

FHWA Local Highway Finance Reporting

FINAL REPORT

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In cooperation with:
New Jersey
Department of Transportation

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16. Abstract The Federal Highway Administration requires State departments of transportation (DOTs) to compile, analyze, and report State motor-fuel, motor-vehicle, driver license, motor-carrier data, and highway finance data associated with expenditures by State and local governments. The purpose of this study was to develop a new methodology and procedures for collecting and analyzing local government roadway revenue and spending data in New Jersey, so that NJDOT can complete the FHWA Local Highway Finance Report (FHWA Form 536) on at least a biennial basis. Based on the review of current practices, the research team developed a sampling and estimation methodology that relies on the collection and analysis of local government revenue and expenditure data as reported in local government financial audit reports. Audit reports for Fiscal Year 2015 were used to complete the analysis. In all, data for a total of 177 municipalities and 13 counties was compiled and analyzed. Analysis results indicated that roadway-related spending by local government units (municipalities and counties) in New Jersey totaled an estimated \$3.2 billion dollars in FY 2015. Approximately 57 percent of all local roadway-related spending was for highway law enforcement and safety. Spending for routine maintenance represented another 22 percent of overall spending, while outlays for capital projects represented 17 percent of overall local government spending on roads. The remaining four percent of spending was for road and street services. The vast majority of revenue used to support local highway spending (94 percent) came from general fund appropriations, proceeds from local bond sales, and miscellaneous local receipts. Only about six percent of the revenue used to support local highway spending came from State grants, Local Aid, and/or Federal grants.			
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TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	1
RESEARCH PROBLEM AND BACKGROUND	3
RESEARCH OBJECTIVES	3
CURRENT PRACTICE SCAN	3
FHWA Form 536 Overview	3
Methods Used in Other States to Complete FHWA Form 536.....	4
Local Government Finance Reporting Practices in New Jersey	6
Observations from Review of Local Government Finance Reporting Practices in New Jersey	7
DATA COLLECTION METHODOLOGY AND ANALYSIS RESULTS	9
Sampling and Stratification Framework	9
Data Collection Methods	10
Data Assumptions and Limitations	11
<u>General</u>	12
<u>State and Federal Grants</u>	12
<u>Bonds and Notes</u>	13
<u>Road and Street Services</u>	14
<u>Highway Law Enforcement and Safety</u>	14
<u>Line Items for Which There Was Not Enough Data</u>	14
Analysis Results	15
RECOMMENDATIONS.....	19
REFERENCES.....	20
LIST OF APPENDICES	21

List of Tables

Table 1 – Municipal stratification and sampling framework	10
Table 2 – Number of municipalities sampled in each substrata	11
Table 3 – Comparison of estimated vs. actual recorded expenditures in each sample substrata	16
Table 4 – Statewide estimates of local government road-related revenue and expenditures	17
Table 5 – Share of statewide local government road-related revenue and expenditures by category.....	18

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EXECUTIVE SUMMARY

The Federal Highway Administration requires State departments of transportation (DOTs) to compile, analyze, and report State motor-fuel, motor-vehicle, driver license, motor-carrier data and highway finance data associated with expenditures by State and local governments. Due to changes in the way local finance data in New Jersey is reported and disseminated, completing this required federal reporting became more challenging. The purpose of this study was to develop a new methodology and procedures for collecting and analyzing local government roadway revenue and spending data so that NJDOT can complete the FHWA Local Highway Finance Report (FHWA Form 536) on at least a biennial basis. A secondary objective was to develop recommendations regarding the on-going collection and maintenance of local government highway finance data in New Jersey.

The FHWA instructions for completing FHWA Form 536 permit State DOTs to use a sampling and estimation approach to prepare the form, if centralized reporting of local highway finance data is not available. A review of current practice related to collecting and reporting local government highway finance data in other states showed that State DOTs use a variety of approaches to complete the form. A review of local finance reporting requirements in New Jersey revealed that local government financial audit report documents provide sufficient data and information to estimate total local government revenue and expenditures for most of the categories required in FHWA Form 536.

Based on the review of current practices, the research team developed a sampling and estimation methodology that relies on the collection and analysis of local government revenue and expenditure data as reported in local government financial audit reports. Audit reports for Fiscal Year 2015 were used to complete the analysis. In all, data for a total of 177 municipalities was compiled and analyzed. This represents 31 percent of the municipalities in New Jersey.

The 177 municipalities for which data were obtained were grouped into five categories—very large, large, medium, small, and very small municipalities, based on total population. Each grouping was further stratified based on the number of lane miles of local roadway in the municipality and the age of municipal housing stock. The later variable was used as a surrogate for age of roadway infrastructure. This sub-stratification was designed to ensure that the calculations done to expand the sample data to the universe of municipalities in the State adequately accounted for possible variation in local conditions that might increase or decrease roadway-related spending and revenue.

The following is a summary of key findings from the analysis of local government revenue and expenditures for road and street purposes:

- Total roadway-related spending by local government units (municipalities and counties) in New Jersey totaled an estimated \$3.2 billion dollars in FY 2015.

This includes: spending for maintenance, road and street services such as traffic control operations and snow/ice removal; highway law enforcement and safety initiatives; and capital outlays for roadway infrastructure purposes.

- Of the \$3.2 billion in total roadway-related spending, municipal governments spent an estimated \$2.8 billion and county governments spent an estimated \$401.4 million. This represents about \$360 per person and about \$74,256 per lane mile of roadway under local government jurisdiction.
- Approximately 57 percent of all local roadway-related spending was for highway law enforcement and safety. Spending for routine maintenance represented another 22 percent of overall spending, while outlays for capital projects represented 17 percent of overall local government spending on roads. The remaining four percent of spending was for road and street services.
- Total revenue used to support roadway-related spending by local government units (municipalities and counties) in New Jersey also totaled an estimated \$3.2 billion dollars in FY 2015. The vast majority of revenue (94 percent) came from general fund appropriations, proceeds from local bond sales and miscellaneous other local receipts. Only about six percent of the revenue used to support local highway spending came from State grants, Local Aid, and/or Federal grants.

