

# 5-9035-01-P3

# 4-YEAR PAVEMENT MANAGEMENT PLAN: ANALYSIS REPORT

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TxDOT Project 5-9035-01: Pilot Implementation of a Web-based GIS System to Provide Information for Pavement Maintenance Decision-Making

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# **Table of Contents**

Section 1. Pavement Management Plan Executive Summary	1
Section 2. Analysis Assumptions	7
Section 3. State-Wide Summary	
Section 4. District Summaries	
Abilene District	15
Amarillo District	18
Atlanta District	22
Austin District	25
Beaumont District	28
Brownwood District	31
Bryan District	34
Childress District	38
Corpus Christi District	41
Dallas District	44
El Paso District	47
Fort Worth District	50
Houston District	53
Laredo District	56
Lubbock District	59
Lufkin District	63
Odessa District	66
Paris District.	69
Pharr District	72
San Angelo District	75
San Antonio District	
Tyler District	81
Waco District	84
Wichita Falls District	87
Yoakum District	90

# **List of Tables**

Table 1. Summary of Nine Groups of Deterioration Models	7
Table 2. Maintenance and Rehabilitation Action Unit Costs	
Table 3. Maintenance and Rehabilitation Action Improvements	
Table 4. Pavement Performance Summary for the Entire State and 25 Districts	12
Table 5. Pavement Performance Summary for Abilene District and Counties	
Table 6. Pavement Performance Summary for Amarillo District and Counties	
Table 7. Pavement Performance Summary for Atlanta District and Counties	
Table 8. Pavement Performance Summary for Austin District and Counties	
Table 9. Pavement Performance Summary for Beaumont District and Counties	
Table 10. Pavement Performance Summary for Brownwood District and Counties	32
Table 11. Pavement Performance Summary for Bryan District and Counties	
Table 12. Pavement Performance Summary for Childress District and Counties	
Table 13. Pavement Performance Summary for Corpus Christi District and Counties	
Table 14. Pavement Performance Summary for Dallas District and Counties	
Table 15. Pavement Performance Summary for El Paso District and Counties	48
Table 16. Pavement Performance Summary for Fort Worth District and Counties	51
Table 17. Pavement Performance Summary for Houston District and Counties	54
Table 18. Pavement Performance Summary for Laredo District and Counties	57
Table 19. Pavement Performance Summary for Lubbock District and Counties	60
Table 20. Pavement Performance Summary for Lufkin District and Counties	64
Table 21. Pavement Performance Summary for Odessa District and Counties	67
Table 22. Pavement Performance Summary for Paris District and Counties	70
Table 23. Pavement Performance Summary for Pharr District and Counties	73
Table 24. Pavement Performance Summary for San Angelo District and Counties	
Table 25. Pavement Performance Summary for San Antonio District and Counties	79
Table 26. Pavement Performance Summary for Tyler District and Counties	82
Table 27. Pavement Performance Summary for Waco District and Counties	
Table 28. Pavement Performance Summary for Wichita Falls District and Counties	
Table 29. Pavement Performance Summary for Yoakum District and Counties	

# **List of Figures**

Figure 1. Photos Indicating the Pavement Conditions with the Associated Condition Ratings	2
Figure 2. Funding Requirements for Associated Pavement Condition Goals as Determined by 2030	
Committee	
Figure 3. Climatic Regions in the State of Texas	
Figure 4. State-wide Treatment Plans for FY 2009-2012	
Figure 5. State-Wide Overall Pavement Performance of FY 2002-FY 2013	
Figure 6. Abilene District Treatment Plans for FY 2009-2012	15
Figure 7. Abilene District Overall Pavement Performance of FY 2002-FY 2013	
Figure 8. Amarillo District Treatment Plans for FY 2009-2010.	18
Figure 9. Amarillo District Overall Pavement Performance of FY 2002-FY 2013	21
Figure 10. Atlanta District Treatment Plans for FY 2009-2012	22
Figure 11. Atlanta District Overall Pavement Performance of FY 2002-FY 2013	24
Figure 12. Austin District Treatment Plans for FY 2009-2012	25
Figure 13. Austin District Overall Pavement Performance of FY 2002-FY 2013	27
Figure 14. Beaumont District Treatment Plans for FY 2009-2012.	28
Figure 15. Beaumont District Overall Pavement Performance of FY 2002-FY 2013	
Figure 16. Brownwood District Treatment Plans for FY 2009-2012	31
Figure 17. Brownwood District Overall Pavement Performance of FY 2002-FY 2013	33
Figure 18. Bryan District Treatment Plans for FY 2009-2012	34
Figure 19. Bryan District Overall Pavement Performance of FY 2002-FY 2013	
Figure 20. Childress District Treatment Plans for FY 2009-2012	
Figure 21. Childress District Overall Pavement Performance of FY 2002-FY 2013	
Figure 22. Corpus Christi District Treatment Plans for FY 2009-2012	
Figure 23. Corpus Christi District Overall Pavement Performance of FY 2002-FY 2013	
Figure 24. Dallas District Treatment Plans for FY 2009-2012	44
Figure 25. Dallas District Overall Pavement Performance of FY 2002-FY 2013	46
Figure 26. El Paso District Treatment Plans for FY 2009-2012	47
Figure 27. El Paso District Overall Pavement Performance of FY 2002-FY 2013	49
Figure 28. Fort Worth District Treatment Plans for FY 2009-2012	50
Figure 29. Fort Worth District Overall Pavement Performance of FY 2002-FY 2013	
Figure 30. Houston District Treatment Plans for FY 2009-2012	
Figure 31. Houston District Overall Pavement Performance of FY 2002-FY 2013	
Figure 32. Laredo District Treatment Plans for FY 2009-2012.	
Figure 33. Laredo District Overall Pavement Performance of FY 2002-FY 2013	
Figure 34. Lubbock District Treatment Plans for FY 2009-2012	
Figure 35. Lubbock District Overall Pavement Performance of FY 2002-FY 2013	
Figure 36. Lufkin District Treatment Plans for FY 2009-2012	
Figure 37. Lufkin District Overall Pavement Performance of FY 2002-FY 2013	
Figure 38. Odessa District Treatment Plans for FY 2009-2012	
Figure 39. Odessa District Overall Pavement Performance of FY 2002-FY 2013	68
Figure 40. Paris District Treatment Plans for FY 2009-2012	69
Figure 41. Paris District Overall Pavement Performance of FY 2002-FY 2013	71
Figure 42. Pharr District Treatment Plans for FY 2010-2012	72
Figure 43. Pharr District Overall Pavement Performance of FY 2002-FY 2013.	/4
Figure 44. San Angelo District Treatment Plans for FY 2009-2012	75
Figure 45. San Angelo District Overall Pavement Performance of FY 2002-FY 2013	/7
Figure 46. San Antonio District Treatment Plans for FY 2009-2012	
Figure 47. San Antonio District Overall Pavement Performance of FY 2002-FY 2013	
Figure 48. Tyler District Treatment Plans for FY 2009-2012	81

Figure 49. Tyler District Overall Pavement Performance of FY 2002-FY 2013	83
Figure 50. Waco District Treatment Plans for FY 2009-2012	
Figure 51. Waco District Overall Pavement Performance of FY 2002-FY 2013	86
Figure 52. Wichita Falls District Treatment Plans for FY 2009-2012	87
Figure 53. Wichita Falls District Overall Pavement Performance of FY 2002-FY 2013	89
Figure 54. Yoakum District Treatment Plans for FY 2009-2012	90
Figure 55. Yoakum District Overall Pavement Performance of FY 2002-FY 2013	92

# **Section 1. Pavement Management Plan Executive Summary**

Rider 55 of TxDOT's appropriations bill requires that prior to the beginning of each fiscal year, the department provide the Legislative Budget Board and the Governor with a detailed plan for the use of these funds that includes, but is not limited to a district by district analysis of pavement score targets and how proposed maintenance spending will impact pavement scores in each district.

The 2009-2012 Pavement Management Plan, which was completed last year, provided TxDOT with a mechanism to be able to predict pavement conditions based on a specified funding level and project specific plan. The resulting report consisted of the summary of the number of lane miles that each district planned to treat as Preventive Maintenance (PM), Light, Medium or Heavy Rehabilitation and the impact that those treatments would have on the pavement conditions. This year, the plan has been updated to extend to FY2013 and a similar report generated.

#### **Definitions**

Maintenance is composed of Routine + Preventive + Rehabilitation + Bridges Routine Maintenance includes but is not limited to:

- Emergency response,
- Sealing cracks,
- Signs,
- Striping,
- Edge maintenance,
- Ditch cleaning,
- Operating ITS,
- Traffic signals,
- Patching,
- Pothole repair,
- Level up,
- Litter and debris removal,
- Mowing

# Preventive Maintenance includes:

- Seal coats (chip seals)
- Thin Overlays
- Micro-surfacing

#### Rehabilitation includes:

- Thick structural overlays,
- Rebuilding the pavement structure
- Adding shoulders and passing lanes

Note: Every \$1 spent on Preventive Maintenance saves \$6 of Rehabilitation over the life of the pavement.

# **Pavement Condition Ratings**

All pavements are rated on an annual basis with visual observations as well as mechanical measurements. The types of distresses considered are cracking, rutting, failures, etc. The ride quality is measure utilizing a Profiler. The Pavement Condition Score is then a measure of distress and ride quality. The Texas Transportation Commission has set a goal for 90% of our pavements to be rated "Good or Better" (Score>70) by 2012. Figure 1 below shows samples of the ratings.

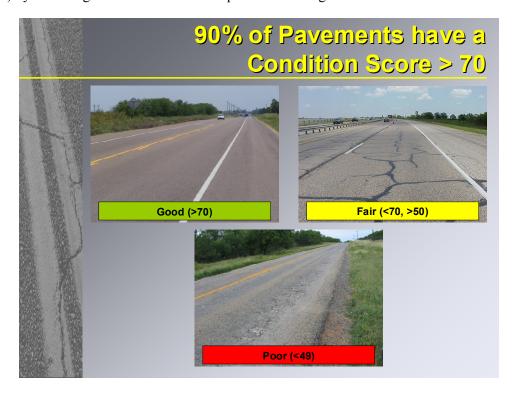


Figure 1. Photos Indicating the Pavement Conditions with the Associated Condition Ratings

# **Funding relationship**

The 2030 Committee identified the required level of funding associated with the Performance Measure of Pavement Condition. Figure 2 shows the necessary annual investment needed for maintaining certain Pavement Condition.

Pavement and Bridge Condition % Good or Better	Total Annual Maintenance Needs	Annual Pavement Needs (PM and Rehabilitation) 2030 Rep.	Annual Routine Maintenance Needs	Annual Bridge Needs (PM, Rehabilitation and Replacement)	2010 GAP
90%	\$ 5.8 B	\$ 3.7 B	\$ 1.2 B	\$ 0.9 B	<\$ 3.5 B>
87%	\$ 5.5 B	\$ 3.5 B	\$ 1.2 B	\$ 0.8 B	<\$ 3.2 B>
80%	\$ 4.9 B	\$ 3.1 B	\$ 1.2 B	\$ 0.6 B	<\$ 2.6 B>

Figure 2. Funding Requirements for Associated Pavement Condition Goals as determined by the 2030 Committee

# Challenges

#### **Pavement Condition Trends**

- Pavement conditions have continued to decrease across the state, especially in urban districts. The
  following observations are based on the 2009 Condition of Texas Pavements report published by
  the Construction Division, Materials and Pavements Section:
  - ✓ Since FY 2005, the % Good or Better average of the entire highway system has steadily decreased.
  - ✓ Asphalt concrete pavements got worse in all categories, with the largest drops being in distress and deep distress.
  - ✓ In FY 2009, only 85.94% of roadways were rated in "good or better condition," down from 86.27 in FY 2008 and down from the highest value of 87.34% in FY 2005.
  - ✓ The FY 2009 Pavement conditions are the lowest they have been since FY 2003.

# **Funding Limitations**

- Non pavement related tasks continually re-direct resources away from pavement maintenance.
  - ✓ In FY 2008, approximately 26% of our statewide maintenance budget was spent on salaries and other miscellaneous expenditures.
  - ✓ In FY 2008, only 16% of our statewide maintenance budget was spent on roadway materials.
  - ✓ Over the past 4 years, an average of \$ 460 million per year (60% of total statewide maintenance budget) has been spent on non pavement items.
  - ✓ Over the past 4 years, Metro districts have spent an average of 69 % of their total budget on non-pavement related items.

# **Summary of 2009-2012 Plan and Projections**

#### Plan

Each district developed their 4 year expenditure projections based on anticipated budgets. There are certain expenses that are fixed and are part of doing business such as overhead and operational expenses. The roadside expenditures continue to be evaluated in order to find the balance with expectations. Traffic operational expenses are also pretty well established in order to maintain existing systems (ITS, signals, illumination, etc.). The pavement expenditures include both in house and routine maintenance contracts. These pavement expenditures do not include construction expenditures in which approximately \$700 M were expected to be available in 2009 for rehabilitation and preventive maintenance projects.

# **Statewide Expenditure Projections**

FY	Budget	ОН & О	H & Opers.		et.	Roadside		Traffic Opers.		Pvmt.	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
2009	844 M	116 M	14	19 M	2	201 M	24	227 M	27	281 M	33
2010	899 M	123 M	14	18 M	2	208 M	23	238 M	28	309 M	34
2011	942 M	129 M	14	19 M	2	216 M	23	248 M	28	316 M	34
2012	942 M	132 M	14	20 M	2	222 M	24	256 M	27	321 M	34
Avg.			14		2		23		27		34

#### **Metros**

- Expenditure projections indicate approximately 75% of maintenance resources expended on non pavement items.
- Pavement condition scores are the lowest as expected.

#### Statewide

- Projected annual growth in maintenance budget at 5.7%. This was an optimistic projection.
- Overall, we can only predict spending an average of 34% of our maintenance budget on pavement work.
- Even with an aggressive approach of targeting pavement work with our Cat 1 and Maintenance budget, we still hover at 60% of total combined construction and maintenance dollars directed towards pavements.

#### **Pavement Condition Projections**

- Center for Transportation Research (CTR) developed a document that summarizes all the assumptions and is included in the report.
- CTR developed a model that predicts deterioration of pavements based on several factors such as climatic region, historical deterioration, and highway type.
- The 4 year plan indicated that the following number of lanes miles would be treated with PM or Rehab:
  - > FY 2009 15,913 lane miles = 8.6% of system
  - > FY 2010 14,987 lane miles = 8.1% of system

- > FY 2011 16,204 lane miles = 8.8% of system
- > FY 2012 18,655 lane miles = 10.1% of system
- The 4 year projections indicated that the Percent of Good or Better Pavement Conditions would be as follows:
  - > FY 2009 84.78%
  - > FY 2010 83.47%
  - ➤ FY 2011 82.01%
  - ➤ FY 2012 80.37%

## 2010-2013 Pavement Management Plan

#### Goals

- Develop a comprehensive and uniform pavement management plan that is roadway specific to the greatest extent possible, and is fiscally constrained
- Generate Pavement Condition Projections based on a financially constrained plan that can be reported in compliance with Rider 55 of the 2010-11 Appropriations.
- Assure maintenance resources are directed towards pavement operations and roadway related work.
- Provide a reporting mechanism for District Engineers, Administration, and Commission to utilize in briefing elected officials.
- Allow districts and regions to appropriately allocate resources through long term planning in order to accomplish the plan.

#### Plan

Each district developed their 4 year expenditure projections based on anticipated budgets. There are certain expenses that are fixed and are part of doing business such as overhead and operational expenses. The roadside expenditures continue to be evaluated in order to find the balance with expectations. Traffic operational expenses are also pretty well established in order to maintain existing systems (ITS, signals, illumination, etc.). The pavement expenditures include both in house and routine maintenance contracts. These pavement expenditures do not include construction expenditures in which approximately \$932 M was expected to be available in 2010 for rehabilitation and preventive maintenance projects from Fund 6, ARRA and Proposition 14.

#### **Statewide Expenditure Projections**

FY	Budget	OH & Opers.		Struct.		Roadside		Traffic Opers.		Pvmt.	
	\$	\$	%	\$	%	\$	%	\$	%	\$	%
2010	858 M	124 M	14	23 M	2.7	184 M	21	202 M	24	325 M	38.3
2011	883 M	128 M	14	21 M	2.4	187 M	21	208 M	24	339 M	38.6
2012	885 M	130 M	15	21 M	2.4	189 M	21	209 M	24	336 M	37.6
2013	886 M	132 M	15	21 M	2.4	191 M	22	212 M	24	330 M	36.6
Avg.			14.5		2.5		21.3		24		37.7

#### Statewide

- Projected annual growth in maintenance budget at 0 %.
- Overall, we can only project spending an average of 36 % of our maintenance budget on pavement work.
- Even with an aggressive approach of targeting pavement work with our Cat 1 and Maintenance budget, we still hover at 65 % of total combined construction and maintenance dollars directed towards pavements.

# **Pavement Condition Projections**

- CTR developed a document that summarizes all their assumptions and is included in the report.
- CTR developed a model that predicts deterioration of pavements based on several factors such as climatic region, historical deterioration, and highway type.
- The 4 year plan indicated that the following number of lanes miles would be treated with PM or Rehab:
  - Arr FY 2010 15,661 lane miles = 8.4 % of system
  - > FY 2011 15,405 lane miles = 8.2 % of system
  - > FY 2012 14,053 lane miles = 7.5 % of system
  - > FY 2013 12,898 lane miles = 6.9 % of system
- The 4 year projections indicated that the Percent of Good or Better Pavement Conditions would be as follows:
  - > FY 2009 (Actual) 85.94%
  - > FY 2010 84.94 %
  - > FY 2011 83.77 %
  - > FY 2012 81.89 %
  - > FY 2013 79.05 %

# **Section 2. Analysis Assumptions**

Key assumptions used in the analysis and prediction of the pavement conditions under the 4-year pavement management plans provided by TxDOT are discussed as follows.

#### **Pavement Network**

The pavement network with which the analysis was conducted consists of the existing pavements under TxDOT's jurisdiction and is stored in the existing PMIS database. The most current version of the PMIS database was used in the analysis, based on the 2009 PMIS data collection.

#### **Base Year Network Condition**

The base year of the analysis was 2009. The condition of the entire state's pavement network was initially determined based on the individual scores of the pavement sections in the PMIS database. The Condition Score of these sections was used as the performance measurement index to calculate the "Good" or Better Pavement Scores.

#### **Deterioration Models**

Before planning for the Maintenance and Rehabilitation (M&R) actions for the road network, the deterioration process of the pavements was studied in order to understand when their condition would reach a critical level that would trigger intervention. In this study, a statistical analysis was carried out to analyze the deterioration rate distribution for the different pavement structure types and highway functional classifications. As a result, nine broad groups of deterioration models were defined as presented in Table 1.

Table 1. Summary of Nine Groups of Deterioration Models

	,		of Bettinitution 1110t				
		Pavement Type					
Highway Functional Class		Florible	Rigid				
		Flexible	CRCP	JCP			
Interstate Highways	IH	Group 1	Group 4	Group 7			
US Highways	US	Group 1	Group 4	Group 7			
State Highways	SH	Group 2	Group 5	Group 8			
Farm-to-Market	FM	Group 3	Group 6	Group 9			

These nine groups were found to have distinctive deterioration rates; and therefore a different set of models were developed for each group.

