.46	5.16	3.03	1.20		1,247,263	25,814	10,491
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	5.15	4.80	4.64	4.31	4.01	3.31	2.14	0.62	250	4,736,978	18,824	14,084
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	8.30	7.26	6.77	6.03	5.25	3.95	2.05	0.86	250	1,361,947	15,896	15,334
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	5.30	4.77	4.46	4.13	3.69	2.94	1.75	0.87	250	2,650,900	37,108	16,658
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	5.19	4.77	4.67	4.38	3.96	3.33	2.20	0.93	250	4,175,149	35,020	12,681
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	4.93	4.52	4.32	4.07	3.74	3.09	1.95	0.95	250	4,599,716	20,859	15,864
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	4.90	4.50	4.29	4.02	3.70	3.06	1.93	0.98	250	4,430,474	23,290	15,860
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	4.13	3.74	3.56	3.26	3.00	2.42	1.45	1.01	250	4,323,571	31,097	21,237
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	8.26	7.24	6.69	6.02	5.24	3.96	2.06	1.02	250	1,382,280	15,992	15,198
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	4.76	4.33	4.21	3.96	3.64	3.04	1.94	1.13	250	5,191,525	17,416	16,226
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	8.32	7.25	6.74	6.05	5.31	3.98	2.05	1.15	250	1,421,785	13,971	15,638
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	4.88	4.45	4.28	4.03	3.74	3.09	1.95	1.17	250	5,038,667	13,865	16,785
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008	9	20	4.67	4.26	4.13	3.88	3.62	3.04	1.96	1.22	250	5,637,560	14,830	15,994

Location					Material Type			FWD File Information				Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer															RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title		PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	5.31	4.75	4.42	4.12	3.71	2.97	1.76	1.30	250	2,698,135	37,569	16,467
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	4.17	3.73	3.55	3.32	3.01	2.43	1.46	1.31	250	4,324,512	30,519	21,091
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	4.78	4.37	4.16	3.99	3.69	3.04	1.95	1.36	250	5,240,129	15,645	16,330
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	4.76	4.33	4.16	3.98	3.64	3.06	1.94	1.41	250	5,430,144	12,940	16,973
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	4.17	3.67	3.49	3.19	2.89	2.32	1.35	1.50	250	3,517,179	43,253	21,968
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	6.71	5.60	5.21	4.65	4.01	3.02	1.64	1.53	250	1,256,255	38,124	17,459
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	5.34	4.73	4.41	4.13	3.72	2.99	1.78	1.56	250	2,708,529	39,480	16,228
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	4.67	4.25	4.04	3.88	3.61	3.01	1.93	1.61	250	5,568,538	14,878	16,344
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	6.71	5.63	5.16	4.63	4.01	3.04	1.63	1.68	250	1,278,348	37,276	17,608
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	4.19	3.71	3.47	3.22	2.92	2.35	1.35	1.75	250	3,824,089	33,056	22,835
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	6.69	5.63	5.18	4.63	4.06	3.06	1.61	1.82	250	1,381,099	32,488	18,109
Southwest	US-31	06-05	11057	NA	SP-SM	NA	NA	Summer	4/18/2008	rigid-So-US31-CS11057-05-14-2008		9	20	4.19	3.69	3.44	3.22	2.97	2.31	1.35	1.99	250	3,783,378	34,241	22,758
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/9/2001	rigid-So-US31-CS11057-10-09-2001		9	20	7.68	6.57	6.10	5.39	4.76	3.74	2.17	1.46	700	1,227,661	31,166	17,905
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/9/2001	rigid-So-US31-CS11057-10-09-2001		9	20	7.48	6.50	5.94	5.31	4.72	3.74	2.13	1.78	700	1,406,884	27,407	18,652
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/9/2001	rigid-So-US31-CS11057-10-09-2001		9	20	7.76	6.54	6.02	5.35	4.80	3.78	2.20	2.07	700	1,200,609	34,976	17,699
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/9/2001	rigid-So-US31-CS11057-10-09-2001		9	20	7.68	6.42	5.87	5.24	4.65	3.66	2.13	2.10	700	1,109,188	37,849	17,968
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/9/2001	rigid-So-US31-CS11057-10-09-2001		9	20	7.68	6.50	5.94	5.31	4.72	3.74	2.13	2.23	700	1,221,733	32,855	18,261
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.57	5.94	5.55	5.08	4.61	3.66	2.32	0.59	700	2,139,763	31,325	17,587
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	7.48	6.61	6.10	5.47	4.88	3.94	2.52	0.60	700	1,252,884	49,112	15,189
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.73	6.06	5.63	5.08	4.53	3.54	2.05	0.66	700	2,031,465	17,791	21,160
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	12.28	10.87	10.16	9.25	8.31	6.73	4.37	0.67	700	890,038	28,032	8,751
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.73	6.06	5.63	5.04	4.49	3.54	2.09	0.67	700	1,883,353	23,544	19,771
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	12.56	11.18	10.51	9.53	8.58	6.97	4.49	0.77	700	925,360	22,744	8,530
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.93	6.22	5.87	5.35	4.80	3.86	2.44	0.78	700	1,952,037	29,557	16,421
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	12.24	10.87	10.16	9.21	8.27	6.73	4.29	0.79	700	929,088	25,395	9,000
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.57	5.91	5.55	5.08	4.53	3.70	2.28	0.93	700	2,207,751	28,171	18,030
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.26	5.43	5.08	4.61	4.13	3.43	2.28	0.96	700	1,428,469	80,569	16,548
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.73	6.10	5.67	5.12	4.49	3.58	2.05	0.98	700	1,986,945	17,244	20,813
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	7.76	6.85	6.38	5.75	5.20	4.25	2.72	0.98	700	1,365,937	46,243	14,156
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	7.48	6.57	6.06	5.47	4.88	3.98	2.52	1.01	700	1,278,243	48,679	15,131
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	8.07	7.09	6.65	5.98	5.39	4.45	2.87	1.04	700	1,266,673	46,613	13,062
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	7.80	6.85	6.38	5.75	5.20	4.25	2.72	1.06	700	1,319,225	47,596	14,100
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	10.04	8.90	8.31	7.72	6.97	5.83	3.90	1.10	700	1,160,084	40,859	9,486
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	7.87	6.89	6.38	5.79	5.16	4.17	2.60	1.11	700	1,291,658	39,329	14,651
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	9.49	8.39	7.91	7.20	6.54	5.47	3.58	1.17	700	1,227,555	41,101	10,563
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.38	5.59	5.16	4.72	4.21	3.54	2.32	1.25	700	1,447,858	73,066	15,979
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.22	5.39	5.08	4.61	4.09	3.43	2.24	1.28	700	1,512,489	74,356	16,874
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.38	5.59	5.24	4.72	4.21	3.43	2.09	1.36	700	1,853,726	38,735	18,963
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	9.57	8.46	7.91	7.28	6.57	5.55	3.62	1.41	700	1,213,304	41,601	10,367
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.57	5.79	5.39	4.88	4.33	3.54	2.09	1.62	700	1,890,701	29,668	19,088
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/30/2001	rigid-So-US31-CS11057-10-30-2001		9	20	6.34	5.59	5.20	4.72	4.21	3.46	2.05	1.74	700	2,052,209	30,666	19,678
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	8.35	7.13	6.50	5.63	4.92	3.70	2.01	1.30	700	969,495	21,088	18,416
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	8.07	6.81	6.10	5.28	4.53	3.31	1.73	1.31	700	915,447	20,968	21,514
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	8.31	7.13	6.50	5.63	4.88	3.70	1.97	1.43	700	1,002,051	19,236	18,943
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	8.31	7.09	6.46	5.59	4.88	3.70	2.01	1.44	700	969,100	21,682	18,332
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	8.82	7.68	7.17	6.50	5.98	4.80	2.99	1.66	700	1,248,570	29,531	12,061
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	8.82	7.64	7.13	6.42	5.91	4.76	2.95	1.79	700	1,191,635	30,773	12,116
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	8.11	6.85	6.10	5.31	4.57	3.35	1.69	1.79	700	968,006	18,049	22,363
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	6.50	5.67	5.20	4.65	4.13	3.27	1.81	1.89	700	1,713,639	20,687	21,443
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	6/6/2003	rigid-So-US31-CS11057-06-06-2003		9	20	6.50	5.71	5.24	4.69	4.17	3.31	1.81	1.90	700	1,821,538	17,295	22,064
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002		9	20	12.13	10.67	9.92	9.02	8.11	6.61	4.33	0.77	700	783,111	29,824	8,188
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002		9	20	11.38	10.35	9.72	9.06	8.27	6.97	4.69	0.87	700	1,247,600	27,656	7,626
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002		9	20	11.61	10.20	9.45	8.54	7.72	6.30	4.09	0.90	700	794,895	33,441	8,827
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002		9	20	12.20	11.02	10.39	9.65	8.86	7.48	5.04	1.01	700	1,129,732	27,475	6,983
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002		9	20	12.52	10.87	10.00	8.90	7.83	6.06	3.50	1.05	700	766,160	16,003	10,959
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002		9	20	11.38	10.31	9.69	9.02	8.23	6.97	4.65	1.06	700	1,246,423	27,541	7,713

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	13.07	11.34	10.39	9.33	8.19	6.34	3.70	1.08	700	712,240	15,930	10,122
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	12.52	10.87	9.96	8.94	7.83	6.06	3.50	1.11	700	767,977	15,891	10,946
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	9.45	8.27	7.60	6.89	6.14	4.88	2.99	1.12	700	1,027,105	27,545	12,266
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	8.11	7.13	6.57	5.98	5.35	4.29	2.64	1.19	700	1,280,948	31,606	13,997
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	8.11	7.13	6.57	5.98	5.35	4.29	2.64	1.20	700	1,271,301	31,866	13,958
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	10.20	8.90	8.23	7.44	6.65	5.31	3.23	1.26	700	978,140	24,305	11,304
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	9.45	8.27	7.60	6.85	6.14	4.88	2.95	1.28	700	1,044,348	26,017	12,473
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	11.57	10.20	9.37	8.50	7.68	6.34	4.06	1.28	700	803,751	32,895	8,829
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	8.15	7.05	6.50	5.94	5.28	4.21	2.60	1.35	700	1,165,931	34,166	13,927
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.91	6.69	6.06	5.31	4.61	3.46	1.89	1.41	700	1,020,672	24,542	20,066
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	11.89	10.35	9.53	8.50	7.52	5.83	3.23	1.46	700	907,491	11,675	12,173
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.87	6.65	6.02	5.28	4.57	3.46	1.89	1.52	700	1,013,935	25,288	19,900
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	8.15	6.89	6.26	5.51	4.76	3.62	1.97	1.59	700	1,005,127	22,517	18,877
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	11.77	10.20	9.37	8.39	7.40	5.75	3.15	1.67	700	948,076	11,334	12,832
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	8.31	7.17	6.54	5.83	5.12	3.98	2.20	1.69	700	1,161,726	20,312	17,322
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	11.73	10.20	9.37	8.39	7.40	5.75	3.11	1.70	700	973,207	10,327	13,185
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.72	6.61	6.02	5.35	4.72	3.66	2.05	1.74	700	1,209,938	24,986	18,625
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.76	6.65	6.02	5.35	4.69	3.66	2.05	1.78	700	1,152,349	26,849	18,524
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.80	6.42	5.79	5.12	4.41	3.31	1.81	1.95	700	949,004	28,832	20,658
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.76	6.38	5.79	5.08	4.41	3.31	1.81	1.96	700	963,811	29,002	20,698
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.56	6.26	5.63	4.72	3.90	2.28	0.94	2.12	700	849,804	12,364	42,899
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.13	5.91	5.28	4.49	3.66	2.17	0.94	2.17	700	879,899	14,721	41,926
Southwest	US-31	06-05	11057	16487	SP-SM	Natural Gravel	Open	Summer	10/10/2002	rigid-So-US31-CS11057-10-10-2002	9	20	7.76	6.34	5.71	5.04	4.37	3.27	1.77	2.24	700	948,130	28,022	20,865
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	8.39	7.48	6.93	6.26	5.55	4.49	2.80	0.60	250	1,148,132	42,317	9,543
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.59	4.92	4.53	4.09	3.62	2.83	1.69	0.65	250	1,667,974	52,415	16,095
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.81	5.94	5.43	4.88	4.21	3.27	1.89	0.74	250	1,229,243	42,517	14,527
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	4.80	4.21	3.94	3.50	3.03	2.40	1.42	0.76	250	1,810,546	62,079	19,066
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.97	5.94	5.43	4.88	4.21	3.23	1.89	0.80	250	1,065,247	47,924	14,344
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.35	4.65	4.37	3.98	3.50	2.83	1.81	0.82	250	1,617,346	79,827	14,243
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.71	5.12	4.88	4.53	4.06	3.31	2.13	0.87	250	2,270,783	56,452	12,390
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	4.96	4.33	3.98	3.62	3.11	2.44	1.50	0.88	250	1,653,061	74,341	18,248
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	4.96	4.25	3.94	3.50	3.11	2.40	1.42	0.88	250	1,643,729	65,839	18,993
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.71	5.04	4.69	4.29	3.70	2.95	1.81	0.91	250	1,690,367	58,831	15,332
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	8.50	7.36	7.01	6.18	5.47	4.45	2.95	0.92	250	858,848	61,200	8,623
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.93	5.87	5.39	4.88	4.21	3.31	2.09	0.92	250	950,930	67,913	12,713
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	9.17	7.87	7.17	6.50	5.71	4.49	2.80	0.93	250	783,559	46,086	9,404
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	4.84	4.37	4.09	3.78	3.31	2.68	1.69	0.93	250	2,264,784	69,093	16,437
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.24	6.22	5.75	5.20	4.49	3.50	2.09	0.96	250	1,174,071	45,742	13,407
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.10	5.35	5.00	4.49	3.90	3.11	1.81	0.97	250	1,618,071	42,837	15,187
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.59	4.76	4.45	3.94	3.39	2.64	1.54	0.99	250	1,362,556	58,510	17,401
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.20	6.18	5.79	5.12	4.37	3.39	1.97	1.00	250	1,106,696	43,989	14,439
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.56	6.50	5.83	5.24	4.41	3.27	1.81	1.00	250	1,000,336	35,485	15,974
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.28	4.57	4.21	3.78	3.23	2.60	1.57	1.05	250	1,447,776	73,738	17,279
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.81	5.87	5.51	4.92	4.21	3.39	2.13	1.07	250	1,073,072	63,030	12,321
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.81	5.79	5.28	4.84	4.21	3.31	2.09	1.09	250	1,015,329	67,781	12,567
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.00	4.29	3.98	3.62	3.11	2.44	1.46	1.10	250	1,684,508	67,999	18,910
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	9.65	8.54	7.80	7.24	6.38	5.08	3.11	1.11	250	1,031,133	34,305	8,628
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.20	4.53	4.17	3.74	3.19	2.60	1.61	1.12	250	1,404,137	83,648	16,612
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.40	6.10	5.51	4.88	4.09	3.11	1.77	1.13	250	813,771	49,055	15,658
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	8.27	7.20	6.61	5.98	5.16	4.02	2.24	1.15	250	1,133,766	27,885	12,404
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.89	5.87	5.35	4.80	4.17	3.23	1.85	1.16	250	1,145,550	44,384	14,674
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.31	4.61	4.37	3.98	3.46	2.87	1.85	1.17	250	1,602,347	86,651	13,630
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.42	5.55	5.08	4.65	3.98	3.07	1.77	1.18	250	1,376,590	43,096	15,838
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.65	5.83	5.31	4.84	4.21	3.31	1.89	1.20	250	1,417,733	38,642	14,535
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.36	6.30	5.67	5.08	4.37	3.43	1.97	1.20	250	1,007,875	47,933	14,159
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.39	4.69	4.29	3.98	3.50	2.83	1.77	1.25	250	1,621,156	75,729	14,651

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.91	5.12	4.65	4.25	3.70	2.87	1.65	1.26	250	1,514,254	47,016	16,749
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.52	6.69	6.14	5.75	5.20	4.21	2.83	1.27	250	1,250,173	66,599	8,732
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.54	5.71	5.24	4.80	4.25	3.35	1.97	1.27	250	1,490,036	45,464	13,868
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.79	5.04	4.72	4.25	3.66	2.83	1.50	1.27	250	1,920,399	26,309	20,170
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.57	5.71	5.28	4.84	4.25	3.39	2.01	1.27	250	1,485,252	45,800	13,400
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	9.06	7.64	7.05	6.22	5.35	4.02	2.13	1.27	250	944,526	25,270	13,720
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.75	5.04	4.80	4.25	3.66	2.87	1.54	1.28	250	2,000,407	26,109	19,701
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.72	6.34	5.83	5.20	4.49	3.46	2.05	1.29	250	804,953	52,128	12,911
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.50	5.63	5.12	4.61	3.98	3.11	1.73	1.29	250	1,352,454	40,284	16,199
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	9.06	7.68	7.09	6.30	5.35	4.09	2.20	1.29	250	945,176	26,792	13,228
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.52	6.22	5.55	4.96	4.17	3.15	1.77	1.29	250	815,700	47,079	15,776
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.56	6.42	5.87	5.20	4.33	3.31	1.77	1.31	250	1,019,406	33,560	16,220
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.16	4.29	3.90	3.46	3.03	2.36	1.38	1.31	250	1,219,263	79,551	19,358
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.17	6.18	5.67	5.20	4.41	3.50	2.09	1.31	250	1,145,599	49,488	13,197
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.83	6.42	5.91	5.28	4.57	3.50	2.09	1.32	250	795,367	52,200	12,727
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.91	5.12	4.65	4.25	3.66	2.87	1.61	1.45	250	1,540,294	43,660	17,292
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	8.11	6.93	6.26	5.67	4.92	3.78	2.09	1.53	250	1,046,646	32,558	13,349
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.00	4.33	3.90	3.62	3.15	2.48	1.46	1.60	250	1,758,205	66,008	18,855
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.16	4.29	3.86	3.50	3.03	2.36	1.38	1.60	250	1,262,070	77,122	19,386
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.83	6.46	5.83	5.28	4.61	3.54	2.09	1.62	250	817,187	52,018	12,738
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	8.39	7.28	6.57	6.02	5.24	4.09	2.28	1.63	250	1,115,569	28,972	12,115
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	6.22	5.39	4.88	4.49	3.94	3.03	1.69	1.64	250	1,628,135	37,168	17,122
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	4.96	4.25	3.90	3.58	3.11	2.44	1.38	1.68	250	1,872,433	52,831	19,894
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.12	4.09	3.82	3.43	2.95	2.40	1.46	2.06	250	1,090,156	104,009	17,672
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.71	4.72	4.25	3.78	3.19	2.36	1.14	2.18	250	1,402,689	31,277	25,351
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.71	4.72	4.25	3.74	3.15	2.36	1.14	2.23	250	1,339,793	33,414	24,909
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	5.75	4.69	4.21	3.82	3.23	2.40	1.18	2.71	250	1,427,693	34,511	24,737
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/13/2000	rigid-Su-I75-CS49025-06-13-2000	9	22	7.72	5.94	5.28	4.72	4.06	2.99	1.61	2.93	250	715,157	49,532	17,349
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	7.36	6.18	5.63	4.88	4.17	3.07	1.69	0.53	150	812,732	53,517	11,135
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	8.82	7.60	7.13	6.30	5.51	4.29	2.44	0.68	150	934,974	44,064	7,512
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	7.52	6.30	5.63	4.92	4.25	3.11	1.65	0.70	150	813,524	49,728	11,533
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	7.44	6.26	5.59	4.92	4.21	3.11	1.65	0.70	150	840,648	49,995	11,557
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.13	7.87	7.28	6.50	5.55	4.17	2.24	0.78	150	914,956	32,650	8,589
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	6.50	5.59	5.12	4.65	4.09	3.23	1.97	0.79	150	1,093,862	78,282	8,516
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.96	8.62	7.99	7.17	6.18	4.72	2.56	0.79	150	895,181	30,471	7,471
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	5.00	4.37	4.06	3.62	3.11	2.36	1.26	0.81	150	1,878,247	52,323	15,407
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	11.22	9.88	9.13	8.23	7.05	5.31	2.68	0.83	150	951,165	17,053	7,741
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.43	9.02	8.23	7.32	6.22	4.72	2.60	0.88	150	692,018	36,131	7,211
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	8.62	7.36	6.73	5.98	5.16	3.78	1.93	0.89	150	959,742	30,394	10,204
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.63	9.25	8.54	7.72	6.61	5.08	2.76	0.90	150	847,552	28,387	6,933
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.21	7.95	7.28	6.57	5.63	4.21	2.24	0.91	150	932,393	31,199	8,674
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.28	8.86	8.23	7.40	6.34	4.80	2.56	0.94	150	878,311	27,801	7,596
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	11.42	9.84	8.94	8.07	6.93	5.16	2.76	0.95	150	702,020	26,918	6,913
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.41	7.99	7.32	6.61	5.67	4.37	2.48	0.98	150	768,312	44,774	7,433
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.84	8.27	7.72	6.77	5.83	4.33	2.32	0.98	150	752,288	34,444	8,176
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.25	7.80	7.09	6.26	5.47	4.02	2.13	0.99	150	776,895	36,277	8,914
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.80	8.46	7.87	7.01	5.94	4.57	2.44	0.99	150	868,638	30,325	7,825
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	5.08	4.37	4.06	3.62	3.07	2.36	1.26	1.02	150	1,628,756	58,285	15,085
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.21	7.95	7.28	6.61	5.67	4.25	2.28	1.03	150	951,179	31,642	8,512
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.00	8.58	7.83	7.09	6.10	4.61	2.48	1.06	150	825,336	31,151	7,597
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.80	8.50	7.76	7.05	6.06	4.61	2.44	1.09	150	937,498	28,333	7,976
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.83	9.45	8.58	7.87	6.81	5.16	2.83	1.11	150	842,424	28,379	6,759
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.49	8.07	7.28	6.61	5.75	4.37	2.48	1.11	150	753,674	44,465	7,401
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.16	8.82	7.95	7.24	6.34	4.80	2.64	1.15	150	828,316	32,454	7,031
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.51	9.09	8.27	7.56	6.46	4.88	2.60	1.19	150	845,501	27,361	7,456
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.00	8.66	7.83	7.17	6.10	4.65	2.52	1.22	150	834,826	32,248	7,556

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.49	8.15	7.44	6.77	5.91	4.49	2.44	1.25	150	936,934	33,755	7,819
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.20	8.46	7.56	6.65	5.67	4.17	2.09	1.27	150	630,354	31,806	9,100
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.33	7.80	7.05	6.34	5.43	4.02	2.09	1.40	150	782,723	34,758	9,177
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	9.41	8.11	7.36	6.73	5.94	4.45	2.44	1.41	150	940,984	33,519	7,703
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.28	8.50	7.56	6.73	5.79	4.21	2.17	1.44	150	617,823	33,530	8,705
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	7.36	6.18	5.59	4.84	4.06	2.91	1.26	1.44	150	1,085,567	24,189	16,648
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.51	9.02	8.19	7.52	6.46	4.88	2.56	1.50	150	868,378	26,244	7,611
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	10.28	8.50	7.52	6.77	5.79	4.21	2.17	1.65	150	623,969	33,272	8,715
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	5.63	4.41	4.09	3.58	3.03	2.24	1.14	2.19	150	1,016,177	64,435	16,200
Superior	I-75	03-05	49025	NA	SC	NA	NA	Summer	6/2/2000	rigid-Su-I75-CS49025-06-02-2000	9	22	6.02	4.96	4.41	3.86	3.27	2.28	0.91	2.35	150	1,386,512	23,684	24,381
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.83	6.77	6.26	5.59	4.92	3.82	2.44	0.49	600	1,039,363	39,506	14,737
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.76	6.65	6.10	5.47	4.76	3.70	2.32	0.69	600	1,008,292	39,703	15,538
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.13	6.18	5.71	5.16	4.53	3.58	2.28	0.69	600	1,236,119	42,654	15,767
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.58	7.52	7.01	6.26	5.43	4.33	2.60	0.97	600	1,167,560	25,462	14,425
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.72	6.69	6.14	5.43	4.72	3.74	2.24	0.98	600	1,079,317	34,003	16,205
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.03	6.93	6.38	5.71	4.88	3.74	2.09	1.08	600	1,204,865	21,905	18,756
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.57	8.11	7.48	6.77	5.75	4.45	2.64	1.32	600	883,606	25,676	14,067
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.41	8.11	7.52	6.77	5.98	4.69	2.76	1.33	600	1,098,110	22,104	13,671
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.25	7.83	7.17	6.38	5.59	4.21	2.40	1.33	600	949,851	22,641	15,740
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.65	8.23	7.48	6.77	5.87	4.53	2.64	1.41	600	917,195	23,991	14,158
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.80	6.50	6.02	5.31	4.49	3.35	1.81	1.45	600	1,082,328	23,211	21,292
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.11	6.85	6.34	5.71	4.88	3.74	2.13	1.46	600	1,128,093	25,722	18,028
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.03	6.77	6.30	5.67	4.88	3.86	2.32	1.47	600	1,079,384	34,390	16,009
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.11	6.93	6.34	5.67	4.92	3.78	2.09	1.52	600	1,192,427	22,247	18,624
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.83	6.54	6.02	5.35	4.49	3.39	1.85	1.53	600	1,066,626	24,632	20,752
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.99	6.89	6.42	5.94	5.16	4.17	2.56	1.60	600	1,345,820	30,701	14,451
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	13.19	11.06	10.16	9.02	7.72	5.67	2.91	1.61	600	725,898	10,553	14,139
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.50	7.32	6.65	6.14	5.28	4.06	2.32	1.63	600	1,200,633	21,279	16,735
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	6.93	5.91	5.47	5.04	4.41	3.58	2.24	1.66	600	1,377,612	45,291	16,264
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.69	8.15	7.40	6.69	5.63	4.33	2.44	1.67	600	839,827	22,689	15,234
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.69	8.19	7.48	6.85	5.91	4.57	2.68	1.70	600	930,211	23,918	13,878
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	6.77	5.75	5.39	4.96	4.29	3.50	2.20	1.70	600	1,403,241	46,341	16,493
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.03	6.85	6.46	5.94	5.16	4.17	2.56	1.72	600	1,314,654	31,497	14,391
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.91	6.65	5.94	5.35	4.57	3.46	1.93	1.72	600	1,021,888	27,849	19,586
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	6.93	5.98	5.59	5.20	4.61	3.82	2.44	1.75	600	1,557,343	44,528	14,390
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	13.31	11.10	10.12	9.02	7.64	5.67	2.91	1.84	600	687,142	11,283	13,826
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	12.24	10.28	9.37	8.39	7.17	5.55	3.07	1.84	600	721,791	17,196	12,511
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.46	7.28	6.57	6.10	5.31	4.13	2.36	1.99	600	1,272,250	21,110	16,462
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.11	6.77	6.10	5.55	4.92	3.70	2.20	2.01	600	1,010,908	32,455	16,727
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	10.12	8.46	7.56	6.77	5.83	4.41	2.40	2.01	600	819,471	20,828	15,937
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	6.97	5.91	5.43	5.00	4.41	3.58	2.20	2.01	600	1,366,427	44,268	16,593
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.37	7.91	7.36	6.69	5.71	4.49	2.44	2.18	600	1,112,026	17,188	15,999
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	11.50	9.72	8.82	8.03	6.93	5.47	3.03	2.30	600	834,672	17,172	12,476
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.66	7.24	6.61	6.14	5.31	4.17	2.44	2.33	600	1,111,666	26,615	15,280
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	7.99	6.57	6.10	5.59	4.96	4.02	2.52	2.35	600	1,067,458	44,481	14,008
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.41	7.91	7.20	6.57	5.67	4.37	2.32	2.39	600	1,110,015	15,825	17,227
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.94	7.40	6.77	6.26	5.35	4.21	2.44	2.41	600	988,841	27,856	15,178
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	8.94	7.40	6.69	6.22	5.35	4.21	2.48	2.48	600	966,148	30,394	14,891
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.41	7.72	7.09	6.50	5.59	4.41	2.56	2.49	600	906,739	27,082	14,163
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.72	7.83	7.17	6.30	5.31	4.17	2.28	2.59	600	731,575	26,310	15,952
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.80	7.91	7.13	6.34	5.35	4.17	2.28	2.62	600	715,925	26,861	16,051
Superior	I-75	03-04	17033	NA	SP1	NA	NA	Summer	5/31/2000	rigid-Su-I75-CS17033-05-31-2000	9	24	9.92	7.99	7.17	6.38	5.39	4.25	2.32	2.86	600	705,755	27,505	15,784
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	7.17	6.14	5.63	5.08	4.29	3.19	1.77	1.18	400	1,272,508	23,950	19,989
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	10.55	8.82	8.11	7.17	6.22	4.72	2.80	1.28	400	775,582	21,244	11,070
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	10.43	8.86	8.03	7.24	6.22	4.76	2.76	1.43	400	843,742	19,555	11,633
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	5.28	4.61	4.29	3.94	3.35	2.64	1.50	1.47	400	2,135,263	27,742	23,498

																					MICHBACK Output				
Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
					Roadbed	Granular Layer																			
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	10.39	8.86	8.11	7.32	6.26	4.84	2.76	1.48	400	907,640	18,142	12,018
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	7.40	6.22	5.71	5.12	4.33	3.23	1.73	1.54	400	1,227,898	22,771	20,936
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	5.28	4.61	4.21	3.90	3.35	2.64	1.50	1.69	400	2,122,259	28,294	23,069
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	9.06	7.60	7.09	6.38	5.43	4.21	2.36	1.83	400	1,070,180	19,595	14,358
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	7.36	6.22	5.63	5.08	4.33	3.27	1.73	1.84	400	1,278,068	22,345	21,115
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	9.02	7.64	6.97	6.38	5.47	4.17	2.32	1.84	400	1,094,638	18,955	14,974
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	9.06	7.60	6.97	6.30	5.47	4.17	2.36	1.85	400	1,050,150	20,384	14,138
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	7.40	6.22	5.75	5.24	4.45	3.39	1.85	1.90	400	1,347,050	21,928	19,423
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	8.39	6.97	6.50	5.79	4.96	3.74	1.93	2.04	400	1,190,724	17,935	20,023
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	8.46	7.05	6.46	5.79	4.96	3.74	1.93	2.11	400	1,152,727	18,334	19,731
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	7.40	6.10	5.75	5.24	4.45	3.39	1.89	2.26	400	1,350,921	22,915	18,517
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/25/2000	rigid-Su-I75-CS17034-05-25-2000	9	48	7.52	6.22	5.71	5.24	4.49	3.43	1.85	2.51	400	1,344,770	21,800	19,467
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	9.72	8.50	7.72	7.01	6.06	4.57	2.48	1.19	400	1,085,002	14,754	15,186
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	8.82	7.64	7.01	6.38	5.43	4.25	2.48	1.33	400	1,109,140	20,926	13,076
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	8.70	7.52	6.93	6.30	5.35	4.21	2.44	1.44	400	1,134,701	20,762	13,325
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	9.80	8.39	7.72	7.01	6.02	4.57	2.52	1.45	400	1,039,014	16,154	14,223
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	8.74	7.52	6.97	6.34	5.35	4.21	2.48	1.46	400	1,106,821	21,609	12,892
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	5.75	5.00	4.69	4.41	3.82	3.15	2.17	1.53	400	1,825,843	46,819	11,623
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	6.97	5.91	5.35	4.84	4.06	3.19	1.89	1.63	400	1,150,241	32,169	15,911
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	6.02	5.08	4.61	4.25	3.78	3.07	2.09	1.77	400	1,327,473	52,881	11,530
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	5.67	4.84	4.53	4.25	3.74	3.11	2.13	1.84	400	1,800,312	50,146	11,411
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	6.02	5.20	4.80	4.57	4.09	3.39	2.40	1.87	400	1,755,974	51,201	9,645
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	6.10	5.12	4.65	4.33	3.82	3.07	2.09	1.92	400	1,326,052	51,445	11,800
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	10.35	8.58	7.76	7.01	6.02	4.49	2.52	1.93	400	813,109	19,152	13,067
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	6.97	5.87	5.20	4.76	4.09	3.15	1.89	1.94	400	1,122,778	33,299	15,545
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	6.97	5.87	5.28	4.80	4.06	3.19	1.85	1.99	400	1,171,774	30,884	16,345
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	10.00	8.46	7.80	7.17	6.14	4.84	2.80	2.01	400	1,022,336	18,610	11,641
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	10.00	8.39	7.76	7.13	6.14	4.80	2.80	2.07	400	1,008,232	19,211	11,524
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	10.20	8.46	7.60	6.89	5.91	4.41	2.44	2.09	400	828,538	19,048	13,662
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	9.96	8.35	7.72	7.13	6.10	4.80	2.80	2.19	400	1,014,193	19,201	11,453
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	10.35	8.19	7.40	6.69	5.67	4.33	2.44	2.96	400	700,977	22,508	12,438
Superior	I-75	03-04	17034	NA	SP1	NA	NA	Summer	5/22/2000	rigid-Su-I75-CS17034-05-22-2000	9	48	10.28	8.11	7.32	6.57	5.51	4.21	2.32	2.96	400	681,725	22,259	13,217
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	6.89	6.02	5.63	5.08	4.57	3.74	2.40	0.72	300	1,138,385	47,493	11,589
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	5.16	4.69	4.41	3.98	3.50	2.83	1.65	0.85	300	2,155,300	26,213	20,519
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	9.25	8.19	7.40	6.34	5.39	3.90	2.01	0.89	300	713,765	16,266	16,702
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	5.20	4.69	4.37	3.90	3.46	2.80	1.65	0.96	300	1,885,844	36,032	19,433
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	5.20	4.69	4.29	3.94	3.50	2.80	1.65	0.98	300	1,951,139	32,948	19,520
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	6.02	5.12	4.72	4.09	3.62	2.76	1.54	0.98	300	1,146,125	36,703	20,501
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	9.37	8.31	7.48	6.42	5.47	3.90	2.01	0.99	300	695,386	15,682	16,881
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	6.77	5.94	5.47	4.92	4.41	3.58	2.20	1.00	300	1,146,304	41,151	12,968
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	4.65	4.13	3.86	3.43	3.07	2.48	1.46	1.04	300	2,041,276	42,042	21,828
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	6.06	5.20	4.76	4.13	3.62	2.80	1.54	1.14	300	1,165,865	34,858	20,748
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	4.65	4.17	3.86	3.46	3.07	2.52	1.50	1.20	300	2,021,259	45,863	20,887
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	6.77	5.91	5.47	4.96	4.41	3.62	2.20	1.29	300	1,200,807	39,120	13,027
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	6.02	5.16	4.76	4.13	3.58	2.80	1.50	1.46	300	1,220,544	31,674	21,643
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	8.03	6.38	5.91	5.24	4.65	3.70	2.24	2.05	300	644,193	50,271	12,590
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	4.65	4.17	3.82	3.43	3.07	2.56	1.46	2.05	300	2,189,435	36,980	22,006
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	8.11	6.42	5.98	5.28	4.69	3.78	2.28	2.26	300	640,538	51,100	12,338
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001	10	25	8.07	6.38	5.94	5.24	4.69	3.74	2.24	2.37	300	650,409	49,320	12,540
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	7.72	6.65	6.10	5.39	4.72	3.70	2.20	0.56	300	848,185	35,457	13,560
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	6.69	6.06	5.63	5.08	4.45	3.54	2.09	0.60	300	1,414,341	24,777	15,230
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	5.28	4.72	4.45	4.02	3.62	2.87	1.69	0.62	300	2,061,835	26,683	19,394
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	6.65	6.02	5.59	5.04	4.41	3.46	2.05	0.63	300	1,372,112	24,628	15,643
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	11.93	10.47	9.53	8.19	7.01	5.12	2.72	0.64	300	550,133	13,837	11,885
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	7.48	6.61	6.18	5.55	4.92	3.94	2.36	0.66	300	1,193,007	28,309	13,028
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)	10	25	6.65	6.06	5.59	5.04	4.41	3.43	2.05	0.70	300	1,328,823	26,507	15,440

Location					Material Type			FWD File Information				Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer															RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title		PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	11.93	10.51	9.53	8.23	7.01	5.16	2.72	0.70	300	557,825	13,420	11,970
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	9.06	7.56	6.73	5.71	4.92	3.54	1.85	0.72	300	587,564	23,516	16,805
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	13.15	11.73	10.71	9.33	7.95	5.87	3.07	0.76	300	559,228	10,175	10,984
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	13.03	11.65	10.67	9.29	7.95	5.87	3.07	0.78	300	580,078	10,000	11,124
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	9.06	7.60	6.77	5.75	4.92	3.58	1.85	0.81	300	605,071	22,868	17,000
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	7.48	6.61	6.14	5.51	4.88	3.94	2.36	0.85	300	1,155,116	30,507	12,906
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	11.38	9.80	8.90	7.80	6.85	5.28	2.99	0.85	300	593,173	20,002	10,307
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	12.05	10.51	9.49	8.23	6.97	5.12	2.72	0.87	300	516,803	15,334	11,486
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	11.50	9.88	8.94	7.91	6.93	5.31	2.99	0.88	300	592,422	19,413	10,312
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	7.44	6.61	6.06	5.51	4.88	3.90	2.32	0.89	300	1,165,014	29,196	13,157
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	11.46	9.80	8.94	7.87	6.89	5.31	2.99	0.90	300	595,031	19,748	10,295
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	9.17	7.76	6.97	5.94	5.08	3.70	1.85	0.92	300	657,903	18,949	17,335
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	8.98	7.52	6.73	5.67	4.88	3.54	1.81	0.96	300	615,837	21,732	17,434
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	5.24	4.69	4.41	3.94	3.50	2.80	1.57	0.98	300	2,045,089	21,045	22,129
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	11.02	9.61	8.78	7.80	6.85	5.28	2.87	1.01	300	747,651	14,670	11,504
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	11.06	9.65	8.78	7.80	6.85	5.28	2.87	1.06	300	740,741	15,134	11,564
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	5.28	4.76	4.49	4.06	3.62	2.95	1.69	1.07	300	2,280,165	19,194	20,891
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	5.28	4.76	4.45	4.06	3.62	2.95	1.69	1.15	300	2,255,087	19,868	20,567
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	11.06	9.65	8.78	7.83	6.89	5.31	2.87	1.15	300	763,509	14,321	11,694
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	5.16	4.53	4.13	3.70	3.27	2.64	1.57	1.15	300	1,449,436	49,200	18,720
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	8.86	7.28	6.57	5.79	5.04	3.86	2.20	1.30	300	626,982	32,786	13,533
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	7.76	6.73	6.18	5.43	4.76	3.82	2.20	1.31	300	921,159	31,842	13,747
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	8.86	7.24	6.57	5.79	5.04	3.86	2.20	1.38	300	632,205	32,844	13,562
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	6.69	5.87	5.31	4.80	4.17	3.27	1.77	1.41	300	1,258,599	22,542	18,469
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	8.90	7.28	6.57	5.75	5.08	3.86	2.20	1.49	300	638,054	32,178	13,602
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	7.72	6.69	6.06	5.35	4.76	3.82	2.20	1.60	300	919,957	33,719	13,652
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	6.65	5.83	5.35	4.72	4.13	3.31	1.77	1.79	300	1,288,238	22,383	18,457
Superior	M-28	03-01	2041	c1, c2, c3	SP-SM	Natural Gravel	Dense	Summer	8/23/2001	rigid-Su-M28-CS02041-08-23-2001-(2)		10	25	5.20	4.53	4.17	3.70	3.27	2.72	1.54	2.19	300	1,560,184	42,738	19,474
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.17	6.06	5.55	4.88	4.25	3.27	2.01	0.43	400	959,611	101,276	17,575
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.17	6.06	5.59	4.88	4.25	3.31	2.01	0.48	400	987,214	99,544	17,546
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.03	6.89	6.26	5.47	4.80	3.74	2.24	0.49	400	925,131	83,921	15,694
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.13	6.02	5.55	4.80	4.25	3.27	2.01	0.52	400	964,151	104,200	17,555
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		9.13	7.56	6.89	5.98	5.28	4.13	2.52	0.53	400	613,017	92,559	13,772
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.39	7.09	6.50	5.63	4.88	3.62	2.13	0.56	400	912,097	63,244	16,609
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.19	7.09	6.54	5.87	5.24	4.13	2.60	0.61	400	1,019,240	93,743	13,435
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.39	7.20	6.61	5.87	5.20	4.09	2.52	0.62	400	919,751	88,747	13,482
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.83	6.54	6.02	5.20	4.53	3.46	2.05	0.62	400	888,136	82,902	17,268
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		9.21	7.80	7.13	6.30	5.51	4.25	2.56	0.63	400	788,579	73,158	13,576
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.35	7.05	6.54	5.63	4.88	3.66	2.13	0.66	400	968,655	61,011	16,605
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.80	6.54	6.02	5.24	4.57	3.46	2.05	0.71	400	940,788	79,348	17,223
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.19	7.05	6.54	5.79	5.20	4.13	2.56	0.75	400	1,013,701	94,124	13,545
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.03	6.89	6.30	5.51	4.88	3.78	2.28	0.75	400	937,266	87,495	15,486
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.87	6.61	6.06	5.28	4.61	3.50	2.05	0.76	400	962,894	75,521	17,265
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.19	7.09	6.54	5.79	5.24	4.13	2.56	0.80	400	1,037,726	91,603	13,553
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.23	7.40	6.93	6.26	5.71	4.72	3.03	0.83	400	1,434,407	94,265	11,336
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.03	6.85	6.26	5.51	4.84	3.74	2.20	0.84	400	1,021,316	74,627	15,944
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.01	5.98	5.55	4.92	4.37	3.43	2.09	0.89	400	1,256,595	94,315	16,816
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		10.12	8.82	8.23	7.28	6.57	5.28	3.27	0.89	400	905,793	73,258	10,636
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.86	7.36	6.69	5.79	5.08	3.94	2.32	0.89	400	715,869	78,511	14,976
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.35	7.01	6.50	5.63	4.84	3.66	2.13	0.91	400	879,851	64,808	16,584
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.05	6.02	5.51	4.88	4.41	3.58	2.24	0.95	400	907,146	137,668	15,064
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.99	6.54	5.94	5.12	4.49	3.43	2.01	0.98	400	766,084	87,392	17,694
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.68	6.54	6.02	5.35	4.61	3.46	2.01	0.98	400	1,238,207	54,865	17,423
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		6.81	6.06	5.59	5.08	4.53	3.66	2.24	0.99	400	1,776,881	81,208	15,343
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		7.13	6.42	5.98	5.47	4.84	3.86	2.32	1.00	400	1,983,339	54,182	15,368
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001		8		8.07	6.89	6.38	5.63	4.96	3.90	2.32	1.00	400	1,080,861	75,270	15,094

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.64	6.69	6.22	5.51	5.00	4.02	2.48	1.01	400	1,268,508	91,036	13,707
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.23	6.77	6.18	5.28	4.61	3.39	1.93	1.03	400	862,441	64,532	18,398
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.91	6.77	6.14	5.43	4.92	3.94	2.44	1.03	400	817,071	113,830	13,762
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.70	7.32	6.69	5.83	5.12	3.94	2.28	1.07	400	860,697	66,237	14,941
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.60	6.54	6.02	5.31	4.69	3.70	2.17	1.13	400	1,212,132	75,629	16,112
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.95	6.77	6.30	5.55	4.88	3.78	2.20	1.16	400	1,149,882	67,538	15,847
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		10.28	8.74	7.99	7.01	6.22	4.92	2.91	1.17	400	759,212	66,172	11,927
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.29	7.99	7.28	6.50	5.79	4.53	2.68	1.26	400	968,549	62,195	12,673
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.13	7.68	6.97	6.06	5.24	3.90	2.13	1.26	400	933,162	43,553	16,234
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		11.06	9.37	8.58	7.52	6.54	4.92	2.72	1.28	400	859,123	33,850	12,649
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.94	7.40	6.69	5.71	5.00	3.70	2.05	1.29	400	839,788	53,880	17,202
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.52	6.50	5.94	5.24	4.61	3.46	1.89	1.32	400	1,550,609	38,500	18,873
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.64	6.54	5.98	5.31	4.72	3.62	2.09	1.35	400	1,260,016	61,652	16,364
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		6.65	5.71	5.28	4.76	4.37	3.58	2.28	1.35	400	1,241,653	145,807	14,790
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		6.50	5.47	5.04	4.41	3.94	3.03	1.77	1.38	400	1,353,322	89,221	20,115
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.66	7.56	6.97	6.14	5.39	4.09	2.17	1.42	400	1,526,738	23,343	16,425
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		10.94	9.25	8.50	7.40	6.50	4.88	2.68	1.46	400	885,048	32,528	12,722
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.49	8.03	7.32	6.34	5.59	4.25	2.36	1.47	400	934,822	47,032	14,747
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.27	7.13	6.57	5.71	5.00	3.78	2.01	1.48	400	1,421,959	31,767	17,800
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.96	8.39	7.68	6.69	5.75	4.33	2.32	1.51	400	938,583	34,021	14,762
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.28	6.14	5.59	4.88	4.21	3.23	1.77	1.54	400	1,169,000	60,890	19,573
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.36	6.50	6.02	5.43	4.88	3.94	2.32	1.56	400	1,761,023	61,269	14,765
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.68	6.65	6.14	5.47	4.88	3.74	2.09	1.58	400	1,647,138	39,917	16,783
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.41	8.11	7.44	6.69	5.91	4.69	2.72	1.59	400	1,116,850	52,943	12,628
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		10.71	9.13	8.31	7.28	6.42	4.92	2.72	1.63	400	924,105	36,755	12,689
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.45	7.80	7.05	6.06	5.28	3.98	2.17	1.68	400	786,247	50,736	15,869
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.64	6.61	6.14	5.47	4.84	3.74	2.05	1.69	400	1,825,065	31,790	17,444
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.68	6.61	6.18	5.47	4.88	3.74	2.05	1.76	400	1,791,722	32,283	17,409
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.83	6.34	5.79	4.92	4.21	3.11	1.65	1.76	400	954,621	53,955	21,237
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		13.94	11.89	10.87	9.57	8.39	6.38	3.43	1.78	400	784,638	21,989	10,088
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.46	7.13	6.50	5.63	4.92	3.66	1.93	1.78	400	1,138,159	38,832	18,098
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.56	6.46	5.94	5.28	4.57	3.46	1.81	1.83	400	1,689,005	28,743	20,012
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.62	7.36	6.69	5.83	5.12	3.94	2.13	1.84	400	1,147,088	41,999	16,064
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		11.22	9.37	8.46	7.36	6.38	4.80	2.56	1.84	400	751,628	33,878	13,147
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		6.50	5.55	5.12	4.49	4.02	3.11	1.73	1.89	400	1,683,195	62,255	20,388
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		7.48	6.42	5.87	5.20	4.53	3.46	1.81	1.95	400	1,734,957	28,933	19,981
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.90	7.56	6.89	6.02	5.20	3.86	1.93	1.96	400	1,350,310	19,817	18,471
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		8.70	7.52	6.93	6.10	5.39	4.06	2.05	1.97	400	1,691,367	13,753	17,993
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.37	7.99	7.40	6.54	5.75	4.33	2.24	2.00	400	1,498,683	17,103	16,245
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.41	8.11	7.44	6.57	5.83	4.49	2.40	2.05	400	1,265,896	29,998	14,394
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.33	8.07	7.36	6.50	5.75	4.41	2.28	2.21	400	1,462,424	20,485	15,779
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		9.29	7.99	7.32	6.46	5.71	4.37	2.24	2.28	400	1,536,433	17,811	16,329
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		10.79	8.98	8.07	6.93	5.94	4.29	2.01	2.45	400	976,070	14,630	17,121
Superior	M-28	03-04	17062	47046	SP1	NA	NA	Summer	5/8/2001	rigid-Su-M28-CS17062-05-08-2001	8		11.30	9.06	8.27	7.01	6.06	4.41	2.24	2.46	400	712,356	31,048	15,453
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	6/25/2001	rigid-U-I69-CS19043-06-25-2001	9	20	4.84	4.29	3.94	3.54	3.15	2.56	1.54	1.38	700	2,198,831	50,035	24,761
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	6/25/2001	rigid-U-I69-CS19043-06-25-2001	9	20	8.43	7.24	6.57	5.79	5.08	3.82	2.05	1.49	700	1,115,234	18,204	19,300
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	6/25/2001	rigid-U-I69-CS19043-06-25-2001	9	20	8.27	7.13	6.50	5.67	4.96	3.78	2.01	1.57	700	1,143,670	18,207	19,727
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	6/25/2001	rigid-U-I69-CS19043-06-25-2001	9	20	4.80	4.29	3.94	3.54	3.15	2.60	1.54	1.74	700	2,420,660	43,819	25,077
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	6/25/2001	rigid-U-I69-CS19043-06-25-2001	9	20	8.27	7.13	6.46	5.67	4.96	3.86	2.01	2.19	700	1,204,458	16,749	19,893
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.09	3.66	3.39	3.07	2.76	2.20	1.34	0.88	700	2,894,155	47,181	28,642
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.49	3.98	3.66	3.31	2.99	2.36	1.46	0.96	700	2,369,575	55,037	25,930
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	3.94	3.54	3.27	2.99	2.68	2.17	1.34	1.00	700	3,135,633	53,103	28,661
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.49	3.98	3.74	3.43	3.07	2.52	1.61	1.01	700	2,704,163	61,045	23,383
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.57	4.02	3.74	3.39	2.99	2.40	1.46	1.03	700	2,348,516	50,300	25,946
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.45	3.94	3.66	3.31	2.95	2.36	1.42	1.06	700	2,577,713	45,666	27,139
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.21	3.70	3.46	3.11	2.76	2.17	1.26	1.09	700	2,833,329	34,913	31,595

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	3.98	3.54	3.27	2.95	2.68	2.13	1.30	1.13	700	2,913,610	53,268	29,419
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.76	4.21	3.94	3.58	3.23	2.56	1.54	1.13	700	2,703,642	33,665	25,500
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.96	4.29	3.98	3.58	3.19	2.52	1.54	1.14	700	1,948,937	54,298	24,485
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.65	4.09	3.82	3.46	3.11	2.52	1.57	1.15	700	2,435,716	54,263	23,926
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.41	3.90	3.66	3.31	2.95	2.40	1.46	1.20	700	2,790,624	46,743	26,629
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.65	4.09	3.78	3.39	3.03	2.40	1.42	1.20	700	2,349,803	41,312	26,943
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.55	4.80	4.45	4.06	3.62	2.95	1.89	1.21	700	1,656,513	69,734	19,652
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.96	4.25	3.86	3.39	2.95	2.20	1.18	1.26	700	1,802,230	31,695	33,294
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.65	4.13	3.86	3.54	3.19	2.56	1.54	1.28	700	2,914,931	32,153	25,394
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.72	4.21	3.94	3.54	3.19	2.60	1.57	1.28	700	2,731,170	41,120	25,180
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	10.04	8.62	7.87	7.09	6.22	4.76	2.76	1.29	700	911,103	20,999	13,735
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.51	4.72	4.41	3.98	3.54	2.87	1.81	1.31	700	1,651,758	64,927	20,555
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.61	4.06	3.74	3.35	2.99	2.32	1.30	1.32	700	2,545,071	27,533	31,189
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.35	4.69	4.33	3.90	3.50	2.80	1.69	1.33	700	1,985,252	44,427	22,420
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.25	3.78	3.50	3.19	2.83	2.28	1.34	1.33	700	2,994,892	35,450	29,571
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.31	4.69	4.33	3.94	3.54	2.80	1.65	1.35	700	2,313,327	30,227	23,843
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.37	3.86	3.62	3.27	2.95	2.40	1.46	1.36	700	2,861,372	47,261	26,440
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.46	5.51	5.04	4.45	3.86	2.91	1.57	1.39	700	1,414,528	24,461	24,872
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.26	5.28	4.80	4.21	3.62	2.68	1.42	1.39	700	1,361,442	26,030	27,674
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	8.66	7.44	6.81	6.06	5.31	4.13	2.36	1.40	700	1,041,242	24,496	15,979
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.57	4.02	3.70	3.31	2.91	2.28	1.26	1.40	700	2,561,944	28,238	32,928
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	7.32	6.34	5.79	5.24	4.65	3.62	2.13	1.41	700	1,329,892	29,687	17,712
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.61	5.67	5.20	4.65	4.06	3.19	1.85	1.43	700	1,359,420	35,811	20,492
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.00	4.29	3.98	3.50	3.15	2.40	1.38	1.43	700	1,939,807	38,837	27,908
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	8.11	6.93	6.30	5.63	4.88	3.66	1.97	1.49	700	1,117,472	19,049	19,578
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.50	5.51	5.04	4.45	3.86	2.91	1.57	1.52	700	1,399,776	24,641	24,865
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.02	5.16	4.84	4.37	3.86	3.11	1.89	1.52	700	1,651,919	44,901	19,811
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.25	3.74	3.46	3.15	2.83	2.24	1.30	1.53	700	3,036,700	32,475	31,148
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.69	5.75	5.20	4.69	4.13	3.23	1.89	1.57	700	1,327,564	36,956	19,917
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	7.56	6.34	5.75	5.12	4.45	3.39	1.93	1.59	700	1,060,312	30,595	19,420
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.04	4.29	3.98	3.50	3.15	2.40	1.38	1.59	700	1,885,852	40,490	27,870
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	7.48	6.50	5.98	5.39	4.76	3.70	2.05	1.59	700	1,515,219	18,451	19,697
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	7.72	6.57	5.98	5.31	4.65	3.50	1.89	1.64	700	1,206,550	20,209	20,594
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.16	4.41	4.09	3.58	3.23	2.48	1.42	1.64	700	1,818,939	39,086	26,594
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	9.21	7.87	7.13	6.38	5.67	4.33	2.48	1.64	700	987,707	23,415	15,426
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	9.06	7.76	7.01	6.26	5.55	4.21	2.36	1.67	700	1,013,752	21,457	16,357
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	7.68	6.54	5.94	5.24	4.57	3.46	1.85	1.69	700	1,184,776	20,633	20,992
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	7.64	6.50	5.94	5.28	4.57	3.58	2.01	1.71	700	1,151,134	28,549	19,012
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	7.56	6.42	5.91	5.24	4.53	3.54	1.97	1.71	700	1,190,935	26,781	19,466
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	5.28	4.57	4.21	3.78	3.39	2.72	1.61	1.76	700	1,934,522	45,210	23,406
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.65	5.67	5.12	4.57	3.98	3.07	1.69	1.83	700	1,362,535	28,773	22,887
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.26	5.24	4.76	4.17	3.62	2.68	1.38	1.90	700	1,412,024	23,828	28,807
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.93	5.79	5.28	4.65	4.02	3.15	1.77	1.93	700	1,131,133	37,059	21,340
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.34	5.35	4.84	4.33	3.78	2.87	1.54	2.06	700	1,451,233	25,748	25,113
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.53	3.78	3.43	3.07	2.68	2.05	1.14	2.06	700	1,885,067	45,790	33,128
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.93	5.94	5.43	4.88	4.33	3.35	1.81	2.10	700	1,619,870	19,255	22,632
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.84	4.06	3.70	3.27	2.87	2.17	1.14	2.19	700	1,983,270	30,218	34,973
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.81	5.75	5.24	4.69	4.09	3.19	1.73	2.25	700	1,373,426	26,008	22,070
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.61	5.59	5.08	4.57	3.98	3.11	1.69	2.28	700	1,445,095	26,715	22,798
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.93	5.79	5.24	4.61	4.02	3.15	1.73	2.31	700	1,159,994	34,364	21,805
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.22	5.24	4.69	4.21	3.70	2.83	1.54	2.33	700	1,430,955	30,341	24,809
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	4.49	3.74	3.43	2.99	2.64	2.01	1.06	2.36	700	1,993,638	37,089	36,375
University	I-69	10-08	19043	18632	SC	Natural Gravel	Open	Summer	5/14/2002	rigid-U-I69-CS19043-05-14-2002	9	20	6.18	5.20	4.65	4.17	3.70	2.83	1.54	2.51	700	1,457,402	30,862	24,811
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999	9	20	2.51	2.08	1.89	1.62	1.38	1.03	0.63	0.54	700	1,064,053	69,172	28,543
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999	9	20	3.29	2.77	2.51	2.18	1.85	1.32	0.71	0.74	700	1,109,164	27,487	26,734
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999	9	20	8.22	7.10	6.63	5.88	5.11	3.96	2.35	0.79	700	1,803,603	45,854	26,475

Location					Material Type			FWD File Information				Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer															RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title		PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999		9	20	8.38	7.18	6.71	5.91	5.14	3.99	2.39	0.87	700	1,674,145	49,319	25,915
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999		9	20	8.33	7.12	6.63	5.84	5.12	3.96	2.37	0.87	700	1,650,840	52,363	26,050
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999		9	20	10.26	8.78	8.09	7.17	6.12	4.67	2.63	1.03	700	1,386,926	31,774	24,159
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999		9	20	10.17	8.70	7.99	7.04	6.03	4.55	2.47	1.12	700	1,430,694	26,988	25,965
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999		9	20	10.10	8.64	7.84	6.93	6.03	4.55	2.53	1.22	700	1,405,674	31,126	25,040
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999		9	20	3.40	2.80	2.57	2.18	1.83	1.36	0.71	1.57	700	1,010,339	28,394	26,203
University	I-69	10-08	19042	24680	SC	Dolomite	Open	Summer	9/18/1998	rigid-U-I69-CS19042-09-18-1999		9	20	10.24	8.64	7.99	6.80	6.02	4.57	2.53	1.62	700	1,299,816	34,126	24,716
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	5.14	4.92	4.54	4.28	3.94	3.24	2.08	0.96	225	3,208,750	22,840	13,487
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.68	4.32	4.13	3.93	3.71	3.15	2.13	1.06	225	4,433,817	33,286	11,941
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.36	4.01	3.85	3.65	3.45	2.95	2.01	1.08	225	4,585,287	47,132	12,125
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	5.14	4.94	4.55	4.32	3.97	3.24	2.09	1.10	225	3,309,015	19,373	13,762
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.67	4.35	4.13	3.98	3.74	3.23	2.21	1.14	225	4,886,945	29,356	11,282
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.41	4.04	3.87	3.70	3.46	2.97	2.00	1.22	225	4,579,496	41,055	12,509
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.40	4.06	3.88	3.69	3.51	2.98	2.01	1.24	225	4,982,657	27,813	12,917
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.41	3.97	3.77	3.62	3.39	2.92	2.09	1.24	225	2,817,580	146,479	9,899
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	5.39	4.73	4.43	4.09	3.80	3.06	1.97	1.24	225	1,730,950	76,224	12,540
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.45	4.11	3.93	3.79	3.59	3.13	2.20	1.29	225	4,987,982	59,487	10,304
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.47	4.12	3.93	3.78	3.53	3.04	2.02	1.32	225	5,079,968	18,429	13,495
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.37	4.05	3.87	3.80	3.56	3.09	2.19	1.36	225	5,719,400	39,413	10,670
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.78	4.45	4.20	4.08	3.85	3.30	2.26	1.37	225	4,943,732	23,271	11,273
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.26	3.94	3.76	3.60	3.43	2.96	2.02	1.39	225	5,529,422	30,684	12,380
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.38	4.00	3.83	3.66	3.45	2.97	2.01	1.41	225	4,538,269	51,218	12,073
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.45	4.10	3.95	3.81	3.61	3.17	2.21	1.42	225	5,796,281	32,585	10,772
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.60	4.19	4.03	3.83	3.61	3.07	2.02	1.42	225	4,746,414	18,166	13,775
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.31	3.95	3.74	3.55	3.38	2.90	1.98	1.43	225	3,962,798	78,314	11,634
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.86	4.75	4.51	4.18	3.82	3.10	2.04	1.44	225	3,640,007	15,277	14,638
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.73	4.36	4.15	3.98	3.77	3.22	2.14	1.45	225	5,021,670	12,378	13,444
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.43	4.05	3.87	3.71	3.53	3.01	2.05	1.51	225	4,775,257	42,441	11,992
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.48	4.09	3.91	3.80	3.53	3.05	2.07	1.51	225	4,778,754	38,945	11,972
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.36	3.94	3.80	3.63	3.42	2.87	1.88	1.59	225	4,970,579	14,455	15,499
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.39	4.01	3.78	3.64	3.44	2.92	1.97	1.60	225	4,196,712	52,712	12,221
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.47	4.09	3.85	3.73	3.53	3.00	2.07	1.60	225	4,071,219	70,830	11,325
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.55	4.14	3.93	3.74	3.59	3.02	2.07	1.61	225	3,868,393	68,375	11,432
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.17	3.77	3.62	3.47	3.29	2.80	1.90	1.65	225	4,748,965	52,221	12,765
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.67	4.27	4.08	3.93	3.72	3.21	2.15	1.68	225	5,205,701	15,989	12,633
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.40	4.03	3.83	3.73	3.55	3.00	2.07	1.71	225	5,081,931	37,853	11,876
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.37	4.06	3.85	3.74	3.61	3.12	2.18	1.72	225	6,467,568	17,050	11,686
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.28	3.94	3.74	3.57	3.45	2.97	2.03	1.76	225	5,253,033	43,128	11,854
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.15	3.76	3.59	3.43	3.27	2.81	1.90	1.78	225	4,741,426	56,723	12,540
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.45	4.06	3.88	3.77	3.59	3.10	2.14	1.79	225	5,440,332	34,344	11,315
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.34	3.99	3.76	3.68	3.48	3.00	2.06	1.80	225	5,233,107	39,724	11,717
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	5.34	4.67	4.32	4.03	3.74	3.07	1.93	1.81	225	1,694,528	80,611	12,617
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.18	3.79	3.59	3.44	3.30	2.78	1.90	1.81	225	4,325,487	68,054	12,401
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.30	3.98	3.74	3.64	3.48	2.98	2.01	1.86	225	5,993,073	12,001	14,264
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.23	3.89	3.66	3.53	3.42	2.85	1.95	1.93	225	5,140,630	36,366	12,880
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.32	3.93	3.73	3.64	3.45	3.00	2.07	1.95	225	5,169,804	52,870	11,294
University	I-75	14-01	58151	NA	SC	NA	NA	?	3/31/2008	rigid-U-I75-CS58151-03-31-2008		10	20	4.35	3.98	3.75	3.68	3.49	3.02	2.09	1.96	225	5,261,308	48,230	11,317
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	3.86	3.31	3.17	2.97	2.75	2.33	1.62	1.66	500	2,347,332	143,436	20,146
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	8.57	7.12	6.67	5.94	5.27	4.18	2.46	1.72	500	824,745	31,471	14,378
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	8.55	7.10	6.64	5.93	5.25	4.16	2.43	1.78	500	847,923	30,000	14,701
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	8.53	7.04	6.60	5.87	5.21	4.10	2.39	1.83	500	830,293	30,185	14,898
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	7.68	6.41	6.03	5.47	4.89	3.96	2.40	1.94	500	1,006,317	39,621	14,738
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	8.50	7.03	6.63	5.90	5.24	4.17	2.43	1.96	500	864,551	29,876	14,625
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	10.08	8.35	7.79	7.08	6.24	5.00	2.96	2.00	500	739,838	27,186	12,042
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	9.97	8.22	7.68	6.93	6.17	4.92	2.92	2.04	500	726,229	28,985	12,149
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006		10	20	10.10	8.34	7.77	7.06	6.25	5.00	2.96	2.09	500	725,222	28,371	12,028

Location					Material Type			FWD File Information			Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer														RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	7.79	6.45	6.03	5.49	4.86	3.98	2.41	2.12	500	931,827	42,619	14,535
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	9.04	7.31	6.89	6.15	5.47	4.29	2.54	2.14	500	733,070	33,406	13,890
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	9.04	7.30	6.87	6.16	5.44	4.27	2.52	2.16	500	738,091	32,692	14,069
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	9.00	7.26	6.86	6.16	5.44	4.27	2.51	2.27	500	752,429	32,008	14,099
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	10.56	8.91	8.27	7.52	6.72	5.33	2.95	2.30	500	910,266	12,857	13,141
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	7.09	5.73	5.33	4.84	4.24	3.39	2.00	2.35	500	904,620	46,060	17,541
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	7.14	5.76	5.37	4.84	4.27	3.42	2.02	2.36	500	885,522	47,455	17,342
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	10.65	9.00	8.36	7.65	6.78	5.43	2.99	2.39	500	931,788	11,920	13,122
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	7.19	5.77	5.38	4.84	4.25	3.40	2.00	2.39	500	844,992	47,589	17,404
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	10.61	8.91	8.31	7.52	6.69	5.33	2.92	2.40	500	892,363	12,927	13,274
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	5.08	4.10	3.80	3.43	3.02	2.36	1.35	2.43	500	1,295,178	53,793	26,342
University	I-75	14-03	58152	28352	SC	NA	NA	Summer	10/6/2006	rigid-U-I75-CS58152-10-06-2006	10	20	5.11	4.12	3.87	3.45	3.04	2.42	1.34	2.82	500	1,405,691	46,008	26,919
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	3.76	3.32	3.08	2.73	2.40	1.86	1.06	0.39	225	2,089,644	59,091	25,856
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	4.48	3.90	3.57	3.22	2.80	2.18	1.29	0.50	225	1,514,089	71,024	20,338
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	4.58	3.91	3.61	3.24	2.82	2.20	1.29	0.63	225	1,416,339	72,416	20,155
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	4.32	3.71	3.37	3.01	2.59	2.00	1.14	0.64	225	1,427,549	69,243	23,241
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	4.29	3.69	3.37	3.00	2.58	1.98	1.18	0.65	225	1,356,410	81,783	22,172
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	4.47	3.85	3.54	3.21	2.78	2.18	1.30	0.80	225	1,486,720	72,537	20,007
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	4.30	3.66	3.40	3.02	2.60	1.99	1.20	0.86	225	1,367,035	84,198	21,816
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.40	6.24	5.71	5.04	4.38	3.26	1.72	0.90	225	912,003	29,092	16,024
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.39	6.21	5.71	5.01	4.37	3.25	1.68	1.10	225	937,612	26,046	16,481
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	3.52	3.00	2.79	2.55	2.28	1.82	1.11	1.16	225	2,055,795	110,487	22,850
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	3.50	3.00	2.79	2.57	2.30	1.85	1.13	1.29	225	2,198,444	107,769	22,336
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.37	6.15	5.69	5.00	4.36	3.21	1.61	1.37	225	987,138	21,818	17,665
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	3.79	3.17	2.97	2.72	2.43	1.93	1.20	1.38	225	1,757,834	117,700	20,842
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.58	4.36	3.93	3.44	2.89	2.12	1.13	1.47	225	789,699	59,173	23,027
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.87	4.70	4.25	3.79	3.23	2.45	1.34	1.59	225	838,378	58,694	19,190
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	6.54	5.29	4.90	4.35	3.81	2.97	1.69	1.62	225	832,172	59,003	15,041
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.93	4.74	4.31	3.80	3.28	2.51	1.36	1.75	225	850,853	59,350	19,098
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	6.53	5.28	4.86	4.32	3.76	2.92	1.62	1.76	225	841,030	54,888	15,880
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.19	5.59	5.15	4.43	3.79	2.74	1.42	1.79	225	657,466	41,025	18,398
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	8.14	6.51	5.81	5.08	4.33	3.09	1.50	1.80	225	659,799	26,841	17,949
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.18	5.59	5.18	4.47	3.82	2.74	1.41	1.89	225	703,494	37,638	18,854
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.63	6.12	5.62	4.91	4.20	3.10	1.54	1.91	225	761,568	28,882	17,367
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.54	5.99	5.35	4.70	3.99	2.87	1.41	1.91	225	690,506	31,124	18,862
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.19	5.65	5.18	4.49	3.81	2.76	1.37	1.91	225	720,927	34,227	19,414
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	9.13	7.31	6.79	5.92	5.11	3.73	1.87	1.92	225	653,664	23,709	14,341
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.92	4.75	4.30	3.82	3.30	2.46	1.29	1.92	225	908,920	48,530	20,274
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.58	6.11	5.59	4.90	4.19	3.12	1.55	1.95	225	786,064	28,879	17,358
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.56	4.34	3.93	3.44	2.92	2.12	1.08	1.95	225	876,049	49,660	24,311
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.72	4.56	4.15	3.66	3.18	2.35	1.23	1.96	225	936,145	49,854	21,356
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.05	5.57	5.16	4.45	3.79	2.74	1.33	2.00	225	810,285	29,466	20,492
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.45	5.94	5.35	4.68	4.05	2.95	1.48	2.00	225	732,596	32,978	18,006
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.62	6.15	5.60	4.92	4.23	3.08	1.49	2.00	225	805,531	24,580	18,294
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.58	5.99	5.47	4.79	4.09	3.01	1.52	2.02	225	710,200	33,416	17,399
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.07	5.59	4.98	4.33	3.67	2.60	1.21	2.02	225	622,159	16,968	16,741
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.50	5.97	5.43	4.77	4.03	2.96	1.45	2.03	225	754,303	29,415	18,606
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.43	5.66	5.02	4.42	3.75	2.66	1.26	2.03	225	706,045	22,045	18,852
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	8.13	6.51	5.80	5.08	4.33	3.10	1.47	2.03	225	679,568	24,349	18,274
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	9.28	7.44	6.91	6.06	5.21	3.84	1.91	2.05	225	678,699	22,017	14,275
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.51	5.94	5.33	4.70	4.04	2.95	1.50	2.07	225	704,095	35,180	17,656
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.76	4.55	4.09	3.57	3.07	2.26	1.14	2.08	225	879,805	47,990	23,196
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.52	5.99	5.40	4.73	4.09	2.97	1.45	2.08	225	821,057	29,199	19,660
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.42	5.67	5.03	4.44	3.74	2.66	1.24	2.12	225	756,331	28,081	22,399
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	7.62	6.02	5.50	4.83	4.08	3.01	1.49	2.13	225	729,887	31,094	18,059
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006	10	20	5.61	4.35	3.93	3.42	2.89	2.11	1.03	2.13	225	670,951	31,076	18,865