Given current practices for reporting local finance data in New Jersey, the process of collecting and analyzing data on local highway revenues and expenditures is very labor intensive and time consuming. As noted above, the NJDOT is required to complete FHWA Form 536 a minimum of every other year. To ensure future compliance with this requirement, the research team recommends the following:

- In the short-term, NJDOT should allocate sufficient time and resources to replicate the sampling, data collection and analysis process outlined in this report on a biennial basis. This should include a minimum of 650 labor hours;
- In the longer term, representatives from NJDOT should continue to explore ways to enhance local government reporting of roadway-related revenue and expenditures. This should include working with the Department of Community Affairs Office of Local Government Services and representatives from the New Jersey Government Finance Officers Association to develop a guidance document establishing improved procedures for identifying, coding, and reporting roadway-related revenues and expenditures within the current structure of finance reporting requirements; and finally,
- NJDOT should also explore the feasibility of requiring local government units to report data on local roadway-related revenue and expenditures as a condition of receiving local aid funding.

RESEARCH PROBLEM AND BACKGROUND

The Federal Highway Administration requires the New Jersey Department of Transportation (NJDOT) to compile, analyze, and report State motor-fuel, motor-vehicle, driver license, motor-carrier data and highway finance data associated with expenditures by State and local governments. Local governments in New Jersey are required to submit detailed budget and financial audit data to the NJ Department of Community Affairs (NJDCA) on an annual basis. In the past, NJDCA analyzed these data and produced a report that could be used to estimate local highway revenue and spending in New Jersey. However, several years ago the NJDCA stopped analyzing and reporting the data previously used to complete federal reporting related to local highway finance. As a result, research is needed to develop a new methodology and procedures for collecting and analyzing local government roadway revenue and spending data so that NJDOT can complete the FHWA Local Highway Finance Report (FHWA Form 536) on at least a biennial basis.

RESEARCH OBJECTIVES

The research objectives for the study were to:

1. Investigate the current methods used by state Departments of Transportation (DOTs) to complete Local Highway Finance Report, FHWA Form 536.
2. Develop a methodology for estimating local government highway revenues and expenditures in New Jersey.
3. Implement the methodology to estimate revenues and expenditures for FY2015.
4. Develop recommendations regarding the on-going collection and maintenance of local government highway finance data in New Jersey.

CURRENT PRACTICE SCAN

To inform the development of a local highway finance data collection and reporting methodology for New Jersey, the research team reviewed on-line documentation related to FHWA Form 536, investigated how other states comply with requirements and investigated current local finance data reporting requirements and procedures in New Jersey. The following sections summarize the results of these investigations.

FHWA Form 536 Overview

The Local Highway Finance Report, FHWA Form 536, is a biennial report summarizing highway funding by local governments, including: counties, municipalities, special districts, and other general purpose authorities that are under the jurisdiction of local governments. FHWA Form 536 provides addresses four basic areas of local highway finance: (1) disposition of highway-user revenues; (2) revenues used for roads and

streets, identified by source and type of funds; (3) road and street expenditures identified by purpose or activity; and (4) local highway debt status.

According to FHWA instructions for completing FHWA Form 536, state DOTs are expected to “report the disposition of all highway-user revenues available to local governments for expenditure, and all receipts and expenditures related to: (1) the construction, maintenance, operation, and administration of roads, streets, alleys, and other public ways; (2) traffic police and road patrols; and (3) debt service and status of bonds and notes issued to finance highway activities.” Reporting should also include private sector donations for roads and streets under local government jurisdiction. ⁽¹⁾

The FHWA instructions also acknowledge that local highway finance data may not be “easily or economically” obtained. Therefore, for reporting purposes, FHWA recommends that state DOTs “use sampling and estimation” to prepare FHWA Form 536, if centralized reporting of local highway finance data is not available. Such an approach allows for the collection of data for a sample of local governments that can then be “expanded” to estimate statewide totals. ⁽¹⁾

The FHWA Guide to Reporting Highway Statistics describes a basic sampling and estimation methodology that states can use. The recommended approach includes the following steps:

1. Group or stratify all local government units based on some criteria such as population size.
2. Select the number of local government units to represent as the sample for each grouping or strata.
3. Collect data through surveys, analysis of financial reports, or other means.
4. Compile a local highway finance database.
5. Analyze and test the data included in the database.
6. Expand the data within each group or strata to reflect the universe of local government units in that group/strata.
7. Combine individual group data to produce the statewide summary totals needed for the local highway finance reports.

The guidance states that “the sample size necessary to estimate a group total with a desired confidence level can be determined using mathematical formulas, statistical textbooks, or judgmental decision and that the composition of the samples should take into account the data reporting burden on individual governments and the accuracy of the data collected.” ⁽¹⁾

Methods Used in Other States to Complete FHWA Form 536

As part of the scoping process for this study, the NJDOT Research Bureau conducted a quick-response survey of state DOTs seeking responses regarding current methods used to complete that FHWA Local Highway finance report, FHWA Form 536. In all, 11

responses were received. The states responding to the survey included: Florida, Georgia, Idaho, Illinois, Montana, New Hampshire, Oklahoma, South Carolina, Texas, Utah, and Virginia. The data provided by the state DOTs responding to the survey shows that a variety of approaches are currently used.

In two states (Idaho and Virginia), reporting of detailed highway finance data is required by state law or regulation. A number of the responding states prepare FHWA Form 536 annually. The states that require centralized data reporting and most of those that request voluntary submission of data, send out data requests to the local government units in their jurisdiction—several to 100 percent of the jurisdictions. The majority use either paper or web-based data reporting forms to collect the data; however, several states assemble the data from financial information reported for other purposes to that state agency that oversees local government finance. ⁽²⁾

Two states in particular had practices that were seen to be potentially instructive in terms of informing research practice in New Jersey. These were Texas and Virginia. The research team conducted follow up interviews with state DOT subject matter experts from these two states. The purpose of the follow up interviews was to document the process, procedures and schedule used for collecting and maintaining local highway finance data and the methods used to estimate annual local government highway revenue and expenditures in those states.

In Virginia, FHWA Form 536 is prepared annually for the Virginia Department of Transportation by researchers at the Weldon Cooper Center for Public Service at the University of Virginia. Data is collected annually using a fillable PDF survey form from the 95 counties in the state as well as Virginia's 25 largest cities. They do not collect data from less populated municipalities. ⁽³⁾

State law requires that local government units comply with local highway finance data requests, which are sent to local finance officers. The survey form is generally filled out by finance department and then forwarded to the public works department to complete the sections that focus on maintenance expenditures. The data received from local governments is compiled and entered into an Excel spreadsheet that includes formulas that estimate statewide figures based on data from an annual audit of public accounts completed by another Virginia state government agency. This audit is completed for the 30 largest local governments in the state as a way to gauge statewide local government revenues and expenditures in various categories. These audit multipliers are used in to estimate statewide highway revenue and expenditure figures. ⁽³⁾

Texas Department of Transportation generally follows FHWA guidance for preparing Form 536. They use a sampling approach that stratifies counties and towns by size based on population. They attempt to collect data from 100 percent of larger cities/counties, which they define as having a population above 35,000. Their sample includes 145 local governments (large and small) and 25-30 counties.