It is also known that the daily temperature range and the precipitation play an important role in the pavement deterioration process. As a result, instead of developing pavement condition models for every district in Texas, these models were developed instead for the four climatic regions of Texas, as shown in Figure 1. For each climatic region, separate pavement condition models pertaining to the Distress Score and the Ride score were developed.

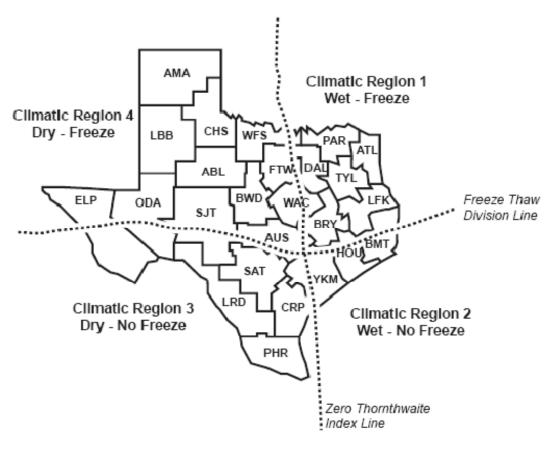


Figure 3. Climatic Regions in the State of Texas

#### **Next Year Network Condition**

The condition of the network for each subsequent year was based on the condition of the previous year with the addition of the effect of the natural deterioration and the M&R work planned for the previous year. Once these new values in terms of the Ride Score and their Distress Score were determined then they were combined together to calculate the new Condition Score of each section. The new Condition Scores of each sections were then averaged together weighted by their respective lane-miles to get the new state-wide Condition Score.

# **Maintenance and Rehabilitation Costs**

Finally, the implementation of each treatment action corresponded to a specific cost for the agency, based on the unit cost of the action by lane-mile treated and the lane-miles of the treated section(s). The unit costs of each action were set to the values shown in Table 2, and were different for flexible and for rigid pavements. These values are consistent with the 2030 analysis. The treatment costs used in the 2030 Pavement Needs Estimate and the analysis undertaken in this study are based on Project delivery costs that include estimated costs for mobilization, traffic control, materials, labor, and ancillary items necessary to actually complete the pavement project. These costs generally differ from PMIS treatment costs, which primarily include the cost for pavement materials (i.e., Hot mix, Portland Cement Concrete, etc.). In addition, the treatment costs used in this analysis are based on constant FY 2008 dollars.

**Table 2. Maintenance and Rehabilitation Action Unit Costs** 

M&R Action	Unit Cost (per mile per lane) for Flexible Pavements	Unit Cost (per mile per lane) for Rigid Pavements		
Needs Nothing	\$0	\$0		
Preventive Maintenance	\$7,000	\$10,000		
Light Rehabilitation	\$40,000	\$60,000		
Medium Rehabilitation	\$55,000	\$125,000		
Heavy Rehabilitation	\$170,000	\$400,000		

# **Maintenance and Rehabilitation Improvements**

Each M&R action was assumed to have a specific effect on the section it was applied to, in terms of the section's Ride Score and Distress Score. The correspondence between the various M&R actions and their respective effect on the pavement sections are shown in Table 3.

Table 3. Maintenance and Rehabilitation Action Improvements

M&R Action	Ride Score Improvement	Distress Score Improvement		
Needs Nothing	0	0		
Preventive Maintenance	0.5	95		
Light Rehabilitation	1.5	100		
Medium Rehabilitation	Reset to 4.8	Reset to 100		
Heavy Rehabilitation	Reset to 4.8	Reset to 100		

# **Section 3. State-Wide Summary**

## I. Summary of FY 2009-FY 2012 Treatments

Total State Center line miles = 80,000 Total State Lane miles = 187,179

FY 2009 Plan total treatments = **15,685.9 lane miles** = 8.4% of system lane miles FY 2010 Plan total treatments = **15,404.8 lane miles** = 8.2% of system lane miles FY 2011 Plan total treatments = **14,069.2 lane miles** = 7.5% of system lane miles FY 2012 Plan total treatments = **14,204.1 lane miles** = 7.6% of system lane miles

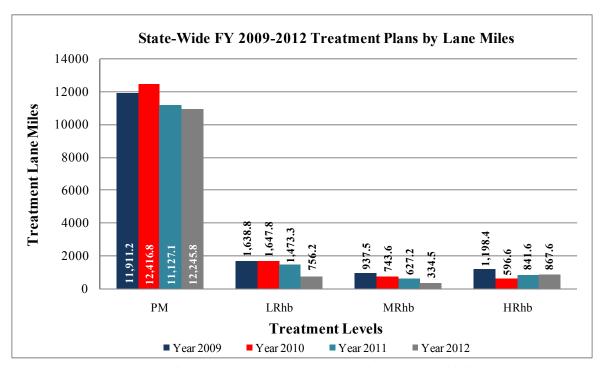


Figure 4. State-wide Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011, and FY 2012 are 1,198.4, 596.6, 841.6, and 867.6 lane
  miles respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011, and FY 2012 are 937.5, 743.6, 627.2, and 334.5 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011, and FY 2012 are 1,638.8, 1,647.8, 1,473.3, and 756.2 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011, and FY 2012 are 11,911.2, 12,416.8, 11,127.1, and 12,245.8 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 14,487.50 lane miles or approximately 7.7% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 16,006.60 lane miles or approximately 8.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 13,824.20 lane miles or approximately 7.4% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 14,178.10 lane miles or approximately 7.6% of the total system.

# II. Summary of FY 2009–FY 2013 Percentage of "Good" or Better Pavements and Condition Score for Entire State

Table 4. Pavement Performance Summary for the Entire State and 25 Districts

			Base Yo	ear 2009	Analysis Years				
			Measured	Predicted	2010	2011	2012	2013	
Overall State  Achieved Goal (%)  Achieved Average CS		85.94	84.78	84.95	83.76	81.92	79.22		
		Achieved Average CS	90	88	88	86	83	81	
	Abilene	Achieved Goal (%)	89.31	89.98	88.74	86.98	85.58	82.47	
	Abhene	Achieved Average CS	92	91	90	87	85	82	
	Amarillo	Achieved Goal (%)	87.41	86.09	87.91	88.43	87.62	84.89	
	Amarmo	Achieved Average CS	90	88	89	88	86	84	
	Atlanta	Achieved Goal (%)	94.25	92.48	92.55	91.23	90.21	86.56	
7.4	Atlanta	Achieved Average CS	95	92	93	90	88	85	
еха	Austin	Achieved Goal (%)	83.95	80.71	81.41	78.44	75.8	71.26	
Districts in State of Texas		Achieved Average CS	88	85	86	83	80	77	
tate	Beaumont	Achieved Goal (%)	86.98	85.07	86.79	86.38	85.69	84.57	
in S		Achieved Average CS	90	88	89	87	85	83	
icts	Duarranaad	Achieved Goal (%)	91.17	92.71	92.39	93.6	93.33	92.47	
)istr	Brownwood	Achieved Average CS	93	93	92	91	89	87	
I	Damas	Achieved Goal (%)	87.57	83.87	85.27	83.5	81.81	77.52	
	Bryan	Achieved Average CS	90	86	88	86	83	81	
	Childress	Achieved Goal (%)	91.48	92.00	90.87	91.25	90.15	88.01	
	Childress	Achieved Average CS	94	93	92	90	88	85	
	Commercial distriction	Achieved Goal (%)	83.58	80.65	83.48	82.87	82.62	80.24	
	Corpus Christi	Achieved Average CS	88	85	87	85	84	82	

		Base Yo	ear 2009		Analys	is Years	
		Measured	Predicted	2010	2011	2012	2013
Dallas	Achieved Goal (%)	75.27	67.37	69.9	66.3	61.72	55.61
Dallas	Achieved Average CS	81	76	77	74	71	67
El Doss	Achieved Goal (%)	87.35	85.15	86.25	83.52	82.14	80.52
El Paso	Achieved Average CS	90	87	88	85	84	82
E4 W4l	Achieved Goal (%)	81.44	79.05	80.23	78.55	74.63	78.34
Fort Worth	Achieved Average CS	87	84	84	82	79	81
11 4	Achieved Goal (%)	75.80	75.92	71.93	67.74	62.46	57.41
Houston	Achieved Average CS	84	82	80	77	72	69
	Achieved Goal (%)	85.37	82.87	83.30	81.36	78.01	73.27
Laredo	Achieved Average CS	89	86	86	84	81	78
	Achieved Goal (%)	86.40	89.10	86.33	86.47	86.87	84.45
Lubbock	Achieved Average CS	91	91	89	87	86	84
T (0)	Achieved Goal (%)	87.87	85.75	85.45	84.49	82.48	81.75
Lufkin	Achieved Average CS	91	88	88	86	84	82
Odessa	Achieved Goal (%)	93.33	93.19	92.75	93.69	92.57	90.38
	Achieved Average CS	95	92	93	91	89	86
ъ.	Achieved Goal (%)	74.92	68.90	72.65	72.18	72.19	70.39
Paris	Achieved Average CS	83	79	81	80	79	77
DI.	Achieved Goal (%)	80.38	80.84	79.98	82.1	82.58	81.16
Pharr	Achieved Average CS	88	86	86	85	83	82
G A 1	Achieved Goal (%)	94.58	94.63	94.91	94.43	92.21	89.31
San Angelo	Achieved Average CS	95	94	94	91	88	86
g	Achieved Goal (%)	83.03	85.64	81.42	79.98	77.47	72.41
San Antonio	Achieved Average CS	88	88	85	83	80	76
TD 1	Achieved Goal (%)	92.28	83.44	89.83	86.29	81.96	76.8
Tyler	Achieved Average CS	92	86	90	87	84	80
***	Achieved Goal (%)	86.72	88.53	83.26	81.37	79.63	75.52
Waco	Achieved Average CS	89	89	87	85	83	79
**** 1 ** ** **	Achieved Goal (%)	92.98	92.46	91.97	89.98	88.12	88.81
Wichita Falls	Achieved Average CS	93	92	91	89	86	86
<b>3</b> 7 2	Achieved Goal (%)	86.08	83.12	84.08	82.93	80.23	76.5
Yoakum	Achieved Average CS	90	87	87	85	83	80

# III. Summary of FY 2002–FY 2013 Percentage of "Good" or Better Pavements for Entire State

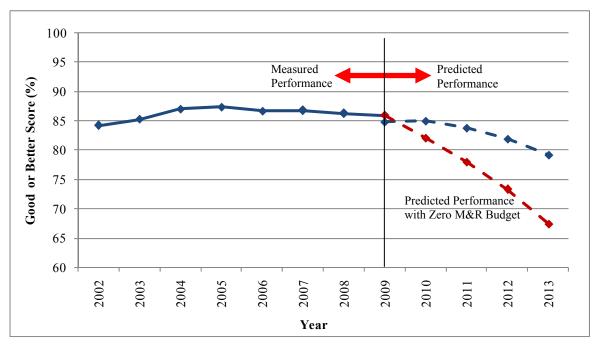


Figure 5. State-Wide Overall Pavement Performance of FY 2002-FY 2013

# **Section 4. District Summaries**

# **Abilene District**

# I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,744
Total Lane miles = 8,265

FY 2009 Plan total treatments = 566.8 lane miles = 6.9% of system lane miles
FY 2010 Plan total treatments = 530.0 lane miles = 6.4% of system lane miles
FY 2011 Plan total treatments = 479.9 lane miles = 5.8% of system lane miles
```

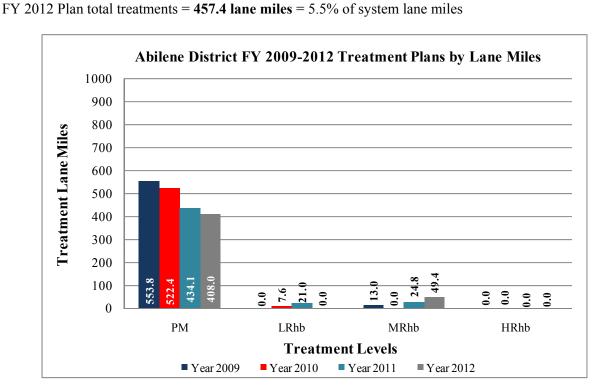


Figure 6. Abilene District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. There were no HRhb treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 13.0, 0.0, 24.8 and 49.4 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 7.6, 21.0, and 0.0 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 553.8, 522.4, 434.1 and 408.0 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 566.8 lane miles or approximately 6.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 530.0 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 530.0 lane miles or approximately 6.4% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 479.9 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 479.9 lane miles or approximately 5.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 457.4 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2011 = 457.4 lane miles or approximately 5.5% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

**Table 5. Pavement Performance Summary for Abilene District and Counties** 

			Base Year		Analysis Years				
			2009	2010	2011	2012	2013		
A 1.	'l D'	Achieved Goal (%)	89.31	88.74	86.98	85.58	82.47		
Abilene District		Achieved Average CS	92	90	87	85	82		
	Borden	Achieved Goal (%)	96.33	94.53	92.78	2012 85.58 85 88.71 88 79 82 96.06 91 88.27 86 84.86 84 83.59 83 89.53 87 92.89 89	87.37		
	boruen	Achieved Average CS	96	94	90		85		
	Callahan	Achieved Goal (%)	85.3	85.16	81.82	88.71     87       88     8       79     76       82     8       96.06     92       91     8       88.27     85       86     8       84.86     81       84     8	76.89		
	Cananan	Achieved Average CS	89	88	85	82	80		
	Fisher	Achieved Goal (%)	96.09	96.82	97.58	2012 85.58 85 88.71 88 79 82 96.06 91 88.27 86 84.86 84 83.59 83 89.53 87 92.89 89	92.73		
rict	risher	Achieved Average CS	97	95	93		87		
Dist	Haskell	Achieved Goal (%)	90.72	91.94	89.73	88.27	85.68		
ene	паѕкен	Achieved Average CS	93	92	89	91 88.27 86 84.86	84		
Abil	Howard	Achieved Goal (%)	88.23	88.21	85.64	2012         2013           85.58         82.47           85         82           88.71         87.37           88         85           79         76.89           82         80           96.06         92.73           91         87           88.27         85.68           86         84           84.86         81.46           84         81           83.59         79.29           83         81           89.53         86.21           87         84           92.89         91.12           89         86	81.46		
Counties in Abilene District	пожаги	Achieved Average CS	91	89	86		81		
ıntie	Jones	Achieved Goal (%)	88.09	89.13	86.88	2012 85.58 85 88.71 88 79 82 96.06 91 88.27 86 84.86 84 83.59 83 89.53 87 92.89 89	79.29		
Con	Jones	Achieved Average CS	92	90	87	83	81		
	Kent	Achieved Goal (%)	95.32	93.53	92.3	2012 85.58 85 88.71 88 79 82 96.06 91 88.27 86 84.86 84 83.59 83 89.53 87 92.89 89	86.21		
	Kent	Achieved Average CS	96	93	90		84		
	Mitchell	Achieved Goal (%)	88.54	84.71	86.31	92.89	91.12		
	Mittenen	Achieved Average CS	92	90	88	89	86		
	Nolan	Achieved Goal (%)	90.18	90.18	87.07	83.57	77.74		

				Analysis Years			
		2009	2010	2011	2012	2013	
	Achieved Average CS	92	90	87	83	79	
Carren	Achieved Goal (%)	91.78	90.53	90.56	90.11	86.2	
Scurry	Achieved Average CS	94	91	89	<b>2012 2013</b> 83 79	84	
Shackelford	Achieved Goal (%)	85.62	89.22	85.05	82.14	84.65	
Shackehoru	Achieved Average CS	89	88	86	83	82	
C4amanuall	Achieved Goal (%)	94.06	96.51	98.78	98.16	94.49	
Stonewall	Achieved Average CS	96	95	95	2012 2 83 90.11 8 87 82.14 84 83 98.16 94 92 74.99 7	89	
Toylor	Achieved Goal (%)	83.96	80.13	76.69	74.99	71.57	
Taylor	Achieved Average CS	89	85	82	80	77	

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Stonewall (94.49%) while the worst was Taylor (71.57%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

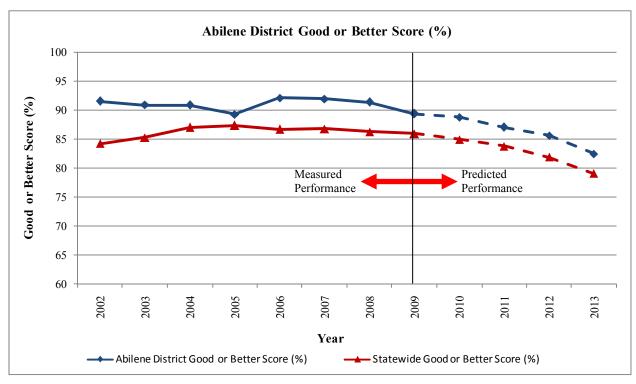


Figure 7. Abilene District Overall Pavement Performance of FY 2002-FY 2013

For FY 2002 to FY 2009 the solid line data points are based on measured values from TxDOT's PMIS. The dashed line data points from FY 2009 until FY 2013 are projected values from the analysis conducted by CTR.

# **Amarillo District**

# I. Summary of FY 2009–FY 2012 Treatments