Location					Material Type			FWD File Information				Pavement Layer Thicknesses (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							MICHBACK Output				
					Roadbed	Granular Layer															RMS Error (%)	Depth to Stiff Layer (in)	Backcalculated Resilient Modulus (psi)		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title		PCC	Granular	0	8	12	18	24	36	60			PCC	Granular	Roadbed
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.11	5.63	5.24	4.57	3.86	2.82	1.38	2.15	225	695,509	22,018	19,328
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	5.79	4.62	4.20	3.73	3.23	2.44	1.28	2.16	225	947,761	50,748	20,416
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	8.28	6.52	5.81	5.14	4.39	3.11	1.51	2.22	225	710,022	20,799	19,205
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.57	5.96	5.32	4.58	3.80	2.62	1.05	2.22	225	708,885	19,693	14,721
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.03	5.45	4.88	4.25	3.61	2.51	0.97	2.23	225	703,101	37,554	20,857
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	6.22	4.83	4.31	3.76	3.23	2.31	1.14	2.24	225	749,656	29,930	18,564
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	9.87	7.75	7.15	6.23	5.26	3.73	1.74	2.24	225	593,794	17,648	15,773
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.03	5.48	4.94	4.24	3.57	2.49	0.96	2.25	225	939,973	50,810	20,575
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	6.15	4.85	4.33	3.78	3.23	2.31	1.06	2.26	225	690,141	23,182	17,942
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.46	5.67	5.05	4.40	3.74	2.63	1.23	2.29	225	738,037	27,711	22,506
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	5.60	4.32	3.89	3.44	2.90	2.10	1.05	2.30	225	644,489	26,485	17,653
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	5.77	4.51	4.07	3.61	3.10	2.32	1.18	2.33	225	794,341	40,988	23,157
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	8.21	6.45	5.95	5.14	4.37	3.09	1.43	2.33	225	791,183	25,278	23,658
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.02	5.34	4.88	4.26	3.63	2.63	1.35	2.34	225	882,567	46,433	25,849
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	5.59	4.35	3.90	3.38	2.94	2.12	1.04	2.35	225	650,876	27,210	16,937
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.15	5.58	4.99	4.35	3.68	2.58	1.20	2.35	225	645,928	22,707	18,888
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.02	5.50	4.93	4.29	3.60	2.55	1.16	2.36	225	628,296	23,535	18,710
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	9.87	7.71	7.13	6.17	5.23	3.73	1.73	2.39	225	580,905	18,232	15,689
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.03	5.41	4.84	4.25	3.55	2.45	0.95	2.40	225	662,194	43,345	19,318
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	6.31	4.87	4.35	3.81	3.27	2.33	1.15	2.41	225	853,729	49,476	25,012
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	9.29	7.44	6.94	6.06	5.25	3.85	1.88	2.47	225	771,899	41,926	23,028
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	6.93	5.33	4.88	4.22	3.61	2.55	1.27	2.53	225	884,323	46,195	25,148
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.58	5.93	5.29	4.64	3.84	2.66	1.07	2.58	225	893,114	50,204	22,133
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	5.79	4.58	4.18	3.73	3.22	2.41	1.27	2.59	225	884,682	31,530	25,363
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	9.51	7.54	6.96	5.97	5.11	3.59	1.65	2.67	225	691,896	19,857	19,038
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	7.67	6.01	5.40	4.74	4.02	2.88	1.41	2.86	225	643,932	31,360	21,372
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	8.30	6.61	5.97	5.25	4.41	3.22	1.51	2.93	225	653,337	32,503	20,871
University	US-23	13-06	58034	18877	SP-SM	Natural Gravel	Dense	Summer	9/14/2006	rigid-U-US23-CS58034-09-14-2006		10	20	8.30	6.55	5.95	5.21	4.44	3.24	1.56	2.97	225	666,216	30,696	21,240

APPENDIX B

BACKCALCULATED UNBOUND GRANULAR LAYER MODULI FOR FLEXIBLE PAVEMENTS USING TWO AND THREE LAYER SYSTEMS

B-1

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	13.09	9.28	6.93	4.76	3.50	2.10	1.04	1.20	1		250	947,354	35,020	25,165	3.5	8.0	18.0	759,477	44,574	31,436	25,475	250	0.69	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	13.71	9.78	7.35	4.92	3.59	2.12	1.04	0.92	1		250	931,590	32,275	25,169	3.5	8.0	18.0	808,311	38,216	29,903	25,369	250	0.62	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	13.48	10.02	8.06	5.98	4.67	2.99	1.55	1.58	1		250	1,356,105	34,541	17,121	3.5	8.0	18.0	861,826	58,115	27,975	17,565	250	0.71	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	12.24	8.65	6.64	4.71	3.56	2.18	1.12	1.63	1		250	1,088,984	38,870	23,762	3.5	8.0	18.0	768,435	55,354	33,418	24,200	250	1.00	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	13.93	10.12	7.78	5.47	4.09	2.52	1.40	1.78	1		250	887,769	35,293	19,730	3.5	8.0	18.0	1,082,646	26,618	41,125	19,477	250	1.53	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	14.48	10.50	8.11	5.75	4.38	2.70	1.42	1.22	1		250	942,671	32,916	18,862	3.5	8.0	18.0	824,972	38,785	30,492	19,022	250	1.11	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.30	5.68	5.19	4.52	3.89	2.84	1.58	0.20	1		700	2,273,076	29,426	25,071	7.25	4.5	17.5	2,277,944	11,288	42,392	24,977	700	0.18	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.07	7.21	6.50	5.55	4.64	3.20	1.42	0.66	1		700	1,807,213	11,116	30,083	7.25	4.5	17.5	1,375,857	123,653	8,339	31,138	700	0.52	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.53	6.77	6.19	5.35	4.54	3.19	1.58	0.08	1		700	2,006,488	14,768	26,207	7.25	4.5	17.5	2,006,495	5,000	22,379	26,480	700	0.18	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.87	8.11	6.93	5.58	4.62	3.12	1.76	1.76	1		700	429,536	36,980	20,693	7.25	4.5	17.5	272,403	131,628	28,580	21,174	700	0.66	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.90	7.11	6.52	5.71	4.89	3.54	1.85	0.19	1		700	2,035,012	15,852	22,285	7.25	4.5	17.5	1,797,285	65,010	13,185	22,406	700	0.14	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.08	5.49	5.06	4.46	3.84	2.84	1.55	0.19	1		700	2,745,326	23,557	26,436	7.25	4.5	17.5	2,452,041	76,892	19,882	26,584	700	0.17	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	5.91	5.25	4.79	4.15	3.55	2.57	1.41	0.20	1		700	2,295,196	30,795	27,913	7.25	4.5	17.5	2,010,101	91,592	26,331	27,973	700	0.10	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.44	5.85	5.38	4.78	4.14	3.07	1.75	0.29	1		700	2,538,022	26,136	22,896	7.25	4.5	17.5	2,555,386	5,965	59,901	22,977	700	0.30	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	9.03	8.03	7.38	6.46	5.54	3.95	2.00	0.48	1		700	1,798,903	12,261	20,974	7.25	4.5	17.5	1,292,204	154,304	8,641	21,811	700	0.25	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.70	6.00	5.57	4.94	4.26	3.11	1.60	0.57	1		700	2,775,105	14,208	27,162	7.25	4.5	17.5	1,837,910	287,031	9,116	29,016	700	0.33	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	5.38	4.85	4.48	3.95	3.44	2.60	1.53	0.10	1		700	2,836,815	41,551	25,564	7.25	4.5	17.5	2,701,461	55,417	39,071	25,552	700	0.11	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.07	7.22	6.56	5.72	4.87	3.46	1.68	0.55	1		700	1,978,408	12,350	25,199	7.25	4.5	17.5	1,388,377	178,693	8,609	26,425	700	0.27	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.91	7.10	6.48	5.62	4.72	3.29	1.54	0.24	1		700	1,958,727	11,183	27,965	7.25	4.5	17.5	1,781,056	41,109	9,568	27,978	700	0.22	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.81	7.15	6.62	5.87	5.15	3.94	2.20	0.52	1		700	2,466,243	17,152	18,680	7.25	4.5	17.5	1,812,478	201,456	11,754	19,297	700	0.39	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.37	5.70	5.21	4.51	3.84	2.78	1.35	0.77	1		700	2,558,032	15,648	31,317	7.25	4.5	17.5	1,663,871	281,237	10,294	33,354	700	0.47	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.36	6.58	6.02	4.84	4.11	2.94	1.50	1.68	1		700	1,513,192	24,600	25,531	7.25	4.5	17.5	1,490,601	16,592	27,328	25,454	700	1.68	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.76	6.59	5.83	4.93	4.12	2.81	1.48	0.72	1		700	1,222,334	28,513	25,251	7.25	4.5	17.5	936,335	114,415	22,769	25,579	700	0.53	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.73	6.64	5.92	5.09	4.29	3.05	1.60	0.98	1		700	1,425,475	26,490	23,573	7.25	4.5	17.5	868,373	230,500	18,103	24,426	700	0.33	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	9.30	7.18	6.25	5.21	4.38	3.15	1.89	1.29	1		700	539,122	50,413	19,542	7.25	4.5	17.5	365,738	153,312	39,947	19,968	700	0.49	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.03	5.43	5.00	4.45	3.85	2.92	1.73	0.33	1		700	2,500,153	38,067	22,485	7.25	4.5	17.5	2,276,629	77,965	33,562	22,552	700	0.32	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	5.84	5.24	4.76	4.20	3.58	2.65	1.46	0.52	1		700	2,488,234	30,513	26,946	7.25	4.5	17.5	2,005,166	158,273	23,821	27,303	700	0.43	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.44	6.56	5.91	5.09	4.33	3.15	1.82	0.28	1		700	1,446,168	35,849	20,886	7.25	4.5	17.5	1,495,918	12,615	55,368	20,707	700	0.23	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.07	5.40	4.87	4.22	3.57	2.59	1.45	0.37	1		700	1,952,804	36,021	26,500	7.25	4.5	17.5	1,986,087	12,871	54,783	26,351	700	0.35	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.87	6.66	5.90	4.89	4.07	2.84	1.66	0.63	1		700	935,400	41,031	22,573	7.25	4.5	17.5	1,081,881	6,370	169,939	22,430	700	0.28	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.15	5.50	5.03	4.38	3.81	2.86	1.64	0.41	1		700	2,221,190	35,905	23,292	7.25	4.5	17.5	1,743,769	172,602	27,740	23,635	700	0.23	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.78	5.94	5.35	4.60	3.89	2.71	1.37	0.52	1		700	1,852,866	22,184	28,358	7.25	4.5	17.5	1,377,715	157,990	16,722	28,976	700	0.25	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	5.91	5.30	4.83	4.26	3.71	2.81	1.57	0.82	1		700	2,643,865	30,774	24,848	7.25	4.5	17.5	1,606,487	388,117	19,273	25,948	700	0.44	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.19	5.56	5.09	4.42	3.82	2.81	1.55	0.24	1		700	2,327,842	28,453	25,231	7.25	4.5	17.5	2,041,691	89,773	23,930	25,362	700	0.19	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	5.88	5.40	5.01	4.48	3.91	3.03	1.77	0.36	1		700	3,180,520	29,239	22,684	7.25	4.5	17.5	2,863,834	90,601	24,582	22,794	700	0.35	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.55	6.55	5.97	5.23	4.52	3.45	2.02	0.94	1		700	1,567,102	39,602	18,627	7.25	4.5	17.5	914,559	308,838	26,733	19,255	700	0.31	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.51	6.66	6.06	5.29	4.60	3.36	1.85	0.62	1		700	1,897,037	24,542	21,134	7.25	4.5	17.5	1,281,504	221,978	16,975	21,790	700	0.28	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.06	5.39	4.89	4.25	3.65	2.69	1.51	0.34	1		700	2,128,979	35,742	25,431	7.25	4.5	17.5	1,773,359	125,844	29,252	25,647	700	0.23	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.73	5.98	5.40	4.68	3.95	2.80	1.30	0.90	1		700	2,272,250	13,897	32,319	7.25	4.5	17.5	1,366,382	294,246	8,862	35,131	700	0.45	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.15	6.31	5.64	4.83	4.05	2.85	1.47	0.40	1		700	1,641,006	23,982	26,018	7.25	4.5	17.5	1,438,433	67,499	20,498	26,128	700	0.35	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.14	6.31	5.70	4.91	4.21	3.03	1.75	0.40	1		700	1,560,656	34,826	21,709	7.25	4.5	17.5	1,637,094	7,986	80,601	21,575	700	0.36	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.96	6.21	5.67	4.93	4.24	3.11	1.78	0.18	1		700	1,860,856	32,367	21,595	7.25	4.5	17.5	1,881,246	12,348	46,386	21,498	700	0.11	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.30	5.64	5.16	4.50	3.88	2.88	1.64	0.16	1		700	2,197,699	33,159	23,643	7.25	4.5	17.5	1,988,841	70,363	29,191	23,712	700	0.11	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.33	5.71	5.25	4.68	4.12	3.15	1.86	0.50	1		700	2,583,549	34,150	20,834	7.25	4.5	17.5	1,778,985	292,415	23,429	21,409	700	0.22	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.51	5.87	5.35	4.73	4.08	3.06	1.73	0.41	1		700	2,298,755	29,330	22,537	7.25	4.5	17.5	1,885,044	137,211	23,082	22,812	700	0.32	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.45	7.48	6.82	6.03	5.31	3.91	2.36	0.81	1		700	1,547,391	31,687	16,115	7.25	4.5	17.5	1,244,326	117,136	25,333	16,313	700	0.77	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.94	7.89	7.14	6.18	5.33	3.90	2.21	0.40	1		700	1,352,944	26,027	17,201	7.25	4.5	17.5	1,082,883	102,806	20,668	17,423	700	0.22	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	11.34	9.36	8.03	6.42	5.20	3.44	1.81	0.43	1		700	567,721	23,733	20,003	7.25	4.5	17.5	535,203	27,409	22,982	19,983	700	0.42	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.73	8.75	7.52	6.03	4.91	3.30	1.77	0.46	1		700	574,170	27,362	20,454	7.25	4.5	17.5	507,834	43,722	24,832	20,510	700	0.35	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.81	8.86	7.51	6.01	4.84	3.22	1.66	0.78	1		700	572,346	25,025	21,479	7.25	4.5	17.5	488,098	48,843	21,954	21,590	700	0.64	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.33	8.69	7.50	6.10	4.97	3.32	1.72	0.51	1		700	712,663	23,399	21,121	7.25	4.5	17.5	648,194	36,209	21,442	21,156	700	0.48	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.71	7.86	7.15	6.19	5.30	3.79	1.96	0.27	1		700	1,692,127	14,845	20,451	7.25	4.5	17.5	1,583,199	27,865	13,480	20,436	700	0.26	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.01	8.34	7.40	6.30	5.28	3.69	1.81	1.83	1		700	1,059,317	18,565	20,486	7.25	4.5	17.5	459,896	299,024	10,817	22,030	700	0.33	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.51	8.02	6.81	5.47	4.39	2.82	1.45	1.72	1		700	534,101	27,498	24,418	7.25	4.5	17.5	323,929	123,709	21,075	24,961	700	0.53	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.05	6.13	5.51	4.73	4.00	2.84	1.56	0.36	1		700	1,533,012	31,967	24,192	7.25	4.5	17.5	1,326,352	80,853	27,300	24,324	700	0.30	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.64	6.72	6.05	5.21	4.41	3.20	1.84	0.23	1		700	1,389,761	33,695	20,518	7.25	4.5	17.5	1,417,561	14,931	45,057	20,371	700	0.20	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.37	7.00	6.07	4.95	3.98	2.60	1.29	0.35	1		700	918,400	25,281	28,041	7.25	4.5	17.5	809,757	49,463	22,497	28,102	700	0.23	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.90	6.86	6.07	5.05	4.18	2.82	1.44	0.32	1		700	1,203,925	24,465	25,780	7.25	4.5	17.5	1,209,691	12,726	29,912	25,707	700	0.30	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.13	7.10	6.35	5.38	4.53	3.14	1.68	0.30	1		700	1,281,596	25,083	22,424	7.25	4.5	17.5	1,251,342	20,882	26,240	22,360	700	0.30	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.40	7.26	6.47	5.50	4.63	3.29	1.80	0.45	1		700	1,188,943	28,412	20,861	7.25	4.5	17.5	958,224	94,129	23,185	21,081	700	0.22	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.37	8.75	7.76	6.57	5.47	3.65	1.90	0.92	1		700	907,665	20,016	19,512	7.25	4.5	17.5	720,398	73,057	16,284	19,731	700	0.84	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.30	5.55	5.01	4.36	3.78	2.83	1.73	0.28	1		700	1,679,118	52,418	21,624	7.25	4.5	17.5	1,591,172	60,914	50,615	21,613	700	0.28	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.32	5.69	5.16	4.52	3.93	2.91	1.75	0.47	1		700	1,964,381	41,683	21,612	7.25	4.5	17.5	2,105,703	6,120	180,807	21,548	700	0.41	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.08	7.12	6.48	5.62	4.83	3.56	2.00	0.43	1		700	1,532,706	27,370	18,900	7.25	4.5	17.5	1,159,242	141,578	20,746	19,244	700	0.10	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.91	6.58	5.97	5.04	4.20	2.99	1.64	0.94	1		700	1,138,984	32,908	22,397	7.25	4.5	17.5	757,954	173,892	24,514	22,901	700	0.49	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	9.03	7.99	7.17	6.10	5.19	3.70	2.09	0.41	1		700	1,159,809	26,578	17,992	7.25	4.5	17.5	1,235,341	5,000	88,120	18,000	700	0.82	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	9.67	8.34	7.44	6.31	5.30	3.69	1.97	0.41	1		700	1,036,534	22,196	18,884	7.25	4.5	17.5	864,935	67,095	18,482	19,042	700	0.28	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.92	6.10	5.43	4.60	3.85	2.76	1.55	0.53	1		700	1,381,105	36,373	23,984	7.25	4.5	17.5	1,476,292	7,399	99,731	23,887	700	0.43	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.43	5.54	4.93	4.21	3.57	2.53	1.45	0.44	1		700	1,440,224	42,803	25,714	7.25	4.5	17.5	1,296,612	72,662	38,568	25,778	700	0.41	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.59	9.21	8.18	6.85	5.68	3.83	1.86	0.40	1		700	992,551	14,877	19,998	7.25	4.5	17.5	846,169	49,026	12,517	20,126	700	0.29	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.52	9.56	7.69	5.56	4.25	2.77	1.62	1.56	1		700	290,378	29,631	25,650	7	5	18	354,391	7,507	88,479	22,466	700	0.74	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.16	10.68	8.46	6.10	4.65	2.96	1.62	1.29	1		700	267,163	24,288	24,923	7	5	18	278,384	14,025	33,566	21,993	700	1.02	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.32	10.88	8.49	5.92	4.45	2.77	1.53	1.90	1		700	244,542	23,700	26,458	7	5	18	276,431	9,074	43,119	23,314	700	1.49	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.80	9.06	7.20	5.24	4.07	2.69	1.60	1.71	1		700	298,992	33,120	26,237	7	5	18	366,249	8,761	92,496	22,905	700	1.03	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.57	9.67	7.71	5.62	4.37	2.87	1.61	1.51	1		700	306,157	28,278	25,247	7	5	18	329,868	13,421	44,358	22,177	700	1.25	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.28	10.15	7.92	5.56	4.18	2.65	1.47	1.99	1		700	262,376	25,934	27,448	7	5	18	300,079	9,246	50,724	24,151	700	1.52	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.30	9.26	7.27	5.27	4.09	2.73	1.53	1.75	1		700	280,749	30,676	26,301	7	5	18	292,994	18,278	41,983	23,167	700	1.44	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.88	8.79	6.78	4.81	3.73	2.47	1.42	1.86	1		700	255,112	33,780	28,602	7	5	18	290,330	14,092	58,312	25,055	700	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.93	8.95	7.04	4.96	3.81	2.48	1.43	1.85	1		700	266,631	31,759	28,257	7	5	18	318,716	10,164	69,705	24,763	700	1.25	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.98	8.65	6.61	4.65	3.62	2.44	1.42	1.97	1		700	222,825	36,439	28,591	7	5	18	257,577	15,883	60,395	25,042	700	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.00	9.57	7.30	5.15	3.95	2.59	1.45	1.97	1		700	231,471	29,728	27,563	7	5	18	248,238	16,190	42,644	24,265	700	1.61	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.15	9.78	7.61	5.39	4.12	2.69	1.46	1.99	1		700	253,177	27,407	26,965	7	5	18	256,169	18,881	34,737	23,853	700	1.64	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.18	10.48	8.40	6.23	4.88	3.31	1.97	1.98	1		700	291,957	28,510	20,976	7	5	18	355,180	6,802	93,177	18,249	700	1.32	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.27	10.29	8.22	6.07	4.78	3.28	1.97	1.78	1		700	263,376	30,633	20,975	7	5	18	321,737	8,285	82,972	18,204	700	1.12	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.57	10.16	8.03	5.93	4.69	3.20	1.94	1.41	1		700	234,312	31,722	21,289	7	5	18	276,100	11,044	64,912	18,487	700	0.89	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.45	9.86	7.77	5.69	4.53	3.20	1.95	1.61	1		700	208,166	35,396	21,142	7	5	18	250,768	12,698	69,901	18,312	700	0.89	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.98	9.74	7.68	5.70	4.57	3.27	2.01	1.83	1		700	228,721	36,722	20,644	7	5	18	277,816	11,730	82,599	17,777	700	1.11	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.44	9.45	7.45	5.60	4.45	3.19	2.00	1.94	1		700	244,079	38,186	20,921	7	5	18	307,543	10,167	106,359	17,936	700	0.99	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.42	9.34	7.43	5.50	4.40	3.15	1.96	1.90	1		700	239,566	38,280	21,220	7	5	18	297,535	11,025	96,681	18,230	700	0.98	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.00	9.78	7.80	5.76	4.57	3.22	1.92	1.55	1		700	247,648	33,486	21,319	7	5	18	283,388	13,123	61,810	18,512	700	1.05	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.85	11.27	8.93	6.52	5.09	3.37	1.92	1.44	1		700	239,072	24,852	20,848	7	5	18	255,956	12,825	36,957	18,313	700	1.17	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	16.42	12.72	10.03	7.29	5.66	3.62	1.97	1.70	1		700	238,568	19,691	19,892	7	5	18	243,187	12,238	26,335	17,551	700	1.49	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.39	10.13	7.98	5.84	4.65	3.16	1.92	1.76	1		700	236,045	32,154	21,594	7	5	18	287,074	10,015	73,096	18,752	700	1.20	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	17.09	12.65	10.15	7.64	5.94	3.82	2.01	1.88	1		700	246,174	18,968	19,243	7	5	18	186,092	34,842	18,225	17,273	700	0.71	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.23	9.97	7.83	5.73	4.57	3.13	1.94	1.97	1		700	227,695	33,503	21,306	7	5	18	285,307	8,939	93,836	18,382	700	1.15	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.37	10.43	8.00	5.76	4.54	3.14	1.83	1.88	1		700	190,133	31,051	22,029	7	5	18	211,402	15,435	47,403	19,279	700	1.44	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.30	9.81	7.82	5.76	4.58	3.21	1.86	1.50	1		700	239,400	32,753	21,714	7	5	18	249,977	20,383	43,986	19,074	700	1.14	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	16.85	12.57	10.11	7.49	5.88	3.82	2.04	1.76	1		700	244,139	19,957	19,266	7	5	18	199,734	29,445	20,056	17,227	700	0.97	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.43	9.38	7.40	5.47	4.32	2.98	1.81	1.62	1		700	254,756	34,967	22,860	7	5	18	308,522	10,748	81,563	19,806	700	0.97	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	15.14	11.71	9.38	7.02	5.52	3.61	1.92	1.80	1		700	293,135	20,893	20,418	7	5	18	253,287	26,254	22,001	18,172	700	1.29	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	15.10	11.73	9.44	7.09	5.60	3.69	1.97	1.80	1		700	298,326	21,066	19,907	7	5	18	256,953	26,616	22,216	17,706	700	1.32	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.95	9.97	8.03	5.95	4.79	3.35	1.98	1.64	1		700	275,558	32,243	20,661	7	5	18	308,863	13,357	56,613	17,974	700	1.28	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.52	9.56	7.69	5.56	4.25	2.77	1.62	1.56	1		700	291,755	29,560	25,662	7	5	18	354,391	7,507	88,479	22,466	701	0.74	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.16	10.68	8.46	6.10	4.65	2.96	1.62	1.29	1		700	267,163	24,288	24,923	7	5	18	278,384	14,025	33,566	21,993	702	1.02	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.32	10.88	8.49	5.92	4.45	2.77	1.53	1.90	1		700	244,542	23,700	26,458	7	5	18	276,431	9,074	43,119	23,314	703	1.49	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.80	9.06	7.20	5.24	4.07	2.69	1.60	1.71	1		700	298,992	33,120	26,237	7	5	18	366,249	8,761	92,496	22,905	704	1.03	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.57	9.67	7.71	5.62	4.37	2.87	1.61	1.51	1		700	306,157	28,278	25,247	7	5	18	329,868	13,421	44,358	22,177	705	1.25	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.28	10.15	7.92	5.56	4.18	2.65	1.47	1.99	1		700	262,376	25,934	27,448	7	5	18	300,079	9,246	50,724	24,151	706	1.52	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.30	9.26	7.27	5.27	4.09	2.73	1.53	1.75	1		700	280,749	30,676	26,301	7	5	18	292,994	18,278	41,983	23,167	707	1.44	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.88	8.79	6.78	4.81	3.73	2.47	1.42	1.86	1		700	255,112	33,779	28,602	7	5	18	290,330	14,092	58,312	25,055	708	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.93	8.95	7.04	4.96	3.81	2.48	1.43	1.85	1		700	266,631	31,759	28,257	7	5	18	318,716	10,164	69,705	24,763	709	1.25	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.98	8.65	6.61	4.65	3.62	2.44	1.42	1.97	1		700	222,826	36,439	28,591	7	5	18	257,577	15,883	60,395	25,042	710	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.00	9.57	7.30	5.15	3.95	2.59	1.45	1.97	1		700	231,471	29,728	27,563	7	5	18	248,238	16,190	42,644	24,265	711	1.61	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.15	9.78	7.61	5.39	4.12	2.69	1.46	1.99	1		700	253,177	27,407	26,965	7	5	18	256,169	18,881	34,737	23,853	712	1.64	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.18	10.48	8.40	6.23	4.88	3.31	1.97	1.98	1		700	291,956	28,510	20,976	7	5	18	353,832	6,928	90,682	18,248	713	1.32	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.27	10.29	8.22	6.07	4.78	3.28	1.97	1.78	1		700	263,376	30,633	20,975	7	5	18	321,736	8,284	82,986	18,204	714	1.12	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.11	10.05	8.02	5.95	4.72	3.30	2.01	1.74	1		700	251,422	32,966	20,545	7	5	18	306,687	9,544	82,164	17,763	715	1.02	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.57	10.16	8.03	5.93	4.69	3.20	1.93	1.39	1		700	234,563	31,645	21,324	7	5	18	275,185	11,370	62,602	18,537	716	0.90	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.45	9.86	7.77	5.69	4.53	3.20	1.94	1.60	1		700	209,095	35,251	21,183	7	5	18	249,788	13,065	67,554	18,363	717	0.92	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.98	9.74	7.68	5.70	4.57	3.27	2.01	1.83	1		700	228,619	36,730	20,643	7	5	18	275,832	12,102	79,911	17,788	718	1.11	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.44	9.45	7.45	5.60	4.45	3.19	2.00	1.94	1		700	244,090	38,185	20,921	7	5	18	307,469	10,176	106,235	17,936	719	0.99	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.42	9.34	7.43	5.50	4.40	3.15	1.96	1.90	1		700	239,565	38,280	21,220	7	5	18	297,542	11,024	96,691	18,230	720	0.98	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.00	9.78	7.80	5.76	4.57	3.22	1.92	1.55	1		700	247,648	33,486	21,319	7	5	18	283,397	13,121	61,818	18,512	721	1.05	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.85	11.27	8.93	6.52	5.09	3.37	1.93	1.42	1		700	236,990	25,061	20,762	7	5	18	258,247	11,878	39,379	18,212	722	1.12	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	16.42	12.72	10.03	7.29	5.66	3.62	1.97	1.70	1		700	238,568	19,691	19,892	7	5	18	243,387	12,194	26,378	17,550	723	1.49	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.39	10.13	7.98	5.84	4.65	3.16	1.92	1.76	1		700	236,045	32,154	21,594	7	5	18	287,061	10,017	73,079	18,752	724	1.20	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	17.09	12.65	10.15	7.64	5.94	3.82	2.01	1.88	1		700	246,173	18,968	19,243	7	5	18	186,093	34,842	18,225	17,273	725	0.71	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.30	10.00	7.90	5.80	4.60	3.19	1.94	1.72	1		700	231,061	33,036	21,151	7	5	18	280,306	10,124	77,738	18,295	726	1.01	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.13	10.38	8.03	5.82	4.54	3.14	1.89	1.84	1		700	195,148	31,628	21,600	7	5	18	237,206	10,545	67,536	18,747	727	1.07	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.18	10.46	8.16	5.93	4.64	3.16	1.90	1.62	1		700	205,889	30,277	21,387	7	5	18	245,280	10,209	64,492	18,567	728	0.93	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.37	10.43	8.00	5.76	4.54	3.14	1.87	1.86	1		700	186,051	31,730	21,778	7	5	18	217,102	12,860	56,572	18,957	729	1.28	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.30	9.81	7.82	5.76	4.58	3.21	1.86	1.50	1		700	239,401	32,753	21,714	7	5	18	249,979	20,382	43,986	19,074	730	1.14	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	16.85	12.57	10.11	7.49	5.88	3.82	2.04	1.76	1		700	244,138	19,957	19,266	7	5	18	199,737	29,444	20,056	17,227	731	0.97	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.43	9.38	7.40	5.47	4.32	2.98	1.81	1.62	1		700	254,756	34,967	22,860	7	5	18	308,513	10,749	81,552	19,806	732	0.97	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	15.14	11.71	9.38	7.02	5.52	3.61	1.92	1.80	1		700	293,134	20,893	20,418	7	5	18	253,292	26,253	22,001	18,172	733	1.29	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	15.10	11.73	9.44	7.09	5.60	3.69	1.98	1.71	1		700	295,595	21,266	19,819	7	5	18	260,236	24,771	22,901	17,605	734	1.27	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.95	9.97	8.03	5.95	4.79	3.35	2.01	1.64	1		700	271,006	32,790	20,499	7	5	18	313,023	11,724	65,533	17,773	735	1.19	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	16.77	12.56	10.31	8.15	6.26	3.90	2.05	1.81	1		700	387,568	20,429	17,983	6.25	6	18	261,072	50,484	16,297	18,318	700	1.11	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.12	7.80	6.57	5.31	4.17	2.80	1.61	1.21	1		700	647,405	40,521	23,870	6.25	6	18	557,039	61,382	35,848	24,049	700	1.11	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.40	6.22	5.31	4.37	3.46	2.32	1.38	1.48	1		700	1,174,278	48,253	28,670	6.25	6	18	370,356	25,333	65,119	25,715	700	0.70	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.26	8.03	6.30	4.69	3.58	2.44	1.50	1.51	1		700	295,013	47,269	26,270	6.25	6	18	805,342	22,604	28,194	21,490	700	0.79	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.17	5.79	4.65	3.58	2.76	1.77	1.14	3.36	1		700	304,907	67,372	35,244	6.25	6	18	1,397,202	70,192	16,298	36,346	700	0.22	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.03	6.85	5.98	4.88	3.90	2.44	1.06	0.56	1		700	1,716,641	20,643	35,807	6.25	6	18	1,015,527	50,070	29,925	36,349	700	0.48	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.67	8.35	6.46	4.72	3.31	1.89	0.98	1.90	1		700	466,784	29,328	36,809	6.25	6	18	1,652,248	78,738	19,820	28,894	700	0.50	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.91	6.50	5.47	4.29	3.31	2.09	1.02	0.60	1		700	1,116,124	33,198	36,265	6.25	6	18	965,870	68,371	16,398	28,597	700	0.78	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.69	8.58	7.09	5.51	4.25	2.68	1.57	1.81	1		700	436,196	35,947	24,318	6.25	6	18	1,881,259	34,371	38,447	29,814	700	0.35	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.21	8.15	7.24	6.02	4.88	3.11	1.50	0.90	1		700	1,623,553	18,534	26,248	6.25	6	18	853,041	50,495	29,598	32,448	700	0.89	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	12.64	7.99	6.22	4.29	3.03	1.73	0.91	1.92	1		700	266,738	33,060	39,440	6.25	6	18	957,111	154,105	11,932	44,161	700	0.45	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.44	6.26	5.31	4.29	3.27	2.05	1.06	1.26	1		700	1,221,928	35,052	35,422	6.25	6	18	1,725,389	55,543	25,307	37,689	700	0.23	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.50	9.49	7.99	6.18	4.72	2.72	1.22	0.49	1		700	798,399	18,470	29,300	6.25	6	18	605,107	21,028	34,961	38,477	700	1.03	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.84	8.39	7.13	5.59	4.41	2.76	1.50	1.52	1		700	875,320	28,637	25,396	6.25	6	18	933,598	35,625	38,974	21,346	700	0.59	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.76	6.77	5.98	5.04	4.09	2.80	1.38	0.65	1		700	1,988,682	25,199	28,497	6.25	6	18	322,847	67,695	23,222	33,495	700	1.30	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.80	8.39	7.32	5.98	4.76	3.15	1.61	0.36	1		700	1,175,298	24,699	23,534	6.25	6	18	1,525,871	70,417	34,620	27,020	700	0.55	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.67	8.07	6.57	5.12	3.94	2.56	1.38	1.15	1		700	547,961	35,638	27,152	6.25	6	18	322,058	145,542	15,843	43,662	700	0.82	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.66	7.72	6.69	5.63	4.57	3.15	1.77	1.18	1		700	1,416,116	32,569	22,080	6.25	6	18	449,662	12,026	145,105	21,480	700	1.81	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.05	6.06	5.35	4.53	3.62	2.44	1.34	1.02	1		700	1,756,963	37,341	29,041	6.25	6	18	366,310	57,121	33,147	27,689	700	0.68	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.89	5.94	5.28	4.37	3.54	2.44	1.30	0.35	1		700	1,862,412	37,341	29,912	6.25	6	18	724,042	76,587	35,838	27,432	700	1.17	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.01	5.98	5.24	4.41	3.54	2.40	1.38	1.13	1		700	1,538,886	44,211	28,103	6.25	6	18	770,941	88,343	33,819	28,090	700	0.19	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.85	5.87	5.16	4.33	3.46	2.40	1.38	0.96	1		700	1,594,930	46,123	28,179	6.25	6	18	208,814	94,081	33,147	29,207	700	1.25	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.58	7.01	5.94	4.53	3.54	2.28	1.14	0.99	1		700	950,271	33,079	32,327	6.25	6	18	1,440,435	10,522	398,323	20,887	700	0.89	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.07	6.73	5.83	4.76	3.74	2.32	0.91	1.57	1		700	1,745,259	18,002	41,207	6.25	6	18	1,572,722	10,789	323,977	21,880	700	0.44	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.83	6.34	5.31	4.13	3.11	1.89	0.91	0.50	1		700	1,062,877	32,371	40,377	6.25	6	18	874,280	44,831	67,551	29,758	700	0.72	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.50	6.85	5.67	4.33	3.31	1.97	1.10	1.99	1		700	761,499	37,394	34,383	6.25	6	18	931,575	20,323	49,283	31,825	700	1.02	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.85	5.87	5.16	4.17	3.35	2.17	1.02	0.35	1		700	1,899,475	29,190	37,562	6.25	6	18	509,680	14,119	100,536	21,707	700	1.19	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.16	7.80	6.14	4.53	3.31	1.85	0.94	1.15	1		700	548,962	30,477	38,701	6.25	6	18	1,561,756	35,395	43,273	35,794	700	0.55	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.52	6.34	5.39	4.37	3.35	1.89	0.79	1.19	1		700	1,523,931	22,777	46,724	6.25	6	18	1,382,082	90,379	34,836	36,248	700	0.16	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.65	7.95	6.89	5.67	4.53	3.15	1.81	0.59	1		700	920,677	38,039	21,407	6.25	6	18	268,367	107,369	36,388	33,390	700	0.82	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.32	6.22	5.51	4.65	3.78	2.64	1.46	0.60	1		700	1,703,632	40,067	26,857	6.25	6	18	1,596,347	32,382	57,922	26,386	700	0.75	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.18	8.11	6.61	5.04	3.86	2.48	1.38	1.05	1		700	438,448	37,592	27,450	6.25	6	18	1,580,048	17,700	66,115	32,203	700	0.61	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.74	6.93	5.83	4.80	3.78	2.52	1.42	1.31	1		700	884,759	42,206	27,158	6.25	6	18	1,170,981	11,797	99,673	32,188	700	0.93	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.43	6.77	5.79	4.65	3.74	2.52	1.38	0.80	1		700	988,380	41,436	27,714	6.25	6	18	1,034,996	13,059	127,116	35,592	700	0.54	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.35	6.38	5.00	3.78	2.83	1.81	0.98	1.01	1		700	540,246	42,089	34,677	6.25	9	15	519,557	42,062	41,947	34,567	700	1.01	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.64	5.71	4.41	3.43	2.52	1.73	1.02	1.97	1		700	454,249	57,239	34,242	6.25	9	15	530,502	39,109	77,809	33,598	700	1.65	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.32	5.59	4.53	3.58	2.72	1.89	1.10	1.20	1		700	616,220	56,993	31,932	6.25	9	15	625,101	50,360	62,330	31,650	700	1.16	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.64	5.94	4.80	3.82	2.91	2.01	1.18	1.26	1		700	615,282	52,727	29,594	6.25	9	15	657,411	40,787	64,262	29,195	700	1.14	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.68	5.75	4.72	3.66	2.87	1.97	1.26	1.91	1		700	486,784	62,459	28,525	6.25	9	15	642,364	30,869	126,139	27,551	700	1.09	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.35	6.02	4.65	3.66	2.83	2.05	1.26	1.57	1		700	347,401	65,015	28,273	6.25	9	15	379,580	51,763	77,113	27,817	700	1.37	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.91	5.87	4.65	3.70	2.80	1.97	1.14	1.50	1		700	489,453	56,595	30,443	6.25	9	15	457,930	59,841	53,706	30,456	700	1.49	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.25	6.97	5.55	4.33	3.27	2.20	1.30	1.28	1		700	443,978	44,636	26,904	6.25	9	15	475,304	34,794	54,306	26,529	700	1.12	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.63	8.07	6.46	5.08	3.90	2.60	1.46	1.11	1		700	438,817	35,830	23,425	6.25	9	15	385,836	43,124	31,395	23,577	700	0.99	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.41	7.32	6.02	4.88	3.82	2.72	1.65	1.10	1		700	502,653	46,980	21,103	6.25	9	15	525,783	38,768	54,110	20,866	700	1.03	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.86	6.61	5.28	4.21	3.31	2.20	1.26	1.57	1		700	508,263	46,161	27,256	6.25	9	15	403,969	64,990	36,623	27,662	700	1.21	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.33	6.93	5.43	4.17	3.15	2.05	1.14	1.07	1		700	443,485	41,063	29,881	6.25	9	15	406,147	45,133	38,238	29,925	700	1.03	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.65	6.97	5.28	4.02	2.95	1.97	1.06	1.82	1		700	366,505	41,840	31,662	6.25	9	15	316,405	49,968	36,810	31,851	700	1.65	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.72	6.73	4.96	3.62	2.60	1.69	0.91	1.71	1		700	301,281	42,475	36,693	6.25	9	15	273,300	46,247	39,650	36,736	700	1.64	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	RMS Error (%)	Convergence	
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed			Yes	No
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.43	6.30	5.04	3.94	3.03	2.01	1.14	1.01	1		700	523,407	46,711	30,045	6.25	9	15	464,240	54,385	41,952	30,164	700	0.92	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.46	6.02	4.69	3.50	2.60	1.69	0.91	1.36	1		700	434,269	45,878	36,781	6.25	9	15	358,954	59,191	38,435	37,154	700	0.89	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.28	5.31	4.17	3.35	2.52	1.69	0.98	1.79	1		700	529,601	59,014	35,069	6.25	9	15	478,035	67,016	53,116	35,229	700	1.74	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.17	5.28	4.25	3.31	2.44	1.61	0.91	1.29	1		700	603,049	53,290	37,872	6.25	9	15	565,481	56,153	51,069	37,838	700	1.28	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.28	5.55	4.57	3.62	2.83	1.93	1.14	0.83	1		700	652,367	56,479	30,505	6.25	9	15	630,516	55,823	56,680	30,394	700	0.83	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.20	5.59	4.57	3.78	2.95	2.09	1.18	1.79	1		700	764,744	55,419	29,047	6.25	9	15	568,023	90,720	40,145	29,723	700	1.34	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.32	5.51	4.53	3.66	2.95	2.05	1.18	1.59	1		700	678,657	58,258	29,071	6.25	9	15	474,795	98,455	41,733	29,794	700	0.71	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.74	6.26	4.96	3.86	2.95	2.01	1.10	1.74	1		700	445,660	48,318	30,690	6.25	9	15	333,579	72,309	36,766	31,301	700	0.91	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.43	6.50	5.31	4.17	3.35	2.17	1.18	1.47	1		700	685,271	40,622	28,766	6.25	9	15	508,094	67,650	29,844	29,356	700	0.88	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.39	7.99	6.46	5.04	3.78	2.36	1.14	1.91	1		700	603,024	26,166	28,418	6.25	9	15	411,272	52,280	18,073	29,236	700	0.91	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.08	7.52	5.71	4.29	3.07	1.89	0.98	1.61	1		700	411,144	32,825	33,445	6.25	9	15	377,166	35,999	30,793	33,469	700	1.57	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	11.57	8.43	6.54	4.92	3.66	2.32	1.22	1.50	1		700	358,213	31,015	27,215	6.25	9	15	285,996	42,543	25,332	27,551	700	0.95	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.51	7.76	6.18	4.88	3.78	2.72	1.61	1.08	1		700	341,381	46,168	21,581	6.25	9	15	330,895	45,347	46,258	21,510	700	1.08	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.70	6.42	5.20	4.17	3.31	2.32	1.42	1.08	1		700	440,703	55,970	24,580	6.25	9	15	404,712	60,820	52,060	24,640	700	1.05	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.84	6.93	5.28	4.02	3.07	2.13	1.22	1.20	1		700	296,442	48,720	28,064	6.25	9	15	277,843	50,645	46,643	28,055	700	1.17	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.37	7.09	5.79	4.72	3.74	2.64	1.50	1.80	1		700	528,408	45,024	22,740	6.25	9	15	369,963	77,708	31,468	23,387	700	0.98	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.04	7.40	5.94	4.72	3.70	2.56	1.42	1.86	1		700	437,292	41,329	23,705	6.25	9	15	308,082	68,723	29,632	24,317	700	0.88	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.31	7.17	5.55	4.21	3.19	2.13	1.26	1.13	1		700	289,172	45,200	27,430	6.25	9	15	285,805	42,905	46,442	27,278	700	1.12	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.68	5.31	3.98	3.03	2.24	1.54	0.87	1.64	1		700	365,966	60,596	39,198	6.25	9	15	337,793	64,500	57,061	39,211	700	1.60	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.06	6.38	5.04	3.94	3.07	2.13	1.26	1.04	1		700	352,447	54,291	27,358	6.25	9	15	311,124	62,220	48,555	27,507	700	0.89	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.88	6.77	5.16	3.90	2.99	2.13	1.26	1.07	1		700	252,454	53,861	27,570	6.25	9	15	259,675	47,884	58,061	27,301	700	0.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.21	6.54	5.04	3.86	2.99	1.93	1.06	1.90	1		700	376,954	45,199	31,235	6.25	9	15	297,460	64,761	34,444	31,911	700	1.11	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.68	5.31	4.13	3.19	2.44	1.57	0.94	1.83	1		700	410,630	59,528	36,650	6.25	9	15	381,338	62,793	56,625	36,635	700	1.82	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.21	6.54	5.00	3.82	2.87	1.89	1.02	1.79	1		700	377,389	44,591	32,527	6.25	9	15	302,014	60,903	35,580	33,043	700	1.19	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.49	7.09	5.75	4.53	3.50	2.40	1.34	1.30	1		700	480,850	41,894	25,215	6.25	9	15	380,007	59,815	32,929	25,622	700	0.78	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.31	7.17	5.51	4.06	2.95	1.85	0.98	1.27	1		700	336,969	36,919	33,584	6.25	9	15	281,904	46,252	31,601	33,870	700	0.81	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.39	7.44	5.71	4.33	3.39	2.24	1.26	1.44	1		700	323,873	41,899	26,754	6.25	9	15	271,414	52,506	35,395	27,033	700	1.10	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.21	6.34	4.80	3.50	2.68	1.81	1.02	0.87	1		700	296,419	51,359	33,432	6.25	9	15	282,576	51,795	50,318	33,347	700	0.86	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.74	5.91	4.49	3.39	2.56	1.73	1.06	1.63	1		700	283,694	58,885	33,045	6.25	9	15	308,587	47,591	69,145	32,527	700	1.38	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.09	6.73	5.35	4.02	3.03	1.89	1.06	0.87	1		700	455,115	39,345	31,605	6.25	9	15	456,437	35,874	41,845	31,397	700	0.84	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.58	5.87	4.45	3.23	2.40	1.50	0.79	1.67	1		700	366,197	45,831	41,186	6.25	9	15	295,102	61,866	36,748	41,855	700	0.68	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.99	5.59	4.17	2.91	2.05	1.22	0.63	1.04	1		700	412,706	44,859	52,208	6.25	9	15	381,404	47,841	42,735	52,148	700	0.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.83	5.59	4.33	3.15	2.28	1.50	0.79	1.43	1		700	457,145	49,459	42,843	6.25	9	15	407,386	56,364	44,870	42,983	700	1.31	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.28	5.20	4.13	2.99	2.20	1.38	0.79	1.00	1		700	490,166	53,032	43,751	6.25	9	15	532,969	41,126	64,407	43,141	700	0.60	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.52	5.51	4.41	3.35	2.56	1.69	0.98	0.66	1		700	513,711	55,426	35,375	6.25	9	15	515,101	50,950	58,617	35,119	700	0.62	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.99	5.71	4.41	3.35	2.52	1.69	0.98	1.04	1		700	405,467	56,264	35,373	6.25	9	15	405,666	52,288	58,833	35,129	700	1.02	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.28	5.31	4.17	3.15	2.32	1.54	0.87	1.01	1		700	508,092	54,627	39,478	6.25	9	15	508,546	50,285	57,763	39,186	700	0.98	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.28	5.59	4.57	3.43	2.60	1.77	0.98	1.04	1		700	627,104	51,739	35,046	6.25	9	15	630,182	46,572	55,758	34,774	700	1.01	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.95	6.02	4.92	3.86	2.95	1.97	1.14	0.92	1		700	588,005	48,860	30,334	6.25	9	15	584,529	45,233	51,437	30,149	700	0.90	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.02	6.61	5.24	4.02	3.03	2.09	1.14	1.45	1		700	426,880	45,404	29,439	6.25	9	15	366,709	56,914	38,145	29,754	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.20	7.48	5.98	4.57	3.50	2.36	1.38	0.60	1		700	368,559	41,839	25,012	6.25	9	15	366,494	39,146	43,581	24,869	700	0.58	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.08	7.28	5.75	4.41	3.35	2.28	1.34	0.91	1		700	343,048	44,581	25,940	6.25	9	15	343,510	41,267	46,776	25,772	700	0.89	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.83	5.75	4.57	3.46	2.64	1.77	1.02	0.64	1		700	476,152	53,627	33,693	6.25	9	15	474,844	49,699	56,397	33,460	700	0.60	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.90	6.73	5.39	4.25	3.31	2.32	1.46	1.60	1		700	414,886	54,010	24,384	6.25	9	15	501,721	32,892	84,281	23,716	700	1.04	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.15	6.18	5.04	4.02	3.23	2.40	1.50	0.84	1		700	457,251	65,951	23,635	6.25	9	15	484,331	54,470	75,960	23,304	700	0.68	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.46	6.54	5.24	4.09	3.11	2.09	1.26	1.67	1		700	504,858	47,967	27,873	6.25	9	15	613,447	26,274	84,708	27,171	700	1.09	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.52	5.51	4.41	3.43	2.64	1.81	1.10	1.17	1		700	469,554	61,445	31,719	6.25	9	15	511,885	48,412	73,396	31,267	700	0.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.05	5.39	4.53	3.58	2.91	1.89	1.10	1.50	1		700	802,750	53,059	31,491	6.25	9	15	678,263	69,530	44,598	31,750	700	1.43	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.57	5.00	3.86	2.91	2.20	1.46	0.91	1.79	1		700	599,189	62,680	45,263	6.25	9	15	728,467	29,267	178,543	39,010	700	1.30	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.77	4.96	3.86	2.87	2.13	1.50	0.91	1.64	1		700	498,408	66,025	44,543	6.25	9	15	582,020	38,080	131,616	38,598	700	1.11	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	5.98	4.37	3.50	2.76	2.13	1.50	0.98	1.75	1		700	593,280	84,065	42,202	6.25	9	15	733,412	42,923	200,034	36,003	700	1.56	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.36	5.59	4.45	3.54	2.72	1.93	1.22	1.48	1		700	559,286	62,204	33,360	6.25	9	15	637,125	35,637	125,560	28,674	700	1.37	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.05	5.31	4.25	3.43	2.64	1.89	1.22	1.64	1		700	566,250	68,817	33,652	6.25	9	15	663,691	38,150	143,982	28,808	700	1.54	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.03	5.94	4.61	3.58	2.72	1.89	1.14	1.36	1		700	465,934	54,864	34,891	6.25	9	15	473,230	42,852	76,535	30,587	700	1.34	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.48	5.59	4.45	3.43	2.56	1.73	1.10	1.89	1		700	525,442	56,882	37,001	6.25	9	15	671,473	23,255	211,144	31,637	700	1.26	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.64	5.83	4.69	3.70	2.87	2.01	1.30	1.54	1		700	546,198	59,982	31,589	6.25	9	15	677,379	27,112	176,214	26,861	700	1.22	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.06	6.61	5.31	4.13	3.27	2.28	1.46	0.87	1		700	405,091	54,037	27,937	6.25	9	15	433,372	38,618	82,205	24,281	700	1.06	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.17	5.43	4.33	3.35	2.64	1.73	1.02	1.13	1		700	656,583	53,349	38,265	6.25	9	15	600,466	51,795	61,487	33,922	700	1.10	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.50	6.46	5.20	4.02	3.03	1.97	1.14	0.87	1		700	589,199	41,206	34,279	6.25	9	15	576,175	33,031	56,171	30,166	700	0.96	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.20	5.31	4.13	3.15	2.36	1.46	0.87	1.61	1		700	593,256	50,368	45,319	6.25	9	15	615,804	35,931	76,185	39,838	700	1.79	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.81	5.00	3.90	2.95	2.17	1.30	0.75	1.56	1		700	657,108	49,366	51,702	6.25	9	15	663,480	37,210	70,041	45,644	700	1.74	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.60	5.63	4.29	3.15	2.24	1.42	0.79	1.38	1		700	525,176	45,338	48,379	6.25	9	15	526,389	35,337	62,371	42,744	700	1.28	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.13	5.24	4.13	3.15	2.40	1.61	0.98	0.86	1		700	536,280	59,179	40,361	6.25	9	15	568,382	42,100	90,277	35,311	700	0.95	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.10	4.61	3.66	2.91	2.20	1.57	0.91	1.93	1		700	743,606	67,052	43,046	6.25	9	15	631,474	75,285	69,326	38,410	700	1.57	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.73	4.84	3.82	2.83	2.13	1.34	0.79	0.85	1		700	591,133	56,231	49,620	6.25	9	15	584,704	45,908	74,456	43,839	700	1.09	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.60	5.55	4.37	3.39	2.56	1.65	0.94	1.58	1		700	585,998	48,829	40,819	6.25	9	15	487,703	56,533	49,562	36,526	700	1.27	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.26	4.45	3.54	2.72	2.09	1.38	0.83	1.20	1		700	615,370	67,221	47,425	6.25	9	15	555,228	66,400	76,271	42,136	700	1.24	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.28	5.43	4.33	3.43	2.56	1.69	0.94	1.85	1		700	701,682	48,311	40,868	6.25	9	15	550,726	62,334	46,367	36,650	700	1.37	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.44	5.51	4.53	3.58	2.72	1.85	1.06	1.60	1		700	689,461	49,983	36,522	6.25	9	15	544,457	62,659	49,253	32,630	700	1.18	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.91	5.94	4.80	3.78	2.95	2.01	1.26	1.12	1		700	550,279	54,462	31,943	6.25	9	15	585,168	37,435	86,633	27,791	700	1.27	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.89	4.84	3.74	2.76	2.05	1.30	0.75	0.97	1		700	529,428	56,426	51,554	6.25	9	15	480,572	54,477	65,083	45,860	700	0.93	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.17	5.16	4.06	3.11	2.40	1.57	0.94	1.23	1		700	539,621	57,856	41,389	6.25	9	15	489,832	56,655	66,079	36,748	700	1.30	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.21	6.69	5.16	3.74	2.68	1.65	0.91	0.98	1		700	436,991	36,637	41,574	6.25	9	15	413,599	32,523	44,892	36,892	700	0.83	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.86	6.54	5.12	4.02	3.23	2.36	1.46	1.21	1		700	385,332	58,310	27,348	6.25	9	15	370,325	52,151	71,500	24,031	700	1.03	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.64	5.83	4.72	3.78	2.91	1.97	1.14	1.41	1		700	705,954	47,994	34,210	6.25	9	15	584,620	56,361	49,152	30,470	700	1.13	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.19	6.02	4.84	3.78	2.91	1.97	1.18	1.04	1		700	524,783	50,060	33,211	6.25	9	15	479,147	48,271	58,263	29,391	700	1.06	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.87	5.87	4.69	3.70	2.87	1.97	1.22	1.14	1		700	530,006	55,160	32,650	6.25	9	15	528,825	44,140	75,440	28,597	700	1.30	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.86	6.54	5.20	4.09	3.23	2.20	1.30	1.57	1		700	482,786	47,005	29,677	6.25	9	15	384,857	58,567	45,290	26,601	700	0.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.09	5.16	4.09	3.19	2.40	1.57	0.94	1.40	1		700	589,825	55,745	41,482	6.25	9	15	561,310	49,223	69,558	36,641	700	1.55	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.33	6.81	5.43	4.17	3.11	2.01	1.14	1.30	1		700	485,410	38,167	33,441	6.25	9	15	419,426	40,743	41,277	29,775	700	1.13	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.83	5.31	4.09	2.99	2.09	1.26	0.71	1.60	1		700	453,554	46,164	53,180	6.25	9	15	416,608	44,024	53,103	47,403	700	1.69	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.48	5.00	3.66	2.44	1.69	0.98	0.51	1.71	1		700	411,659	47,284	70,138	6.25	9	15	352,153	50,519	49,430	63,058	700	0.74	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.01	5.00	3.90	3.03	2.28	1.61	1.02	1.58	1		700	449,810	69,866	39,358	6.25	9	15	511,272	44,429	122,340	34,074	700	1.52	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.60	5.59	4.37	3.43	2.68	1.89	1.14	1.24	1		700	480,835	60,464	34,260	6.25	9	15	446,050	57,705	70,166	30,311	700	1.10	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.88	7.17	5.55	4.17	3.19	2.09	1.22	1.03	1		700	381,537	39,986	31,429	6.25	9	15	350,081	37,960	46,954	27,859	700	0.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.50	6.18	4.76	3.54	2.60	1.57	0.87	1.35	1		700	507,423	38,776	43,211	6.25	9	15	441,948	40,421	42,454	38,518	700	1.18	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.76	7.01	5.47	4.13	3.19	2.09	1.18	1.66	1		700	412,467	39,565	32,099	6.25	9	15	320,280	49,775	38,215	28,819	700	0.76	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.09	6.73	5.39	4.25	3.31	2.24	1.30	1.61	1		700	506,574	43,247	29,593	6.25	9	15	393,433	56,359	40,728	26,571	700	0.92	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.62	6.18	4.76	3.62	2.72	1.77	1.02	1.38	1		700	439,715	45,486	37,435	6.25	9	15	385,405	46,991	49,981	33,342	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.62	5.98	4.57	3.43	2.64	1.77	1.14	1.69	1		700	317,530	57,500	35,326	6.25	9	15	374,258	36,292	99,961	30,672	700	1.71	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.58	6.10	4.69	3.66	2.83	1.97	1.26	1.56	1		700	350,540	58,167	31,670	6.25	9	15	377,641	42,109	87,366	27,582	700	1.71	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.95	5.16	3.74	2.60	1.81	1.10	0.63	1.06	1		700	328,521	51,773	59,917	6.25	9	15	321,040	45,489	62,755	53,356	700	1.22	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.01	4.88	3.74	2.64	1.89	1.14	0.67	0.93	1		700	490,927	54,668	59,265	6.25	9	15	536,064	36,616	87,633	52,174	700	0.96	1	