The methodology they use for compiling needed data includes two steps. Step one involves reviewing online budget and audit report information from as many local governments as are available within the sample pool. Step two involves sending out “targeted” emails requesting additional information or clarification to fill in the gaps of what is discernible from online reports. This step two request is usually needed for about 50 percent of the local governments in the sample. There is no statute that compels compliance with data requests. Submission of data is voluntary. ⁽⁴⁾

In general, the compilation of data on annual operating expenditures and revenues is straight forward, however, capital expenditures are usually more complicated. Budget numbers must be reconciled with what was actually spent. There are sometimes significant discrepancies between the amounts budgeted and actual expenditures. Developing debt estimates is a significant challenge because most local governments rely on general purpose bonds which are used for a mix of projects rather than transportation-specific bonding. ⁽⁴⁾

Local Government Finance Reporting Practices in New Jersey

New Jersey’s Local Budget Law (N.J.S.A. 40A:4-1 et seq.) requires the governing body of each local government unit in the State to adopt a budget for each fiscal year. Among many other requirements, local government budgets must be reported to the New Jersey Department of Community Affairs, Office of Local Government Services (OLGS). Municipal budget documents are available on-line via the OLGS website. ⁽⁵⁾

The following information is generally reported in varying levels of detail in local government budget documents:

- Anticipated revenue to be raised by taxes to support the municipal budget;
- Anticipated revenue from licenses, fees, permits, fines, interest, parking meters, and other sources that may apply;
- Anticipated state aid without off-setting appropriations;
- Anticipated general fund appropriations for operations by purpose, including salary and wages, expenditures required by statute such as pension contributions, unemployment insurance, etc.;
- Anticipated general fund appropriations for capital improvements;
- Anticipated off-setting federal and state grant funds for operations and capital improvements; and
- Anticipated debt service, including interest on bonds and notes, loan repayments for principal and interest and capital lease obligations.

Local government budget documents also include anticipated appropriations for school district purposes, which are reported separately. ⁽⁶⁾

In addition, New Jersey's Local Fiscal Affairs Law (N.J.S.A. 40A:5-1 et seq.) requires that all local government units in the State to "...cause an annual audit of its books, accounts and financial transactions to be made and completed within six months after the close of its fiscal year." ⁽⁷⁾ Local government finance audit reports must be filed with OLGS; however, OLGS do not make them available online.

The following information is generally reported in varying levels of detail in local government annual financial audit reports:

- A statement of assets, including: current fund balances, such as cash on hand and funds due from the State of New Jersey;
- Receivables and other assets such as revenue accounts receivables, delinquent tax receivables, and the assessed valuation of properties acquired as a result of tax liens; and
- A statement of liabilities, including: appropriation reserves, reserve for encumbrances, accounts payable, funds due to the State of New Jersey, prepaid taxes, tax overpayments, and other reserves.

Financial audit reports also include statements regarding Federal, State and other grant fund balances, receivables and reserves.

Observations from Review of Local Government Finance Reporting Practices in New Jersey

To determine if local government budget and audit reports contained the information necessary to complete FHWA Form 536, the research team collected and reviewed a small sample of documents. An effort was made to collect and review documents from places of varying size. In addition, the research team met with representatives from OLGS and the New Jersey Government Finance Officers Association (NJGFOA) to discuss how the local government finance reporting data might be used to complete FHWA Form 536.

The following observations were made from the document review process and interviews with OLGS and NJGFOA representatives:

- The information available in local government budget documents was very often too general to provide the detail necessary to complete local highway finance reporting. For example, anticipated general fund appropriations for operations were often not reported at a department level and general fund appropriations for capital improvements were not reported at the project level.

- Another constraint regarding the municipal budget data is that the data contained in the budgets represents anticipated rather than actual revenue and expenditures. Consequently, it is not possible to determine from the budget documents—even when information on transportation-related revenue and expenses is discernable, how much revenue was actually received and spent for any particular purpose.
- The data reported in local government financial audit reports is significantly more detailed, providing sufficient data to report data for most of the relevant revenue and expense categories required to complete FHWA Form 536. The audit reports generally contained enough data to complete the following entries on the form:
 - Section II: Revenues/Receipts for Road and Street Purposes
 - General fund appropriations
 - Proceeds from the sale of bonds and notes
 - Receipts from State government
 - Receipts from Federal government
 - Section III A: Expenditures for Road and Street Purposes
 - Capital outlay
 - Routine maintenance
 - Road and street services
 - Highway law enforcement and safety
- The following entries on the form are not applicable to New Jersey: Section II: Receipts for Road and Street Purposes, Items: A1-Local highway-user taxes and A3-Other local inposts.
- Representatives from NJGROA and OLGS confirmed that local government budget documents are not likely to provide information at the level of detail needed for local highway finance reporting. However, they agreed that audit reports might include enough information to estimate revenue and expenses for many categories included on FHWA Form 536. ^(8,9)
- NJGROA members also remarked that any effort to request information and collect data via a survey of local finance officers was not likely to be successful without a State requirement or mandate to do so. ⁽⁸⁾
- Representatives from both NJGROA and OLGS agreed that asking local finance officers to provide data retrospectively for a past fiscal year was going to be met with significant resistance. However, they were less pessimistic about the prospect of working with NJDOT to develop new reporting guidance that would make it easier to track and report local highway finance data in the future. ^(8,9)

- There appears to be an opportunity to develop guidance on the coding of revenue and expenses related to transportation using existing chart of accounts that most local governments use. Current practice and guidance do not require the coding and tracking of transportation-related expense and revenue but if new guidance were provided, such as asking local finance officers to use a new coding procedure in the future, many are likely to comply. This could significantly ease data collection efforts and improve the accuracy of reporting by reducing the number of assumptions needing to be made when data are reported at a more general level.

DATA COLLECTION METHODOLOGY AND ANALYSIS RESULTS

Based on the findings of the current practice review and consultation with NJDOT subject matter experts, a decision was made to use local government financial audit reports as the primary source of data for completing FHWA Form 536. The sections that follow describe the sampling and stratification framework used to guide data collection, the assumptions used when interpreting audit report data, a description of data limitations and a summary of data analysis results.