```
Total Center line miles = 4,092
Total Lane miles = 9,274
```

FY 2009 Plan total treatments = **704.0 lane miles** = 7.6% of system lane miles FY 2010 Plan total treatments = **870.5 lane miles** = 9.4% of system lane miles FY 2011 Plan total treatments = **944.9 lane miles** = 10.2% of system lane miles FY 2012 Plan total treatments = **755.6 lane miles** = 8.1% of system lane miles

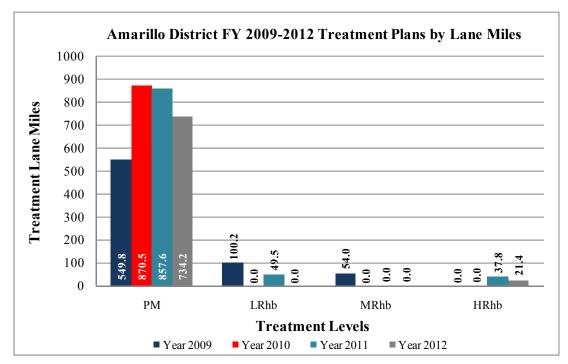


Figure 8. Amarillo District Treatment Plans for FY 2009-2010

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 0.0, 37.8 and 21.4 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 54.0, 0.0, 0.0 and 0.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 100.2 0.0, 49.5 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 549.8, 870.5, 857.6 and 734.2 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 704.0 lane miles or approximately 7.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 870.5 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 870.5 lane miles or approximately 9.4% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 907.1 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 907.1 lane miles or approximately 9.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 734.2 lane miles + 37.8 lane miles of Heavy Rehab treatments from FY 2011 = 772.0 lane miles or approximately 8.3% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 6. Pavement Performance Summary for Amarillo District and Counties

			Base Year		Analysis Years			
				2010	2011	2012	2013	
A 222	arillo District	Achieved Goal (%)	87.41	87.91	88.43	87.62	84.89	
AIII	iarino District	Achieved Average CS	90	89	88	86	84	
	Armstrong	Achieved Goal (%)	79.3	91.85	92.99	95.41	93.28	
	Armstrong	Achieved Average CS	87	92	91	90	87	
	Carson	Achieved Goal (%)	83.28	78.8	84.11	2012     2013       87.62     84.89       86     84       95.41     93.28	85.32	
	Carson	Achieved Average CS	87	84	86		83	
	Dallam	Achieved Goal (%)	88.69	87.92	89.9	2012         2013           87.62         84.89           86         84           95.41         93.29           90         87           84.59         85.33           85         83           87.88         85.33           85         83           87.44         85.29           85         84           81.55         76.96           83         80           97.23         94.63           91         89           93.24         90.13           88         86           85.1         84.42           85         83           82.21         78.11           83         80	85.35	
	Danam	Achieved Average CS	91	89	88		83	
trict	Deaf Smith	Achieved Goal (%)	90.51	89.16	88.26	87.44	85.29	
Counties in Amarillo District	Dear Sillitii	Achieved Average CS	92	90	88	87.44 8 85 81.55 7	84	
rillo	Gray	Achieved Goal (%)	88.45	86.55	83.84	81.55	76.96	
√ma	Gray	Achieved Average CS	90	88	86	81.55 83	80	
in A	Hansford	Achieved Goal (%)	96.55	98.22	97.54	97.23	94.65	
nties	nansioru	Achieved Average CS	96	95	93	2012 87.62 86 95.41 90 84.59 85 87.88 85 87.44 85 81.55 83 97.23 91 93.24 88 85.1 85 82.21	89	
Cou	Hartley	Achieved Goal (%)	85.01	94.94	95.5	86     84       95.41     93.28       90     87       84.59     85.32       85     83       87.88     85.35       85     83       87.44     85.29       85     84       81.55     76.96       83     80       97.23     94.65       91     89       93.24     90.18       88     86       85.1     84.42       85     83       82.21     78.17       83     80	90.18	
	пагиеу	Achieved Average CS	88	93	91	88	86	
	Hammhill	Achieved Goal (%)	86.31	85.36	86.83	85.1	84.42	
	Hemphill	Achieved Average CS	88	87	86	2012         2013           87.62         84.89           86         84           95.41         93.28           90         87           84.59         85.32           85         83           87.88         85.35           85         83           87.44         85.29           85         84           81.55         76.96           83         80           97.23         94.65           91         89           93.24         90.18           88         86           85.1         84.42           85         83           82.21         78.17           83         80	83	
	II4 ab a	Achieved Goal (%)	87.83	82.98	85.45	82.21	78.17	
	Hutchinson	Achieved Average CS	88	85	86	83	80	
	Lipscomb	Achieved Goal (%)	81.73	87.37	91.08	91.08	86.45	

		Base Year		Analysis Years				
		2009	2010	2011	2012	2013		
	Achieved Average CS	86	87	88	88	86		
3.4	Achieved Goal (%)	90.39	93.58	95.17	91.94	89.01		
Moore	Achieved Average CS	93	93	91	88	86 89.01 84 80.2 80 89.35 86 76.52 79 81.16 82 92.98 89 92.56		
0.134	Achieved Goal (%)	75.17	81.93	84.58	83.84	86 89.01 84 80.2 80 89.35 86 76.52 79 81.16 82 92.98 89 92.56		
Ochiltree	Achieved Average CS	82	84	85	83	80		
01.11	Achieved Goal (%)	95.51	93.44	91.88	92.03	86 89.01 84 80.2 80 89.35 86 76.52 79 81.16 82 92.98 89		
Oldham	Achieved Average CS	94	92	90	89			
D //	Achieved Goal (%)	84.1	84.37	84.2	81.32	86 2 76.52		
Potter	Achieved Average CS	88	87	86	81.32 76.3 83 79	79		
	Achieved Goal (%)	92.42	90.61	88.39	85.22	2 2013 86 4 89.01 84 4 80.2 80 8 89.35 86 2 76.52 79 2 81.16 82 8 92.98 8 92.56		
Randall	Achieved Average CS	93	91	88	85			
	Achieved Goal (%)	88.47	87.05	90.56	92.48	92.98		
Roberts	Achieved Average CS	93	91	90	89	12         2013           8         86           .94         89.01           8         84           .84         80.2           3         80           .03         89.35           9         86           .32         76.52           3         79           .22         81.16           5         82           .48         92.98           .9         89           .24         92.56		
GI.	Achieved Goal (%)	87.45	86.8	89.91	92.24	92.56		
Sherman	Achieved Average CS	91	89	88	88	88		

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Hansford (94.65%) while the worst was Potter (76.52%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

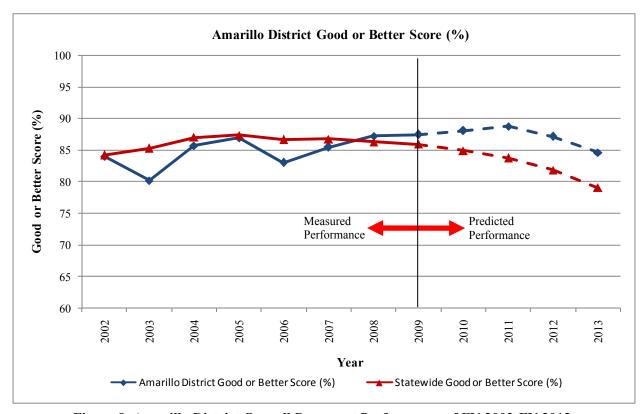


Figure 9. Amarillo District Overall Pavement Performance of FY 2002-FY 2013

For FY 2002 to FY 2009 the solid line data points are based on measured values from TxDOT's PMIS. The dashed line data points from FY 2009 until FY 2013 are projected values from the analysis conducted by CTR.

## **Atlanta District**

# I. Summary of FY 2009–FY 2012 Treatments

```
Total Center line miles = 2,691
Total Lane miles = 6,217
```

FY 2009 Plan total treatments = 412.6 lane miles = 6.6% of system lane miles FY 2010 Plan total treatments = 541.7 lane miles = 8.7% of system lane miles FY 2011 Plan total treatments = 659.4 lane miles = 10.6% of system lane miles FY 2012 Plan total treatments = 503.7 lane miles = 8.1% of system lane miles

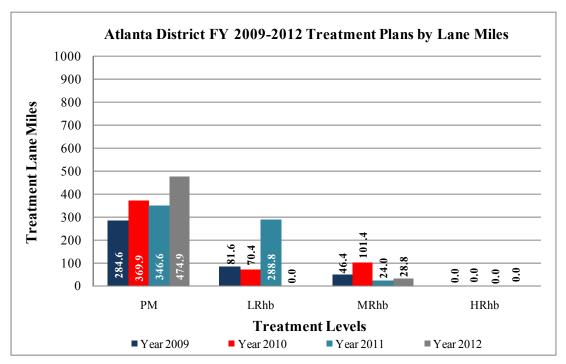


Figure 10. Atlanta District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. There were no HRhb treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 46.4, 101.4, 24.0 and 28.8 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 81.6, 70.4, 288.8 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 284.6, 369.9, 346.6 and 474.9 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 412.6 lane miles or approximately 6.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 541.7 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 541.7 lane miles or approximately 8.7% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 659.4 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 659.4 lane miles or approximately 10.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 503.7 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2011 = 503.7 lane miles or approximately 8.1% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

**Table 7. Pavement Performance Summary for Atlanta District and Counties** 

			Base Year	r Analysis Years			
			2009	2010	2011	2011	2012
A 4	lanta District	Achieved Goal (%)	94.25	92.55	91.23	90.21	86.56
At	lanta District	Achieved Average CS	95	93	90	88	85
	Bowie	Achieved Goal (%)	92.71	89.9	87.43	87.05	83.6
	Dowle	Achieved Average CS	93	91	88	2011         2013           90.21         86.5           88         85           87.05         83.6           86         83           88.42         88.5           89         87           91.84         88.5           89         86           89.6         84.4           87         84           93.95         90.7           90         86           94.8         91.2           90         88           91.59         87.8           90         86           86.08         83.3           86         84           92.34         88.3	83
	Camp	Achieved Goal (%)	94.85	90.59	88.58	2011         201           90.21         86.3           88         85           87.05         83           86         83           88.42         88           89         87           91.84         88.3           89         86           89.6         84           87         82           93.95         90           90         86           91.59         87.8           90         86           86.08         83.3           86         84	88.5
	Сашр	Achieved Average CS	94	91	91	89	87
	Cass	Achieved Goal (%)	97.01	95.43	93.33	2011     2       90.21     8       88     87.05       86     88.42       89     91.84       89     89.6       87     93.95       90     94.8       90     91.59       86.08     8       86     92.34       88	88.55
ıt	Cass	Achieved Average CS	96	95	92		86
istri	Harrison	Achieved Goal (%)	94.42	94.41	93.08	89.6	84.4
Counties in Atlanta District	пагтізоп	Achieved Average CS	94	93	90	89 89.6 87 93.95	84
tlant	Marion	Achieved Goal (%)	96.88	95.1	93.89	93.95	87 84 3.95 90.7
in Ai	Marion	Achieved Average CS	96	94	91	86 88.42 89 91.84 89 89.6 87 93.95 90 94.8 90 91.59 90 86.08	86
ties i	Morris	Achieved Goal (%)	97.83	96.23	96.8	87.05     83.6       86     83       88.42     88.5       89     87       91.84     88.55       89     86       89.6     84.4       87     84       93.95     90.7       90     86       94.8     91.26       90     88       91.59     87.86       90     86       86.08     83.32       86     84       92.34     88.3	91.26
0un	Morris	Achieved Average CS	98	96	94	90	88
$^{\circ}$	Donala	Achieved Goal (%)	95.61	94	93.86	2011         2012           90.21         86.56           88         85           87.05         83.6           86         83           88.42         88.5           89         87           91.84         88.55           89         86           89.6         84.4           87         84           93.95         90.7           90         86           94.8         91.26           90         88           91.59         87.86           90         86           86.08         83.32           86         84           92.34         88.3	87.86
	Panola	Achieved Average CS	96	94	92		86
	T:4ma	Achieved Goal (%)	87.15	85.2	84.78	86.08	83.32
	Titus	Achieved Average CS	91	89	87	86	84
	Unahaa	Achieved Goal (%)	93.65	91.86	90.79	92.34	88.3
	Upshur	Achieved Average CS	95	93	90	90.21 88 87.05 86 88.42 89 91.84 89 89.6 87 93.95 90 94.8 90 91.59 90 86.08 86 92.34	85

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Morris (91.26%) while the worst was Titus (83.32%).

# III. Summary of FY 2002–FY 2013 Percentage of "Good" or Better Pavements

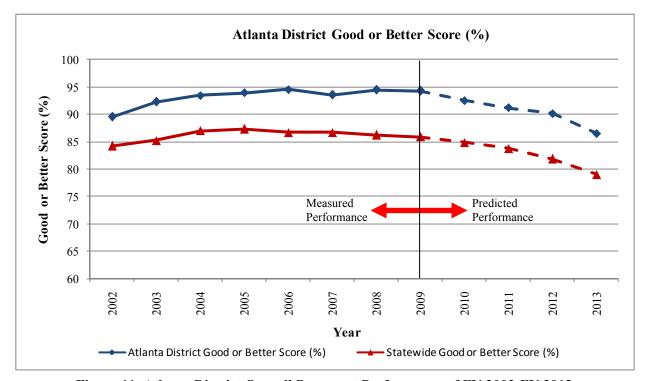


Figure 11. Atlanta District Overall Pavement Performance of FY 2002-FY 2013

For FY 2002 to FY 2009 the solid line data points are based on measured values from TxDOT's PMIS. The dashed line data points from FY 2009 until FY 2013 are projected values from the analysis conducted by CTR.

# **Austin District**

## I. Summary of FY 2009–FY 2012 Treatments

```
Total Center line miles = 3,345
Total Lane miles = 8,766
```

```
FY 2009 Plan total treatments = 431.1 lane miles = 4.9% of system lane miles FY 2010 Plan total treatments = 435.6 lane miles = 5.0% of system lane miles FY 2011 Plan total treatments = 400.6 lane miles = 4.6% of system lane miles FY 2012 Plan total treatments = 154.2 lane miles = 1.8% of system lane miles
```

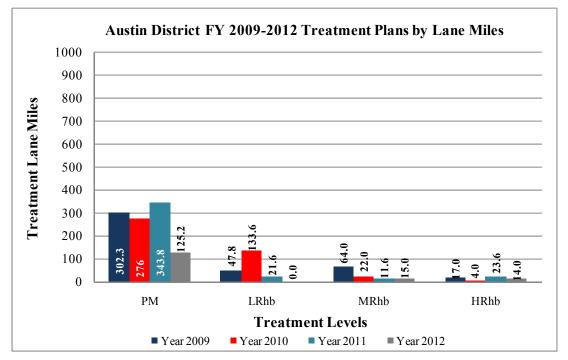


Figure 12. Austin District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 17.0, 4.0, 23.6 and 14.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 64.0, 22.0, 11.6 and 15.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 47.8, 133.6, 21.6 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 302.3, 276.0, 343.8 and 125.2 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 414.1 lane miles or approximately 4.7% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 431.6 lane miles + 17.0 lane miles of Heavy Rehab treatments from FY 2009 = 448.6 lane miles or approximately 5.1% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 377.0 lane miles + 4.0 lane miles of Heavy Rehab treatments from FY 2010 = 381.0 lane miles or approximately 9.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 140.2 lane miles + 23.6 lane miles of Heavy Rehab treatments from FY 2011 = 163.8 lane miles or approximately 1.9% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

**Table 8. Pavement Performance Summary for Austin District and Counties** 

			Base Year	Analysis Years			
			2009	2010	2011	2012	2013
Α.	ustin District	Achieved Goal (%)	83.95	81.41	78.44	75.8	71.26
A	usum District	Achieved Average CS	88	86	83	80	77
	Bastrop	Achieved Goal (%)	82.4	79.98	79.1	78.17	72.75
	Баѕиор	Achieved Average CS	87	85	84	82	79
	Blanco	Achieved Goal (%)	90.35	85.14	82.27	2012     75.8       75.8     7       80     78.17       82     77.92       81     83.08       84     69.65       6     76       77.02     6       82     75.54       80     80.19       83     77.84       81     81.88       84     84	71.71
	Dianco	Achieved Average CS	91	88	85		78
	Burnet	Achieved Goal (%)	88.71	87.25	87.35	2012 75.8 80 78.17 82 77.92 81 83.08 84 69.65 76 77.02 82 75.54 80 80.19 83 77.84 81 81.88	75.45
	Burnet	Achieved Average CS	90	89	87		80
ict	Caldwell	Achieved Goal (%)	73.08	75.63	70.78	69.65	66.11
Jistr	Caldwell	Achieved Average CS	83	82	79	82 77.92 81 83.08 84 69.65 76 77.02 82 75.54 80 80.19 83	73
tin I	C'II '	Achieved Goal (%)	89.9	86.87	80.23	77.02	69.95
Counties in Austin District	Gillespie	Achieved Average CS	91	88	85	77.02 82	78
s in	11	Achieved Goal (%)	84.38	81.17	77.96	75.54	72.26
ıntie	Hays	Achieved Average CS	89	86	83	2012 75.8 80 78.17 82 77.92 81 83.08 84 69.65 76 77.02 82 75.54 80 80.19 83 77.84 81 81.88 84	77
Coı	T	Achieved Goal (%)	78.82	79.56	79.8	75.8         71.26           80         77           78.17         72.75           82         79           77.92         71.71           81         78           83.08         75.45           84         80           69.65         66.11           76         73           77.02         69.95           82         78           75.54         72.26           80         77           80.19         76.14           83         79           77.84         74.9           81         77           81.88         76.77           84         80	76.14
	Lee	Achieved Average CS	86	85	84	83	79
	Llows	Achieved Goal (%)	87.87	85.44	80.67	77.84	74.9
	Llano	Achieved Average CS	89	87	83	2012       75.8       80       78.17       82       77.92       81       83.08       84       69.65       76       77.02       82       75.54       80       80.19       83       77.84       81       81.88       84	77
	Manage	Achieved Goal (%)	90.39	87.28	85.74	81.88	76.77
	Mason	Achieved Average CS	92	90	87	84	80
	Travis	Achieved Goal (%)	85.72	83.35	80.74	77.92	73.62

			Base Year	Analysis Years			
			2009	2010	2011	2012	2013
		Achieved Average CS	89	87	84	81	78
	Williamson	Achieved Goal (%)	77.92	73.17	68.89	65.96	63.23
		Achieved Average CS	84	80	77	74	72

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Mason (76.77%) while the worst was Williamson (63.23%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

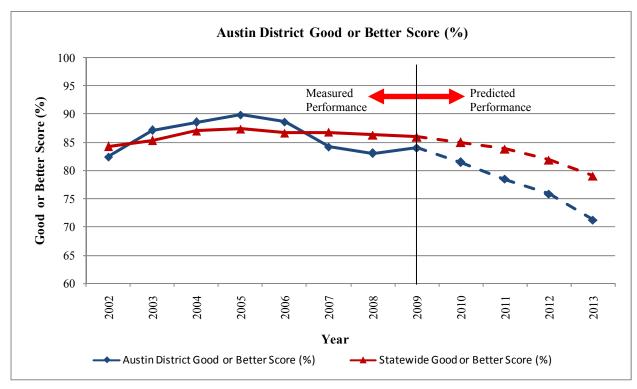


Figure 13. Austin District Overall Pavement Performance of FY 2002-FY 2013

For FY 2002 to FY 2009 the solid line data points are based on measured values from TxDOT's PMIS. The dashed line data points from FY 2009 until FY 2013 are projected values from the analysis conducted by CTR.

# **Beaumont District**

# I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 2,374
Total Lane miles = 5,370
```

```
FY 2009 Plan total treatments = 694.6 lane miles = 12.9\% of system lane miles FY 2010 Plan total treatments = 691.6 lane miles = 12.9\% of system lane miles FY 2011 Plan total treatments = 618.1 lane miles = 11.5\% of system lane miles FY 2012 Plan total treatments = 644.1 lane miles = 12.0\% of system lane miles
```