Location: Region	Road	Cluster-Area	Control Section	Project Number	Material Types: Roadbed Soil Type	Granular Layer Aggregate Type	Gradation	FWD File Information: Season	Date	File Title	Pavement Layer Thickness (in): Asphalt concrete	Base/ Subbase	Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area: 0	8	12	18	24	36	60	2-Layer Backcalculation: RMS Error (%)	Converged? Yes	No	Depth to Stiff Layer (in)	2-Layer Resilient Modulus (psi): Asphalt Concrete	Base/ Subbase	Roadbed	3-Layer System: Layer Thicknesses (in): Asphalt Concrete	Base	Subbase	Resilient modulus (psi): Asphalt Concrete	Base	Subbase	Roadbed	Depth to Stiff layer (in)	RMS Error (%)	Convergence: Yes	No
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.48	5.04	3.74	2.72	1.93	1.26	0.75	1.40	1		700	373,857	59,785	53,322	6.25	9	15	398,412	45,043	84,564	47,022	700	1.44	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	5.79	4.17	3.35	2.52	1.89	1.30	0.79	0.87	1		700	650,976	76,346	51,719	6.25	9	15	695,758	53,212	119,542	45,216	700	0.83	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.20	5.00	3.78	2.76	2.01	1.30	0.79	1.26	1		700	427,019	60,316	51,070	6.25	9	15	473,622	40,546	97,583	44,758	700	1.25	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.81	4.76	3.66	2.72	2.01	1.30	0.79	1.15	1		700	490,262	63,281	51,174	6.25	9	15	519,827	46,343	92,959	44,997	700	1.34	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.61	4.61	3.46	2.52	1.81	1.22	0.75	1.84	1		700	432,077	69,418	54,579	6.25	9	15	524,965	39,173	142,421	47,423	700	1.21	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.76	5.55	4.45	3.35	2.52	1.65	0.98	0.79	1		700	511,396	52,298	40,299	6.25	9	15	501,048	43,814	67,966	35,558	700	0.99	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.36	5.24	4.13	3.11	2.36	1.57	0.91	1.15	1		700	526,094	55,864	43,137	6.25	9	15	448,105	61,126	58,642	38,549	700	0.58	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.66	6.10	4.80	3.62	2.72	1.89	1.22	1.84	1		700	353,974	56,958	33,854	6.25	9	15	447,171	28,430	144,041	28,965	700	1.32	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.15	6.02	4.80	3.70	2.76	1.85	1.14	1.41	1		700	504,448	50,678	35,508	6.25	9	15	573,431	28,351	106,125	30,745	700	1.29	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.62	6.46	5.12	4.02	2.99	2.01	1.22	1.47	1		700	502,936	46,369	32,812	6.25	9	15	544,378	29,666	80,199	28,587	700	1.51	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.06	6.61	5.20	3.90	3.03	2.09	1.26	0.62	1		700	395,363	49,191	31,507	6.25	9	15	401,535	38,730	67,980	27,636	700	0.55	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.01	5.16	4.09	3.11	2.32	1.50	0.91	1.22	1		700	590,616	54,329	43,513	6.25	9	15	648,264	33,408	98,538	37,978	700	1.27	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.60	5.67	4.65	3.66	2.83	2.01	1.22	0.90	1		700	583,190	57,263	32,526	6.25	9	15	552,733	51,085	71,196	28,606	700	0.88	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.17	5.31	4.29	3.39	2.60	1.89	1.22	1.53	1		700	507,111	69,949	33,540	6.25	9	15	617,552	36,992	156,110	28,628	700	1.22	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.61	4.76	3.86	3.03	2.36	1.61	1.06	1.86	1		700	554,605	74,142	38,864	6.25	9	15	648,754	43,195	144,200	33,457	700	1.98	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.20	5.39	4.37	3.39	2.60	1.77	1.14	1.63	1		700	565,173	61,351	35,920	6.25	9	15	722,597	25,539	213,124	30,618	700	1.20	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	14.88	12.56	10.67	8.54	6.69	4.21	2.13	0.60	1		700	666,878	17,102	17,919	6.25	9	15	696,896	11,181	23,313	17,792	700	0.51	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.87	6.61	5.71	4.69	3.82	2.60	1.50	0.58	1		700	1,224,266	44,748	26,435	6.25	9	15	1,284,949	31,495	58,110	26,131	700	0.51	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.68	6.30	5.35	4.37	3.50	2.40	1.42	0.75	1		700	1,029,999	52,481	28,044	6.25	9	15	1,106,667	36,984	68,241	27,680	700	0.64	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	12.36	9.29	7.64	5.79	4.45	2.91	1.73	1.17	1		700	386,675	35,774	22,483	6.25	9	15	443,575	23,306	51,274	22,074	700	0.66	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.46	9.29	7.87	6.18	4.88	3.19	1.77	0.41	1		700	658,843	30,042	21,643	6.25	9	15	685,635	23,179	36,124	21,452	700	0.24	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.39	7.05	5.98	4.57	3.58	2.36	1.34	1.66	1		700	867,158	41,040	28,997	6.25	9	15	1,075,913	13,746	176,215	28,419	700	0.93	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.11	6.85	5.83	4.45	3.54	2.36	1.38	1.87	1		700	880,713	45,025	28,388	6.25	9	15	1,137,910	13,281	264,258	27,723	700	1.03	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.53	7.52	6.18	4.84	3.82	2.36	1.22	1.28	1		700	789,636	32,830	30,689	6.25	9	15	624,936	52,417	25,328	31,132	700	0.96	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.50	7.40	6.69	5.79	4.80	3.50	2.13	0.83	1		700	1,624,366	41,119	18,586	6.25	9	15	1,902,723	11,001	244,632	18,095	700	0.68	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.31	8.39	7.13	5.67	4.53	2.99	1.65	0.34	1		700	779,816	33,091	23,126	6.25	9	15	734,454	35,369	31,693	23,120	700	0.34	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.11	6.65	5.59	4.33	3.31	2.09	1.14	1.21	1		700	896,013	38,986	33,435	6.25	9	15	1,085,997	14,101	140,138	32,967	700	0.32	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.91	6.38	5.43	4.25	3.27	2.09	1.10	0.42	1		700	1,001,211	38,794	34,470	6.25	9	15	1,016,858	32,035	44,172	34,214	700	0.35	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.98	8.46	6.85	5.12	3.86	2.40	1.34	0.92	1		700	480,781	33,673	28,299	6.25	9	15	534,065	22,841	45,780	27,911	700	0.41	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	6.77	5.43	4.57	3.70	2.87	1.85	0.94	1.20	1		700	1,305,092	43,222	39,964	6.25	9	15	1,003,554	78,036	31,540	40,699	700	0.83	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	6.85	5.75	4.92	4.06	3.19	2.13	1.14	0.74	1		700	1,451,086	42,821	33,732	6.25	9	15	1,437,545	38,029	46,285	33,540	700	0.74	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	6.77	5.59	4.76	3.90	3.03	2.05	1.14	0.90	1		700	1,256,313	49,612	33,741	6.25	9	15	1,320,076	35,956	62,623	33,387	700	0.84	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.91	6.30	5.39	4.29	3.43	2.32	1.30	0.50	1		700	952,665	46,651	29,266	6.25	9	15	820,165	61,367	39,451	29,473	700	0.24	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.41	7.87	6.77	5.67	4.53	3.19	1.77	0.96	1		700	1,054,216	35,720	21,612	6.25	9	15	889,774	53,922	27,922	21,898	700	0.84	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.13	7.68	6.65	5.55	4.45	3.15	1.77	0.77	1		700	1,098,270	37,141	21,648	6.25	9	15	983,236	47,349	32,074	21,771	700	0.73	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.31	8.58	7.24	5.83	4.53	2.99	1.65	0.90	1		700	788,783	31,205	22,995	6.25	9	15	880,573	16,675	54,211	22,662	700	0.66	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.16	7.91	6.54	5.20	4.06	2.80	1.61	0.69	1		700	568,493	42,313	23,651	6.25	9	15	535,871	44,313	40,776	23,641	700	0.68	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.87	8.39	6.73	4.96	3.58	2.05	0.91	1.34	1		700	614,237	23,800	38,050	6.25	9	15	486,491	37,430	18,993	38,511	700	0.70	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.58	6.57	5.39	4.13	3.15	2.01	1.10	0.49	1		700	675,326	43,351	34,404	6.25	9	15	648,077	43,593	43,082	34,304	700	0.49	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.11	6.73	5.79	4.76	3.66	2.36	1.30	1.47	1		700	1,124,743	36,499	29,601	6.25	9	15	1,398,021	9,205	369,829	29,508	700	1.05	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.98	7.48	5.83	4.37	3.31	2.13	1.26	1.42	1		700	302,669	45,940	30,453	6.25	9	15	292,558	45,455	45,689	30,353	700	1.42	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.39	7.01	5.98	4.80	3.78	2.60	1.50	0.96	1		700	944,269	43,054	25,733	6.25	9	15	1,094,691	20,089	91,491	25,189	700	0.57	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	6.73	5.67	4.88	3.98	3.15	2.05	1.02	0.51	1		700	1,634,839	36,107	37,035	6.25	9	15	1,447,486	51,061	30,160	37,246	700	0.41	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.92	7.52	5.83	4.29	3.07	1.73	0.79	1.68	1		700	582,823	28,287	43,397	6.25	9	15	458,334	43,237	22,575	43,973	700	1.06	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.09	6.06	5.24	4.41	3.46	2.24	0.98	1.27	1		700	2,026,980	23,305	38,819	6.25	9	15	1,464,784	76,939	13,906	40,999	700	0.94	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.16	7.87	6.10	4.49	3.31	1.93	0.94	1.33	1		700	542,688	29,747	37,164	6.25	9	15	482,284	35,581	26,762	37,267	700	1.22	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.30	8.70	7.13	5.59	4.21	2.60	1.46	1.51	1		700	531,026	31,074	25,807	6.25	9	15	571,828	22,062	40,500	25,489	700	1.38	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.88	6.81	5.12	3.70	2.72	1.65	0.91	1.11	1		700	349,386	43,604	40,437	6.25	9	15	316,925	47,793	40,602	40,484	700	1.01	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.94	7.76	5.94	4.13	3.19	1.97	1.02	1.86	1		700	344,640	37,744	35,126	6.25	9	15	284,877	48,570	31,627	35,511	700	1.44	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.76	6.02	5.08	4.02	3.07	1.93	0.94	1.51	1		700	1,057,440	36,685	38,942	6.25	9	15	736,198	76,930	24,961	40,047	700	0.71	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.92	7.52	6.14	4.88	3.70	2.32	1.30	1.58	1		700	594,164	37,232	28,924	6.25	9	15	557,815	39,452	35,746	28,905	700	1.58	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	12.01	9.09	7.13	5.28	3.90	2.36	1.34	1.58	1		700	379,647	31,556	28,097	6.25	9	15	444,980	19,062	48,735	27,620	700	0.96	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.74	7.13	5.98	4.76	3.78	2.56	1.50	0.77	1		700	785,534	44,315	25,560	6.25	9	15	874,121	27,565	65,725	25,126	700	0.45	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.24	6.18	5.31	4.29	3.35	2.20	1.22	1.28	1		700	1,260,805	41,009	31,405	6.25	9	15	1,560,314	10,384	396,813	31,194	700	0.57	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.21	7.36	6.06	4.65	3.58	2.20	1.14	0.54	1		700	759,297	32,944	32,289	6.25	9	15	726,013	33,622	32,512	32,215	700	0.54	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.60	6.22	5.24	4.17	3.15	2.05	1.10	1.08	1		700	1,006,707	40,707	34,066	6.25	9	15	1,117,654	22,873	66,406	33,610	700	0.89	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.71	8.74	7.24	5.63	4.25	2.56	1.30	0.86	1		700	705,115	25,266	28,097	6.25	9	15	776,488	14,331	40,133	27,844	700	0.60	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.53	7.68	6.38	5.12	3.98	2.64	1.38	1.16	1		700	825,227	33,401	26,917	6.25	9	15	649,781	54,758	25,239	27,354	700	0.79	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.27	6.85	5.83	4.72	3.66	2.44	1.34	0.84	1		700	1,023,722	38,296	28,336	6.25	9	15	1,089,642	25,499	52,219	28,011	700	0.74	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.43	6.93	5.94	4.84	3.90	2.72	1.61	0.57	1		700	919,853	47,232	23,763	6.25	9	15	985,452	33,085	62,155	23,429	700	0.40	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.54	6.93	5.83	4.65	3.46	2.09	0.91	1.24	1		700	1,137,612	24,421	39,319	6.25	9	15	893,108	48,085	17,876	40,130	700	0.90	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.15	6.77	5.79	4.57	3.58	2.28	1.18	0.29	1		700	1,097,069	33,367	31,547	6.25	9	15	1,119,775	25,992	39,507	31,316	700	0.19	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.53	7.72	6.30	4.92	3.70	2.24	1.18	1.20	1		700	725,441	30,838	31,101	6.25	9	15	815,517	16,977	51,319	30,746	700	0.93	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.68	6.38	5.39	4.33	3.31	2.09	1.06	0.81	1		700	1,155,226	33,933	34,752	6.25	9	15	1,222,673	21,723	47,378	34,440	700	0.72	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.60	6.54	5.71	4.69	3.74	2.60	1.42	0.73	1		700	1,416,812	38,197	26,873	6.25	9	15	1,459,145	27,311	48,607	26,623	700	0.70	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.24	6.06	5.24	4.25	3.31	2.20	1.26	1.33	1		700	1,178,293	44,800	30,365	6.25	9	15	1,482,355	11,808	360,562	29,912	700	0.62	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.60	6.46	5.71	4.69	3.86	2.68	1.61	0.97	1		700	1,280,361	47,946	23,969	6.25	9	15	1,598,080	12,679	322,834	23,315	700	0.30	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.07	6.42	5.31	4.17	3.19	1.93	0.91	1.24	1		700	1,043,494	31,053	39,630	6.25	9	15	782,063	59,571	22,560	40,441	700	0.64	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.11	6.81	5.94	4.80	3.82	2.48	1.34	0.71	1		700	1,220,896	34,123	28,315	6.25	9	15	1,399,473	12,046	123,491	28,027	700	0.32	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.27	6.61	5.55	4.37	3.39	2.13	1.22	1.53	1		700	817,010	41,598	31,141	6.25	9	15	1,019,287	14,789	154,408	30,562	700	0.94	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	6.77	5.55	4.65	3.62	2.68	1.65	0.83	1.05	1		700	1,142,329	39,120	44,177	6.25	9	15	1,245,226	22,813	60,317	43,736	700	0.88	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.44	5.87	4.80	3.70	2.72	1.61	0.83	1.01	1		700	879,944	38,884	43,852	6.25	9	15	948,219	26,730	50,937	43,437	700	0.84	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.36	6.06	5.08	4.06	3.11	2.01	1.10	1.06	1		700	1,035,275	42,825	34,177	6.25	9	15	1,187,996	20,346	88,048	33,646	700	0.72	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.17	5.91	4.96	3.90	3.07	1.97	1.06	0.60	1		700	1,096,812	43,051	35,274	6.25	9	15	1,147,133	31,562	53,881	34,923	700	0.49	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.45	7.17	5.98	4.57	3.46	2.09	1.14	1.31	1		700	638,626	35,571	32,528	6.25	9	15	668,954	28,009	42,047	32,238	700	1.23	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	6.93	5.67	4.88	3.98	3.07	1.97	1.06	1.13	1		700	1,289,653	42,099	35,723	6.25	9	15	1,450,976	19,421	89,170	35,267	700	0.98	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.60	6.34	5.47	4.53	3.54	2.32	1.26	1.02	1		700	1,293,091	37,494	30,164	6.25	9	15	1,424,771	18,144	73,475	29,784	700	0.91	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.64	6.34	5.39	4.37	3.43	2.28	1.22	0.61	1		700	1,173,842	39,433	30,853	6.25	9	15	1,109,904	42,053	37,943	30,818	700	0.60	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.99	6.42	5.47	4.33	3.39	2.28	1.34	0.94	1		700	839,838	48,058	28,495	6.25	9	15	976,342	25,009	88,474	27,886	700	0.44	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.40	6.10	5.16	4.13	3.19	2.09	1.22	1.69	1		700	988,212	47,128	31,535	6.25	9	15	1,290,665	12,402	399,530	30,896	700	0.67	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.22	8.90	7.28	5.47	4.09	2.60	1.50	1.84	1		700	487,016	32,232	25,373	6.25	9	15	615,104	12,180	112,987	24,749	700	0.39	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.54	6.38	4.92	3.78	2.99	2.01	1.22	1.59	1		700	401,356	53,764	28,687	6.25	9	15	432,968	42,744	64,156	28,271	700	1.45	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.46	6.02	4.92	3.86	2.99	2.05	1.26	1.43	1		700	413,934	56,551	27,706	6.25	9	15	415,545	52,438	59,038	27,531	700	1.43	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.23	5.98	4.69	3.66	2.87	2.09	1.34	1.89	1		700	340,749	68,753	26,854	6.25	9	15	427,345	41,922	107,294	25,977	700	1.07	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.09	6.65	5.28	4.17	3.35	2.40	1.46	0.86	1		700	365,982	57,789	24,012	6.25	9	15	345,329	59,791	55,404	24,013	700	0.84	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.06	6.14	4.61	3.39	2.56	1.73	1.06	1.82	1		700	266,218	57,225	33,598	6.25	9	15	308,457	40,605	77,020	32,797	700	1.09	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.07	5.31	4.06	3.07	2.36	1.65	0.98	0.84	1		700	290,795	69,074	35,679	6.25	9	15	280,376	68,066	68,507	35,530	700	0.84	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.37	6.97	5.63	4.45	3.50	2.52	1.54	0.79	1		700	392,929	53,158	22,869	6.25	9	15	397,267	48,108	56,812	22,685	700	0.74	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.02	6.77	5.51	4.37	3.35	2.32	1.38	1.08	1		700	473,131	47,962	25,298	6.25	9	15	471,975	44,275	50,560	25,138	700	1.07	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.51	7.56	6.02	4.69	3.58	2.44	1.42	1.02	1		700	346,948	42,307	24,287	6.25	9	15	311,872	47,407	38,670	24,370	700	0.94	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.65	6.73	5.20	3.78	2.83	1.81	1.02	0.53	1		700	327,400	43,341	33,230	6.25	9	15	316,249	42,830	43,307	33,108	700	0.53	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.37	6.65	5.28	4.09	3.11	2.13	1.18	1.56	1		700	390,999	46,243	28,611	6.25	9	15	308,624	63,954	36,683	29,080	700	0.98	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.46	5.79	4.41	3.35	2.48	1.61	0.91	1.51	1		700	365,571	51,723	37,503	6.25	9	15	310,427	62,337	45,058	37,758	700	1.26	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	RMS Error (%)	Convergence	
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed			Yes	No
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.92	7.24	5.79	4.76	3.74	2.68	1.65	1.61	1		700	356,487	52,457	21,067	6.25	9	15	320,982	58,515	47,823	21,162	700	1.57	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.21	6.34	5.04	4.02	3.07	2.17	1.30	1.59	1		700	323,505	55,934	26,446	6.25	9	15	282,327	65,093	49,330	26,631	700	1.48	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.45	6.57	5.16	3.98	2.95	1.93	1.10	1.54	1		700	359,291	44,917	30,729	6.25	9	15	316,610	52,005	40,086	30,889	700	1.43	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.35	6.93	5.04	3.66	2.76	1.81	1.06	1.47	1		700	221,493	46,840	32,037	6.25	9	15	230,721	40,593	51,886	31,655	700	1.33	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.09	6.26	4.92	3.78	2.95	1.89	1.10	1.87	1		700	365,973	49,295	31,018	6.25	9	15	294,834	64,813	40,487	31,412	700	1.55	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.58	6.10	4.84	3.78	2.87	1.97	1.22	1.70	1		700	369,849	56,710	28,873	6.25	9	15	404,609	44,565	68,282	28,417	700	1.51	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.62	6.02	4.72	3.50	2.52	1.61	0.94	1.69	1		700	372,044	47,586	36,363	6.25	9	15	415,254	35,418	60,160	35,777	700	1.36	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	7.83	5.43	4.09	3.07	2.40	1.65	1.02	1.66	1		700	312,785	68,098	34,502	6.25	9	15	353,509	50,985	86,246	33,775	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.04	6.81	5.08	3.74	2.87	1.93	1.10	1.05	1		700	253,648	48,522	30,890	6.25	9	15	238,889	49,872	46,740	30,856	700	1.03	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.88	6.54	4.92	3.78	2.95	2.13	1.26	1.10	1		700	222,337	59,175	27,461	6.25	9	15	212,897	58,900	57,999	27,386	700	1.10	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.09	5.87	4.37	3.35	2.48	1.69	0.98	1.66	1		700	252,217	57,906	34,853	6.25	9	15	228,404	63,038	53,224	34,946	700	1.59	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.43	6.97	5.28	4.06	3.15	2.24	1.30	1.28	1		700	225,589	52,138	25,957	6.25	9	15	202,509	57,886	47,096	26,085	700	1.14	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.28	7.13	5.47	4.13	3.15	2.09	1.22	1.04	1		700	283,450	44,684	27,833	6.25	9	15	270,176	45,346	43,496	27,794	700	1.03	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.76	6.77	5.16	3.82	2.95	2.01	1.22	1.33	1		700	262,897	51,611	28,593	6.25	9	15	292,577	39,843	63,265	28,088	700	0.87	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.37	6.61	5.08	3.82	2.83	1.81	0.94	1.97	1		700	391,713	39,777	34,228	6.25	9	15	294,430	59,193	30,575	34,892	700	1.02	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.09	6.34	4.84	3.62	2.72	1.73	0.94	1.45	1		700	368,104	44,024	34,950	6.25	9	15	299,883	56,773	36,951	35,302	700	0.94	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.31	5.94	4.57	3.46	2.56	1.65	0.87	1.93	1		700	450,403	44,687	37,475	6.25	9	15	350,679	64,037	35,004	38,118	700	1.24	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.09	6.61	5.28	4.09	3.07	1.97	1.06	1.57	1		700	484,989	39,641	31,235	6.25	9	15	378,292	57,703	31,069	31,735	700	1.07	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.45	6.65	5.16	3.94	2.95	2.05	1.18	1.14	1		700	319,509	48,839	28,721	6.25	9	15	308,054	48,383	48,582	28,626	700	1.14	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.49	6.50	5.04	3.94	2.91	2.01	1.18	1.69	1		700	303,828	50,597	28,895	6.25	9	15	285,266	52,368	48,613	28,874	700	1.68	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.50	6.38	5.12	4.02	3.07	2.09	1.14	1.45	1		700	554,565	46,109	30,250	6.25	9	15	440,184	65,686	36,432	30,703	700	0.99	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.69	7.32	5.87	4.72	3.70	2.56	1.46	1.53	1		700	485,914	43,667	23,861	6.25	9	15	379,271	62,853	34,249	24,250	700	1.12	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.57	7.13	5.79	4.45	3.46	2.28	1.30	0.66	1		700	469,988	41,537	26,727	6.25	9	15	420,654	47,852	37,477	26,833	700	0.53	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.31	6.02	4.80	3.70	2.76	1.81	1.06	1.37	1		700	463,767	50,662	33,283	6.25	9	15	481,447	43,339	56,657	32,951	700	1.29	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.43	5.91	4.57	3.43	2.52	1.69	0.94	1.15	1		700	387,181	51,953	36,598	6.25	9	15	359,091	54,977	49,409	36,583	700	1.12	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.37	6.81	5.47	4.29	3.27	2.20	1.26	1.22	1		700	434,135	45,325	27,497	6.25	9	15	373,679	55,481	39,038	27,723	700	1.04	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.63	8.03	6.54	5.08	4.02	2.68	1.46	1.43	1		700	486,048	34,996	23,417	6.25	9	15	354,407	56,969	25,881	23,913	700	0.46	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.08	7.56	6.06	4.72	3.70	2.64	1.57	0.81	1		700	376,651	47,338	22,403	6.25	9	15	382,988	42,242	51,227	22,212	700	0.75	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.96	7.24	5.87	4.57	3.54	2.36	1.34	1.19	1		700	428,195	41,700	25,774	6.25	9	15	344,764	56,758	33,767	26,119	700	0.72	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.71	7.76	5.98	4.49	3.39	2.20	1.18	1.45	1		700	357,250	36,532	28,566	6.25	9	15	293,866	47,565	30,463	28,877	700	1.00	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	11.34	7.99	6.10	4.53	3.39	2.13	1.26	1.67	1		700	275,109	37,758	27,644	6.25	9	15	298,740	30,377	44,221	27,308	700	1.47	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.76	7.17	5.63	4.33	3.27	2.17	1.22	1.04	1		700	404,781	41,981	28,412	6.25	9	15	371,688	45,877	39,064	28,466	700	0.99	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.39	7.68	6.14	4.61	3.50	2.17	1.14	1.09	1		700	455,655	32,424	29,347	6.25	9	15	370,313	44,618	26,580	29,674	700	0.54	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.20	7.36	5.71	4.29	3.31	2.24	1.34	1.06	1		700	311,317	46,083	26,359	6.25	9	15	333,578	37,274	54,305	25,987	700	0.79	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.35	7.24	5.51	3.94	2.91	1.89	1.10	1.32	1		700	277,389	42,593	31,720	6.25	9	15	312,010	31,385	54,804	31,144	700	0.56	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.45	6.73	5.16	3.82	2.83	1.77	0.94	1.30	1		700	385,858	40,039	35,301	6.25	9	15	328,425	50,134	33,982	35,646	700	0.89	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.92	6.73	5.04	3.54	2.56	1.61	0.94	1.62	1		700	264,594	44,210	36,800	6.25	9	15	303,041	31,963	57,980	36,071	700	0.77	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.04	7.24	5.63	4.29	3.27	2.20	1.34	1.46	1		700	322,906	46,479	26,497	6.25	9	15	357,056	34,612	59,513	26,002	700	1.11	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.35	7.24	5.51	4.02	2.95	1.85	0.98	1.19	1		700	330,430	37,580	34,007	6.25	9	15	282,274	45,682	32,678	34,256	700	0.79	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.29	6.30	4.76	3.43	2.64	1.69	0.98	0.97	1		700	290,580	50,514	35,325	6.25	9	15	285,397	48,454	51,471	35,127	700	0.96	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.76	6.61	4.80	3.43	2.48	1.54	0.87	1.38	1		700	271,251	44,038	39,386	6.25	9	15	274,368	40,240	46,678	39,058	700	1.32	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.29	6.26	4.65	3.31	2.44	1.54	0.83	1.17	1		700	302,182	45,355	40,202	6.25	9	15	265,469	52,129	40,604	40,402	700	0.86	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.09	6.57	5.16	3.94	2.95	1.97	1.14	1.03	1		700	387,687	46,847	30,215	6.25	9	15	388,374	43,228	49,340	30,009	700	1.00	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.50	5.91	4.65	3.46	2.64	1.73	1.06	1.63	1		700	347,480	55,693	33,284	6.25	9	15	392,251	41,510	70,324	32,693	700	1.30	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.11	5.71	4.53	3.54	2.76	1.97	1.22	1.15	1		700	360,167	67,191	29,160	6.25	9	15	375,639	58,055	74,434	28,810	700	1.04	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.33	6.81	5.47	4.29	3.39	2.28	1.30	1.41	1		700	430,114	46,435	26,223	6.25	9	15	342,494	66,365	35,563	26,757	700	0.70	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.74	6.18	4.88	3.78	2.91	1.97	1.22	1.59	1		700	357,283	56,601	29,121	6.25	9	15	383,298	46,760	64,843	28,755	700	1.46	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.49	6.65	5.20	4.02	3.07	2.13	1.34	1.84	1		700	298,521	55,544	26,884	6.25	9	15	344,756	39,535	73,700	26,289	700	1.44	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	7.83	5.94	4.69	3.66	2.83	1.97	1.22	1.71	1		700	478,846	59,650	29,389	6.25	9	15	562,193	36,691	94,364	28,552	700	1.14	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.15	6.30	4.92	3.82	2.80	1.81	0.98	1.55	1		700	570,920	42,048	34,489	6.25	9	15	565,425	39,345	43,865	34,301	700	1.55	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.74	6.50	5.20	4.06	3.11	2.05	1.14	1.17	1		700	516,214	43,756	29,825	6.25	9	15	428,822	56,910	36,799	30,093	700	0.89	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.83	5.79	4.53	3.50	2.60	1.81	1.14	1.92	1		700	439,730	56,856	35,363	6.25	9	15	554,937	28,244	145,395	30,335	700	1.46	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.17	6.22	4.92	3.94	3.07	2.20	1.34	1.90	1		700	310,641	57,861	28,953	6.25	9	15	254,473	72,416	54,007	26,107	700	1.26	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.33	5.98	4.45	3.15	2.36	1.54	0.94	0.97	1		700	242,451	52,453	41,726	6.25	9	15	260,359	41,309	71,731	36,756	700	1.33	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.09	5.87	4.29	3.03	2.28	1.50	0.94	1.65	1		700	234,298	55,939	42,472	6.25	9	15	273,369	38,174	89,903	37,079	700	1.60	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.66	5.47	4.09	3.03	2.32	1.54	0.94	1.35	1		700	256,021	60,861	41,686	6.25	9	15	243,742	59,323	67,879	37,204	700	1.62	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.82	5.55	4.02	2.95	2.24	1.54	0.98	1.78	1		700	219,454	66,545	42,040	6.25	9	15	250,079	48,022	99,558	36,745	700	1.87	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.09	5.67	4.17	3.11	2.32	1.57	0.94	1.41	1		700	238,163	59,589	42,079	6.25	9	15	222,577	58,968	65,947	37,580	700	1.43	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.82	5.51	4.02	2.91	2.20	1.50	0.94	1.40	1		700	219,592	63,629	42,676	6.25	9	15	243,624	47,970	90,765	37,434	700	1.60	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.78	5.31	3.86	2.76	2.09	1.46	0.91	1.11	1		700	198,445	67,299	44,179	6.25	9	15	221,387	50,102	97,150	38,714	700	1.00	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.86	5.51	3.82	2.80	2.09	1.42	0.87	1.88	1		700	205,704	62,784	45,586	6.25	9	15	217,460	50,959	82,906	40,213	700	1.96	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.61	6.02	4.29	3.19	2.44	1.65	1.02	1.61	1		700	204,432	60,029	39,602	6.25	9	15	207,739	52,096	74,318	35,053	700	1.84	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.90	5.59	4.02	2.95	2.24	1.57	0.94	1.32	1		700	219,464	64,545	42,260	6.25	9	15	223,523	55,698	80,359	37,397	700	1.23	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.09	6.02	4.33	3.23	2.44	1.65	1.02	1.75	1		700	249,208	57,872	39,475	6.25	9	15	266,672	45,594	79,599	34,692	700	1.86	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.88	6.77	5.31	4.17	3.23	2.28	1.50	1.65	1		700	275,321	55,872	27,361	6.25	9	15	303,169	41,532	81,949	23,799	700	1.89	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.39	6.30	5.00	3.86	2.95	2.05	1.26	1.06	1		700	469,032	50,960	31,865	6.25	9	15	523,017	32,762	90,224	27,601	700	0.90	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.49	6.81	5.31	4.06	3.11	2.09	1.26	0.93	1		700	364,543	45,257	31,037	6.25	9	15	361,052	39,994	56,580	27,384	700	1.08	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.44	5.04	3.86	2.91	2.13	1.46	0.91	1.67	1		700	364,688	64,442	44,207	6.25	9	15	411,709	45,358	100,151	38,633	700	1.74	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.58	5.31	3.94	2.87	2.13	1.38	0.83	1.47	1		700	259,361	57,602	46,670	6.25	9	15	237,672	58,415	62,734	41,755	700	1.64	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.23	5.59	4.17	3.03	2.28	1.46	0.87	1.11	1		700	338,803	52,760	44,580	6.25	9	15	332,345	48,055	63,304	39,581	700	1.32	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.74	6.02	4.69	3.62	2.72	1.85	1.14	1.45	1		700	346,506	53,631	34,634	6.25	9	15	347,226	47,041	67,002	30,569	700	1.69	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.49	5.87	4.49	3.35	2.52	1.73	1.02	1.63	1		700	232,688	55,728	37,467	6.25	9	15	201,985	62,349	55,868	33,727	700	1.12	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.82	5.98	4.80	3.66	2.80	1.81	1.10	1.83	1		700	380,251	49,582	35,452	6.25	9	15	337,303	54,069	51,946	31,687	700	1.96	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.90	5.75	4.29	3.11	2.24	1.42	0.79	1.95	1		700	312,479	46,762	47,184	6.25	9	15	256,158	55,993	45,506	42,584	700	1.07	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.02	5.63	4.25	3.27	2.48	1.69	1.02	1.93	1		700	244,738	60,516	37,959	6.25	9	15	210,486	69,156	59,548	34,218	700	1.61	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.03	6.06	4.88	3.86	3.03	1.97	1.18	1.47	1		700	630,564	48,580	34,757	6.25	9	15	577,623	49,464	55,328	30,761	700	1.59	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.23	6.54	5.35	4.33	3.31	2.24	1.26	1.42	1		700	788,897	40,381	32,047	6.25	9	15	700,083	46,039	42,809	28,443	700	1.22	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.60	5.75	4.69	3.70	2.76	1.77	0.94	1.79	1		700	801,538	40,603	41,559	6.25	9	15	616,232	60,553	36,801	37,341	700	1.22	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.36	5.59	4.53	3.46	2.60	1.73	0.94	1.42	1		700	725,131	46,234	41,857	6.25	9	15	611,102	55,601	47,280	37,323	700	0.88	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.61	5.04	4.13	3.23	2.44	1.65	0.94	1.06	1		700	808,948	55,249	42,801	6.25	9	15	746,425	55,337	63,794	37,884	700	0.90	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.34	4.53	3.62	2.80	2.09	1.38	0.83	1.33	1		700	633,820	66,084	49,376	6.25	9	15	625,674	58,281	82,983	43,614	700	1.52	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.89	5.04	4.06	3.07	2.32	1.57	0.98	1.23	1		700	547,171	63,994	42,011	6.25	9	15	662,103	35,020	138,335	36,304	700	0.95	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.33	7.28	6.02	4.72	3.66	2.32	1.18	1.76	1		700	792,684	28,362	32,798	6.25	9	15	541,171	56,694	22,585	29,728	700	0.50	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.82	6.65	5.35	4.33	3.46	2.44	1.50	1.35	1		700	512,995	52,176	27,183	6.25	9	15	442,854	59,618	54,166	24,149	700	1.13	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.19	6.22	5.04	3.94	2.95	1.81	0.94	1.65	1		700	761,948	34,498	40,783	6.25	9	15	591,150	51,560	31,431	36,607	700	1.15	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.58	6.61	5.28	4.09	2.99	1.77	0.87	1.75	1		700	750,870	29,166	43,276	6.25	9	15	595,004	43,496	26,581	38,855	700	1.23	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.37	6.81	5.31	3.94	2.91	1.85	1.02	1.09	1		700	442,096	38,120	37,745	6.25	9	15	397,820	40,177	41,591	33,631	700	0.69	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.98	6.81	5.59	4.37	3.35	2.13	1.10	1.97	1		700	720,080	32,040	34,730	6.25	9	15	487,272	60,829	25,695	31,527	700	0.67	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.31	6.38	5.20	4.09	3.23	2.09	1.18	1.43	1		700	709,893	39,946	33,292	6.25	9	15	565,312	54,198	38,446	29,727	700	1.07	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.43	6.46	5.35	4.21	3.23	2.13	1.14	1.61	1		700	749,635	36,603	33,981	6.25	9	15	557,800	59,343	31,571	30,629	700	0.68	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.21	6.97	5.47	4.17	3.11	1.97	1.14	1.11	1		700	493,904	38,260	34,813	6.25	9	15	525,158	27,311	58,445	30,561	700	1.19	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.90	6.34	4.80	3.46	2.56	1.65	0.94	0.97	1		700	376,210	44,943	41,495	6.25	9	15	378,120	38,373	57,478	36,701	700	0.82	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.60	5.51	4.29	3.19	2.48	1.65	1.06	1.73	1		700	424,337	62,005	39,227	6.25	9	15	540,776	32,195	145,921	33,743	700	1.33	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.28	5.00	3.74	2.80	2.01	1.30	0.79	1.73	1		700	412,718	61,246	51,908	6.25	9	15	453,298	45,235	89,479	45,659	700	1.88	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.44	5.31	4.13	3.07	2.20	1.42	0.79	1.31	1		700	517,823	49,823	49,322	6.25	9	15	488,722	48,754	56,648	43,931	700	1.12	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.68	5.75	4.57	3.54	2.68	1.73	1.06	1.52	1		700	567,970	51,312	38,530	6.25	9	15	664,645	28,790	105,851	33,482	700	1.55	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.09	6.61	5.20	3.90	2.87	1.81	1.02	0.96	1		700	468,367	39,684	38,469	6.25	9	15	445,717	37,445	47,037	34,118	700	0.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.91	5.87	4.61	3.58	2.68	1.77	1.10	1.72	1		700	491,363	52,670	37,007	6.25	9	15	591,110	29,162	110,783	32,076	700	1.65	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.89	4.96	3.82	2.83	2.09	1.22	0.67	1.60	1		700	622,942	48,037	57,172	6.25	9	15	558,946	51,872	50,998	51,134	700	1.55	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.36	5.51	4.33	3.31	2.40	1.46	0.75	1.79	1		700	716,737	39,784	50,386	6.25	9	15	583,955	53,493	37,373	45,318	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.36	5.16	4.02	2.91	2.09	1.26	0.75	1.45	1		700	483,454	50,808	53,027	6.25	9	15	553,968	32,285	87,225	46,571	700	1.51	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.36	5.63	4.45	3.39	2.44	1.46	0.79	1.19	1		700	707,232	39,522	48,820	6.25	9	15	733,290	28,945	57,798	43,077	700	1.25	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.73	4.84	3.78	2.87	2.13	1.42	0.83	1.15	1		700	553,527	60,277	47,752	6.25	9	15	540,500	54,493	73,792	42,276	700	1.15	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.77	4.96	3.90	2.99	2.28	1.54	0.98	1.72	1		700	518,574	67,298	41,977	6.25	9	15	651,028	34,811	158,558	36,130	700	1.49	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.32	5.51	4.45	3.50	2.68	1.81	1.06	1.11	1		700	655,697	53,167	37,733	6.25	9	15	607,742	53,117	61,066	33,405	700	1.05	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.31	5.83	4.45	3.35	2.48	1.61	0.98	1.38	1		700	385,523	52,410	40,856	6.25	9	15	417,645	39,350	75,623	35,896	700	1.59	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.39	11.18	8.86	6.69	5.04	3.07	1.69	1.10	1		700	235,545	23,435	20,917	7	8	17	228,958	22,579	23,758	20,847	700	1.10	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.99	13.11	10.24	7.68	5.83	3.58	1.85	1.35	1		700	208,720	19,129	18,607	7	8	17	169,473	29,834	16,565	18,750	700	0.89	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.13	10.24	8.39	6.61	5.20	3.50	2.05	0.99	1		700	258,867	31,101	17,681	7	8	17	223,665	40,365	28,785	17,801	700	0.85	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.40	13.46	10.98	8.70	6.81	4.41	2.40	0.96	1		700	278,077	19,450	14,849	7	8	17	242,010	26,868	17,630	14,928	700	0.84	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.76	9.65	7.99	6.57	5.28	3.62	2.13	1.41	1		700	350,527	32,945	16,896	7	8	17	273,038	57,058	28,004	17,166	700	1.09	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	13.66	9.21	7.17	5.51	4.41	3.07	1.97	1.67	1		700	165,165	44,602	19,231	7	8	17	182,107	29,710	55,544	18,952	700	1.41	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.76	9.21	7.36	5.79	4.57	3.27	2.05	1.24	1		700	227,621	42,653	18,291	7	8	17	255,012	25,319	57,766	17,968	700	0.86	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	13.11	8.90	6.89	5.20	4.06	2.80	1.73	1.40	1		700	177,003	42,085	21,414	7	8	17	198,564	26,628	53,856	21,072	700	0.96	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.02	11.34	9.02	7.01	5.47	3.74	2.28	1.11	1		700	179,194	31,005	15,984	7	8	17	185,585	24,387	35,120	15,866	700	1.06	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.85	12.17	9.72	7.20	5.31	3.31	1.93	1.80	1		700	190,333	22,968	18,672	7	8	17	233,512	9,150	40,753	18,361	700	0.96	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.99	9.09	7.09	5.47	4.29	2.99	1.89	1.69	1		700	192,587	42,485	19,746	7	8	17	223,901	23,513	59,840	19,352	700	1.21	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.90	13.90	10.91	8.03	5.91	3.58	1.93	0.86	1		700	183,336	18,055	17,917	7	8	17	193,646	13,125	20,521	17,770	700	0.65	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.20	11.50	8.82	6.61	4.80	3.03	1.69	1.36	1		700	156,233	24,928	20,775	7	8	17	144,325	27,400	23,947	20,787	700	1.32	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.95	15.24	11.38	8.23	6.02	3.58	1.97	1.31	1		700	112,224	17,930	17,615	7	8	17	103,530	19,766	17,127	17,614	700	1.27	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.05	11.10	8.35	6.34	4.72	3.19	1.89	1.44	1		700	128,343	31,218	19,275	7	8	17	128,985	27,389	33,094	19,173	700	1.43	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	24.53	17.44	13.19	9.53	6.81	4.41	2.24	1.97	1		700	120,025	15,300	15,106	7	8	17	110,857	16,938	14,657	15,100	700	1.95	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.77	11.77	9.29	7.44	5.91	4.06	2.32	1.86	1		700	187,595	28,505	15,212	7	8	17	138,612	50,557	23,878	15,498	700	1.04	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.86	14.02	11.06	8.70	6.73	4.49	2.40	1.75	1		700	202,271	20,230	14,411	7	8	17	158,972	35,587	16,674	14,659	700	1.19	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.72	13.70	10.39	7.68	5.75	3.70	1.97	1.38	1		700	144,000	20,689	17,413	7	8	17	124,920	26,575	18,840	17,506	700	1.12	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.93	12.01	9.69	7.64	6.14	4.41	2.56	1.20	1		700	178,423	30,284	13,836	7	8	17	146,826	43,915	26,790	14,043	700	0.63	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.65	11.14	8.66	6.61	5.12	3.54	2.20	1.44	1		700	137,359	33,963	16,870	7	8	17	149,427	23,685	40,934	16,662	700	1.21	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.49	9.21	6.81	5.24	4.06	2.87	1.77	1.60	1		700	126,251	43,948	20,848	7	8	17	133,723	32,960	50,728	20,614	700	1.43	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.02	11.69	8.35	6.18	4.88	3.35	2.05	1.83	1		700	86,043	34,043	17,992	7	8	17	91,528	25,083	39,524	17,759	700	1.58	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	11.65	8.19	6.77	5.51	4.45	3.23	2.01	1.15	1		700	258,024	49,898	18,271	7	8	17	218,991	66,102	45,952	18,508	700	0.94	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	13.70	9.57	7.20	5.51	4.33	2.87	1.65	1.55	1		700	194,518	35,199	21,685	7	8	17	177,599	39,493	33,822	21,750	700	1.49	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.25	13.50	10.39	7.44	5.16	2.87	1.54	1.64	1		700	160,565	17,383	22,353	7	8	17	181,289	10,277	21,680	22,108	700	1.15	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.18	12.28	10.28	7.83	5.79	3.54	1.65	1.27	1		700	333,054	15,904	20,549	7	8	17	259,220	32,212	13,051	20,735	700	0.80	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.48	11.97	9.13	6.42	4.57	2.52	1.18	1.65	1		700	193,050	18,065	27,592	7	8	17	148,589	30,603	15,266	27,780	700	0.51	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.39	11.18	8.86	6.69	5.04	3.07	1.69	1.10	1		700	235,545	23,435	20,917	7	8	17	228,958	22,579	23,758	20,847	700	1.10	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.99	13.11	10.24	7.68	5.83	3.58	1.85	1.35	1		700	208,720	19,129	18,607	7	8	17	169,473	29,834	16,565	18,750	700	0.89	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.13	10.24	8.39	6.61	5.20	3.50	2.05	0.99	1		700	258,867	31,101	17,681	7	8	17	223,665	40,365	28,785	17,801	700	0.85	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.40	13.46	10.98	8.70	6.81	4.41	2.40	0.96	1		700	278,077	19,450	14,849	7	8	17	242,010	26,868	17,630	14,928	700	0.84	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.76	9.65	7.99	6.57	5.28	3.62	2.13	1.41	1		700	350,527	32,945	16,896	7	8	17	273,038	57,058	28,004	17,166	700	1.09	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	13.66	9.21	7.17	5.51	4.41	3.07	1.97	1.67	1		700	165,165	44,602	19,231	7	8	17	182,107	29,710	55,544	18,952	700	1.41	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.76	9.21	7.36	5.79	4.57	3.27	2.05	1.24	1		700	227,621	42,653	18,291	7	8	17	255,012	25,319	57,766	17,968	700	0.86	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	13.11	8.90	6.89	5.20	4.06	2.80	1.73	1.40	1		700	177,003	42,085	21,414	7	8	17	198,564	26,628	53,856	21,072	700	0.96	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.02	11.34	9.02	7.01	5.47	3.74	2.28	1.11	1		700	179,194	31,005	15,984	7	8	17	185,585	24,387	35,120	15,866	700	1.06	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.85	12.17	9.72	7.20	5.31	3.31	1.93	1.80	1		700	190,333	22,968	18,672	7	8	17	233,512	9,150	40,753	18,361	700	0.96	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.99	9.09	7.09	5.47	4.29	2.99	1.89	1.69	1		700	192,587	42,485	19,746	7	8	17	223,901	23,513	59,840	19,352	700	1.21	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.90	13.90	10.91	8.03	5.91	3.58	1.93	0.86	1		700	183,336	18,055	17,917	7	8	17	193,646	13,125	20,521	17,770	700	0.65	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.20	11.50	8.82	6.61	4.80	3.03	1.69	1.36	1		700	156,233	24,928	20,775	7	8	17	144,325	27,400	23,947	20,787	700	1.32	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.95	15.24	11.38	8.23	6.02	3.58	1.97	1.31	1		700	112,224	17,930	17,615	7	8	17	103,530	19,766	17,127	17,614	700	1.27	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.05	11.10	8.35	6.34	4.72	3.19	1.89	1.44	1		700	128,343	31,218	19,275	7	8	17	128,985	27,389	33,094	19,173	700	1.43	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	24.53	17.44	13.19	9.53	6.81	4.41	2.24	1.97	1		700	120,025	15,300	15,106	7	8	17	110,857	16,938	14,657	15,100	700	1.95	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.77	11.77	9.29	7.44	5.91	4.06	2.32	1.86	1		700	187,595	28,505	15,212	7	8	17	138,612	50,557	23,878	15,498	700	1.04	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.86	14.02	11.06	8.70	6.73	4.49	2.40	1.75	1		700	202,271	20,230	14,411	7	8	17	158,972	35,587	16,674	14,659	700	1.19	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.72	13.70	10.39	7.68	5.75	3.70	1.97	1.38	1		700	144,000	20,689	17,413	7	8	17	124,920	26,575	18,840	17,506	700	1.12	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.93	12.01	9.69	7.64	6.14	4.41	2.56	1.20	1		700	178,423	30,284	13,836	7	8	17	146,826	43,915	26,790	14,043	700	0.63	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.65	11.14	8.66	6.61	5.12	3.54	2.20	1.44	1		700	137,359	33,963	16,870	7	8	17	149,427	23,685	40,934	16,662	700	1.21	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.49	9.21	6.81	5.24	4.06	2.87	1.77	1.60	1		700	126,251	43,948	20,848	7	8	17	133,723	32,960	50,728	20,614	700	1.43	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.02	11.69	8.35	6.18	4.88	3.35	2.05	1.83	1		700	86,043	34,043	17,992	7	8	17	91,528	25,083	39,524	17,759	700	1.58	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	11.65	8.19	6.77	5.51	4.45	3.23	2.01	1.15	1		700	258,024	49,898	18,271	7	8	17	218,991	66,102	45,952	18,508	700	0.94	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	13.70	9.57	7.20	5.51	4.33	2.87	1.65	1.55	1		700	194,518	35,199	21,685	7	8	17	177,599	39,493	33,822	21,750	700	1.49	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.25	13.50	10.39	7.44	5.16	2.87	1.54	1.64	1		700	160,565	17,383	22,353	7	8	17	181,289	10,277	21,680	22,108	700	1.15	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.18	12.28	10.28	7.83	5.79	3.54	1.65	1.27	1		700	333,054	15,904	20,549	7	8	17	259,220	32,212	13,051	20,735	700	0.80	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.48	11.97	9.13	6.42	4.57	2.52	1.18	1.65	1		700	193,050	18,065	27,592	7	8	17	148,589	30,603	15,266	27,780	700	0.51	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.94	5.04	4.45	3.74	2.99	2.20	1.38	1.43	1		700	1,090,326	59,840	30,590	7.25	4	18	1,346,790	5,995	500,000	26,275	700	1.20	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.83	4.88	4.25	3.58	2.80	1.93	1.06	1.17	1		700	1,260,876	41,466	38,806	7.25	4	18	1,356,725	6,611	199,038	34,463	700	1.14	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.63	4.88	4.29	3.58	2.87	1.97	0.98	0.84	1		700	1,657,641	29,092	41,811	7.25	4	18	1,568,644	22,264	36,684	36,635	700	0.76	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.24	8.94	7.99	6.73	5.39	3.50	1.54	0.49	1		700	1,082,335	9,892	28,065	7.25	4	18	1,027,286	5,000	13,901	24,193	700	1.17	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.72	8.54	7.68	6.42	5.16	3.43	1.50	0.66	1		700	1,175,166	10,128	29,075	7.25	4	18	1,129,830	5,736	13,086	25,340	700	1.05	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.51	9.13	8.19	6.81	5.35	3.50	1.54	0.88	1		700	987,099	10,506	27,483	7.25	4	18	932,555	5,000	14,415	23,946	700	1.93	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.83	5.04	4.53	3.94	3.15	2.36	1.42	1.49	1		700	1,487,591	48,872	29,393	7.25	4	18	1,671,971	5,556	370,443	25,633	700	1.41	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.54	5.75	5.24	4.69	3.94	2.87	1.65	0.98	1		700	1,978,540	27,426	25,726	7.25	4	18	1,896,910	14,717	41,620	22,287	700	1.00	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.20	8.78	7.83	6.61	5.28	3.58	1.77	0.77	1		700	963,960	14,550	23,283	7.25	4	18	943,794	5,178	25,874	20,449	700	0.75	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	11.18	9.45	8.27	6.93	5.35	3.46	1.54	1.15	1		700	818,453	11,706	26,342	7.25	4	18	692,625	36,778	11,657	23,124	700	1.06	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.28	8.70	7.68	6.34	4.96	3.15	1.42	0.60	1		700	865,038	12,869	28,286	7.25	4	18	851,094	5,000	21,274	24,987	700	0.86	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.98	5.04	4.29	3.43	2.68	1.77	1.02	1.59	1		700	934,687	44,751	39,494	7.25	4	18	1,159,330	5,000	500,000	34,950	700	1.32	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.06	7.24	6.18	5.20	4.06	2.83	1.69	1.34	1		700	584,979	36,833	23,881	7.25	4	18	652,362	7,739	107,672	20,806	700	1.41	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.14	5.16	4.53	3.82	2.99	2.09	1.18	1.20	1		700	1,157,210	40,467	34,099	7.25	4	18	1,291,292	5,162	293,692	30,322	700	1.12	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.50	5.43	4.76	3.94	3.11	2.17	1.34	1.73	1		700	915,495	48,889	30,949	7.25	4	18	1,207,018	5,000	500,000	26,463	700	1.67	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	12.99	10.67	8.94	6.93	5.08	2.80	1.06	0.68	1		700	484,986	10,365	32,851	7.25	4	18	475,459	9,274	11,247	28,513	700	1.88	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.47	8.58	7.32	5.47	4.06	2.32	0.94	1.12	1		700	572,993	14,280	37,543	7.25	4	18	591,545	5,000	24,203	33,662	700	1.59	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.51	8.27	6.73	5.08	3.82	2.40	1.30	0.98	1		700	387,217	25,588	29,059	7.25	4	18	433,984	5,492	74,228	25,823	700	0.63	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	11.77	8.94	7.32	5.51	4.09	2.60	1.38	0.79	1		700	336,552	23,693	27,325	7.25	4	18	340,574	12,493	32,491	24,173	700	0.59	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.35	6.57	5.55	4.49	3.43	2.24	1.26	1.04	1		700	587,136	32,981	30,644	7.25	4	18	652,303	6,585	105,703	27,092	700	1.10	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.19	6.61	5.63	4.41	3.39	2.28	1.34	1.46	1		700	552,079	36,837	29,274	7.25	4	18	687,264	5,000	252,112	25,606	700	1.30	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.40	6.18	5.39	4.45	3.54	2.40	1.34	0.58	1		700	976,105	34,626	31,638	7.25	4	18	1,073,416	5,068	195,009	28,128	700	0.50	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.07	6.57	5.67	4.72	3.74	2.48	1.30	1.08	1		700	918,277	28,505	32,006	7.25	4	18	721,916	79,163	28,264	28,426	700	0.84	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.32	6.22	5.51	4.72	3.78	2.76	1.65	1.20	1		700	1,064,264	42,346	26,003	7.25	4	18	1,215,771	5,095	291,473	22,705	700	1.10	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.65	8.03	7.01	5.67	4.29	2.52	0.98	0.71	1		700	873,758	12,666	40,486	7.25	4	18	870,018	5,000	19,142	35,939	700	0.82	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.46	7.24	6.46	5.47	4.29	2.80	1.18	1.05	1		700	1,316,043	12,428	37,211	7.25	4	18	1,087,851	65,278	11,853	32,610	700	0.97	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.37	7.76	6.69	5.43	4.09	2.48	0.98	1.10	1		700	888,792	13,815	40,304	7.25	4	18	732,901	48,722	13,336	35,502	700	0.93	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.70	7.48	6.65	5.71	4.45	3.15	1.65	1.55	1		700	1,093,760	21,970	25,730	7.25	4	18	1,102,429	5,000	66,527	22,670	700	1.64	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.20	8.54	7.40	6.02	4.57	2.64	0.94	0.71	1		700	868,931	10,553	42,364	7.25	4	18	836,335	7,181	12,614	37,344	700	0.72	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	11.10	8.78	7.32	5.87	4.49	2.87	1.46	1.17	1		700	524,831	21,900	27,535	7.25	4	18	428,522	43,185	22,335	24,462	700	0.78	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.03	6.18	5.12	3.94	2.83	1.81	0.94	1.48	1		700	560,987	34,096	42,034	7.25	4	18	594,689	11,332	61,043	37,255	700	1.37	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.17	7.32	6.14	4.84	3.66	2.36	1.30	0.95	1		700	553,306	30,215	31,404	7.25	4	18	632,324	5,000	148,304	28,065	700	1.19	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.81	5.75	5.04	4.21	3.31	2.24	1.18	0.91	1		700	1,192,064	30,681	35,363	7.25	4	18	1,235,321	5,802	113,262	31,419	700	0.89	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.40	6.18	5.39	4.37	3.46	2.24	1.14	0.21	1		700	1,026,132	26,786	35,993	7.25	4	18	1,057,068	5,675	81,749	32,039	700	0.21	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.01	5.87	5.12	4.21	3.31	2.24	1.22	0.80	1		700	1,017,115	33,849	33,792	7.25	4	18	1,103,755	5,132	182,345	30,156	700	0.71	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.62	7.09	6.06	4.88	3.82	2.48	1.30	0.44	1		700	754,994	26,645	31,258	7.25	4	18	772,872	8,165	52,354	27,582	700	0.42	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	11.65	9.13	7.68	6.10	4.65	2.80	1.18	1.92	1		700	592,185	14,509	32,270	7.25	4	18	344,460	108,901	12,756	29,137	700	0.56	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.80	7.52	6.14	4.69	3.50	2.17	1.14	0.52	1		700	449,084	28,051	34,457	7.25	4	18	454,725	14,233	39,023	30,505	700	0.49	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.46	6.77	5.75	4.65	3.58	2.36	1.38	1.24	1		700	604,642	35,738	29,800	7.25	4	18	731,284	5,000	228,484	26,430	700	1.41	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.60	6.30	5.55	4.53	3.58	2.48	1.42	0.84	1		700	854,476	36,196	28,947	7.25	4	18	964,824	5,002	215,105	25,637	700	0.66	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.73	5.59	4.76	3.86	2.95	1.89	0.91	0.96	1		700	1,045,042	27,312	43,559	7.25	4	18	988,891	21,727	33,034	38,410	700	0.87	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.36	5.67	4.72	3.74	2.83	1.85	0.98	1.09	1		700	660,406	38,136	40,037	7.25	4	18	578,321	48,686	41,164	35,569	700	0.83	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.30	4.96	4.09	3.27	2.44	1.61	0.94	1.64	1		700	685,353	51,426	43,298	7.25	4	18	850,026	6,831	342,206	38,483	700	1.18	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.34	5.00	4.13	3.23	2.44	1.57	0.94	1.90	1		700	653,492	51,408	43,541	7.25	4	18	850,026	6,831	342,206	38,483	700	1.20	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.44	6.30	5.47	4.53	3.62	2.64	1.61	1.30	1		700	816,885	46,530	25,967	7.25	4	18	981,081	5,541	314,361	22,516	700	0.86	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.05	5.71	4.76	3.82	2.95	1.93	1.14	1.55	1		700	689,287	43,789	36,089	7.25	4	18	877,552	5,000	403,661	32,373	700	1.07	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.76	6.38	5.55	4.45	3.50	2.44	1.42	0.99	1		700	740,560	39,180	29,095	7.25	4	18	847,948	5,699	209,003	25,605	700	0.66	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.31	8.07	6.65	5.04	3.82	2.32	1.14	0.81	1		700	479,472	22,355	33,174	7.25	4	18	436,859	23,635	24,909	29,409	700	0.43	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.90	7.20	6.14	4.84	3.78	2.44	1.22	0.81	1		700	697,101	24,534	32,064	7.25	4	18	610,036	36,447	26,154	28,389	700	0.43	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	12.56	9.57	7.68	5.67	4.06	2.36	1.10	1.29	1		700	350,710	18,373	33,625	7.25	4	18	319,653	19,290	20,200	29,864	700	0.94	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.42	5.08	4.33	3.39	2.48	1.50	0.71	1.02	1		700	898,475	30,963	54,139	7.25	4	18	923,908	9,604	57,396	48,300	700	1.00	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.97	5.75	4.88	3.78	2.83	1.77	0.87	1.14	1		700	840,802	28,967	44,731	7.25	4	18	902,111	5,006	129,098	40,479	700	0.96	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.70	6.85	5.79	4.53	3.43	2.13	0.94	1.72	1		700	724,873	21,259	39,835	7.25	4	18	487,962	99,797	19,690	35,667	700	0.80	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.13	6.14	5.59	4.80	3.90	2.80	1.61	1.04	1		700	1,336,992	32,023	25,921	7.25	4	18	1,307,481	45,555	30,049	23,446	700	1.74	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.62	6.81	5.87	4.76	3.70	2.48	1.42	0.92	1		700	616,177	34,073	28,234	7.25	4	18	670,581	7,903	89,233	24,801	700	1.02	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.05	5.47	4.49	3.62	2.80	1.85	1.06	1.07	1		700	637,044	46,734	38,166	7.25	4	18	646,837	24,025	65,967	33,614	700	1.17	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.13	5.43	4.45	3.39	2.56	1.69	0.98	1.03	1		700	511,968	48,353	40,674	7.25	4	18	608,629	9,371	160,455	35,872	700	0.45	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.61	5.20	4.33	3.46	2.72	1.85	1.06	0.64	1		700	700,168	50,451	37,966	7.25	4	18	706,345	26,949	70,236	33,401	700	0.61	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.48	5.87	5.04	4.06	3.15	2.17	1.22	0.90	1		700	685,123	41,258	32,749	7.25	4	18	657,643	30,560	51,048	28,879	700	0.85	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.66	6.77	5.63	4.53	3.50	2.36	1.26	1.44	1		700	586,635	33,030	31,093	7.25	4	18	465,503	67,286	33,045	27,740	700	0.88	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	19.67	15.30	12.31	9.03	6.85	4.18	2.04	1.49	1		700	341,551	15,203	16,924	6	6	18	256,321	28,663	12,933	17,083	700	1.00	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	17.94	14.23	11.75	8.83	6.76	4.20	2.12	0.69	1		700	412,429	16,548	16,628	6	6	18	351,593	24,564	14,826	16,705	700	0.47	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	15.84	11.97	9.37	6.53	4.87	2.99	1.55	1.34	1		700	306,206	22,380	22,629	6	6	18	290,364	23,011	22,136	22,587	700	1.34	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	16.77	12.48	9.45	6.23	4.47	2.55	1.27	1.81	1		700	256,172	20,001	26,727	6	6	18	253,008	18,599	20,475	26,614	700	1.80	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	20.60	15.21	11.40	7.57	5.31	3.06	1.48	1.96	1		700	206,458	16,127	22,516	6	6	18	190,250	17,804	15,606	22,502	700	1.93	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	16.75	12.56	9.71	6.86	5.13	3.33	1.91	1.75	1		700	236,469	25,454	19,256	6	6	18	290,087	12,236	37,196	18,898	700	0.91	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.26	9.74	7.29	5.02	3.62	2.02	0.97	1.85	1		700	361,045	24,358	34,548	6	6	18	288,401	36,514	21,739	34,731	700	1.42	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	14.61	10.51	7.93	5.55	4.15	2.58	1.35	1.54	1		700	274,272	27,419	25,959	6	6	18	235,386	34,210	25,430	26,041	700	1.37	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.97	10.36	8.69	6.65	5.24	3.32	1.89	1.03	1		700	538,193	26,989	19,448	6	6	18	624,980	11,374	42,091	19,220	700	0.71	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.93	10.69	9.08	6.90	5.32	3.12	1.38	0.60	1		700	792,425	15,879	24,951	6	6	18	694,425	25,771	14,199	25,000	700	0.49	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.89	9.84	8.37	6.48	5.01	2.99	1.25	1.10	1		700	972,494	15,668	27,615	6	6	18	682,739	55,199	12,196	28,157	700	0.44	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	10.73	8.86	7.50	5.81	4.53	2.78	1.34	0.48	1		700	923,986	22,435	26,475	6	6	18	805,707	35,207	20,071	26,544	700	0.33	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	9.24	7.73	6.69	5.33	4.22	2.68	1.34	0.18	1		700	1,224,504	26,034	27,126	6	6	18	1,141,018	32,604	24,351	27,159	700	0.16	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.91	10.37	9.08	7.35	5.72	3.60	1.52	0.68	1		700	1,255,134	12,868	23,919	6	6	18	1,166,258	18,414	11,876	23,895	700	0.67	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	14.01	11.25	9.50	7.39	5.73	3.53	1.58	1.65	1		700	748,479	16,074	21,951	6	6	18	430,511	66,981	11,909	22,564	700	0.33	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	16.86	12.35	9.95	7.32	5.58	3.34	1.73	1.39	1		700	339,712	20,553	20,387	6	6	18	245,699	38,117	17,365	20,615	700	0.64	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.40	10.20	8.28	6.13	4.71	2.92	1.64	0.84	1		700	411,552	28,067	22,383	6	6	18	434,734	21,110	31,137	22,227	700	0.73	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.70	10.11	8.31	6.36	5.04	3.35	1.92	0.63	1		700	492,526	30,888	19,237	6	6	18	511,885	23,858	34,010	19,100	700	0.55	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.98	9.38	7.63	5.71	4.48	2.94	1.64	0.70	1		700	481,749	32,339	22,202	6	6	18	478,227	29,432	33,346	22,110	700	0.69	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.53	8.54	6.66	4.82	3.71	2.41	1.37	0.87	1		700	363,106	37,704	26,749	6	6	18	372,552	32,053	39,938	26,566	700	0.81	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.66	8.90	7.13	5.20	3.96	2.52	1.41	0.71	1		700	436,584	33,117	25,940	6	6	18	463,193	24,239	37,483	25,702	700	0.49	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.85	8.55	6.61	4.62	3.49	2.10	1.10	1.26	1		700	371,895	32,070	31,967	6	6	18	314,682	42,305	29,297	32,086	700	1.00	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.28	8.27	6.44	4.54	3.42	2.10	1.10	1.11	1		700	405,240	33,298	31,983	6	6	18	355,889	41,072	31,004	32,053	700	0.95	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	10.16	7.56	6.03	4.37	3.32	2.10	1.19	0.72	1		700	450,521	39,858	30,563	6	6	18	488,185	28,721	45,259	30,268	700	0.43	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	9.24	6.97	5.58	3.99	3.03	1.92	1.10	1.24	1		700	498,924	43,557	33,547	6	6	18	591,584	22,279	60,175	33,024	700	0.53	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	9.92	7.35	5.68	3.97	3.02	1.88	1.07	1.54	1		700	399,989	42,051	34,194	6	6	18	468,972	24,686	53,157	33,714	700	1.07	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.94	9.38	7.70	5.77	4.50	2.94	1.73	1.22	1		700	465,807	33,765	21,474	6	6	18	572,502	13,148	57,591	21,092	700	0.45	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.47	10.11	8.51	6.68	5.33	3.58	2.10	0.69	1		700	572,208	30,752	17,513	6	6	18	642,620	15,507	42,645	17,266	700	0.35	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.71	10.80	8.91	6.78	5.36	3.59	2.14	1.01	1		700	404,804	30,924	17,284	6	6	18	486,302	14,297	45,389	17,003	700	0.44	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.61	9.33	7.81	5.98	4.66	2.94	1.58	0.31	1		700	655,021	27,128	22,888	6	6	18	654,323	23,367	28,502	22,796	700	0.29	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.56	9.74	7.89	5.85	4.54	2.93	1.69	1.04	1		700	419,174	31,563	21,679	6	6	18	483,415	16,895	42,178	21,381	700	0.59	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	15.63	12.33	10.08	7.59	6.01	3.99	2.31	0.87	1		700	361,498	25,852	15,856	6	6	18	395,705	16,764	30,963	15,686	700	0.67	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	16.00	12.58	10.56	8.23	6.55	4.28	2.30	0.98	1		700	469,213	21,445	15,555	6	6	18	350,400	43,329	17,506	15,791	700	0.27	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.52	10.84	9.11	7.10	5.58	3.53	1.76	1.12	1		700	665,880	20,462	20,045	6	6	18	462,720	52,951	16,278	20,362	700	0.30	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.56	10.54	8.58	6.26	4.62	2.82	1.41	0.84	1		700	470,781	22,367	24,717	6	6	18	426,614	27,021	21,141	24,729	700	0.78	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.85	9.99	8.12	5.84	4.25	2.40	1.10	0.76	1		700	539,045	20,053	30,418	6	6	18	466,993	28,357	18,357	30,455	700	0.54	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.51	9.36	7.78	5.88	4.45	2.55	1.01	1.54	1		700	887,110	16,209	32,522	6	6	18	581,419	59,071	12,643	33,174	700	0.69	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.19	10.01	8.36	6.21	4.52	2.59	1.03	1.39	1		700	771,285	15,843	31,631	6	6	18	639,188	30,651	13,790	31,722	700	1.24	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	10.34	8.27	6.85	5.04	3.65	2.02	0.81	1.04	1		700	842,468	19,645	39,755	6	6	18	676,276	39,448	16,980	39,883	700	0.69	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	10.16	7.99	6.48	4.67	3.38	1.82	0.76	0.97	1		700	762,230	22,095	42,678	6	6	18	622,143	38,672	19,555	42,729	700	0.58	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.68	9.04	7.26	5.22	3.81	2.05	0.86	1.47	1		700	644,312	19,793	37,725	6	6	18	465,032	44,801	16,661	38,009	700	0.64	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.10	8.95	7.43	5.51	4.19	2.39	1.00	1.43	1		700	842,678	18,872	33,436	6	6	18	597,145	53,151	15,222	33,904	700	0.79	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.86	10.14	7.90	5.54	4.20	2.64	1.35	1.75	1		700	329,353	27,305	25,770	6	6	18	265,896	39,547	24,297	25,941	700	1.43	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	10.09	8.15	6.79	5.08	3.93	2.41	1.22	0.64	1		700	771,938	28,003	28,912	6	6	18	725,234	30,907	27,191	28,873	700	0.63	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	14.11	12.11	10.49	8.32	6.60	3.99	1.68	0.54	1		700	970,802	11,347	21,066	6	6	18	844,239	23,709	9,767	21,144	700	0.45	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.54	9.79	8.48	6.77	5.36	3.27	1.31	0.98	1		700	1,253,200	12,918	27,015	6	6	18	841,850	67,534	9,522	27,911	700	0.31	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.22	9.08	7.70	6.04	4.75	2.95	1.34	1.62	1		700	967,028	19,664	25,840	6	6	18	547,554	87,309	14,339	26,621	700	0.31	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.46	9.34	7.98	6.24	4.92	3.19	1.57	1.12	1		700	873,802	22,673	22,462	6	6	18	603,675	62,996	17,992	22,795	700	0.47	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	10.04	8.03	6.57	5.31	4.09	2.76	1.50	1.33	1		700	438,898	28,380	27,768	8	9	16	428,011	24,180	37,074	24,283	700	1.26	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	8.23	6.89	6.02	5.24	4.25	3.03	1.69	1.19	1		700	883,620	28,681	25,343	8	9	16	749,992	46,652	26,063	22,430	700	1.05	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	12.52	10.51	9.17	7.68	6.14	4.25	2.28	0.73	1		700	525,314	17,549	18,518	8	9	16	512,801	13,827	25,084	16,074	700	0.70	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	14.88	12.24	10.55	8.66	6.93	4.61	2.48	0.44	1		700	383,435	15,515	16,713	8	9	16	388,402	9,927	26,792	14,488	700	0.44	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	14.17	11.42	9.69	7.76	6.02	3.94	2.05	0.62	1		700	354,557	16,843	20,077	8	9	16	350,186	13,110	23,673	17,516	700	0.56	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	12.95	9.76	7.80	6.06	4.53	2.83	1.57	1.20	1		700	259,889	23,886	25,967	8	9	16	280,746	14,235	43,983	22,575	700	1.07	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	17.20	13.70	11.30	8.98	6.81	4.41	2.28	1.09	1		700	257,073	14,683	17,768	8	9	16	255,246	11,465	20,416	15,526	700	1.03	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	15.39	13.27	11.50	10.00	8.31	5.98	3.27	1.29	1		700	529,859	13,491	13,154	8	9	16	416,203	31,628	10,313	11,804	700	0.99	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	11.30	9.57	8.35	7.20	5.94	4.33	2.48	1.01	1		700	627,549	22,467	17,022	8	9	16	533,725	35,303	20,714	15,027	700	0.80	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	16.81	13.66	11.46	9.65	7.68	5.12	2.52	1.82	1		700	370,229	12,081	16,298	8	9	16	264,026	31,604	8,559	14,936	700	1.13	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	12.32	9.49	7.95	6.30	4.88	3.19	1.57	1.57	1		700	382,297	19,890	25,398	8	9	16	294,214	36,474	16,277	22,948	700	0.59	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	8.15	6.81	5.94	5.12	4.25	3.19	1.81	1.61	1		700	863,618	33,640	23,275	8	9	16	607,179	88,778	22,583	21,209	700	0.91	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	13.31	10.59	8.70	6.69	5.04	3.31	1.61	1.90	1		700	322,937	18,205	24,495	8	9	16	293,829	20,320	19,456	21,651	700	1.70	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	13.35	9.84	8.03	6.26	4.80	3.35	1.93	1.02	1		700	234,605	28,331	21,322	8	9	16	230,384	24,516	36,180	18,656	700	0.88	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	12.60	9.69	7.76	6.22	4.92	3.66	2.28	1.74	1		700	235,858	36,026	18,384	8	9	16	261,235	21,046	70,710	15,631	700	1.44	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	11.18	8.11	6.30	4.96	3.86	2.87	1.77	1.92	1		700	215,946	44,551	23,748	8	9	16	233,571	29,596	74,097	20,392	700	1.62	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	12.01	10.04	8.78	7.32	5.87	3.86	1.89	0.55	1		700	589,396	14,165	22,205	8	9	16	544,785	16,283	15,457	19,439	700	0.50	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	14.49	11.57	9.96	8.31	6.50	4.17	2.01	1.35	1		700	424,551	13,021	20,297	8	9	16	339,302	25,885	10,653	18,254	700	1.05	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	13.46	10.67	9.13	7.48	5.79	3.74	1.93	0.93	1		700	386,285	16,815	20,964	8	9	16	362,944	16,845	19,552	18,399	700	0.92	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	9.69	8.03	7.01	6.06	4.92	3.58	2.01	1.40	1		700	701,651	25,984	20,805	8	9	16	542,734	54,618	20,250	18,680	700	1.03	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	16.02	12.24	10.47	7.95	5.98	3.66	1.77	0.72	1		700	269,062	14,208	22,038	8	9	16	258,375	12,966	17,193	19,372	700	0.66	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	17.28	14.33	12.13	9.69	7.36	4.69	2.36	1.26	1		700	296,177	12,080	17,176	8	9	16	327,900	3,926	89,134	15,060	700	0.95	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	14.06	11.65	9.84	7.72	5.87	3.78	2.05	1.84	1		700	325,104	17,344	20,160	8	9	16	387,099	4,521	279,361	17,539	700	1.07	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	13.54	11.26	9.69	7.76	6.02	4.02	2.28	1.63	1		700	361,237	19,290	18,393	8	9	16	439,166	4,535	382,473	15,735	700	0.76	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.36	6.83	5.60	4.36	3.50	2.24	1.18	1.92	1		700	447,564	37,361	29,673	7.25	4.5	18	288,687	116,138	29,719	30,203	700	0.64	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.99	6.62	5.28	3.96	3.10	1.91	1.05	1.05	1		700	380,786	39,139	33,173	7.25	4.5	18	365,757	39,562	38,634	33,070	700	1.05	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.31	6.84	5.59	4.12	3.22	2.05	1.08	0.79	1		700	389,545	37,880	32,295	7.25	4.5	18	346,229	51,358	34,833	32,365	700	0.65	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.38	6.81	5.44	4.07	3.01	1.94	1.04	0.74	1		700	345,913	39,126	33,723	7.25	4.5	18	347,928	32,988	40,615	33,533	700	0.70	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.62	6.35	5.09	3.94	3.13	2.12	1.23	0.67	1		700	367,558	51,932	29,328	7.25	4.5	18	364,799	46,777	52,257	29,130	700	0.65	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.92	7.30	5.81	4.41	3.47	2.26	1.20	1.26	1		700	351,108	37,861	29,003	7.25	4.5	18	292,345	62,541	33,145	29,199	700	0.94	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.57	7.71	6.18	4.64	3.59	2.23	1.18	0.88	1		700	338,479	32,701	29,474	7.25	4.5	18	289,535	50,222	29,331	29,618	700	0.56	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.62	6.31	5.00	3.78	2.97	1.88	1.00	1.28	1		700	406,481	42,026	34,740	7.25	4.5	18	333,428	71,495	36,853	34,961	700	0.92	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.37	7.47	5.98	4.54	3.51	2.23	1.17	1.25	1		700	340,958	34,450	29,585	7.25	4.5	18	265,305	67,760	29,411	29,881	700	0.47	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.63	6.12	4.86	3.69	2.90	1.88	1.05	0.84	1		700	351,242	48,980	33,754	7.25	4.5	18	307,836	65,998	44,699	33,808	700	0.66	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.36	7.81	6.42	5.01	4.01	2.62	1.42	1.05	1		700	393,139	34,626	24,661	7.25	4.5	18	317,814	67,101	29,177	24,930	700	0.56	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.75	9.16	7.62	6.18	5.06	3.54	2.01	1.06	1		700	382,877	34,147	17,731	7.25	4.5	18	302,127	69,262	28,437	17,919	700	0.70	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.31	6.86	5.56	4.28	3.33	2.11	1.09	1.39	1		700	428,430	35,766	31,573	7.25	4.5	18	318,851	82,915	29,776	31,970	700	0.51	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.67	7.35	5.96	4.57	3.70	2.35	1.20	1.91	1		700	464,430	32,298	28,831	7.25	4.5	18	324,540	90,477	26,274	29,266	700	1.22	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.39	7.10	5.86	4.70	3.78	2.62	1.52	0.65	1		700	405,084	46,205	23,594	7.25	4.5	18	358,075	64,031	41,455	23,652	700	0.52	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.60	7.98	6.46	4.96	3.89	2.44	1.25	1.33	1		700	400,146	29,458	27,620	7.25	4.5	18	307,791	64,814	24,912	27,918	700	0.74	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.07	8.27	6.71	5.09	4.02	2.57	1.35	1.15	1		700	354,543	30,512	25,575	7.25	4.5	18	287,687	55,498	26,540	25,761	700	0.72	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.60	7.99	6.64	5.22	4.19	2.78	1.51	1.15	1		700	404,389	33,718	23,226	7.25	4.5	18	301,910	79,095	27,671	23,534	700	0.34	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.83	7.31	5.87	4.51	3.60	2.40	1.35	0.85	1		700	346,343	41,454	26,314	7.25	4.5	18	319,058	48,984	38,909	26,297	700	0.81	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.59	7.03	5.68	4.52	3.58	2.48	1.45	0.80	1		700	336,686	48,328	24,875	7.25	4.5	18	307,662	58,424	44,713	24,864	700	0.75	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.31	7.36	5.75	4.39	3.39	2.14	1.16	1.24	1		700	304,359	37,214	29,881	7.25	4.5	18	257,126	57,151	33,122	30,041	700	0.97	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.02	7.32	5.85	4.47	3.45	2.18	1.14	1.21	1		700	359,586	34,376	29,995	7.25	4.5	18	289,264	64,208	29,523	30,282	700	0.65	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.79	6.41	5.12	4.01	3.14	2.03	1.12	1.23	1		700	397,935	44,039	31,374	7.25	4.5	18	329,473	72,061	38,731	31,541	700	0.96	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.13	6.71	5.35	4.16	3.26	2.12	1.15	1.19	1		700	385,610	41,412	30,191	7.25	4.5	18	316,704	71,182	35,929	30,410	700	0.83	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.06	7.14	5.82	4.46	3.55	2.31	1.23	1.77	1		700	347,729	38,575	28,167	7.25	4.5	18	243,121	99,167	30,917	28,670	700	0.42	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.39	6.76	5.47	4.18	3.30	2.16	1.24	0.68	1		700	336,580	45,040	28,776	7.25	4.5	18	313,630	50,887	42,706	28,727	700	0.65	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.85	8.20	6.71	5.32	4.31	2.99	1.72	0.72	1		700	335,773	40,191	20,752	7.25	4.5	18	299,407	54,132	36,216	20,804	700	0.62	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	12.85	9.74	8.06	6.52	5.37	3.76	2.06	1.92	1		700	327,433	31,849	16,945	7.25	4.5	18	218,722	101,243	23,900	17,384	700	0.90	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.91	6.69	5.48	4.37	3.44	2.33	1.34	0.74	1		700	416,147	46,051	26,624	7.25	4.5	18	385,185	54,226	43,151	26,597	700	0.71	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.26	7.80	6.39	5.01	3.98	2.59	1.31	1.82	1		700	451,417	30,172	26,127	7.25	4.5	18	303,314	97,150	23,697	26,660	700	0.79	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.12	8.47	6.73	5.16	4.07	2.74	1.46	1.62	1		700	335,619	33,112	23,928	7.25	4.5	18	286,076	49,987	29,771	24,007	700	1.49	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.72	8.06	6.53	5.19	4.18	2.88	1.60	1.29	1		700	349,944	38,356	21,982	7.25	4.5	18	276,461	73,446	32,304	22,202	700	0.88	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.01	7.29	5.91	4.54	3.60	2.36	1.23	1.87	1		700	374,218	36,174	27,925	7.25	4.5	18	261,280	96,503	28,897	28,438	700	0.80	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.43	8.70	7.12	5.51	4.40	2.99	1.66	0.75	1		700	331,935	33,724	21,202	7.25	4.5	18	300,766	43,030	31,092	21,227	700	0.69	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.18	7.93	6.54	5.15	4.06	2.68	1.47	0.55	1		700	429,183	33,403	23,985	7.25	4.5	18	404,805	37,295	32,002	23,956	700	0.54	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.82	7.61	6.24	4.84	3.95	2.73	1.64	1.25	1		700	353,211	45,938	22,137	7.25	4.5	18	414,953	19,048	64,230	21,695	700	0.78	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.20	7.62	5.97	4.48	3.45	2.18	1.18	1.06	1		700	327,573	34,957	29,468	7.25	4.5	18	323,391	31,651	35,536	29,336	700	1.06	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.95	7.20	5.84	4.47	3.51	2.28	1.25	0.91	1		700	348,192	38,811	28,108	7.25	4.5	18	285,103	66,124	33,773	28,306	700	0.35	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.65	6.24	4.92	3.70	2.86	1.87	1.01	0.84	1		700	359,417	45,526	34,430	7.25	4.5	18	323,826	57,545	42,213	34,459	700	0.72	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.22	6.07	4.90	3.69	2.88	1.90	1.04	0.56	1		700	409,851	46,387	33,591	7.25	4.5	18	388,030	49,974	44,728	33,512	700	0.56	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.60	7.16	5.72	4.36	3.42	2.27	1.30	0.83	1		700	334,432	42,597	27,339	7.25	4.5	18	350,504	30,357	46,478	27,070	700	0.68	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.73	7.64	6.03	4.48	3.53	2.22	1.15	1.76	1		700	305,935	34,075	29,627	7.25	4.5	18	233,768	70,264	28,613	30,012	700	1.04	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.50	7.80	6.42	5.04	4.02	2.68	1.48	0.93	1		700	363,657	36,722	23,631	7.25	4.5	18	291,871	68,393	31,247	23,846	700	0.37	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	10.72	7.94	6.69	5.29	4.09	2.43	1.26	1.91	1		700	449,150	26,489	27,593	7.5	4.5	18	333,753	65,032	22,710	27,835	700	1.71	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.80	7.30	6.07	4.74	3.79	2.50	1.46	0.89	1		700	383,740	41,813	24,966	7.5	4.5	18	361,874	36,879	42,138	24,887	700	0.86	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.15	6.52	5.24	4.05	3.10	2.07	1.07	1.94	1		700	378,066	41,014	31,932	7.5	4.5	18	262,556	108,346	33,940	32,410	700	0.99	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.05	6.72	5.43	3.98	3.04	1.89	1.00	0.51	1		700	392,552	37,076	34,748	7.5	4.5	18	385,803	24,945	40,372	34,555	700	0.48	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.13	6.89	5.55	4.14	3.23	2.17	1.29	1.80	1		700	341,180	46,837	28,434	7.5	4.5	18	410,327	9,234	121,762	27,840	700	0.58	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	8.58	6.01	4.59	3.32	2.48	1.51	0.85	1.22	1		700	310,147	46,228	41,933	7.5	4.5	18	326,494	24,725	54,798	41,495	700	0.97	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	10.69	7.51	5.88	4.35	3.33	2.17	1.14	1.40	1		700	279,944	36,723	30,280	7.5	4.5	18	227,496	56,359	33,300	30,404	700	1.07	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.52	6.79	5.39	4.07	3.15	2.07	1.07	1.79	1		700	342,747	39,964	31,923	7.5	4.5	18	254,544	87,817	33,809	32,324	700	1.06	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.69	6.83	5.34	3.93	3.11	1.99	1.04	1.89	1		700	310,881	40,492	32,776	7.5	4.5	18	241,226	75,621	35,223	33,072	700	1.41	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.81	7.32	5.96	4.43	3.51	2.25	1.13	1.84	1		700	399,108	33,376	30,044	7.5	4.5	18	301,053	77,553	27,969	30,458	700	1.30	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.25	6.88	5.56	4.23	3.34	2.23	1.20	1.17	1		700	390,557	40,727	29,107	7.5	4.5	18	321,803	62,354	36,851	29,229	700	0.94	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.20	7.05	5.78	4.48	3.62	2.51	1.51	1.03	1		700	372,666	49,236	24,134	7.5	4.5	18	414,720	16,260	76,159	23,661	700	0.54	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.65	7.19	5.70	4.20	3.23	2.04	1.02	1.70	1		700	383,576	33,243	33,295	7.5	4.5	18	310,322	56,259	29,723	33,473	700	1.45	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.73	7.36	5.86	4.36	3.34	2.06	0.99	1.76	1		700	421,324	29,422	33,690	7.5	4.5	18	323,456	63,555	25,444	33,990	700	1.33	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.08	6.71	5.33	3.91	3.04	1.93	1.01	1.15	1		700	378,427	38,468	34,168	7.5	4.5	18	333,576	44,353	36,868	34,142	700	1.11	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.55	7.33	5.85	4.42	3.44	2.21	1.10	1.83	1		700	429,156	32,351	30,848	7.5	4.5	18	341,199	62,580	28,143	31,114	700	1.56	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.42	6.69	5.29	3.97	3.08	1.92	0.97	1.93	1		700	351293	35839	34653	7.5	4.5	18	253,946	89,550	29,678	35,163	700	0.88	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.23	7.37	5.91	4.49	3.47	2.20	1.15	1.09	1		700	325608	34083	29616	7.5	4.5	18	263,370	62,791	29,688	29,846	700	0.47	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	8.50	6.02	4.78	3.63	2.85	1.85	1.03	0.78	1		700	338838	48255	33862	7.5	4.5	18	302,678	62,547	44,688	33,886	700	0.65	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.26	7.74	6.36	4.96	3.97	2.59	1.41	0.91	1		700	374225	34294	24664	7.5	4.5	18	314,702	60,561	29,741	24,862	700	0.58	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	11.64	9.07	7.54	6.12	5.02	3.51	1.99	1.06	1		700	367101	33552	17767	7.5	4.5	18	295,723	66,983	28,365	17,943	700	0.74	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.19	6.77	5.48	4.22	3.29	2.08	1.08	1.23	1		700	407157	35415	31611	7.5	4.5	18	315,596	77,311	30,067	31,935	700	0.52	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.55	7.26	5.89	4.52	3.66	2.32	1.18	1.81	1		700	439479	31989	28853	7.5	4.5	18	320,435	85,363	26,495	29,224	700	1.25	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.29	7.02	5.80	4.65	3.74	2.59	1.51	0.57	1		700	387702	45638	23624	7.5	4.5	18	352,701	58,074	42,105	23,643	700	0.51	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.47	7.88	6.37	4.90	3.84	2.41	1.23	1.27	1		700	381565	28993	27720	7.5	4.5	18	300,768	62,442	24,819	27,981	700	0.76	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.99	8.21	6.66	5.06	3.99	2.55	1.34	1.05	1		700	337190	30182	25617	7.5	4.5	18	280,990	52,263	26,707	25,761	700	0.74	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.53	7.93	6.59	5.19	4.16	2.76	1.50	1.05	1		700	385317	33297	23254	7.5	4.5	18	297,905	74,716	27,853	23,521	700	0.36	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.75	7.25	5.82	4.47	3.57	2.38	1.34	0.85	1		700	331053	41072	26314	7.5	4.5	18	313,122	44,421	39,576	26,259	700	0.85	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.49	6.96	5.62	4.47	3.55	2.45	1.43	0.78	1		700	323631	47809	24884	7.5	4.5	18	304,572	52,577	45,589	24,831	700	0.77	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.25	7.31	5.72	4.36	3.37	2.13	1.15	1.18	1		700	292664	36705	29959	7.5	4.5	18	251,969	54,786	33,077	30,086	700	0.95	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.98	7.30	5.83	4.45	3.44	2.17	1.13	1.12	1		700	344400	33894	30090	7.5	4.5	18	284,338	60,900	29,566	30,327	700	0.66	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	8.70	6.34	5.08	3.97	3.11	2.00	1.11	1.12	1		700	380325	43561	31413	7.5	4.5	18	328,667	64,454	39,386	31,506	700	0.96	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.08	6.68	5.32	4.14	3.24	2.11	1.14	1.15	1		700	370209	40768	30293	7.5	4.5	18	309,813	68,663	35,811	30,483	700	0.84	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.96	7.07	5.76	4.41	3.51	2.28	1.22	1.63	1		700	333298	38070	28220	7.5	4.5	18	241,417	95,303	31,029	28,669	700	0.43	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.30	6.70	5.42	4.14	3.27	2.14	1.23	0.64	1		700	322284	44659	28780	7.5	4.5	18	309,794	45,244	43,723	28,678	700	0.63	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.77	8.14	6.66	5.27	4.27	2.96	1.71	0.68	1		700	322129	39667	20785	7.5	4.5	18	295,418	49,010	36,782	20,801	700	0.64	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	12.77	9.68	8.00	6.48	5.33	3.73	2.05	1.83	1		700	313559	31399	16968	7.5	4.5	18	216,836	98,369	24,019	17,377	700	0.90	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	8.84	6.64	5.45	4.33	3.42	2.32	1.33	0.67	1		700	398070	45490	26652	7.5	4.5	18	380,168	47,606	44,144	26,574	700	0.66	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.20	7.75	6.36	4.98	3.96	2.57	1.30	1.70	1		700	427960	29826	26161	7.5	4.5	18	299,565	92,873	23,844	26,636	700	0.79	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	11.01	8.39	6.67	5.11	4.03	2.71	1.44	1.56	1		700	319848	32760	23958	7.5	4.5	18	282,486	45,086	30,207	23,992	700	1.49	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.66	8.01	6.50	5.16	4.16	2.86	1.59	1.22	1		700	335597	37808	22029	7.5	4.5	18	273,175	69,279	32,464	22,217	700	0.89	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.95	7.25	5.87	4.51	3.58	2.35	1.22	1.80	1		700	358087	35655	28015	7.5	4.5	18	257,583	94,091	28,876	28,487	700	0.85	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	11.40	8.68	7.11	5.50	4.39	2.98	1.65	0.73	1		700	317632	33296	21225	7.5	4.5	18	295,575	38,807	31,547	21,215	700	0.71	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.12	7.88	6.50	5.12	4.03	2.66	1.46	0.55	1		700	409447	32924	24031	7.5	4.5	18	395,557	32,683	32,613	23,961	700	0.55	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.74	7.55	6.19	4.80	3.92	2.71	1.63	1.36	1		700	338709	45526	22115	7.5	4.5	18	404,231	15,717	71,412	21,641	700	0.81	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.14	7.58	5.94	4.45	3.43	2.17	1.17	1.11	1		700	314388	34442	29564	7.5	4.5	18	315,633	28,537	35,932	29,398	700	1.09	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.85	7.12	5.78	4.43	3.47	2.26	1.24	0.78	1		700	332441	38500	28093	7.5	4.5	18	281,617	61,188	34,234	28,235	700	0.35	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	8.58	6.18	4.88	3.68	2.84	1.85	1.00	0.79	1		700	345353	44943	34528	7.5	4.5	18	318,775	52,990	42,561	34,506	700	0.73	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	8.20	6.06	4.88	3.68	2.88	1.89	1.04	0.59	1		700	391000	46020	33580	7.5	4.5	18	380,494	44,231	45,882	33,435	700	0.59	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.57	7.14	5.70	4.35	3.41	2.26	1.30	0.94	1		700	320199	42157	27367	7.5	4.5	18	343,963	25,607	48,845	27,045	700	0.70	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.65	7.59	5.99	4.45	3.50	2.20	1.14	1.64	1		700	291724	33806	29642	7.5	4.5	18	230,457	66,150	28,968	29,946	700	1.07	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.47	7.78	6.40	5.02	4.00	2.67	1.48	0.84	1		700	347958	36229	23673	7.5	4.5	18	287,519	64,397	31,406	23,853	700	0.37	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.59	7.33	5.64	4.42	3.52	2.43	1.39	1.91	1		700	311,963	45,198	25,523	7.5	4.5	18	323,678	30,991	49,858	25,284	700	1.86	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	10.53	7.80	6.57	5.20	4.02	2.39	1.24	1.83	1		700	424,221	26,256	27,606	7.5	4.5	18	335,638	63,336	22,856	27,786	700	1.72	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.60	7.15	5.94	4.65	3.72	2.45	1.42	0.80	1		700	368,956	41,136	25,012	7.5	4.5	18	357,437	39,874	41,153	24,932	700	0.80	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	10.48	7.45	6.03	4.69	3.75	2.32	1.27	1.97	1		700	322,794	35,123	27,186	7.5	4.5	18	237,589	90,842	29,581	27,528	700	1.42	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.11	6.49	5.21	4.03	3.09	2.06	1.06	1.86	1		700	361,941	40,495	32,011	7.5	4.5	18	262,033	109,052	33,859	32,446	700	1.02	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	8.91	6.62	5.36	3.93	2.99	1.86	0.99	0.62	1		700	375,101	36,571	34,866	7.5	4.5	18	387,308	24,496	40,439	34,612	700	0.47	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	8.99	6.79	5.47	4.08	3.18	2.14	1.27	1.93	1		700	326,922	46,481	28,402	7.5	4.5	18	409,162	9,257	122,492	27,773	700	0.58	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	8.42	5.90	4.50	3.26	2.43	1.49	0.83	1.27	1		700	298,514	45,783	41,978	7.5	4.5	18	324,526	25,738	53,874	41,500	700	0.96	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	10.57	7.43	5.82	4.30	3.29	2.15	1.13	1.29	1		700	267,754	36,456	30,278	7.5	4.5	18	228,445	55,367	33,489	30,351	700	1.04	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.44	6.73	5.34	4.04	3.13	2.05	1.06	1.68	1		700	329,070	39,437	32,003	7.5	4.5	18	255,122	87,521	33,763	32,350	700	1.04	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.61	6.79	5.30	3.90	3.09	1.98	1.03	1.83	1		700	299,960	39,866	32,881	7.5	4.5	18	241,562	76,227	34,989	33,133	700	1.42	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.72	7.25	5.90	4.39	3.48	2.23	1.12	1.74	1		700	380,940	32,952	30,099	7.5	4.5	18	301,400	77,192	28,001	30,449	700	1.30	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.18	6.83	5.51	4.20	3.32	2.22	1.19	1.14	1		700	373,872	40,214	29,164	7.5	4.5	18	321,102	63,169	36,726	29,254	700	0.96	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.12	6.98	5.72	4.45	3.58	2.49	1.50	1.15	1		700	357,918	48,764	24,113	7.5	4.5	18	415,600	15,900	77,832	23,607	700	0.52	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.55	7.11	5.64	4.16	3.20	2.02	1.01	1.64	1		700	366,063	32,861	33,332	7.5	4.5	18	309,712	57,091	29,627	33,459	700	1.43	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.65	7.30	5.82	4.33	3.32	2.05	0.98	1.65	1		700	400,021	29,109	33,739	7.5	4.5	18	324,630	62,804	25,494	33,964	700	1.31	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	8.99	6.64	5.28	3.87	3.00	1.91	1.00	1.14	1		700	359,878	38,167	34,212	7.5	4.5	18	333,904	43,817	37,032	34,133	700	1.11	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.47	7.27	5.80	4.38	3.42	2.20	1.09	1.81	1		700	409,150	31,919	30,912	7.5	4.5	18	340,103	63,826	28,008	31,132	700	1.58	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.79	7.48	5.76	4.51	3.59	2.48	1.42	1.88	1		700	312,785	45,044	25,559	7.5	4.5	18	321,899	33,858	48,201	25,315	700	1.86	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	10.72	7.94	6.69	5.29	4.09	2.43	1.26	1.83	1		700	425,189	26,192	27,642	7.5	4.5	18	340,123	56,790	22,666	27,854	700	1.73	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.80	7.30	6.07	4.74	3.79	2.50	1.46	0.87	1		700	367,442	41,294	24,995	7.5	4.5	18	361,559	37,851	41,557	24,871	700	0.85	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	10.60	7.54	6.10	4.75	3.79	2.35	1.29	1.97	1		700	323,383	35,072	27,196	7.5	4.5	18	240,226	82,344	29,061	27,565	700	1.43	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.15	6.52	5.24	4.05	3.10	2.07	1.07	1.83	1		700	361,683	40,547	31,980	7.5	4.5	18	264,497	98,532	33,351	32,450	700	0.97	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.05	6.72	5.43	3.98	3.04	1.89	1.00	0.62	1		700	374,484	36,681	34,805	7.5	4.5	18	383,703	26,740	39,951	34,561	700	0.49	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.13	6.89	5.55	4.14	3.23	2.17	1.29	1.92	1		700	328,122	46,303	28,463	7.5	4.5	18	408,820	10,956	100,000	27,755	700	1.46	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	8.58	6.01	4.59	3.32	2.48	1.51	0.85	1.32	1		700	298,019	45,821	41,992	7.5	4.5	18	325,517	26,669	54,372	41,481	700	0.96	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	10.69	7.51	5.88	4.35	3.33	2.17	1.14	1.33	1		700	268,309	36,367	30,321	7.5	4.5	18	227,379	54,597	32,912	30,431	700	1.06	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.52	6.79	5.39	4.07	3.15	2.07	1.07	1.69	1		700	328,613	39,502	31,975	7.5	4.5	18	255,503	81,683	33,277	32,365	700	1.03	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.69	6.83	5.34	3.93	3.11	1.99	1.04	1.81	1		700	298,446	40,059	32,826	7.5	4.5	18	241,519	71,675	34,734	33,108	700	1.39	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.81	7.32	5.96	4.43	3.51	2.25	1.13	1.75	1		700	380,887	32,949	30,104	7.5	4.5	18	301,904	71,746	27,588	30,507	700	1.27	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.25	6.88	5.56	4.23	3.34	2.23	1.20	1.11	1		700	373,264	40,258	29,146	7.5	4.5	18	321,280	60,800	36,279	29,247	700	0.94	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.20	7.05	5.78	4.48	3.62	2.51	1.51	1.13	1		700	358,537	48,607	24,157	7.5	4.5	18	412,016	19,183	70,884	23,633	700	0.54	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.65	7.19	5.70	4.20	3.23	2.04	1.02	1.65	1		700	365,252	32,890	33,353	7.5	4.5	18	309,972	53,897	29,472	33,520	700	1.43	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.73	7.36	5.86	4.36	3.34	2.06	0.99	1.67	1		700	399,886	29,107	33,757	7.5	4.5	18	324,124	58,940	25,268	34,052	700	1.30	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.08	6.71	5.33	3.91	3.04	1.93	1.01	1.14	1		700	360,702	38,098	34,215	7.5	4.5	18	332,579	44,407	36,570	34,165	700	1.10	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.55	7.33	5.85	4.42	3.44	2.21	1.10	1.78	1		700	408,517	31,956	30,906	7.5	4.5	18	340,775	59,356	27,822	31,162	700	1.54	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	7.64	6.14	5.31	4.37	3.46	2.36	1.38	1.19	1		700	613,959	42,256	26,819	8	4	20	735,416	5,656	170,185	26,519	700	0.71	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.39	6.42	5.55	4.57	3.66	2.40	1.42	1.74	1		700	510,345	40,788	25,948	8	4	20	529,900	23,823	46,716	25,712	700	1.72	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.62	6.65	5.79	4.72	3.78	2.56	1.50	1.10	1		700	499,390	40,148	24,453	8	4	20	509,391	26,945	44,078	24,266	700	1.08	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.82	6.77	5.75	4.69	3.74	2.48	1.50	1.60	1		700	432,896	41,812	24,556	8	4	20	524,476	7,515	107,667	24,109	700	1.39	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	7.44	5.71	5.04	4.29	3.43	2.32	1.30	1.97	1		700	706,016	40,761	27,998	8	4	20	481,969	180,642	32,503	28,606	700	1.64	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.78	6.69	5.71	4.61	3.62	2.36	1.26	0.94	1		700	496,876	33,551	28,331	8	4	20	412,881	71,879	29,667	28,529	700	0.73	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.46	6.61	5.63	4.69	3.62	2.40	1.30	1.30	1		700	550,842	33,746	27,644	8	4	20	505,879	45,926	31,913	27,656	700	1.29	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.39	6.38	5.55	4.61	3.62	2.36	1.30	1.72	1		700	560,355	35,119	27,779	8	4	20	459,167	81,071	30,824	27,990	700	1.63	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	6.46	5.31	4.61	3.94	3.15	2.17	1.22	1.16	1		700	901,826	43,200	30,289	8	4	20	934,716	19,770	53,973	29,999	700	1.14	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	7.56	5.75	5.04	4.17	3.23	2.17	1.18	1.66	1		700	618,044	39,288	30,439	8	4	20	509,905	88,878	34,483	30,671	700	1.57	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.94	6.69	5.35	4.25	3.19	2.05	1.14	1.49	1		700	355,717	37,965	31,130	8	4	20	384,902	18,081	46,926	30,760	700	1.33	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.98	6.69	5.55	4.41	3.43	2.17	1.14	1.02	1		700	428,046	33,927	31,031	8	4	20	361,159	64,259	30,504	31,190	700	0.81	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.31	6.50	5.35	4.17	3.11	2.05	1.10	1.57	1		700	433,063	36,577	32,192	8	4	20	498,033	8,620	70,976	31,805	700	1.14	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	7.91	6.02	5.20	4.17	3.19	1.97	1.06	1.81	1		700	536,536	34,592	33,605	8	4	20	627,999	5,465	112,754	33,614	700	1.60	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	7.95	5.94	5.04	4.06	3.15	2.01	1.14	1.60	1		700	474,419	41,146	31,561	8	4	20	497,379	23,090	47,682	31,265	700	1.57	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.78	6.42	5.28	4.17	3.19	2.05	1.14	1.10	1		700	371,680	39,341	31,083	8	4	20	360,929	37,532	39,511	30,962	700	1.10	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	7.80	5.94	5.00	4.06	3.11	2.01	1.14	1.58	1		700	491,483	41,297	31,628	8	4	20	554,394	11,734	68,043	31,189	700	1.40	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.98	6.69	5.51	4.21	3.23	2.05	1.14	0.99	1		700	360,025	37,468	31,378	8	4	20	403,124	13,377	53,350	30,942	700	0.43	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	17.24	12.70	9.70	6.65	4.93	3.09	1.69	1.01	1		700	1,304,910	25,231	20,629	3	8	18	1,019,121	32,889	22,440	20,802	700	0.44	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	13.09	9.84	7.47	5.04	3.84	2.53	1.46	1.17	1		700	1,437,640	36,729	24,621	3	8	18	1,538,595	31,761	39,621	24,440	700	1.08	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	12.98	9.82	7.48	5.25	4.05	2.61	1.43	1.76	1		700	1,800,642	34,636	24,421	3	8	18	1,274,820	51,258	28,948	24,809	700	1.13	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.49	9.00	7.13	5.03	3.83	2.41	1.26	1.87	1		700	2,829,872	33,337	27,473	3	8	18	1,916,868	58,926	26,375	28,012	700	1.06	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.56	8.51	6.88	4.98	3.89	2.54	1.43	0.98	1		700	3,254,490	38,745	24,854	3	8	18	2,875,532	45,812	36,062	24,921	700	0.92	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.37	8.36	6.74	4.82	3.74	2.42	1.31	1.43	1		700	3,422,904	37,333	26,731	3	8	18	2,701,582	54,142	32,091	26,967	700	1.18	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.04	8.72	6.83	4.83	3.70	2.43	1.42	1.03	1		700	2,317,936	40,541	25,337	3	8	18	2,526,882	31,986	46,022	25,100	700	0.89	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.48	8.90	6.90	4.72	3.37	1.88	0.95	1.05	1		700	2,864,439	28,569	35,382	3	8	18	2,329,844	39,017	25,481	35,534	700	0.64	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.87	7.51	5.73	3.90	2.84	1.73	0.95	0.79	1		700	2,505,702	40,559	36,818	3	8	18	2,257,109	45,045	38,750	36,835	700	0.71	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.10	8.71	6.75	4.70	3.57	2.37	1.41	1.44	1		700	2,028,110	41,761	25,731	3	8	18	2,565,657	27,719	48,066	25,515	700	1.96	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.38	7.86	5.86	4.08	3.07	1.98	1.15	1.08	1		700	1,918,900	44,769	31,047	3	8	18	1,914,216	42,579	45,925	30,915	700	1.07	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.27	7.33	5.85	4.25	3.23	2.08	1.21	0.65	1		700	3,220,798	45,239	29,461	3	8	18	3,444,161	36,490	50,000	29,212	700	0.57	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.59	7.56	6.10	4.37	3.32	2.17	1.27	0.64	1		700	2,977,698	44,397	28,009	3	8	18	3,281,824	33,363	50,000	27,740	700	0.80	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.81	9.33	7.55	5.45	4.16	2.54	1.35	1.11	1		700	3,222,775	29,690	25,433	3	8	18	2,417,322	47,461	24,925	25,688	700	0.59	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.63	6.88	5.19	3.59	2.63	1.63	0.89	1.42	1		700	2,162,981	46,025	38,799	3	8	18	1,482,535	66,475	39,252	39,286	700	0.29	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.13	7.38	5.81	4.02	2.96	1.83	1.01	1.27	1		700	3,316,948	40,631	34,771	3	8	18	3,586,871	30,917	46,703	34,479	700	1.15	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.29	7.26	5.62	3.98	3.04	2.05	1.18	1.04	1		700	2,521,281	49,464	30,125	3	8	18	2,520,739	46,479	50,000	29,982	700	1.17	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.09	8.91	6.94	4.97	3.73	2.40	1.35	1.01	1		700	2,618,354	36,242	25,963	3	8	18	2,634,812	33,150	37,867	25,847	700	1.00	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.64	7.54	5.81	4.12	3.08	1.98	1.10	0.97	1		700	2,749,751	43,044	31,725	3	8	18	2,467,273	48,252	40,944	31,755	700	0.91	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.59	8.28	6.43	4.55	3.42	2.20	1.25	0.77	1		700	2,454,243	39,594	28,084	3	8	18	2,424,437	37,882	40,474	27,984	700	0.77	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.86	8.10	6.42	4.66	3.55	2.40	1.48	2.00	1		700	2,711,216	45,758	24,526	3	8	18	3,130,273	36,278	50,000	24,265	700	1.81	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.88	9.86	7.95	5.80	4.47	2.98	1.80	1.66	1		700	2,664,046	35,710	19,976	3	8	18	3,227,644	19,096	50,000	19,657	700	1.53	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	8.65	6.61	5.37	3.81	2.84	1.70	0.94	0.85	1		700	3,736,237	42,856	36,773	3	8	18	3,444,119	47,079	41,163	36,767	700	0.84	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	13.77	11.03	9.26	7.13	5.59	3.61	1.88	1.79	1		700	3,852,068	24,166	18,283	3	8	18	1,916,385	72,076	16,519	18,917	700	0.19	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.38	7.38	5.83	4.09	3.12	2.00	1.16	0.96	1		700	2,843,316	44,924	30,572	3	8	18	3,090,748	35,189	50,000	30,292	700	0.96	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.55	8.15	6.24	4.40	3.34	2.20	1.29	0.97	1		700	2,055,756	43,574	27,428	3	8	18	2,210,196	36,644	47,677	27,211	700	0.87	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.87	6.75	5.11	3.53	2.66	1.66	0.94	1.93	1		700	1,767,253	48,570	36,778	3	8	18	1,055,884	72,248	40,960	37,346	700	0.93	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.69	6.83	5.13	3.53	2.60	1.61	0.89	1.45	1		700	1,951,617	46,319	38,415	3	8	18	1,354,038	65,382	39,648	38,917	700	0.44	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.25	6.86	5.27	3.69	2.76	1.74	1.02	0.92	1		700	2,299,303	48,463	34,655	3	8	18	2,273,078	46,534	49,511	34,508	700	0.92	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.33	7.27	5.81	4.19	3.23	2.13	1.27	0.70	1		700	2,823,530	48,451	28,178	3	8	18	3,014,595	43,796	50,000	27,941	700	0.84	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	8.34	6.30	5.03	3.66	2.83	1.88	1.09	0.80	1		700	3,067,708	55,240	32,389	3	8	18	2,413,683	73,174	48,668	32,659	700	0.36	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.29	7.13	5.18	3.46	2.56	1.61	0.91	0.99	1		700	1,439,569	47,231	38,402	3	8	18	1,186,773	54,866	43,861	38,581	700	0.69	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	12.36	8.86	6.40	4.21	3.11	1.97	1.16	1.29	1		700	1,181,455	39,818	31,273	3	8	18	1,322,703	33,176	44,068	30,944	700	1.07	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.91	7.60	5.95	4.26	3.28	2.11	1.16	1.49	1		700	2,911,116	43,268	30,617	3	8	18	1,977,973	69,066	35,675	31,064	700	0.73	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.81	7.79	6.26	4.68	3.69	2.56	1.57	0.56	1		700	2,803,453	51,295	23,392	3	8	18	3,107,312	47,786	49,496	23,473	700	1.20	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.23	7.78	6.09	4.42	3.41	2.16	1.17	1.91	1		700	2,935,862	40,644	29,630	3	8	18	1,683,026	76,898	31,549	30,282	700	0.63	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.26	6.83	5.22	3.57	2.65	1.66	0.93	0.78	1		700	2,359,363	47,043	37,736	3	8	18	1,966,893	56,292	43,527	37,854	700	0.49	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	8.86	6.75	5.44	3.96	2.96	1.84	1.04	0.87	1		700	3,571,620	45,561	34,248	3	8	18	3,144,001	53,889	42,378	34,328	700	0.81	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.85	7.92	6.53	4.89	3.82	2.50	1.42	0.55	1		700	3,995,173	40,739	25,153	3	8	18	3,406,688	52,670	36,608	25,279	700	0.37	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.30	8.09	6.50	4.65	3.52	2.16	1.08	2.00	1		700	3,854,257	32,859	31,342	3	8	18	2,239,906	72,433	24,915	32,020	700	0.70	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.69	7.46	5.82	4.02	2.93	1.78	0.94	1.14	1		700	3,033,615	38,086	36,394	3	8	18	2,382,359	52,845	33,463	36,634	700	0.67	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.79	7.41	5.79	4.07	3.06	1.91	1.06	0.86	1		700	2,726,655	42,142	32,923	3	8	18	2,195,056	54,881	37,672	33,124	700	0.47	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.88	8.01	5.95	4.25	3.32	2.29	1.33	1.25	1		700	1,487,313	49,345	26,819	3	8	18	1,258,684	56,439	46,012	26,955	700	1.12	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.88	8.29	6.35	4.56	3.57	2.47	1.49	0.88	1		700	1,755,012	47,969	24,225	3	8	18	1,834,535	42,214	50,000	24,013	700	1.12	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.10	7.75	6.06	4.30	3.26	2.09	1.20	0.54	1		700	2,512,179	42,942	29,413	3	8	18	2,421,380	42,874	43,007	29,343	700	0.54	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.54	8.01	6.09	4.47	3.54	2.34	1.44	1.58	1		700	1,930,331	49,499	25,397	3	8	18	1,890,422	48,352	50,000	25,320	700	1.59	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.10	8.05	6.25	4.40	3.39	2.15	1.25	1.29	1		700	1,922,975	43,024	28,641	3	8	18	1,483,463	55,628	38,277	28,881	700	1.02	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.28	8.23	6.64	4.85	3.83	2.39	1.28	1.74	1		700	3,961,073	35,689	27,481	3	8	18	2,560,992	69,815	27,864	27,970	700	1.11	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.99	7.58	5.84	4.22	3.17	2.18	1.28	0.65	1		700	2,117,140	49,821	28,385	3	8	18	2,157,146	45,567	50,000	28,208	700	1.25	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.54	8.96	6.94	5.02	3.78	2.34	1.28	1.29	1		700	2,683,422	33,896	27,158	3	8	18	1,973,295	50,180	29,212	27,376	700	0.84	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.25	8.05	6.03	4.24	3.21	2.09	1.19	1.14	1		700	1,593,532	43,935	29,701	3	8	18	1,184,498	57,051	38,849	30,002	700	0.51	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.36	7.84	6.07	4.21	3.13	1.91	1.02	1.39	1		700	2,672,731	37,757	33,750	3	8	18	1,910,609	57,511	31,858	34,146	700	0.58	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.36	7.57	5.83	4.09	3.04	1.96	1.11	0.68	1		700	2,055,628	44,060	31,740	3	8	18	1,687,989	53,629	40,186	31,903	700	0.19	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.79	7.74	5.83	3.89	2.80	1.64	0.92	1.00	1		700	1,906,506	38,943	37,794	3	8	18	1,740,741	41,782	37,741	37,778	700	0.98	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.02	8.10	6.20	4.31	3.19	2.02	1.20	0.97	1		700	1,825,776	42,245	30,083	3	8	18	1,953,881	36,144	45,823	29,851	700	0.87	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.71	8.01	6.18	4.48	3.41	2.20	1.21	1.75	1		700	2,403,465	40,683	28,501	3	8	18	1,439,477	69,491	32,657	29,043	700	0.51	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.48	8.92	7.01	5.15	3.98	2.64	1.46	1.54	1		700	2,527,712	37,448	23,701	3	8	18	1,697,300	61,487	30,320	24,120	700	0.74	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.15	8.34	6.45	4.71	3.64	2.38	1.34	1.58	1		700	2,214,145	40,786	25,901	3	8	18	1,374,464	65,980	33,389	26,341	700	0.58	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.58	7.07	5.55	3.96	3.02	1.96	1.12	0.96	1		700	2,456,770	47,780	31,490	3	8	18	1,855,387	64,620	41,822	31,780	700	0.38	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.87	7.31	5.64	4.02	3.09	2.05	1.18	0.80	1		700	2,142,708	49,498	30,220	3	8	18	1,725,761	60,996	44,950	30,408	700	0.44	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.12	7.49	5.74	4.15	3.18	2.15	1.28	0.56	1		700	1,889,036	51,085	28,233	3	8	18	1,792,395	52,354	50,000	28,209	700	0.59	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.37	7.45	5.43	3.47	2.44	1.39	0.73	1.46	1		700	2,040,662	40,347	48,730	3	8	18	1,587,893	51,957	36,261	49,031	700	0.87	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.38	9.66	7.70	5.49	4.07	2.48	1.30	1.11	1		700	3,000,799	30,221	27,898	3	8	18	2,212,032	47,971	25,440	28,178	700	0.31	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.82	9.10	6.99	4.96	3.75	2.49	1.40	0.98	1		700	2,084,686	39,950	26,303	3	8	18	1,849,945	45,064	37,745	26,367	700	0.90	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.85	8.21	6.31	4.36	3.27	2.13	1.22	0.65	1		700	2,078,151	43,955	30,610	3	8	18	2,087,899	41,184	45,449	30,465	700	0.62	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.46	7.79	5.94	4.15	3.12	2.04	1.16	0.59	1		700	2,099,257	47,134	32,252	3	8	18	1,876,520	51,941	45,005	32,294	700	0.49	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.40	9.31	7.58	5.64	4.37	2.72	1.43	1.18	1		700	4,182,868	30,778	25,309	3	8	18	3,000,000	56,176	24,815	25,640	700	0.68	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.47	8.30	6.76	4.97	3.77	2.26	1.11	1.91	1		700	4,796,672	30,361	31,891	3	8	18	2,605,860	79,918	22,243	32,685	700	0.32	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.46	9.11	7.43	5.49	4.18	2.56	1.27	1.89	1		700	4,359,183	28,555	27,943	3	8	18	2,349,604	74,112	20,967	28,624	700	0.31	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.50	8.99	7.23	5.23	3.96	2.34	1.20	1.57	1		700	3,702,008	30,070	29,692	3	8	18	2,378,497	59,981	23,740	30,158	700	0.65	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.51	9.10	7.29	5.32	3.93	2.28	1.12	1.52	1		700	4,032,638	27,526	31,549	3	8	18	2,621,062	57,778	21,611	32,050	700	0.44	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.29	8.69	6.99	5.09	3.83	2.35	1.31	0.94	1		700	3,138,024	35,735	28,267	3	8	18	2,607,499	46,760	32,082	28,400	700	0.79	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.04	8.50	6.78	4.89	3.67	2.18	1.16	1.37	1		700	3,404,574	33,894	31,264	3	8	18	2,407,762	57,339	27,866	31,653	700	0.74	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.02	7.86	6.43	4.71	3.59	2.16	1.09	1.72	1		700	4,689,469	33,647	32,731	3	8	18	2,734,874	78,803	25,290	33,434	700	0.51	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.47	7.71	5.80	3.92	2.88	1.75	0.92	1.87	1		700	2,378,140	40,354	38,747	3	8	18	1,562,190	62,734	33,843	39,249	700	0.83	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.02	8.59	6.81	4.77	3.46	1.88	0.91	1.40	1		700	3,824,526	27,933	38,126	3	8	18	2,760,686	48,800	23,343	38,435	700	0.69	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.14	7.88	6.18	4.33	3.15	1.85	0.93	1.45	1		700	3,651,685	34,524	37,902	3	8	18	2,531,081	58,407	28,842	38,254	700	0.51	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.83	10.32	8.40	6.11	4.51	2.63	1.21	1.86	1		700	4,204,412	21,790	28,536	3	8	18	2,427,968	57,729	16,383	29,125	700	0.43	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	13.09	9.84	7.47	5.04	3.84	2.53	1.46	1.17	1		700	1,448,315	36,663	24,633	3	8	18	1,538,752	31,805	39,529	24,486	700	1.08	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	12.98	9.82	7.48	5.25	4.05	2.61	1.43	1.76	1		700	1,801,671	34,631	24,422	3	8	18	1,271,988	51,416	28,871	24,857	700	1.14	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.49	9.00	7.13	5.03	3.83	2.41	1.26	1.87	1		700	2,830,123	33,336	27,473	3	8	18	1,912,107	59,157	26,294	28,074	700	1.06	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.56	8.51	6.88	4.98	3.89	2.54	1.43	0.98	1		700	3,254,455	38,745	24,854	3	8	18	2,870,969	46,021	35,931	24,972	700	0.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.37	8.36	6.74	4.82	3.74	2.42	1.31	1.43	1		700	3,422,901	37,332	26,731	3	8	18	2,695,536	54,410	31,973	27,027	700	1.18	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.04	8.72	6.83	4.83	3.70	2.43	1.42	1.03	1		700	2,317,927	40,541	25,337	3	8	18	2,522,399	32,159	45,795	25,151	700	0.89	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.48	8.90	6.90	4.72	3.37	1.88	0.95	1.05	1		700	2,864,528	28,568	35,382	3	8	18	2,324,010	39,250	25,378	35,630	700	0.64	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.87	7.51	5.73	3.90	2.84	1.73	0.95	0.79	1		700	2,505,709	40,559	36,818	3	8	18	2,250,527	45,330	38,561	36,939	700	0.71	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.10	8.71	6.75	4.70	3.57	2.37	1.41	1.44	1		700	2,028,052	41,761	25,731	3	8	18	2,476,689	26,454	54,982	25,349	700	0.95	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.75	8.44	6.58	4.72	3.56	2.33	1.42	1.52	1		700	2,254,743	42,664	25,773	3	8	18	2,914,449	22,706	64,395	25,309	700	0.76	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.38	7.86	5.86	4.08	3.07	1.98	1.15	1.08	1		700	1,918,906	44,769	31,047	3	8	18	1,904,234	42,968	45,626	30,994	700	1.07	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.83	7.96	6.50	4.81	3.66	2.31	1.28	0.30	1		700	4,017,622	37,309	27,526	3	8	18	3,816,203	38,704	36,705	27,544	700	0.30	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.65	7.70	6.27	4.48	3.42	2.11	1.10	1.24	1		700	4,066,048	35,792	31,209	3	8	18	3,066,929	57,968	29,852	31,596	700	0.79	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.27	7.33	5.85	4.25	3.23	2.08	1.21	0.65	1		700	3,220,839	45,239	29,461	3	8	18	3,432,422	36,562	50,309	29,297	700	0.52	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.59	7.56	6.10	4.37	3.32	2.17	1.27	0.64	1		700	2,977,692	44,398	28,009	3	8	18	3,275,570	33,576	51,346	27,800	700	0.37	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.81	9.33	7.55	5.45	4.16	2.54	1.35	1.11	1		700	3,222,842	29,690	25,433	3	8	18	2,413,014	47,650	24,851	25,741	700	0.59	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.09	7.06	5.74	4.17	3.08	1.87	0.93	1.75	1		700	4,592,663	36,046	36,370	3	8	18	2,741,162	79,731	27,411	37,213	700	0.28	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.63	7.51	6.02	4.37	3.37	2.26	1.43	1.62	1		700	2,547,873	51,412	26,095	3	8	18	3,496,260	23,672	89,599	25,471	700	0.67	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.63	6.88	5.19	3.59	2.63	1.63	0.89	1.42	1		700	2,163,085	46,024	38,799	3	8	18	1,479,754	66,639	39,141	39,397	700	0.28	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.13	7.38	5.81	4.02	2.96	1.83	1.01	1.27	1		700	3,316,979	40,631	34,771	3	8	18	3,582,203	31,120	46,409	34,573	700	1.15	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.29	7.26	5.62	3.98	3.04	2.05	1.18	1.04	1		700	2,521,290	49,464	30,125	3	8	18	2,534,798	46,129	51,195	30,043	700	1.04	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.09	8.91	6.94	4.97	3.73	2.40	1.35	1.01	1		700	2,618,310	36,242	25,964	3	8	18	2,630,062	33,334	37,695	25,901	700	1.00	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.64	7.54	5.81	4.12	3.08	1.98	1.10	0.97	1		700	2,749,775	43,044	31,725	3	8	18	2,460,899	48,533	40,758	31,835	700	0.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.59	8.28	6.43	4.55	3.42	2.20	1.25	0.77	1		700	2,454,177	39,595	28,084	3	8	18	2,409,083	38,395	40,137	28,053	700	0.77	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.86	8.10	6.42	4.66	3.55	2.40	1.48	2.00	1		700	2,710,987	45,758	24,526	3	8	18	3,808,188	17,737	96,462	23,935	700	0.94	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.88	9.86	7.95	5.80	4.47	2.98	1.80	1.66	1		700	2,664,042	35,710	19,976	3	8	18	3,442,060	15,060	67,619	19,571	700	0.93	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	8.65	6.61	5.37	3.81	2.84	1.70	0.94	0.85	1		700	3,736,167	42,857	36,773	3	8	18	3,449,600	46,942	41,137	36,860	700	0.83	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	13.77	11.03	9.26	7.13	5.59	3.61	1.88	1.79	1		700	3,851,782	24,167	18,282	3	8	18	1,912,377	72,229	16,483	18,948	700	0.19	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.38	7.38	5.83	4.09	3.12	2.00	1.16	0.96	1		700	2,843,366	44,924	30,572	3	8	18	3,079,321	35,551	50,677	30,369	700	0.82	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.55	8.15	6.24	4.40	3.34	2.20	1.29	0.97	1		700	2,055,737	43,574	27,428	3	8	18	2,205,581	36,835	47,452	27,271	700	0.87	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.87	6.76	5.12	3.51	2.64	1.64	0.95	1.62	1		700	1,704,807	48,961	36,873	3	8	18	1,182,284	65,674	42,869	37,353	700	1.11	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.59	6.85	5.13	3.50	2.56	1.58	0.88	1.01	1		700	1,972,351	46,163	38,919	3	8	18	1,570,692	57,845	41,466	39,301	700	0.53	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	8.60	6.86	5.53	4.06	3.16	2.11	1.31	1.30	1		700	3,221,960	53,965	27,746	3	8	18	4,123,877	27,885	82,836	27,240	700	0.68	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	8.89	7.04	5.64	4.04	3.13	2.04	1.19	0.81	1		700	3,139,461	46,933	28,914	3	8	18	3,247,969	40,777	50,279	28,795	700	0.76	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.18	7.78	6.15	4.51	3.45	2.35	1.45	1.03	1		700	2,155,776	49,404	25,059	3	8	18	2,612,098	34,086	60,745	24,748	700	0.63	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	8.45	6.62	5.43	4.06	3.18	2.17	1.26	0.61	1		700	3,786,979	53,198	28,028	3	8	18	3,029,296	72,085	46,558	28,316	700	0.12	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	8.15	5.67	4.25	2.86	2.12	1.28	0.75	1.72	1		700	2,085,641	57,095	46,911	3	8	18	1,856,837	62,404	54,584	47,080	700	1.70	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.72	7.73	5.74	4.08	3.19	2.21	1.35	0.90	1		700	1,225,655	52,266	26,376	3	8	18	1,318,763	46,398	55,797	26,190	700	0.79	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	8.23	5.62	4.15	2.85	2.10	1.30	0.75	1.61	1		700	1,898,527	58,748	46,572	3	8	18	1,412,692	74,415	52,486	47,095	700	1.24	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	12.61	9.48	7.20	4.86	3.71	2.44	1.41	1.17	1		700	1,449,974	36,661	24,631	3	8	18	1,532,386	32,057	39,352	24,491	700	1.10	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	12.53	9.48	7.22	5.06	3.91	2.52	1.38	1.82	1		700	1,808,235	34,561	24,457	3	8	18	1,263,518	51,931	28,665	24,909	700	1.18	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	11.06	8.67	6.86	4.84	3.69	2.32	1.21	1.86	1		700	2,827,971	33,350	27,467	3	8	18	1,906,359	59,272	26,292	28,070	700	1.05	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.21	8.23	6.65	4.81	3.77	2.46	1.39	0.98	1		700	3,253,769	38,748	24,848	3	8	18	2,870,568	46,015	35,937	24,966	700	0.93	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.04	8.09	6.52	4.67	3.62	2.34	1.27	1.39	1		700	3,406,531	37,429	26,701	3	8	18	2,717,382	53,393	32,318	26,977	700	1.16	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.69	8.44	6.61	4.67	3.58	2.36	1.38	1.04	1		700	2,308,606	40,625	25,310	3	8	18	2,517,381	32,112	45,988	25,121	700	0.91	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	11.11	8.61	6.68	4.56	3.26	1.82	0.92	1.02	1		700	2,854,438	28,600	35,386	3	8	18	2,335,846	38,738	25,528	35,621	700	0.64	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.56	7.27	5.55	3.78	2.76	1.68	0.92	0.78	1		700	2,516,636	40,491	36,838	3	8	18	2,265,647	45,111	38,554	36,954	700	0.70	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.76	8.45	6.54	4.56	3.46	2.30	1.37	1.46	1		700	2,025,303	41,776	25,736	3	8	18	2,477,033	26,383	55,130	25,350	700	0.96	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.44	8.20	6.39	4.58	3.46	2.26	1.38	1.52	1		700	2,254,932	42,658	25,771	3	8	18	2,917,568	22,638	64,549	25,306	700	0.76	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.09	7.64	5.70	3.97	2.99	1.93	1.12	1.08	1		700	1,913,224	44,828	31,023	3	8	18	1,922,899	42,268	46,097	30,951	700	1.07	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.56	7.75	6.33	4.68	3.56	2.25	1.25	0.30	1		700	4,016,530	37,309	27,525	3	8	18	3,859,045	37,639	37,144	27,528	700	0.30	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.41	7.51	6.12	4.36	3.33	2.06	1.07	1.32	1		700	4,083,798	35,692	31,244	3	8	18	3,031,413	59,341	29,501	31,660	700	0.83	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.05	7.16	5.71	4.15	3.15	2.03	1.18	0.64	1		700	3,215,797	45,228	29,496	3	8	18	3,426,414	36,578	50,279	29,333	700	0.50	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.42	7.43	5.99	4.29	3.26	2.13	1.25	0.68	1		700	2,964,601	44,489	27,980	3	8	18	3,304,058	32,641	52,394	27,751	700	0.35	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	11.59	9.16	7.41	5.34	4.08	2.49	1.32	1.12	1		700	3,227,816	29,665	25,438	3	8	18	2,404,398	47,993	24,763	25,752	700	0.58	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	8.82	6.85	5.57	4.05	2.99	1.82	0.90	1.81	1		700	4,614,624	35,957	36,411	3	8	18	2,705,673	81,203	27,169	37,289	700	0.32	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.30	7.25	5.81	4.22	3.25	2.19	1.38	1.59	1		700	2,548,104	51,393	26,103	3	8	18	3,481,140	23,944	88,474	25,487	700	0.65	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.34	6.68	5.04	3.48	2.55	1.58	0.87	1.41	1		700	2,170,293	45,949	38,834	3	8	18	1,491,312	66,331	39,133	39,424	700	0.30	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	8.89	7.18	5.66	3.92	2.88	1.78	0.98	1.26	1		700	3,323,442	40,603	34,762	3	8	18	3,576,351	31,386	46,134	34,570	700	1.15	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.07	7.09	5.49	3.88	2.97	2.00	1.15	1.05	1		700	2,535,421	49,338	30,175	3	8	18	2,535,208	46,429	50,823	30,103	700	1.04	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.88	8.73	6.80	4.88	3.66	2.35	1.33	1.00	1		700	2,623,815	36,223	25,963	3	8	18	2,623,737	33,634	37,497	25,907	700	0.99	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.42	7.37	5.67	4.02	3.01	1.94	1.08	0.97	1		700	2,740,168	43,124	31,685	3	8	18	2,457,574	48,438	40,900	31,791	700	0.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.41	8.14	6.32	4.47	3.36	2.16	1.23	0.78	1		700	2,447,925	39,630	28,073	3	8	18	2,430,676	37,584	40,620	28,023	700	0.78	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	11.70	9.71	7.83	5.72	4.40	2.93	1.77	1.66	1		700	2,675,239	35,614	20,004	3	8	18	3,444,495	15,112	66,967	19,601	700	0.94	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.41	7.50	5.77	3.95	2.93	1.83	1.09	1.99	1		700	2,505,741	43,085	32,368	3	8	18	3,260,684	21,736	67,932	31,851	700	1.20	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	8.51	6.50	5.28	3.74	2.79	1.68	0.93	0.86	1		700	3,736,499	42,864	36,774	3	8	18	3,402,199	48,259	40,669	36,889	700	0.83	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	13.54	10.85	9.10	7.01	5.50	3.55	1.85	1.79	1		700	3,851,501	24,171	18,274	3	8	18	1,876,850	72,441	16,554	18,916	700	0.18	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.21	7.25	5.72	4.02	3.06	1.96	1.14	0.95	1		700	2,844,344	44,954	30,547	3	8	18	3,065,656	35,964	50,401	30,352	700	0.83	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.38	8.02	6.14	4.33	3.29	2.17	1.27	0.96	1		700	2,060,920	43,549	27,428	3	8	18	2,207,295	36,910	47,357	27,274	700	0.87	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.72	6.67	5.04	3.46	2.60	1.62	0.93	1.59	1		700	1,700,526	49,007	36,849	3	8	18	1,188,836	65,337	43,011	37,319	700	1.09	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.47	6.76	5.07	3.45	2.53	1.56	0.87	1.03	1		700	1,964,932	46,259	38,853	3	8	18	1,554,118	58,330	41,432	39,248	700	0.53	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	8.45	6.74	5.44	3.99	3.11	2.08	1.28	1.25	1		700	3,221,850	53,951	27,756	3	8	18	4,081,426	28,726	80,671	27,269	700	0.66	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.79	7.91	5.92	4.22	3.26	2.31	1.47	1.98	1		700	1,216,304	53,032	24,750	3	8	18	1,752,717	30,761	77,413	24,021	700	0.95	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.00	7.13	5.72	4.09	3.17	2.07	1.21	0.82	1		700	3,132,867	46,793	28,913	3	8	18	3,253,629	40,309	50,354	28,787	700	0.77	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.97	7.62	6.03	4.42	3.38	2.30	1.42	1.05	1		700	2,156,652	49,374	25,068	3	8	18	2,620,272	33,879	60,929	24,753	700	0.65	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	8.31	6.51	5.34	4.00	3.13	2.13	1.24	0.58	1		700	3,781,783	53,233	28,019	3	8	18	3,045,968	71,426	46,776	28,296	700	0.12	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	8.02	5.57	4.18	2.81	2.09	1.26	0.74	1.72	1		700	2,073,081	57,266	46,827	3	8	18	1,871,654	61,660	55,126	46,967	700	1.71	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.70	7.71	5.73	4.07	3.18	2.21	1.35	0.92	1		700	1,222,869	52,343	26,356	3	8	18	1,328,186	45,973	56,241	26,154	700	0.79	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.86	6.78	5.01	3.50	2.64	1.74	1.10	1.98	1		700	1,214,375	55,760	32,851	3	8	18	1,422,381	45,772	62,154	32,519	700	1.81	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	8.11	5.54	4.09	2.81	2.07	1.28	0.74	1.63	1		700	1,897,552	58,770	46,580	3	8	18	1,420,559	74,065	52,629	47,090	700	1.30	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.58	8.53	6.95	5.24	4.17	2.87	1.71	0.97	1		700	3,461,715	41,194	24,005	3	8	18	2,956,339	46,473	43,749	21,273	700	0.48	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.26	8.17	6.62	4.85	3.75	2.38	1.29	1.80	1		700	4,079,926	33,972	30,660	3	8	18	2,717,174	61,064	30,258	27,660	700	0.53	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	8.14	6.33	4.97	3.55	2.56	1.53	0.87	0.56	1		700	4,016,894	43,768	45,998	3	8	18	4,151,586	32,623	56,613	40,856	700	0.72	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.60	7.76	6.41	4.79	3.75	2.45	1.40	1.00	1		700	4,477,203	38,491	28,834	3	8	18	3,671,348	49,723	38,737	25,701	700	0.35	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.89	7.65	6.03	4.24	3.22	2.12	1.18	1.77	1		700	2,973,811	40,848	33,488	3	8	18	2,332,476	51,594	40,752	30,030	700	0.86	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.59	7.71	6.13	4.24	3.10	1.85	0.97	1.54	1		700	3,910,096	32,460	39,655	3	8	18	3,339,119	37,630	33,942	35,430	700	1.02	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.23	7.73	6.02	4.23	3.24	2.16	1.36	0.86	1		700	2,065,317	46,681	30,560	3	8	18	2,571,427	26,826	75,082	26,681	700	0.91	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.72	8.82	6.68	4.78	3.71	2.57	1.50	1.74	1		700	1,735,383	41,414	26,584	3	8	18	1,432,136	46,940	42,594	23,802	700	0.98	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.24	7.28	5.72	4.17	3.27	2.28	1.44	0.88	1		700	2,566,129	53,058	28,678	3	8	18	3,087,527	31,398	83,533	24,922	700	0.75	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.34	7.98	6.22	4.39	3.35	2.17	1.25	1.21	1		700	2,612,466	39,925	31,653	3	8	18	2,297,968	42,381	42,880	28,239	700	0.69	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.53	7.24	5.83	4.18	3.02	1.88	1.15	1.26	1		700	3,030,572	41,253	35,504	3	8	18	3,843,396	17,829	88,092	31,173	700	1.14	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.69	7.42	5.75	4.16	3.19	2.09	1.22	1.35	1		700	2,797,447	43,929	32,703	3	8	18	2,229,577	53,075	44,632	29,271	700	0.73	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.71	8.47	6.81	4.86	3.81	2.65	1.71	1.41	1		700	2,261,278	45,538	24,488	3	8	18	3,136,793	18,401	100,000	21,049	700	1.40	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.69	7.29	5.72	4.14	3.15	2.22	1.42	0.90	1		700	1,997,453	53,326	29,234	3	8	18	2,721,433	27,212	96,297	25,283	700	0.62	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	25.11	14.76	9.35	5.66	3.98	2.49	1.48	0.91	1		700	230,760	22,159	26,462	3	8	18	265,419	19,193	25,629	23,640	700	1.60	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	7.92	5.76	4.55	3.08	2.17	1.45	0.88	1.51	1		700	2,569,898	56,753	46,964	3	8	18	3,266,718	29,690	100,000	41,174	700	1.02	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.22	7.89	5.94	4.03	3.09	2.02	1.30	1.53	1		700	1,314,648	46,704	32,439	3	8	18	1,702,132	29,964	68,183	28,440	700	1.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.50	7.87	6.44	4.62	3.84	2.58	1.60	1.99	1		700	3,609,032	46,532	26,039	3	8	18	4,069,329	27,289	73,607	22,656	700	1.96	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.49	8.41	6.81	5.03	3.88	2.47	1.46	0.63	1		700	3,564,444	36,220	27,952	3	8	18	3,613,334	27,619	47,051	24,645	700	0.75	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	8.75	7.02	5.89	4.33	3.30	2.14	1.28	0.61	1		700	4,409,666	43,526	31,983	3	8	18	5,204,998	19,587	88,222	27,978	700	0.47	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.24	7.87	6.02	4.32	3.32	2.25	1.44	1.24	1		700	2,016,662	48,349	29,195	3	8	18	2,684,495	24,389	88,572	25,317	700	1.14	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.17	7.47	5.64	4.03	3.03	2.17	1.36	1.04	1		700	1,537,160	53,957	30,955	3	8	18	2,036,523	32,634	83,317	26,940	700	0.67	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.48	9.39	7.47	5.40	4.05	2.42	1.25	1.63	1		700	3,863,452	25,961	30,792	3	8	18	2,964,865	39,289	24,857	27,577	700	0.93	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.67	8.09	5.94	4.26	3.26	2.21	1.33	1.52	1		700	1,226,744	46,373	30,480	3	8	18	957,211	52,934	47,084	27,434	700	1.01	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.22	7.54	5.85	4.19	3.17	2.13	1.24	1.26	1		700	2,226,611	45,009	32,110	3	8	18	1,785,693	52,994	45,737	28,792	700	0.20	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.18	8.03	5.92	3.95	2.82	1.74	1.05	0.82	1		700	1,608,489	39,559	38,620	3	8	18	1,878,368	27,462	53,613	34,204	700	1.20	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.73	8.28	6.80	5.06	3.98	2.61	1.48	1.85	1		700	3,531,229	37,013	26,973	3	8	18	2,151,844	68,260	32,323	24,378	700	0.58	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.65	7.03	5.51	3.98	3.03	1.95	1.14	1.77	1		700	2,655,512	45,175	34,766	3	8	18	1,773,048	64,632	42,757	31,354	700	0.97	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.62	7.26	5.65	4.02	3.07	2.00	1.13	1.86	1		700	2,798,828	43,783	35,013	3	8	18	1,980,391	62,195	41,179	31,617	700	0.44	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.21	7.40	5.57	3.98	3.11	2.12	1.31	0.93	1		700	1,647,735	52,211	31,604	3	8	18	1,560,595	50,084	58,375	28,114	700	0.97	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.08	7.68	6.15	4.48	3.37	2.20	1.23	1.73	1		700	3,227,967	39,199	32,250	3	8	18	2,216,164	60,742	36,123	29,095	700	0.20	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.17	8.21	6.68	5.04	4.01	2.76	1.65	0.50	1		700	3,132,450	44,597	21,258	3	8	18	2,950,575	46,624	43,626	21,286	700	0.49	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.91	7.90	6.39	4.68	3.62	2.30	1.25	1.10	1		700	3,709,503	36,996	27,200	3	8	18	2,724,613	60,400	30,534	27,585	700	0.54	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	7.84	6.10	4.79	3.42	2.46	1.47	0.84	1.09	1		700	3,675,790	46,982	41,106	3	8	18	4,198,857	31,527	57,956	40,806	700	0.74	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.29	7.50	6.20	4.64	3.62	2.37	1.36	0.40	1		700	4,111,207	41,819	25,565	3	8	18	3,700,238	48,682	39,168	25,660	700	0.33	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.99	8.06	6.58	4.95	3.91	2.59	1.40	1.71	1		700	4,110,952	37,457	24,298	3	8	18	2,386,164	83,129	27,631	24,958	700	0.67	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.58	7.41	5.84	4.11	3.11	2.06	1.15	0.96	1		700	2,660,044	44,026	29,856	3	8	18	2,329,366	51,297	40,995	30,009	700	0.86	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.37	7.53	5.99	4.14	3.03	1.81	0.95	1.02	1		700	3,560,175	35,102	35,303	3	8	18	3,332,455	37,507	34,133	35,347	700	1.01	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.35	7.07	5.56	3.90	2.90	1.73	0.89	1.91	1		700	3,386,130	37,606	37,110	3	8	18	2,020,654	72,876	29,434	37,920	700	0.37	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.95	7.52	5.85	4.11	3.15	2.10	1.32	1.75	1		700	1,880,152	49,720	27,274	3	8	18	2,552,053	27,112	74,666	26,663	700	0.89	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	11.63	8.06	5.67	3.99	3.11	2.20	1.28	1.39	1		700	820,852	50,425	27,347	3	8	18	814,975	49,059	51,043	27,284	700	1.39	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	11.46	8.63	6.53	4.67	3.63	2.51	1.47	0.98	1		700	1,561,178	44,145	23,712	3	8	18	1,438,707	46,560	42,882	23,765	700	0.97	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.04	7.12	5.60	4.08	3.21	2.24	1.41	1.46	1		700	2,354,680	56,549	25,507	3	8	18	3,076,760	31,687	82,943	24,914	700	0.77	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.12	7.81	6.09	4.30	3.27	2.13	1.22	0.68	1		700	2,378,946	42,654	28,302	3	8	18	2,287,885	42,846	42,501	28,303	700	0.68	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.49	7.27	5.63	4.08	3.13	2.04	1.19	0.77	1		700	2,521,341	47,074	29,198	3	8	18	2,235,357	53,023	44,522	29,311	700	0.70	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.50	7.14	5.61	4.06	3.09	2.18	1.39	1.88	1		700	1,796,938	56,901	26,024	3	8	18	2,732,108	26,991	97,311	25,257	700	0.64	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.16	8.15	6.60	4.88	3.75	2.39	1.41	0.90	1		700	3,258,911	39,179	24,837	3	8	18	3,597,217	28,031	46,596	24,654	700	0.73	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	8.49	6.81	5.71	4.20	3.20	2.07	1.24	1.29	1		700	4,071,459	46,957	28,442	3	8	18	5,220,665	19,505	88,190	28,007	700	0.50	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.77	7.17	5.42	3.87	2.91	2.09	1.31	1.88	1		700	1,368,438	57,298	27,673	3	8	18	2,036,825	32,567	83,546	26,938	700	0.67	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.49	7.58	6.06	4.42	3.33	2.07	1.04	1.86	1		700	4,183,350	34,563	31,715	3	8	18	2,543,448	74,810	26,167	32,484	700	0.75	1	