Sampling and Stratification Framework

To develop a local government sampling framework, the research team assembled a database that included a range of data designed to help characterize the 565 municipal government jurisdictions in the New Jersey. The following data were compiled:

1. Municipality Name and Census FIPS Code;
2. The County in which the municipality is located;
3. Form of municipal government (i.e., Borough, City, Town, Township, Village);
4. Total land Area (square miles and acres);
5. Total population;
6. Population density (persons per sq. mile);
7. Total number of jobs located in the municipality;
8. Total Population + Jobs (This served as a measure of total activity as a surrogate for wear and tear on local road mileage);
9. Activity density (people + jobs per acre);
10. Number of dwelling units;
11. Housing density (dwelling units per acre);
12. Percent of housing built prior and after 1970;
13. Total road mileage:
 - a. State road mileage;
 - b. County road mileage;
 - c. Local road mileage; and
14. Road density (local road mileage per acre).

These data were analyzed to determine what if any patterns could inform the stratification of municipalities into useful grouping for the purpose of sampling. Ultimately, a decision was made to group municipalities by size as measured by total population, with substrata related to age of housing stock in two categories (newer and older) and number of local roadway lane miles in three categories (high, medium and low). The age of housing stock variable was used as a surrogate for age of roadway infrastructure, which was hypothesized to potentially influence municipal spending on roadway infrastructure maintenance, operations and capital investment.

Table 1 shows the final municipal stratification and sampling framework and the number of municipalities in each substrata and the target for sampling each strata.

Table 1 – Municipal stratification and sampling framework

	Local Road Mileage (Center Line Miles) Age of Housing Stock (Older = > 50% built prior to 1970)											
Total Population	Low < 30			Medium 31- 60			High > 60			Total		
	Newer	Older	All	Newer	Older	All	Newer	Older	All	Newer	Older	All
Very Large (> 100,000)	0	0	0	0	0	0	1	5	6	1	5	6
Large (50,000 - 99,999)	0	2	2	0	4	4	8	16	24	8	22	30
Medium (25,000 - 49,999)	0	0	0	0	6	6	33	25	58	33	31	64
Small (5,000 - 24,999)	8	61	69	34	89	123	59	24	83	101	174	275
Very Small (<5,000)	31	112	143	24	16	40	3	4	7	58	132	190
Total	39	175	214	58	115	173	104	74	178	201	364	565

Data Collection Methods

As noted above, OLGS does not make local government financial audit reports available on their website. As a result, it was necessary to search for and collect individual audit reports made available online via individual local government websites. Local Government audit reports were collected from July 2017 through September 2017. At that time, the most recent audit data consistently available on-line was for FY 2015. Only about half of the local government websites surveyed had FY 2016 audit reports available.

Municipal audit reports were downloaded from the Internet in PDF format, reposed on a local server, and organized in accordance with the municipal size categories used to stratify the municipalities. In addition, audit reports for all 21 of New Jersey's counties were collected and reposed for later analysis. Audit reports were deemed to contain insufficient data for inclusion in the sample if (1) the public works spending line items did

not provide information specific to roads AND/OR (2) the report did not include road-specific bond programs. Roughly half of the 2015 audit reports available online were found to contain insufficient data for analysis.

As shown in in Table 2, data for a total of 177 municipalities was compiled. This represents 31 percent of the municipalities in New Jersey. Data for a total of 13 out of 21 New Jersey counties was compiled. Attempts were made to include 100 percent of very large and large municipalities in the sample as well as 100 percent of counties; however, this was not possible because either financial audit reports were not available for the municipalities and counties not included in the sample or the data contained in the financial audit reports was insufficient to complete the analysis.

Table 2 – Municipalities sampled in each substrata

	Local Road Mileage (Center Line Miles) Age of Housing Stock (Older = > 50% built prior to 1970)												
Total Population	Low < 30			Medium 31- 60			High > 60			Total			Percent Sampled
	Newer	Older	All	Newer	Older	All	Newer	Older	All	Newer	Older	All	
Very Large (> 100,000)							1	2	3	1	2	3	50%
Large (50,000 - 99,999)	0	1	1	0	1	1	4	10	14	4	12	16	53%
Medium (25,000 - 49,999)	0	0	0	0	2	2	14	15	29	14	17	31	48%
Small (5,000 - 24,999)	4	22	26	14	18	32	15	8	22	33	48	81	50%
Very Small (<5,000)	11	14	25	9	7	16	2	3	5	22	25	46	25%
Total	15	38	53	23	28	51	36	38	73	74	104	177	31%

As noted above, audit reports were only available in PDF format. As a result, data had to be mined from the reports manually. To facilitate data collection, the research team developed an Excel-based data capture worksheet designed to “blend” the categories of revenue and expenditure required to complete FHWA Form 536 with the uniform terminology and financial reporting categories used in New Jersey’s local government financial audit report template. A copy of the generic data capture worksheet is attached to this report as Appendix A.

Data Assumptions and Limitations

The local government audit reports reviewed as part of this study were generally standardized in terms of terminology and format; however, reporting of revenue and expenditures were not always uniform, nor did the terminology and categories of revenue and expenditure always match that used in FHWA Form 536. To address these constraints, the research team developed a program of data interpretation

assumptions to guide the data input process. When there was ambiguity or questions about how to record data the following assumptions and rules applied:

General

- Generally, amounts reported in the “Paid or Charged” column of the audit reports was reported. In many audit reports, columns with spending data in grants and bond programs sections were labeled variously as “Expenditures” or “Disbursed” among other labels. These columns were used when it was clear that the reported expenditures were payments made in the analysis year.
- Expenditures related to employee fringe benefits were assumed to be equal to 50 percent of reported salaries and wages and calculated by multiplying reported salary and wages by a factor of 1.5.
- General fund appropriations were assumed to be equal to expenditures not funded by other revenue sources such as capital bonds, state grants or federal grants.

State and Federal grants

- Revenues received from State and Federal grants generally appeared in three sections of municipal audit reports: (1) Current Fund – Schedule of Expenditures - Public and Private Programs Offset by Revenues (2) Schedule of Reserve for Grants-Appropriated (3) Schedule of Expenditures of Federal Awards/State Financial Assistance. Entries and references to the same grant were sometimes reported in more than one section. To avoid double-counting, the following protocol was followed:
 - All relevant line items in all three sections were recorded in the Notes tab of the data capture worksheet, even if the entries were redundant.
 - Grants reported in the “Current Fund – Schedule of Expenditures - Public and Private Programs Offset by Revenues” section, were given precedence and recorded in the data capture worksheet under the revenue section. If the same grant appeared in another section, it was not counted again. It was decided to use expenditures reported under “Current Fund – Schedule of Expenditures - Public and Private Programs Offset by Revenues” because expenditures reported in this section show the total amount spent in the fiscal year whether or not invoiced at the time the audit report was prepared. The other sections often reported invoiced amounts which was not a full accounting of expenditures.
 - If a grant was not reported in the “Current Fund – Schedule of Expenditures - Public and Private Programs Offset by Revenues” section but was reported in another section, the amount reported was recorded in the data capture worksheet under the revenue section.