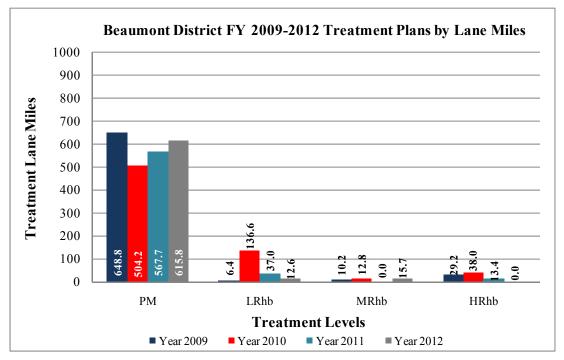


Figure 14. Beaumont District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 29.2, 38.0, 13.4 and 0.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 10.2, 12.8, 0.0 and 15.7 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 6.4, 136.6, 37.0 and 12.6 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 648.8, 504.2, 567.7 and 615.8 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 665.4 lane miles or approximately 12.4% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 653.6 lane miles + 29.2 lane miles of Heavy Rehab treatments from FY 2009 = 682.6 lane miles or approximately 12.7% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 604.7 lane miles + 38.0 lane miles of Heavy Rehab treatments from FY 2010 = 642.7 lane miles or approximately 12.0% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 644.1 lane miles + 13.4 lane miles of Heavy Rehab treatments from FY 2011 = 657.5 lane miles or approximately 12.2% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 9. Pavement Performance Summary for Beaumont District and Counties

		ient Feriormance S	Base Year	or Dead		is Years	ounties
			2009	2010	2011	2012	2013
Ъ	Achieved Goal (%)		86.98	86.79	86.38	85.69	84.57
Веа	umont District	Achieved Average CS	90	89	87	85	83
	Ch and an	Achieved Goal (%)	90.87	91.23	89.67	87.85	86.48
	Chambers	Achieved Average CS	92	91	89	87	84
	II 1	Achieved Goal (%)	93.79	93.27	93.64	91.01	89.25
	Hardin	Achieved Average CS	95	93	92	89	86
ict	Jasper	Achieved Goal (%)	91.99	93.94	93.2	90.92	87.05
Counties in Beaumont District		Achieved Average CS	93	93	91	88	84
ont I	I - CC	Achieved Goal (%)	73.74	71.69	70.34	74.51	75.25
mn	Jefferson	Achieved Average CS	81	79	77	77	78
Bea	T 11	Achieved Goal (%)	90.61	87.55	89.44	89.69	87.89
es in	Liberty	Achieved Average CS	92	90	89	88	85
untik	NT 4	Achieved Goal (%)	97.2	96.82	96.63	93.18	93.22
Col	Newton	Achieved Average CS	97	95	93	90	89
	0	Achieved Goal (%)	76.51	78.76	80.34	79.48	80.42
	Orange	Achieved Average CS	84	83	83	81	82
	Tulou	Achieved Goal (%)	91.43	93.25	90.41	87.09	84.4
	Tyler	Achieved Average CS	93	92	89	86	83

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Newton (93.22%) while the worst was Jefferson (75.25%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

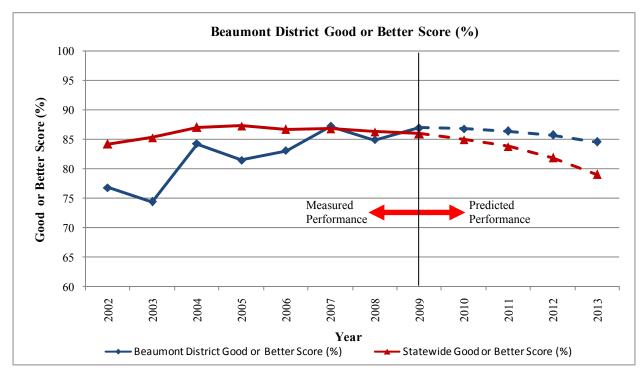


Figure 15. Beaumont District Overall Pavement Performance of FY 2002-FY 2013

#### **Brownwood District**

### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 2,678
Total Lane miles = 5,741
```

```
FY 2009 Plan total treatments = 962.8 lane miles = 16.8% of system lane miles FY 2010 Plan total treatments = 958.2 lane miles = 16.7% of system lane miles FY 2011 Plan total treatments = 777.3 lane miles = 13.5% of system lane miles FY 2012 Plan total treatments = 657.8 lane miles = 11.5% of system lane miles
```

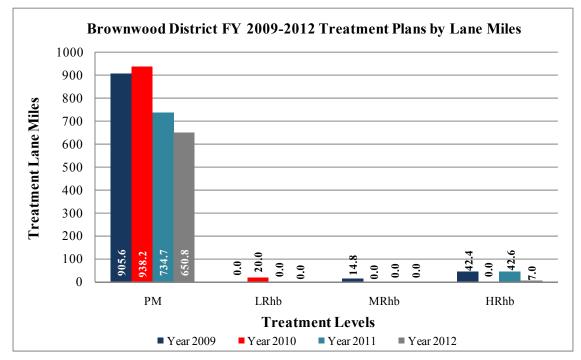


Figure 16. Brownwood District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 42.2, 0.0, 42.6 and 7.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 14.8, 0.0, 0.0 and 0.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0 20.0, 0.0 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 905.6 and 938.2, 734.7 and 650.8 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 920.4 lane miles or approximately 16.0% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 958.2 lane miles + 42.4 lane miles of Heavy Rehab treatments from FY 2009 = 1000.6 lane miles or approximately 17.4% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 734.7 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 734.7 lane miles or approximately 12.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 650.8 lane miles + 42.6 lane miles of Heavy Rehab treatments from FY 2011 = 693.4 lane miles or approximately 12.1% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 10. Pavement Performance Summary for Brownwood District and Counties

			Base Year		Analysi	is Years	
		_	2008	2010	2011	2012	2013
D	District	Achieved Goal (%)	91.17	92.39	93.6	93.33	92.47
BLOM	nwood District	Achieved Average CS	93	92	91	89	87
	Brown	Achieved Goal (%)	94.38	92.97	92.6	90.87	88.09
		Achieved Average CS	95	93	91	88	86
	Coleman	Achieved Goal (%)	92.24	94.28	94.57	94.17	93.11
	Coleman	Achieved Average CS	93	93	91	89	86
	Comonoho	Achieved Goal (%)	91.28	92.06	96	95.06	93.25
rict	Comanche	Achieved Average CS	94	92	92	89	87
Counties in Brownwood District	Eastland	Achieved Goal (%)	91.84	92.88	93.51	91.38	91.21
poo.		Achieved Average CS	93	92	90	88	87
wnw	Lammagag	Achieved Goal (%)	95.04	93.92	93.59	92.8	90.53
Bro	Lampasas	Achieved Average CS	95	93	91	89	87
s in	McCulloch	Achieved Goal (%)	93.96	94.15	93.73	96.42	96.85
ıntie	McCunocn	Achieved Average CS	94	93	91	91	89
Cou	Mills	Achieved Goal (%)	95.75	94.8	97.7	97.24	98.1
	IVIIIIS	Achieved Average CS	95	94	94	92	90
	San Saba	Achieved Goal (%)	86.51	87.02	87.67	89.65	92.33
	San Sada	Achieved Average CS	89	89	88	88	88
	C4 am h am s	Achieved Goal (%)	77.71	87.64	91.96	93.54	91.32
	Stephens	Achieved Average CS	85	90	90	89	86

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Mills (98.10%) while the worst was Brown (88.09%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

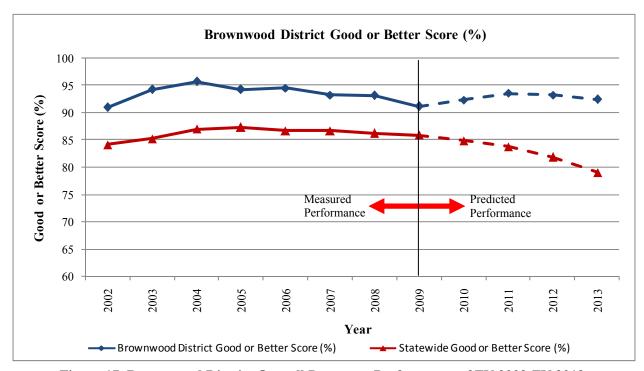


Figure 17. Brownwood District Overall Pavement Performance of FY 2002-FY 2013

# **Bryan District**

## I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,127
Total Lane miles = 6,833
```

```
FY 2009 Plan total treatments = 816.3 lane miles = 11.9\% of system lane miles FY 2010 Plan total treatments = 627.0 lane miles = 9.2\% of system lane miles FY 2011 Plan total treatments = 580.8 lane miles = 8.5\% of system lane miles FY 2012 Plan total treatments = 532.2 lane miles = 7.8\% of system lane miles
```

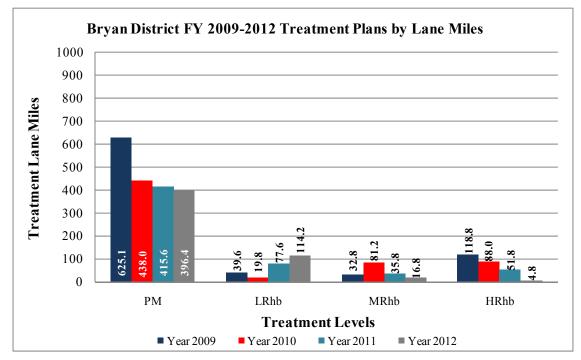


Figure 18. Bryan District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 118.8, 88.0, 51.8 and 4.8 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 32.8, 81.2, 35.8 and 16.8 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 39.6, 19.8, 77.6 and 114.2 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 625.1, 438.0, 415.6 and 396.4 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 697.5 lane miles or approximately 10.2% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 539.0 lane miles + 118.8 lane miles of Heavy Rehab treatments from FY 2009 = 657.8 lane miles or approximately 9.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 529.0 lane miles + 88.0 lane miles of Heavy Rehab treatments from FY 2010 = 617.0 lane miles or approximately 9.0% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 527.4 lane miles + 51.8 lane miles of Heavy Rehab treatments from FY 2011 = 579.2 lane miles or approximately 8.5% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 11. Pavement Performance Summary for Bryan District and Counties

	14010 110 1 40	ement Performance	Base Year	<u> </u>		is Years	
			2009	2010	2011	2012	2013
D	Achieved Goal (%)		87.57	85.27	83.5	81.81	77.52
B	Bryan District Achieved Average CS		90	88	86	83	81
	Brazos	Achieved Goal (%)	83.33	82.19	80	75.38	68.45
		Achieved Average CS	88	87	83	79	75
	Dl	Achieved Goal (%)	88.87	84.55	79.46	79.49	71.75
	Burleson	Achieved Average CS	90	87	84	82	78
	E	Achieved Goal (%)	82.47	79.21	80.12	80.85	77.22
	Freestone	Achieved Average CS	87	85	84	84	81
<sub>t</sub>	Cwimas	Achieved Goal (%)	85.16	81.58	80.75	77.5	77.8
tric	Grimes	Achieved Average CS	89	86	85	82	82
n Dis	Leon	Achieved Goal (%)	88.68	86.93	82.45	84.4	79.97
ryaı		Achieved Average CS	90	89	85	85	82
in B	Madina	Achieved Goal (%)	85.19	82.66	81.16	78.66	73.41
Counties in Bryan District	Madison	Achieved Average CS	88	86	85	82	78
	Milan	Achieved Goal (%)	89.33	87.4	87.93	83.31	78.5
	Milam	Achieved Average CS	91	89	89	85	81
	D.1. 4	Achieved Goal (%)	87.11	86.28	87.37	85.69	83.12
	Robertson	Achieved Average CS	91	89	88	86	83
	XX/-11	Achieved Goal (%)	94.5	91.97	88.29	87.39	83.32
	Walker	Achieved Average CS	93	91	88	85	83
	<b>13</b> 7 <b>1.</b> * 4	Achieved Goal (%)	91.91	90.05	87.61	85.21	81.79
	Washington	Achieved Average CS	93	91	87	84	82

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Walker (83.32%) while the worst was Brazos (68.45%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

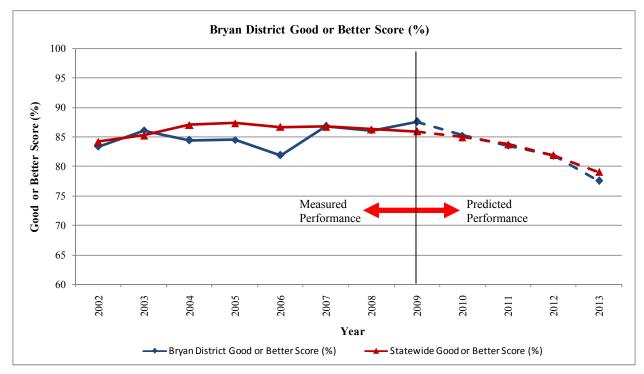


Figure 19. Bryan District Overall Pavement Performance of FY 2002-FY 2013

#### **Childress District**

#### I. Summary of FY 2009–FY 2012 Treatments

```
Total Center line miles = 2,506
Total Lane miles = 5,401
```

FY 2009 Plan total treatments = **417.0 lane miles** = 7.7% of system lane miles FY 2010 Plan total treatments = **337.5 lane miles** = 6.2% of system lane miles FY 2011 Plan total treatments = **308.6 lane miles** = 5.7% of system lane miles FY 2012 Plan total treatments = **382.4 lane miles** = 7.1% of system lane miles

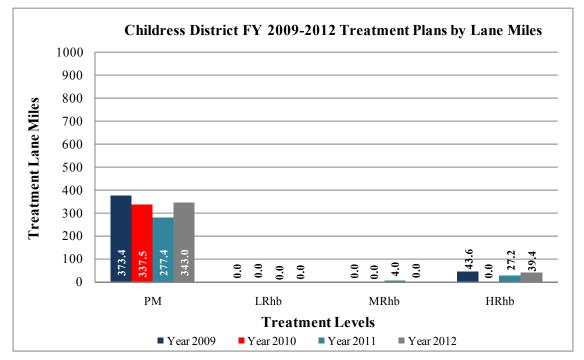


Figure 20. Childress District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 43.6, 0.0, 27.2 and 39.4 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 0.0, 4.0 and 0.0.
- There were no Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 373.4, 337.5, 277.4 and 343.0 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 373.4 lane miles or approximately 6.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 337.5 lane miles + 43.6 lane miles of Heavy Rehab treatments from FY 2009 = 381.1 lane miles or approximately 7.1% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 281.4 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 281.4 lane miles or approximately 5.2% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 343.0 lane miles + 27.2 lane miles of Heavy Rehab treatments from FY 2011 = 370.2 lane miles or approximately 6.9% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 12. Pavement Performance Summary for Childress District and Counties

			Base Year		Analysi	s Years	
		_	2009	2010	2011	2012	2013
Ch	ldress District	Achieved Goal (%)	91.48	90.87	91.25	90.15	88.01
CIII	iuress District	Achieved Average CS	94	92	90	88	85
	ъ.	Achieved Goal (%)	91.18	90.94	88.18	89.04	85.12
	Briscoe	Achieved Average CS	93	92	89	87	84
	Childress	Achieved Goal (%)	84.77	83.55	92.32	91.1	87.91
	Cinuress	Achieved Average CS	90	88	91	88	85
	Callingawa-4h	Achieved Goal (%)	91.71	89.94	89.1	88.7	86.48
	Collingsworth	Achieved Average CS	94	92	90	87	83
Counties in Childress District	Cottle	Achieved Goal (%)	98.09	96.54	95.15	94.22	90.5
Dis		Achieved Average CS	97	95	92	89	86
lress	Dickens	Achieved Goal (%)	94.43	92.81	91.49	89.66	87.66
hilc		Achieved Average CS	96	93	91	88	86
in (	Dawlan	Achieved Goal (%)	82.77	80.69	88.33	87.08	85.77
ıties	Donley	Achieved Average CS	91	89	89	87	85
Cour	Essud	Achieved Goal (%)	90.47	86.49	82.03	82.3	80.47
	Foard	Achieved Average CS	91	89	86	85	82
	Hall	Achieved Goal (%)	94.77	93.75	94.46	93.18	90.68
	пап	Achieved Average CS	96	94	92	90	87
	Handama -	Achieved Goal (%)	87.04	90.1	91.46	88.92	85.77
	Hardeman	Achieved Average CS	92	91	90	87	84
	King	Achieved Goal (%)	92.99	93.5	91.98	97.46	96.95

	]		Base Year		Analysi	s Years	
_			2009	2010	2011	2012	2013
		Achieved Average CS	93	93	90	92	90
	V	Achieved Goal (%)	94.51	97.23	95.89	95.03	92.18
	Knox	Achieved Average CS	96	95	92	90	88
	Modless	Achieved Goal (%)	96.49	96.25	95.34	94.43	93.1
	Motley	Achieved Average CS	96	95	93	90	87
	***	Achieved Goal (%)	91.98	91	89.09	85.48	85.75
	Wheeler	Achieved Average CS	93	91	88	85	84

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was King (96.95%) while the worst was Foard (80.47%).