Location: Region	Location: Road	Location: Cluster-Area	Location: Control Section	Location: Project Number	Material Types: Roadbed: Soil Type	Material Types: Granular Layer: Aggregate Type	Material Types: Granular Layer: Gradation	FWD File Information: Season	FWD File Information: Date	FWD File Information: File Title	Pavement Layer Thickness (in): Asphalt concrete	Pavement Layer Thickness (in): Base/ Subbase	Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area: 0	8	12	18	24	36	60	2-Layer Backcalculation: RMS Error (%)	Converged?: Yes	Converged?: No	Depth to Stiff Layer (in)	2-Layer Resilient Modulus (psi): Asphalt Concrete	Base/ Subbase	Roadbed	3-Layer System: Layer Thicknesses (in): Asphalt Concrete	Base	Subbase	Resilient modulus (psi): Asphalt Concrete	Base	Subbase	Roadbed	Depth to Stiff layer (in)	Convergence: RMS Error (%)	Yes	No
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	11.17	9.14	7.27	5.26	3.94	2.36	1.22	1.08	1		700	3,543,153	28,252	27,330	3	8	18	2,976,759	38,739	25,084	27,507	700	0.91	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	11.33	7.85	5.76	4.13	3.16	2.14	1.29	1.05	1		700	1,078,839	49,220	27,289	3	8	18	963,950	52,506	47,400	27,388	700	1.00	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.16	7.79	6.02	4.11	3.02	1.77	0.89	1.97	1		700	2,962,856	33,534	36,655	3	8	18	1,931,168	59,653	26,986	37,351	700	0.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.97	7.36	5.71	4.09	3.10	2.08	1.21	0.35	1		700	2,001,145	48,070	28,682	3	8	18	1,786,315	52,979	45,768	28,793	700	0.20	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.32	7.39	5.63	3.76	2.70	1.56	0.82	1.62	1		700	2,257,006	36,812	40,092	3	8	18	1,542,879	55,794	31,156	40,677	700	0.57	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.84	7.79	5.74	3.83	2.74	1.69	1.02	1.87	1		700	1,465,084	41,830	34,659	3	8	18	1,871,751	27,570	53,611	34,149	700	1.20	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.40	8.03	6.59	4.91	3.86	2.53	1.44	1.24	1		700	3,204,951	40,082	23,957	3	8	18	2,148,664	68,461	32,244	24,394	700	0.56	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	11.05	8.74	6.92	5.11	3.94	2.63	1.46	1.23	1		700	2,769,409	37,500	23,352	3	8	18	2,029,731	57,062	31,400	23,689	700	0.77	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	11.76	8.85	6.84	4.98	3.86	2.54	1.40	1.90	1		700	2,156,072	37,355	24,225	3	8	18	1,227,048	65,667	29,651	24,768	700	0.71	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.47	6.90	5.41	3.90	2.98	1.91	1.12	1.25	1		700	2,346,608	48,591	31,012	3	8	18	1,783,262	64,211	42,934	31,333	700	0.99	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.35	7.06	5.49	3.91	2.98	1.95	1.10	0.91	1		700	2,522,388	46,946	31,239	3	8	18	1,986,070	61,810	41,375	31,574	700	0.42	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.85	7.14	5.37	3.84	3.00	2.04	1.26	1.04	1		700	1,477,501	55,402	28,284	3	8	18	1,565,314	49,810	58,607	28,121	700	0.97	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.78	7.45	5.97	4.35	3.27	2.13	1.19	0.89	1		700	2,933,541	42,184	28,741	3	8	18	2,220,739	60,666	36,128	29,093	700	0.20	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	9.71	8.07	7.09	5.71	4.61	3.06	1.67	0.50	1		700	1,407,740	31,301	22,238	5.5	8	18	1,278,414	39,361	27,847	22,292	700	0.47	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	9.41	7.84	6.94	5.63	4.63	3.13	1.77	0.65	1		700	1,484,830	34,855	21,124	5.5	8	18	1,342,094	44,401	30,505	21,169	700	0.63	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	9.27	7.64	6.68	5.39	4.37	2.89	1.50	1.04	1		700	1,579,445	30,222	24,550	5.5	8	18	1,058,233	79,068	20,985	25,288	700	0.37	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	11.12	9.41	8.30	6.74	5.50	3.66	1.93	0.49	1		700	1,445,489	23,945	19,353	5.5	8	18	1,197,897	42,840	19,023	19,603	700	0.30	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	10.20	8.76	7.75	6.42	5.33	3.64	1.99	0.48	1		700	1,712,576	27,160	18,876	5.5	8	18	1,408,352	50,754	21,021	19,127	700	0.31	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	9.44	7.94	7.11	5.90	4.83	3.25	1.67	1.02	1		700	1,972,207	25,446	22,313	5.5	8	18	1,315,131	83,357	16,561	23,214	700	0.60	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	9.89	8.44	7.47	6.11	4.97	3.26	1.60	0.62	1		700	1,867,251	21,564	23,182	5.5	8	18	1,432,620	54,982	15,818	23,783	700	0.25	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	9.85	8.24	7.35	6.00	4.95	3.38	1.90	0.71	1		700	1,525,177	32,182	19,682	5.5	8	18	1,282,260	51,831	25,823	19,863	700	0.62	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	10.01	8.81	7.99	6.79	5.80	4.13	2.32	0.47	1		700	2,287,565	26,118	16,388	5.5	8	18	1,841,413	60,371	18,744	16,693	700	0.33	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	8.91	7.45	6.53	5.28	4.21	2.63	1.19	0.99	1		700	1,991,523	21,418	30,666	5.5	8	18	1,368,958	70,340	15,074	31,897	700	0.43	1	
Superior	M-28	03-01	NA	NA	SP-SM	NA	NA	Summer	5/21/2008	flex-Su-M28-CS75061-05-21-2008	5.5	24.5	11.07	9.63	8.59	7.21	6.02	4.24	2.41	0.23	1		700	1,645,506	27,215	15,623	5.5	8	18	1,502,170	36,269	23,342	15,664	700	0.20	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	5.55	4.69	4.28	3.72	3.19	2.35	1.31	1.68	1		300	3,871,807	63,664	23,269	5.5	12	18	1,760,993	224,123	15,218	27,521	300	0.78	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	5.20	4.34	3.90	3.34	2.85	2.04	1.12	1.70	1		300	3,578,370	69,016	27,382	5.5	12	18	1,773,728	208,729	20,969	31,076	300	0.78	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	6.30	5.40	5.00	4.38	3.82	2.87	1.77	1.27	1		300	3,271,449	71,872	16,875	5.5	12	18	2,084,890	163,173	26,161	17,878	300	1.04	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	6.15	5.29	4.88	4.27	3.71	2.78	1.68	1.15	1		300	3,415,479	69,732	17,825	5.5	12	18	2,223,532	159,034	25,675	18,908	300	0.92	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	5.87	5.01	4.60	4.00	3.43	2.46	1.31	1.58	1		300	4,348,250	46,442	23,950	5.5	12	18	2,237,253	181,751	11,596	29,391	300	1.02	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	5.62	4.83	4.46	3.84	3.25	2.29	1.16	1.27	1		300	4,782,908	39,128	27,590	5.5	12	18	2,974,789	142,297	13,019	32,764	300	0.91	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	6.07	5.29	4.88	4.28	3.72	2.81	1.65	1.06	1		300	4,060,232	61,570	18,476	5.5	12	18	2,368,471	180,461	17,654	20,528	300	0.55	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	6.24	5.42	5.03	4.36	3.75	2.75	1.55	1.02	1		300	3,989,212	50,576	20,010	5.5	12	18	2,721,767	130,793	18,741	21,693	300	0.79	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	6.08	5.33	4.95	4.37	3.84	2.88	1.73	1.05	1		300	4,366,397	61,550	17,653	5.5	12	18	2,889,508	158,475	20,849	18,975	300	0.86	1	
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	6.11	5.36	4.97	4.42	3.87	2.96	1.82	0.97	1		300	4,191,385	67,941	16,499	5.5	12	18	2,713,566	170,470	22,513	17,661	300	0.71	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	10.82	9.32	8.19	6.58	5.19	3.15	1.38	0.23	1		700	2,137,560	15,859	26,113	5	6	15	2,011,984	22,253	13,359	25,830	700	0.22	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	10.50	8.91	7.81	6.29	5.01	3.16	1.43	0.85	1		700	2,196,653	18,145	25,261	5	6	15	1,376,537	97,099	12,054	25,670	700	0.09	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	10.30	8.76	7.74	6.35	5.11	3.30	1.64	0.63	1		700	2,204,125	21,528	22,360	5	6	15	1,732,689	61,247	16,831	22,444	700	0.51	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	10.05	8.48	7.52	6.17	5.05	3.42	1.85	0.74	1		700	2,046,997	28,396	19,833	5	6	15	1,444,642	84,649	23,018	20,119	700	0.44	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	9.73	8.13	7.19	5.77	4.67	3.05	1.56	0.83	1		700	2,044,844	26,168	23,223	5	6	15	1,413,489	87,202	19,977	23,497	700	0.48	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	10.65	9.21	8.26	6.87	5.66	3.88	2.13	0.38	1		700	2,198,021	25,056	17,362	5	6	15	1,990,285	34,857	24,648	17,418	700	0.36	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	10.51	9.10	8.15	6.85	5.68	3.92	2.14	0.53	1		700	2,377,172	24,839	17,350	5	6	15	1,869,918	66,165	20,827	17,538	700	0.41	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	9.43	7.99	7.08	5.80	4.70	3.10	1.57	0.75	1		700	2,361,300	25,090	23,204	5	6	15	1,617,884	95,934	18,560	23,509	700	0.41	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	9.23	7.88	7.03	5.84	4.83	3.26	1.71	0.88	1		700	2,649,199	26,389	21,683	5	6	15	1,641,116	125,872	18,813	22,132	700	0.47	1	
Superior	M-28	03-03	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-M28-CS17061-05-22-2008	5	25	10.43	8.97	7.96	6.56	5.38	3.61	1.82	0.74	1		700	2,340,221	21,457	20,135	5	6	15	1,478,142	107,405	14,778	20,539	700	0.14	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	10.18	7.35	6.13	4.87	3.96	2.80	1.62	1.91	1		200	1,272,468	64,570	14,472	3.5	6.5	12	731,516	96,102	53,843	14,966	200	1.37	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	13.12	9.84	7.98	6.10	4.83	3.23	1.82	1.44	1		200	1,122,991	42,192	12,933	3.5	6.5	12	1,096,525	41,323	42,742	12,837	200	1.46	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	9.13	6.78	5.64	4.52	3.75	2.73	1.70	1.48	1		200	1,244,849	79,345	13,660	3.5	6.5	12	1,179,808	80,550	78,537	13,593	200	1.49	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	9.36	6.93	5.76	4.53	3.65	2.51	1.48	1.89	1		200	1,524,860	65,713	15,951	3.5	6.5	12	1,323,422	72,947	62,406	15,970	200	1.90	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	8.84	6.32	5.19	4.10	3.30	2.35	1.42	1.90	1		200	1,159,600	78,573	16,812	3.5	6.5	12	1,035,745	82,909	76,611	16,767	200	1.91	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	10.60	7.54	5.92	4.26	3.19	1.88	0.93	1.99	1		200	1,430,591	42,098	24,840	3.5	6.5	12	1,040,872	56,874	36,788	24,983	200	1.78	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	11.74	9.26	7.71	5.94	4.69	3.11	1.71	0.46	1		700	479,911	29,828	20,840	6.5	6	17.5	443,170	34,449	28,299	20,860	700	0.41	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	10.85	8.31	6.86	5.06	3.85	2.48	1.46	1.83	1		700	396,689	35,610	25,064	6.5	6	17.5	522,945	9,338	105,173	24,589	700	0.27	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	11.31	8.52	7.06	5.45	4.24	2.76	1.57	0.68	1		700	427,165	33,937	22,865	6.5	6	17.5	403,181	35,968	33,100	22,840	700	0.67	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	11.33	8.45	7.16	5.66	4.58	3.14	1.82	1.16	1		700	443,540	38,660	19,938	6.5	6	17.5	326,685	70,886	31,908	20,234	700	0.55	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	11.65	9.83	8.51	7.06	5.78	4.08	2.38	0.42	1		700	718,734	29,812	15,288	6.5	6	17.5	717,208	24,975	31,771	15,217	700	0.41	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	10.88	8.62	7.26	5.88	4.75	3.27	1.81	1.20	1		700	604,543	32,881	19,621	6.5	6	17.5	419,671	77,269	25,666	19,997	700	0.39	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	12.13	9.38	7.74	5.96	4.65	2.98	1.59	0.68	1		700	463,428	27,200	22,129	6.5	6	17.5	386,010	41,795	23,847	22,271	700	0.29	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	13.68	10.57	8.54	6.52	5.08	3.25	1.79	0.70	1		700	355,262	25,735	19,511	6.5	6	17.5	339,965	26,208	25,471	19,477	700	0.70	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	15.08	11.85	9.65	7.26	5.54	3.41	1.73	0.65	1		700	371,410	19,233	19,696	6.5	6	17.5	339,313	23,128	18,139	19,713	700	0.59	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	12.18	9.61	8.25	6.59	5.31	3.63	2.05	0.64	1		700	528,520	29,872	17,400	6.5	6	17.5	428,880	49,961	25,472	17,566	700	0.27	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008	6.5	23.5	7.18	5.78	5.10	4.22	3.50	2.47	1.41	1.18	1		700	1,155,904	49,461	25,579	6.5	6	17.5	739,537	150,451	36,045	26,262	700	0.39	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	7.38	6.03	5.35	4.55	3.85	2.80	1.63	1.48	1		300	1,693,890	63,951	18,188	5.5	9.5	15	945,656	157,721	37,979	19,171	300	0.70	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	5.71	4.70	4.30	3.77	3.26	2.52	1.54	1.95	1		300	2,685,246	94,230	18,797	5.5	9.5	15	982,474	341,183	47,591	20,455	300	0.70	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	6.08	4.91	4.35	3.69	3.12	2.30	1.31	1.88	1		300	2,053,433	77,311	22,498	5.5	9.5	15	920,721	229,014	42,389	23,970	300	0.40	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	5.64	4.62	4.13	3.49	2.98	2.19	1.26	1.64	1		300	2,406,007	81,040	23,556	5.5	9.5	15	1,153,096	237,973	44,215	25,041	300	0.47	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	5.72	4.61	4.13	3.45	2.86	2.04	1.15	1.52	1		300	2,211,671	74,457	25,984	5.5	9.5	15	1,294,134	176,655	46,132	27,072	300	0.95	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	6.60	5.43	4.80	3.99	3.32	2.33	1.18	1.93	1		300	2,463,129	47,961	25,350	5.5	9.5	15	1,070,549	193,062	21,949	27,507	300	0.19	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	7.13	5.72	5.00	4.03	3.23	2.13	1.08	1.31	1		300	1,754,567	45,536	27,537	5.5	9.5	15	1,165,337	99,866	30,254	28,343	300	0.77	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	8.75	7.36	6.47	5.26	4.19	2.61	1.06	1.09	1		300	2,135,468	20,079	27,617	5.5	9.5	15	1,409,276	72,243	11,613	29,434	300	0.39	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	9.31	7.87	7.16	6.21	5.34	4.00	2.40	1.05	1		150	1,851,236	63,331	7,088	5.5	8	18	1,345,871	112,868	52,546	7,342	150	0.97	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	6.71	5.65	5.13	4.56	3.95	2.98	1.80	1.57	1		150	2,798,001	89,490	9,265	5.5	8	18	1,230,246	282,824	66,064	9,990	150	1.11	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	8.27	7.20	6.64	5.88	5.11	3.81	2.14	1.21	1		150	3,608,719	51,703	8,254	5.5	8	18	1,373,724	286,057	31,286	8,952	150	0.79	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	7.70	6.10	5.43	4.63	3.96	2.93	1.68	1.81	1		150	1,474,786	82,254	10,326	5.5	8	18	640,772	211,629	64,807	11,029	150	0.86	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	7.36	6.29	5.78	5.05	4.35	3.23	1.86	1.19	1		150	3,078,447	67,383	9,381	5.5	8	18	1,595,874	220,204	47,693	9,962	150	0.94	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	7.42	6.39	5.83	5.09	4.39	3.14	1.56	1.58	1		150	4,341,207	41,637	12,217	5.5	8	18	1,187,388	387,431	19,932	13,511	150	0.57	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	8.91	6.19	4.83	3.36	2.44	1.37	0.62	1.96	1		150	563,055	50,111	29,790	5.5	8	18	651,837	36,510	58,452	28,921	150	1.82	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	12.32	9.36	7.73	6.01	4.78	3.12	1.54	1.01	1		150	608,824	39,967	11,952	5.5	8	18	516,362	49,178	36,913	11,992	150	0.92	1	
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	6.45	4.78	3.94	2.91	2.09	0.99	0.21	1.72	1		150	835,544	26,195	67,793	7.5	8	14.5	610,582	62,136	19,497	67,839	150	0.67	1	
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	5.96	4.42	3.69	2.72	1.95	0.95	0.24	1.18	1		150	862,058	31,138	65,682	7.5	8	14.5	716,522	50,976	26,329	64,050	150	0.82	1	
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	5.94	4.52	3.74	2.82	2.03	1.07	0.38	1.32	1		150	725,533	42,964	46,662	7.5	8	14.5	837,674	16,916	117,345	44,882	150	0.80	1	
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	6.39	4.81	4.07	3.07	2.28	1.22	0.44	1.43	1		150	712,669	40,446	40,724	7.5	8	14.5	785,376	20,791	71,530	39,268	150	1.27	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.95	14.23	10.17	6.24	4.18	2.21	1.13	2.00	1		700	194,253	17,934	29,476	5.5	6.5	18	207,622	14,652	19,223	29,210	700	1.81	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.78	11.52	8.33	5.29	3.75	2.15	1.18	1.53	1		700	208,317	24,774	29,795	5.5	6.5	18	227,842	19,538	27,232	29,475	700	1.24	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	13.63	9.51	7.10	4.72	3.42	2.07	1.15	1.00	1		700	281,673	31,361	31,097	5.5	6.5	18	304,846	24,933	34,498	30,785	700	0.69	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.29	13.78	9.96	6.49	4.62	2.69	1.36	1.97	1		700	215,440	19,895	24,934	5.5	6.5	18	195,223	22,081	19,019	24,927	700	1.92	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	20.53	15.36	11.74	8.14	6.04	3.57	1.76	1.97	1		700	281,630	16,645	19,062	5.5	6.5	18	218,964	25,872	14,294	19,274	700	1.47	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	14.95	10.61	7.81	5.13	3.73	2.22	1.25	1.79	1		700	254,324	28,389	28,836	5.5	6.5	18	296,415	19,036	34,145	28,424	700	1.25	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	12.44	8.86	6.71	4.56	3.37	2.05	1.16	1.06	1		700	335,813	34,038	31,118	5.5	6.5	18	362,783	26,760	37,716	30,812	700	0.81	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	17.00	12.00	8.80	5.92	4.38	2.77	1.53	1.44	1		700	214,436	26,487	23,323	5.5	6.5	18	228,654	21,686	28,855	23,107	700	1.30	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.76	14.50	11.03	7.62	5.63	3.37	1.74	1.37	1		700	257,913	18,696	19,617	5.5	6.5	18	221,783	23,760	17,039	19,721	700	1.13	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	18.16	13.22	9.71	6.47	4.85	3.04	1.67	1.99	1		700	211,639	23,729	21,211	5.5	6.5	18	230,097	18,781	26,142	21,023	700	1.86	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	21.87	15.14	10.80	6.77	4.58	2.57	1.30	1.62	1		700	167,464	17,430	25,536	5.5	6.5	18	165,711	16,529	17,636	25,392	700	1.62	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.91	12.08	9.06	6.11	4.43	2.52	1.24	1.84	1		700	296,077	21,135	26,870	5.5	6.5	18	229,303	31,406	18,382	27,125	700	1.16	1	