- Any Federal grants passed through NJDOT were counted as State grants. Any grants passed through an MPO were considered federal grants.
- All grant expenditures related to road safety that could not be identified as an infrastructure improvement, such as “Click It or Ticket,” or “Drunk Driving Enforcement,” “Safe Routes to School,” and others were included under Highway law enforcement and safety.
- Community Development Block Grants (CDBG) were not included because they were rarely broken down by spending purpose. CDBG grant funds are sometimes used for road and street maintenance and capital improvement purposes. Any use of CDBG grants funds for road-related purposes is not included in the analysis.

Bonds and Notes

- Revenue for street and road-related capital projects in New Jersey come from several sources, including: general fund appropriations; State and Federal grants; and past and current bond issuances. In general, information on bond-supported capital projects for road and street purposes was recorded in the “Schedule of Improvement Authorizations” section of the audit reports.
 - If the names of line items for any bond program suggested they were specifically road-related, it was assumed that those line items constituted the entirety or most of bond-supported funding for roads. The “Spent Amounts” for these line items was recorded in the data capture worksheet. Line items that did not specify use or specified a non-road use were not recorded.
 - If expenditures were listed as a bond program in the “Schedule of Improvement Authorizations” AND was also listed as grant spending in one of the three grant spending sections, the bond program amount was not listed, because it was assumed to double-count the amount already recorded under the grant spending section. Only amounts listed as “Non-grant capital projects supported by general fund/bonds,” were included. In some instances, the bond program spending amount reported in the Schedule of Improvement Authorization section exceeded the amount listed under the corresponding grant spending, but the rule above was still followed.
- It should be noted that it is common in New Jersey for municipal governments to issue general purpose bonds for a mix of capital projects. Each bond issuance may or may not include capital projects related to roads and streets. If it was not possible to tell if funds from the sale of general purpose bonds included road and street projects, these were not included. Following this rule likely results in an undercounting of bond funding used for road and street purposes.

Road and street services

- Very few audit reports included data on traffic control operations expenditures.
- Many but not all audit reports included information on street lighting and snow and ice removal expenditures. If not present, the audit reports were still considered to have sufficient data to be included in the sample.
- The Current Fund section of many audit reports contained a “Statement of 2014 Appropriation Reserves” with Paid or Charged items. This sub-section repeats items such as “Street and Road Maintenance”, “Snow Removal”, “Street Lighting” and other items listed in the “Current Fund – Statement of Expenditures” sub-section. Because of the way these were reported, it was assumed that these expenditures were in addition to spending listed in the “Statement of Expenditures.”

Highway law enforcement and safety

- Expenditures related to Highway law enforcement and safety include salary and wages and fringe benefits for police personnel, including crossing guards; expenses related to police vehicle purchases; 911 dispatch; and other miscellaneous expenses identified with law enforcement and public safety. Expenditures related to police pension obligations were not included.
- Very few if any audit reports included data that apportioned total expenditures for police and public safety between highway traffic safety enforcement and other law enforcement activities. Because it was not known what proportion was spent on highway-related law enforcement and safety, a factor of 0.5 was applied to total police and public safety expenditures to calculate estimates for this line item.

Line items for which there was not enough data

- The local government financial audit reports reviewed for this study did not contain enough information to record entries for the following revenue and expenditure items:
 - Debt service on local obligation bonds;
 - Local Highway Debt Status;
 - Private contributions received for road and street purposes;
 - Payments to State for highways;
 - A breakdown of capital outlays by category of cost and project type; and
 - A breakdown of capital outlays for National Highway System roadways.

Analysis Results

Once the audit report data capture worksheets were completed for each municipality and county in the sample, the reports were “rolled up” into a series of Excel-based workbooks, one for each of the five municipal size grouping (very large, large, medium, small and very small) and one for counties. The workbooks contain a series of tabs that repose the data necessary to: 1) calculate average per-capita and per lane mile revenue and expenditure multipliers for each category of revenue and spending for which data was available for each substrate grouping represented in Table 1; and 2) expand the sample-based estimates to represent 100 percent of the municipalities in each substrata in each grouping using the revenue and expenditure multipliers.

The average per-capita and per-lane mile multipliers derived through the spreadsheet calculations were tested to determine how well they estimated spending in the sample municipalities. This was done by applying the per-capita and per-lane mile multipliers for total expenditures to the total population and total local lane miles for each municipality in the sample in each substrata grouping. This analysis showed that the per-capita multipliers performed better than the per-lane mile multipliers when estimated expenditures were compared against the actual expenditures reported in the financial audit reports.

As shown in Table 3, in most cases, the estimated vs. actual per-capita expenditures were within plus or minus five percent. Based on these results, it was decided that the per-capita multipliers should be used to expand the sample data to the full universe of municipalities in New Jersey. In addition, the difference rates shown in Table 3 were used to adjust the estimates for each substrata up or down when expanding the estimates to statewide totals.

The following is a summary of key findings from the analysis:

- Roadway-related spending by local government units (municipalities and counties) in New Jersey totaled an estimated \$3.2 billion dollars in FY 2015. This includes: spending for maintenance; road and street services such as traffic control operations and snow/ice removal; highway law enforcement and safety initiatives; and capital outlays for roadway infrastructure purposes.
- Of the \$3.2 billion in total roadway-related spending, municipal governments spent an estimated \$2.8 billion and county governments spent an estimated \$401.4 million. This represents about \$360 per person and about \$74,256 per lane mile of roadway under local government jurisdiction.
- Approximately 57 percent of all local roadway-related spending was for highway law enforcement and safety. Spending for routine maintenance represented another 22 percent of overall spending, while outlays for capital projects represented 17 percent of overall local government spending on roads. The remaining four percent of spending was for road and street services.

- Total revenue used to support roadway-related spending by local government units (municipalities and counties) in New Jersey also totaled an estimated \$3.2 billion dollars in FY 2015. The vast majority of revenue (94 percent) came from general fund appropriations, proceeds from local bond sales, and miscellaneous other local receipts. Only about six percent of the revenue used to support local highway spending came from State grants, Local Aid, and/or Federal grants.