### III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

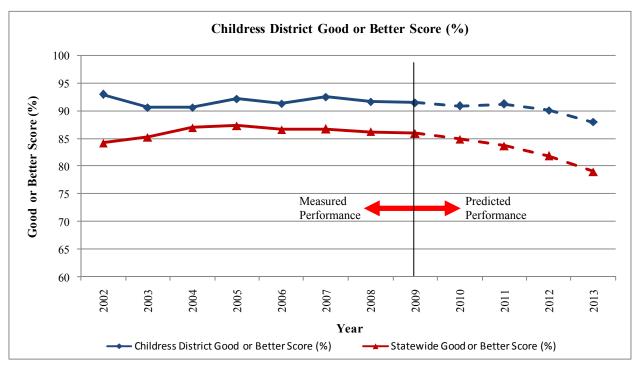


Figure 21. Childress District Overall Pavement Performance of FY 2002-FY 2013

# **Corpus Christi District**

### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 2,886
Total Lane miles = 6,866
```

FY 2009 Plan total treatments = **1033.5 lane miles** = 15.1% of system lane miles FY 2010 Plan total treatments = **963.9 lane miles** = 14.0% of system lane miles FY 2011 Plan total treatments = **958.3 lane miles** = 14.0% of system lane miles FY 2012 Plan total treatments = **660.4 lane miles** = 9.6% of system lane miles

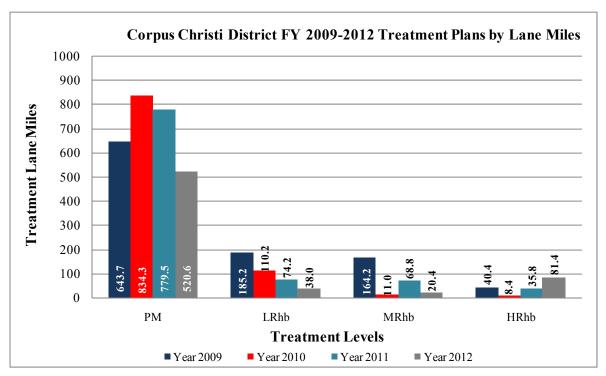


Figure 22. Corpus Christi District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 40.4, 8.4, 35.8 and 81.4 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 164.2, 11.0, 68.8 and 20.4 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 185.2, 110.2, 74.2 and 38.0 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 643.7, 834.3, 779.5 and 520.6 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 993.1 lane miles or approximately 14.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 955.5 lane miles + 40.4 lane miles of Heavy Rehab treatments from FY 2009 = 995.9 lane miles or approximately 14.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 922.5 lane miles + 8.4 lane miles of Heavy Rehab treatments from FY 2010 = 930.9 lane miles or approximately 13.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 579.0 lane miles + 35.8 lane miles of Heavy Rehab treatments from FY 2011 = 614.8 lane miles or approximately 9.0% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 13. Pavement Performance Summary for Corpus Christi District and Counties

			Base Year	-	Analysi	is Years	
		-	2009	2010	2011	2012	2013
Co	Corpus Christi Achieved Goal (%)		83.58	83.48	82.87	82.62	80.24
	District	Achieved Average CS	88	87	85	84	82
	Aransas	Achieved Goal (%)	89.85	84.97	83.72	81.91	84.2
		Achieved Average CS	91	87	85	84	84
	Bee	Achieved Goal (%)	86.39	89.61	89.2	88.15	85.6
	Dee	Achieved Average CS	90	90	88	86	83
rict	Colind	Achieved Goal (%)	82.97	86.32	82.38	82.42	77.68
Dist	Goliad	Achieved Average CS	87	89	86	84	81
isti ]	Jim Wells	Achieved Goal (%)	76.21	76.01	77.46	80.36	82.11
Chr		Achieved Average CS	84	83	83	83	83
Counties in Corpus Christi District	17	Achieved Goal (%)	85.59	83.59	80.07	78.62	73.7
Cor	Karnes	Achieved Average CS	89	87	85	82	79
is in	I/lah aug	Achieved Goal (%)	84.47	85.62	87.44	83.39	79.79
ıntie	Kleberg	Achieved Average CS	88	88	87	84	80
Co	Live Oak	Achieved Goal (%)	84.32	85.87	85.3	83.45	78.8
	Live Oak	Achieved Average CS	88	89	88	85	81
	Nueces	Achieved Goal (%)	85.1	83.29	82.89	82.62	80.45
		Achieved Average CS	89	86	85	84	82
	Refugio	Achieved Goal (%)	91.1	89.75	87.12	88.39	84.4

]		Base Year		Analysis Years				
_		2009	2010	2011	2012	2013		
	Achieved Average CS	90	89	87	87	83		
C D-4	Achieved Goal (%)	77.48	76.93	78.42	79.76	79.68		
San Patricio	Achieved Average CS	85	83	83	83	81		

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Bee (85.60%) while the worst was Karnes (73.7%).

### III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

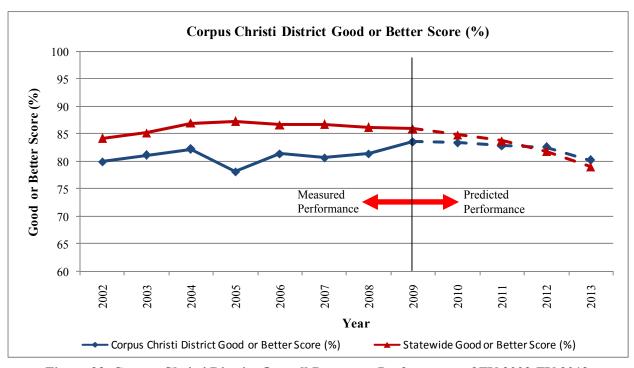


Figure 23. Corpus Christi District Overall Pavement Performance of FY 2002-FY 2013

#### **Dallas District**

#### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,289
Total Lane miles = 10,040
```

```
FY 2009 Plan total treatments = 464.2 lane miles = 4.6\% of system lane miles FY 2010 Plan total treatments = 781.8 lane miles = 7.8\% of system lane miles FY 2011 Plan total treatments = 153.3 lane miles = 1.5\% of system lane miles FY 2012 Plan total treatments = 265.3 lane miles = 2.6\% of system lane miles
```

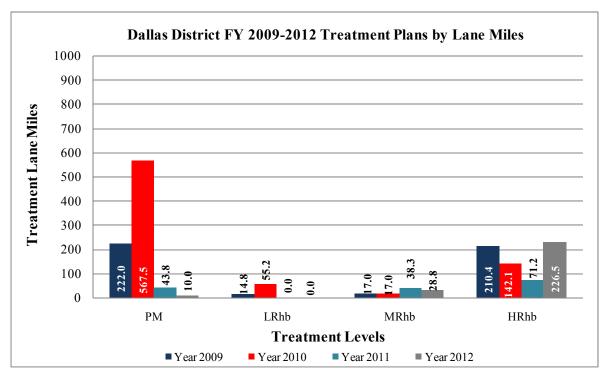


Figure 24. Dallas District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 210.4, 142.1, 71.2 and 226.5 lane miles respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 17.0, 17.0, 38.3 and 28.8 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 14.8, 55.2, 0.0 and 0.0 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 222.0 and 567.5, 43.8 and 10.0 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 253.8 lane miles or approximately 2.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 639.7 lane miles + 210.4 lane miles of Heavy Rehab treatments from FY 2009 = 850.1 lane miles or approximately 8.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 82.1 lane miles + 142.1 lane miles of Heavy Rehab treatments from FY 2010 = 224.2 lane miles or approximately 2.2% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 38.8 lane miles + 71.2 lane miles of Heavy Rehab treatments from FY 2011 = 110.0 lane miles or approximately 1.1% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 14. Pavement Performance Summary for Dallas District and Counties

		cinciit i criorinanec	Base Year	<i>J</i>	Analysi	s Years	
			2009	2010	2011	2012	2013
D.	Achieved Goal (%)		75.27	69.9	66.3	61.72	55.61
D	allas District	Achieved Average CS	81	77	74	71	67
	Collin	Achieved Goal (%)	78.41	73.33	70.59	65.85	59.37
	Collin	Achieved Average CS	83	80	78	75	70
t	Dallas	Achieved Goal (%)	67.98	61.1	55.83	50.81	44.24
stric	Dallas	Achieved Average CS	76	71	67	64	59
s Dis	Denton	Achieved Goal (%)	80.92	75.19	73.16	70.62	65.18
alla		Achieved Average CS	85	81	79	76	72
Counties in Dallas District	T.111*	Achieved Goal (%)	82	77.88	73.51	68.86	63.05
ties	Ellis	Achieved Average CS	86	82	79	75	72
`oun	IZ C	Achieved Goal (%)	69.83	64.68	60.69	55.95	50.73
	Kaufman	Achieved Average CS	78	74	70	67	63
	Nama	Achieved Goal (%)	86.02	81.79	79.74	74.69	68.06
	Navarro	Achieved Average CS	88	85	83	79	74
	D 1 "	Achieved Goal (%)	57.51	56.78	57.64	51.3	45.45
	Rockwall	Achieved Average CS	71	69	70	66	61

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Navarro (68.06%) while the worst was Dallas (44.24%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

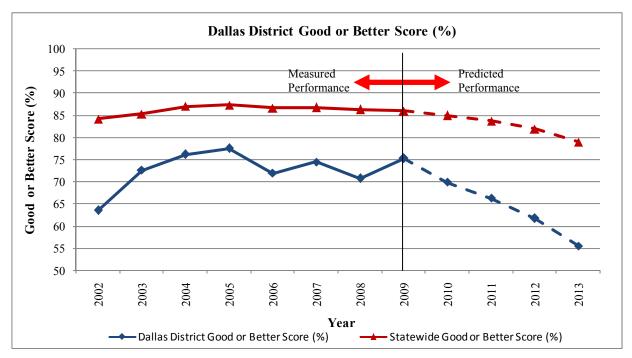


Figure 25. Dallas District Overall Pavement Performance of FY 2002-FY 2013

### El Paso District

## I. Summary of FY 2009-FY 2012 Treatments

Total Center line miles = 1,927Total Lane miles = 4,717

FY 2009 Plan total treatments = **319.1 lane miles** = 6.8% of system lane miles FY 2010 Plan total treatments = **79.2 lane miles** = 1.7% of system lane miles FY 2011 Plan total treatments = **323.9 lane miles** = 6.9% of system lane miles FY 2012 Plan total treatments = **350.2 lane miles** = 7.4% of system lane miles

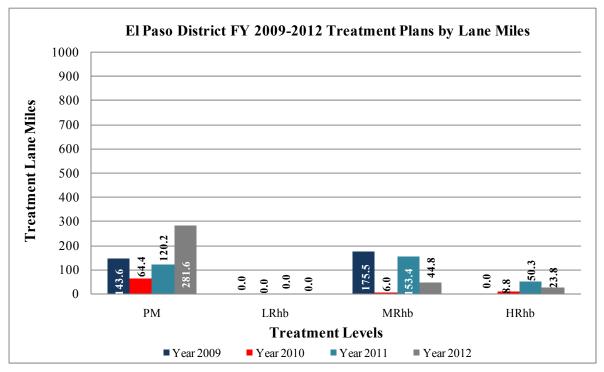


Figure 26. El Paso District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 8.8, 50.3 and 23.8 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 175.5, 6.0, 153.4 and 44.8 lane miles respectively.
- There were no Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 143.6, 64.4, 120.2 and 281.6 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 319.1 lane miles or approximately 6.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 70.4 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 70.4 lane miles or approximately 1.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 273.6 lane miles + 8.8 lane miles of Heavy Rehab treatments from FY 2010 = 282.4 lane miles or approximately 6.0% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 326.4 lane miles + 50.3 lane miles of Heavy Rehab treatments from FY 2011 = 376.7 lane miles or approximately 8.0% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 15. Pavement Performance Summary for El Paso District and Counties

			Base Year	v	Analysi	s Years	
			2008	2010	2011	2012	2013
161	Paso District	Achieved Goal (%)	87.35	86.25	83.52	82.14	80.52
ועו	raso District	Achieved Average CS	90	88	85	84	82
	D4	Achieved Goal (%)	95.55	93.48	91.76	90.59	85.95
	Brewster	Achieved Average CS	95	93	90	88	85
+	Callana	Achieved Goal (%)	92.46	92.21	89.18	86.49	82.37
stric	Culberson	Achieved Average CS	93	92	88	85	82
Paso District	El Paso	Achieved Goal (%)	78.34	77.91	72.97	72.24	75.51
		Achieved Average CS	84	83	80	79	80
n El	TT 1 41	Achieved Goal (%)	90.42	89.01	89.45	87.85	83.25
Counties in	Hudspeth	Achieved Average CS	93	91	89	86	83
0 nu	I cc D	Achieved Goal (%)	87.94	84.85	82.2	81.23	79.24
C	Jeff Davis	Achieved Average CS	90	88	84	82	82
	Presidio	Achieved Goal (%)	92.01	91.16	89.16	87.35	83.24
		Achieved Average CS	93	91	88	86	83

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Brewster (85.95%) while the worst was El Paso (75.51%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

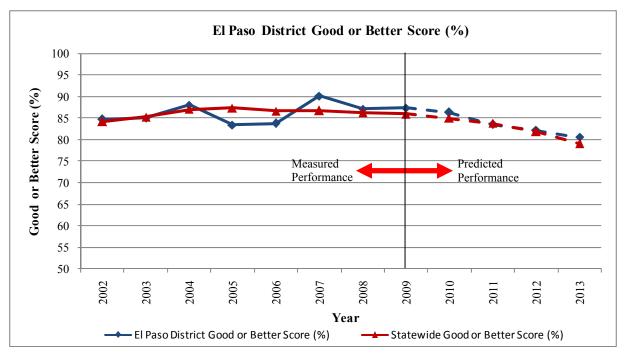


Figure 27. El Paso District Overall Pavement Performance of FY 2002-FY 2013

#### **Fort Worth District**

### I. Summary of FY 2009–FY 2012 Treatments

Total Center line miles = 3,297 Total Lane miles = 8,528

FY 2009 Plan total treatments = **726.1 lane miles** = 8.5% of system lane miles FY 2010 Plan total treatments = **596.3 lane miles** = 7.0% of system lane miles FY 2011 Plan total treatments = **589.2 lane miles** = 5.7% of system lane miles FY 2012 Plan total treatments = **2136.1 lane miles** = 25.0% of system lane miles

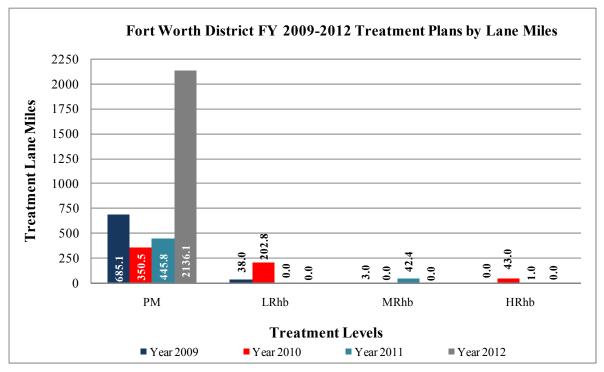


Figure 28. Fort Worth District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 43.0, 1.0 and 0.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 3.0 0.0, 42.4 and 0.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 38.0 202.8, 0.0 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 685.1, 350.5, 445.8 and 2136.1 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 726.1 lane miles or approximately 8.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 553.3 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 553.3 lane miles or approximately 6.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 488.2 lane miles + 43.0 lane miles of Heavy Rehab treatments from FY 2010 = 531.2 lane miles or approximately 6.2% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 2136.1 lane miles + 1.0 lane miles of Heavy Rehab treatments from FY 2011 = 2137.1 lane miles or approximately 25.1% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 16. Pavement Performance Summary for Fort Worth District and Counties

			Base Year		Analysi	is Years	
		_	2009	2010	2011	2012	2013
East	Wanth District	Achieved Goal (%)	81.44	80.23	78.55	74.63	78.34
Fort	Worth District	Achieved Average CS	87	84	82	79	81
	Erath	Achieved Goal (%)	87.59	87.61	84.97	82.93	77.99
	Eratn	Achieved Average CS	90	89	86	83	80
	Hood	Achieved Goal (%)	73.75	71.93	79.35	78.73	83.04
	11000	Achieved Average CS	85	82	84	82	82
	Look	Achieved Goal (%)	91.2	90.65	91.1	88.84	82.27
rict	Jack	Achieved Average CS	93	91	88	86	82
Dist	Johnson	Achieved Goal (%)	76.29	77.1	75.28	72.67	74.63
rth		Achieved Average CS	84	82	79	77	78
0 M 1	Palo Pinto	Achieved Goal (%)	90.36	88.76	83.69	79.27	74.3
For	raio riiito	Achieved Average CS	93	90	86	83	79
s in	Parker	Achieved Goal (%)	78.17	80.72	77.75	77.22	83
Counties in Fort Worth District	rarker	Achieved Average CS	83	84	80	79	82
Con	Somervell	Achieved Goal (%)	83.74	78.78	86.57	80.33	75.8
	Somerven	Achieved Average CS	89	85	88	84	79
	Townert	Achieved Goal (%)	79.2	73.9	71.82	65.38	77.72
	Tarrant	Achieved Average CS	85	80	78	74	81
	***	Achieved Goal (%)	80.79	88.57	86.27	83.31	79.9
	Wise	Achieved Average CS	87	90	87	83	80

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Hood (83.04%) while the worst was Palo Pinto (74.30%).

# III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

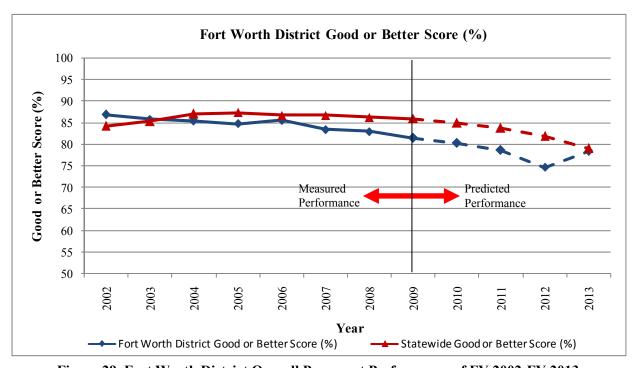


Figure 29. Fort Worth District Overall Pavement Performance of FY 2002-FY 2013

### **Houston District**

#### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,134
Total Lane miles = 9,885
```

FY 2009 Plan total treatments = **506.8 lane miles** = 5.1% of system lane miles FY 2010 Plan total treatments = **288.5 lane miles** = 2.9% of system lane miles FY 2011 Plan total treatments = **154.6 lane miles** = 1.6% of system lane miles FY 2012 Plan total treatments = **226.3 lane miles** = 2.3% of system lane miles

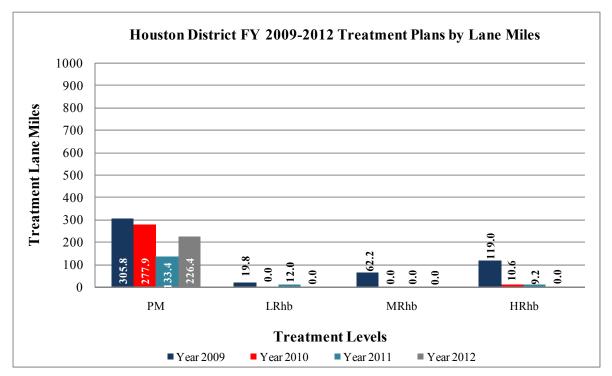


Figure 30. Houston District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 119.0, 10.6, 9.2 and 0.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 62.2, 0.0, 0.0 and 0.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 19.8 0.0, 12.0 and 0.0 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 305.8 and 277.9, 133.4 and 226.4 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 387.8 lane miles or approximately 3.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 277.9 lane miles + 119.0 lane miles of Heavy Rehab treatments from FY 2009 = 396.9 lane miles or approximately 4.0% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 145.4 lane miles + 10.6 lane miles of Heavy Rehab treatments from FY 2010 = 156.0 lane miles or approximately 1.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 226.4 lane miles + 9.2 lane miles of Heavy Rehab treatments from FY 2011 = 235.6 lane miles or approximately 2.4% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

**Table 17. Pavement Performance Summary for Houston District and Counties** 

			Base Year		Analysi	s Years	
		_	2009	2010	2011	2012	2013
Ша	Achieved Goal (%)		75.8	71.93	67.74	62.46	57.41
по	uston District	Achieved Average CS	84	80	77	72	69
	D	Achieved Goal (%)	74.26	73.72	70.17	65.42	62.53
	Brazoria	Achieved Average CS	82	81	77	73	70
ct	Fout Don 3	Achieved Goal (%)	81.43	78.45	74.3	70.26	66.73
istri	Fort Bend	Achieved Average CS	88	85	81	77	73
Houston District	Galveston	Achieved Goal (%)	70.75	66.4	64.58	61.08	58.48
nste		Achieved Average CS	81	78	76	72	70
in Ho	11 .	Achieved Goal (%)	75.09	69.14	62.84	56.19	48.66
	Harris	Achieved Average CS	82	78	74	68	64
Counties	3.4	Achieved Goal (%)	80.45	76.64	74.59	70.42	67.39
ŭ	Montgomery	Achieved Average CS	88	85	82	78	75
	XX7 11	Achieved Goal (%)	75.3	80.9	84.63	82.18	82.3
	Waller	Achieved Average CS	87	88	88	85	82

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Waller (82.30%) while the worst was Harris (48.66%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

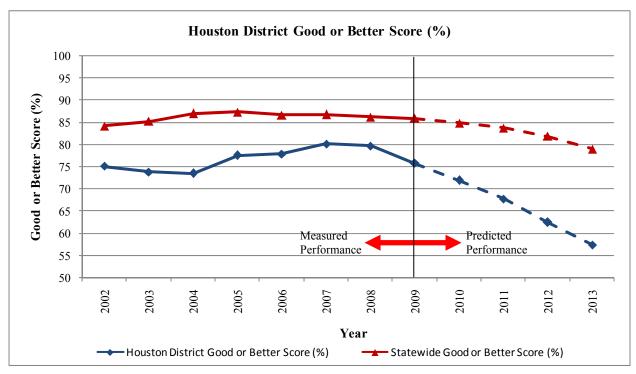


Figure 31. Houston District Overall Pavement Performance of FY 2002-FY 2013

#### Laredo District

### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 2,266
Total Lane miles = 4,892
```