Location: Region	Location: Road	Location: Cluster-Area	Location: Control Section	Location: Project Number	Material Types: Roadbed Soil Type	Material Types: Granular Layer Aggregate Type	Material Types: Granular Layer Gradation	FWD File Information: Season	FWD File Information: Date	FWD File Information: File Title	Pavement Layer Thickness (in): Asphalt concrete	Pavement Layer Thickness (in): Base/ Subbase	Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area: 0	8	12	18	24	36	60	2-Layer Backcalculation: RMS Error (%)	Converged? Yes	Converged? No	Depth to Stiff Layer (in)	2-Layer Resilient Modulus (psi): Asphalt Concrete	Base/ Subbase	Roadbed	3-Layer System: Layer Thicknesses (in): Asphalt Concrete	Base	Subbase	Resilient modulus (psi): Asphalt Concrete	Base	Subbase	Roadbed	Depth to Stiff layer (in)	RMS Error (%)	Convergence: Yes	Convergence: No
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	18.57	12.95	9.54	6.28	4.49	2.64	1.43	1.01	1		700	206,159	21,924	24,296	5.5	6.5	18	213,685	19,204	22,943	24,142	700	0.91	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	17.71	12.58	9.33	6.17	4.46	2.62	1.37	1.31	1		700	241,914	22,059	25,211	5.5	6.5	18	224,754	23,471	21,429	25,178	700	1.28	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.08	11.41	8.43	5.69	4.17	2.50	1.34	1.19	1		700	258,101	25,377	25,947	5.5	6.5	18	243,720	26,151	24,971	25,895	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.79	14.37	10.89	7.65	5.71	3.55	1.92	1.04	1		700	237,176	20,600	18,284	5.5	6.5	18	214,095	23,202	19,642	18,316	700	0.96	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	17.66	12.90	9.88	7.11	5.46	3.55	1.93	1.38	1		700	273,922	24,538	18,367	5.5	6.5	18	223,340	32,463	22,201	18,503	700	1.11	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.92	14.70	11.30	7.72	5.69	3.28	1.70	1.08	1		700	270,417	17,604	20,060	5.5	6.5	18	245,185	19,940	16,791	20,062	700	1.02	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	17.87	12.99	9.73	6.47	4.67	2.75	1.48	1.28	1		700	245,253	21,484	23,512	5.5	6.5	18	261,915	17,450	23,204	23,343	700	1.15	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.50	11.40	8.33	5.67	4.16	2.46	1.29	1.64	1		700	247,233	24,782	26,497	5.5	6.5	18	199,585	32,430	22,456	26,643	700	1.22	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	17.65	12.08	8.88	5.89	4.21	2.49	1.29	1.14	1		700	220,559	22,993	26,305	5.5	6.5	18	194,662	26,506	21,659	26,346	700	0.93	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	18.88	12.62	9.05	5.80	4.06	2.35	1.30	1.24	1		700	169,258	22,792	26,748	5.5	6.5	18	186,493	18,139	24,877	26,478	700	0.83	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.80	11.54	8.20	5.18	3.64	2.06	1.10	1.57	1		700	206,100	24,222	31,221	5.5	6.5	18	213,598	21,062	25,482	30,951	700	1.48	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	13.71	9.69	7.26	4.90	3.58	2.17	1.27	1.82	1		700	277,748	32,051	28,886	5.5	6.5	18	344,305	18,802	41,907	28,387	700	0.98	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.14	13.91	10.60	7.27	5.41	3.31	1.73	1.35	1		700	252,166	20,459	20,019	5.5	6.5	18	221,995	24,554	19,007	20,096	700	1.19	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	13.88	10.09	7.72	5.51	4.20	2.64	1.42	1.35	1		700	359,311	29,824	24,772	5.5	6.5	18	288,283	40,704	26,746	24,951	700	0.99	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.78	13.95	10.10	6.46	4.45	2.45	1.32	1.55	1		700	194,407	19,081	25,989	5.5	6.5	18	217,441	14,143	21,473	25,713	700	1.13	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.68	11.93	8.73	5.90	4.37	2.76	1.59	1.93	1		700	216,727	27,621	23,074	5.5	6.5	18	260,742	17,272	35,035	22,674	700	1.27	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	14.59	10.25	7.48	4.91	3.53	2.08	1.17	1.60	1		700	253,987	28,772	30,551	5.5	6.5	18	287,387	20,554	33,463	30,141	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	14.95	10.78	8.14	5.64	4.27	2.72	1.42	1.85	1		700	303,045	27,868	24,351	5.5	6.5	18	249,441	36,785	25,070	24,532	700	1.58	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.20	12.62	10.28	8.03	6.52	4.58	2.68	0.99	1		700	405,356	28,696	13,431	5.5	6.5	18	325,428	40,791	25,539	13,589	700	0.68	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	15.76	12.03	9.62	7.20	5.75	3.94	2.38	0.85	1		700	330,646	30,468	15,433	5.5	6.5	18	359,980	22,710	35,109	15,284	700	0.67	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	18.95	13.91	10.63	7.44	5.46	3.10	1.60	1.19	1		700	297,879	18,181	21,301	5.5	6.5	18	251,068	23,675	16,627	21,365	700	0.96	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.91	8.40	6.18	4.27	3.18	2.05	1.23	1.99	1		700	288,269	40,756	30,265	5.5	6.5	18	360,047	23,213	55,689	29,588	700	1.05	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	12.36	9.12	7.11	5.19	3.89	2.53	1.47	0.80	1		700	393,195	35,555	24,851	5.5	6.5	18	429,192	26,538	40,659	24,602	700	0.53	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	12.20	8.60	6.37	4.17	3.02	1.75	0.90	1.46	1		700	347,975	31,682	37,806	5.5	6.5	18	313,429	35,586	30,181	37,787	700	1.37	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	12.23	8.90	6.80	4.82	3.59	2.28	1.21	1.28	1		700	402,522	33,464	29,092	5.5	6.5	18	345,900	41,360	30,865	29,224	700	1.04	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.37	8.14	6.02	4.07	2.95	1.83	1.01	1.34	1		700	345,670	37,619	35,394	5.5	6.5	18	381,561	28,630	42,261	35,010	700	1.05	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	13.61	9.88	7.51	5.41	4.17	2.77	1.51	1.62	1		700	331,376	33,351	23,543	5.5	6.5	18	280,648	41,635	30,583	23,705	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	10.44	7.59	5.75	3.95	2.91	1.82	1.04	1.47	1		700	402,141	40,965	34,799	5.5	6.5	18	475,888	25,426	51,855	34,251	700	0.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.53	8.14	6.03	3.97	2.81	1.63	0.88	0.97	1		700	355,164	34,143	39,872	5.5	6.5	18	372,014	28,933	36,287	39,539	700	0.82	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.42	8.39	6.44	4.49	3.25	1.97	1.04	0.74	1		700	447,584	32,781	33,381	5.5	6.5	18	424,151	33,870	32,277	33,304	700	0.72	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	12.51	8.55	6.35	4.16	2.93	1.70	0.95	1.14	1		700	295,758	33,155	37,209	5.5	6.5	18	328,499	25,158	37,157	36,781	700	0.64	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	11.87	8.58	6.29	4.21	3.03	1.89	1.09	1.65	1		700	324,832	33,209	35,840	5.5	6.5	18	382,383	18,484	50,617	31,495	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	10.94	7.85	5.76	3.85	2.84	1.81	1.08	1.86	1		700	326,023	38,612	36,924	5.5	6.5	18	407,597	19,157	65,288	32,313	700	1.20	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	10.57	7.57	5.70	3.93	2.96	1.86	1.06	1.20	1		700	396,818	38,129	36,596	5.5	6.5	18	391,695	32,809	44,573	32,527	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	11.46	8.45	6.54	4.64	3.48	2.16	1.15	1.75	1		700	488,630	30,411	32,852	5.5	6.5	18	390,689	39,734	30,430	29,448	700	0.76	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	9.39	6.88	5.14	3.40	2.46	1.45	0.86	1.99	1		700	438,408	39,673	45,828	5.5	6.5	18	572,203	16,032	80,209	40,282	700	1.31	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	11.44	8.47	6.38	4.35	3.22	1.99	1.08	1.82	1		700	416,094	31,608	35,173	5.5	6.5	18	397,925	28,754	35,939	31,301	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	10.38	7.42	5.60	3.92	2.92	1.97	1.20	1.41	1		700	347,522	44,051	33,599	5.5	6.5	18	446,927	20,684	79,180	29,260	700	0.54	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	12.57	9.77	7.73	5.61	4.28	2.84	1.56	1.69	1		700	492,029	28,347	24,779	5.5	6.5	18	450,504	28,123	31,761	21,996	700	1.25	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	12.50	9.39	7.12	5.06	3.89	2.58	1.62	1.96	1		700	332,869	35,265	25,291	5.5	6.5	18	448,777	12,891	84,517	21,874	700	1.26	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	12.34	8.31	5.96	4.00	2.98	1.98	1.20	1.72	1		700	223,799	39,789	33,466	5.5	6.5	18	282,823	21,853	62,128	29,252	700	0.98	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	21.48	15.35	11.30	7.54	5.46	3.21	1.74	1.54	1		700	200,143	16,896	21,588	5.5	6.5	18	190,735	15,562	18,950	19,221	700	1.20	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	19.81	14.52	11.02	7.81	5.82	3.67	2.00	1.72	1		700	251,665	18,712	19,082	5.5	6.5	18	216,465	21,183	19,556	17,060	700	0.98	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	19.90	13.38	9.54	5.95	4.15	2.46	1.32	1.89	1		700	163,459	19,843	28,148	5.5	6.5	18	164,446	16,949	22,687	25,072	700	1.34	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	19.31	13.74	10.13	6.43	4.53	2.64	1.46	1.67	1		700	201,522	18,854	25,952	5.5	6.5	18	223,240	12,528	24,830	22,949	700	1.29	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	15.43	11.08	8.11	5.46	4.08	2.65	1.59	1.99	1		700	222,502	28,473	25,109	5.5	6.5	18	284,142	13,771	49,487	21,918	700	1.28	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.30	12.13	9.00	5.84	4.15	2.42	1.39	1.16	1		700	220,146	21,921	27,730	5.5	6.5	18	257,966	12,991	31,094	24,481	700	0.89	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	19.87	12.61	8.63	5.27	3.64	2.21	1.25	1.72	1		700	121,769	22,747	30,484	5.5	6.5	18	144,207	15,410	29,261	26,967	700	0.93	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	22.28	14.58	10.31	6.24	4.31	2.49	1.33	1.90	1		700	135,376	17,980	27,582	5.5	6.5	18	137,346	15,318	20,444	24,578	700	1.36	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.86	12.29	8.86	5.71	4.11	2.44	1.31	1.93	1		700	202,003	21,751	28,389	5.5	6.5	18	191,557	20,522	23,929	25,349	700	1.39	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	15.45	10.68	7.67	5.24	3.82	2.37	1.29	1.99	1		700	235,871	26,429	29,245	5.5	6.5	18	212,733	27,605	27,906	26,219	700	1.30	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	21.82	13.96	9.80	6.11	4.27	2.65	1.51	1.43	1		700	118,349	20,757	25,464	5.5	6.5	18	137,810	14,033	27,069	22,492	700	0.59	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.48	11.19	8.02	5.33	3.93	2.65	1.57	1.25	1		700	140,545	29,429	25,360	5.5	6.5	18	167,668	19,016	40,366	22,300	700	0.38	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	19.21	13.37	9.55	6.45	4.76	2.92	1.62	1.96	1		700	187,413	21,334	23,489	5.5	6.5	18	176,703	20,304	23,551	20,965	700	1.57	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	15.44	10.27	7.30	4.81	3.43	2.09	1.16	1.31	1		700	206,653	27,337	32,699	5.5	6.5	18	202,643	24,376	30,847	29,170	700	0.90	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	12.50	9.03	6.62	4.44	3.19	1.99	1.15	1.66	1		700	324,617	33,237	35,806	5.5	6.5	18	384,513	18,147	51,474	31,448	700	1.10	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	11.49	8.25	6.05	4.04	2.98	1.90	1.13	1.85	1		700	326,442	38,592	36,937	5.5	6.5	18	406,436	19,349	64,638	32,332	700	1.20	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	11.02	7.89	5.94	4.10	3.08	1.94	1.11	1.19	1		700	396,129	38,167	36,560	5.5	6.5	18	392,441	32,600	44,777	32,489	700	0.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	12.00	8.85	6.85	4.86	3.64	2.26	1.21	1.74	1		700	489,203	30,371	32,878	5.5	6.5	18	391,679	39,598	30,413	29,468	700	0.75	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	9.81	7.18	5.37	3.55	2.57	1.51	0.90	2.00	1		700	437,462	39,756	45,775	5.5	6.5	18	571,382	16,048	80,544	40,229	700	1.31	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	11.99	8.88	6.69	4.56	3.37	2.09	1.13	1.85	1		700	417,163	31,547	35,221	5.5	6.5	18	396,853	29,034	35,685	31,354	700	1.43	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	10.84	7.75	5.85	4.09	3.06	2.05	1.25	1.36	1		700	349,061	43,932	33,661	5.5	6.5	18	445,584	21,043	77,398	29,336	700	0.57	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	13.17	10.23	8.09	5.88	4.48	2.98	1.63	1.72	1		700	494,293	28,251	24,819	5.5	6.5	18	449,511	28,504	31,439	22,040	700	1.26	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	13.04	9.80	7.43	5.28	4.06	2.69	1.69	1.96	1		700	332,639	35,280	25,283	5.5	6.5	18	447,455	12,996	83,711	21,869	700	1.28	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	12.95	8.72	6.25	4.20	3.13	2.08	1.26	1.73	1		700	223,521	39,801	33,464	5.5	6.5	18	283,169	21,756	62,391	29,245	700	0.99	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	22.28	15.92	11.72	7.82	5.66	3.33	1.81	1.56	1		700	200,354	16,888	21,591	5.5	6.5	18	190,335	15,649	18,893	19,226	700	1.21	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	20.51	15.03	11.41	8.08	6.03	3.80	2.07	1.71	1		700	251,759	18,706	19,084	5.5	6.5	18	216,438	21,194	19,546	17,062	700	0.97	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	20.66	13.89	9.90	6.18	4.31	2.55	1.37	1.88	1		700	163,717	19,833	28,151	5.5	6.5	18	164,546	16,970	22,656	25,075	700	1.33	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	19.94	14.19	10.46	6.64	4.68	2.73	1.51	1.67	1		700	201,188	18,870	25,947	5.5	6.5	18	224,455	12,320	25,122	22,937	700	1.27	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	15.94	11.45	8.38	5.64	4.22	2.74	1.64	1.98	1		700	222,920	28,440	25,131	5.5	6.5	18	283,359	13,923	48,853	21,946	700	1.29	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.83	12.50	9.28	6.02	4.27	2.50	1.43	1.13	1		700	220,653	21,893	27,762	5.5	6.5	18	257,551	13,096	30,851	24,514	700	0.88	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.22	12.24	9.23	6.51	4.98	3.32	1.84	2.00	1		700	245,349	25,557	21,483	5.5	6.5	18	212,997	27,952	26,993	19,222	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	20.41	12.96	8.86	5.42	3.74	2.27	1.28	1.71	1		700	122,250	22,702	30,525	5.5	6.5	18	143,547	15,584	28,974	27,015	700	0.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	22.72	14.87	10.52	6.36	4.40	2.54	1.36	1.91	1		700	135,405	17,984	27,579	5.5	6.5	18	137,304	15,335	20,440	24,576	700	1.37	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.17	12.50	9.01	5.81	4.18	2.49	1.34	1.93	1		700	202,077	21,753	28,374	5.5	6.5	18	191,362	20,574	23,907	25,338	700	1.38	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	15.81	10.92	7.85	5.36	3.90	2.42	1.32	1.94	1		700	235,891	26,417	29,257	5.5	6.5	18	213,694	27,379	27,986	26,221	700	1.28	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	22.22	14.21	9.98	6.22	4.35	2.70	1.54	1.44	1		700	118,317	20,768	25,444	5.5	6.5	18	138,118	13,974	27,170	22,470	700	0.59	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.98	11.52	8.25	5.48	4.05	2.72	1.61	1.25	1		700	140,650	29,409	25,370	5.5	6.5	18	167,179	19,129	40,160	22,314	700	0.38	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	19.76	13.76	9.82	6.63	4.90	3.00	1.66	1.98	1		700	187,849	21,305	23,509	5.5	6.5	18	176,051	20,491	23,410	20,990	700	1.58	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	15.84	10.53	7.49	4.93	3.52	2.14	1.19	1.31	1		700	206,797	27,339	32,700	5.5	6.5	18	202,562	24,419	30,827	29,172	700	0.91	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.19	13.69	9.78	6.01	4.02	2.13	1.09	1.99	1		700	194,028	17,954	29,437	5.5	6.5	18	208,401	14,518	19,331	29,164	700	1.78	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.12	11.07	8.00	5.08	3.60	2.06	1.13	1.54	1		700	208,094	24,780	29,798	5.5	6.5	18	227,627	19,536	27,245	29,477	700	1.24	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	13.07	9.12	6.80	4.53	3.27	1.98	1.10	0.99	1		700	281,672	31,330	31,134	5.5	6.5	18	304,345	24,987	34,411	30,824	700	0.68	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	18.50	13.21	9.55	6.22	4.43	2.58	1.30	1.98	1		700	215,529	19,895	24,936	5.5	6.5	18	194,861	22,166	18,992	24,933	700	1.93	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	14.26	10.13	7.45	4.89	3.56	2.12	1.19	1.76	1		700	255,129	28,341	28,860	5.5	6.5	18	295,191	19,324	33,764	28,459	700	1.25	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.95	8.51	6.44	4.38	3.24	1.97	1.11	1.05	1		700	335,727	34,042	31,124	5.5	6.5	18	361,193	27,011	37,554	30,825	700	0.82	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.31	11.52	8.45	5.69	4.21	2.66	1.47	1.45	1		700	215,011	26,461	23,335	5.5	6.5	18	228,050	21,893	28,680	23,128	700	1.32	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.18	14.07	10.71	7.40	5.47	3.27	1.69	1.35	1		700	257,940	18,698	19,612	5.5	6.5	18	222,150	23,685	17,062	19,713	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	17.53	12.76	9.37	6.25	4.68	2.93	1.61	2.00	1		700	211,849	23,712	21,226	5.5	6.5	18	229,763	18,854	26,068	21,040	700	1.87	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	21.17	14.66	10.45	6.55	4.43	2.48	1.26	1.60	1		700	167,352	17,440	25,519	5.5	6.5	18	166,192	16,426	17,697	25,369	700	1.60	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.29	11.63	8.73	5.89	4.27	2.43	1.20	1.87	1		700	296,522	21,121	26,876	5.5	6.5	18	228,321	31,689	18,315	27,141	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	17.98	12.55	9.24	6.08	4.35	2.55	1.39	1.02	1		700	205,650	21,945	24,282	5.5	6.5	18	214,325	19,040	23,055	24,123	700	0.90	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	17.02	12.08	8.97	5.92	4.28	2.52	1.31	1.30	1		700	241,556	22,069	25,210	5.5	6.5	18	224,795	23,410	21,462	25,174	700	1.28	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	15.51	11.01	8.14	5.49	4.03	2.42	1.30	1.19	1		700	257,975	25,384	25,940	5.5	6.5	18	243,764	26,128	24,990	25,887	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.13	13.89	10.53	7.40	5.52	3.43	1.85	1.03	1		700	236,956	20,601	18,286	5.5	6.5	18	214,231	23,134	19,665	18,316	700	0.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.99	12.41	9.51	6.84	5.26	3.41	1.86	1.37	1		700	274,065	24,533	18,370	5.5	6.5	18	223,711	32,403	22,209	18,505	700	1.11	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.34	14.28	10.97	7.50	5.52	3.19	1.65	1.10	1		700	270,619	17,602	20,058	5.5	6.5	18	244,316	20,108	16,742	20,064	700	1.04	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	17.29	12.57	9.41	6.26	4.52	2.66	1.43	1.29	1		700	244,653	21,514	23,488	5.5	6.5	18	261,483	17,456	23,248	23,320	700	1.16	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.00	11.05	8.07	5.50	4.04	2.38	1.25	1.60	1		700	246,568	24,819	26,473	5.5	6.5	18	200,501	32,134	22,566	26,609	700	1.20	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	17.11	11.71	8.61	5.71	4.08	2.41	1.25	1.13	1		700	220,705	22,987	26,304	5.5	6.5	18	194,756	26,507	21,651	26,346	700	0.93	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	18.33	12.25	8.79	5.63	3.94	2.28	1.26	1.23	1		700	169,437	22,774	26,771	5.5	6.5	18	186,379	18,174	24,825	26,502	700	0.83	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.21	11.13	7.91	5.00	3.51	1.99	1.06	1.56	1		700	206,343	24,213	31,226	5.5	6.5	18	212,250	21,348	25,319	30,969	700	1.48	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	13.14	9.28	6.95	4.69	3.43	2.08	1.22	1.87	1		700	278,524	32,105	28,845	5.5	6.5	18	345,635	18,513	42,514	28,338	700	0.99	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	18.42	13.38	10.20	7.00	5.21	3.18	1.67	1.32	1		700	251,854	20,470	20,010	5.5	6.5	18	222,655	24,370	19,074	20,081	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	13.35	9.71	7.42	5.30	4.04	2.54	1.37	1.35	1		700	358,956	29,850	24,760	5.5	6.5	18	288,238	40,677	26,783	24,938	700	1.00	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.19	13.53	9.80	6.27	4.31	2.37	1.28	1.54	1		700	194,584	19,069	25,997	5.5	6.5	18	217,541	14,146	21,450	25,722	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	15.90	11.37	8.33	5.62	4.16	2.64	1.52	1.93	1		700	216,587	27,639	23,067	5.5	6.5	18	261,170	17,182	35,196	22,662	700	1.25	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	14.04	9.86	7.20	4.72	3.39	2.00	1.12	1.61	1		700	253,693	28,790	30,539	5.5	6.5	18	287,651	20,478	33,559	30,126	700	1.13	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	14.45	10.42	7.87	5.45	4.13	2.63	1.37	1.89	1		700	303,609	27,828	24,370	5.5	6.5	18	248,601	37,080	24,950	24,560	700	1.61	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	15.74	12.26	9.98	7.80	6.33	4.45	2.61	0.99	1		700	405,165	28,707	13,427	5.5	6.5	18	324,431	40,980	25,513	13,587	700	0.68	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	15.30	11.67	9.34	6.99	5.58	3.82	2.31	0.85	1		700	330,881	30,455	15,438	5.5	6.5	18	361,091	22,560	35,207	15,286	700	0.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	18.38	13.49	10.31	7.21	5.29	3.01	1.55	1.19	1		700	297,964	18,168	21,322	5.5	6.5	18	251,451	23,609	16,625	21,384	700	0.96	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.90	8.78	6.85	5.00	3.75	2.44	1.42	0.80	1		700	392,544	35,604	24,836	5.5	6.5	18	428,251	26,622	40,680	24,589	700	0.54	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.76	8.29	6.14	4.02	2.91	1.69	0.87	1.41	1		700	347,143	31,744	37,742	5.5	6.5	18	315,666	35,071	30,419	37,704	700	1.34	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.72	8.54	6.52	4.62	3.44	2.19	1.16	1.29	1		700	402,049	33,484	29,086	5.5	6.5	18	345,677	41,376	30,878	29,219	700	1.06	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	10.89	7.80	5.77	3.90	2.83	1.75	0.97	1.33	1		700	345,700	37,611	35,402	5.5	6.5	18	381,033	28,708	42,193	35,019	700	1.05	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	13.09	9.50	7.22	5.20	4.01	2.67	1.45	1.66	1		700	331,551	33,328	23,564	5.5	6.5	18	279,424	41,947	30,470	23,734	700	1.42	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	10.06	7.32	5.54	3.80	2.80	1.75	1.01	1.51	1		700	401,261	41,004	34,801	5.5	6.5	18	478,239	24,984	52,509	34,239	700	0.78	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.07	7.82	5.79	3.81	2.70	1.57	0.85	0.99	1		700	353,070	34,300	39,727	5.5	6.5	18	372,444	28,641	36,705	39,380	700	0.82	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.03	8.11	6.23	4.34	3.14	1.90	1.01	0.71	1		700	448,988	32,715	33,426	5.5	6.5	18	426,227	33,680	32,256	33,345	700	0.69	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	12.08	8.26	6.13	4.01	2.83	1.64	0.92	1.22	1		700	294,555	33,227	37,176	5.5	6.5	18	331,139	24,587	37,712	36,725	700	0.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.02	7.89	5.94	4.10	3.08	1.94	1.11	1.10	1		700	368,091	40,428	32,785	5.5	6.5	18	392,441	32,600	44,777	32,489	700	0.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.00	8.85	6.85	4.86	3.64	2.26	1.21	0.96	1		700	447,029	32,598	29,381	5.5	6.5	18	391,679	39,598	30,413	29,468	700	0.75	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.99	8.58	6.30	4.06	2.90	1.68	0.87	1.65	1		700	348,721	32,354	39,900	5.5	6.5	18	343,710	31,021	32,488	39,606	700	1.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.99	8.88	6.69	4.56	3.37	2.09	1.13	1.47	1		700	385,867	33,584	31,583	5.5	6.5	18	396,853	29,034	35,685	31,354	700	1.43	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.17	10.23	8.09	5.88	4.48	2.98	1.63	1.29	1		700	458,792	30,236	22,093	5.5	6.5	18	449,511	28,504	31,439	22,040	700	1.26	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	22.28	15.92	11.72	7.82	5.66	3.33	1.81	1.28	1		700	184,443	17,976	19,375	5.5	6.5	18	190,335	15,649	18,893	19,226	700	1.21	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.51	15.03	11.41	8.08	6.03	3.80	2.07	1.02	1		700	232,994	19,928	17,059	5.5	6.5	18	216,438	21,194	19,546	17,062	700	0.97	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.02	12.68	9.42	6.31	4.60	2.70	1.43	1.14	1		700	235,913	22,222	24,327	5.5	6.5	18	214,870	24,585	21,222	24,304	700	1.06	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.66	13.89	9.90	6.18	4.31	2.55	1.37	1.62	1		700	151,351	20,959	25,394	5.5	6.5	18	164,546	16,970	22,656	25,075	700	1.33	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.85	11.58	8.62	5.96	4.42	2.77	1.44	1.93	1		700	237,879	25,097	23,510	5.5	6.5	18	180,414	35,946	22,091	23,740	700	1.23	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.97	15.21	11.38	7.83	5.72	3.46	1.78	1.56	1		700	224,736	18,075	19,096	5.5	6.5	18	189,841	23,141	16,451	19,175	700	1.32	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.22	12.24	9.23	6.51	4.98	3.32	1.84	1.25	1		700	227,385	27,056	19,205	5.5	6.5	18	212,997	27,952	26,993	19,222	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	22.72	14.87	10.52	6.36	4.40	2.54	1.36	1.73	1		700	125,019	18,987	24,912	5.5	6.5	18	137,304	15,335	20,440	24,576	700	1.37	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.17	12.50	9.01	5.81	4.18	2.49	1.34	1.45	1		700	189,655	22,919	25,584	5.5	6.5	18	191,362	20,574	23,907	25,338	700	1.38	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	21.62	14.95	10.87	7.24	5.29	3.24	1.67	1.84	1		700	170,013	19,247	20,041	5.5	6.5	18	149,201	22,638	17,903	20,105	700	1.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	22.87	15.70	11.66	7.82	5.76	3.51	1.85	1.39	1		700	169,212	18,394	18,493	5.5	6.5	18	143,846	22,400	17,022	18,559	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	21.47	14.59	10.38	7.01	5.12	3.13	1.67	1.61	1		700	157,081	20,374	20,393	5.5	6.5	18	138,608	23,113	19,314	20,416	700	1.50	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.24	11.44	8.13	5.39	3.88	2.38	1.28	1.19	1		700	179,346	26,173	26,798	5.5	6.5	18	169,317	26,805	25,723	26,718	700	1.17	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.81	10.92	7.85	5.36	3.90	2.42	1.32	1.29	1		700	220,920	27,854	26,323	5.5	6.5	18	213,694	27,379	27,986	26,221	700	1.28	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.76	13.76	9.82	6.63	4.90	3.00	1.66	1.61	1		700	175,623	22,472	21,138	5.5	6.5	18	176,051	20,491	23,410	20,990	700	1.58	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.84	10.53	7.49	4.93	3.52	2.14	1.19	1.12	1		700	190,532	28,894	29,464	5.5	6.5	18	202,562	24,419	30,827	29,172	700	0.91	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.87	12.77	9.07	5.86	4.13	2.39	1.23	1.56	1		700	183,668	21,666	27,185	5.5	6.5	18	164,919	24,194	20,494	27,134	700	1.49	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	14.90	11.13	8.48	5.84	4.16	2.37	1.11	1.95	1		700	413,699	21,532	30,133	5.5	6.5	18	310,165	35,697	18,228	30,321	700	1.39	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.78	11.52	8.33	5.29	3.75	2.15	1.18	1.56	1		700	207,415	24,865	29,850	5.5	6.5	18	227,845	19,537	27,232	29,475	700	1.24	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.63	9.51	7.10	4.72	3.42	2.07	1.15	0.99	1		700	281,872	31,341	31,116	5.5	6.5	18	304,847	24,933	34,498	30,785	700	0.69	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.29	13.78	9.96	6.49	4.62	2.69	1.36	1.94	1		700	214,489	19,976	24,992	5.5	6.5	18	195,209	22,083	19,018	24,927	700	1.92	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.53	15.36	11.74	8.14	6.04	3.57	1.76	1.95	1		700	281,230	16,675	19,098	5.5	6.5	18	218,964	25,872	14,294	19,274	700	1.47	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	14.95	10.61	7.81	5.13	3.73	2.22	1.25	1.79	1		700	254,186	28,393	28,855	5.5	6.5	18	296,430	19,034	34,147	28,423	700	1.25	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.44	8.86	6.71	4.56	3.37	2.05	1.16	1.04	1		700	336,627	33,954	31,121	5.5	6.5	18	362,780	26,761	37,715	30,812	700	0.81	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.00	12.00	8.80	5.92	4.38	2.77	1.53	1.44	1		700	215,227	26,397	23,320	5.5	6.5	18	228,641	21,686	28,857	23,107	700	1.30	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.76	14.50	11.03	7.62	5.63	3.37	1.74	1.36	1		700	258,002	18,695	19,641	5.5	6.5	18	221,778	23,761	17,039	19,721	700	1.13	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.16	13.22	9.71	6.47	4.85	3.04	1.67	1.99	1		700	212,512	23,648	21,213	5.5	6.5	18	230,106	18,779	26,144	21,023	700	1.86	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	21.87	15.14	10.80	6.77	4.58	2.57	1.30	1.60	1		700	166,149	17,558	25,621	5.5	6.5	18	165,714	16,529	17,636	25,392	700	1.62	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.91	12.08	9.06	6.11	4.43	2.52	1.24	1.79	1		700	294,837	21,223	26,938	5.5	6.5	18	229,306	31,406	18,382	27,125	700	1.16	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.57	12.95	9.54	6.28	4.49	2.64	1.43	1.02	1		700	205,689	21,964	24,330	5.5	6.5	18	213,683	19,205	22,943	24,142	700	0.91	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.71	12.58	9.33	6.17	4.46	2.62	1.37	1.30	1		700	241,367	22,106	25,254	5.5	6.5	18	224,750	23,472	21,429	25,178	700	1.28	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.08	11.41	8.43	5.69	4.17	2.50	1.34	1.19	1		700	258,212	25,367	25,973	5.5	6.5	18	243,718	26,152	24,971	25,895	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.79	14.37	10.89	7.65	5.71	3.55	1.92	1.06	1		700	238,119	20,522	18,287	5.5	6.5	18	214,092	23,202	19,642	18,316	700	0.96	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.66	12.90	9.88	7.11	5.46	3.55	1.93	1.43	1		700	276,368	24,337	18,352	5.5	6.5	18	223,338	32,463	22,201	18,503	700	1.11	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.92	14.70	11.30	7.72	5.69	3.28	1.70	1.07	1		700	269,839	17,644	20,092	5.5	6.5	18	245,183	19,941	16,791	20,062	700	1.02	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.87	12.99	9.73	6.47	4.67	2.75	1.48	1.29	1		700	244,806	21,517	23,542	5.5	6.5	18	261,923	17,449	23,204	23,343	700	1.15	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.50	11.40	8.33	5.67	4.16	2.46	1.29	1.63	1		700	247,170	24,792	26,535	5.5	6.5	18	199,581	32,431	22,456	26,643	700	1.22	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.65	12.08	8.88	5.89	4.21	2.49	1.29	1.11	1		700	220,099	23,039	26,352	5.5	6.5	18	194,665	26,505	21,660	26,346	700	0.93	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.88	12.62	9.05	5.80	4.06	2.35	1.30	1.27	1		700	168,530	22,866	26,793	5.5	6.5	18	186,494	18,139	24,877	26,478	700	0.83	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.80	11.54	8.20	5.18	3.64	2.06	1.10	1.59	1		700	204,955	24,341	31,295	5.5	6.5	18	213,599	21,062	25,482	30,951	700	1.48	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.71	9.69	7.26	4.90	3.58	2.17	1.27	1.79	1		700	278,487	31,974	28,880	5.5	6.5	18	344,303	18,802	41,906	28,387	700	0.98	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.14	13.91	10.60	7.27	5.41	3.31	1.73	1.36	1		700	252,598	20,426	20,035	5.5	6.5	18	222,003	24,553	19,007	20,096	700	1.19	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.88	10.09	7.72	5.51	4.20	2.64	1.42	1.38	1		700	361,541	29,653	24,768	5.5	6.5	18	288,287	40,703	26,746	24,951	700	0.99	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.78	13.95	10.10	6.46	4.45	2.45	1.32	1.61	1		700	192,973	19,206	26,055	5.5	6.5	18	217,440	14,143	21,473	25,713	700	1.13	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.68	11.93	8.73	5.90	4.37	2.76	1.59	1.89	1		700	217,497	27,511	23,059	5.5	6.5	18	260,729	17,274	35,033	22,674	700	1.27	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	14.59	10.25	7.48	4.91	3.53	2.08	1.17	1.60	1		700	253,535	28,805	30,581	5.5	6.5	18	287,377	20,555	33,462	30,141	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	14.95	10.78	8.14	5.64	4.27	2.72	1.42	1.88	1		700	304,648	27,742	24,355	5.5	6.5	18	249,438	36,786	25,070	24,532	700	1.58	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.20	12.62	10.28	8.03	6.52	4.58	2.68	1.07	1		700	412,883	28,129	13,381	5.5	6.5	18	325,419	40,792	25,539	13,589	700	0.68	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.76	12.03	9.62	7.20	5.75	3.94	2.38	0.79	1		700	335,729	29,969	15,377	5.5	6.5	18	360,010	22,705	35,112	15,284	700	0.67	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.95	13.91	10.63	7.44	5.46	3.10	1.60	1.18	1		700	297,063	18,235	21,339	5.5	6.5	18	251,061	23,676	16,626	21,365	700	0.96	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.91	8.40	6.18	4.27	3.18	2.05	1.23	1.91	1		700	289,536	40,515	30,216	5.5	6.5	18	360,049	23,213	55,689	29,588	700	1.05	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.36	9.12	7.11	5.19	3.89	2.53	1.47	0.74	1		700	396,360	35,244	24,811	5.5	6.5	18	429,193	26,538	40,659	24,602	700	0.53	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.20	8.60	6.37	4.17	3.02	1.75	0.90	1.44	1		700	346,845	31,779	37,882	5.5	6.5	18	313,432	35,585	30,182	37,787	700	1.37	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.23	8.90	6.80	4.82	3.59	2.28	1.21	1.31	1		700	404,344	33,314	29,095	5.5	6.5	18	345,924	41,352	30,867	29,223	700	1.04	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.37	8.14	6.02	4.07	2.95	1.83	1.01	1.32	1		700	346,284	37,548	35,405	5.5	6.5	18	381,546	28,632	42,259	35,010	700	1.05	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.61	9.88	7.51	5.41	4.17	2.77	1.51	1.68	1		700	334,774	33,037	23,514	5.5	6.5	18	280,651	41,634	30,583	23,705	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	10.44	7.59	5.75	3.95	2.91	1.82	1.04	1.43	1		700	403,305	40,811	34,782	5.5	6.5	18	475,906	25,423	51,857	34,251	700	0.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.53	8.14	6.03	3.97	2.81	1.63	0.88	0.98	1		700	353,970	34,245	39,939	5.5	6.5	18	372,017	28,933	36,287	39,539	700	0.82	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.42	8.39	6.44	4.49	3.25	1.97	1.04	0.74	1		700	447,792	32,766	33,413	5.5	6.5	18	424,148	33,870	32,277	33,304	700	0.72	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.51	8.55	6.35	4.16	2.93	1.70	0.95	1.16	1		700	294,947	33,230	37,259	5.5	6.5	18	328,501	25,158	37,157	36,781	700	0.64	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System										
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	12.72	10.05	8.43	6.23	4.70	2.79	1.37	0.67	1		300	1,414,918	24,491	19,699	4	7	18	1,148,418	43,008	19,884	20,213	300	1.22	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	12.02	9.52	8.03	5.98	4.60	2.76	1.27	1.36	1		300	1,734,213	24,178	20,866	4	7	18	1,149,474	58,754	18,759	21,321	300	0.54	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	11.74	9.06	7.67	5.75	4.44	2.71	1.31	1.61	1		300	1,637,855	27,658	20,621	4	7	18	1,029,022	64,266	21,733	21,041	300	0.92	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	13.15	9.95	8.11	5.64	4.09	2.31	1.02	1.54	1		300	1,191,260	22,627	25,171	4	7	18	836,326	43,459	18,768	25,525	300	0.63	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	11.89	8.91	7.24	4.99	3.55	2.02	0.98	0.71	1		300	1,079,679	27,945	27,137	4	7	18	1,091,612	27,331	28,163	27,129	300	0.71	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	16.31	12.57	10.34	7.36	5.54	3.42	1.72	0.65	1		300	838,802	22,131	15,720	4	7	18	780,506	25,772	20,934	15,778	300	0.58	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	15.93	13.00	11.11	8.34	6.35	3.82	1.78	0.50	1		300	1,405,980	17,224	14,960	4	7	18	1,290,289	23,088	15,720	15,025	300	0.42	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	13.19	9.83	7.87	5.40	3.91	2.31	1.14	0.56	1		300	871,808	27,156	23,395	4	7	18	840,443	29,133	26,456	23,434	300	0.53	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	13.66	10.35	8.51	6.06	4.45	2.57	1.27	0.91	1		300	1,038,285	24,418	21,008	4	7	18	1,019,413	25,466	24,052	21,024	300	0.91	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	14.74	11.60	9.73	7.14	5.43	3.39	1.77	0.63	1		300	1,039,019	24,503	15,487	4	7	18	1,123,235	19,816	26,775	15,418	300	0.56	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	14.00	10.64	8.65	6.15	4.57	2.72	1.38	0.65	1		300	931,054	25,586	19,603	4	7	18	920,013	26,294	25,306	19,618	300	0.65	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	12.78	9.74	8.00	5.66	4.12	2.40	1.18	0.68	1		300	1,094,706	26,009	22,664	4	7	18	1,102,256	25,560	26,180	22,657	300	0.68	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	15.53	11.96	9.80	7.12	5.38	3.32	1.68	0.62	1		300	918,722	23,446	16,197	4	7	18	794,163	31,183	21,252	16,311	300	0.37	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	15.44	11.68	9.52	6.78	5.05	3.11	1.54	0.87	1		300	855,376	23,749	17,520	4	7	18	704,140	33,646	21,080	17,680	300	0.47	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	15.55	11.94	9.77	6.88	5.07	3.00	1.47	0.56	1		300	890,912	21,786	18,147	4	7	18	860,002	23,642	21,142	18,179	300	0.54	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	14.66	10.89	8.85	6.22	4.61	2.73	1.37	0.94	1		300	849,749	24,803	19,674	4	7	18	742,233	31,779	22,727	19,798	300	0.80	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	14.04	10.33	8.23	5.71	4.14	2.43	1.22	0.70	1		300	797,230	26,308	22,072	4	7	18	757,776	28,796	25,452	22,117	300	0.68	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	11.19	8.04	6.45	4.45	3.20	1.77	0.83	1.73	1		300	1,116,517	29,945	31,329	4	7	18	803,344	50,712	25,339	31,767	300	1.10	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	14.04	10.84	9.03	6.64	5.09	3.14	1.47	1.82	1		300	1,263,880	23,075	17,947	4	7	18	715,005	58,651	17,574	18,419	300	0.52	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	12.21	9.37	7.90	6.03	4.84	3.24	1.73	1.54	1		300	1,244,614	35,166	15,895	4	7	18	707,291	76,000	27,430	16,348	300	0.53	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	14.11	10.42	8.32	5.86	4.29	2.53	1.29	0.80	1		300	811,459	26,408	20,965	4	7	18	752,486	30,189	25,153	21,034	300	0.77	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	17.24	13.46	11.17	8.27	6.33	3.97	1.97	0.94	1		300	939,519	20,222	13,609	4	7	18	710,499	34,790	16,970	13,803	300	0.29	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	17.28	13.65	11.27	8.26	6.27	3.83	1.88	0.68	1		300	970,637	19,153	14,339	4	7	18	813,141	28,197	16,937	14,452	300	0.32	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	18.87	15.12	12.78	9.73	7.60	4.75	2.25	1.40	1		300	1,141,865	16,171	11,821	4	7	18	699,520	43,621	12,075	12,150	300	0.32	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	18.37	14.69	12.57	9.72	7.71	4.89	2.29	1.92	1		300	1,342,304	16,198	11,728	4	7	18	603,082	62,985	11,071	12,219	300	0.38	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	16.93	13.14	10.78	7.67	5.60	3.07	1.38	0.82	1		300	1,012,074	16,560	18,680	4	7	18	880,512	23,522	14,897	18,779	300	0.65	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	17.27	13.19	10.93	8.04	6.14	3.78	1.78	1.89	1		300	969,048	19,346	14,789	4	7	18	538,120	48,657	14,664	15,204	300	0.45	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	12.41	8.99	7.32	5.23	3.94	2.44	1.26	1.33	1		300	900,619	32,988	21,710	4	7	18	680,232	49,213	28,684	21,991	300	0.97	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	14.16	10.41	8.37	5.98	4.49	2.86	1.62	1.66	1		300	636,628	32,376	17,520	4	7	18	847,666	18,888	42,852	17,236	300	1.22	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	12.17	8.75	7.04	4.99	3.73	2.27	1.22	1.42	1		300	814,418	34,665	22,703	4	7	18	804,834	35,467	34,283	22,730	300	1.42	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	10.97	8.87	7.49	5.59	4.22	2.59	1.38	0.88	1		400	1,683,238	30,434	22,690	4	7	18	2,068,018	13,432	48,201	22,518	400	0.41	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	11.15	8.94	7.71	5.80	4.40	2.60	1.25	0.88	1		400	2,125,405	24,548	24,433	4	7	18	1,942,871	33,628	22,317	24,531	400	0.84	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	10.44	8.39	7.19	5.47	4.20	2.53	1.19	1.13	1		400	2,398,251	25,929	25,411	4	7	18	1,697,403	63,887	20,350	25,862	400	0.60	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	11.74	9.29	7.96	6.03	4.60	2.76	1.25	1.70	1		400	2,146,830	21,999	23,723	4	7	18	1,200,831	75,349	16,021	24,433	400	0.68	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.13	11.15	9.22	6.60	4.81	2.73	1.26	0.73	1		400	1,329,205	19,662	23,243	4	7	18	1,135,447	29,798	17,409	23,382	400	0.38	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.62	10.92	9.14	6.68	4.85	2.65	1.11	0.77	1		400	1,680,887	16,953	25,514	4	7	18	1,380,660	31,501	14,449	25,707	400	0.29	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.18	9.58	7.88	5.59	4.03	2.27	1.09	0.34	1		400	1,394,448	23,766	27,150	4	7	18	1,410,284	22,971	24,050	27,140	400	0.34	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.24	10.48	8.66	6.19	4.53	2.65	1.35	0.65	1		400	1,202,386	23,936	22,298	4	7	18	1,372,784	15,726	28,702	22,206	400	0.33	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	19.63	16.12	13.79	10.32	7.76	4.57	2.06	0.62	1		400	1,276,087	12,484	14,338	4	7	18	1,113,109	20,481	10,875	14,429	400	0.43	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.18	9.85	8.55	6.53	4.99	2.99	1.34	1.22	1		400	2,276,881	19,704	22,209	4	7	18	1,570,983	56,582	15,076	22,676	400	0.69	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.07	10.91	9.01	6.35	4.65	2.77	1.49	1.17	1		400	974,812	24,764	20,554	4	7	18	1,209,239	12,721	35,230	20,373	400	0.61	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.66	11.77	10.07	7.41	5.51	3.26	1.57	0.67	1		400	1,424,055	18,944	18,955	4	7	18	1,424,122	18,946	18,942	18,955	400	0.67	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.28	11.51	9.97	7.59	5.83	3.59	1.78	0.84	1		400	1,641,125	20,194	16,940	4	7	18	1,436,292	30,880	17,757	17,053	400	0.75	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.20	10.22	8.59	6.18	4.50	2.60	1.30	0.92	1		400	1,276,557	23,171	22,958	4	7	18	1,348,449	19,541	24,719	22,913	400	0.89	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.10	11.86	10.01	7.36	5.56	3.46	1.74	0.89	1		400	1,194,912	21,636	17,247	4	7	18	986,601	33,684	18,811	17,402	400	0.62	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.00	10.58	8.61	5.84	4.08	2.27	1.09	0.79	1		400	988,451	21,852	26,593	4	7	18	963,765	23,195	21,410	26,615	400	0.78	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	17.22	13.22	11.00	8.11	6.17	3.82	1.86	1.77	1		400	1,025,395	18,836	15,717	4	7	18	583,894	47,239	14,438	16,097	400	0.46	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.85	12.01	9.76	6.94	5.19	3.18	1.65	0.68	1		400	822,173	22,787	17,971	4	7	18	719,964	29,364	20,839	18,081	400	0.46	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.04	11.09	8.83	5.99	4.33	2.56	1.38	1.02	1		400	675,993	25,035	21,714	4	7	18	787,139	18,415	28,619	21,590	400	0.74	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.88	11.60	9.64	6.82	4.95	2.91	1.50	0.91	1		400	1,008,050	21,851	20,085	4	7	18	1,172,908	13,588	27,143	19,977	400	0.61	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.68	9.67	7.87	5.44	3.91	2.28	1.14	0.59	1		400	1,079,808	26,004	26,050	4	7	18	1,067,259	26,705	25,757	26,061	400	0.58	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.51	9.38	7.72	5.51	4.01	2.31	1.14	1.14	1		400	1,224,110	25,750	25,986	4	7	18	1,017,425	37,724	22,848	26,171	400	0.93	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.24	10.55	8.54	5.94	4.40	2.75	1.50	0.81	1		400	744,461	28,414	20,413	4	7	18	814,347	23,773	30,701	20,319	400	0.71	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	11.14	8.11	6.68	4.64	3.34	1.89	0.94	1.50	1		400	1,226,781	29,863	31,380	4	7	18	1,038,778	41,181	26,893	31,585	400	1.33	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.37	10.35	8.75	6.55	5.01	3.15	1.57	1.55	1		400	1,410,976	24,591	19,010	4	7	18	863,574	59,221	18,989	19,438	400	0.64	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.74	9.71	8.11	5.93	4.38	2.57	1.18	1.91	1		400	1,670,414	25,199	27,328	4	7	18	962,038	68,231	19,185	28,006	400	0.71	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.24	10.78	8.93	6.39	4.65	2.60	1.17	1.72	1		400	1,283,737	19,326	24,268	4	7	18	829,921	45,140	15,423	24,689	400	0.78	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.28	10.26	8.57	6.26	4.64	2.76	1.30	1.44	1		400	1,412,388	22,067	22,379	4	7	18	946,544	48,714	17,724	22,747	400	0.58	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.82	11.14	9.37	6.93	5.25	3.35	1.82	1.23	1		400	945,257	26,388	16,689	4	7	18	824,929	34,285	24,025	16,802	400	1.16	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	17.03	12.86	10.43	7.24	5.20	3.03	1.56	0.63	1		400	750,324	20,025	19,051	4	7	18	795,682	17,436	21,148	19,006	400	0.57	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	16.63	12.77	10.78	8.03	6.13	3.82	1.85	1.95	1		400	1,152,661	19,115	15,902	4	7	18	605,418	54,407	14,197	16,355	400	0.66	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.87	11.27	9.53	7.20	5.54	3.50	1.81	1.76	1		400	1,179,760	23,862	16,600	4	7	18	674,756	56,643	18,536	16,972	400	0.98	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	16.04	11.93	9.70	6.82	4.91	2.82	1.47	1.11	1		400	800,174	21,453	20,240	4	7	18	839,822	19,186	22,404	20,201	400	1.08	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.76	10.88	8.83	6.23	4.52	2.61	1.26	1.60	1		400	957,361	22,112	22,896	4	7	18	660,728	41,272	18,262	23,255	400	0.72	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.12	10.19	8.11	5.54	3.95	2.28	1.19	0.99	1		400	755,535	25,848	24,803	4	7	18	746,902	26,398	25,641	24,815	400	0.99	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	17.55	12.95	10.30	7.27	5.51	3.54	1.92	0.54	1		400	565,658	24,367	15,800	4	7	18	513,984	28,294	22,972	15,878	400	0.39	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.63	10.89	9.36	7.14	5.55	3.50	1.78	0.99	1		400	1,608,354	23,090	16,993	4	7	18	1,214,571	45,346	18,929	17,224	400	0.65	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	17.23	13.54	11.59	8.89	7.00	4.41	2.17	1.89	1		400	1,312,477	17,727	13,629	4	7	18	629,663	61,033	12,552	14,099	400	0.64	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.95	12.67	10.87	8.43	6.66	4.41	2.24	1.76	1		400	1,410,645	20,835	13,379	4	7	18	683,595	67,707	14,891	13,822	400	0.47	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.67	12.39	10.64	8.22	6.53	4.29	2.18	1.83	1		400	1,419,351	21,457	13,819	4	7	18	673,495	70,667	15,223	14,297	400	0.52	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.90	10.75	9.03	6.70	5.09	3.08	1.66	1.25	1		400	1,161,685	25,078	18,280	4	7	18	1,197,405	23,101	25,881	18,254	400	1.23	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	16.29	12.59	10.56	7.90	6.01	3.65	1.78	1.55	1		400	1,177,749	18,964	16,487	4	7	18	720,097	46,870	14,671	16,845	400	0.68	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.14	11.90	10.03	7.43	5.64	3.43	1.73	0.83	1		400	1,223,883	20,793	17,223	4	7	18	1,027,418	31,869	18,199	17,359	400	0.62	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	18.78	14.00	11.30	7.95	5.86	3.53	1.77	1.11	1		400	688,001	18,733	16,518	4	7	18	529,632	29,152	16,195	16,703	400	0.46	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.58	10.30	8.10	5.58	4.10	2.56	1.42	0.94	1		400	567,381	30,034	21,498	4	7	18	583,747	28,761	30,597	21,467	400	0.92	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.61	10.98	8.94	6.38	4.70	2.77	1.39	1.02	1		400	966,325	22,910	20,970	4	7	18	773,329	34,899	19,997	21,168	400	0.62	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	16.15	11.89	9.66	6.86	5.08	3.15	1.73	1.00	1		400	679,972	24,799	17,555	4	7	18	707,661	22,977	25,584	17,521	400	0.98	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.37	9.07	7.37	5.32	4.09	2.68	1.45	1.16	1		400	873,846	35,084	20,887	4	7	18	644,825	52,963	30,266	21,188	400	0.56	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.54	10.16	8.27	5.94	4.50	2.86	1.65	1.35	1		400	788,246	31,590	18,833	4	7	18	971,498	19,960	39,738	18,610	400	1.05	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.16	11.57	9.69	7.33	5.72	3.71	1.97	1.55	1		400	1,017,418	25,588	15,186	4	7	18	620,910	55,547	19,737	15,593	400	0.59	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.88	12.43	10.44	7.86	6.07	3.86	2.08	0.79	1		400	1,045,485	22,973	14,597	4	7	18	910,461	31,369	20,616	14,704	400	0.68	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.56	12.78	11.17	8.97	7.33	4.92	2.45	1.94	1		400	2,009,961	18,602	12,307	4	7	18	710,601	101,788	11,534	12,978	400	0.27	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	13.05	8.69	6.31	4.31	3.20	1.99	1.04	1.93	1		200	368,379	41,972	22,455	4	7	18	450,643	31,984	47,908	21,940	200	1.64	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	12.83	8.60	6.27	4.15	2.98	1.72	0.77	1.45	1		200	532,818	34,902	28,071	4	7	18	393,890	45,630	31,620	28,136	200	0.52	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	14.70	9.89	7.11	4.65	3.39	1.99	0.89	1.49	1		200	429,061	30,972	24,031	4	7	18	328,477	38,527	28,576	24,061	200	0.91	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	15.81	10.66	7.62	5.20	3.94	2.42	1.19	1.26	1		200	324,446	33,020	18,796	4	7	18	308,602	33,202	32,873	18,677	200	1.27	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	15.53	10.15	7.19	4.77	3.50	2.03	0.95	1.53	1		200	345,585	31,372	22,950	4	7	18	276,236	37,146	29,296	22,971	200	1.19	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	13.73	9.39	6.73	4.53	3.40	2.13	1.08	1.61	1		200	361,296	38,404	21,249	4	7	18	439,627	29,221	43,930	20,770	200	1.19	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	14.73	10.61	7.81	5.54	4.21	2.70	1.31	1.17	1		200	472,971	33,541	17,000	4	7	18	422,081	36,454	32,394	16,963	200	1.10	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	12.67	8.72	6.30	4.42	3.41	2.13	1.02	1.73	1		200	468,186	40,536	21,719	4	7	18	354,146	50,926	36,990	21,829	200	1.31	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.49	8.67	6.92	4.96	3.72	2.27	1.17	0.60	1		275	1,088,891	35,893	23,550	4	7	18	1,016,650	38,216	34,820	23,687	275	0.58	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.57	8.74	6.96	4.85	3.54	2.04	0.99	0.55	1		275	1,157,885	31,157	26,970	4	7	18	1,048,247	35,440	29,596	27,156	275	0.48	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	10.78	8.03	6.39	4.55	3.36	2.04	1.06	0.79	1		275	1,080,351	38,636	26,068	4	7	18	1,104,405	34,639	40,164	26,095	275	0.72	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System										
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.15	8.44	6.78	4.89	3.74	2.37	1.20	0.74	1		275	1,139,411	38,065	22,708	4	7	18	904,075	52,324	33,679	23,044	275	0.28	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.17	8.43	6.83	4.94	3.80	2.42	1.27	0.60	1		275	1,108,038	39,490	21,806	4	7	18	970,997	46,452	36,894	22,010	275	0.51	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	9.24	6.79	5.45	3.94	2.95	1.81	0.88	1.54	1		275	1,411,364	43,571	30,413	4	7	18	886,500	79,856	35,361	31,172	275	0.33	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.92	9.26	7.59	5.57	4.19	2.45	1.10	1.54	1		275	1,639,538	26,080	23,803	4	7	18	989,251	61,912	20,332	24,419	275	0.28	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	10.85	8.12	6.54	4.69	3.52	2.12	1.04	1.15	1		275	1,274,550	35,231	25,764	4	7	18	912,069	56,863	29,908	26,224	275	0.49	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.33	8.41	6.70	4.69	3.48	2.10	1.15	1.70	1		275	902,822	38,518	24,406	4	7	18	1,164,924	21,505	51,552	24,170	275	1.13	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.31	8.47	6.66	4.61	3.31	1.88	0.91	0.50	1		275	1,110,463	32,110	29,148	4	7	18	1,058,504	32,959	31,627	29,280	275	0.49	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.60	8.74	7.00	4.93	3.61	2.11	1.00	0.77	1		275	1,200,442	30,791	26,237	4	7	18	969,510	42,968	27,353	26,565	275	0.29	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.94	9.13	7.39	5.29	4.06	2.57	1.36	0.56	1		275	1,020,131	36,130	20,225	4	7	18	1,030,067	33,088	37,248	20,253	275	0.52	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	10.70	7.85	6.27	4.41	3.27	2.02	1.04	0.63	1		275	1,015,407	39,991	26,232	4	7	18	964,163	41,172	39,259	26,362	275	0.61	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	9.97	7.45	5.88	4.09	2.98	1.72	0.79	1.46	1		275	1,385,269	34,978	32,917	4	7	18	938,852	61,299	29,180	33,552	275	0.31	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	12.15	9.09	7.25	5.11	3.75	2.17	0.99	1.61	1		275	1,214,613	28,214	26,141	4	7	18	770,172	54,684	22,937	26,726	275	0.27	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/10/2005	flex-B-M84-CS9011-10-10-2005	4	25	11.89	8.81	7.00	4.84	3.46	1.96	0.92	0.81	1		275	1,117,316	29,347	28,386	4	7	18	909,265	39,764	26,427	28,690	275	0.41	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.10	6.53	5.76	4.58	3.71	2.43	1.21	1.24	1		160	2,959,346	51,870	16,382	4	7	18	2,276,878	87,049	43,562	16,710	160	1.16	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.79	6.24	5.44	4.26	3.40	2.10	0.94	1.42	1		160	3,320,234	44,658	20,816	4	7	18	2,199,297	103,467	34,633	21,369	160	1.18	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.61	6.06	5.30	4.19	3.39	2.17	1.04	1.51	1		160	3,135,392	52,418	18,974	4	7	18	2,009,941	114,957	41,072	19,517	160	1.26	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.75	6.23	5.44	4.31	3.50	2.26	1.10	1.35	1		160	3,085,752	52,238	17,964	4	7	18	2,056,509	109,527	41,281	18,467	160	1.13	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.69	6.12	5.32	4.18	3.36	2.19	1.12	1.30	1		160	2,531,953	59,393	17,766	4	7	18	2,370,112	64,035	57,530	17,825	160	1.30	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	6.50	5.09	4.42	3.45	2.77	1.77	0.85	1.64	1		160	3,206,554	64,036	23,350	4	7	18	2,012,220	136,240	50,194	24,056	160	1.32	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.64	6.13	5.40	4.32	3.50	2.27	1.05	1.67	1		160	3,596,611	48,582	18,732	4	7	18	1,696,006	165,854	33,464	19,665	160	0.97	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.47	5.94	5.17	4.04	3.23	2.04	0.95	1.40	1		160	3,125,891	51,488	20,723	4	7	18	2,111,727	106,404	41,012	21,239	160	1.20	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.98	6.45	5.68	4.48	3.63	2.34	1.11	1.29	1		160	3,218,451	48,418	17,842	4	7	18	2,197,098	103,539	38,061	18,330	160	1.08	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.06	6.61	5.87	4.77	3.92	2.59	1.27	1.37	1		160	3,656,834	48,930	15,586	4	7	18	2,318,641	122,099	36,878	16,126	160	1.16	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.10	6.53	5.70	4.49	3.53	2.15	0.97	1.38	1		160	3,207,271	42,011	20,361	4	7	18	2,815,729	56,601	38,003	20,518	160	1.38	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.68	6.18	5.40	4.24	3.38	2.08	0.93	1.41	1		160	3,457,009	44,498	21,127	4	7	18	2,546,199	89,016	35,933	21,559	160	1.28	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.53	6.78	5.87	4.55	3.57	2.12	0.93	1.51	1		160	2,837,359	39,264	20,867	4	7	18	2,282,019	64,096	33,623	21,135	160	1.49	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.62	6.80	5.78	4.42	3.39	1.96	0.78	1.53	1		160	2,840,789	34,803	24,238	4	7	18	1,771,839	89,480	26,704	24,872	160	1.05	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.67	6.15	5.37	4.22	3.34	2.07	0.89	1.55	1		160	3,669,699	42,004	22,039	4	7	18	2,001,671	132,535	30,210	22,865	160	0.98	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.51	6.76	5.88	4.58	3.65	2.34	1.17	1.34	1		160	2,352,596	50,861	17,047	4	7	18	2,250,758	51,825	50,406	17,059	160	1.34	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.00	6.33	5.47	4.24	3.31	2.04	0.98	1.47	1		160	2,546,428	49,636	20,312	4	7	18	2,608,130	41,147	53,586	20,194	160	1.45	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.45	6.59	5.61	4.23	3.26	2.00	0.92	1.05	1		160	2,157,856	46,290	21,379	4	7	18	1,916,732	56,068	43,116	21,510	160	1.02	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.97	7.15	6.20	4.87	3.89	2.55	1.31	1.24	1		160	2,093,399	51,660	15,093	4	7	18	2,144,259	44,191	55,063	14,992	160	1.22	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.29	6.46	5.56	4.28	3.37	2.12	1.06	1.63	1		160	2,086,227	53,659	18,781	4	7	18	2,192,917	43,155	58,749	18,631	160	1.60	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.62	5.92	5.06	3.81	2.95	1.76	0.81	1.57	1		160	2,438,303	50,407	24,322	4	7	18	2,396,713	47,797	51,377	24,285	160	1.57	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.69	6.89	5.93	4.62	3.63	2.27	1.00	1.46	1		160	2,695,506	41,463	19,340	4	7	18	1,578,404	106,394	31,042	19,993	160	0.84	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.18	6.44	5.48	4.23	3.31	2.04	0.93	1.29	1		160	2,536,160	46,447	21,045	4	7	18	1,763,136	87,742	38,031	21,476	160	1.06	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.08	6.55	5.70	4.46	3.56	2.21	1.03	1.13	1		160	3,074,083	45,072	19,298	4	7	18	2,644,663	62,709	40,257	19,487	160	1.11	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	9.45	7.82	6.91	5.53	4.55	3.00	1.44	1.10	1		160	3,102,548	40,164	13,738	4	7	18	2,064,700	95,397	30,692	14,169	160	0.83	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.87	6.45	5.65	4.45	3.51	2.15	0.94	1.04	1		160	3,659,618	40,024	20,970	4	7	18	3,060,650	64,525	34,435	21,220	160	1.00	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.34	6.76	5.87	4.63	3.69	2.27	1.04	1.33	1		160	3,096,913	41,791	18,993	4	7	18	2,594,028	63,240	36,460	19,214	160	1.30	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.11	6.54	5.71	4.50	3.58	2.23	1.04	1.27	1		160	3,110,209	44,920	19,103	4	7	18	2,590,412	67,609	39,200	19,336	160	1.23	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	8.04	6.45	5.57	4.37	3.45	2.08	0.96	1.54	1		160	2,976,798	44,080	20,632	4	7	18	2,769,395	49,437	42,247	20,697	160	1.55	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/11/2005	flex-B-M84-CS9011-09-11-2005	4	25	7.68	6.16	5.32	4.19	3.35	2.03	0.97	1.85	1		160	3,005,281	49,169	20,443	4	7	18	3,007,096	43,353	51,648	20,366	160	1.84	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	12.08	8.63	6.58	4.40	3.22	1.96	1.00	0.81	1		250	661,537	37,029	26,020	4	7	18	712,607	31,181	39,860	25,853	250	0.60	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	12.69	9.28	7.26	4.96	3.62	2.17	1.11	0.82	1		250	765,670	33,019	23,438	4	7	18	826,057	26,732	36,218	23,277	250	0.56	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	13.48	9.75	7.53	5.09	3.71	2.22	1.09	0.45	1		250	692,871	30,645	23,149	4	7	18	639,604	32,686	29,781	23,193	250	0.40	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	12.37	8.76	6.63	4.38	3.15	1.82	0.89	0.62	1		250	689,522	33,161	28,290	4	7	18	644,704	34,570	32,517	28,323	250	0.60	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	12.10	8.91	6.91	4.70	3.40	1.97	0.93	0.73	1		250	894,998	31,119	26,592	4	7	18	757,582	38,661	28,626	26,772	250	0.38	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	13.60	9.68	7.31	4.81	3.40	1.91	0.88	0.97	1		250	694,136	27,974	27,527	4	7	18	561,714	35,539	25,645	27,715	250	0.46	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	14.18	10.11	7.51	4.78	3.27	1.72	0.74	1.48	1		250	694,464	24,432	31,274	4	7	18	531,710	33,604	21,945	31,539	250	0.73	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	12.63	9.14	7.03	4.60	3.21	1.76	0.83	0.52	1		250	793,088	28,733	29,511	4	7	18	781,270	27,650	29,100	29,480	250	0.51	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	11.86	8.66	6.70	4.58	3.37	2.00	0.99	0.54	1		250	828,916	34,390	25,575	4	7	18	764,646	36,816	33,386	25,626	250	0.50	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	12.61	9.26	7.17	4.94	3.68	2.25	1.12	0.61	1		250	766,471	33,204	22,594	4	7	18	681,764	37,401	31,600	22,683	250	0.51	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	11.54	8.30	6.41	4.30	3.09	1.76	0.86	0.72	1		250	833,831	33,611	28,921	4	7	18	796,740	34,088	33,319	28,933	250	0.72	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	11.93	8.59	6.60	4.51	3.29	1.90	0.88	1.59	1		250	887,317	31,823	27,716	4	7	18	601,311	50,935	27,043	28,156	250	0.42	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	11.80	8.35	6.37	4.23	3.04	1.74	0.82	1.11	1		250	794,328	32,906	29,827	4	7	18	616,517	43,722	29,696	30,086	250	0.51	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	11.91	8.44	6.47	4.34	3.15	1.85	0.86	1.40	1		250	799,771	33,177	28,343	4	7	18	572,379	48,401	28,974	28,711	250	0.49	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	11.38	7.98	6.13	4.12	3.03	1.83	0.88	1.02	1		250	756,341	37,468	28,267	4	7	18	592,682	48,170	34,033	28,521	250	0.52	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	9/13/2005	flex-B-M84-CS9011-09-13-2005-(2)	4	25	11.37	8.07	6.18	4.16	2.98	1.72	0.81	1.11	1		250	835,914	34,082	30,112	4	7	18	643,082	46,660	30,302	30,439	250	0.30	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.75	9.07	7.76	6.03	4.64	2.68	1.18	1.24	1		250	936,420	21,952	22,880	6	9	15	1,152,875	5,093	375,345	23,019	250	0.32	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.74	9.05	7.77	6.06	4.66	2.72	1.18	0.95	1		250	971,155	21,466	22,844	6	9	15	1,153,078	5,686	213,075	22,960	250	0.21	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.14	9.32	8.06	6.27	4.80	2.73	1.15	1.13	1		250	943,639	19,530	23,056	6	9	15	1,146,557	4,420	434,484	23,413	250	0.30	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.15	9.26	7.92	6.19	4.75	2.72	1.22	1.42	1		250	857,888	22,050	21,988	6	9	15	1,093,394	4,857	439,728	22,054	250	0.56	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.99	9.13	7.81	6.07	4.64	2.64	1.14	1.13	1		250	895,911	21,011	23,254	6	9	15	1,084,097	5,320	262,728	23,451	250	0.45	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.51	9.53	8.00	6.09	4.66	2.64	1.14	0.97	1		250	776,457	21,212	23,031	6	9	15	883,188	9,212	49,091	22,779	250	0.63	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.13	9.20	7.76	5.92	4.49	2.57	1.15	1.18	1		250	769,264	23,223	23,027	6	9	15	940,558	7,076	132,976	22,881	250	0.34	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.85	8.89	7.60	5.88	4.53	2.64	1.17	0.72	1		250	878,822	22,974	22,859	6	9	15	954,104	12,478	38,639	22,513	250	0.51	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.85	9.02	7.60	5.83	4.42	2.53	1.13	1.19	1		250	814,350	23,221	23,592	6	9	15	991,306	6,779	157,041	23,500	250	0.38	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.62	8.83	7.53	5.86	4.50	2.61	1.18	1.19	1		250	887,654	23,506	22,662	6	9	15	1,089,849	6,111	236,012	22,622	250	0.45	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.87	9.05	7.80	6.07	4.65	2.65	1.14	1.16	1		250	938,027	20,658	23,261	6	9	15	1,138,956	4,862	364,676	23,523	250	0.41	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.93	8.99	7.61	5.79	4.42	2.55	1.11	0.74	1		250	805,820	22,833	23,531	6	9	15	900,071	11,443	42,087	23,218	250	0.37	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.01	8.85	7.39	5.51	4.17	2.36	1.10	1.39	1		250	666,426	26,107	24,233	6	9	15	816,780	9,620	88,059	23,814	250	0.64	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.60	8.74	7.43	5.71	4.33	2.52	1.15	1.20	1		250	824,963	24,872	23,289	6	9	15	1,008,654	7,212	170,456	23,055	250	0.23	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.43	9.37	7.86	5.97	4.53	2.63	1.14	0.49	1		250	755,955	22,325	23,032	6	9	15	790,575	15,945	28,365	22,743	250	0.32	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.85	8.86	7.48	5.71	4.33	2.51	1.11	0.71	1		250	789,142	23,993	23,735	6	9	15	881,310	12,397	42,768	23,379	250	0.27	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.06	8.75	7.20	5.29	3.95	2.24	1.10	1.94	1		250	561,315	28,767	24,482	6	9	15	736,151	9,481	133,637	23,924	250	0.65	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.73	9.26	7.63	5.78	4.33	2.48	1.17	1.17	1		250	595,716	25,699	22,780	6	9	15	678,639	14,234	42,787	22,352	250	0.81	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.42	9.29	7.82	5.87	4.42	2.52	1.15	1.31	1		250	685,383	23,750	22,940	6	9	15	838,494	7,771	112,494	22,634	250	0.34	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	13.08	10.38	8.58	6.39	4.72	2.64	1.14	0.51	1		250	567,989	20,488	22,615	6	9	15	596,290	15,253	25,138	22,349	250	0.28	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.71	8.66	7.31	5.56	4.21	2.45	1.14	1.04	1		250	735,971	26,302	23,324	6	9	15	871,983	10,769	69,363	22,895	250	0.37	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.66	8.81	7.47	5.70	4.33	2.47	1.10	1.25	1		250	824,147	23,411	24,009	6	9	15	1,005,413	6,558	189,943	23,925	250	0.36	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.67	8.58	7.31	5.59	4.21	2.36	1.06	1.44	1		250	778,597	24,122	24,716	6	9	15	972,806	6,723	195,079	24,661	250	0.79	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.67	9.08	7.45	5.38	3.99	2.23	1.09	1.96	1		250	499,973	27,500	24,592	6	9	15	648,785	10,093	96,816	24,036	250	0.76	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.25	9.02	7.52	5.58	4.14	2.36	1.10	1.41	1		250	626,445	25,553	24,058	6	9	15	767,959	9,369	89,791	23,600	250	0.22	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.30	9.09	7.52	5.62	4.20	2.37	1.07	1.04	1		250	646,210	24,511	24,365	6	9	15	747,016	11,963	47,922	23,956	250	0.43	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.64	8.73	7.44	5.66	4.32	2.49	1.14	1.22	1		250	797,407	24,674	23,244	6	9	15	973,852	7,439	147,871	22,995	250	0.38	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.51	8.66	7.41	5.71	4.33	2.45	1.10	1.52	1		250	855,617	23,335	24,013	6	9	15	1,088,447	5,302	443,253	24,035	250	0.42	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.58	8.67	7.31	5.60	4.28	2.44	1.07	0.91	1		250	828,667	23,573	24,366	6	9	15	942,122	10,479	52,645	24,041	250	0.55	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.27	8.95	7.45	5.51	4.09	2.29	1.06	1.38	1		250	609,245	25,353	24,703	6	9	15	746,287	9,903	75,080	24,285	250	0.45	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.76	8.78	7.45	5.72	4.37	2.48	1.17	1.80	1		250	771,786	25,045	22,914	6	9	15	1,011,513	5,744	408,999	22,698	250	0.74	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.72	8.93	7.44	5.67	4.32	2.49	1.09	0.87	1		250	812,231	23,279	24,114	6	9	15	898,652	12,249	40,438	23,772	250	0.60	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.72	8.71	7.39	5.64	4.36	2.49	1.07	0.69	1		250	852,448	22,878	24,358	6	9	15	863,089	18,567	26,330	24,091	250	0.66	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.56	8.45	7.13	5.54	4.22	2.51	1.13	0.59	1		250	812,736	25,919	23,448	6	9	15	772,503	26,928	25,487	23,312	250	0.59	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System										
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.39	8.65	7.36	5.67	4.32	2.51	1.10	0.90	1		250	896,509	23,178	23,938	6	9	15	1,046,426	7,795	98,945	23,729	250	0.19	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.51	8.51	7.23	5.51	4.20	2.40	1.06	0.83	1		250	815,290	24,218	24,629	6	9	15	910,428	12,451	43,273	24,276	250	0.53	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.01	8.86	7.48	5.66	4.28	2.44	1.09	0.83	1		250	732,421	23,818	23,918	6	9	15	818,331	12,713	40,865	23,551	250	0.46	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.17	8.94	7.41	5.55	4.16	2.35	1.10	1.48	1		250	622,406	25,956	23,928	6	9	15	781,283	9,235	94,308	23,544	250	0.60	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	13.55	10.03	8.01	5.89	4.53	2.85	1.49	1.85	1		350	1,433,454	31,843	20,320	3.5	8	24	793,907	60,385	24,170	20,766	350	0.61	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	12.28	9.08	7.30	5.46	4.27	2.85	1.64	1.12	1		350	1,264,424	42,136	19,082	3.5	8	24	926,841	59,828	33,181	18,994	350	0.75	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	12.33	9.05	7.37	5.41	4.19	2.70	1.54	1.43	1		350	1,344,398	39,334	20,305	3.5	8	24	1,019,371	54,906	31,722	20,248	350	1.21	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	12.69	9.71	7.95	6.01	4.73	3.11	1.70	1.34	1		350	1,676,760	35,725	18,059	3.5	8	24	1,048,809	65,264	26,263	18,320	350	0.50	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	13.27	10.11	8.27	6.34	5.03	3.29	1.77	1.97	1		350	1,747,050	33,473	17,327	3.5	8	24	841,169	75,781	23,339	17,814	350	0.60	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	16.71	13.13	10.71	8.03	6.20	3.91	1.94	1.75	1		350	1,665,839	21,932	15,545	3.5	8	24	925,808	49,816	16,202	16,030	350	0.23	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	15.42	12.18	10.11	8.04	6.52	4.47	2.58	1.37	1		350	1,605,837	31,595	11,996	3.5	8	24	922,967	63,646	21,874	12,128	350	0.72	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	14.15	10.04	7.61	5.29	3.96	2.39	1.26	1.56	1		350	957,604	32,440	24,177	3.5	8	24	671,746	45,829	27,357	24,458	350	0.88	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	14.16	10.68	8.43	6.20	4.77	2.98	1.55	1.72	1		350	1,371,585	30,188	19,561	3.5	8	24	839,926	54,483	23,042	20,004	350	0.61	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	14.77	11.37	9.24	6.90	5.36	3.39	1.74	1.69	1		350	1,621,829	27,062	17,350	3.5	8	24	927,566	56,223	19,947	17,823	350	0.41	1	
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	7.78	6.56	5.97	5.24	4.54	3.40	1.84	1.63	1		300	1,253,188	34,823	16,796	8	6	18	620,700	311,264	15,923	18,507	300	0.18	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	13.87	11.29	9.16	6.58	4.81	2.58	1.02	1.70	1		700	1,321,901	15,502	31,279	4.5	8	18	907,400	35,729	12,268	31,900	700	0.85	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	16.27	13.63	11.46	8.70	6.68	3.94	1.84	0.59	1		700	1,256,861	14,521	18,650	4.5	8	18	1,097,399	20,679	12,897	18,747	700	0.47	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	17.27	13.95	11.29	7.98	5.67	2.87	1.12	0.98	1		700	961,719	12,314	27,415	4.5	8	18	791,634	19,216	10,852	27,586	700	0.60	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	13.99	11.50	9.61	7.24	5.56	3.36	1.62	0.92	1		700	1,329,093	18,795	21,288	4.5	8	18	1,017,844	34,518	15,295	21,566	700	0.41	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	12.02	9.35	7.62	5.55	4.25	2.63	1.38	1.09	1		700	1,055,514	28,578	25,352	4.5	8	18	795,500	44,706	23,867	25,648	700	0.48	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	15.52	12.82	10.73	8.15	6.32	3.85	1.85	1.09	1		700	1,256,285	16,638	18,616	4.5	8	18	907,460	35,069	12,965	18,957	700	0.48	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	16.04	13.05	10.78	7.94	5.96	3.45	1.53	1.47	1		700	1,142,856	14,865	21,724	4.5	8	18	778,034	33,942	11,524	22,185	700	0.59	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	17.84	14.50	11.90	8.75	6.52	3.62	1.53	1.42	1		700	1,045,605	12,483	21,273	4.5	8	18	722,786	28,874	10,000	21,734	700	0.98	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	19.76	15.96	13.02	9.54	7.17	4.17	1.99	1.05	1		700	802,625	13,680	16,962	4.5	8	18	625,715	22,649	11,502	17,149	700	0.57	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	17.61	14.18	11.65	8.70	6.69	4.12	2.13	0.84	1		700	852,964	17,809	16,341	4.5	8	18	683,610	26,982	15,145	16,496	700	0.46	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	17.99	14.62	12.07	8.96	6.92	4.41	2.33	0.89	1		700	804,661	18,264	15,016	4.5	8	18	675,353	25,026	16,013	15,119	700	0.71	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	17.49	13.99	11.38	8.31	6.25	3.78	1.95	0.61	1		700	770,078	17,913	17,688	4.5	8	18	680,338	21,970	16,464	17,752	700	0.48	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	17.11	12.61	9.96	7.16	5.50	3.36	1.55	1.52	1		150	2,397,263	28,239	11,708	2.5	12	15.5	1,815,260	35,345	23,162	11,892	150	1.13	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	18.45	13.93	10.91	7.94	6.13	3.77	1.75	1.33	1		150	2,331,786	25,983	10,353	2.5	12	15.5	1,815,566	31,988	21,644	10,501	150	1.01	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	16.35	12.06	9.33	6.70	5.18	3.23	1.57	1.22	1		150	2,080,204	31,988	11,753	2.5	12	15.5	1,889,151	33,447	30,944	11,705	150	1.21	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	15.97	11.64	9.02	6.55	5.11	3.27	1.65	1.35	1		150	1,873,879	35,212	11,187	2.5	12	15.5	1,809,350	34,999	35,652	11,083	150	1.37	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	17.59	13.09	10.17	7.36	5.59	3.37	1.46	1.91	1		150	2,546,073	25,618	12,118	2.5	12	15.5	1,650,713	36,715	18,838	12,464	150	0.84	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	17.00	13.12	10.42	7.67	5.96	3.81	1.83	0.79	1		150	2,628,314	28,764	9,912	2.5	12	15.5	2,260,137	32,335	26,010	9,958	150	0.65	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	18.65	13.97	10.94	7.95	6.19	3.92	1.91	1.07	1		150	1,966,844	27,645	9,480	2.5	12	15.5	1,714,021	30,209	25,585	9,507	150	1.00	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	17.73	12.87	9.91	7.12	5.52	3.51	1.77	1.36	1		150	1,588,398	31,596	10,401	2.5	12	15.5	1,594,095	30,458	32,968	10,271	150	1.37	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	17.97	13.35	10.57	7.79	6.18	4.06	2.09	1.05	1		150	1,823,333	31,625	8,711	2.5	12	15.5	1,670,887	33,111	30,275	8,712	150	1.04	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	18.77	13.85	10.71	7.81	6.08	3.92	1.94	1.04	1		150	1,680,707	29,174	9,392	2.5	12	15.5	1,480,773	31,466	27,190	9,420	150	0.98	1	
Superior	US-41	02-04	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US41-CS7013-05-19-2008	2.5	27.5	16.97	12.35	9.56	6.89	5.34	3.38	1.71	1.45	1		150	1,740,207	32,767	10,828	2.5	12	15.5	1,724,569	31,778	34,043	10,695	150	1.46	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	8.31	5.84	4.68	3.62	3.07	2.42	1.56	1.94	1		250	655,235	107,874	18,118	3.5	8.0	18.0					250	0.56		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.76	6.29	5.88	5.13	4.44	3.31	1.82	0.80	1		700	2,737,602	17,573	23,167	7.25	4.5	17.5					700	10.16		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.90	6.18	5.60	4.81	4.08	2.88	1.56	0.41	1		700	1,834,574	26,364	25,270	7.25	4.5	17.5					700	5.21		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.77	6.09	5.55	4.84	4.13	2.80	1.54	1.58	1		700	1,944,166	24,414	26,019	7.25	4.5	17.5					700	5.74		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.52	7.72	7.06	6.07	5.13	3.60	1.91	0.75	1		700	1,596,168	17,463	20,914	7.25	4.5	17.5					700	8.47		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.36	7.42	6.72	5.68	4.70	3.10	1.46	0.64	1		700	1,463,826	14,380	27,254	7.25	4.5	17.5					700	11.73		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.98	7.11	6.43	5.59	4.65	3.11	1.60	1.23	1		700	1,550,466	17,931	24,492	7.25	4.5	17.5					700	5.95		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.15	6.50	5.97	5.25	4.54	3.38	2.00	0.48	1		700	2,005,675	31,118	19,496	7.25	4.5	17.5					700	4.66		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.18	5.51	4.99	4.32	3.67	2.64	1.49	0.37	1		700	1,964,681	34,949	26,010	7.25	4.5	17.5					700	2.20		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.57	6.78	6.09	5.08	4.24	2.93	1.51	0.76	1		700	1,449,376	22,794	25,388	7.25	4.5	17.5					700	9.07		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.51	6.82	6.26	5.54	4.87	3.42	2.07	1.74	1		700	1,861,406	28,636	18,780	7.25	4.5	17.5					700	12.21		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	11.13	9.46	8.36	6.97	5.77	3.89	2.20	0.98	1		700	704,402	24,530	16,919	7.25	4.5	17.5					700	2.91		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	11.29	9.50	8.33	6.73	5.47	3.57	1.87	0.55	1		700	654,173	20,810	19,469	7.25	4.5	17.5					700	3.70		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.35	7.22	6.34	5.23	4.23	2.79	1.48	0.97	1		700	964,641	26,314	24,826	7.25	4.5	17.5					700	9.49		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.02	7.02	6.21	5.19	4.30	2.98	1.62	0.60	1		700	1,129,856	29,203	23,027	7.25	4.5	17.5					700	2.66		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.90	7.07	6.36	5.51	4.74	3.12	1.70	1.86	1		700	1,532,806	20,922	22,833	7.25	4.5	17.5					700	6.81		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.42	9.33	7.99	6.42	5.12	3.27	1.77	0.80	1		700	779,953	26,652	21,564	6.25	6	18					700	6.76		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.62	7.24	6.10	4.80	3.66	2.17	1.06	1.20	1		700	1,028,600	27,156	34,546	6.25	6	18					700	6.36		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.72	8.15	7.09	5.79	4.49	2.91	1.34	1.06	1		700	1,249,244	21,005	28,111	6.25	6	18					700	3.30		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.45	7.95	6.85	5.59	4.41	2.87	1.34	1.08	1		700	1,285,989	22,313	28,173	6.25	6	18					700	3.00		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.89	5.67	4.76	3.82	2.95	1.93	1.14	1.81	1		700	1,028,202	53,309	34,314	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.56	6.34	5.43	4.57	3.74	2.72	1.81	1.81	1		700	962,050	68,752	21,948	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.32	6.18	5.39	4.49	3.70	2.68	1.73	1.31	1		700	1,131,556	64,239	22,729	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.48	5.94	4.92	3.94	3.15	2.17	1.30	0.79	1		700	804,423	59,979	30,028	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.62	6.93	5.71	4.53	3.46	2.17	1.18	1.14	1		700	822,733	37,645	32,099	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.95	6.34	5.24	4.09	3.11	1.89	0.91	0.99	1		700	1,023,173	33,374	40,419	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.61	5.16	4.21	3.19	2.32	1.34	0.63	0.66	1		700	1,057,748	40,237	56,987	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.32	6.14	5.20	4.09	3.11	1.93	1.02	1.47	1		700	1,127,463	38,096	37,161	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.39	6.65	5.71	4.57	3.70	2.52	1.38	1.14	1		700	965,148	43,270	27,583	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.86	7.76	6.85	5.59	4.49	3.19	1.81	1.23	1		700	1,229,726	35,739	21,479	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.65	5.59	4.88	3.90	3.07	2.05	1.06	0.55	1		700	1,526,031	41,082	35,949	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.50	5.39	4.72	3.82	3.07	2.05	1.06	0.52	1		700	1,655,801	41,957	35,919	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.24	5.83	4.92	4.02	3.11	2.09	1.22	1.29	1		700	990,791	52,679	31,756	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.05	5.98	5.24	4.41	3.54	2.52	1.46	0.77	1		700	1,492,590	49,029	26,607	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.39	6.77	5.75	4.65	3.66	2.44	1.26	1.20	1		700	1,071,945	36,002	29,722	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.94	7.48	6.34	5.20	4.21	2.99	1.85	1.10	1		700	825,869	49,193	21,037	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.89	9.02	7.60	6.10	4.84	3.35	2.01	1.01	1		700	468,365	39,881	19,251	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.24	8.50	7.24	5.79	4.57	2.91	1.69	1.75	1		700	765,792	32,548	22,762	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.66	7.28	6.10	4.96	3.82	2.52	1.38	1.20	1		700	970,983	35,811	27,643	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.91	6.42	5.43	4.37	3.50	2.40	1.38	0.38	1		700	941,941	48,640	27,775	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	6.97	5.87	5.04	4.13	3.27	2.17	1.18	0.72	1		700	1,400,470	42,453	32,496	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.91	6.46	5.39	4.33	3.31	2.13	1.18	1.24	1		700	948,935	41,590	32,482	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.56	5.98	4.96	3.82	2.91	1.85	1.06	1.37	1		700	781,153	48,675	36,002	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.74	7.05	5.83	4.57	3.50	2.24	1.22	0.72	1		700	801,960	38,140	31,128	6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	5.67	4.92	4.37	3.70	2.99	2.05	1.18	1.24	1		700	2,154,739	52,000	33,299	6.25	9	15					700	4.19		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.28	6.34	5.63	4.76	3.82	2.36	1.18	1.83	1		700	1,928,611	25,431	33,151	6.25	9	15					700	2.67		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.44	6.18	5.24	4.09	3.07	1.93	1.06	1.89	1		700	993,309	40,367	35,606	6.25	9	15					700	0.76		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.32	6.22	5.43	4.45	3.54	2.40	1.42	1.40	1		700	1,252,740	46,121	27,221	6.25	9	15					700	1.14		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.56	6.38	5.59	4.53	3.62	2.40	1.46	1.99	1		700	1,127,655	45,800	26,399	6.25	9	15					700	4.17		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	7.76	6.65	5.79	4.84	3.90	2.72	1.65	1.42	1		700	1,205,585	47,385	23,346	6.25	9	15					700	0.99		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.09	6.18	4.69	3.70	2.87	2.05	1.34	1.82	1		700	264,995	63,065	30,290	6.25	9	15					700	2.01		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.17	5.63	4.09	3.07	2.28	1.50	0.91	1.98	1		700	229,141	58,054	43,388	6.25	9	15					700	2.03		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.02	5.63	4.02	2.95	2.24	1.50	0.94	1.78	1		700	214,212	62,659	42,863	6.25	9	15					700	2.10		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.82	5.67	4.06	3.03	2.28	1.50	0.91	1.91	1		700	251,015	58,051	43,374	6.25	9	15					700	2.04		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.28	5.00	3.82	2.87	2.13	1.38	0.87	1.85	1		700	399,279	60,724	45,639	6.25	9	15					700	2.06		1