Table 3 – Comparison of estimated vs. actual recorded expenditures
in each sample substrata

Grouping/Substrata			% Difference Estimated vs. Actual Expenditures (per-capita)	% Difference Estimated vs. Actual Expenditures (per lane mile)
Population	Local Lane Miles	Age of Housing		
Very Large (> 100,000)	Low (< 30 mi.)	Newer	--	--
		Older	--	--
	Medium (31-60 mi.)	Newer	--	--
		Older	--	--
	High (> 60 mi.)	Newer	0.0%	0.0%
		Older	-0.3%	3.0%
<i>Overall Very Large</i>			-0.3%	2.7%
Large (50,000 to 99,999)	Low (< 30 mi.)	Newer	--	--
		Older	21.7%	192.6%
	Medium (31-60 mi.)	Newer	--	--
		Older	1.4%	114.2%
	High (> 60 mi.)	Newer	-6.3%	-7.7%
		Older	3.5%	2.6%
<i>Overall Large</i>			3.7%	77.0%
Medium (25,000 to 49,999)	Low (< 30 mi.)	Newer	--	--
		Older	--	--
	Medium (31-60 mi.)	Newer	--	--
		Older	0.0%	-0.5%
	High (> 60 mi.)	Newer	0.0%	2.0%
		Older	0.0%	6.5%
<i>Overall Medium</i>			0.0%	8.0%
Small (5,000 to 24,999)	Low (< 30 mi.)	Newer	3.1%	23.7%
		Older	3.3%	-1.2%
	Medium (31-60 mi.)	Newer	0.4%	-6.1%
		Older	2.3%	3.3%
	High (> 60 mi.)	Newer	1.2%	9.0%
		Older	-0.2%	1.2%
<i>Overall Small</i>			1.8%	3.0%
Very Small (< 5,000)	Low (< 30 mi.)	Newer	-4.8%	-1.5%
		Older	1.7%	12.9%
	Medium (31-60 mi.)	Newer	1.7%	5.4%
		Older	-0.8%	1.9%
	High (> 60 mi.)	Newer	-0.1%	-1.9%
		Older	3.4%	9.6%
<i>Overall Very Small</i>			0.8%	7.5%

Table 4 – Statewide estimates of local government road-related revenue and expenditures

	Municipal Governments						County Governments	TOTAL
	Very Large	Large	Medium	Small	Very Small	Total		
<i>Population Range</i>	<i>> 100,000</i>	<i>50,000 to 99,999</i>	<i>25,000 to 49,999</i>	<i>5,000 to 24,999</i>	<i>< 5,000</i>	<i>n/a</i>	<i>n/a</i>	
<i>No. of Local Govt Units in Sample</i>	<i>3</i>	<i>16</i>	<i>31</i>	<i>81</i>	<i>46</i>	<i>177</i>	<i>13</i>	
<i>No. of Local Govt Units Statewide</i>	<i>6</i>	<i>30</i>	<i>64</i>	<i>275</i>	<i>190</i>	<i>565</i>	<i>21</i>	
Revenue/Receipts from local sources:								
1. General fund appropriations	\$322,582,419	\$442,367,754	\$594,148,108	\$951,812,247	\$173,640,587	\$2,476,267,135	\$254,127,280	\$2,738,678,396
2. Misc. local receipts	n/a	n/a	n/a	n/a	n/a	n/a	\$16,418,755	\$16,418,755
3. Proceeds for bond sales	\$3,587,884	\$33,438,281	\$69,418,780	\$92,648,017	\$15,595,243	\$211,099,292	\$23,045,308	\$237,733,512
<i>Subtotal revenue from local sources</i>	<i>\$326,170,303</i>	<i>\$475,806,035</i>	<i>\$663,566,889</i>	<i>\$1,044,460,264</i>	<i>\$189,235,830</i>	<i>\$2,687,366,427</i>	<i>\$293,591,343</i>	<i>\$2,992,830,664</i>
State Grants/Local Aid	\$17,714,470	\$17,201,728	\$24,753,855	\$10,735,552	\$8,996,417	\$91,275,496	\$85,065,010	\$164,467,032
Federal Grants	\$8,929,214	\$950,591	\$5,777,691	\$2,335,543	\$7,318	\$18,000,357	\$22,765,047	\$40,765,404
Total Revenue/Receipts	\$352,813,987	\$493,958,355	\$694,098,435	\$1,057,531,358	\$198,239,565	\$2,796,642,280	\$401,421,400	\$3,198,063,100
Percent of Total	11%	15%	22%	33%	6%	n/a	13%	100%
Local Road and Street Expenditures								
1. Routine maintenance	\$17,635,456	\$62,275,386	\$121,226,295	\$263,793,899	\$70,152,034	\$535,083,069	\$167,580,981	\$702,664,050
2. Road and street services								
a. Traffic control operations	n/a	\$2,993,696	\$3,005,950	\$1,396,651	\$11,904	\$7,408,201	\$1,349,078	\$8,757,279
b. Snow/ice removal	n/a	\$5,581,244	\$15,891,977	\$9,000,201	\$1,656,120	\$32,129,542	\$6,241,496	\$38,371,039
c. Other	\$7,468,160	\$19,376,228	\$24,162,968	\$32,703,062	\$5,330,918	\$89,041,336	\$4,071,982	\$93,113,318
d. Subtotal road/street services	\$7,468,160	\$27,951,167	\$43,060,895	\$43,099,914	\$6,998,943	\$128,579,079	\$11,662,556	\$140,241,635
3. Hwy law enforcement and safety	\$297,478,804	\$352,141,201	\$429,860,918	\$643,627,927	\$96,489,611	\$1,819,599,040	n/a	\$1,819,598,460
4. Capital project outlays	\$30,231,568	\$51,590,601	\$99,950,326	\$107,009,619	\$24,598,978	\$313,381,092	\$222,177,863	\$535,558,955
Total Expenditures	\$352,813,987	\$493,958,355	\$694,098,435	\$1,057,531,358	\$198,239,565	\$2,796,642,280	\$401,421,400	\$3,198,063,100
Percent of Total	11%	15%	22%	33%	6%	87%	13%	100%

Table 5 – Share of statewide local government road-related revenue and expenditures by category