FY 2009 Plan total treatments = **153.8 lane miles** = 3.1% of system lane miles FY 2010 Plan total treatments = **379.1 lane miles** = 7.8% of system lane miles FY 2011 Plan total treatments = **194.6 lane miles** = 4.0% of system lane miles FY 2012 Plan total treatments = **337.7 lane miles** = 6.9% of system lane miles

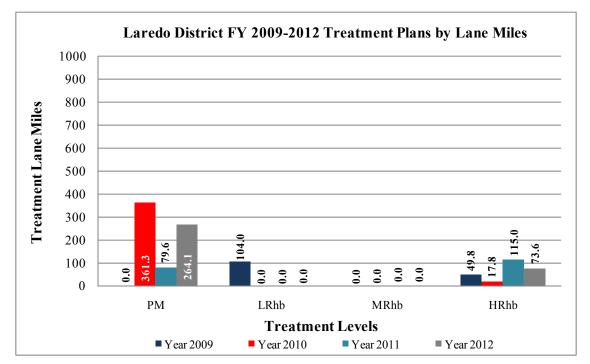


Figure 32. Laredo District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 49.8 and 17.8, 115.0 and 73.6 lane miles
  respectively.
- There were no Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 104.0 0.0, 0.0 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 361.3, 79.6 and 264.1 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 104.0 lane miles or approximately 2.1% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 361.3 lane miles + 49.8 lane miles of Heavy Rehab treatments from FY 2009 = 411.1 lane miles or approximately 8.4% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 79.6 lane miles + 17.8 lane miles of Heavy Rehab treatments from FY 2010 = 97.4 lane miles or approximately 2.0% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 264.1 lane miles + 115.0 lane miles of Heavy Rehab treatments from FY 2011 = 379.1 lane miles or approximately 7.8% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

**Table 18. Pavement Performance Summary for Laredo District and Counties** 

	Table 18. Pavement Performance Summary for Laredo District and Counties								
			Base Year	Analysis Years					
		_	2009	2010	2011	2012	2013		
т.	Achieved Goal (%)		85.37	83.30	81.36	78.01	73.27		
La	redo District	Achieved Average CS	89	86	84	81	78		
	Dimmit	Achieved Goal (%)	83.76	80.1	77.57	76.1	76.33		
	Diminit	Achieved Average CS	89	86	82	80	80		
	Donal	Achieved Goal (%)	93.46	92.18	89.62	86.43	81.47		
	Duval	Achieved Average CS	94	92	88	85	82		
ţ	771	Achieved Goal (%)	94.09	90.94	88.98	83.63	77.07		
Counties in Laredo District	Kinney	Achieved Average CS	95	91	88	84	79		
o Di	La Salle	Achieved Goal (%)	79.29	80.87	76.22	72.9	70.68		
ared		Achieved Average CS	86	86	82	78	77		
ın La	Manadala	Achieved Goal (%)	67.95	65.15	70.17	64.74	59.80		
ties i	Maverick	Achieved Average CS	78	74	78	74	71		
0un(	<b>X</b> 7-1 <b>X</b> 7 <b>J</b> -	Achieved Goal (%)	91.2	88.42	86.31	84.26	77.49		
С	Val Verde	Achieved Average CS	92	88	86	83	80		
	Walah	Achieved Goal (%)	87.79	85.69	84.32	81.45	76.47		
	Webb	Achieved Average CS	90	88	86	82	79		
		Achieved Goal (%)	79.62	76.03	71.4	66.53	59.15		
	Zavala	Achieved Average CS	86	83	79	74	69		

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Duval (81.47%) while the worst was Zavala (59.15%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

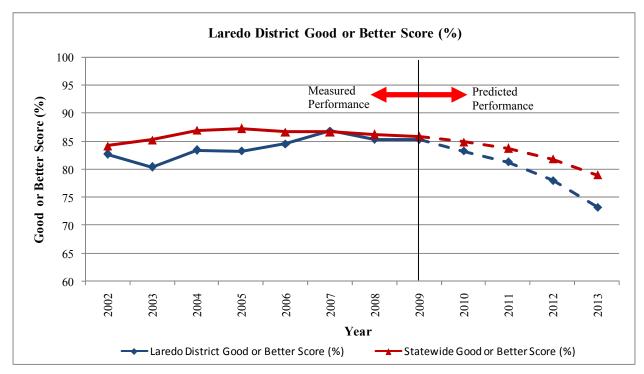


Figure 33. Laredo District Overall Pavement Performance of FY 2002-FY 2013

#### **Lubbock District**

## I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 5,267
Total Lane miles = 11,732
```

FY 2009 Plan total treatments = **815.0 lane miles** = 6.9% of system lane miles FY 2010 Plan total treatments = **684.5 lane miles** = 5.8% of system lane miles FY 2011 Plan total treatments = **845.7 lane miles** = 7.2% of system lane miles FY 2012 Plan total treatments = **691.8 lane miles** = 5.9% of system lane miles

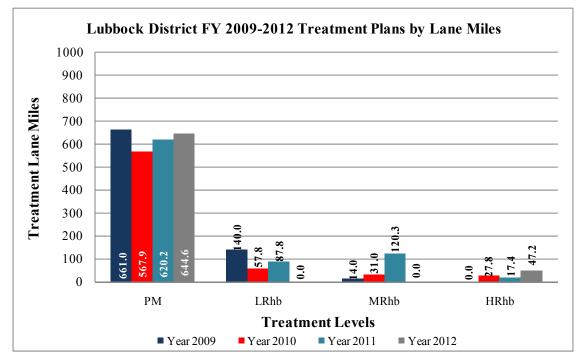


Figure 34. Lubbock District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 27.8, 17.4 and 47.2 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 14.0, 31.0, 120.3 and 0.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 140.0, 57.8, 87.8 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 661.0 and 567.9, 620.2 and 644.6 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 815.0 lane miles or approximately 6.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 656.7 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 656.7 lane miles or approximately 5.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 828.3 lane miles + 27.8 lane miles of Heavy Rehab treatments from FY 2010 = 856.1 lane miles or approximately 7.3% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 644.6 lane miles + 17.2 lane miles of Heavy Rehab treatments from FY 2011 = 662.0 lane miles or approximately 5.6% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 19. Pavement Performance Summary for Lubbock District and Counties

			Base Year	Analysis Years				
			2009	2010	2011	2012	2013	
Il	Lubbock District  Achieved Goal (%)		86.4	86.33	86.47	86.87	84.45	
Lubbock District		Achieved Average CS	91	89	87	86	84	
	Bailey	Achieved Goal (%)	91.77	91.77	90.24	88.71	86.81	
		Achieved Average CS	93	91	88	86	85	
	Castro	Achieved Goal (%)	82.35	86.89	87.52	86.21	82.09	
		Achieved Average CS	88	89	88	85	82	
	Cochran	Achieved Goal (%)	95.54	93.39	95.02	93.31	91.16	
		Achieved Average CS	96	94	93	90	87	
trict	Crosby	Achieved Goal (%)	76.42	81.37	89.47	92.75	90.1	
Counties in Lubbock District		Achieved Average CS	87	87	89	89	86	
	Dawson	Achieved Goal (%)	79.8	79.52	77.84	90.08	88.43	
qqn		Achieved Average CS	88	86	83	87	85	
in I	Floyd	Achieved Goal (%)	77.64	75.86	74.89	73.78	80.09	
ıties		Achieved Average CS	87	84	82	79	82	
Cour	Gaines	Achieved Goal (%)	92.59	93.37	95.25	92.56	89.68	
		Achieved Average CS	94	92	91	88	87	
	Garza	Achieved Goal (%)	96.59	95.94	96.77	94.64	89.65	
		Achieved Average CS	97	95	93	90	87	
	Hale	Achieved Goal (%)	90.96	89.64	87.82	85.61	84.66	
		Achieved Average CS	93	91	88	85	85	
	Hockley	Achieved Goal (%)	85.01	83.24	81.87	81.06	76.53	

		Base Year	Analysis Years			
		2009	2010	2011	2012	2013
	Achieved Average CS	88	87	85	83	81
Tl.	Achieved Goal (%)	76.32	78.46	78.79	78.51	74.88
Lamb	Achieved Average CS	85	85	84	82	79
T 11	Achieved Goal (%)	88.62	87.94	87.48	87.68	83.28
Lubboc	Achieved Average CS	91	90	88	87	84
Ī	Achieved Goal (%)	85.43	85.95	88.01	87.79	84.75
Lynn	Achieved Average CS	91	89	88	87	84
D	Achieved Goal (%)	77.06	74.39	75.66	76.62	77.86
Parmer	Achieved Average CS	86	83	82	81	80
6 1	Achieved Goal (%)	93.98	91.47	89.98	89.37	85.12
Swisher	Achieved Average CS	94	92	89	87	84
Tr.	Achieved Goal (%)	87.75	90.81	90.27	92.15	89.98
Terry	Achieved Average CS	92	92	90	88	86
Vaal	Achieved Goal (%)	94.4	92.89	91.71	94.92	90.87
Yoakun	Achieved Average CS	95	93	90	90	87

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Cochran (91.16%) while the worst was Lamb (74.88%).

### III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

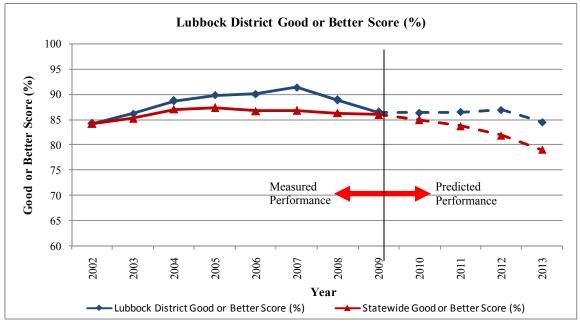


Figure 35. Lubbock District Overall Pavement Performance of FY 2002-FY 2013

#### **Lufkin District**

#### I. Summary of FY 2009–FY 2012 Treatments

```
Total Center line miles = 2,880
Total Lane miles = 6,386
```

FY 2009 Plan total treatments = 598.4 lane miles = 9.4% of system lane miles FY 2010 Plan total treatments = 954.3 lane miles = 14.9% of system lane miles FY 2011 Plan total treatments = 755.1 lane miles = 11.8% of system lane miles FY 2012 Plan total treatments = 580.0 lane miles = 9.1% of system lane miles

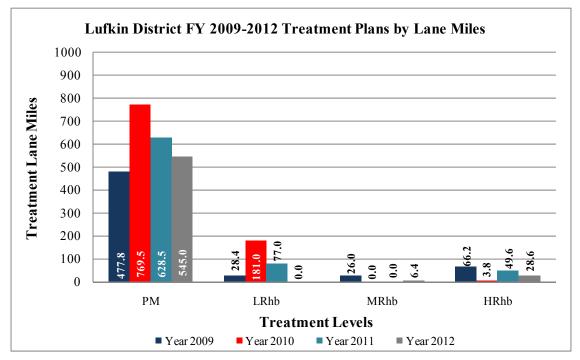


Figure 36. Lufkin District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 66.2 and 3.8, 49.6 and 28.6 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 26.0, 0.0, 0.0 and 6.4 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 28.4 and 181.0, 77.0 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 477.8, 769.5, 628.5 and 545.0 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 532.2 lane miles or approximately 8.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 950.5 lane miles + 66.2 lane miles of Heavy Rehab treatments from FY 2009 = 1016.7 lane miles or approximately 15.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 705.5 lane miles + 3.8 lane miles of Heavy Rehab treatments from FY 2010 = 709.3 lane miles or approximately 11.1% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 551.4 lane miles + 49.6 lane miles of Heavy Rehab treatments from FY 2011 = 601.0 lane miles or approximately 9.4% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 20. Pavement Performance Summary for Lufkin District and Counties

Table 20. I avenient I erioi mance			Base Year				
			2009	2010	2011	2012	2013
Ι.	Achieved Goal (%)		87.87	85.45	84.49	82.48	81.75
Lufkin District		Achieved Average CS	91	88	86	84	82
	Angelina	Achieved Goal (%)	88.24	84.86	84.01	80.6	85.23
		Achieved Average CS	91	88	86	82	83
	Houston	Achieved Goal (%)	82.34	77.76	76.2	73.65	68.61
		Achieved Average CS	87	84	81	79	75
	Nacogdoches	Achieved Goal (%)	89.97	84.7	83.04	80.66	81.09
		Achieved Average CS	91	88	86	83	82
stric	Polk	Achieved Goal (%)	81.01	84.25	85.1	82.15	81.72
Counties in Lufkin District		Achieved Average CS	88	88	87	84	82
ufki	Sabine	Achieved Goal (%)	90.07	86.44	83.42	81.02	81.31
in L		Achieved Average CS	91	89	86	84	83
ties	San Augustine	Achieved Goal (%)	91.69	93.34	92.09	91.15	86.48
onu		Achieved Average CS	93	93	90	88	85
	San Jacinto	Achieved Goal (%)	97.21	95.34	93.35	93.87	92.99
		Achieved Average CS	97	94	92	90	88
	Shelby	Achieved Goal (%)	88.19	83.32	82.33	80.52	79.87
		Achieved Average CS	91	87	85	83	81
	Trinity	Achieved Goal (%)	87.73	87.63	89.72	90.14	86.64
		Achieved Average CS	92	90	90	88	85

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was San Jacinto (92.99%) while the worst was Houston (68.61%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

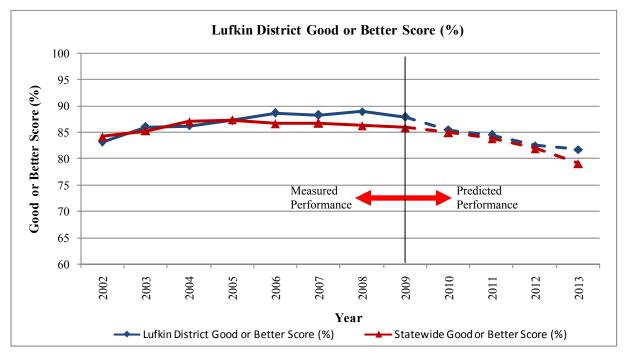


Figure 37. Lufkin District Overall Pavement Performance of FY 2002-FY 2013

### **Odessa District**

### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,388
Total Lane miles = 8,079
```

```
FY 2009 Plan total treatments = 708.4 lane miles = 8.8% of system lane miles FY 2010 Plan total treatments = 638.4 lane miles = 7.9% of system lane miles FY 2011 Plan total treatments = 605.6 lane miles = 7.5% of system lane miles FY 2012 Plan total treatments = 440.4 lane miles = 5.5% of system lane miles
```

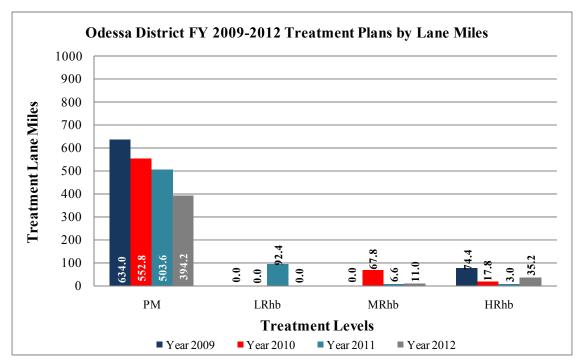


Figure 38. Odessa District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 74.4, 17.8, 3.0 and 35.2 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0 and 67.8, 6.6 and 11.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 0.0, 92.4 and 0.0 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 634.0, 552.8, 503.6 and 394.2 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 634.0 lane miles or approximately 7.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 620.6 lane miles + 74.4 lane miles of Heavy Rehab treatments from FY 2009 = 695.0 lane miles or approximately 8.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 602.6 lane miles + 17.8 lane miles of Heavy Rehab treatments from FY 2010 = 620.4 lane miles or approximately 7.7% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 405.2 lane miles + 3.0 lane miles of Heavy Rehab treatments from FY 2011 = 408.2 lane miles or approximately 5.1% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 21. Pavement Performance Summary for Odessa District and Counties

			Base Year		Analysi	is Years	
			2009	2010 2011 2012			2013
0.	dessa District	Achieved Goal (%)	93.33	92.75	93.69	92.57	90.38
U	uessa District	Achieved Average CS	95	93	91	89	86
	Andrews	Achieved Goal (%)	96.17	95.25	96.83	94.88	92.89
		Achieved Average CS	96	94	93	90	88
	Crane	Achieved Goal (%)	98.98	100	99.04	98.66	97.57
	Crane	Achieved Average CS	96	97	94	92	90
	Estor	Achieved Goal (%)	89.52	89.86	91.18	90.35	88.08
rict	Ector	Achieved Average CS	94	92	90	88	85
Dist	Loving	Achieved Goal (%)	98.81	98.52	97.03	98.22	94.07
ssa		Achieved Average CS	99	97	95	92	89
Counties in Odessa District	3.4	Achieved Goal (%)	85.84	89.88	96.17	95.08	92.3
s in	Martin	Achieved Average CS	91	91	93	90	86
	Midland	Achieved Goal (%)	85.97	82.35	84.13	81.46	76.77
Cor	Midiand	Achieved Average CS	90	87	86	83	79
	Danas	Achieved Goal (%)	98.71	98.15	98.35	97.2	95.58
	Pecos	Achieved Average CS	98	96	94	92	89
	Danne	Achieved Goal (%)	92.34	90.95	90.61	91	90.4
	Reeves	Achieved Average CS	94	92	90	89	87
	Terrell	Achieved Goal (%)	96.51	98.18	99.48	99.22	97.11

			Base Year	Analysis Years				
	_	-	2009	2010	2011	2012	2013	
		Achieved Average CS	97	96	94	91	88	
	Upton	Achieved Goal (%)	96.97	97.9	98.87	98.1	97.08	
		Achieved Average CS	98	96	94	92	89	
	<b>33</b> 7 J	Achieved Goal (%)	96.63	94.35	94.97	93.92	90.4	
	Ward	Achieved Average CS	97	95	92	89	86	
	Winkler	Achieved Goal (%)	92.27	91.06	88.63	84.73	83.39	
		Achieved Average CS	94	92	90	87	84	

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Crane (97.57%) while the worst was Midland (76.77%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