Location: Region	Location: Road	Location: Cluster-Area	Location: Control Section	Location: Project Number	Material Types: Roadbed Soil Type	Material Types: Granular Layer Aggregate Type	Material Types: Granular Layer Gradation	FWD File Information: Season	FWD File Information: Date	FWD File Information: File Title	Pavement Layer Thickness (in): Asphalt concrete	Pavement Layer Thickness (in): Base/ Subbase	Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area: 0	8	12	18	24	36	60	2-Layer Backcalculation: RMS Error (%)	Converged?: Yes	Converged?: No	Depth to Stiff Layer (in)	2-Layer Resilient Modulus (psi): Asphalt Concrete	Base/ Subbase	Roadbed	3-Layer System: Layer Thicknesses (in): Asphalt Concrete	Base	Subbase	Resilient modulus (psi): Asphalt Concrete	Base	Subbase	Roadbed	Depth to Stiff layer (in)	Convergence: RMS Error (%)	Yes	No
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.49	6.65	5.28	4.25	3.27	2.24	1.42	1.98	1		700	354,172	50,945	28,068	6.25	9	15					700	2.15		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.07	5.04	3.78	2.91	2.20	1.57	1.02	1.89	1		700	236,035	76,601	39,688	6.25	9	15					700	2.16		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.17	5.71	4.37	3.35	2.56	1.77	1.14	1.75	1		700	223,984	63,843	35,044	6.25	9	15					700	2.18		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.47	4.61	4.06	3.43	2.72	1.89	1.18	1.91	1		700	1,200,035	58,008	35,858	7.25	4	18					700	5.46		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.67	4.96	4.37	3.74	3.03	2.17	1.26	1.03	1		700	1,517,723	43,719	33,192	7.25	4	18					700	2.94		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.71	4.84	4.25	3.50	2.76	1.97	1.18	1.58	1		700	1,123,048	53,881	35,479	7.25	4	18					700	2.68		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.87	4.96	4.25	3.39	2.52	1.54	0.67	1.25	1		700	1,217,433	25,518	57,649	7.25	4	18					700	4.63		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.65	8.11	7.17	5.75	4.45	2.76	1.26	0.64	1		700	827,240	15,536	31,765	7.25	4	18					700	6.47		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.90	7.64	6.93	5.83	4.61	3.15	1.61	1.11	1		700	1,075,235	18,249	25,666	7.25	4	18					700	8.80		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.28	4.53	3.98	3.27	2.52	1.65	0.91	1.79	1		700	1,365,453	39,897	45,389	7.25	4	18					700	4.94		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.54	5.55	4.96	4.09	3.27	2.32	1.38	1.28	1		700	1,074,792	43,419	30,039	7.25	4	18					700	3.91		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.18	5.08	4.37	3.58	2.64	1.73	0.91	1.83	1		700	995,635	35,594	43,725	7.25	4	18					700	3.29		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.38	5.28	4.61	3.74	2.80	1.77	0.91	1.57	1		700	1,039,127	30,829	43,940	7.25	4	18					700	6.23		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.70	7.44	6.57	5.59	4.37	2.91	1.42	1.10	1		700	1,069,515	16,968	28,763	7.25	4	18					700	2.20		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.28	6.30	5.47	4.65	3.62	2.40	1.22	1.24	1		700	1,172,086	23,236	33,348	7.25	4	18					700	11.79		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.76	6.65	5.71	4.72	3.70	2.44	1.42	1.89	1		700	827,258	31,830	28,679	7.25	4	18					700	12.69		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.13	6.02	5.24	4.37	3.46	2.32	1.34	1.28	1		700	960,523	35,232	30,557	7.25	4	18					700	6.19		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.19	7.20	6.42	5.43	4.41	2.83	1.34	0.84	1		700	1,285,669	14,002	31,340	7.25	4	18					700	20.53		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.81	5.94	5.24	4.41	3.54	2.48	1.46	1.34	1		700	1,136,439	36,742	28,254	7.25	4	18					700	5.89		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.38	5.39	4.72	3.98	3.11	2.05	1.06	1.05	1		700	1,253,711	28,997	37,904	7.25	4	18					700	9.50		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.81	5.83	5.16	4.25	3.54	2.48	1.61	1.89	1		700	931,005	50,610	25,719	7.25	4	18					700	2.70		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.50	5.55	4.76	3.90	2.91	1.77	0.87	1.91	1		700	1,052,936	25,698	45,072	7.25	4	18					700	11.51		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.09	7.76	6.77	5.51	4.21	2.64	1.34	1.57	1		700	781,861	19,490	29,657	7.25	4	18					700	21.80		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.87	4.92	4.29	3.58	2.80	1.85	1.06	1.62	1		700	1,134,249	41,718	38,239	7.25	4	18					700	4.27		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.67	4.69	4.09	3.39	2.60	1.77	1.06	1.98	1		700	1,018,015	51,385	38,462	7.25	4	18					700	3.17		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.02	5.08	4.49	3.82	3.03	2.09	1.22	1.37	1		700	1,229,039	42,718	33,727	7.25	4	18					700	2.30		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.67	4.65	4.06	3.35	2.60	1.61	0.87	1.64	1		700	1,178,563	36,523	45,925	7.25	4	18					700	6.71		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.55	4.61	4.02	3.31	2.52	1.61	0.87	1.55	1		700	1,199,572	38,565	46,527	7.25	4	18					700	4.55		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.39	4.69	4.09	3.43	2.64	1.77	0.94	1.66	1		700	1,444,583	35,960	43,112	7.25	4	18					700	6.76		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.94	5.04	4.49	3.66	2.87	1.97	1.06	1.11	1		700	1,237,883	36,086	37,658	7.25	4	18					700	3.43		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.61	5.55	4.92	3.98	3.03	1.97	1.02	1.48	1		700	1,046,035	29,289	38,627	7.25	4	18					700	10.10		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.57	5.47	4.80	3.94	3.03	1.97	1.06	1.34	1		700	1,020,968	32,805	37,643	7.25	4	18					700	8.57		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.46	7.36	6.42	5.20	4.06	2.60	1.38	1.70	1		700	837,094	22,531	28,992	7.25	4	18					700	14.93		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.48	6.38	5.63	4.49	3.54	2.40	1.42	1.93	1		700	801,155	35,544	28,368	7.25	4	18					700	6.39		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.72	6.54	5.63	4.61	3.46	2.28	1.26	2.00	1		700	785,379	29,165	31,205	7.25	4	18					700	14.27		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.13	5.94	5.04	3.90	2.99	1.89	1.06	1.94	1		700	705,245	34,375	36,686	7.25	4	18					700	7.67		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.90	7.24	6.18	4.76	3.62	2.24	1.26	1.85	1		700	549,797	27,499	30,855	7.25	4	18					700	14.18		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	12.99	10.00	8.27	6.02	4.33	2.44	1.18	0.76	1		700	326,266	16,522	30,400	7.25	4	18					700	2.02		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.90	7.17	6.02	4.65	3.43	2.17	1.18	1.66	1		700	520,279	27,960	32,593	7.25	4	18					700	3.66		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.08	7.80	6.61	5.12	3.82	2.36	1.34	1.59	1		700	428,066	26,848	28,796	7.25	4	18					700	9.38		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.46	7.28	6.50	5.47	4.29	2.83	1.34	0.95	1		700	1,190,478	16,346	31,974	7.25	4	18					700	5.11		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.76	7.99	6.73	5.43	4.09	2.68	1.46	1.31	1		700	579,799	26,557	28,163	7.25	4	18					700	3.43		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.44	6.22	5.35	4.37	3.31	2.13	1.06	1.18	1		700	948,716	26,361	38,257	7.25	4	18					700	6.79		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.46	6.97	5.98	4.76	3.62	2.36	1.30	1.34	1		700	686,760	30,170	31,769	7.25	4	18					700	8.13		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.95	6.85	6.02	5.00	3.94	2.68	1.57	1.82	1		700	899,822	32,496	26,865	7.25	4	18					700	12.12		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.99	6.69	5.87	4.84	3.78	2.60	1.50	1.29	1		700	841,544	34,338	28,220	7.25	4	18					700	5.24		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.69	5.63	4.96	4.09	3.15	2.09	1.06	1.14	1		700	1,183,524	28,999	39,170	7.25	4	18					700	5.83		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.03	6.69	5.79	4.65	3.58	2.36	1.26	0.99	1		700	807,075	28,943	32,462	7.25	4	18					700	5.35		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.36	6.18	5.31	4.29	3.39	2.20	1.26	1.38	1		700	835,235	35,645	33,044	7.25	4	18					700	4.94		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.60	6.38	5.55	4.49	3.58	2.28	1.18	0.49	1		700	977,477	26,296	34,713	7.25	4	18					700	8.18		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.61	5.43	4.69	3.78	2.91	1.89	1.06	1.33	1		700	904,840	38,567	38,726	7.25	4	18					700	5.15		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.73	5.59	4.80	3.98	3.07	2.05	1.18	1.54	1		700	907,942	40,239	35,024	7.25	4	18					700	5.04		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.97	5.71	4.88	3.82	2.91	1.89	1.06	1.50	1		700	749,785	38,599	38,249	7.25	4	18					700	5.35		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.95	6.54	5.47	4.41	3.43	2.28	1.34	1.38	1		700	640,458	37,965	30,528	7.25	4	18					700	3.28		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.37	7.72	6.54	4.96	3.66	2.28	1.18	1.82	1		700	545,009	24,085	33,010	7.25	4	18					700	4.99		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.69	8.03	6.89	5.51	4.25	2.72	1.42	0.77	1		700	655,961	22,448	28,283	7.25	4	18					700	3.47		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.62	7.28	6.22	5.00	3.86	2.48	1.30	1.10	1		700	744,290	24,460	30,599	7.25	4	18					700	8.58		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.24	8.23	6.77	5.08	3.66	2.24	1.14	1.73	1		700	447,948	23,251	33,913	7.25	4	18					700	4.58		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.91	9.06	7.76	6.02	4.45	2.52	1.10	1.27	1		700	582,042	14,447	34,345	7.25	4	18					700	3.79		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.59	8.74	7.40	5.67	4.09	2.13	0.67	0.71	1		700	635,461	10,982	50,853	7.25	4	18					700	3.61		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.11	6.81	5.79	4.49	3.27	1.97	0.94	1.93	1		700	720,213	22,917	40,932	7.25	4	18					700	10.54		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.69	5.59	4.76	3.78	2.83	1.81	0.91	1.33	1		700	931,932	30,467	43,696	7.25	4	18					700	3.20		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	11.06	9.06	7.48	5.71	4.17	2.48	1.22	1.44	1		700	460,587	18,911	31,309	7.25	4	18					700	5.42		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.63	4.88	4.45	3.82	3.11	2.20	1.30	1.23	1		700	1,675,743	41,516	32,401	7.25	4	18					700	5.61		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.83	5.16	4.72	4.21	3.43	2.56	1.50	1.42	1		700	2,063,551	34,849	28,429	7.25	4	18					700	8.32		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.10	5.35	4.76	4.06	3.23	2.28	1.38	1.85	1		700	1,304,857	43,111	30,462	7.25	4	18					700	5.53		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.14	5.35	4.88	4.21	3.43	2.44	1.38	1.02	1		700	1,683,690	32,024	30,429	7.25	4	18					700	8.25		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.83	5.16	4.61	3.94	3.11	2.20	1.30	1.95	1		700	1,455,102	40,413	32,086	7.25	4	18					700	4.50		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.31	4.61	4.21	3.58	2.83	1.93	1.06	1.73	1		700	1,784,910	33,946	39,422	7.25	4	18					700	10.19		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.26	5.71	5.20	4.57	3.74	2.68	1.46	1.27	1		700	2,080,807	21,399	29,865	7.25	4	18					700	19.25		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.17	6.30	5.67	4.92	3.94	2.83	1.65	1.50	1		700	1,309,993	31,443	25,134	7.25	4	18					700	13.03		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.32	6.54	5.87	4.84	3.86	2.60	1.34	1.48	1		700	1,275,831	21,312	30,966	7.25	4	18					700	15.24		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.73	5.75	5.31	4.65	3.70	2.64	1.46	1.66	1		700	1,603,661	27,336	29,133	7.25	4	18					700	2.06		1
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	10.28	8.86	7.60	6.26	4.76	3.11	1.57	1.85	1		700	585,950	18,359	26,534	8	9	16					700	2.53		1
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.78	6.85	5.87	4.76	3.66	2.44	1.42	1.66	1		700	464,383	37,427	25,876	8	4	20					700	1.24		1
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	7.17	5.98	5.20	4.41	3.50	2.32	1.34	1.91	1		700	787,157	37,273	27,640	8	4	20					700	3.30		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.75	8.44	6.58	4.72	3.56	2.33	1.42	1.52	1		700	2,254,845	42,664	25,773	3	8	18					700	3.20		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.63	7.51	6.02	4.37	3.37	2.26	1.43	1.62	1		700	2,543,822	51,431	26,093	3	8	18					700	3.18		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.38	7.25	5.69	4.14	3.21	2.19	1.38	1.45	1		700	2,272,005	54,377	26,533	3	8	18					700	8.60		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.31	7.73	5.91	4.20	3.25	2.27	1.40	1.26	1		700	1,538,333	51,324	25,264	3	8	18					700	2.30		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.60	7.40	5.92	4.37	3.37	2.29	1.40	0.70	1		700	2,563,869	50,967	25,788	3	8	18					700	3.51		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.04	6.37	4.76	3.28	2.49	1.59	0.96	1.28	1		700	1,688,972	55,908	37,306	3	8	18					700	3.42		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.48	7.45	5.54	3.91	3.02	2.07	1.26	0.87	1		700	1,248,698	53,058	28,354	3	8	18					700	2.81		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.43	6.48	4.77	3.33	2.49	1.61	1.00	1.87	1		700	1,370,530	57,111	36,377	3	8	18					700	5.48		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	8.67	6.42	4.92	3.34	2.49	1.58	0.95	1.23	1		700	2,280,060	54,261	38,806	3	8	18					700	6.09		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.01	6.94	5.46	3.99	3.07	2.08	1.26	0.76	1		700	2,598,862	55,451	29,135	3	8	18					700	5.73		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.80	8.37	6.11	4.27	3.27	2.26	1.38	1.20	1		700	1,006,618	48,595	26,525	3	8	18					700	2.58		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.59	7.52	5.88	4.25	3.30	2.25	1.37	1.10	1		700	2,411,556	51,096	26,501	3	8	18					700	4.98		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.58	7.28	5.83	4.20	3.06	1.94	1.19	1.88	1		700	2,648,891	45,508	30,612	3	8	18					700	5.18		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.42	7.19	5.58	3.97	3.02	1.96	1.19	1.17	1		700	2,335,971	50,031	30,450	3	8	18					700	4.11		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.38	8.11	6.45	4.64	3.62	2.53	1.60	1.70	1		700	2,025,737	50,611	22,981	3	8	18					700	9.90		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	8.42	6.03	4.54	3.18	2.35	1.50	0.90	1.18	1		700	2,074,218	58,178	40,095	3	8	18					700	5.33		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.81	8.05	6.55	4.85	3.85	2.54	1.54	1.23	1		700	3,459,234	45,049	23,726	3	8	18					700	2.34		1