	Municipal Government	County Government	Total	Share of Total
Revenue/Receipts from local sources:				
1. General fund appropriations	\$2,476,267,135	\$254,127,280	\$2,738,678,396	85.6%
2. Misc. local receipts	n/a	\$16,418,755	\$16,418,755	0.5%
3. Proceeds for bond sales	\$211,099,292	\$23,045,308	\$237,733,512	7.4%
<i>Subtotal revenue from local sources</i>	\$2,687,366,427	\$293,591,343	\$2,992,830,664	93.6%
State Grants/Local Aid	\$91,275,496	\$85,065,010	\$164,467,032	5.1%
Federal Grants	\$18,000,357	\$22,765,047	\$40,765,404	1.3%
Total Revenue/Receipts	\$2,796,642,280	\$401,421,400	\$3,198,063,100	100.0%
Percent of Total	87%	13%	100%	
Local Road and Street Expenditures				
1. Routine maintenance	\$535,083,069	\$167,580,981	\$702,664,050	22.0%
2. Road and street services				
a. Traffic control operations	\$7,408,201	\$1,349,078	\$8,757,279	0.3%
b. Snow/ice removal	\$32,129,542	\$6,241,496	\$38,371,039	1.2%
c. Other	\$89,041,336	\$4,071,982	\$93,113,318	2.9%
d. Subtotal road/street services	\$128,579,079	\$11,662,556	\$140,241,635	4.4%
3. Hwy law enforcement and safety	\$1,819,599,040	n/a	\$1,819,598,460	56.9%
4. Capital project outlays	\$313,381,092	\$222,177,863	\$535,558,955	16.7%
Total Expenditures	\$2,796,642,280	\$401,421,400	\$3,198,063,100	100.0%
Percent of Total	87%	13%	100%	

RECOMMENDATIONS

Given current practices for reporting local finance data in New Jersey, the process of collecting and analyzing data on local highway revenues and expenditures is very labor intensive and time consuming. As noted above, the NJDOT is required to complete FHWA Form 536 a minimum of every other year. To ensure future compliance with this requirement, the research team recommends the following:

- In the short-term, NJDOT should allocate sufficient time and resources to replicate the sampling, data collection and analysis process outlined in this report on a biennial basis. This should include a minimum of 650 labor hours;
- In the longer term, representatives from NJDOT should continue to explore ways to enhance local government reporting of roadway-related revenue and expenditures. This should include working with the Department of Community Affairs Office of Local Government Services and representatives from the New Jersey Government Finance Officers Association to develop a guidance document establishing improved procedures for identifying, coding, and reporting roadway-related revenues and expenditures within the current structure of finance reporting requirements; and finally,
- NJDOT should also explore the feasibility of requiring local government units to report data on local roadway-related revenue and expenditures as a condition of receiving local aid funding.

REFERENCES

1. United States Department of Transportation, Federal Highway Administration, Office of Highway Policy Information, A Guide to Reporting Highway Statistics, No Date. Accessed online at:
<https://www.fhwa.dot.gov/policyinformation/hss/guide/guide.pdf>
2. New Jersey Department of Transportation, Bureau of Research, Results from Survey of State Departments of Transportation Regarding Current Practices for Completing FHWA Form 536. Excel spreadsheet dated 9/26/2016.
3. Telephone Interview with Steve Kulp, Weldon Cooper Center for Public Service, University of Virginia. Interview conducted on June 23, 2017
4. Telephone Interview with Lucy Elizondo, Texas Department of Transportation. Interview conducted on June 27, 2017.
5. N.J.S.A. 40A:4-1 et seq., New Jersey Local Budget Law
6. New Jersey Department of Community Affairs, Office of Local Government Services, State Fiscal Year 2018 Budget Forms, accessed online at:
http://www.nj.gov/dca/divisions/dlgs/programs/mc_budgets.html#7
7. N.J.S.A. 40A:5-1 et seq., New Jersey Local Fiscal Affairs Law.
8. Group interview with representatives of the New Jersey Government Finance Officers Association (NJGFOA). Interview conducted on February 24, 2017.
9. Group interview with representatives of the New Jersey Department of Community Affairs, Office of Local Government Services. Interview conducted on May 23, 2017.

LIST OF APPENDICES

- A. Blank Audit Report Data Capture Worksheet
- B. Completed FHWA Form 536 for 2015 Local Government Revenue and Expenditures
- C. Very Small Mun Results Summary with Estimates Excel Workbook (digital file)
- D. Small Mun Results Summary with Estimates Excel Workbook (digital file)
- E. Medium Mun Results Summary with Estimates Excel Workbook (digital file)
- F. Large Mun Results Summary with Estimates Excel Workbook (digital file)
- G. Very Large Mun Results Summary with Estimates Excel Workbook (digital file)
- H. County Results Summary with Estimates Excel Workbook (digital file)

Appendix A

Blank Audit Report Data Capture Worksheet

Page 1

SECTION I. REVENUE/RECEIPTS FOR ROAD AND STREET PURPOSES	AMOUNT	PER CAPITA	PER LANE MILE NOTES:
A. Revenue/Receipts from local sources:			
1. General fund appropriations	\$0.00	#DIV/0!	#DIV/0!
2. Traffic fines and fees		#DIV/0!	#DIV/0!
3. Proceeds from sale of bonds and notes:			
a. Bonds - Original Issues	\$0.00	#DIV/0!	#DIV/0!
b. Bonds - Refunding Issues		#DIV/0!	#DIV/0!
c. Notes		#DIV/0!	#DIV/0!
d. Total (a + b + c)	\$0.00	#DIV/0!	#DIV/0!
4. Total private contributions	\$0.00	#DIV/0!	#DIV/0!
5. Misc. local revenue/receipts (Total from Section III.A.8)	\$0.00	#DIV/0!	#DIV/0!
6. Total revenue/receipts from local sources	\$0.00	#DIV/0!	#DIV/0!
B. State Grants/Local Aid (Total from Section III.B.8)	\$0.00	#DIV/0!	#DIV/0!
C. Federal Grants (Total from Section III.C.8)	\$0.00	#DIV/0!	#DIV/0!
D. Total revenue/receipts	\$0.00	#DIV/0!	#DIV/0!
SECTION II. EXPENDITURES FOR ROAD AND STREET PURPOSES	AMOUNT	PER CAPITA	PER LANE MILE NOTES:
A. Local road and street expenditures			
1. Routine road/sidewalk/drainage repairs and maintenance			
a. Salary and wages		#DIV/0!	#DIV/0!
b. Salary and wages including benefits (assumed at 50%)	\$0.00	#DIV/0!	#DIV/0!
c. Other expenses		#DIV/0!	#DIV/0!
d. Total salary and wages and other expenses	\$0.00	#DIV/0!	#DIV/0!
2. Road and street services			
a. Traffic control operations salary		#DIV/0!	#DIV/0!
b. Traffic control operations salary including benefits (assumed at 50%)	\$0.00	#DIV/0!	#DIV/0!
c. Traffic control operations (Other)		#DIV/0!	#DIV/0!
d. Total traffic control operations	\$0.00	#DIV/0!	#DIV/0!
e. Snow and ice removal		#DIV/0!	#DIV/0!
f. Other services		#DIV/0!	#DIV/0!
g. Total road and street services	\$0.00	#DIV/0!	#DIV/0!
3. Highway law enforcement and safety		#DIV/0!	#DIV/0!
4. Capital project outlays (Total from Section IV.A.4c)	\$0.00	#DIV/0!	#DIV/0!
5. Total local road and street expenditures (1+2+3)	\$0.00	#DIV/0!	#DIV/0!
B. Debt service on local obligations			
1. Bond interest		#DIV/0!	#DIV/0!
2. Bond redemption		#DIV/0!	#DIV/0!
3. Note interest		#DIV/0!	#DIV/0!
4. Note redemption		#DIV/0!	#DIV/0!
5. Total debt service (1+2+3+4)	\$0.00	#DIV/0!	#DIV/0!
C. Payments to State for roads and streets		#DIV/0!	#DIV/0!
D. Payments to Toll Authorities for roads and streets		#DIV/0!	#DIV/0!
E. Total expenditures for road and street purposes	\$0.00	#DIV/0!	#DIV/0!