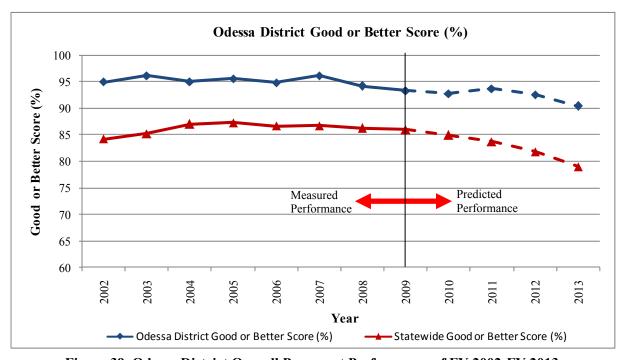


Figure 39. Odessa District Overall Pavement Performance of FY 2002-FY 2013

#### **Paris District**

### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,412
Total Lane miles = 6,780
```

FY 2009 Plan total treatments = **630.8 lane miles** = 9.3% of system lane miles FY 2010 Plan total treatments = **528.8 lane miles** = 7.8% of system lane miles FY 2011 Plan total treatments = **642.0 lane miles** = 9.5% of system lane miles FY 2012 Plan total treatments = **587.4 lane miles** = 8.7% of system lane miles

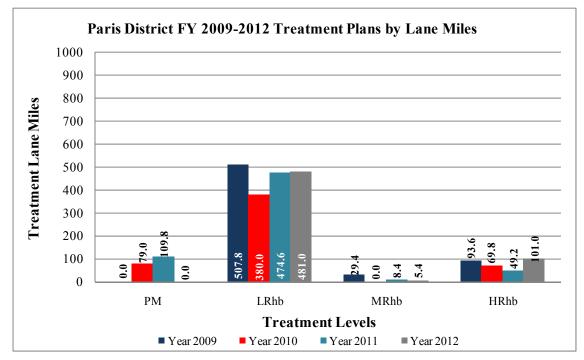


Figure 40. Paris District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 93.6, 69.8, 49.2 and 101.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 29.4, 0.0, 8.4 and 5.4 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 507.8 380.0, 474.6 and 481.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 79.0, 109.8 and 0.0 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 537.2 lane miles or approximately 7.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 459.0 lane miles + 93.6 lane miles of Heavy Rehab treatments from FY 2009 = 552.6 lane miles or approximately 8.2% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 592.8 lane miles + 69.8 lane miles of Heavy Rehab treatments from FY 2010 = 662.6 lane miles or approximately 9.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 486.4 lane miles + 49.2 lane miles of Heavy Rehab treatments from FY 2011 = 535.6 lane miles or approximately 7.9% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 22. Pavement Performance Summary for Paris District and Counties

		cincit i ci ioi manci	Base Year	<u> </u>	Analysi		
		_	2009	2010	2011	2012	2013
D	ania Diatriat	Achieved Goal (%)	74.92	72.65	72.18	72.19	70.39
P	aris District	Achieved Average CS	83	81	80	79	77
	Delta	Achieved Goal (%)	75.38	67.57	61.48	60.25	62.28
	Detta	Achieved Average CS	84	80	77	75	76
	Fannin	Achieved Goal (%)	62.59	66.28	65.67	67.63	67.17
	ганин	Achieved Average CS	80	80	78	78	76
	Franklin	Achieved Goal (%)	82.99	82.68	84.76	83.29	78.29
	Frankiii	Achieved Average CS	89	88	88	85	82
trict	Grayson	Achieved Goal (%)	67.46	62.64	63.04	64.85	65.15
Counties in Paris District		Achieved Average CS	78	75	74	75	74
aris	Hauldus	Achieved Goal (%)	77.67	75.11	76.05	72.74	68.63
in I	Hopkins	Achieved Average CS	84	82	81	78	76
nties	Hunt	Achieved Goal (%)	78.32	73.59	70.96	68.31	67.47
Com	пипі	Achieved Average CS	83	81	79	76	75
	T	Achieved Goal (%)	73.13	74.62	76.66	79.74	78.67
	Lamar	Achieved Average CS	83	83	84	84	82
	Daina	Achieved Goal (%)	79.61	74.02	71.89	70.24	58.58
	Rains	Achieved Average CS	85	81	79	77	73
		Achieved Goal (%)	89.96	86.4	85.06	85.97	82.82
	Red River	Achieved Average CS	91	90	87	87	84

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Red River (82.82%) while the worst was Rains (58.58%).

### III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

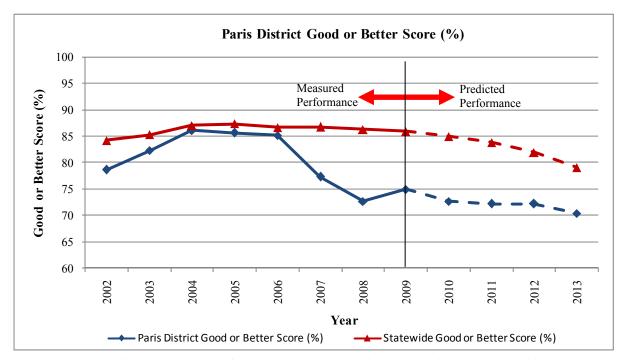


Figure 41. Paris District Overall Pavement Performance of FY 2002-FY 2013

#### **Pharr District**

Total Center line miles = 2,322

# I. Summary of FY 2009-FY 2012 Treatments

```
Total Lane miles = 5,690

FY 2009 Plan total treatments = 661.1 lane miles = 11.6 % of system lane miles
FY 2010 Plan total treatments = 587.2 lane miles = 10.3 % of system lane miles
FY 2011 Plan total treatments = 510.6 lane miles = 9.0% of system lane miles
FY 2012 Plan total treatments = 599.3 lane miles = 10.5% of system lane miles
```

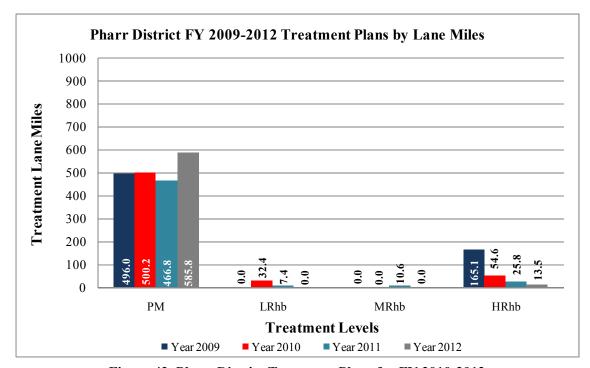


Figure 42. Pharr District Treatment Plans for FY 2010-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 165.1, 54.6, 25.8 and 13.5 lane miles respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 0.0, 10.6 and 0.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0 32.4, 7.4 and 0.0 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 496.0, 500.2, 466. 8 and 585.8 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 496.0 lane miles or approximately 8.7 % of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 532.6 lane miles + 165.1 lane miles of Heavy Rehab treatments from FY 2009 = 697.7 lane miles or approximately 12.3% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 484.8 lane miles + 54.6 lane miles of Heavy Rehab treatments from FY 2010 = 539.4 lane miles or approximately 9.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 585.8 lane miles + 25.8 lane miles of Heavy Rehab treatments from FY 2011 = 611.6 lane miles or approximately 10.7% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 23. Pavement Performance Summary for Pharr District and Counties

			Base Year	-	Analysi	s Years	
			2009	2010	2011	2012	2013
Di	Pharr District  Achieved Goal (%)		80.38	79.98	82.1	82.58	81.16
P	narr District	Achieved Average CS	88	86	85	83	82
	Dwaalra	Achieved Goal (%)	92.39	91.25	96.12	94.9	92.69
	Brooks	Achieved Average CS	94	92	92	90	88
	C	Achieved Goal (%)	84.91	81.71	81.9	81.79	79.84
	Cameron	Achieved Average CS	89	86	85	83	80
	III: dalaa	Achieved Goal (%)	78.74	79.14	83.65	83.36	82.98
tric	Hidalgo	Achieved Average CS	86	85	86	83	83
Dis	Jim Hogg	Achieved Goal (%)	95.93	95.86	93.38	91.25	89.66
harı		Achieved Average CS	97	95	92	88	86
in P	T7 1 4	Achieved Goal (%)	0	0	0	24.2	24.2
ties	Kenedy*	Achieved Average CS	59	54	48	56	51
Counties in Pharr District	C4	Achieved Goal (%)	78.95	80.55	82.31	81.7	82.23
	Starr	Achieved Average CS	88	87	86	84	83
	XX/911	Achieved Goal (%)	92.15	95.17	90.68	88.83	82.07
	Willacy	Achieved Average CS	92	92	88	86	83
	_	Achieved Goal (%)	75.12	75.92	87.5	91.91	91.51
	Zapata	Achieved Average CS	86	84	89	90	86

Based on the analysis results presented in Table 2, at the end of the 4-year planning horizon the county in best condition was Brooks (92.69%) while the worst was Kennedy (24.20%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

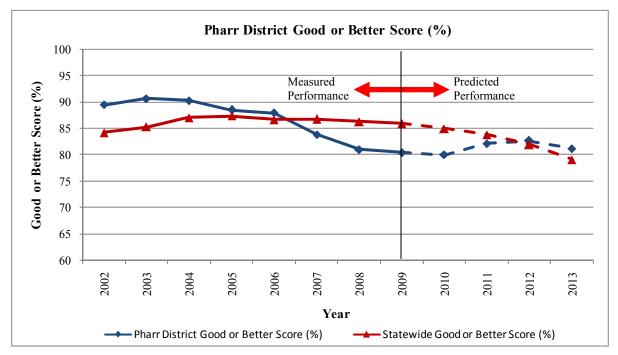


Figure 43. Pharr District Overall Pavement Performance of FY 2002-FY 2013

# San Angelo District

## I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,253
Total Lane miles = 7,174
```

FY 2009 Plan total treatments = 453.8 lane miles = 6.3% of system lane miles FY 2010 Plan total treatments = 470.6 lane miles = 6.6% of system lane miles FY 2011 Plan total treatments = 304.2 lane miles = 4.2% of system lane miles FY 2012 Plan total treatments = 407.2 lane miles = 5.7% of system lane miles

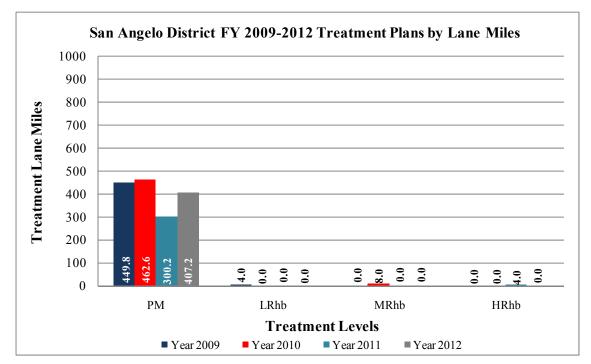


Figure 44. San Angelo District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 0.0, 4.0, and 0.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 8.0, 0.0 and 0.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 4.0 0.0, 0.0 and 0.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 449.8 and 462.6, 300.2 and 407.2 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 453.8 lane miles or approximately 6.3% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 470.6 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 470.6 lane miles or approximately 6.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 300.2 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 300.2 lane miles or approximately 4.2% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 407.2 lane miles + 4.0 lane miles of Heavy Rehab treatments from FY 2011 = 411.2 lane miles or approximately 5.7% of the total system.

## II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 24. Pavement Performance Summary for San Angelo District and Counties

			Base Year		Analysi	s Years	
		_	2009	2010	2011	2012	2013
Carr	Amasla District	Achieved Goal (%)	94.58	94.91	94.43	92.21	89.31
San	An Angelo District Achieved Average CS		95	94	91	88	86
	Coke	Achieved Goal (%)	97.6	95.92	93.58	91.54	89.89
	Corc	Achieved Average CS	97	95	92	89	86
	Concho	Achieved Goal (%)	87.67	86.99	96.65	92.16	91.34
	Concho	Achieved Average CS	93	90	92	89	86
	Crockett	Achieved Goal (%)	92.93	93.58	96.88	94.47	93.34
ict	Crockett	Achieved Average CS	95	93	93	90	88
District	Edwards	Achieved Goal (%)	95.86	94.41	92.8	89.82	86.48
	Edwarus	Achieved Average CS	95	92	89	86	84
elo	Glasscock	Achieved Goal (%)	98.3	97.21	97.21	96.88	95.11
Angelo		Achieved Average CS	98	96	94	90	87
San 4	Irion	Achieved Goal (%)	94.42	94	94.84	90.59	84.76
	11 1011	Achieved Average CS	95	93	91	88	85
s in	T71 11	Achieved Goal (%)	96.65	96.3	94.66	93.28	91.02
ıtie	Kimble	Achieved Average CS	96	95	92	89	87
Counties	M	Achieved Goal (%)	95.35	96.29	93.46	92.14	87.08
C	Menard	Achieved Average CS	95	94	91	88	84
	Daggan	Achieved Goal (%)	98.75	100	98.75	97.44	94.57
	Reagan	Achieved Average CS	98	97	94	91	88
	Dool	Achieved Goal (%)	91.8	89.99	88.9	85.12	78.96
	Real	Achieved Average CS	94	92	89	85	81

			Base Year		Analysi	s Years	
			2009	2010	2011	2012	2013
	ъ .	Achieved Goal (%)	95.83	95.11	92.45	90.76	86.04
	Runnels	Achieved Average CS	95	93	91	88	84
	Schleicher	Achieved Goal (%)	94.09	97.68	96.3	94.92	90.22
		Achieved Average CS	96	95	92	89	87
	G: 11	Achieved Goal (%)	91.36	89.44	89.44	90.64	88.64
	Sterling	Achieved Average CS	94	91	89	88	86
	Cutton	Achieved Goal (%)	95.87	98	97.09	94.11	92.82
	Sutton	Achieved Average CS	95	95	92	89	88
	Tom Green	Achieved Goal (%)	93.12	95.44	92.64	90.13	87.5
	Tom Green	Achieved Average CS	94	93	90	87	84

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Glasscock (95.11%) while the worst was Real (78.96%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

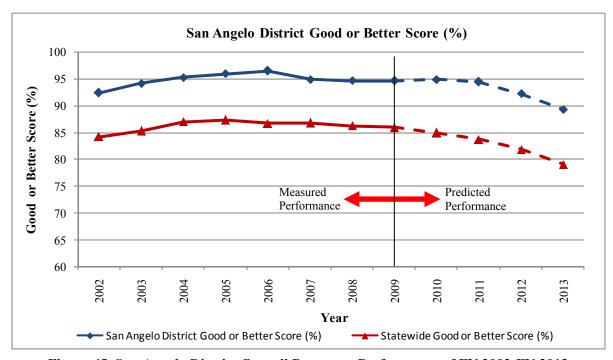


Figure 45. San Angelo District Overall Pavement Performance of FY 2002-FY 2013

#### San Antonio District

### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 4,270
Total Lane miles = 10,713
```

FY 2009 Plan total treatments = 1028.6 lane miles = 9.3% of system lane miles FY 2010 Plan total treatments = 944.4 lane miles = 8.8% of system lane miles FY 2011 Plan total treatments = 868.6 lane miles = 8.1% of system lane miles FY 2012 Plan total treatments = 204.7 lane miles = 1.9% of system lane miles

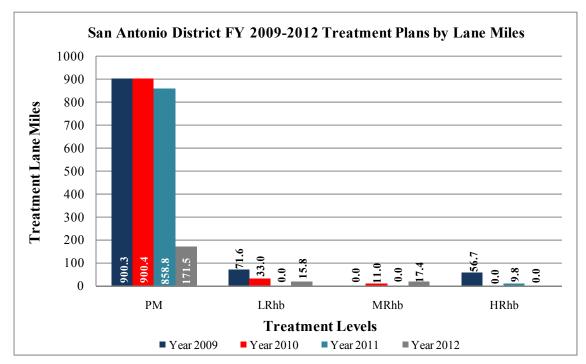


Figure 46. San Antonio District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments planned for FY 2009 and FY 2010 are 56.7, 0.0, 9.8 and 0.0 lane miles respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 11.0, 0.0 and 17.4 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 71.6 and 33.0, 0.0 and 15.8 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 900.3, 900.4, 858.8 and 171.5 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 971.9 lane miles or approximately 9.1% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 944.4 lane miles + 56.7 lane miles of Heavy Rehab treatments from FY 2009 = 1001.1 lane miles or approximately 9.3% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 858.8 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 858.8 lane miles or approximately 8.0% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 204.7 lane miles + 9.8 lane miles of Heavy Rehab treatments from FY 2011 = 214.5 lane miles or approximately 2.0% of the total system.

## II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 25. Pavement Performance Summary for San Antonio District and Counties

			Base Year		Analysi	s Years	
		_	2009	2010	2011	2012	2013
San /	Antonio District	Achieved Goal (%)	83.03	81.42	79.98	77.47	72.41
San F	AIITOIIIO DISTRICT	Achieved Average CS	88	85	83	80	76
	Atascosa	Achieved Goal (%)	80.84	83.72	84.64	80.74	74.83
	Atascosa	Achieved Average CS	87	87	85	82	77
	Bandera	Achieved Goal (%)	95.3	89.6	89.62	87.47	81.69
	Danuera	Achieved Average CS	94	90	88	87	82
	Davan	Achieved Goal (%)	79.86	76.89	74	69.25	62.8
ct	Bexar	Achieved Average CS	85	82	80	76	72
Counties in San Antonio District	Comal	Achieved Goal (%)	88.34	88.5	88.05	83.16	78.57
io D		Achieved Average CS	91	89	87	83	80
ıton	Frio	Achieved Goal (%)	91.69	90.74	90.17	88.77	83.85
n Aı		Achieved Average CS	93	91	89	86	83
n Sa	Cuadaluna	Achieved Goal (%)	76.95	74.9	73.35	78.13	73.43
ies i	Guadalupe	Achieved Average CS	84	82	80	80	76
ount	Vandall	Achieved Goal (%)	82.79	79.82	72.65	68.08	70.87
Č	Kendall	Achieved Average CS	87	84	80	75	77
	Vann	Achieved Goal (%)	84.99	82.1	81.08	76.72	71.47
	Kerr	Achieved Average CS	89	86	84	80	76
	MaMadlass	Achieved Goal (%)	80.22	80.93	77.84	77.64	73.52
	McMullen	Achieved Average CS	85	85	81	80	76
	Medina	Achieved Goal (%)	89.16	88.9	86.76	84.26	80.71

					Analysis Years				
			2009	2010	2011	2012	2013		
		Achieved Average CS	92	90	87	84	82		
	Uvalde	Achieved Goal (%)	79.12	79.85	79.7	77.88	72.16		
		Achieved Average CS	85	85	83	81	76		
	Wilson	Achieved Goal (%)	83.78	79.65	81.89	83.76	79.38		
		Achieved Average CS	89	86	85	84	80		

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Frio (83.85%) while the worst was Bexar (62.80%).

### III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

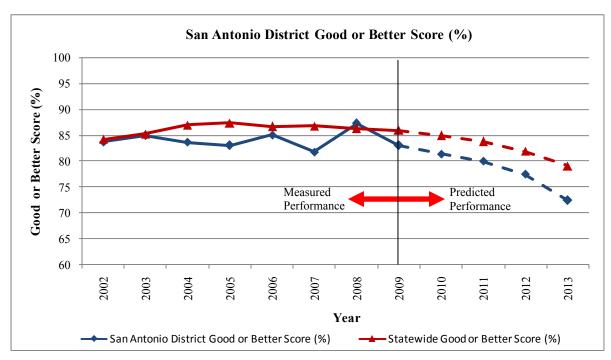


Figure 47. San Antonio District Overall Pavement Performance of FY 2002-FY 2013

# **Tyler District**

### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,704
Total Lane miles = 8,526
```

```
FY 2009 Plan total treatments = 857.2 lane miles = 10.1\% of system lane miles FY 2010 Plan total treatments = 733.2 lane miles = 8.6\% of system lane miles FY 2011 Plan total treatments = 814.2 lane miles = 9.5\% of system lane miles FY 2012 Plan total treatments = 588.5 lane miles = 6.9\% of system lane miles
```

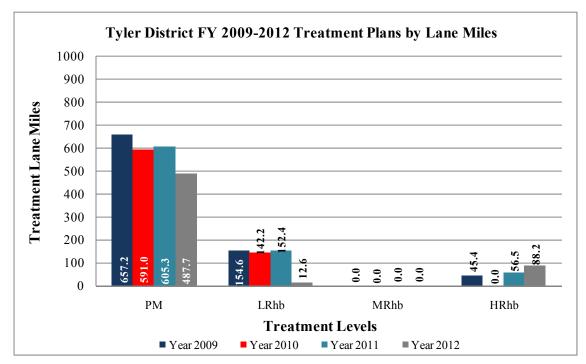


Figure 48. Tyler District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 45.4, 0.0, 56.5 and 88.2 lane miles
  respectively.
- There were no Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 154.6 142.2, 152.4 and 12.6 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 657.2, 591.0, 605.3, and 487.7 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 811.8 lane miles or approximately 9.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 733.2 lane miles + 45.4 lane miles of Heavy Rehab treatments from FY 2009 = 778.6 lane miles or approximately 9.1% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 757.7 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 757.7 lane miles or approximately 8.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 500.3 lane miles + 56.5 lane miles of Heavy Rehab treatments from FY 2011 = 556.8 lane miles or approximately 6.5% of the total system.

### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 26. Pavement Performance Summary for Tyler District and Counties

	14010 20.14	vement Performanc	Base Year	1 y 101 1 y		is Years	intics
				2010	1		2012
			2009	2010	2011	2012	2013
Т	Tyler District Achieved Goal (%)		92.28	89.83	86.29	81.96	76.8
l	yiei District	Achieved Average CS	92	90	87	84	80
	Andorson	Achieved Goal (%)	96.15	93.36	89.28	84.81	76.89
	Anderson	Achieved Average CS	94	91	87	84	80
	Cherokee	Achieved Goal (%)	96.86	95.8	92.37	87.88	81.18
	Cherokee	Achieved Average CS	95	93	90	86	82
	Gregg	Achieved Goal (%)	88.6	84.97	83.58	78.64	75.02
trict		Achieved Average CS	91	88	86	83	79
Dis	Henderson	Achieved Goal (%)	90.32	87.66	83.15	79.48	73.27
yler		Achieved Average CS	90	88	85	82	79
in J	Donale	Achieved Goal (%)	88.1	84.7	80.93	76.72	72.29
ıties	Rusk	Achieved Average CS	90	87	85	81	78
Counties in Tyler District	Smith	Achieved Goal (%)	92.89	91.18	87.16	82.75	78.09
	Smith	Achieved Average CS	93	91	88	84	81
	Van Zan H	Achieved Goal (%)	91.37	89.12	85.71	84.18	80.43
	Van Zandt	Achieved Average CS	92	90	87	85	82
	Waad	Achieved Goal (%)	93.35	90.58	87.58	79.94	75.75
	Wood	Achieved Average CS	91	89	87	83	80

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Cherokee (81.18%) while the worst was Rusk (72.29%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

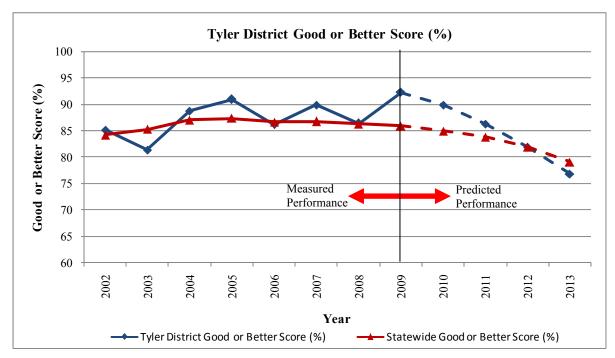


Figure 49. Tyler District Overall Pavement Performance of FY 2002-FY 2013

#### **Waco District**

#### I. Summary of FY 2009–FY 2012 Treatments

```
Total Center line miles = 3,404
Total Lane miles = 7,339
```

FY 2009 Plan total treatments = **457.2 lane miles** = 6.2% of system lane miles FY 2010 Plan total treatments = **686.3 lane miles** = 9.4% of system lane miles FY 2011 Plan total treatments = **605.2 lane miles** = 8.2% of system lane miles FY 2012 Plan total treatments = **115.8 lane miles** = 1.6% of system lane miles

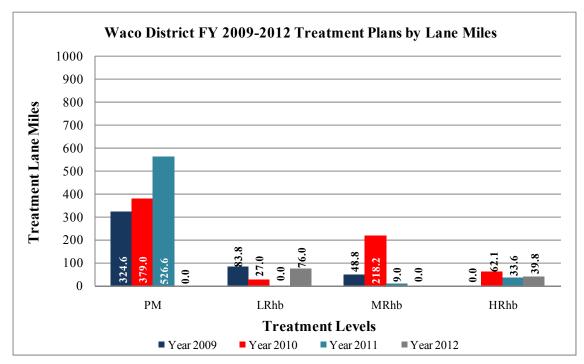


Figure 50. Waco District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments planned for FY 2009 and FY 2010 are 0.0, 62.1, 33.6 and 39.8 lane miles respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 48.8, 218.2, 0.0 and 76.0 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 83.8 27.0, 0.0 and 76.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 324.6, 379.0, 562.6 and 0.0 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 457.2 lane miles or approximately 6.2% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 624.2 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 624.2 lane miles or approximately 8.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 571.6 lane miles + 62.1 lane miles of Heavy Rehab treatments from FY 2010 = 633.7 lane miles or approximately 8.6% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 76.0 lane miles + 33.6 lane miles of Heavy Rehab treatments from FY 2011 = 109.6 lane miles or approximately 1.5% of the total system.

#### II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 27. Pavement Performance Summary for Waco District and Counties

	1 11 2 7 7 1 11 7	ement renormance		<i>y</i> 101			
			Base Year		Analysi	s Years	
		_	2009	2010	2011	2012	2013
	Waco District  Achieved Goal (%)		86.72	83.26	81.37	79.63	75.52
V	aco District	Achieved Average CS	89	87	85	83	79
	Bell	Achieved Goal (%)	81.44	77.37	75.34	74.75	70.31
	Bell	Achieved Average CS	87	84	82	80	77
	Dagger	Achieved Goal (%)	97.04	93.19	90.86	91.91	88.03
	Bosque	Achieved Average CS	95	92	90	90	86
	CII	Achieved Goal (%)	95.01	90.02	88.14	85.3	78.12
Counties in Waco District	Coryell	Achieved Average CS	93	91	88	86	81
Dis	Falls	Achieved Goal (%)	95.56	93.48	91.92	88.92	86.04
Vaco		Achieved Average CS	95	93	91	88	84
in V	II 214	Achieved Goal (%)	92.88	87.74	83.66	82.14	80.66
ıties	Hamilton	Achieved Average CS	92	89	87	85	85
onu	11411	Achieved Goal (%)	78.49	76.12	74.82	73.17	69.16
	Hill	Achieved Average CS	84	82	81	79	75
	T .	Achieved Goal (%)	87.86	83.37	83.05	80.82	76.95
	Limestone	Achieved Average CS	91	88	87	84	81
	M	Achieved Goal (%)	81.77	79.43	77.3	74.49	70.14
	McLennan	Achieved Average CS	86	84	82	79	75

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Bosque (88.03%) while the worst was Hill (69.16%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

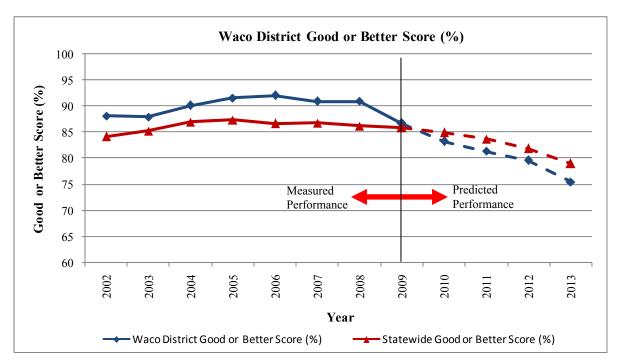


Figure 51. Waco District Overall Pavement Performance of FY 2002-FY 2013

#### Wichita Falls District

### I. Summary of FY 2009–FY 2012 Treatments

Total Center line miles = 2,857Total Lane miles = 6,121

FY 2009 Plan total treatments = **580.4 lane miles** = 9.5% of system lane miles FY 2010 Plan total treatments = **357.2 lane miles** = 5.8% of system lane miles FY 2011 Plan total treatments = **505.1 lane miles** = 8.3% of system lane miles FY 2012 Plan total treatments = **1356.3 lane miles** = 22.2% of system lane miles

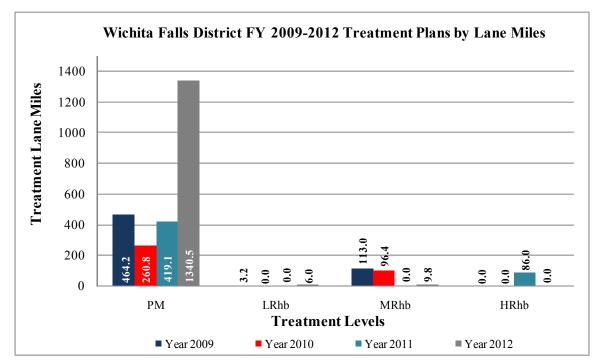


Figure 52. Wichita Falls District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 0.0, 0.0, 86.0 and 0.0 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 113.0, 96.4, 0.0 and 9.8 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 3.2 0.0, 0.0 and 6.0 lane miles respectively.
- The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 464.2, 260.8, 419.1 and 1340.5 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 580.4 lane miles or approximately 9.5% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 357.2 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2009 = 357.2 lane miles or approximately 5.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 419.1 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 419.1 lane miles or approximately 6.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 1356.3 lane miles + 86.0 lane miles of Heavy Rehab treatments from FY 2011 = 1442.3 lane miles or approximately 23.6% of the total system.

# II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 28. Pavement Performance Summary for Wichita Falls District and Counties

			Base Year		Analysi	s Years	
		_	2009	2010	2011	2012	2013
V	Vichita Falls	Achieved Goal (%)	92.98	91.97	89.98	88.12	88.81
	District	Achieved Average CS	93	91	89	86	86
	Archer	Achieved Goal (%)	95.18	95.62	94.4	92.7	92.07
	Archer	Achieved Average CS	96	94	91	88	87
	Danlan	Achieved Goal (%)	96.99	95.89	94.31	94.22	90.39
	Baylor	Achieved Average CS	97	94	92	90	86
	Class	Achieved Goal (%)	97.14	96.8	94.89	93.16	92.79
trict	Clay	Achieved Average CS	96	94	91	89	87
Dist	Cooke	Achieved Goal (%)	91.19	89.34	86.1	84.03	86.83
Counties in Wichita Falls District		Achieved Average CS	91	90	87	84	86
ita ]	Montoguo	Achieved Goal (%)	90.64	90.47	86.46	83	83.88
Vich	Montague	Achieved Average CS	92	90	87	84	84
ii	Thus alone and an	Achieved Goal (%)	96.44	94.54	93.77	92.57	87.48
nties	Throckmorton	Achieved Average CS	95	93	91	89	85
Cour	XX/* - I. *4 -	Achieved Goal (%)	86.28	84.78	82.43	80.03	86.35
	Wichita	Achieved Average CS	88	87	84	81	86
	Wilh anger	Achieved Goal (%)	94.32	93.63	93.49	92.12	94.1
	Wilbarger	Achieved Average CS	95	93	91	89	89
	V	Achieved Goal (%)	96.24	94.29	93.28	92.26	89.72
	Young	Achieved Average CS	95	92	90	89	87

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Wilbarger (94.10%) while the worst was Montague (83.88%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

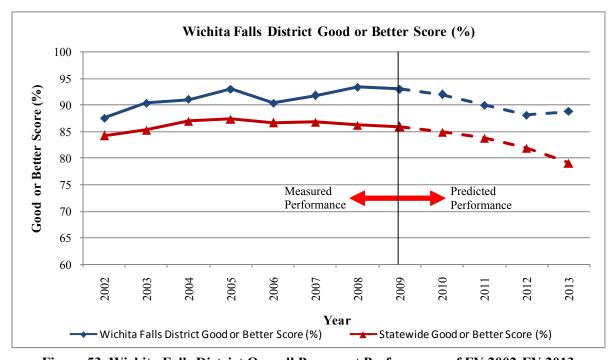


Figure 53. Wichita Falls District Overall Pavement Performance of FY 2002-FY 2013

### **Yoakum District**

#### I. Summary of FY 2009-FY 2012 Treatments

```
Total Center line miles = 3,836
Total Lane miles = 7,843
```

FY 2009 Plan total treatments = **686.3 lane miles** = 8.8% of system lane miles FY 2010 Plan total treatments = **739.0 lane miles** = 9.4% of system lane miles FY 2011 Plan total treatments = **569.4 lane miles** = 7.3% of system lane miles FY 2012 Plan total treatments = **569.2 lane miles** = 7.3% of system lane miles

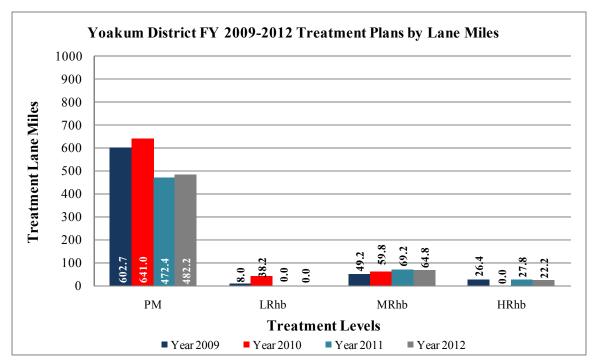


Figure 54. Yoakum District Treatment Plans for FY 2009-2012

- Heavy Rehabilitation pertains to both existing sections and Added Capacity. The HRhb treatments
  planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 26.4, 0.0, 27.8, and 22.2 lane miles
  respectively.
- The Medium Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 49.2, 59.8, 69.2, and 64.8 lane miles respectively.
- The Light Rehabilitation treatments planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 8.0, 38.2, 0.0, and 0.0 lane miles respectively.

• The Preventive Maintenance planned for FY 2009, FY 2010, FY 2011 and FY 2012 are 602.7, 641.0, 472.4, and 482.2 lane miles respectively.

The total number of Treatment lane miles that will improve Condition Score in FY 2010 = 659.9 lane miles or approximately 8.4% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2011 = 739.0 lane miles + 26.4 lane miles of Heavy Rehab treatments from FY 2009 = 765.4 lane miles or approximately 9.8% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2012 = 541.6 lane miles + 0.0 lane miles of Heavy Rehab treatments from FY 2010 = 541.6 lane miles or approximately 6.9% of the total system.

The total number of Treatment lane miles that will improve Condition Score in FY 2013 = 547.0 lane miles + 27.8 lane miles of Heavy Rehab treatments from FY 2011 = 574.8 lane miles or approximately 7.3% of the total system.

## II. Summary of FY 2010-FY 2013 Percentage of "Good" or Better Pavements and Condition Score

Table 29. Pavement Performance Summary for Yoakum District and Counties

			Base Year		Analysis	Years	
		_	2009	2010	2011	2012	2013
Va	alrum Diatriat	Achieved Goal (%)	86.08	84.08	82.93	80.23	76.5
Yoakum District		Achieved Average CS	90	87	85	83	80
	Austin	Achieved Goal (%)	85.34	88.35	88.9	84.94	84.71
	Austin	Achieved Average CS	89	89	87	84	85
	Calhoun	Achieved Goal (%)	86.08	81.92	82.16	84.53	79.66
	Camoun	Achieved Average CS	90	87	86	86	82
	Calamada	Achieved Goal (%)	90.79	87.5	86.99	84.83	79.47
trict	Colorado	Achieved Average CS	93	90	88	85	82
Counties in Yoakum District	Dewitt	Achieved Goal (%)	87.42	84.83	84.59	81.42	77.56
kum (		Achieved Average CS	91	89	87	84	80
Yoal	F 44	Achieved Goal (%)	83.07	82.62	81.18	78.07	72.93
ii.	Fayette	Achieved Average CS	88	87	84	81	77
ntie	Gonzales	Achieved Goal (%)	83.21	81.19	79	74.98	71.81
Cou	Gonzales	Achieved Average CS	88	86	84	80	77
	Jackson	Achieved Goal (%)	85.72	85.07	81.26	80.86	76.54
	Jackson	Achieved Average CS	90	88	85	84	81
	Lavasa	Achieved Goal (%)	79.93	76.39	76.57	76.7	73.11
	Lavaca	Achieved Average CS	87	84	82	81	77
	Matagorda	Achieved Goal (%)	90.34	92.09	92.27	88.73	85.96

			Base Year	Analysis Years			
	_		2009	2010	2011	2012	2013
		Achieved Average CS	92	91	90	87	85
	Victoria	Achieved Goal (%)	88.27	82.9	79.32	75.12	70.25
		Achieved Average CS	89	86	84	81	78
	Wharton	Achieved Goal (%)	87.01	82.74	81.97	77.84	75.35
		Achieved Average CS	90	87	85	81	79

Based on the analysis results presented in Table 1, at the end of the 4-year planning horizon the county in best condition was Matagorda (85.96%) while the worst was Victoria (70.25%).

## III. Summary of FY 2002-FY 2013 Percentage of "Good" or Better Pavements

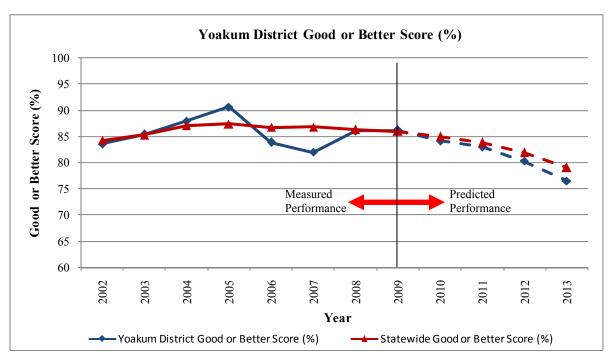


Figure 55. Yoakum District Overall Pavement Performance of FY 2002-FY 2013