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System										
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.88	7.97	6.51	4.81	3.69	2.34	1.41	1.35	1		700	3,508,593	41,773	25,995	3	8	18					700	6.62		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.14	7.30	5.91	4.33	3.29	2.19	1.33	1.22	1		700	3,147,619	49,126	27,440	3	8	18					700	8.28		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.40	7.74	5.91	4.21	3.23	2.20	1.40	1.79	1		700	1,619,894	52,465	26,814	3	8	18					700	3.37		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	9.04	7.44	6.24	4.77	3.67	2.25	1.09	1.33	1		700	7,250,382	31,460	33,189	3	8	18					700	2.96		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	9.32	7.60	6.35	4.81	3.73	2.33	1.17	1.40	1		700	6,261,652	34,394	31,037	3	8	18					700	2.17		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	9.52	7.64	6.36	4.80	3.58	2.10	0.99	1.39	1		700	6,253,443	29,382	35,703	3	8	18					700	2.44		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	7.51	6.21	4.96	3.62	2.77	1.83	1.12	1.84	1		700	4,081,645	58,146	32,993	3	8	18					700	2.05		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.31	7.34	5.94	4.38	3.33	2.23	1.42	1.94	1		700	2,778,300	50,038	25,416	3	8	18					700	2.38		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	7.25	6.00	4.79	3.49	2.67	1.77	1.08	1.84	1		700	4,083,215	58,088	33,018	3	8	18					700	2.99		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	8.37	6.32	4.89	3.55	2.73	1.93	1.26	1.31	1		700	2,199,879	65,299	33,831	3	8	18					700	4.49		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	8.61	6.35	4.94	3.40	2.60	1.72	1.12	1.59	1		700	2,202,599	59,980	39,062	3	8	18					700	2.11		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	8.94	6.34	4.62	3.24	2.46	1.54	0.94	1.88	1		700	1,930,515	54,158	43,102	3	8	18					700	2.00		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.84	7.80	5.98	4.53	3.66	2.40	1.45	1.97	1		700	2,647,005	47,902	24,126	3	8	18					700	1.90		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	7.95	5.59	4.48	3.26	2.38	1.34	0.59	2.00	1		150	814,505	51,869	31,218	5.5	8	18					150	2.05		1
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.22	9.38	8.02	6.17	4.66	2.57	1.10	1.69	1		250	848,059	20,094	23,978	6	9	15					250	2.31		1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	10.96	9.96	9.00	7.62	6.34	4.26	2.13	1.65	1		300	863,518	14,826	15,351											1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	9.54	8.54	7.64	6.45	5.30	3.42	1.42	0.86	1		300	1,043,425	11,061	24,367											1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	9.40	8.46	7.69	6.56	5.48	3.72	1.72	0.76	1		300	1,140,008	13,121	19,725											1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	9.13	8.07	7.15	5.86	4.69	2.86	1.12	1.30	1		300	894,026	12,974	28,849											1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	8.04	7.27	6.59	5.66	4.72	3.18	1.45	0.84	1		300	1,375,269	13,603	24,015											1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	8.95	8.02	7.28	6.22	5.17	3.44	1.56	0.87	1		300	1,184,055	12,897	22,024											1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Summer	4/4/2008	flex-M-M53-CS50015-04-04-2008	8	24	8.01	7.09	6.40	5.39	4.44	2.90	1.26	0.66	1		300	1,225,146	14,943	26,948											1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	10.81	9.92	9.11	7.98	6.84	4.70	2.24	1.00	1		300	1,261,464	8,312	16,741											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	10.65	9.71	8.91	7.74	6.56	4.37	1.85	0.95	1		300	1,255,939	6,206	22,722											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	9.30	8.39	7.72	6.66	5.66	3.80	1.57	0.48	1		300	1,456,559	6,857	27,598											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	9.21	8.36	7.59	6.55	5.54	3.62	1.41	0.76	1		300	1,421,606	6,434	32,288											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	9.71	8.84	8.18	7.20	6.20	4.32	1.86	0.28	1		300	1,646,520	4,971	27,123											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	10.28	9.32	8.46	7.37	6.37	4.37	2.04	0.73	1		300	1,274,685	9,440	17,954											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	9.53	8.71	7.98	6.98	6.02	4.14	1.82	0.56	1		300	1,558,108	6,479	24,148											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	9.57	8.79	8.09	7.15	6.21	4.39	2.07	0.49	1		300	1,652,917	6,917	20,215											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	9.15	8.21	7.40	6.29	5.23	3.32	1.30	0.93	1		300	1,210,090	8,859	29,305											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	8.16	7.44	6.90	6.00	5.20	3.60	1.59	0.46	1		300	1,877,406	7,118	28,508											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	9.61	8.67	7.91	6.86	5.87	3.97	1.71	0.51	1		300	1,388,801	7,759	23,339											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	8.69	7.97	7.40	6.55	5.75	4.08	1.85	0.41	1		300	2,023,892	4,969	28,882											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	2/27/2009	flex-M-M53-CS50015-02-27-2009	8	24	8.04	7.30	6.70	5.80	4.88	3.24	1.36	0.93	1		300	1,613,699	8,669	30,292											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	11.64	10.46	9.29	7.89	6.56	4.25	1.94	1.31	1		300	784,343	11,265	16,370											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	11.30	10.15	9.06	7.64	6.26	3.90	1.57	1.38	1		300	820,481	8,575	21,039											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	10.25	9.17	8.18	6.84	5.65	3.51	1.32	1.00	1		300	940,722	8,161	26,248											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	10.14	8.97	7.93	6.62	5.43	3.28	1.16	0.97	1		300	912,255	8,219	29,689											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	10.29	9.18	8.30	7.09	5.94	3.88	1.51	0.34	1		300	1,091,957	6,761	24,877											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	11.16	9.97	8.95	7.55	6.25	4.02	1.74	1.08	1		300	834,103	10,180	18,464											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	10.89	9.68	8.69	7.29	6.03	3.82	1.50	0.74	1		300	896,381	8,372	22,580											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	9.91	9.00	8.18	7.07	6.04	4.12	1.83	0.54	1		300	1,252,609	8,288	19,914											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	10.34	9.14	8.08	6.63	5.31	3.13	1.10	1.30	1		300	792,262	9,232	29,117											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	8.72	7.76	6.96	5.92	4.93	3.16	1.29	0.81	1		300	1,164,145	10,725	26,448											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	10.43	9.33	8.36	7.04	5.83	3.70	1.51	0.97	1		300	923,558	9,204	22,114											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	9.89	9.00	8.20	7.12	6.01	3.94	1.50	0.75	1		300	1,328,259	4,947	32,804											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/6/2009	flex-M-M53-CS50015-03-06-2009	8	24	8.97	7.97	7.12	5.90	4.86	3.02	1.22	1.18	1		300	984,181	11,892	26,488											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	10.85	9.91	9.06	7.83	6.66	4.53	2.19	1.13	1		300	1,103,182	10,490	15,962											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	10.01	9.09	8.28	7.11	5.97	3.91	1.72	1.29	1		300	1,142,370	9,344	20,950											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	9.32	8.42	7.64	6.56	5.51	3.61	1.48	0.83	1		300	1,281,414	8,218	26,186											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	8.93	8.02	7.28	6.25	5.20	3.36	1.32	0.82	1		300	1,315,720	8,103	30,217											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	9.52	8.72	8.08	7.11	6.12	4.21	1.78	0.59	1		300	1,674,406	4,542	30,987											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	10.26	9.26	8.41	7.28	6.21	4.25	2.05	0.74	1		300	1,131,974	11,990	16,590											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	9.40	8.53	7.75	6.72	5.73	3.86	1.67	0.63	1		300	1,381,218	8,040	23,473											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	9.93	9.00	8.27	7.19	6.14	4.22	1.93	0.57	1		300	1,338,805	8,606	19,490											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	9.32	8.31	7.43	6.24	5.11	3.15	1.15	1.03	1		300	1,072,234	9,017	31,647											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	8.12	7.39	6.80	5.93	5.09	3.44	1.52	0.87	1		300	1,715,428	8,382	27,250											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	9.51	8.51	7.72	6.65	5.59	3.69	1.61	0.78	1		300	1,189,761	9,882	22,071											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	9.45	8.69	8.07	7.16	6.27	4.39	1.93	0.57	1		300	1,852,452	3,892	31,833											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/9/2009	flex-M-M53-CS50015-03-09-2009	8	24	8.13	7.31	6.60	5.65	4.71	3.05	1.30	1.04	1		300	1,346,018	11,900	27,584											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	10.42	9.53	8.71	7.51	6.39	4.38	2.17	1.18	1		300	1,120,181	12,259	15,743											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	10.08	9.19	8.41	7.27	6.08	4.04	1.78	1.20	1		300	1,203,586	8,552	21,108											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	9.03	8.24	7.50	6.46	5.43	3.63	1.55	0.84	1		300	1,374,670	8,535	25,051											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	8.68	7.85	7.18	6.18	5.14	3.37	1.34	0.84	1		300	1,426,974	7,784	30,905											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	8.71	7.90	7.33	6.44	5.56	3.89	1.72	0.29	1		300	1,774,872	6,191	26,282											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	9.69	8.84	8.08	6.99	5.94	4.12	2.02	0.88	1		300	1,218,951	12,441	16,773											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	9.12	8.31	7.64	6.56	5.59	3.82	1.71	0.67	1		300	1,420,031	9,039	22,242											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	9.61	8.79	8.16	7.12	6.12	4.31	2.08	0.66	1		300	1,483,433	9,188	18,120											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	8.91	7.92	7.19	6.01	4.94	3.09	1.22	1.17	1		300	1,120,091	10,821	28,851											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	7.90	7.15	6.62	5.73	4.89	3.36	1.54	0.62	1		300	1,692,972	10,709	24,678											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	9.57	8.63	7.91	6.72	5.69	3.78	1.69	0.95	1		300	1,201,470	10,500	21,181											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	8.87	8.15	7.62	6.76	5.83	4.09	1.81	0.63	1		300	1,921,615	4,586	30,951											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	3/13/2009	flex-M-M53-CS50015-03-13-2009	8	24	7.73	6.93	6.34	5.39	4.51	2.97	1.30	0.88	1		300	1,411,748	12,823	26,836											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	12.96	10.98	9.57	7.55	5.86	3.30	1.18	1.26	1		300	488,164	10,343	24,058											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	12.53	10.54	9.09	7.10	5.45	2.96	0.96	1.12	1		300	488,815	10,211	28,771											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	13.11	11.26	9.88	8.09	6.48	3.89	1.41	0.46	1		300	595,578	8,486	21,714											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	13.28	11.41	10.01	8.03	6.44	3.92	1.80	1.75	1		300	468,011	13,831	16,390											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	12.84	10.99	9.54	7.54	6.00	3.53	1.47	1.51	1		300	474,169	12,667	19,623											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	11.88	10.51	9.32	7.70	6.36	4.07	1.83	1.15	1		300	681,359	12,350	16,896											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	12.56	10.53	9.00	6.96	5.28	2.82	1.00	1.84	1		300	427,883	11,878	26,945											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	10.95	9.59	8.46	6.84	5.46	3.25	1.26	1.42	1		300	673,702	11,459	24,038											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	11.94	10.38	9.08	7.32	5.86	3.52	1.49	1.59	1		300	561,125	12,921	19,951											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	13.64	12.07	10.80	8.85	7.14	4.17	1.39	1.44	1		300	630,310	6,146	23,949											
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	10.31	8.85	7.71	6.11	4.80	2.79	1.15	1.80	1		300	594,339	15,458	25,250											
Metro	I-94	14-09	NA	NA	CL	NA	NA	?	4/2/2008	flex-M-I94-CS77111-04-02-2008	4.2	17.5	22.60	20.59	18.47	15.30	12.27	7.33	2.51	1.80	1		100	1,808,418	12,260	4,640											
Metro	I-94	14-09	NA	NA	CL	NA	NA	?	4/2/2008	flex-M-I94-CS77111-04-02-2008	4.2	17.5	21.05	19.62	17.71	14.88	12.10	7.35	2.56	1.97	1		100	2,342,924	11,141	4,744											
Metro	I-94	14-09	NA	NA	CL	NA	NA	?	4/2/2008	flex-M-I94-CS77111-04-02-2008	4.2	17.5	21.72	19.99	17.95	15.18	12.29	7.43	2.51	1.69	1		100	2,258,778	10,384	4,773											
Metro	I-94	14-09	NA	NA	CL	NA	NA	?	4/2/2008	flex-M-I94-CS77111-04-02-2008	4.2	17.5	20.65	18.85	16.97	14.19	11.49	6.99	2.42	1.51	1		100	2,174,165	12,810	4,910											
Metro	I-94	14-09	NA	NA	CL	NA	NA	?	4/2/2008	flex-M-I94-CS77111-04-02-2008	4.2	17.5	26.46	23.42	20.46	16.39	12.66	7.15	2.26	1.92	1		100	1,104,564	11,707	4,748											
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	7.39	5.46	4.58	3.88	3.44	2.78	1.67	2.80		1	250				3.5	8.0	18.0	426,764	238,164	104,505	16,309	250	1.46	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	9.28	6.19	4.65	3.53	3.08	2.61	1.77	5.90		1	250				3.5	8.0	18.0	807,808	44,291	290,730	14,107	250	0.17	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	13.40	9.48	7.15	4.78	3.40	1.92	0.84	2.56		1	250				3.5	8.0	18.0	686,460	51,162	23,448	30,154	250	0.41	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System										
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.66	7.53	6.29	4.89	3.85	2.41	1.18	2.97		1	700				7.25	4.5	17.5	219,860	169,410	21,598	30,315	700	0.17	1	
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.74	7.85	6.64	5.33	4.36	2.90	1.49	2.95		1	700				7.25	4.5	17.5	223,121	220,225	21,922	24,623	700	0.35	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.52	9.69	7.64	5.40	4.09	2.60	1.49	2.10		1	700				7	5	18	348,113	6,974	86,163	24,433	700	1.39	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.72	9.06	7.21	5.08	3.87	2.52	1.46	2.28		1	700				7	5	18	365,459	7,640	97,160	24,815	700	1.47	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.63	8.67	6.81	4.84	3.77	2.56	1.53	2.07		1	700				7	5	18	319,527	10,520	93,020	23,690	700	1.24	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.39	9.97	7.72	5.27	3.97	2.59	1.46	2.50		1	700				7	5	18	260,878	9,758	56,901	24,148	700	1.83	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.11	9.11	7.01	4.93	3.71	2.44	1.42	2.28		1	700				7	5	18	303,559	9,107	81,403	25,090	700	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.94	8.75	6.70	4.68	3.59	2.45	1.47	2.59		1	700				7	5	18	280,873	10,086	101,891	24,424	700	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.47	9.30	7.17	5.08	3.94	2.65	1.50	2.20		1	700				7	5	18	270,613	15,350	49,963	23,572	700	1.79	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.54	9.92	7.52	5.13	3.86	2.53	1.41	2.53		1	700				7	5	18	235,195	12,580	47,312	24,961	700	1.99	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.63	8.54	6.56	4.58	3.55	2.41	1.45	2.46		1	700				7	5	18	287,922	11,006	94,347	24,778	700	1.45	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.94	8.93	6.93	4.97	3.90	2.63	1.47	2.05		1	700				7	5	18	287,031	19,750	45,911	24,252	700	1.73	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.33	8.62	6.81	4.75	3.62	2.40	1.38	2.39		1	700				7	5	18	342,276	9,873	80,872	25,884	700	1.67	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	10.89	8.27	6.50	4.60	3.54	2.45	1.43	2.55		1	700				7	5	18	339,616	11,460	89,639	24,887	700	1.77	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.73	8.90	6.85	4.88	3.81	2.55	1.46	2.26		1	700				7	5	18	308,671	13,099	61,978	24,376	700	1.84	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.80	9.06	7.13	5.05	3.93	2.65	1.49	2.37		1	700				7	5	18	322,851	13,205	55,208	23,750	700	1.99	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.60	8.99	7.10	5.07	3.91	2.57	1.47	2.10		1	700				7	5	18	354,290	10,062	68,747	24,188	700	1.59	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.65	9.07	7.17	5.12	3.91	2.55	1.42	2.03		1	700				7	5	18	358,970	10,055	59,253	24,723	700	1.63	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.76	9.04	7.14	5.05	3.85	2.49	1.41	2.01		1	700				7	5	18	347,347	9,612	65,293	25,194	700	1.50	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.33	8.93	7.00	4.92	3.73	2.39	1.39	2.77		1	700				7	5	18	383,621	6,365	133,871	25,821	700	1.80	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.51	8.91	6.98	4.93	3.71	2.47	1.38	2.48		1	700				7	5	18	342,529	10,674	63,453	25,670	700	1.94	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.43	9.49	7.48	5.40	4.20	2.79	1.51	2.05		1	700				7	5	18	294,728	20,454	35,271	23,073	700	1.74	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.48	9.96	7.98	5.93	4.73	3.30	1.93	2.08		1	700				7	5	18	354,112	10,678	63,859	18,417	700	1.71	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.39	8.90	7.10	5.27	4.21	3.03	1.94	2.72		1	700				7	5	18	369,446	8,087	181,373	18,449	700	1.30	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	18.12	13.47	10.52	7.67	5.92	3.81	1.94	2.53		1	700				7	5	18	165,759	28,849	17,329	17,418	700	1.68	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.84	10.50	7.92	5.66	4.46	3.11	1.85	2.02		1	700				7	5	18	188,002	14,057	54,825	19,106	700	1.38	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.10	9.42	7.11	5.00	3.97	2.90	1.81	3.36		1	700				7	5	18	224,458	10,367	122,314	19,794	700	1.65	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.29	10.20	7.69	5.43	4.33	3.08	1.89	2.74		1	700				7	5	18	203,865	11,039	85,759	18,962	700	1.57	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.21	9.75	7.55	5.47	4.36	3.10	1.89	2.21		1	700				7	5	18	250,523	11,426	83,587	18,870	700	1.35	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.76	8.73	6.89	5.05	4.06	2.92	1.81	2.03		1	700				7	5	18	296,494	12,691	100,770	19,816	700	1.12	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.08	9.72	7.52	5.44	4.37	3.15	1.93	2.50		1	700				7	5	18	254,475	11,725	89,179	18,668	700	1.59	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.59	9.25	7.47	5.59	4.49	3.20	1.93	2.12		1	700				7	5	18	394,277	9,597	99,073	18,516	700	1.59	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.98	9.37	7.49	5.55	4.44	3.14	1.88	2.03		1	700				7	5	18	352,646	10,587	85,156	19,124	700	1.51	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	11.72	9.09	7.15	5.20	4.12	2.94	1.80	2.68		1	700				7	5	18	332,714	9,625	115,047	19,979	700	1.74	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.59	9.62	7.48	5.39	4.27	3.00	1.80	2.54		1	700				7	5	18	286,562	11,155	78,719	19,900	700	1.80	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.31	9.41	7.32	5.34	4.23	3.06	1.81	2.59		1	700				7	5	18	288,590	12,787	75,900	19,660	700	1.96	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	10.85	8.36	6.62	4.88	3.90	2.86	1.81	2.75		1	700				7	5	18	358,380	10,158	161,547	19,907	700	1.44	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	10.54	8.03	6.43	4.81	3.90	2.86	1.81	2.08		1	700				7	5	18	370,757	12,259	140,409	19,937	700	1.04	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.65	9.38	7.33	5.31	4.22	3.00	1.84	2.20		1	700				7	5	18	274,162	11,449	91,739	19,670	700	1.25	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.52	9.69	7.64	5.40	4.09	2.60	1.49	2.10		1	700				7	5	18	348,113	6,974	86,163	24,433	736	1.39	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.72	9.06	7.21	5.08	3.87	2.52	1.46	2.28		1	700				7	5	18	365,459	7,640	97,160	24,815	737	1.47	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.63	8.67	6.81	4.84	3.77	2.56	1.53	2.07		1	700				7	5	18	319,527	10,520	93,020	23,690	738	1.24	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.39	9.97	7.72	5.27	3.97	2.59	1.46	2.50		1	700				7	5	18	260,878	9,758	56,901	24,148	739	1.83	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.11	9.11	7.01	4.93	3.71	2.44	1.42	2.28		1	700				7	5	18	303,559	9,107	81,403	25,090	740	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.94	8.75	6.70	4.68	3.59	2.45	1.47	2.59		1	700				7	5	18	280,873	10,086	101,891	24,424	741	1.42	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.47	9.30	7.17	5.08	3.94	2.65	1.50	2.20		1	700				7	5	18	270,613	15,350	49,963	23,572	742	1.79	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.54	9.92	7.52	5.13	3.86	2.53	1.41	2.53		1	700				7	5	18	235,195	12,580	47,312	24,961	743	1.99	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.63	8.54	6.56	4.58	3.55	2.41	1.45	2.46		1	700				7	5	18	287,922	11,006	94,347	24,778	745	1.45	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.94	8.93	6.93	4.97	3.90	2.63	1.47	2.05		1	700				7	5	18	287,031	19,750	45,911	24,252	746	1.73	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.33	8.62	6.81	4.75	3.62	2.40	1.38	2.39		1	700				7	5	18	342,276	9,873	80,872	25,884	748	1.67	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	10.89	8.27	6.50	4.60	3.54	2.45	1.43	2.55		1	700				7	5	18	339,616	11,460	89,639	24,887	749	1.77	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.73	8.90	6.85	4.88	3.81	2.55	1.46	2.26		1	700				7	5	18	308,671	13,099	61,978	24,376	750	1.84	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.80	9.06	7.13	5.05	3.93	2.65	1.49	2.37		1	700				7	5	18	322,851	13,205	55,208	23,750	751	1.99	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.60	8.99	7.10	5.07	3.91	2.57	1.47	2.10		1	700				7	5	18	354,290	10,062	68,747	24,188	752	1.59	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.65	9.07	7.17	5.12	3.91	2.55	1.42	2.03		1	700				7	5	18	358,970	10,055	59,253	24,723	753	1.63	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.76	9.04	7.14	5.05	3.85	2.49	1.41	2.01		1	700				7	5	18	347,347	9,612	65,293	25,194	754	1.50	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.33	8.93	7.00	4.92	3.73	2.39	1.39	2.77		1	700				7	5	18	383,621	6,365	133,871	25,821	755	1.80	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.51	8.91	6.98	4.93	3.71	2.47	1.38	2.48		1	700				7	5	18	342,529	10,674	63,453	25,670	756	1.94	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.43	9.49	7.48	5.40	4.20	2.79	1.51	2.05		1	700				7	5	18	294,728	20,454	35,271	23,073	757	1.74	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.48	9.96	7.98	5.93	4.73	3.30	1.93	2.08		1	700				7	5	18	354,192	10,665	63,935	18,417	758	1.71	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.39	8.90	7.10	5.27	4.21	3.03	1.94	2.72		1	700				7	5	18	369,414	8,090	181,259	18,449	759	1.30	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.77	10.05	7.74	5.58	4.37	3.03	1.88	2.18		1	700				7	5	18	241,811	9,331	91,653	18,987	760	1.04	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	18.12	13.47	10.52	7.67	5.92	3.81	1.94	2.53		1	700				7	5	18	168,004	28,163	17,373	17,418	761	1.68	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.84	10.50	7.92	5.66	4.46	3.11	1.85	2.02		1	700				7	5	18	188,233	13,995	55,014	19,105	762	1.38	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.10	9.42	7.11	5.00	3.97	2.90	1.81	3.36		1	700				7	5	18	224,452	10,368	122,296	19,794	763	1.65	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	14.29	10.20	7.69	5.43	4.33	3.08	1.89	2.73		1	700				7	5	18	203,576	11,145	84,487	18,986	765	1.58	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.21	9.75	7.55	5.47	4.36	3.10	1.89	2.21		1	700				7	5	18	250,734	11,390	83,876	18,869	766	1.35	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.76	8.73	6.89	5.05	4.06	2.92	1.81	2.03		1	700				7	5	18	296,457	12,696	100,720	19,817	767	1.12	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	13.08	9.72	7.52	5.44	4.37	3.15	1.93	2.50		1	700				7	5	18	254,505	11,719	89,231	18,668	768	1.59	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.59	9.25	7.47	5.59	4.49	3.20	1.93	2.12		1	700				7	5	18	394,292	9,595	99,083	18,516	769	1.59	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.98	9.37	7.49	5.55	4.44	3.14	1.88	2.03		1	700				7	5	18	352,619	10,591	85,117	19,124	770	1.51	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	11.72	9.09	7.15	5.20	4.12	2.94	1.80	2.68		1	700				7	5	18	332,637	9,634	114,893	19,979	771	1.74	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.59	9.62	7.48	5.39	4.27	3.00	1.80	2.54		1	700				7	5	18	286,660	11,138	78,848	19,899	772	1.80	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.31	9.41	7.32	5.34	4.23	3.06	1.81	2.59		1	700				7	5	18	288,519	12,799	75,828	19,661	773	1.96	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	10.85	8.36	6.62	4.88	3.90	2.86	1.81	2.75		1	700				7	5	18	358,412	10,154	161,614	19,907	774	1.44	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	10.54	8.03	6.43	4.81	3.90	2.86	1.81	2.08		1	700				7	5	18	370,700	12,266	140,309	19,937	775	1.04	1	
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.65	9.38	7.33	5.31	4.22	3.00	1.84	2.18		1	700				7	5	18	274,816	11,407	91,683	19,692	776	1.26	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.80	8.82	5.55	4.13	3.19	2.05	1.14	6.97		1	700				6.25	6	18	199,457	82,680	32,273	35,240	700	1.77	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.00	7.95	5.24	3.58	2.40	1.34	0.83	6.58		1	700				6.25	6	18	590,040	10,674	52,381	36,602	700	1.23	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.61	7.40	5.83	4.33	3.23	1.93	1.06	2.92		1	700				6.25	6	18	434,946	36,153	35,930	24,279	700	1.81	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	13.74	8.15	6.26	4.57	3.35	2.09	1.22	2.53		1	700				6.25	6	18	210,965	51,224	29,146	39,836	700	1.19	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	12.48	9.17	7.01	5.00	3.62	2.17	1.34	3.52		1	700				6.25	6	18	839,932	12,818	20,918	29,229	700	0.45	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	14.02	9.96	6.89	4.65	3.35	2.01	1.22	4.02		1	700				6.25	6	18	1,232,780	16,644	28,517	23,432	700	0.33	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.92	8.46	7.17	5.51	4.06	2.20	1.10	3.30		1	700				6.25	6	18	429,197	64,457	30,249	27,463	700	0.57	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.29	8.07	6.97	5.71	4.37	2.24	1.22	5.90		1	700				6.25	6	18	923,217	85,026	16,830	28,813	700	0.59	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.29	8.46	7.36	4.06	3.15	1.97	1.02	9.23		1	700				6.25	6	18	1,020,699	38,968	30,873	40,325	700	0.47	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.94	9.21	7.87	6.10	4.13	2.05	1.18	7.45		1	700				6.25	6	18	365,774	141,362	16,627	43,697	700	0.71	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.13	8.11	7.09	5.83	4.29	2.44	1.26	4.33		1	700				6.25	6	18	827,547	68,925	28,144	40,748	700	0.61	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.94	10.59	7.48	5.35	3.94	2.48	1.57	8.20		1	700				6.25	6	18	992,466	50,989	37,919	56,889	700	0.59	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	14.06	9.76	5.79	4.53	3.50	2.17	1.22	6.37		1	700				6.25	6	18	676,823	110,476	34,006	28,068	700	0.13	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.73	8.50	6.69	5.08	3.82	2.20	1.10	2.24		1	700				6.25	6	18	1,178,276	22,297	82,778	31,289	700	1.13	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.35	7.64	6.22	4.76	3.54	2.09	0.83	3.80		1	700				6.25	6	18	756,312	101,273	27,934	30,290	700	0.51	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.67	7.95	5.67	4.06	2.99	1.77	0.79	4.39		1	700				6.25	6	18	1,055,697	13,806	118,674	20,490	700	0.64	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	RMS Error (%)	Convergence	
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed			Yes	No
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.81	8.62	6.38	4.21	3.11	1.73	0.75	3.97		1	700				6.25	6	18	427,736	50,246	37,042	19,340	700	0.96	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.35	8.70	7.52	6.26	4.69	2.80	1.46	2.67		1	700				6.25	6	18	1,159,129	10,928	77,114	27,406	700	1.00	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.81	8.82	6.77	5.20	4.06	2.76	1.81	3.06		1	700				6.25	6	18	916,948	53,324	47,332	27,761	700	0.36	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.57	7.76	6.10	4.72	3.66	2.32	1.30	2.66		1	700				6.25	6	18	878,288	24,724	45,519	30,875	700	0.61	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.78	6.50	5.12	3.94	2.99	2.01	1.26	2.18		1	700				6.25	9	15	501,364	27,417	100,042	27,551	700	1.32	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.33	6.61	5.00	3.70	2.64	1.69	0.87	2.05		1	700				6.25	9	15	313,915	52,081	33,099	38,360	700	1.65	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.83	5.63	4.33	3.27	2.40	1.46	0.71	2.63		1	700				6.25	9	15	380,472	74,712	28,500	46,320	700	1.10	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.99	5.75	4.41	3.31	2.48	1.61	0.83	2.30		1	700				6.25	9	15	357,380	73,183	35,018	40,644	700	1.31	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.19	6.34	5.16	4.13	3.15	2.13	1.02	2.99		1	700				6.25	9	15	454,638	95,748	20,050	33,725	700	1.51	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.99	5.67	4.25	3.27	2.40	1.69	1.06	2.86		1	700				6.25	9	15	419,178	35,762	117,274	32,543	700	1.86	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.76	5.79	4.61	3.62	2.80	1.81	0.94	2.18		1	700				6.25	9	15	436,504	84,134	30,072	36,171	700	0.96	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.76	5.91	4.72	3.82	2.95	1.97	1.02	2.49		1	700				6.25	9	15	453,388	94,113	27,627	33,825	700	1.28	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.20	7.64	6.14	4.76	3.66	2.32	1.10	2.97		1	700				6.25	9	15	325,248	73,271	16,789	30,751	700	0.77	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.41	6.85	5.39	4.13	3.11	2.01	1.02	2.25		1	700				6.25	9	15	329,075	65,724	26,038	32,883	700	0.95	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.74	6.30	4.92	3.86	2.91	1.85	0.94	2.78		1	700				6.25	9	15	327,340	78,792	26,116	35,579	700	1.22	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.09	6.34	4.92	3.86	2.91	1.85	0.94	3.36		1	700				6.25	9	15	265,819	84,724	25,599	35,535	700	1.24	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.35	5.59	4.09	2.95	2.09	1.26	0.59	3.64		1	700				6.25	9	15	264,060	73,715	30,156	54,008	700	1.66	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.74	6.22	4.88	3.74	2.72	1.69	0.83	2.76		1	700				6.25	9	15	336,117	71,114	25,061	39,804	700	1.23	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.70	5.87	4.45	3.27	2.40	1.46	0.75	2.34		1	700				6.25	9	15	277,929	67,177	32,290	43,907	700	0.83	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.82	6.30	4.96	3.86	2.91	1.93	1.02	2.21		1	700				6.25	9	15	322,458	73,880	31,461	33,197	700	1.05	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.90	6.50	5.20	4.06	3.03	1.89	0.91	2.94		1	700				6.25	9	15	353,759	79,569	20,550	36,952	700	0.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	10.20	7.28	5.75	4.53	3.46	2.40	1.30	2.31		1	700				6.25	9	15	260,762	69,353	29,655	26,240	700	1.26	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.33	6.18	4.53	3.11	2.28	1.61	1.02	4.15		1	700				6.25	9	15	299,060	26,467	164,629	33,824	700	0.56	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.35	5.55	4.06	2.95	2.20	1.57	1.10	5.47		1	700				6.25	9	15	368,999	25,263	387,625	31,830	700	1.97	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	9.02	6.22	4.61	3.35	2.52	1.61	0.98	2.14		1	700				6.25	9	15	326,655	36,420	69,147	34,602	700	1.57	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	6.93	5.08	3.98	2.95	2.09	1.42	0.83	2.43		1	700				6.25	9	15	603,409	33,459	106,964	41,547	700	1.59	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.23	6.10	4.80	3.58	2.72	2.01	1.18	2.18		1	700				6.25	9	15	447,802	38,486	87,377	28,921	700	1.68	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.52	5.63	4.45	3.50	2.68	1.81	1.14	2.18		1	700				6.25	9	15	608,085	33,605	109,836	30,453	700	1.59	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.62	6.30	4.80	3.74	2.83	2.01	1.30	2.88		1	700				6.25	9	15	444,844	29,607	139,070	26,826	700	1.70	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.50	6.18	4.84	3.62	2.72	1.77	1.10	2.33		1	700				6.25	9	15	495,814	26,210	104,852	31,190	700	1.22	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	7.95	5.67	4.41	3.39	2.60	1.85	1.22	2.86		1	700				6.25	9	15	464,677	32,744	168,392	28,590	700	1.38	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.36	5.43	4.33	3.31	2.48	1.73	1.14	2.41		1	700				6.25	9	15	655,077	23,069	322,228	30,716	700	1.15	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.44	5.43	4.33	3.35	2.56	1.69	1.10	2.08		1	700				6.25	9	15	631,015	28,130	166,392	31,986	700	1.88	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.50	4.49	3.46	2.48	1.81	1.10	0.51	4.27		1	700				6.25	9	15	393,934	97,780	34,822	63,778	700	1.09	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.01	5.20	4.17	3.31	2.52	1.57	0.87	2.18		1	700				6.25	9	15	576,365	70,963	39,980	39,889	700	1.62	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.11	6.02	4.88	3.94	3.07	2.09	1.18	2.30		1	700				6.25	9	15	432,324	80,256	37,683	29,832	700	1.08	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.60	5.47	4.29	3.27	2.48	1.61	0.87	2.43		1	700				6.25	9	15	406,032	74,129	39,596	39,368	700	0.77	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.46	6.14	4.76	3.54	2.64	1.61	0.83	2.42		1	700				6.25	9	15	392,068	58,733	31,557	40,417	700	0.80	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	10.20	7.56	5.94	4.37	3.19	1.85	0.83	3.06		1	700				6.25	9	15	355,575	51,408	18,226	39,072	700	0.72	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	9.41	7.01	5.51	4.29	3.27	2.17	1.18	2.16		1	700				6.25	9	15	377,738	55,837	33,049	29,157	700	1.09	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.58	6.57	5.35	4.21	3.23	2.01	1.02	2.10		1	700				6.25	9	15	520,065	61,175	24,487	33,160	700	0.93	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.76	5.83	4.57	3.50	2.60	1.61	0.79	2.87		1	700				6.25	9	15	467,310	70,085	27,356	42,025	700	1.16	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.31	5.79	4.45	3.39	2.56	1.65	0.91	2.56		1	700				6.25	9	15	323,491	69,636	39,888	37,669	700	1.02	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.35	6.02	4.57	3.39	2.44	1.42	0.67	3.29		1	700				6.25	9	15	373,990	61,839	26,199	47,966	700	1.23	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.99	5.75	4.45	3.31	2.32	1.34	0.63	2.82		1	700				6.25	9	15	430,123	58,464	27,616	50,918	700	1.19	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.44	5.47	4.25	3.31	2.44	1.61	1.02	2.18		1	700				6.25	9	15	604,592	27,064	148,665	33,691	700	1.94	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.03	5.83	4.53	3.50	2.64	1.69	0.91	2.58		1	700				6.25	9	15	393,320	69,653	35,704	37,535	700	1.19	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.66	6.38	5.00	3.90	2.91	1.97	1.06	2.46		1	700				6.25	9	15	382,300	61,726	35,961	31,912	700	1.40	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.58	6.26	4.84	3.62	2.64	1.65	0.83	2.82		1	700				6.25	9	15	380,535	58,374	29,793	39,792	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.48	5.24	3.98	3.07	2.36	1.73	1.18	2.83		1	700				6.25	9	15	452,664	34,295	259,935	29,630	700	1.74	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.76	5.39	3.98	2.91	2.13	1.42	0.91	2.45		1	700				6.25	9	15	436,306	29,953	155,818	38,490	700	1.71	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.86	6.14	4.69	3.43	2.48	1.61	1.02	2.15		1	700				6.25	9	15	414,386	24,858	123,998	33,874	700	1.59	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.17	4.88	3.66	2.52	1.73	1.02	0.63	2.41		1	700				6.25	9	15	533,444	26,265	152,914	56,165	700	1.38	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.64	5.39	4.09	2.87	2.01	1.14	0.71	2.88		1	700				6.25	9	15	601,433	17,731	247,425	49,798	700	1.68	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.54	5.98	4.53	3.31	2.40	1.61	1.02	2.26		1	700				6.25	9	15	431,888	25,837	151,882	34,527	700	1.28	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.35	6.10	4.69	3.50	2.56	1.69	1.10	2.81		1	700				6.25	9	15	545,332	18,548	283,729	31,739	700	1.48	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	6.18	4.65	3.74	2.95	2.24	1.57	1.06	2.59		1	700				6.25	9	15	872,460	25,197	481,238	32,812	700	1.54	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.68	5.79	4.57	3.54	2.68	1.77	1.14	2.17		1	700				6.25	9	15	689,962	19,954	258,240	30,450	700	1.60	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.14	7.32	5.79	4.21	2.95	1.85	1.06	2.02		1	700				6.25	9	15	303,569	37,119	44,985	35,379	700	1.98	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.30	8.15	6.14	4.53	3.46	2.24	1.38	2.21		1	700				6.25	9	15	343,844	27,923	67,579	27,510	700	1.52	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.14	7.48	5.87	4.25	3.11	1.81	0.91	2.47		1	700				6.25	9	15	258,926	56,739	24,660	39,594	700	0.83	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	12.36	8.27	6.26	4.61	3.50	2.09	1.06	3.14		1	700				6.25	9	15	196,887	60,294	23,291	34,192	700	1.09	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	13.23	9.29	6.89	5.04	3.78	2.52	1.61	3.23		1	700				6.25	9	15	281,392	19,854	96,584	23,556	700	1.60	1	
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.11	6.57	5.51	4.37	3.39	2.24	1.38	2.07		1	700				6.25	9	15	1,054,579	12,952	398,749	27,223	700	0.65	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.76	6.81	5.20	4.06	3.23	2.32	1.54	2.43		1	700				6.25	9	15	295,756	39,109	99,335	22,743	700	1.60	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.86	5.94	4.57	3.50	2.64	1.77	1.10	2.02		1	700				6.25	9	15	308,628	49,355	66,640	31,801	700	1.89	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	7.52	5.55	4.41	3.43	2.60	1.73	0.91	2.09		1	700				6.25	9	15	433,735	81,334	34,709	37,428	700	1.07	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	7.87	5.35	4.09	3.19	2.32	1.54	0.83	2.51		1	700				6.25	9	15	307,774	80,809	40,857	41,094	700	1.72	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.58	5.79	4.33	3.31	2.44	1.54	0.87	2.08		1	700				6.25	9	15	288,693	62,210	42,791	39,080	700	1.82	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.21	6.30	4.92	3.90	3.03	2.09	1.18	2.19		1	700				6.25	9	15	241,957	81,658	38,513	29,049	700	1.05	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.62	5.71	4.33	3.35	2.48	1.65	0.87	3.12		1	700				6.25	9	15	233,051	86,520	35,367	38,578	700	1.49	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.33	6.22	4.84	3.86	3.03	2.09	1.22	2.12		1	700				6.25	9	15	217,602	83,069	42,775	28,289	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.91	7.28	5.47	4.09	3.15	2.09	1.10	2.62		1	700				6.25	9	15	185,776	63,807	30,135	30,150	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.88	7.40	5.91	4.57	3.39	2.20	1.06	2.71		1	700				6.25	9	15	355,571	65,617	20,635	32,077	700	1.42	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.92	7.52	6.06	4.80	3.70	2.48	1.22	2.98		1	700				6.25	9	15	336,235	82,480	18,844	28,677	700	1.24	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.92	7.56	6.26	5.00	3.90	2.56	1.26	2.65		1	700				6.25	9	15	373,388	83,783	16,605	27,969	700	0.62	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	11.30	8.43	6.65	5.00	3.78	2.44	1.22	2.14		1	700				6.25	9	15	304,735	50,762	21,444	27,774	700	1.12	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.63	7.52	5.71	4.17	3.07	1.93	0.94	2.67		1	700				6.25	9	15	255,579	54,877	24,440	35,028	700	1.37	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.71	7.91	6.22	4.61	3.35	1.89	0.83	2.42		1	700				6.25	9	15	345,714	48,944	16,469	38,872	700	0.68	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.92	7.13	5.55	4.29	3.23	2.01	1.06	2.10		1	700				6.25	9	15	316,192	58,084	27,071	32,022	700	1.29	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.90	6.26	4.80	3.58	2.72	1.89	1.26	3.57		1	700				6.25	9	15	417,949	24,910	201,516	27,982	700	1.43	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.29	6.85	5.39	4.25	3.27	2.20	1.18	2.16		1	700				6.25	9	15	337,071	71,532	30,163	29,383	700	1.20	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	7.32	4.96	3.74	2.80	2.05	1.34	0.83	2.34		1	700				6.25	9	15	417,468	46,756	90,486	42,544	700	1.86	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.90	5.91	4.33	3.07	2.28	1.54	0.94	2.50		1	700				6.25	9	15	299,207	36,671	91,795	36,711	700	0.99	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.06	6.18	4.72	3.54	2.76	2.05	1.34	2.99		1	700				6.25	9	15	320,756	35,153	148,146	26,067	700	0.84	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	10.91	7.40	5.59	4.02	3.11	2.24	1.46	3.38		1	700				6.25	9	15	267,698	25,582	132,947	23,856	700	0.55	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.49	6.69	5.08	3.78	2.95	2.01	1.34	3.36		1	700				6.25	9	15	370,675	26,544	146,002	26,357	700	1.81	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	11.46	8.27	6.30	4.69	3.46	2.24	1.42	2.99		1	700				6.25	9	15	354,964	17,713	99,112	24,369	700	1.57	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.45	6.61	5.20	3.98	3.07	2.09	1.34	2.16		1	700				6.25	9	15	363,642	35,564	81,758	26,213	700	1.63	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.62	6.14	4.96	3.82	2.95	2.09	1.38	2.55		1	700				6.25	9	15	464,384	31,185	139,254	25,519	700	1.44	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	7.87	5.75	4.45	3.31	2.44	1.61	0.98	2.22		1	700				6.25	9	15	522,979	29,266	108,498	35,204	700	1.00	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.33	5.98	4.25	2.99	2.20	1.50	0.98	3.16		1	700				6.25	9	15	274,209	29,437	149,311	35,733	700	1.91	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.46	5.35	4.02	3.11	2.32	1.57	0.94	2.19		1	700				6.25	9	15	234,144	71,402	60,306	36,955	700	1.89	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.94	5.63	4.29	3.19	2.32	1.46	0.83	2.60		1	700				6.25	9	15	242,092	64,339	44,707	41,585	700	1.73	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.72	6.14	4.57	3.35	2.44	1.54	0.87	2.27		1	700				6.25	9	15	214,435	56,432	42,402	39,111	700	1.36	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.35	5.59	4.21	3.11	2.20	1.46	0.91	2.06		1	700				6.25	9	15	371,977	34,153	95,444	38,081	700	1.96	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.44	5.12	4.02	2.95	2.20	1.46	0.94	2.13		1	700				6.25	9	15	487,233	32,394	145,878	36,788	700	1.75	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.86	5.55	4.17	3.11	2.32	1.54	0.87	2.49		1	700				6.25	9	15	214,445	71,438	48,186	39,352	700	0.99	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.82	5.35	3.74	2.64	2.01	1.46	0.98	4.11		1	700				6.25	9	15	237,985	35,887	217,780	36,172	700	1.81	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.11	5.00	3.74	2.76	2.09	1.34	0.79	2.11		1	700				6.25	9	15	232,416	74,600	57,763	44,014	700	1.49	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.03	5.16	4.17	3.31	2.56	1.77	1.02	3.41		1	700				6.25	9	15	234,439	111,676	46,794	34,266	700	1.33	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.33	6.06	4.80	3.66	2.72	1.73	0.94	3.38		1	700				6.25	9	15	236,828	76,204	33,476	36,353	700	1.45	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.61	6.22	5.04	4.02	3.15	2.17	1.30	3.03		1	700				6.25	9	15	203,938	87,695	42,459	27,007	700	1.59	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.06	6.02	4.84	3.82	2.95	2.01	1.18	2.66		1	700				6.25	9	15	245,782	82,956	42,384	29,679	700	1.42	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.74	5.31	3.98	2.87	2.13	1.26	0.71	3.19		1	700				6.25	9	15	214,635	70,670	42,642	47,734	700	1.94	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.33	6.46	5.08	3.94	3.03	1.97	1.14	2.20		1	700				6.25	9	15	293,371	62,288	39,241	30,209	700	1.43	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.76	5.94	4.69	3.70	2.87	1.97	1.10	2.00		1	700				6.25	9	15	515,613	68,006	45,499	32,599	700	1.29	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.44	5.67	4.61	3.66	2.80	1.81	0.91	2.77		1	700				6.25	9	15	534,366	92,844	26,498	39,033	700	0.94	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.43	6.34	5.20	4.13	3.31	2.17	1.22	2.09		1	700				6.25	9	15	467,329	75,860	33,621	29,386	700	1.07	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.83	6.06	4.92	4.02	3.23	2.20	1.14	3.43		1	700				6.25	9	15	444,133	121,764	24,022	31,727	700	1.13	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.13	4.92	3.86	2.87	2.05	1.42	0.79	2.16		1	700				6.25	9	15	434,402	62,375	64,130	44,682	700	1.84	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.28	5.20	4.09	2.99	2.24	1.54	1.02	2.95		1	700				6.25	9	15	602,912	23,961	369,242	35,136	700	0.96	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.01	5.08	4.09	3.11	2.28	1.50	0.98	2.87		1	700				6.25	9	15	762,244	19,252	456,742	36,028	700	1.76	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.18	4.61	3.66	2.95	2.24	1.61	1.10	2.77		1	700				6.25	9	15	832,651	28,798	463,531	31,957	700	1.99	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.05	5.16	4.09	3.15	2.44	1.61	1.06	2.21		1	700				6.25	9	15	669,589	29,240	198,417	33,452	700	1.92	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.20	5.08	3.82	2.87	2.20	1.54	1.06	3.44		1	700				6.25	9	15	535,951	27,708	401,886	33,677	700	2.00	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.31	6.10	4.80	3.58	2.60	1.77	1.18	3.43		1	700				6.25	9	15	586,553	16,608	455,843	29,888	700	1.16	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.61	5.00	3.94	2.99	2.24	1.54	1.02	2.97		1	700				6.25	9	15	791,574	21,610	498,828	34,613	700	1.10	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.48	5.35	4.06	2.95	2.17	1.46	0.94	2.82		1	700				6.25	9	15	538,340	24,150	272,209	37,417	700	1.17	1	
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.83	5.75	4.49	3.35	2.48	1.50	0.94	2.62		1	700				6.25	9	15	673,416	17,313	259,514	37,516	700	1.97	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.21	9.53	7.48	6.14	4.84	3.11	1.69	3.91		1	700				7	8	17	128,307	105,730	21,684	21,512	700	1.70	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.80	14.84	12.01	9.45	7.28	4.53	2.05	2.98		1	700				7	8	17	148,974	57,794	8,898	17,094	700	0.90	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.35	13.27	10.55	8.27	6.50	4.21	2.24	2.08		1	700				7	8	17	145,233	46,315	16,156	15,806	700	0.88	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	23.46	15.47	11.34	7.80	5.24	2.60	1.02	3.61		1	700				7	8	17	89,331	28,865	9,246	28,579	700	1.12	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.17	16.42	12.91	10.28	8.15	5.43	2.80	2.87		1	700				7	8	17	116,268	46,472	11,981	12,549	700	1.51	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.58	13.07	10.55	9.06	7.44	5.39	3.15	3.23		1	700				7	8	17	103,413	96,242	21,484	11,773	700	1.39	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	23.03	14.57	10.43	7.36	5.24	2.76	1.14	5.29		1	700				7	8	17	72,076	42,900	10,145	27,008	700	1.68	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	30.63	21.54	16.89	13.31	10.31	6.18	2.32	6.16		1	700				7	8	17	59,834	72,829	4,084	14,691	700	1.76	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.21	14.02	11.42	9.21	6.89	3.90	1.54	3.70		1	700				7	8	17	142,999	70,510	6,652	22,228	700	1.43	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.50	11.38	8.86	6.93	5.55	3.82	2.05	2.85		1	700				7	8	17	122,937	63,350	21,774	17,290	700	1.40	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	26.30	18.27	14.21	10.31	7.36	3.82	1.69	2.11		1	700				7	8	17	106,156	21,703	8,180	18,594	700	1.10	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.59	10.94	8.39	6.50	5.16	3.50	1.85	2.83		1	700				7	8	17	139,431	58,352	22,345	19,021	700	1.74	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.95	8.86	6.81	5.08	3.78	2.24	1.10	2.57		1	700				7	8	17	177,351	60,739	20,817	30,876	700	0.84	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.47	10.83	8.43	6.34	4.72	2.87	1.34	3.14		1	700				7	8	17	150,024	59,174	15,022	25,034	700	1.03	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.52	11.65	9.02	6.93	5.08	2.91	1.14	5.82		1	700				7	8	17	101,494	94,814	9,613	28,919	700	1.24	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	21.38	14.92	11.85	9.57	7.56	4.96	2.48	4.11		1	700				7	8	17	92,850	76,762	11,381	14,407	700	1.16	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.21	12.87	9.69	7.48	5.94	3.98	2.09	3.31		1	700				7	8	17	95,169	55,386	18,927	16,975	700	1.81	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	20.79	14.88	11.54	8.54	6.42	3.62	1.42	4.33		1	700				7	8	17	111,919	54,177	7,851	22,703	700	1.45	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	21.54	14.37	10.79	7.76	5.71	3.35	1.46	4.40		1	700				7	8	17	88,807	46,087	10,893	22,257	700	1.73	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	20.20	14.17	10.98	8.07	6.06	3.66	1.57	4.18		1	700				7	8	17	109,820	51,798	10,207	20,920	700	1.74	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.21	12.99	9.96	7.95	6.14	3.98	2.05	3.75		1	700				7	8	17	96,972	65,116	15,277	17,119	700	1.50	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.38	11.30	9.06	7.36	5.79	4.02	2.13	3.48		1	700				7	8	17	119,629	90,456	18,862	16,934	700	1.18	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	32.72	23.27	17.52	12.20	8.46	4.17	1.38	3.92		1	700				7	8	17	76,411	22,443	4,917	20,195	700	1.58	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	29.72	22.72	19.69	16.46	13.31	8.90	3.82	4.02		1	700				7	8	17	88,245	103,611	2,894	10,607	700	0.59	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	21.69	16.14	12.95	10.55	8.35	5.43	2.68	3.35		1	700				7	8	17	118,667	64,332	9,451	13,308	700	1.26	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.25	12.52	9.29	7.01	5.39	3.54	1.93	2.10		1	700				7	8	17	97,102	39,407	21,917	18,337	700	1.30	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.72	16.30	12.80	9.65	7.28	4.45	2.13	2.51		1	700				7	8	17	115,660	35,671	10,494	15,968	700	0.88	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.72	14.57	11.06	8.07	5.91	3.35	1.73	2.51		1	700				7	8	17	89,443	30,608	13,763	19,535	700	1.42	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.48	12.09	9.72	7.95	6.26	4.02	1.85	5.35		1	700				7	8	17	103,395	139,353	10,241	19,529	700	1.11	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.14	11.38	9.13	7.52	5.91	3.82	1.81	4.75		1	700				7	8	17	120,627	129,365	11,627	19,737	700	1.23	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.88	9.96	7.56	6.02	4.65	2.99	1.42	5.23		1	700				7	8	17	111,094	111,651	16,343	24,225	700	1.95	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.76	12.48	9.65	7.40	5.59	3.31	1.50	3.82		1	700				7	8	17	126,664	62,135	11,657	22,557	700	1.21	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.77	11.50	9.21	7.52	6.06	4.02	1.85	5.98		1	700				7	8	17	96,967	179,591	10,810	19,467	700	1.56	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.37	13.58	10.63	8.03	5.83	3.31	1.54	2.46		1	700				7	8	17	139,795	38,025	11,696	21,868	700	1.03	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	24.29	16.73	12.44	8.11	5.31	2.24	0.67	3.29		1	700				7	8	17	104,652	22,662	7,307	36,993	700	1.19	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.83	12.17	9.76	7.44	5.51	3.19	1.26	4.90		1	700				7	8	17	114,390	85,858	8,904	26,529	700	0.66	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.26	9.96	7.68	6.22	4.84	3.11	1.42	7.44		1	700				7	8	17	75,941	204,780	13,958	24,764	700	1.68	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.13	10.16	8.43	6.73	5.24	3.54	1.93	2.02		1	700				7	8	17	194,656	69,058	21,605	18,875	700	0.75	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	24.33	18.27	14.61	12.09	9.80	6.77	3.94	2.00		1	700				7	8	17	119,689	35,561	14,955	9,208	700	1.44	1	
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	26.38	20.94	17.95	15.98	13.66	10.75	6.89	1.93		1	700				7	8	17	120,188	63,359	17,312	5,312	700	1.06	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.21	9.53	7.48	6.14	4.84	3.11	1.69	3.91		1	700				7	8	17	128,307	105,730	21,684	21,512	700	1.70	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.80	14.84	12.01	9.45	7.28	4.53	2.05	2.98		1	700				7	8	17	148,974	57,794	8,898	17,094	700	0.90	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.35	13.27	10.55	8.27	6.50	4.21	2.24	2.08		1	700				7	8	17	145,233	46,315	16,156	15,806	700	0.88	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	23.46	15.47	11.34	7.80	5.24	2.60	1.02	3.61		1	700				7	8	17	89,331	28,865	9,246	28,579	700	1.12	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.17	16.42	12.91	10.28	8.15	5.43	2.80	2.87		1	700				7	8	17	116,268	46,472	11,981	12,549	700	1.51	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.58	13.07	10.55	9.06	7.44	5.39	3.15	3.23		1	700				7	8	17	103,413	96,242	21,484	11,773	700	1.39	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	23.03	14.57	10.43	7.36	5.24	2.76	1.14	5.29		1	700				7	8	17	72,076	42,900	10,145	27,008	700	1.68	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	30.63	21.54	16.89	13.31	10.31	6.18	2.32	6.16		1	700				7	8	17	59,834	72,829	4,084	14,691	700	1.76	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.21	14.02	11.42	9.21	6.89	3.90	1.54	3.70		1	700				7	8	17	142,999	70,510	6,652	22,228	700	1.43	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.50	11.38	8.86	6.93	5.55	3.82	2.05	2.85		1	700				7	8	17	122,937	63,350	21,774	17,290	700	1.40	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	26.30	18.27	14.21	10.31	7.36	3.82	1.69	2.11		1	700				7	8	17	106,156	21,703	8,180	18,594	700	1.10	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.59	10.94	8.39	6.50	5.16	3.50	1.85	2.83		1	700				7	8	17	139,431	58,352	22,345	19,021	700	1.74	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	12.95	8.86	6.81	5.08	3.78	2.24	1.10	2.57		1	700				7	8	17	177,351	60,739	20,817	30,876	700	0.84	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.47	10.83	8.43	6.34	4.72	2.87	1.34	3.14		1	700				7	8	17	150,024	59,174	15,022	25,034	700	1.03	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.52	11.65	9.02	6.93	5.08	2.91	1.14	5.82		1	700				7	8	17	101,494	94,814	9,613	28,919	700	1.24	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	21.38	14.92	11.85	9.57	7.56	4.96	2.48	4.11		1	700				7	8	17	92,850	76,762	11,381	14,407	700	1.16	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.21	12.87	9.69	7.48	5.94	3.98	2.09	3.31		1	700				7	8	17	95,169	55,386	18,927	16,975	700	1.81	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	20.79	14.88	11.54	8.54	6.42	3.62	1.42	4.33		1	700				7	8	17	111,919	54,177	7,851	22,703	700	1.45	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	21.54	14.37	10.79	7.76	5.71	3.35	1.46	4.40		1	700				7	8	17	88,807	46,087	10,893	22,257	700	1.73	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	20.20	14.17	10.98	8.07	6.06	3.66	1.57	4.18		1	700				7	8	17	109,820	51,798	10,207	20,920	700	1.74	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.21	12.99	9.96	7.95	6.14	3.98	2.05	3.75		1	700				7	8	17	96,972	65,116	15,277	17,119	700	1.50	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.38	11.30	9.06	7.36	5.79	4.02	2.13	3.48		1	700				7	8	17	119,629	90,456	18,862	16,934	700	1.18	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	32.72	23.27	17.52	12.20	8.46	4.17	1.38	3.92		1	700				7	8	17	76,411	22,443	4,917	20,195	700	1.58	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	29.72	22.72	19.69	16.46	13.31	8.90	3.82	4.02		1	700				7	8	17	88,245	103,611	2,894	10,607	700	0.59	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	21.69	16.14	12.95	10.55	8.35	5.43	2.68	3.35		1	700				7	8	17	118,667	64,332	9,451	13,308	700	1.26	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.25	12.52	9.29	7.01	5.39	3.54	1.93	2.10		1	700				7	8	17	97,102	39,407	21,917	18,337	700	1.30	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	RMS Error (%)	Convergence	
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed			Yes	No
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.72	16.30	12.80	9.65	7.28	4.45	2.13	2.51		1	700				7	8	17	115,660	35,671	10,494	15,968	700	0.88	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	22.72	14.57	11.06	8.07	5.91	3.35	1.73	2.51		1	700				7	8	17	89,443	30,608	13,763	19,535	700	1.42	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.48	12.09	9.72	7.95	6.26	4.02	1.85	5.35		1	700				7	8	17	103,395	139,353	10,241	19,529	700	1.11	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.14	11.38	9.13	7.52	5.91	3.82	1.81	4.75		1	700				7	8	17	120,627	129,365	11,627	19,737	700	1.23	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.88	9.96	7.56	6.02	4.65	2.99	1.42	5.23		1	700				7	8	17	111,094	111,651	16,343	24,225	700	1.95	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.76	12.48	9.65	7.40	5.59	3.31	1.50	3.82		1	700				7	8	17	126,664	62,135	11,657	22,557	700	1.21	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.77	11.50	9.21	7.52	6.06	4.02	1.85	5.98		1	700				7	8	17	96,967	179,591	10,810	19,467	700	1.56	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	19.37	13.58	10.63	8.03	5.83	3.31	1.54	2.46		1	700				7	8	17	139,795	38,025	11,696	21,868	700	1.03	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	24.29	16.73	12.44	8.11	5.31	2.24	0.67	3.29		1	700				7	8	17	104,652	22,662	7,307	36,993	700	1.19	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.83	12.17	9.76	7.44	5.51	3.19	1.26	4.90		1	700				7	8	17	114,390	85,858	8,904	26,529	700	0.66	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	16.26	9.96	7.68	6.22	4.84	3.11	1.42	7.44		1	700				7	8	17	75,941	204,780	13,958	24,764	700	1.68	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	14.13	10.16	8.43	6.73	5.24	3.54	1.93	2.02		1	700				7	8	17	194,656	69,058	21,605	18,875	700	0.75	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	24.33	18.27	14.61	12.09	9.80	6.77	3.94	2.00		1	700				7	8	17	119,689	35,561	14,955	9,208	700	1.44	1	
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	26.38	20.94	17.95	15.98	13.66	10.75	6.89	1.93		1	700				7	8	17	120,188	63,359	17,312	5,312	700	1.06	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.19	6.61	5.47	4.21	3.19	2.20	1.38	2.79		1	700				7.25	4	18	612,015	5,000	466,385	25,707	700	1.90	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.19	6.61	5.63	4.41	3.50	2.44	1.61	2.64		1	700				7.25	4	18	683,778	5,000	500,000	21,496	700	1.02	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.99	6.30	5.12	3.70	2.68	1.73	0.98	2.74		1	700				7.25	4	18	536,676	5,125	275,721	35,305	700	1.66	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.09	6.65	5.35	3.86	2.83	1.81	1.18	3.69		1	700				7.25	4	18	407,289	5,000	500,000	29,656	700	1.47	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.57	5.31	4.53	3.54	2.64	1.73	1.02	2.33		1	700				7.25	4	18	927,872	5,000	500,000	35,426	700	1.54	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.76	5.79	4.61	3.62	2.76	1.93	1.26	2.50		1	700				7.25	4	18	525,939	7,993	370,537	29,021	700	1.29	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	11.02	8.31	6.93	5.20	3.74	2.05	0.71	2.44		1	700				7.25	4	18	311,517	103,111	12,011	43,295	700	0.89	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.05	5.28	4.49	3.74	2.91	2.09	1.18	2.23		1	700				7.25	4	18	430,365	180,394	48,231	30,646	700	1.35	1	
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.86	6.73	5.63	4.53	3.50	2.40	1.26	2.15		1	700				7.25	4	18	368,788	121,864	31,333	28,072	700	1.02	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.77	10.21	7.86	5.41	4.05	2.53	1.50	2.38		1	700				6	6	18	360,230	11,419	58,051	24,412	700	1.02	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	20.23	14.88	12.01	8.77	6.72	4.14	2.04	2.14		1	700				6	6	18	182,003	40,468	13,088	17,215	700	0.70	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	23.10	17.40	13.81	9.97	7.52	4.42	2.00	2.61		1	700				6	6	18	168,304	34,739	9,528	16,885	700	1.20	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	21.60	16.15	12.58	8.98	6.76	4.10	1.92	2.71		1	700				6	6	18	172,798	33,717	11,818	17,860	700	1.68	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	19.42	14.37	10.92	7.48	5.58	3.35	1.67	2.04		1	700				6	6	18	193,259	24,644	16,398	20,470	700	1.84	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	9.39	7.10	5.58	3.90	2.92	1.74	1.01	2.08		1	700				6	6	18	614,071	14,316	76,917	36,007	700	1.04	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.48	9.67	7.79	5.68	4.21	2.33	0.95	2.18		1	700				6	6	18	391,408	58,713	14,015	34,546	700	0.81	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	14.70	10.83	8.53	6.17	4.79	3.05	1.56	2.06		1	700				6	6	18	241,200	47,485	21,312	22,432	700	1.31	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	10.67	9.06	7.23	5.50	4.20	2.44	0.98	2.29		1	700				6	6	18	663,658	55,642	14,214	34,152	700	1.94	1	
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	13.42	10.38	8.57	6.35	4.54	2.57	1.02	2.04		1	700				6	6	18	396,085	51,577	12,427	31,797	700	1.01	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	13.78	10.75	8.74	6.34	4.65	2.91	1.57	2.32		1	700				8	9	16	277,135	8,505	79,115	22,489	700	1.54	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	17.17	13.19	10.47	7.64	5.43	3.23	1.73	2.38		1	700				8	9	16	216,051	5,917	86,770	20,218	700	1.20	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	11.34	9.21	7.72	6.18	4.69	3.07	1.85	2.48		1	700				8	9	16	457,747	7,173	308,359	19,292	700	1.52	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	8.90	7.20	6.34	5.59	4.65	3.58	2.09	2.35		1	700				8	9	16	435,900	133,387	18,416	18,830	700	1.11	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	11.65	8.50	6.73	4.76	3.50	2.24	1.26	2.01		1	700				8	9	16	256,275	15,800	66,815	28,007	700	1.24	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	9.21	6.77	5.28	3.70	2.60	1.69	0.98	3.52		1	700				8	9	16	319,312	15,492	166,109	36,061	700	1.94	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	9.06	6.81	5.28	3.86	2.80	1.89	1.14	3.35		1	700				8	9	16	345,436	15,678	215,600	31,495	700	1.80	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	15.98	12.60	10.51	7.87	5.98	3.90	1.85	2.08		1	700				8	9	16	237,132	18,742	14,573	18,825	700	1.80	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	9.33	7.95	7.05	6.46	5.43	4.02	2.17	2.21		1	700				8	9	16	596,793	140,238	5,482	22,034	700	1.38	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	20.31	16.34	13.46	10.00	7.28	4.37	2.20	2.15		1	700				8	9	16	218,316	3,616	99,863	15,662	700	1.38	1	
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	17.24	13.94	11.61	8.94	6.77	4.41	2.52	2.07		1	700				8	9	16	272,153	4,699	178,239	14,092	700	1.00	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	8.57	6.34	5.18	3.93	2.97	1.68	0.61	3.53		1	700				7.25	4.5	18	317,650	189,538	15,414	54,728	700	0.79	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.33	7.73	6.17	4.76	3.78	2.51	1.29	2.02		1	700				7.25	4.5	18	278,358	82,896	28,270	27,212	700	1.37	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.36	6.96	5.69	4.46	3.53	2.28	1.08	2.95		1	700				7.25	4.5	18	280,616	166,242	22,294	32,559	700	1.02	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.17	8.64	7.00	5.50	4.38	2.77	1.20	3.34		1	700				7.25	4.5	18	256,222	154,355	14,160	29,048	700	1.62	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.45	7.64	6.14	4.68	3.60	2.24	0.96	3.79		1	700				7.25	4.5	18	229,724	154,168	17,520	35,409	700	1.62	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.30	8.07	6.79	5.14	4.04	2.48	0.97	2.95		1	700				7.25	4.5	18	334,777	140,406	12,557	35,496	700	1.61	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.27	8.40	6.85	5.29	4.07	2.46	0.88	4.52		1	700				7.25	4.5	18	214,625	212,404	10,360	39,354	700	1.70	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.59	8.37	6.55	4.83	3.73	2.24	0.97	3.80		1	700				7.25	4.5	18	199,010	111,054	17,665	34,091	700	1.91	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.37	7.69	6.34	4.82	3.84	2.50	1.16	3.20		1	700				7.25	4.5	18	250,987	144,386	19,996	29,909	700	1.60	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.52	7.71	6.31	4.88	3.90	2.51	1.24	2.53		1	700				7.25	4.5	18	244,549	126,696	22,736	28,184	700	0.81	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.47	6.56	5.21	4.02	3.15	2.03	1.08	2.10		1	700				7.25	4.5	18	231,753	112,660	33,988	32,844	700	0.62	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.59	7.01	5.61	4.32	3.22	2.13	1.03	2.66		1	700				7.25	4.5	18	284,657	92,832	27,184	33,352	700	1.79	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.71	7.90	6.32	4.76	3.74	2.38	1.11	3.12		1	700				7.25	4.5	18	243,763	116,151	21,452	31,635	700	1.69	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.91	7.60	6.21	4.50	3.56	2.22	1.08	2.04		1	700				7.25	4.5	18	350,707	55,929	25,026	31,489	700	1.79	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.57	6.99	5.57	4.27	3.40	2.20	1.10	2.69		1	700				7.25	4.5	18	253,879	119,251	27,217	31,120	700	1.39	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.68	6.70	5.34	4.03	3.05	1.92	0.96	2.14		1	700				7.25	4.5	18	238,693	99,891	29,689	36,009	700	0.50	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.93	8.20	6.65	5.03	3.99	2.47	1.17	2.39		1	700				7.25	4.5	18	267,813	95,675	19,845	29,486	700	1.18	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.53	6.77	5.35	4.01	3.11	1.95	0.98	2.11		1	700				7.25	4.5	18	255,248	94,123	29,501	35,195	700	0.89	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.36	8.00	6.44	4.97	3.90	2.50	1.19	2.35		1	700				7.25	4.5	18	307,901	92,259	20,895	28,829	700	1.50	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	10.69	8.06	6.47	5.04	3.98	2.59	1.29	2.23		1	700				7.25	4.5	18	269,737	95,545	23,341	26,916	700	1.25	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.99	7.57	5.97	4.88	4.01	2.67	1.55	2.07		1	700				7.5	4.5	18	295,201	79,286	38,320	23,664	700	1.88	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.62	7.27	5.80	4.54	3.56	2.48	1.30	2.07		1	700				7.5	4.5	18	312,584	81,894	35,720	27,946	700	1.79	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	10.60	7.54	6.10	4.75	3.79	2.35	1.29	2.08		1	700				7.5	4.5	18	237,783	90,984	29,529	27,540	700	1.41	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.47	7.39	5.81	4.56	3.36	2.35	1.42	3.10		1	700				7.5	4.5	18	433,397	6,175	219,970	25,766	700	1.82	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.02	6.75	5.13	4.07	3.16	2.03	1.10	2.15		1	700				7.5	4.5	18	312,134	64,189	37,388	31,788	700	2.00	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.35	7.09	5.57	4.01	3.16	2.11	1.16	2.09		1	700				7.5	4.5	18	355,096	18,186	56,343	30,467	700	1.97	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	10.49	7.66	6.07	4.52	3.47	2.20	1.07	2.28		1	700				7.5	4.5	18	249,738	82,929	25,376	31,820	700	1.44	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	8.35	6.18	5.05	3.84	2.90	1.64	0.59	3.36		1	700				7.5	4.5	18	315,455	187,942	15,383	54,820	700	0.81	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.19	6.84	5.59	4.38	3.47	2.24	1.06	2.84		1	700				7.5	4.5	18	278,079	164,787	22,314	32,561	700	1.06	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	11.02	8.52	6.90	5.43	4.32	2.73	1.19	3.23		1	700				7.5	4.5	18	253,390	154,095	14,144	29,061	700	1.63	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.28	7.52	6.03	4.60	3.54	2.20	0.94	3.67		1	700				7.5	4.5	18	227,211	154,410	17,501	35,430	700	1.66	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.13	7.94	6.69	5.06	3.98	2.45	0.96	2.85		1	700				7.5	4.5	18	330,596	137,680	12,630	35,375	700	1.65	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	11.07	8.25	6.73	5.20	4.00	2.42	0.87	4.37		1	700				7.5	4.5	18	213,593	213,492	10,379	39,278	700	1.67	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	11.44	8.26	6.46	4.77	3.69	2.22	0.96	3.68		1	700				7.5	4.5	18	196,529	110,925	17,623	34,120	700	1.94	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.24	7.60	6.26	4.76	3.79	2.47	1.15	3.05		1	700				7.5	4.5	18	249,146	141,737	20,097	29,876	700	1.58	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.39	7.62	6.24	4.82	3.85	2.48	1.23	2.42		1	700				7.5	4.5	18	242,083	125,074	22,734	28,202	700	0.83	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.46	6.92	5.54	4.26	3.18	2.10	1.01	2.53		1	700				7.5	4.5	18	281,777	88,553	27,323	33,330	700	1.79	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.33	7.62	6.10	4.59	3.61	2.30	1.07	3.03		1	700				7.5	4.5	18	240,111	115,365	21,412	31,638	700	1.73	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.62	7.02	5.60	4.29	3.42	2.21	1.11	2.54		1	700				7.5	4.5	18	252,097	115,066	27,364	31,063	700	1.37	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.48	6.57	5.23	3.95	2.99	1.88	0.94	2.02		1	700				7.5	4.5	18	235,860	97,671	29,727	36,009	700	0.56	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.77	8.09	6.56	4.96	3.93	2.43	1.15	2.24		1	700				7.5	4.5	18	265,785	91,601	19,938	29,467	700	1.18	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.29	7.95	6.40	4.94	3.88	2.49	1.18	2.24		1	700				7.5	4.5	18	303,895	88,132	21,021	28,797	700	1.51	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	10.58	7.98	6.41	4.99	3.94	2.56	1.28	2.05		1	700				7.5	4.5	18	268,444	89,544	23,650	26,852	700	1.22	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.73	7.37	5.81	4.75	3.90	2.60	1.51	2.02		1	700				7.5	4.5	18	294,529	79,647	38,349	23,648	700	1.86	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.17	6.93	5.53	4.33	3.39	2.37	1.24	2.04		1	700				7.5	4.5	18	312,293	81,911	35,763	27,915	700	1.81	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.23	7.21	5.66	4.44	3.28	2.29	1.39	3.19		1	700				7.5	4.5	18	434,113	6,157	220,140	25,775	700	1.82	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.15	6.94	5.45	3.92	3.09	2.06	1.13	2.19		1	700				7.5	4.5	18	353,617	18,702	55,429	30,502	700	1.99	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	10.37	7.57	6.01	4.47	3.43	2.18	1.06	2.19		1	700				7.5	4.5	18	249,251	84,698	25,262	31,822	700	1.47	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.99	7.57	5.97	4.88	4.01	2.67	1.55	2.03		1	700				7.5	4.5	18	296,135	75,387	37,518	23,661	700	1.88	1	

Location: Region	Location: Road	Location: Cluster-Area	Location: Control Section	Location: Project Number	Material Types: Roadbed: Soil Type	Material Types: Granular Layer: Aggregate Type	Material Types: Granular Layer: Gradation	FWD File Information: Season	FWD File Information: Date	FWD File Information: File Title	Pavement Layer Thickness (in): Asphalt concrete	Pavement Layer Thickness (in): Base/ Subbase	Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area: 0	8	12	18	24	36	60	2-Layer Backcalculation: RMS Error (%)	Converged?: Yes	Converged?: No	Depth to Stiff Layer (in)	2-Layer Resilient Modulus (psi): Asphalt Concrete	Base/ Subbase	Roadbed	3-Layer System: Layer Thicknesses (in): Asphalt Concrete	Base	Subbase	Resilient modulus (psi): Asphalt Concrete	Base	Subbase	Roadbed	Depth to Stiff layer (in)	RMS Error (%)	Convergence: Yes	Convergence: No
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.62	7.27	5.80	4.54	3.56	2.48	1.30	2.03		1	700				7.5	4.5	18	312,030	78,357	34,958	27,975	700	1.78	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.02	6.75	5.13	4.07	3.16	2.03	1.10	2.11		1	700				7.5	4.5	18	312,640	61,948	36,897	31,811	700	1.99	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.35	7.09	5.57	4.01	3.16	2.11	1.16	2.19		1	700				7.5	4.5	18	352,616	20,869	54,050	30,455	700	1.99	1	
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	10.49	7.66	6.07	4.52	3.47	2.20	1.07	2.17		1	700				7.5	4.5	18	251,341	76,115	24,939	31,913	700	1.40	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.66	6.65	5.55	4.49	3.46	2.24	1.38	2.54		1	700				8	4	20	534,448	5,053	239,042	26,407	700	1.62	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	8.90	6.77	5.59	4.49	3.43	2.20	1.30	2.02		1	700				8	4	20	492,940	5,285	168,848	27,904	700	1.35	1	
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	9.09	6.85	5.87	4.25	3.35	2.20	1.30	2.37		1	700				8	4	20	427,512	6,186	145,336	27,755	700	1.24	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	10.52	8.18	6.45	4.55	3.41	2.02	0.97	2.69		1	700				3	8	18	1,863,416	77,248	22,593	35,211	700	0.91	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	12.23	9.66	7.74	5.64	4.38	2.83	1.41	2.90		1	700				3	8	18	1,511,394	79,729	20,326	25,040	700	1.27	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.51	9.30	7.40	5.31	4.05	2.51	1.24	2.32		1	700				3	8	18	2,096,252	66,367	21,477	28,010	700	1.32	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.53	8.38	6.46	4.72	3.59	2.19	1.00	5.25		1	700				3	8	18	642,935	111,849	19,567	33,708	700	1.23	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.80	6.78	5.11	3.63	2.69	1.67	0.91	2.49		1	700				3	8	18	975,540	82,654	36,483	37,946	700	0.61	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.19	6.92	5.30	3.64	2.70	1.62	0.83	2.23		1	700				3	8	18	1,900,730	75,584	33,097	42,164	700	0.91	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.30	8.74	6.93	4.99	3.80	2.43	1.20	2.97		1	700				3	8	18	1,488,217	81,897	22,890	28,938	700	1.19	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	12.53	9.82	7.87	5.71	4.35	2.65	1.18	3.79		1	700				3	8	18	1,264,109	91,189	14,977	28,968	700	1.19	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.72	7.07	5.38	3.70	2.78	1.69	0.88	2.56		1	700				3	8	18	1,347,540	79,172	32,654	39,371	700	0.76	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	18.94	11.62	7.71	4.71	3.40	2.14	1.28	2.04		1	700				3	8	18	441,212	24,706	33,909	27,785	700	1.43	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	11.56	8.91	7.18	5.30	4.10	2.59	1.32	2.60		1	700				3	8	18	1,463,758	87,471	21,871	26,841	700	0.37	1	
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	12.20	9.23	7.18	5.20	3.92	2.37	1.03	4.90		1	700				3	8	18	898,125	100,701	16,204	32,787	700	1.46	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.39	9.78	7.20	4.81	3.49	2.09	1.06	2.47		1	700				3	8	18	1,061,681	52,231	25,623	33,535	700	1.17	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.83	10.38	8.02	5.64	4.21	2.59	1.23	3.67		1	700				3	8	18	977,413	71,177	19,016	28,687	700	1.29	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.92	10.41	7.98	5.52	4.11	2.48	1.24	2.81		1	700				3	8	18	1,122,565	59,794	21,355	29,106	700	0.93	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.17	10.47	7.87	5.39	3.95	2.24	0.94	5.48		1	700				3	8	18	778,262	77,400	15,683	36,169	700	1.80	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.84	9.88	7.26	4.95	3.56	2.08	0.92	5.44		1	700				3	8	18	661,260	74,790	19,099	37,330	700	1.86	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.64	9.95	7.48	5.18	3.86	2.41	1.21	3.14		1	700				3	8	18	887,837	64,198	23,947	29,736	700	1.20	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.43	7.99	6.19	4.25	2.96	1.55	0.68	2.37		1	700				3	8	18	2,313,223	63,016	22,003	49,171	700	0.40	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.00	8.93	6.80	4.77	3.55	2.31	1.22	2.14		1	700				3	8	18	1,307,805	62,760	30,754	30,305	700	1.12	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.80	8.28	6.24	4.31	3.13	1.85	0.91	2.50		1	700				3	8	18	1,749,746	66,212	27,250	39,201	700	1.20	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	8.86	6.72	5.39	4.01	3.04	1.83	0.88	3.23		1	700				3	8	18	1,708,624	134,608	25,627	41,809	700	0.30	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	8.94	7.20	5.94	4.57	3.67	2.31	1.14	2.74		1	700				3	8	18	2,330,215	153,895	22,323	33,628	700	0.72	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.92	8.60	6.94	5.03	3.82	2.29	1.06	2.87		1	700				3	8	18	1,960,111	92,954	19,372	33,967	700	0.70	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	9.42	7.72	6.53	5.10	3.97	2.46	1.14	2.03		1	700				3	8	18	3,000,000	141,988	17,337	32,595	700	1.07	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.10	7.76	6.25	4.40	3.22	1.83	0.78	3.49		1	700				3	8	18	1,914,058	98,902	19,106	44,369	700	0.80	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.90	10.49	8.60	6.51	5.02	2.95	1.31	2.40		1	700				3	8	18	2,226,429	83,649	13,144	27,732	700	0.61	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.26	9.02	6.97	5.07	3.86	2.40	1.16	4.24		1	700				3	8	18	752,033	98,284	21,151	30,763	700	1.01	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.72	9.27	6.55	4.48	3.32	2.14	1.12	2.83		1	700				3	8	18	587,152	57,459	31,544	32,077	700	1.41	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.86	9.31	6.58	4.40	3.27	2.03	1.01	4.06		1	700				3	8	18	502,376	62,954	27,507	34,862	700	1.85	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.61	9.15	6.51	4.36	3.22	1.92	0.91	5.12		1	700				3	8	18	472,835	71,719	24,804	38,189	700	1.89	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.16	8.87	6.36	4.28	3.15	1.94	0.97	3.86		1	700				3	8	18	567,881	67,364	28,299	36,685	700	1.42	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.92	9.01	6.33	4.31	3.24	2.04	1.02	4.52		1	700				3	8	18	379,991	68,396	29,581	35,076	700	1.91	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.20	9.66	6.90	4.66	3.59	2.32	1.20	3.29		1	700				3	8	18	533,946	59,492	30,200	30,170	700	1.89	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.32	9.75	6.81	4.55	3.40	2.17	1.17	2.16		1	700				3	8	18	633,784	49,351	32,467	31,263	700	1.39	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.43	10.08	7.22	4.94	3.72	2.32	1.17	3.90		1	700				3	8	18	577,603	62,029	25,289	30,705	700	1.78	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.24	9.62	6.81	4.74	3.65	2.40	1.25	3.61		1	700				3	8	18	452,968	64,057	30,548	29,213	700	1.97	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.96	9.87	7.30	5.12	3.81	2.27	1.00	6.13		1	700				3	8	18	513,586	85,825	18,736	34,504	700	1.99	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.95	8.77	6.27	4.26	3.15	1.92	0.92	4.89		1	700				3	8	18	502,639	76,076	26,366	38,028	700	1.83	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.55	9.17	6.97	4.87	3.56	2.11	1.10	2.22		1	700				3	8	18	1,259,240	60,166	25,757	32,981	700	0.46	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.83	9.21	7.30	5.21	3.92	2.33	1.13	2.54		1	700				3	8	18	1,802,490	73,162	20,992	31,910	700	0.72	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.91	10.43	8.42	6.05	4.53	2.80	1.34	2.41		1	700				3	8	18	2,067,352	62,938	18,335	26,988	700	1.30	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.57	10.36	8.17	5.95	4.56	2.79	1.32	3.66		1	700				3	8	18	1,044,904	85,499	17,240	27,371	700	0.84	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.72	9.42	7.38	5.32	4.06	2.55	1.28	3.32		1	700				3	8	18	976,628	83,818	22,634	28,532	700	0.64	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.11	8.27	6.48	4.63	3.47	2.12	1.08	2.62		1	700				3	8	18	1,407,805	81,843	26,098	33,792	700	0.28	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.72	9.05	7.27	5.34	4.07	2.52	1.27	2.39		1	700				3	8	18	1,690,696	82,406	22,242	28,975	700	0.27	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.98	8.55	6.95	5.09	3.86	2.36	1.18	2.08		1	700				3	8	18	2,148,246	81,048	22,819	31,029	700	0.19	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	9.30	7.19	5.83	4.34	3.31	1.99	0.99	2.47		1	700				3	8	18	2,222,504	109,404	25,167	37,090	700	0.48	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	9.35	7.10	5.47	3.83	2.88	1.79	0.92	2.22		1	700				3	8	18	1,906,910	81,540	34,225	39,419	700	0.92	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.89	8.34	6.24	4.21	3.12	1.90	1.02	2.01		1	700				3	8	18	1,050,763	60,913	32,306	35,673	700	0.50	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.16	9.06	7.09	5.06	3.81	2.27	1.08	3.56		1	700				3	8	18	1,095,472	87,146	20,368	32,943	700	0.55	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.85	9.19	7.40	5.35	3.97	2.23	1.04	2.24		1	700				3	8	18	2,161,980	68,471	18,620	33,873	700	0.61	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	10.98	8.24	6.40	4.48	3.29	1.97	0.99	2.24		1	700				3	8	18	1,674,320	70,007	26,733	36,323	700	0.37	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.15	10.33	8.26	5.97	4.45	2.55	1.04	3.80		1	700				3	8	18	1,395,987	88,868	12,898	33,610	700	0.88	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.47	10.54	8.33	6.01	4.53	2.66	1.11	4.33		1	700				3	8	18	1,070,125	94,943	13,117	31,876	700	1.32	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.09	11.19	9.03	6.70	5.18	3.15	1.34	4.07		1	700				3	8	18	1,111,332	101,171	11,592	27,150	700	1.19	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.39	11.37	9.25	6.85	5.30	3.16	1.40	3.36		1	700				3	8	18	1,282,084	88,268	12,308	25,824	700	0.66	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.30	11.09	8.89	6.48	5.00	2.99	1.29	4.29		1	700				3	8	18	975,235	94,593	12,611	27,733	700	1.13	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.49	10.58	8.45	6.22	4.74	2.84	1.24	3.85		1	700				3	8	18	1,215,258	93,108	13,627	28,790	700	0.95	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.17	10.53	8.60	6.32	4.79	2.78	1.18	2.99		1	700				3	8	18	1,780,831	84,717	12,618	30,113	700	0.56	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.12	9.57	7.35	5.21	3.79	2.23	1.05	2.70		1	700				3	8	18	1,796,775	63,078	20,500	33,416	700	1.24	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	11.86	9.33	7.39	5.37	3.97	2.21	0.94	3.01		1	700				3	8	18	1,886,358	82,005	15,668	36,840	700	0.62	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	12.26	9.86	8.02	5.85	4.33	2.25	0.85	2.28		1	700				3	8	18	2,752,848	66,697	12,397	39,180	700	0.74	1	
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.06	10.14	8.15	5.81	4.30	2.30	0.91	3.34		1	700				3	8	18	1,648,354	78,474	12,890	37,239	700	0.55	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.52	8.18	6.45	4.55	3.41	2.02	0.97	2.69		1	700				3	8	18	1,858,395	77,514	22,523	35,308	700	0.91	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	12.23	9.66	7.74	5.64	4.38	2.83	1.41	2.90		1	700				3	8	18	1,508,509	79,906	20,277	25,090	700	1.27	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.51	9.30	7.40	5.31	4.05	2.51	1.24	2.33		1	700				3	8	18	2,091,771	66,586	21,417	28,073	700	1.33	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.67	7.70	5.91	3.94	2.87	1.81	1.09	2.77		1	700				3	8	18	3,211,372	17,249	91,557	32,402	700	1.34	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.57	7.63	5.87	4.02	2.98	1.86	1.11	2.02		1	700				3	8	18	3,282,575	21,274	69,442	31,838	700	1.19	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	11.53	8.38	6.46	4.72	3.59	2.19	1.00	5.25		1	700				3	8	18	643,841	111,914	19,523	33,792	700	1.24	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.79	6.72	5.08	3.60	2.69	1.68	0.92	2.62		1	700				3	8	18	897,435	85,938	36,855	37,901	700	0.57	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.99	8.06	6.03	4.29	3.32	2.35	1.50	2.01		1	700				3	8	18	1,757,616	30,454	78,407	23,980	700	0.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	10.04	6.90	5.11	3.57	2.69	1.77	1.12	2.00		1	700				3	8	18	1,431,442	45,431	62,377	32,522	700	1.83	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	10.21	7.93	6.26	4.41	3.30	1.96	0.94	2.70		1	700				3	8	18	1,856,798	77,666	22,480	35,331	700	0.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	11.84	9.35	7.49	5.46	4.24	2.73	1.36	2.86		1	700				3	8	18	1,519,017	79,301	20,368	25,064	700	1.24	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	11.12	8.99	7.16	5.13	3.92	2.43	1.20	2.32		1	700				3	8	18	2,095,598	66,405	21,467	28,038	700	1.34	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.50	7.56	5.81	3.87	2.82	1.78	1.07	2.74		1	700				3	8	18	3,203,225	17,426	90,177	32,396	700	1.35	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.71	7.97	6.32	4.59	3.50	2.36	1.46	2.02		1	700				3	8	18	3,814,379	17,531	98,451	23,896	700	0.95	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	11.33	8.23	6.35	4.64	3.53	2.15	0.98	5.27		1	700				3	8	18	575,428	115,936	19,407	33,891	700	1.25	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.68	6.65	5.02	3.56	2.66	1.66	0.91	2.63		1	700				3	8	18	891,546	86,123	36,875	37,899	700	0.54	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.00	6.86	5.23	3.54	2.62	1.58	0.79	3.30		1	700				3	8	18	2,021,399	73,547	33,429	43,762	700	1.34	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.55	7.10	5.44	3.79	2.84	1.73	0.88	3.51		1	700				3	8	18	1,549,705	83,906	31,459	39,990	700	0.78	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.17	7.00	5.22	3.55	2.71	1.73	0.94	3.24		1	700				3	8	18	937,071	73,167	39,590	37,115	700	0.70	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.31	8.31	6.79	5.11	4.03	2.68	1.44	2.38		1	700				3	8	18	2,373,899	83,516	27,563	24,974	700	0.68	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.52	8.31	6.74	4.88	3.66	2.16	1.02	2.75		1	700				3	8	18	2,360,633	76,932	20,356	33,592	700	0.39	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	14.05	10.90	8.74	6.46	4.97	3.06	1.27	5.37		1	700				3	8	18	753,279	106,695	11,336	27,052	700	1.55	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.80	6.98	5.21	3.55	2.66	1.66	0.86	3.75		1	700				3	8	18	1,104,759	78,883	35,147	40,059	700	0.94	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.57	7.24	5.69	4.00	2.97	1.77	0.91	2.74		1	700				3	8	18	2,021,574	72,924	29,363	37,956	700	0.38	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.95	8.28	5.82	4.10	3.20	2.26	1.32	2.01		1	700				3	8	18	818,114	48,755	51,506	27,208	700	1.38	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.15	8.04	6.17	4.67	3.77	2.47	1.50	2.21		1	700				3	8	18	2,160,179	60,510	42,958	24,369	700	1.90	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.71	8.42	6.76	5.13	3.87	2.33	1.13	2.98		1	700				3	8	18	2,014,319	92,236	19,832	31,193	700	0.62	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	9.82	7.83	6.26	4.57	3.44	2.14	1.08	2.63		1	700				3	8	18	2,500,234	76,623	25,874	32,548	700	0.77	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.44	8.01	6.18	4.23	3.10	1.82	0.91	2.86		1	700				3	8	18	1,918,048	60,188	26,867	37,380	700	0.92	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.59	7.58	5.78	3.86	2.77	1.60	0.84	2.58		1	700				3	8	18	1,536,303	56,033	31,068	40,726	700	0.57	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	13.15	10.08	7.90	5.75	4.34	2.56	1.02	5.79		1	700				3	8	18	826,743	104,967	12,284	33,103	700	1.60	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	10.39	7.55	5.73	4.11	3.10	1.97	1.06	3.37		1	700				3	8	18	1,135,569	79,630	32,585	33,172	700	0.56	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.26	8.90	7.05	5.21	4.01	2.68	1.49	2.03		1	700				3	8	18	2,024,966	57,078	31,410	23,691	700	0.79	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	11.89	8.95	6.91	5.03	3.91	2.56	1.41	2.80		1	700				3	8	18	1,225,734	65,887	29,549	24,798	700	0.72	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	8.61	6.57	5.01	3.39	2.51	1.51	0.76	2.26		1	700				3	8	18	2,038,590	72,300	33,827	43,607	700	1.27	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.13	6.78	5.20	3.62	2.71	1.65	0.84	2.58		1	700				3	8	18	1,557,468	83,610	31,455	40,044	700	0.76	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.96	6.85	5.11	3.48	2.65	1.69	0.92	2.10		1	700				3	8	18	941,094	73,003	39,622	37,115	700	0.67	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.21	8.06	6.54	4.74	3.55	2.10	0.99	2.13		1	700				3	8	18	2,383,842	76,187	20,420	33,586	700	0.37	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	13.73	10.65	8.54	6.31	4.85	2.99	1.24	4.92		1	700				3	8	18	755,248	106,473	11,346	27,060	700	1.53	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.56	6.80	5.08	3.46	2.60	1.61	0.84	2.62		1	700				3	8	18	1,110,182	78,577	35,222	40,031	700	0.90	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.32	7.08	5.70	4.09	2.96	1.84	1.12	2.12		1	700				3	8	18	3,852,115	17,652	89,556	31,130	700	1.14	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.46	8.27	6.65	4.74	3.72	2.59	1.67	2.16		1	700				3	8	18	3,122,357	18,633	100,000	21,037	700	1.23	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	8.07	5.95	4.63	3.19	2.44	1.62	1.05	2.58		1	700				3	8	18	3,121,230	27,984	100,000	33,811	700	3.66	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	8.68	6.15	4.49	3.15	2.39	1.50	0.92	2.03		1	700				3	8	18	1,637,650	57,788	57,280	38,656	700	2.03	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.86	7.63	5.75	3.90	2.99	1.95	1.26	2.56		1	700				3	8	18	1,712,195	29,599	69,068	28,399	700	1.97	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.32	8.11	6.52	4.94	3.73	2.25	1.09	2.45		1	700				3	8	18	2,010,999	91,982	19,901	31,157	700	0.63	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.15	7.57	6.20	4.45	3.70	2.48	1.54	2.19		1	700				3	8	18	4,076,535	26,949	74,691	22,620	700	1.98	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	9.92	7.62	5.83	4.18	3.22	2.18	1.39	2.05		1	700				3	8	18	2,658,257	24,918	86,537	25,350	700	1.14	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	12.75	9.77	7.66	5.58	4.21	2.48	0.99	5.31		1	700				3	8	18	830,442	104,678	12,310	33,074	700	1.57	1	
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	10.17	7.39	5.61	4.02	3.04	1.93	1.04	2.39		1	700				3	8	18	1,139,320	79,331	32,699	33,117	700	0.54	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	12.92	9.73	8.03	6.19	4.75	2.91	1.27	3.01		1	200				3.5	6.5	12	728,858	87,863	17,737	18,490	200	0.79	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	9.51	6.71	5.35	3.95	2.99	1.88	0.93	2.07		1	200				3.5	6.5	12	887,992	81,146	40,919	25,118	200	1.20	1	
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	6.30	5.02	4.21	3.22	2.38	1.23	0.33	2.08		1	300				5.5	9.5	15	1,339,436	95,621	13,917	82,529	300	0.55	1	
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	8.44	6.01	5.27	4.27	3.39	2.16	0.97	2.56		1	150				7.5	8	14.5	344,383	106,842	32,197	20,283	150	1.87	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	15.96	11.73	8.85	5.98	4.28	2.40	1.13	2.08		1	700				5.5	6.5	18	276,027	32,794	17,697	29,777	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	14.90	11.13	8.48	5.84	4.16	2.37	1.11	2.01		1	700				5.5	6.5	18	310,147	35,700	18,228	30,321	700	1.39	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	20.56	14.02	9.79	5.82	4.09	2.65	1.67	6.01		1	700				5.5	6.5	18	196,321	7,175	77,858	21,958	700	1.56	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.23	11.37	8.18	5.14	3.72	2.25	1.27	2.64		1	700				5.5	6.5	18	247,906	16,103	35,706	27,762	700	1.70	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	19.26	13.06	9.03	5.52	3.77	2.08	1.16	2.45		1	700				5.5	6.5	18	189,447	14,497	26,090	29,668	700	1.59	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.84	11.09	7.84	4.65	3.10	1.89	1.19	5.63		1	700				5.5	6.5	18	270,588	9,204	93,370	33,338	700	0.81	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.13	7.77	5.83	3.90	2.91	1.86	1.13	2.41		1	700				5.5	6.5	18	406,518	20,913	67,955	32,351	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	13.29	9.15	6.72	4.42	3.20	2.05	1.26	3.21		1	700				5.5	6.5	18	336,353	14,562	70,957	29,082	700	0.78	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	17.44	11.77	8.16	4.92	3.38	2.01	1.21	4.32		1	700				5.5	6.5	18	226,677	10,578	49,885	29,517	700	1.38	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	13.80	10.60	8.34	6.52	5.38	4.29	3.13	4.31		1	700				5.5	6.5	18	447,539	12,056	259,365	11,329	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	10.70	7.69	5.81	3.89	2.80	1.74	1.09	3.66		1	700				5.5	6.5	18	534,384	11,842	134,456	33,731	700	0.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.64	8.32	6.16	4.39	3.41	2.45	1.67	4.56		1	700				5.5	6.5	18	424,807	13,644	200,648	22,277	700	1.32	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.66	12.33	9.63	6.93	5.21	2.99	1.28	3.83		1	700				5.5	6.5	18	215,868	60,203	12,018	25,859	700	1.33	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.78	8.26	6.20	4.21	3.08	2.03	1.25	2.85		1	700				5.5	6.5	18	407,486	16,236	83,005	29,259	700	0.41	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	9.49	6.97	5.25	3.37	2.32	1.35	0.80	3.56		1	700				5.5	6.5	18	611,152	12,765	106,310	45,075	700	0.86	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	11.04	7.72	5.55	3.77	2.79	1.78	1.08	2.69		1	700				5.5	6.5	18	376,546	22,528	66,354	33,603	700	1.43	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	10.90	7.75	5.67	3.80	2.83	1.83	1.13	2.28		1	700				5.5	6.5	18	410,600	17,028	85,322	31,122	700	1.30	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	14.43	10.61	8.25	5.94	4.64	2.97	1.54	3.12		1	700				5.5	6.5	18	255,683	48,819	21,837	22,122	700	1.39	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	11.41	8.16	5.99	3.87	2.77	1.60	0.83	2.24		1	700				5.5	6.5	18	344,083	30,942	32,575	39,532	700	1.65	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.43	12.43	9.71	6.94	5.27	3.05	1.27	4.59		1	700				5.5	6.5	18	219,889	61,178	11,187	25,247	700	1.92	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	11.93	8.07	5.75	3.72	2.71	1.81	1.18	3.96		1	700				5.5	6.5	18	344,957	12,723	144,220	30,421	700	1.31	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	14.81	10.95	8.57	6.75	5.65	4.56	3.32	3.31		1	700				5.5	6.5	18	333,442	13,990	195,274	10,342	700	0.97	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.29	12.17	9.04	6.05	4.41	2.59	1.37	2.04		1	700				5.5	6.5	18	214,637	24,695	21,139	24,334	700	1.07	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.55	12.44	8.53	5.13	3.59	2.21	1.36	3.81		1	700				5.5	6.5	18	198,563	9,297	54,837	25,625	700	1.67	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.13	10.33	7.11	4.36	3.16	2.02	1.25	3.19		1	700				5.5	6.5	18	197,067	13,948	57,464	28,167	700	1.46	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	14.27	9.75	6.90	4.38	3.21	2.15	1.36	3.82		1	700				5.5	6.5	18	275,399	11,535	97,816	26,212	700	1.26	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.09	11.19	8.15	5.20	3.67	2.24	1.35	2.31		1	700				5.5	6.5	18	275,202	10,576	51,727	25,786	700	0.88	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	14.61	10.08	7.01	4.37	3.06	1.81	1.09	2.74		1	700				5.5	6.5	18	271,308	12,920	51,073	31,744	700	1.67	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.81	12.97	8.92	5.40	3.73	2.12	1.19	2.50		1	700				5.5	6.5	18	191,758	12,654	28,699	27,937	700	1.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.89	13.00	9.85	6.89	5.11	3.00	1.37	4.31		1	700				5.5	6.5	18	185,405	43,367	13,791	23,486	700	1.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.56	11.38	8.47	5.85	4.34	2.72	1.41	3.04		1	700				5.5	6.5	18	179,918	36,141	22,024	23,755	700	1.26	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	20.44	14.82	11.09	7.63	5.58	3.37	1.73	2.45		1	700				5.5	6.5	18	189,866	23,142	16,432	19,190	700	1.32	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.76	11.91	8.99	6.34	4.85	3.23	1.79	2.01		1	700				5.5	6.5	18	212,525	28,181	26,866	19,229	700	1.18	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.91	10.56	6.74	3.77	2.53	1.77	1.18	8.02		1	700				5.5	6.5	18	162,333	8,969	145,093	30,912	700	1.29	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.72	11.78	7.96	4.75	3.28	2.04	1.21	2.91		1	700				5.5	6.5	18	158,834	12,952	41,236	28,358	700	1.02	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.22	11.78	8.13	5.11	3.54	2.03	1.19	2.16		1	700				5.5	6.5	18	218,779	13,100	34,486	28,667	700	1.68	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	21.28	14.71	10.70	7.12	5.20	3.19	1.65	2.86		1	700				5.5	6.5	18	149,173	22,610	17,922	20,101	700	1.68	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	22.29	15.30	11.37	7.62	5.62	3.42	1.80	2.43		1	700				5.5	6.5	18	143,875	22,377	17,033	18,558	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	21.13	14.36	10.21	6.90	5.04	3.08	1.64	2.59		1	700				5.5	6.5	18	137,968	23,347	19,201	20,445	700	1.51	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.92	11.23	7.98	5.29	3.81	2.34	1.26	2.12		1	700				5.5	6.5	18	169,719	26,657	25,855	26,656	700	1.17	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	15.70	10.50	7.31	4.60	3.35	2.08	1.16	2.26		1	700				5.5	6.5	18	193,802	21,181	34,294	29,169	700	1.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	22.67	15.85	11.50	7.45	5.05	2.56	1.11	3.99		1	700				5.5	6.5	18	150,437	23,741	11,185	26,944	700	1.51	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.43	12.47	8.85	5.72	4.04	2.34	1.20	2.62		1	700				5.5	6.5	18	164,650	24,303	20,447	27,150	700	1.49	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.86	11.87	8.82	5.87	4.14	2.31	1.02	4.59		1	700				5.5	6.5	18	184,741	40,059	14,975	30,518	700	1.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	22.50	18.62	15.80	13.31	11.39	8.81	5.52	1.84		1	700				5.5	6.5	18	264,849	46,061	19,651	6,469	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	11.44	8.13	5.95	3.98	2.98	1.92	1.19	2.29		1	700				5.5	6.5	18	410,633	17,047	85,240	31,119	700	1.33	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	15.03	11.06	8.59	6.19	4.83	3.09	1.61	3.11		1	700				5.5	6.5	18	256,048	48,561	21,915	22,096	700	1.41	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	11.99	8.58	6.30	4.06	2.90	1.68	0.87	2.25		1	700				5.5	6.5	18	343,710	31,021	32,488	39,606	700	1.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.12	12.96	10.12	7.23	5.49	3.18	1.33	4.54		1	700				5.5	6.5	18	221,283	60,602	11,244	25,191	700	1.89	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	12.54	8.49	6.04	3.91	2.85	1.90	1.24	3.96		1	700				5.5	6.5	18	345,119	12,702	144,625	30,428	700	1.27	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	15.32	11.33	8.87	6.99	5.84	4.72	3.44	3.31		1	700				5.5	6.5	18	333,131	14,006	195,150	10,338	700	0.97	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.02	12.68	9.42	6.31	4.60	2.70	1.43	2.01		1	700				5.5	6.5	18	214,870	24,585	21,222	24,304	700	1.06	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	19.23	12.91	8.85	5.32	3.72	2.29	1.41	3.83		1	700				5.5	6.5	18	198,908	9,250	55,175	25,639	700	1.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	16.72	10.71	7.37	4.52	3.28	2.10	1.30	3.20		1	700				5.5	6.5	18	197,171	13,926	57,585	28,158	700	1.48	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	14.92	10.19	7.22	4.58	3.35	2.25	1.42	3.79		1	700				5.5	6.5	18	274,976	11,611	96,436	26,235	700	1.24	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	16.65	11.57	8.43	5.38	3.79	2.31	1.39	2.31		1	700				5.5	6.5	18	275,113	10,572	51,784	25,778	700	0.89	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	15.10	10.41	7.25	4.52	3.17	1.87	1.12	2.74		1	700				5.5	6.5	18	271,640	12,884	51,187	31,742	700	1.67	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	19.36	13.35	9.18	5.56	3.83	2.18	1.23	2.51		1	700				5.5	6.5	18	192,455	12,510	28,966	27,921	700	1.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.21	11.81	8.49	5.68	4.13	2.53	1.27	3.46		1	700				5.5	6.5	18	176,139	31,712	21,867	26,489	700	1.97	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.43	13.39	10.15	7.10	5.27	3.09	1.42	4.28		1	700				5.5	6.5	18	185,990	43,167	13,820	23,471	700	1.76	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	16.85	11.58	8.62	5.96	4.42	2.77	1.44	3.00		1	700				5.5	6.5	18	180,414	35,946	22,091	23,740	700	1.23	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	20.97	15.21	11.38	7.83	5.72	3.46	1.78	2.45		1	700				5.5	6.5	18	189,841	23,141	16,451	19,175	700	1.32	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.42	10.86	6.93	3.87	2.60	1.82	1.21	8.01		1	700				5.5	6.5	18	162,372	8,973	144,763	30,912	700	1.30	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	19.20	12.08	8.16	4.86	3.37	2.09	1.24	2.90		1	700				5.5	6.5	18	158,659	12,996	41,059	28,373	700	1.06	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.60	12.03	8.31	5.22	3.62	2.08	1.22	2.19		1	700				5.5	6.5	18	219,076	13,014	34,818	28,608	700	1.70	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	21.62	14.95	10.87	7.24	5.29	3.24	1.67	2.85		1	700				5.5	6.5	18	149,201	22,638	17,903	20,105	700	1.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	22.87	15.70	11.66	7.82	5.76	3.51	1.85	2.44		1	700				5.5	6.5	18	143,846	22,400	17,022	18,559	700	1.12	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	21.47	14.59	10.38	7.01	5.12	3.13	1.67	2.54		1	700				5.5	6.5	18	138,608	23,113	19,314	20,416	700	1.50	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.24	11.44	8.13	5.39	3.88	2.38	1.28	2.14		1	700				5.5	6.5	18	169,317	26,805	25,723	26,718	700	1.17	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	16.07	10.75	7.48	4.71	3.43	2.13	1.18	2.27		1	700				5.5	6.5	18	193,769	21,181	34,293	29,183	700	1.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	23.09	16.15	11.72	7.59	5.14	2.61	1.13	3.98		1	700				5.5	6.5	18	150,695	23,722	11,177	26,957	700	1.50	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.87	12.77	9.07	5.86	4.13	2.39	1.23	2.61		1	700				5.5	6.5	18	164,919	24,194	20,494	27,134	700	1.49	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.27	12.17	9.04	6.02	4.24	2.37	1.04	4.59		1	700				5.5	6.5	18	184,699	40,020	15,000	30,480	700	1.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	23.22	19.22	16.30	13.73	11.76	9.09	5.69	1.84		1	700				5.5	6.5	18	264,364	46,119	19,654	6,468	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	15.15	11.13	8.39	5.68	4.06	2.28	1.07	2.14		1	700				5.5	6.5	18	272,011	33,390	17,625	29,800	700	1.43	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	14.18	10.59	8.07	5.55	3.96	2.26	1.06	2.03		1	700				5.5	6.5	18	309,643	35,795	18,222	30,313	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.87	13.55	9.47	5.63	3.96	2.56	1.61	6.02		1	700				5.5	6.5	18	196,381	7,174	77,788	21,973	700	1.57	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.89	14.89	11.37	7.89	5.85	3.46	1.70	2.00		1	700				5.5	6.5	18	218,667	25,999	14,253	19,290	700	1.49	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	15.57	10.90	7.84	4.93	3.56	2.16	1.22	2.66		1	700				5.5	6.5	18	248,823	15,917	36,046	27,730	700	1.69	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	18.51	12.55	8.68	5.30	3.62	2.00	1.12	2.47		1	700				5.5	6.5	18	189,723	14,421	26,208	29,644	700	1.59	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	15.08	9.93	7.01	4.16	2.78	1.69	1.07	5.69		1	700				5.5	6.5	18	269,179	9,018	94,915	33,030	700	0.83	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	10.70	7.47	5.61	3.75	2.80	1.79	1.08	2.43		1	700				5.5	6.5	18	408,421	20,740	68,252	32,377	700	0.96	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	12.78	8.80	6.47	4.25	3.08	1.97	1.21	3.19		1	700				5.5	6.5	18	335,789	14,677	70,077	29,128	700	0.80	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.79	11.34	7.86	4.74	3.25	1.94	1.17	4.34		1	700				5.5	6.5	18	226,783	10,550	50,136	29,492	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	13.27	10.19	8.02	6.27	5.17	4.13	3.01	4.31		1	700				5.5	6.5	18	447,239	12,068	259,631	11,318	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.47	8.09	5.95	4.11	3.06	1.98	1.18	2.00		1	700				5.5	6.5	18	361,281	23,040	56,062	29,558	700	1.03	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	10.29	7.40	5.59	3.74	2.69	1.68	1.05	3.70		1	700				5.5	6.5	18	535,630	11,747	137,102	33,684	700	0.79	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.24	8.03	5.94	4.24	3.29	2.37	1.61	4.58		1	700				5.5	6.5	18	426,108	13,540	203,685	22,269	700	1.33	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.21	12.00	9.38	6.75	5.07	2.91	1.24	3.82		1	700				5.5	6.5	18	215,839	60,246	12,020	25,854	700	1.32	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	11.34	7.96	5.97	4.06	2.96	1.96	1.20	2.86		1	700				5.5	6.5	18	408,266	16,181	83,155	29,283	700	0.44	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	9.13	6.70	5.05	3.24	2.23	1.30	0.77	3.55		1	700				5.5	6.5	18	609,387	12,854	105,510	45,035	700	0.87	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	10.68	7.47	5.37	3.65	2.70	1.72	1.04	2.65		1	700				5.5	6.5	18	375,209	22,726	65,864	33,620	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.50	9.03	6.62	4.44	3.19	1.99	1.15	2.25		1	700				5.5	6.5	18	384,513	18,147	51,474	31,448	700	1.10	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.44	8.13	5.95	3.98	2.98	1.92	1.19	3.14		1	700				5.5	6.5	18	410,633	17,047	85,240	31,119	700	1.33	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.49	8.25	6.05	4.04	2.98	1.90	1.13	2.54		1	700				5.5	6.5	18	406,436	19,349	64,638	32,332	700	1.20	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.03	11.06	8.59	6.19	4.83	3.09	1.61	2.35		1	700				5.5	6.5	18	256,048	48,561	21,915	22,096	700	1.41	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	9.81	7.18	5.37	3.55	2.57	1.51	0.90	2.90		1	700				5.5	6.5	18	571,382	16,048	80,544	40,229	700	1.31	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	10.84	7.75	5.85	4.09	3.06	2.05	1.25	2.14		1	700				5.5	6.5	18	445,584	21,043	77,398	29,336	700	0.57	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.12	12.96	10.12	7.23	5.49	3.18	1.33	3.95		1	700				5.5	6.5	18	221,283	60,602	11,244	25,191	700	1.89	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.04	9.80	7.43	5.28	4.06	2.69	1.69	2.67		1	700				5.5	6.5	18	447,455	12,996	83,711	21,869	700	1.28	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.54	8.49	6.04	3.91	2.85	1.90	1.24	5.03		1	700				5.5	6.5	18	345,119	12,702	144,625	30,428	700	1.27	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.95	8.72	6.25	4.20	3.13	2.08	1.26	2.57		1	700				5.5	6.5	18	283,169	21,756	62,391	29,245	700	0.99	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.32	11.33	8.87	6.99	5.84	4.72	3.44	3.79		1	700				5.5	6.5	18	333,131	14,006	195,150	10,338	700	0.97	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.23	12.91	8.85	5.32	3.72	2.29	1.41	4.98		1	700				5.5	6.5	18	198,908	9,250	55,175	25,639	700	1.66	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.72	10.71	7.37	4.52	3.28	2.10	1.30	4.33		1	700				5.5	6.5	18	197,171	13,926	57,585	28,158	700	1.48	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	14.92	10.19	7.22	4.58	3.35	2.25	1.42	4.76		1	700				5.5	6.5	18	274,976	11,611	96,436	26,235	700	1.24	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.94	14.19	10.46	6.64	4.68	2.73	1.51	2.13		1	700				5.5	6.5	18	224,455	12,320	25,122	22,937	700	1.27	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.94	11.45	8.38	5.64	4.22	2.74	1.64	2.65		1	700				5.5	6.5	18	283,359	13,923	48,853	21,946	700	1.29	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.83	12.50	9.28	6.02	4.27	2.50	1.43	2.04		1	700				5.5	6.5	18	257,551	13,096	30,851	24,514	700	0.88	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.65	11.57	8.43	5.38	3.79	2.31	1.39	3.40		1	700				5.5	6.5	18	275,113	10,572	51,784	25,778	700	0.89	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.10	10.41	7.25	4.52	3.17	1.87	1.12	3.79		1	700				5.5	6.5	18	271,640	12,884	51,187	31,742	700	1.67	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.36	13.35	9.18	5.56	3.83	2.18	1.23	3.23		1	700				5.5	6.5	18	192,455	12,510	28,966	27,921	700	1.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.21	11.81	8.49	5.68	4.13	2.53	1.27	2.36		1	700				5.5	6.5	18	176,139	31,712	21,867	26,489	700	1.97	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.43	13.39	10.15	7.10	5.27	3.09	1.42	3.42		1	700				5.5	6.5	18	185,990	43,167	13,820	23,471	700	1.76	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.41	12.96	8.86	5.42	3.74	2.27	1.28	2.43		1	700				5.5	6.5	18	143,547	15,584	28,974	27,015	700	0.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.42	10.86	6.93	3.87	2.60	1.82	1.21	9.38		1	700				5.5	6.5	18	162,372	8,973	144,763	30,912	700	1.30	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.20	12.08	8.16	4.86	3.37	2.09	1.24	4.14		1	700				5.5	6.5	18	158,659	12,996	41,059	28,373	700	1.06	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.60	12.03	8.31	5.22	3.62	2.08	1.22	3.20		1	700				5.5	6.5	18	219,076	13,014	34,818	28,608	700	1.70	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.07	10.75	7.48	4.71	3.43	2.13	1.18	2.31		1	700				5.5	6.5	18	193,769	21,181	34,293	29,183	700	1.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	23.09	16.15	11.72	7.59	5.14	2.61	1.13	2.83		1	700				5.5	6.5	18	150,695	23,722	11,177	26,957	700	1.50	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	22.22	14.21	9.98	6.22	4.35	2.70	1.54	2.20		1	700				5.5	6.5	18	138,118	13,974	27,170	22,470	700	0.59	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.98	11.52	8.25	5.48	4.05	2.72	1.61	2.02		1	700				5.5	6.5	18	167,179	19,129	40,160	22,314	700	0.38	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.27	12.17	9.04	6.02	4.24	2.37	1.04	3.53		1	700				5.5	6.5	18	184,699	40,020	15,000	30,480	700	1.95	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.96	11.73	8.85	5.98	4.28	2.40	1.13	2.01		1	700				5.5	6.5	18	273,468	33,010	17,707	29,766	700	1.40	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.95	14.23	10.17	6.24	4.18	2.21	1.13	2.05		1	700				5.5	6.5	18	207,629	14,651	19,224	29,210	700	1.81	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.56	14.02	9.79	5.82	4.09	2.65	1.67	5.99		1	700				5.5	6.5	18	196,313	7,176	77,840	21,958	700	1.56	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.23	11.37	8.18	5.14	3.72	2.25	1.27	2.64		1	700				5.5	6.5	18	247,926	16,100	35,711	27,762	700	1.70	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.26	13.06	9.03	5.52	3.77	2.08	1.16	2.53		1	700				5.5	6.5	18	189,443	14,497	26,090	29,668	700	1.59	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.84	11.09	7.84	4.65	3.10	1.89	1.19	5.66		1	700				5.5	6.5	18	270,584	9,204	93,359	33,338	700	0.81	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.13	7.77	5.83	3.90	2.91	1.86	1.13	2.33		1	700				5.5	6.5	18	406,530	20,911	67,960	32,351	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.29	9.15	6.72	4.42	3.20	2.05	1.26	3.14		1	700				5.5	6.5	18	336,345	14,562	70,955	29,082	700	0.78	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.44	11.77	8.16	4.92	3.38	2.01	1.21	4.36		1	700				5.5	6.5	18	226,681	10,577	49,887	29,517	700	1.38	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.80	10.60	8.34	6.52	5.38	4.29	3.13	4.06		1	700				5.5	6.5	18	447,574	12,053	259,449	11,329	700	0.94	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	10.70	7.69	5.81	3.89	2.80	1.74	1.09	3.60		1	700				5.5	6.5	18	534,365	11,843	134,432	33,731	700	0.77	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.64	8.32	6.16	4.39	3.41	2.45	1.67	4.36		1	700				5.5	6.5	18	424,825	13,642	200,698	22,277	700	1.32	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.66	12.33	9.63	6.93	5.21	2.99	1.28	3.77		1	700				5.5	6.5	18	215,859	60,207	12,018	25,859	700	1.33	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.78	8.26	6.20	4.21	3.08	2.03	1.25	2.76		1	700				5.5	6.5	18	407,485	16,236	83,007	29,259	700	0.41	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	9.49	6.97	5.25	3.37	2.32	1.35	0.80	3.58		1	700				5.5	6.5	18	611,233	12,759	106,396	45,075	700	0.86	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	11.04	7.72	5.55	3.77	2.79	1.78	1.08	2.61		1	700				5.5	6.5	18	376,543	22,528	66,352	33,603	700	1.43	1	
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	23.22	19.22	16.30	13.73	11.76	9.09	5.69	1.47		1	700				5.5	6.5	18	264,364	46,119	19,654	6,468	700	0.94	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	12.44	9.07	7.25	4.87	3.40	1.72	0.63	3.29		1	300				4	7	18	630,361	62,325	15,646	37,931	300	0.77	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	13.70	10.03	7.98	5.31	3.75	1.97	0.76	3.22		1	300				4	7	18	556,060	54,747	15,393	32,010	300	1.00	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	13.70	10.67	8.95	6.65	5.08	2.95	1.14	3.05		1	300				4	7	18	606,528	93,396	11,113	23,380	300	0.53	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	13.32	9.69	7.85	5.58	4.09	2.35	1.02	2.88		1	300				4	7	18	502,170	68,652	17,456	25,682	300	0.55	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	16.76	13.08	11.02	8.39	6.54	4.05	1.88	2.13		1	300				4	7	18	567,827	64,351	12,801	14,671	300	0.39	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	16.50	12.27	10.03	7.39	5.70	3.62	1.69	2.93		1	300				4	7	18	354,804	66,527	15,908	16,109	300	0.71	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	15.28	11.37	9.58	7.37	5.82	3.74	1.81	3.10		1	300				4	7	18	307,965	97,676	16,508	15,492	300	0.47	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005	4	25	13.32	9.85	7.95	5.62	4.16	2.48	1.41	2.41		1	300				4	7	18	1,111,533	11,892	58,815	19,713	300	1.66	1	
Bay	M-85	09-09	NA	NA	SC	NA	NA	Summer	5/18/2005	flex-B-M84-CS9011-05-17-2006																	4	7	18	1,066,529	32,897	38,323	15,209	300	1.11	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	11.09	7.90	6.23	4.13	2.86	1.60	0.91	2.76		1	400				4	7	18	1,193,840	13,560	63,856	33,438	400	1.57	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	18.50	14.11	11.57	8.32	6.22	3.66	1.57	2.98		1	400				4	7	18	435,274	53,779	10,568	18,353	400	0.77	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.15	8.97	7.14	4.64	3.06	1.45	0.54	2.49		1	400				4	7	18	846,516	44,343	16,560	47,341	400	0.99	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.90	9.74	7.85	5.39	3.74	1.93	0.74	2.59		1	400				4	7	18	792,657	53,788	14,449	36,373	400	0.65	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.12	11.82	9.85	7.13	5.24	2.96	1.11	2.98		1	400				4	7	18	675,337	68,372	10,037	25,564	400	0.89	1	

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System										
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	RMS Error (%)	Convergence	
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed			Yes	No
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	17.62	13.99	11.92	9.02	6.93	4.24	1.77	2.71		1	400				4	7	18	560,763	74,038	8,661	17,160	400	0.67	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.46	11.13	9.21	6.57	4.73	2.56	0.94	2.88		1	400				4	7	18	703,266	64,265	10,819	29,338	400	0.70	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.62	11.26	9.32	6.55	4.65	2.40	0.86	2.46		1	400				4	7	18	808,825	51,783	10,795	31,023	400	0.66	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.37	11.59	9.24	6.23	4.48	2.71	1.54	2.24		1	400				4	7	18	935,880	9,449	52,808	20,023	400	0.56	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.92	11.48	9.49	6.85	5.11	3.14	1.46	2.10		1	400				4	7	18	675,292	52,861	15,893	20,356	400	0.86	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.63	12.11	10.33	7.87	6.09	3.74	1.77	2.16		1	400				4	7	18	635,564	69,960	12,930	17,189	400	0.73	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.86	11.38	9.69	7.51	5.95	3.85	1.94	2.50		1	400				4	7	18	465,929	90,841	15,932	16,014	400	0.58	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	12.86	9.44	7.80	5.79	4.50	2.91	1.50	2.39		1	400				4	7	18	471,792	80,291	23,257	20,501	400	0.55	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	13.47	10.16	8.53	6.47	5.09	3.30	1.73	2.06		1	400				4	7	18	551,838	77,948	21,129	17,912	400	0.66	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	15.16	11.58	9.81	7.52	5.94	3.85	1.97	2.26		1	400				4	7	18	499,267	77,763	16,801	15,712	400	0.59	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	14.77	10.58	8.58	6.03	4.41	2.52	1.22	2.22		1	400				4	7	18	529,976	49,363	18,207	24,155	400	1.10	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	5/17/2005	flex-B-M84-CS9011-05-17-2005-(2)	4	25	11.14	8.26	7.00	5.34	4.16	2.69	1.34	3.00		1	400				4	7	18	469,983	125,351	22,490	23,152	400	0.73	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	14.15	9.38	6.73	4.46	3.31	2.15	1.17	3.40		1	200				4	7	18	479,842	20,432	65,599	19,779	200	1.61	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	14.50	9.77	6.93	4.40	3.13	1.83	0.92	2.36		1	200				4	7	18	483,771	21,562	43,060	24,492	200	1.44	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	14.44	9.80	7.04	4.64	3.31	1.96	0.99	2.15		1	200				4	7	18	499,508	22,717	41,647	22,643	200	1.55	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	15.35	10.68	7.79	5.21	3.90	2.50	1.31	2.33		1	200				4	7	18	485,779	19,853	48,814	17,293	200	1.04	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	15.27	10.23	7.52	5.23	3.90	2.31	0.96	3.94		1	200				4	7	18	218,129	60,006	22,763	22,074	200	1.22	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	14.41	10.20	7.68	5.51	4.26	2.71	1.25	2.24		1	200				4	7	18	329,551	53,971	27,935	17,669	200	0.99	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	12.06	8.13	5.96	4.11	3.13	1.94	0.88	2.21		1	200				4	7	18	332,850	59,872	35,518	24,863	200	1.05	1	
Bay	M-84	09-08	NA	NA	SC	NA	NA	Summer	10/3/2005	flex-B-M84-CS9011-10-03-2005	4	25	17.17	11.92	8.92	6.28	4.76	2.80	1.11	4.84		1	200				4	7	18	200,148	62,328	17,094	18,879	200	1.73	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.39	9.30	7.75	5.76	4.32	2.40	1.14	2.21		1	250				6	9	15	856,020	5,952	368,948	23,325	250	0.55	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	12.04	9.34	7.48	5.42	4.02	2.24	1.14	2.52		1	250				6	9	15	598,684	9,609	127,269	23,106	250	1.10	1	
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	10.67	8.78	7.44	5.67	4.04	2.29	1.06	2.55		1	250				6	9	15	950,686	5,715	500,000	24,307	250	1.31	1	
Superior	M-38	01-01	NA	NA	CL	NA	NA	Summer	5/21/2008	flex-Su-M38-CS66042-05-20-2008	3.5	26.5	11.77	8.07	6.34	4.57	3.41	2.06	1.08	2.76		1	350				3.5	8	24	613,235	73,165	30,039	28,979	350	1.36	1	
Superior	US-141	02-02	NA	NA	ML	NA	NA	?	5/19/2008	flex-Su-US141-CS7022-05-19-2008	4.5	25.5	19.91	15.46	12.36	8.87	6.80	4.30	2.14	2.29		1	700				4.5	8	18	376,609	33,685	13,141	16,157	700	1.26	1	
Superior	US-2	02-01	NA	NA	SM	NA	NA	Summer	5/20/2008	flex-Su-US2-CS27022-05-20-2008	3.5	26.5	12.08	8.28	6.01	4.01	3.00	2.03	1.31	5.76		1	250				3.5	8.0	18.0					250	2.39		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	26.14	16.39	10.51	6.76	5.08	3.30	1.81	4.33		1	700				7.25	4.5	17.5					700	3.42		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	10.03	8.24	7.06	5.64	4.44	2.45	1.57	6.00		1	700				7.25	4.5	17.5					700	13.20		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.38	6.71	6.13	5.34	4.54	2.91	1.52	2.53		1	700				7.25	4.5	17.5					700	7.28		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.30	7.69	7.32	5.41	4.54	3.19	1.52	4.03		1	700				7.25	4.5	17.5					700	5.21		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.60	7.41	6.69	4.89	4.03	2.72	1.39	2.93		1	700				7.25	4.5	17.5					700	2.88		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	8.31	8.01	7.46	6.60	5.51	3.61	2.02	4.06		1	700				7.25	4.5	17.5					700	10.83		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.85	6.14	5.62	5.01	4.38	3.01	1.78	2.09		1	700				7.25	4.5	17.5					700	13.58		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	6.51	5.97	5.52	5.03	4.52	2.49	1.61	7.87		1	700				7.25	4.5	17.5					700	10.14		1
North	US-131	07-01	NA	NA	SM	NA	NA	Summer	5/1/2002	flex-N-US131-CS67017-05-01-2002	7.25	22	7.75	6.76	5.98	5.00	4.05	2.40	1.22	2.85		1	700				7.25	4.5	17.5					700	19.74		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.23	9.02	6.93	4.76	3.63	2.47	1.38	2.72		1	700				7	5	18					700	2.16		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	12.17	9.33	7.23	5.00	3.82	2.53	1.42	2.77		1	700				7	5	18					700	2.24		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.11	10.05	8.02	5.95	4.72	3.30	1.34	6.51		1	700				7	5	18					700	4.55		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.11	10.35	8.03	5.81	4.54	3.12	1.26	7.24		1	700				7	5	18					700	4.94		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	13.77	10.05	7.74	5.58	4.37	3.03	1.25	7.22		1	700				7	5	18					700	5.06		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	14.18	10.46	8.16	5.93	4.64	3.16	1.27	6.95		1	700				7	5	18					700	4.67		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001	7	23	18.52	13.73	10.60	7.59	5.86	3.79	1.96	2.65		1	700				7	5	18					700	2.01		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.23	9.02	6.93	4.76	3.63	2.47	1.38	2.72		1	700				7	5	18					744	2.16		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	12.17	9.33	7.23	5.00	3.82	2.53	1.42	2.77		1	700				7	5	18					747	2.24		1
North	M-55	05-04	NA	NA	SP2	NA	NA	Summer	8/20/2001	flex-N-M55-CS77022-8-20-2001-(2)	7	23	18.52	13.73	10.60	7.59	5.86	3.79	1.96	2.65		1	700				7	5	18					764	2.01		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.11	7.28	6.57	5.63	4.61	2.40	1.34	6.83		1	700				6.25	6	18					700	3.32		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.50	9.21	7.36	5.20	3.50	2.05	1.14	4.07		1	700				6.25	6	18					700	2.10		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.33	7.87	6.61	4.06	2.95	1.69	0.79	5.27		1	700				6.25	6	18					700	2.40		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	9.88	7.40	6.06	4.57	3.50	2.05	0.83	3.47		1	700				6.25	6	18					700	5.66		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.38	7.80	5.24	3.58	2.20	1.50	1.02	8.84		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.26	8.78	6.89	5.24	4.13	2.83	1.77	2.21		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.00	6.77	5.51	4.21	3.23	2.09	1.14	2.39		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	10.83	9.17	7.99	5.24	3.54	2.09	1.30	7.90		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	12.95	8.50	5.12	4.09	3.19	2.13	1.26	5.66		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.85	8.90	6.85	3.66	2.95	2.13	1.34	10.34		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	7.09	6.14	5.51	4.65	3.78	2.48	1.54	2.79		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	11.02	9.96	7.60	5.59	4.06	2.52	1.57	6.17		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.74	7.60	6.65	5.35	3.78	2.17	1.26	5.78		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.58	7.13	5.87	4.65	3.54	2.32	1.46	3.06		1	700				6.25	6	18								
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/12/1997	flex-N-I75-CS69014-11-12-1997	6.25	24	8.70	7.05	5.87	4.57	3.50	2.28	1.42	2.63		1	700				6.25	6	18								
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999	6.25	24	8.46	6.02	4.61	3.70	2.72	2.01	1.30	3.30		1	700				6.25	9	15					700	2.44		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	8.15	5.51	3.98	2.80	2.32	1.30	0.83	4.38		1	700				6.25	9	15					700	4.67		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/3/1999	flex-N-I75-CS69014-08-03-1999-(2)	6.25	24	7.99	5.43	3.98	2.95	2.28	1.57	1.06	2.96		1	700				6.25	9	15					700	2.20		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	14.21	9.49	7.48	5.20	3.94	2.28	1.38	2.72		1	700				6.25	9	15					700	2.47		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.81	8.94	5.83	4.72	3.66	2.40	1.42	5.05		1	700				6.25	9	15					700	5.06		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.02	7.36	6.18	4.88	3.58	2.17	1.30	3.66		1	700				6.25	9	15					700	4.51		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.03	6.85	5.79	4.53	3.43	2.05	1.10	2.46		1	700				6.25	9	15					700	12.01		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.35	7.76	5.63	3.90	2.87	1.89	1.14	3.82		1	700				6.25	9	15					700	2.01		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	12.24	8.66	6.54	4.76	3.46	2.01	1.22	3.10		1	700				6.25	9	15					700	2.32		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.22	7.87	5.98	4.65	3.50	2.20	1.30	2.19		1	700				6.25	9	15					700	2.18		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.10	8.07	6.26	4.76	3.54	2.09	1.18	2.07		1	700				6.25	9	15					700	2.06		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.65	7.95	6.34	4.09	2.68	1.50	0.83	5.97		1	700				6.25	9	15					700	14.96		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	10.00	8.46	7.01	5.24	3.74	2.13	1.06	2.80		1	700				6.25	9	15					700	2.19		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	8.23	7.17	6.22	5.00	3.86	2.05	1.14	5.40		1	700				6.25	9	15					700	13.03		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.21	8.27	7.09	4.17	3.11	1.81	0.91	7.36		1	700				6.25	9	15					700	12.01		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.69	6.93	5.31	3.94	2.83	1.61	0.83	4.68		1	700				6.25	9	15					700	2.17		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	15.24	10.20	5.28	4.41	3.58	2.48	1.73	10.17		1	700				6.25	9	15					700	9.18		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	11.10	7.83	6.22	4.69	3.50	2.01	1.22	3.36		1	700				6.25	9	15					700	3.02		1
North	I-75	06-02	69014	NA	SP1	NA	NA	Summer	11/13/1997	flex-N-I75-CS69014-11-23-1997	6.25	24	9.09	8.39	7.24	5.71	3.19	2.17	1.38	11.65		1	700				6.25	9	15					700	21.15		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	9.41	6.50	5.12	3.66	2.83	1.50	1.14	8.66		1	700				6.25	9	15					700	12.16		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999	6.25	24	8.82	5.79	4.53	3.54	2.60	1.73	1.06	2.54		1	700				6.25	9	15					700	2.54		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.50	5.55	4.41	3.46	2.60	1.73	1.10	2.59		1	700				6.25	9	15					700	2.86		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.99	5.43	4.09	3.11	2.40	1.65	1.14	3.08		1	700				6.25	9	15					700	2.54		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.91	5.16	4.02	2.95	2.24	1.38	0.91	3.02		1	700				6.25	9	15					700	3.41		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.98	5.55	4.02	2.99	2.17	1.54	0.98	2.49		1	700				6.25	9	15					700	2.29		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.11	5.16	3.86	2.99	2.28	1.54	0.94	2.08		1	700				6.25	9	15					700	2.02		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.06	5.71	4.25	3.19	2.40	1.54	0.94	2.12		1	700				6.25	9	15					700	2.32		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.21	5.75	4.17	3.11	2.36	1.54	0.98	2.20		1	700				6.25	9	15					700	2.65		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.02	5.83	4.13	3.03	2.28	1.50	0.94	2.10		1	700				6.25	9	15					700	2.31		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.86	5.59	4.33	3.19	2.36	1.50	0.91	2.01		1	700				6.25	9	15					700	2.20		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.78	5.83	4.21	3.11	2.40	1.50	0.91	2.28		1	700				6.25	9	15					700	2.40		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	9.84	6.38	4.96	3.86	2.91	1.93	1.22	2.35		1	700				6.25	9	15					700	2.62		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.23	5.08	3.86	2.83	2.05	1.34	0.87	2.57		1	700				6.25	9	15					700	2.94		1

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System										
					Roadbed	Granular Layer														RMS Error	Converged?		Depth to				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to		Convergence	
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60	(%)	Yes	No	Stiff Layer (in)	Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed	Stiff layer (in)	RMS Error (%)	Yes	No
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.23	4.92	3.54	2.64	1.93	1.30	0.83	2.13		1	700				6.25	9	15					700	2.55		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.01	4.49	3.31	2.44	1.77	1.18	0.79	3.07		1	700				6.25	9	15					700	2.81		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.60	4.88	4.09	3.11	2.28	1.42	0.71	4.88		1	700				6.25	9	15					700	2.08		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	8.62	5.51	4.33	3.35	2.48	1.65	0.98	2.50		1	700				6.25	9	15					700	2.08		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.50	4.57	3.62	2.83	2.17	1.57	1.10	3.14		1	700				6.25	9	15					700	2.06		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	7.01	5.00	3.94	2.99	2.32	1.57	1.10	3.29		1	700				6.25	9	15					700	2.14		1
North	I-75	06-02	69014	44972	SP1	CA - AG	NA	Summer	8/4/1999	flex-N-I75-CS69014-08-04-1999-(2)	6.25	24	6.85	5.04	3.90	2.99	2.32	1.61	1.14	3.62		1	700				6.25	9	15					700	3.08		1
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	20.35	13.07	9.37	7.09	5.43	3.46	1.81	3.26		1	700				7	8	17					700	2.06		1
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.63	9.88	7.24	5.55	4.21	2.76	1.38	4.23		1	700				7	8	17					700	2.01		1
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	31.61	22.80	17.32	13.43	10.24	6.06	2.05	6.65		1	700				7	8	17					700	2.82		1
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.76	11.65	8.54	6.50	5.04	3.19	1.38	6.70		1	700				7	8	17					700	3.14		1
Grand	M-120	06-03	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.78	11.65	8.39	5.87	4.09	2.20	0.83	6.79		1	700				7	8	17					700	2.32		1
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	20.35	13.07	9.37	7.09	5.43	3.46	1.81	3.26		1	700				7	8	17					700	2.06		1
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	15.63	9.88	7.24	5.55	4.21	2.76	1.38	4.23		1	700				7	8	17					700	2.01		1
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	31.61	22.80	17.32	13.43	10.24	6.06	2.05	6.65		1	700				7	8	17					700	2.82		1
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	17.76	11.65	8.54	6.50	5.04	3.19	1.38	6.70		1	700				7	8	17					700	3.14		1
Grand	M-120	07-02	NA	NA	SP1	NA	NA	Summer	7/23/1998	flex-G-M120-CS61012-07-23-1998	7	24	18.78	11.65	8.39	5.87	4.09	2.20	0.83	6.79		1	700				7	8	17					700	2.32		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.30	5.35	4.76	3.98	3.15	2.20	1.38	2.06		1	700				7.25	4	18					700	3.02		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.26	5.28	4.61	3.74	2.83	1.85	1.06	2.34		1	700				7.25	4	18					700	6.40		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.57	5.51	4.76	3.86	2.99	2.01	1.22	2.19		1	700				7.25	4	18					700	3.28		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.28	6.54	5.91	5.24	3.98	2.64	1.54	3.80		1	700				7.25	4	18					700	9.44		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.26	5.20	4.45	3.66	2.87	2.01	1.34	2.85		1	700				7.25	4	18					700	6.65		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	5.12	4.37	3.78	3.23	2.52	1.85	1.26	3.08		1	700				7.25	4	18					700	7.07		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.90	7.20	5.91	4.13	3.11	1.93	1.02	2.68		1	700				7.25	4	18					700	2.34		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.03	6.42	5.35	4.06	2.83	1.65	0.87	2.58		1	700				7.25	4	18					700	11.25		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.76	6.42	5.39	4.17	3.15	2.09	1.22	2.31		1	700				7.25	4	18					700	6.90		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.81	5.87	5.16	4.21	3.19	2.13	1.18	2.29		1	700				7.25	4	18					700	6.45		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.36	6.02	4.92	3.90	2.95	2.01	1.38	4.33		1	700				7.25	4	18					700	5.84		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.76	6.54	5.51	4.41	3.43	2.40	1.50	2.41		1	700				7.25	4	18					700	3.98		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.17	6.10	5.12	3.98	2.95	1.85	1.06	3.13		1	700				7.25	4	18					700	9.83		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.62	6.81	5.51	4.13	2.95	1.85	1.06	2.64		1	700				7.25	4	18					700	6.88		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.98	7.87	6.73	5.47	4.25	2.95	1.77	2.53		1	700				7.25	4	18					700	11.57		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.01	5.87	4.96	3.86	2.99	2.01	1.26	2.89		1	700				7.25	4	18					700	2.71		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.48	6.02	5.16	3.98	2.95	1.85	1.06	2.34		1	700				7.25	4	18					700	8.75		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.73	5.75	5.04	4.13	3.19	2.24	1.46	3.14		1	700				7.25	4	18					700	3.21		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.57	5.79	5.00	3.98	2.95	1.73	0.98	4.48		1	700				7.25	4	18					700	17.67		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.56	6.97	5.47	4.21	2.99	1.85	0.94	4.68		1	700				7.25	4	18					700	16.99		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.93	6.10	5.35	4.41	3.46	2.32	1.34	2.17		1	700				7.25	4	18					700	10.98		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.91	6.46	5.55	4.41	3.35	2.24	1.34	2.05		1	700				7.25	4	18					700	7.60		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	10.87	8.94	7.28	5.28	3.74	2.01	1.02	3.19		1	700				7.25	4	18					700	23.30		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.80	6.57	5.16	3.82	2.95	1.97	1.14	3.27		1	700				7.25	4	18					700	2.59		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.56	6.22	5.16	4.06	3.07	2.05	1.26	2.66		1	700				7.25	4	18					700	3.99		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.48	6.02	5.04	3.94	2.91	1.89	1.18	3.23		1	700				7.25	4	18					700	4.28		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.89	5.87	4.76	3.54	2.64	1.73	1.06	4.17		1	700				7.25	4	18					700	3.42		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.60	6.22	5.28	4.17	3.11	2.09	1.34	3.51		1	700				7.25	4	18					700	4.30		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.62	7.28	5.98	4.57	3.46	2.24	1.42	3.87		1	700				7.25	4	18					700	9.19		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.64	6.38	5.31	3.98	2.91	1.81	1.02	3.13		1	700				7.25	4	18					700	10.32		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.85	5.87	5.04	3.94	2.91	1.73	0.91	2.88		1	700				7.25	4	18					700	16.43		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.46	6.61	5.67	4.33	3.27	2.09	1.26	2.32		1	700				7.25	4	18					700	7.98		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.87	6.42	5.43	4.33	3.15	1.97	1.06	2.10		1	700				7.25	4	18					700	12.00		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.39	6.97	5.87	4.37	3.23	2.05	1.14	2.79		1	700				7.25	4	18					700	11.20		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	9.06	7.76	6.81	5.59	4.17	2.83	1.54	2.30		1	700				7.25	4	18					700	13.19		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.31	7.20	6.38	5.35	4.13	2.76	1.61	2.54		1	700				7.25	4	18					700	15.73		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.19	7.09	6.26	5.12	3.82	2.52	1.26	2.16		1	700				7.25	4	18					700	11.63		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.20	6.02	5.16	4.17	3.27	2.20	1.38	2.30		1	700				7.25	4	18					700	2.99		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.73	5.75	4.96	3.98	2.95	1.81	0.98	2.85		1	700				7.25	4	18					700	13.21		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	8.54	6.85	5.71	4.57	3.43	2.40	1.65	4.12		1	700				7.25	4	18					700	2.76		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	7.48	5.87	5.04	4.06	3.15	2.13	1.38	2.44		1	700				7.25	4	18					700	2.20		1
Grand	US-131	07-02	NA	NA	SP1	NA	NA	Summer	5/13/1998	flex-G-US131-CS54014-05-13-1998	7.25	22	6.97	6.50	5.04	4.25	3.35	2.28	1.26	3.67		1	700				7.25	4	18					700	4.95		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	16.80	9.36	6.77	4.91	3.55	2.02	0.83	9.28		1	700				6	6	18					700	2.46		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	22.60	16.88	12.99	8.93	6.64	4.03	1.80	3.66		1	700				6	6	18					700	2.74		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	20.08	14.49	10.71	6.73	4.86	2.65	1.10	4.71		1	700				6	6	18					700	3.63		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	24.30	17.43	12.85	8.28	6.02	3.33	1.25	6.30		1	700				6	6	18					700	4.16		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	17.27	13.92	9.98	7.43	5.76	3.81	2.23	3.46		1	700				6	6	18					700	3.13		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	19.61	14.45	10.29	7.10	5.23	3.10	1.63	2.37		1	700				6	6	18					700	2.37		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	18.94	13.25	9.16	5.84	4.04	2.19	1.07	2.63		1	700				6	6	18					700	2.52		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	12.66	9.12	6.54	4.57	3.43	2.05	0.97	3.89		1	700				6	6	18					700	2.89		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	9.93	8.73	6.64	5.08	3.91	2.27	0.93	3.38		1	700				6	6	18					700	3.17		1
Grand	M-20	07-03	NA	NA	SP1	NA	NA	Summer	4/9/2002	flex-G-M20-CS54041-04-09-2002	6	24	11.48	9.57	8.01	5.96	4.10	2.48	1.03	2.81		1	700				6	6	18					700	2.81		1
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	12.60	9.96	7.99	5.94	4.33	2.56	1.57	4.33		1	700				8	9	16					700	8.82		1
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	10.04	8.43	6.97	5.43	4.37	3.19	1.85	2.43		1	700				8	9	16					700	2.23		1
Grand	M-37	07-03	NA	NA	SP1	NA	NA	Summer	5/18/2000	flex-G-M37-CS62032-05-18-2000	8	25	6.02	5.87	5.91	4.57	3.78	3.03	1.73	5.31		1	700				8	9	16					700	6.39		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	11.37	8.22	6.47	4.88	3.91	2.48	1.17	3.70		1	700				7.25	4.5	18					700	2.02		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994	7.25	24	9.64	6.79	5.67	4.41	3.18	2.23	1.27	2.33		1	700				7.25	4.5	18					700	2.24		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	10.78	7.83	6.35	4.90	3.98	2.75	1.26	4.89		1	700				7.5	4.5	18					700	2.84		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.44	7.27	5.66	4.38	3.52	2.08	1.02	2.62		1	700				7.5	4.5	18					700	2.17		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	10.99	8.18	6.50	5.36	4.01	2.66	1.24	3.75		1	700				7.5	4.5	18					700	2.22		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.07	7.76	6.50	4.93	3.74	2.67	1.51	3.46		1	700				7.5	4.5	18					700	2.98		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.84	7.55	5.57	4.24	3.25	2.17	1.20	2.61		1	700				7.5	4.5	18					700	2.56		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.37	6.98	5.79	4.66	3.39	2.38	1.35	2.17		1	700				7.5	4.5	18					700	2.10		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.58	7.05	5.29	4.11	3.16	2.12	1.05	3.25		1	700				7.5	4.5	18					700	2.69		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	8.92	6.48	5.36	3.85	3.22	2.12	1.05	3.50		1	700				7.5	4.5	18					700	2.78		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(2)	7.5	22	9.59	7.00	5.66	4.24	3.34	2.33	1.15	3.11		1	700				7.5	4.5	18					700	2.49		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	11.06	8.00	6.29	4.75	3.80	2.41	1.14	3.54		1	700				7.5	4.5	18					700	2.01		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(3)	7.5	22	9.47	6.68	5.57	4.34	3.12	2.19	1.25	2.33		1	700				7.5	4.5	18					700	2.20		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	10.59	7.69	6.24	4.81	3.91	2.70	1.23	4.83		1	700				7.5	4.5	18					700	2.87		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.32	7.18	5.59	4.32	3.47	2.05	1.01	2.52		1	700				7.5	4.5	18					700	2.17		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	10.98	8.17	6.49	5.36	4.01	2.66	1.24	3.61		1	700				7.5	4.5	18					700	2.18		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	8.95	7.67	6.41	4.87	3.70	2.64	1.49	3.54		1	700				7.5	4.5	18					700	2.98		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.76	7.48	5.52	4.21	3.22	2.15	1.19	2.68		1	700				7.5	4.5	18					700	2.55		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.30	6.93	5.75	4.63	3.37	2.37	1.34	2.16		1	700				7.5	4.5	18					700	2.07		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	8.96	6.70	5.10	4.04	3.14	2.01	1.09	2.13		1	700				7.5	4.5	18					700	2.01		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.40	6.91	5.19	4.03	3.10	2.08	1.03	3.19		1	700				7.5	4.5	18					700	2.68		1

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System											
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	8.83	6.43	5.31	3.81	3.19	2.10	1.04	3.43		1	700				7.5	4.5	18					700	2.77		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(4)	7.5	22	9.38	6.84	5.54	4.15	3.27	2.28	1.12	3.09		1	700				7.5	4.5	18					700	2.51		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	10.78	7.83	6.35	4.90	3.98	2.75	1.26	4.78		1	700				7.5	4.5	18					700	2.77		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.44	7.27	5.66	4.38	3.52	2.08	1.02	2.54		1	700				7.5	4.5	18					700	2.17		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	10.99	8.18	6.50	5.36	4.01	2.66	1.24	3.64		1	700				7.5	4.5	18					700	2.19		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.07	7.76	6.50	4.93	3.74	2.67	1.51	3.56		1	700				7.5	4.5	18					700	7.29		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.47	7.39	5.81	4.56	3.36	2.35	1.42	3.20		1	700				7.5	4.5	18					700	2.83		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.84	7.55	5.57	4.24	3.25	2.17	1.20	2.68		1	700				7.5	4.5	18					700	2.57		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.37	6.98	5.79	4.66	3.39	2.38	1.35	2.19		1	700				7.5	4.5	18					700	2.10		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.58	7.05	5.29	4.11	3.16	2.12	1.05	3.19		1	700				7.5	4.5	18					700	2.66		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	8.92	6.48	5.36	3.85	3.22	2.12	1.05	3.43		1	700				7.5	4.5	18					700	2.74		1
Grand	US-131	07-03	54014	28121	SP1	Natural Gravel	Dense	Summer	8/18/1994	flex-G-US131-CS54013-08-18-1994-(5)	7.5	22	9.59	7.00	5.66	4.24	3.34	2.33	1.15	3.05		1	700				7.5	4.5	18					700	2.46		1
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	6.57	5.28	4.72	4.17	3.46	2.52	1.38	2.25		1	700				8	4	20					700	1.23		1
Grand	US-131	09-01	NA	NA	SP1	NA	NA	Summer	6/25/1998	flex-G-US131-CS59012-06-25-1998	8	24	6.38	4.84	4.37	3.98	3.31	2.40	1.42	3.47		1	700				8	4	20					700	6.98		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.83	7.85	6.22	4.52	3.52	2.46	1.66	3.15		1	700				3	8	18					700	13.85		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.49	7.48	6.06	4.46	3.39	2.27	1.45	2.02		1	700				3	8	18					700	8.41		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	8.11	6.71	5.46	3.95	3.06	2.05	1.33	2.82		1	700				3	8	18					700	9.80		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.67	7.70	5.91	3.94	2.87	1.81	1.09	2.77		1	700				3	8	18					700	4.75		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.31	7.62	6.18	4.45	3.40	2.23	1.39	2.23		1	700				3	8	18					700	4.96		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.57	7.63	5.87	4.02	2.98	1.86	1.11	2.02		1	700				3	8	18					700	5.84		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.48	7.29	5.75	4.04	3.06	2.03	1.30	2.50		1	700				3	8	18					700	4.47		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	15.31	9.95	7.02	4.70	3.43	2.30	1.47	2.89		1	700				3	8	18					700	2.13		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	8.62	6.33	5.01	3.42	2.48	1.71	1.09	3.02		1	700				3	8	18					700	8.12		1
Grand	M-57	09-01	41122	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS41122-8-23-1994	3	26	9.12	6.79	5.06	3.67	2.88	1.83	1.13	2.17		1	700				3	8	18					700	3.19		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.04	10.27	7.74	5.16	3.69	2.04	0.81	5.96		1	700				3	8	18					700	2.08		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.24	9.37	6.45	4.05	2.72	1.43	0.63	4.85		1	700				3	8	18					700	2.00		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.48	10.73	8.03	5.50	3.96	2.31	0.96	5.57		1	700				3	8	18					700	2.17		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.33	10.05	7.37	5.11	3.84	2.39	1.11	5.44		1	700				3	8	18					700	2.23		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	13.44	9.10	6.43	4.27	3.17	1.94	0.94	4.66		1	700				3	8	18					700	2.16		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.69	9.42	6.53	4.39	3.31	2.06	0.99	5.38		1	700				3	8	18					700	2.63		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.36	9.60	6.84	4.65	3.56	2.26	1.12	4.63		1	700				3	8	18					700	2.25		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.28	9.70	6.89	4.76	3.62	2.31	1.17	4.21		1	700				3	8	18					700	2.01		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	15.38	10.53	7.54	5.25	3.96	2.48	1.14	6.25		1	700				3	8	18					700	2.87		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.39	9.94	7.21	5.08	3.88	2.47	1.18	5.42		1	700				3	8	18					700	2.42		1
Grand	M-57	09-01	29021	33803	SP1	CA - AG	NG - Dense	Summer	5/23/1995	flex-G-M57-CS29021-5-23-1995	3	26	14.45	9.90	7.21	5.02	3.77	2.30	1.05	6.25		1	700				3	8	18					700	2.35		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.83	7.85	6.22	4.52	3.52	2.46	1.66	3.15		1	700				3	8	18					700	7.23		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.49	7.48	6.06	4.46	3.39	2.27	1.45	2.02		1	700				3	8	18					700	2.56		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	8.11	6.71	5.46	3.95	3.06	2.05	1.33	2.82		1	700				3	8	18					700	8.92		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994	3	26	9.31	7.62	6.18	4.45	3.40	2.23	1.39	2.23		1	700				3	8	18					700	3.76		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.58	7.65	6.06	4.41	3.43	2.39	1.62	3.18		1	700				3	8	18					700	7.21		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	7.88	6.51	5.30	3.83	2.97	1.99	1.29	2.81		1	700				3	8	18					700	5.21		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(2)	3	26	9.17	7.51	6.09	4.38	3.35	2.20	1.37	2.21		1	700				3	8	18					700	3.66		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	8.50	6.21	4.76	3.24	2.43	1.57	1.03	2.09		1	700				3	8	18					700	4.63		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(3)	3	26	8.89	6.74	5.23	3.61	2.68	1.72	1.11	2.07		1	700				3	8	18					700	6.98		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	8.19	5.98	4.58	3.12	2.34	1.52	0.99	3.08		1	700				3	8	18					700	4.31		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	8.05	6.08	4.71	3.41	2.63	1.86	1.22	2.28		1	700				3	8	18					700	4.56		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	8.64	6.55	5.08	3.51	2.61	1.67	1.08	3.16		1	700				3	8	18					700	7.21		1
Grand	M-57	09-01	59021	24638	SP1	CA - AG	NG - Dense	Summer	8/23/1994	flex-G-M57-CS59021-08-23-1994-(4)	3	26	7.67	5.57	4.39	2.99	2.10	1.40	0.85	2.26		1	700				3	8	18					700	1.01		1
Superior	US-2	03-01	NA	NA	SP-SM	NA	NA	Summer	5/22/2008	flex-Su-US2-CS75021-05-22-2008	5.5	24.5	6.13	5.34	4.99	4.44	3.93	3.02	1.71	2.31		1	300				5.5	12	18					300	5.67		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	10.51	7.43	5.98	4.54	3.56	2.36	1.35	2.20		1	200				3.5	6.5	12					200	2.22		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	8.95	6.10	5.15	3.96	3.13	2.16	1.28	2.95		1	200				3.5	6.5	12					200	2.92		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS1052-06-03-2008	3.5	26.5	9.04	5.97	4.84	3.74	3.02	2.12	1.26	2.32		1	200				3.5	6.5	12					200	2.25		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	11.54	4.01	3.67	3.22	2.78	2.04	1.17	8.04		1	300				5.5	9.5	15					300	9.91		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/4/2008	flex-N-US23-CS71073-06-04-2008-(2)	5.5	24.5	12.59	6.09	5.65	5.00	4.37	3.30	1.89	6.97		1	300				5.5	9.5	15					300	5.12		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	7.57	6.56	6.08	5.73	5.30	4.56	3.06	2.65		1	150				5.5	8	18					150	5.97		1
North	US-23	04-02	NA	NA	SC-SM	NA	NA	Summer	6/3/2008	flex-N-US23-CS4032-06-03-2008	5	25	5.30	4.22	3.83	3.41	2.90	2.09	1.02	3.72		1	150				5.5	8	18					150	9.60		1
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	8.60	5.10	4.17	3.07	2.18	1.04	0.24	6.91		1	150				7.5	8	14.5					150	2.28		1
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	8.99	5.17	4.30	3.18	2.33	1.21	0.45	5.27		1	150				7.5	8	14.5					150	3.69		1
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	9.45	5.73	4.92	3.89	3.08	1.97	0.97	3.54		1	150				7.5	8	14.5					150	2.97		1
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	2.85	2.11	2.04	1.90	1.70	1.36	0.81	4.92		1	150				7.5	8	14.5					150	46.64		1
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	2.98	1.94	1.84	1.73	1.55	1.29	0.84	3.81		1	150				7.5	8	14.5					150	16.12		1
Superior	I-75	03-05	NA	NA	SC	NA	NA	Summer	5/22/2008	flex-Su-I75-CS49025-05-22-2008	7.5	22.5	2.50	1.79	1.71	1.63	1.49	1.21	0.69	6.33		1	150				7.5	8	14.5					150	26.70		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	20.12	13.60	9.59	6.18	4.53	2.81	1.47	2.20		1	700				5.5	6.5	18					700	2.20		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	15.04	10.62	7.91	5.38	3.92	2.32	1.03	4.25		1	700				5.5	6.5	18					700	2.47		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	20.09	14.67	10.95	6.86	5.08	3.16	1.78	3.11		1	700				5.5	6.5	18					700	2.29		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	16.65	11.92	8.61	5.50	3.93	2.25	1.11	2.42		1	700				5.5	6.5	18					700	2.31		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	14.32	9.86	6.91	4.29	2.91	1.61	0.77	2.55		1	700				5.5	6.5	18					700	2.35		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994	5.5	25	12.76	8.86	6.37	4.21	3.06	1.84	0.92	2.34		1	700				5.5	6.5	18					700	2.01		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	12.34	8.69	6.15	3.82	2.73	1.62	0.90	2.51		1	700				5.5	6.5	18					700	2.07		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	16.74	11.49	8.26	5.52	4.01	2.46	1.24	3.51		1	700				5.5	6.5	18					700	2.00		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.97	12.82	9.09	6.02	4.43	2.81	1.45	3.31		1	700				5.5	6.5	18					700	2.21		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	15.80	10.58	7.38	4.94	3.71	2.39	1.28	2.99		1	700				5.5	6.5	18					700	2.17		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	14.27	9.82	7.00	4.61	3.43	2.13	1.07	3.85		1	700				5.5	6.5	18					700	2.53		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	13.44	8.32	5.65	3.50	2.52	1.62	1.06	4.08		1	700				5.5	6.5	18					700	2.27		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.51	12.10	8.51	5.45	3.88	2.40	1.20	3.75		1	700				5.5	6.5	18					700	2.39		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	26.09	18.04	12.87	7.89	5.29	2.69	1.16	4.57		1	700				5.5	6.5	18					700	2.45		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	21.71	15.16	10.89	7.03	4.92	2.77	1.29	4.10		1	700				5.5	6.5	18					700	2.26		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.22	12.62	9.09	6.08	4.38	2.50	1.06	6.23		1	700				5.5	6.5	18					700	2.98		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.22	12.23	8.89	5.83	4.08	2.25	0.93	5.62		1	700				5.5	6.5	18					700	2.85		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	18.00	12.14	7.98	4.76	3.47	2.26	1.24	4.35		1	700				5.5	6.5	18					700	3.29		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(2)	5.5	25	17.62	13.44	10.23	7.13	5.20	3.00	1.26	4.46		1	700				5.5	6.5	18					700	2.37		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	12.95	9.12	6.46	4.01	2.86	1.70	0.94	2.49		1	700				5.5	6.5	18					700	2.05		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	19.46	13.15	9.33	6.18	4.55	2.88	1.49	3.26		1	700				5.5	6.5	18					700	2.17		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	16.30	10.91	7.62	5.09	3.82	2.47	1.32	3.00		1	700				5.5	6.5	18					700	2.17		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	14.71	10.12	7.22	4.75	3.53	2.19	1.10	3.86		1	700				5.5	6.5	18					700	2.55		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	13.85	8.58	5.82	3.61	2.60	1.67	1.09	4.03		1	700				5.5	6.5	18					700	2.23		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.91	12.36	8.69	5.56	3.97	2.45	1.22	3.71		1	700				5.5	6.5	18					700	2.36		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	26.48	18.31	13.06	8.01	5.37	2.73	1.18	4.55		1	700				5.5	6.5	18					700	2.45		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	22.15	15.47	11.11	7.17	5.02	2.82	1.31	4.10		1	700				5.5	6.5	18					700	2.25		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.63	12.91	9.29	6.21	4.48	2.56	1.09	6.25		1	700				5.5	6.5	18					700	3.00		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	17.62	12.51	9.09	5.97	4.17	2.30	0.95	5.62		1	700				5.5	6.5	18					700	2.84		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.43	12.43	8.17	4.87	3.55	2.31	1.27	4.37		1	700				5.5	6.5	18					700	3.30		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(3)	5.5	25	18.09	13.79	10.50	7.32	5.34	3.08	1.29	4.50		1	700				5.5	6.5	18					700	2.39		1

Location					Material Types			FWD File Information			Pavement Layer Thickness (in)		Deflection (in mills) at the Specified Distance (in inch) from the Center of the Loaded Area							2-Layer Backcalculation				2-Layer Resilient Modulus (psi)			3-Layer System									
					Roadbed	Granular Layer														RMS Error (%)	Converged?		Depth to Stiff Layer (in)				Layer Thicknesses (in)			Resilient modulus (psi)				Depth to Stiff layer (in)	Convergence		
Region	Road	Cluster-Area	Control Section	Project Number	Soil Type	Aggregate Type	Gradation	Season	Date	File Title	Asphalt concrete	Base/ Subbase	0	8	12	18	24	36	60		Yes	No		Asphalt Concrete	Base/ Subbase	Roadbed	Asphalt Concrete	Base	Subbase	Asphalt Concrete	Base	Subbase	Roadbed		RMS Error (%)	Yes	No
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.32	13.06	9.22	5.93	4.35	2.70	1.41	2.20		1	700				5.5	6.5	18					700	2.20		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	14.23	10.05	7.48	5.09	3.71	2.20	0.98	4.25		1	700				5.5	6.5	18					700	2.46		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	19.35	14.13	10.55	6.61	4.89	3.04	1.71	3.13		1	700				5.5	6.5	18					700	2.28		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	16.14	11.55	8.34	5.33	3.80	2.18	1.07	2.44		1	700				5.5	6.5	18					700	2.33		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	13.83	9.53	6.67	4.15	2.81	1.55	0.74	2.65		1	700				5.5	6.5	18					700	2.41		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	8/30/1994	flex-B-M57-CS29022-08-30-1994-(4)	5.5	25	12.25	8.51	6.12	4.04	2.94	1.77	0.88	2.46		1	700				5.5	6.5	18					700	2.10		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.95	9.12	6.46	4.01	2.86	1.70	0.94	2.78		1	700				5.5	6.5	18					700	2.05		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	19.46	13.15	9.33	6.18	4.55	2.88	1.49	2.27		1	700				5.5	6.5	18					700	2.17		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.30	10.91	7.62	5.09	3.82	2.47	1.32	2.20		1	700				5.5	6.5	18					700	2.17		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	14.71	10.12	7.22	4.75	3.53	2.19	1.10	2.83		1	700				5.5	6.5	18					700	2.55		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	13.85	8.58	5.82	3.61	2.60	1.67	1.09	5.31		1	700				5.5	6.5	18					700	2.23		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.91	12.36	8.69	5.56	3.97	2.45	1.22	2.52		1	700				5.5	6.5	18					700	2.36		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	26.48	18.31	13.06	8.01	5.37	2.73	1.18	3.26		1	700				5.5	6.5	18					700	2.45		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	22.15	15.47	11.11	7.17	5.02	2.82	1.31	2.93		1	700				5.5	6.5	18					700	2.25		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.63	12.91	9.29	6.21	4.48	2.56	1.09	5.16		1	700				5.5	6.5	18					700	3.00		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	17.62	12.51	9.09	5.97	4.17	2.30	0.95	4.58		1	700				5.5	6.5	18					700	2.84		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.43	12.43	8.17	4.87	3.55	2.31	1.27	4.66		1	700				5.5	6.5	18					700	3.30		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	18.09	13.79	10.50	7.32	5.34	3.08	1.29	3.85		1	700				5.5	6.5	18					700	2.39		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	28.69	16.90	11.84	7.63	5.55	3.33	1.42	6.76		1	700				5.5	6.5	18					700	4.03		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.12	13.60	9.59	6.18	4.53	2.81	1.47	2.20		1	700				5.5	6.5	18					700	2.20		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	15.04	10.62	7.91	5.38	3.92	2.32	1.03	4.18		1	700				5.5	6.5	18					700	2.47		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	20.09	14.67	10.95	6.86	5.08	3.16	1.78	3.10		1	700				5.5	6.5	18					700	2.29		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	16.65	11.92	8.61	5.50	3.93	2.25	1.11	2.38		1	700				5.5	6.5	18					700	2.31		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	14.32	9.86	6.91	4.29	2.91	1.61	0.77	2.45		1	700				5.5	6.5	18					700	2.35		1
Bay	M-57	09-08	29022	20544	SC	CA - AG	NG - Dense	Summer	1/28/1993	flex-B-M57-CS29022-01-28-1993	5.5	26	12.76	8.86	6.37	4.21	3.06	1.84	0.92	2.31		1	700				5.5	6.5	18					700	2.01		1
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.13	9.30	7.95	6.13	4.66	2.56	1.13	2.06		1	250				6	9	15					250	2.12		1
University	M-52	10-10	NA	NA	SC	NA	NA	Summer	11/13/2002	flex-U-M52-CS33051-11-13-2002	6	24	11.22	10.43	7.23	5.44	4.16	2.40	1.10	5.38		1	250				6	9	15					250	5.27		1
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	13.73	11.96	10.56	8.54	6.77	4.08	1.94	2.66		1	300														
Metro	M-53	14-08	NA	NA	CL	NA	NA	Spring	4/9/2009	flex-M-M53-CS50015-04-09-2009	8	24	13.95	12.15	10.61	8.36	6.50	3.63	1.44	2.65		1	300														