SECTION III. REVENUE/RECEIPTS DETAIL		AMOUNT	NOTES:
A. Misc. local revenue and receipts			
1. Interest on road/street-related reserve funds			
2. Special Imp. District / Business Imp. District fees			
3. Private contributions			
a. Development Impact Fees/Assessments			
b. Value of in-kind contributions/services			
c. Other private contributions			
d. Total (a + b + c)		\$0.00	
4. Specify			
5. Specify			
6. Specify			
7. Specify			
8. Total Misc. local revenue and receipts (1+2+3d+4+5+6+7)		\$0.00	
B. State grants/local aid detail			
1. Specify			
2. Specify			
3. Specify			
4. Specify			
5. Specify			
6. Specify			
7. Specify			
8. Specify			
9. Specify			
10. Specify			
11. Specify			
12. Specify			
13. Specify			
14. Specify			
15. Specify			
16. Total transp. grants from State sources (1+2+3+4+5...10)		\$0.00	
C. Federal grants detail (DVRPC, NITPA, SJTPO, FHWA, HUD, FEMA, etc.)			
1. Specify			
2. Specify			
3. Specify			
4. Specify			
5. Specify			
6. Specify			
7. Specify			
8. Specify			
9. Specify			
10. Specify			
11. Specify			
12. Specify			
13. Specify			
14. Specify			
15. Specify			
16. Total transp. grants from federal sources (1+2+3+4+5+6+7)		\$0.00	

SECTION IV. CAPITAL PROJECT OUTLAY DETAIL		ON NHS SYSTEM (a)	AMOUNT OFF NHS SYSTEM (b)	TOTAL (c)
A. Right-of-Way costs				
B. Planning & Engineering costs				
C. Construction costs				
D. Total capital project outlays (A+B+C)				
Non-grant capital projects supported by general fund/bonds:				
1. Specify				
2. Specify				
3. Specify				
Highway safety related grants:				
1. Specify				
2. Specify				
3. Specify				
4. Specify				
5. Specify				
6. Specify				
7. Specify				
8. Specify				
9. Specify				
10. Specify				
11. Total highway safety grants (1+2+3...10)				

Appendix B

Completed FHWA Form 536 2015 Local Government Revenue and Expenditures

The public report burden for this information collection is estimated to average 380 hours annually. Form Approved
OMB No. 2125-0032

LOCAL HIGHWAY FINANCE REPORT		STATE: New Jersey YEAR ENDING (mm/yy): 12/2015	
This Information From The Records Of:		Prepared By: Jon Carnegie, Rutgers University	
I. DISPOSITION OF HIGHWAY-USER REVENUES AVAILABLE FOR LOCAL GOVERNMENT EXPENDITURE			
ITEM	A. Local Motor-Fuel Taxes	B. Local Motor-Vehicle Taxes	C. Receipts from State Highway-User Taxes
1. Total receipts available			
2. Minus amount used for collection expenses			
3. Minus amount used for nonhighway purposes			
4. Minus amount used for mass transit			
5. Remainder used for highway purposes			40,765,404
II. RECEIPTS FOR ROAD AND STREET PURPOSES		III. EXPENDITURES FOR ROAD AND STREET PURPOSES	
ITEM	AMOUNT	ITEM	AMOUNT
A. Receipts from local sources:		A. Local highway expenditures:	
1. Local highway-user taxes		1. Capital outlay (from page 2)	535,558,955
a. Motor Fuel (from Item I.A.5.)		2. Maintenance:	702,664,050
b. Motor Vehicle (from Item I.B.5.)		3. Road and street services:	
c. Total (a.+b.)		a. Traffic control operations	8,757,279
2. General fund appropriations	2,738,678,396	b. Snow and ice removal	38,371,039
3. Other local imposts (from page 2)		c. Other	93,113,318
4. Miscellaneous local receipts (from page 2)	16,418,755	d. Total (a. through c.)	140,241,635
5. Transfers from toll facilities		4. General administration & miscellaneous	
6. Proceeds of sale of bonds and notes:		5. Highway law enforcement and safety	1,819,598,460
a. Bonds - Original Issues	237,733,512	6. Total (1 through 5)	3,198,063,100
b. Bonds - Refunding Issues		B. Debt service on local obligations:	
c. Notes		1. Bonds:	
d. Total (a. + b. + c.)	237,733,512	a. Interest	
7. Total (1 through 6)	2,992,830,663	b. Redemption	
B. Private Contributions		c. Total (a. + b.)	
C. Receipts from State government (from page 2)	164,467,032	2. Notes:	
D. Receipts from Federal Government (from page 2)	40,765,404	a. Interest	
E. Total receipts (A.7 + B + C + D)	3,198,063,100	b. Redemption	
		c. Total (a. + b.)	
		3. Total (1.c + 2.c)	
		C. Payments to State for highways	
		D. Payments to toll facilities	
		E. Total expenditures (A.6 + B.3 + C + D)	3,198,063,100
IV. LOCAL HIGHWAY DEBT STATUS (Show all entries at par)			
	Opening Debt	Amount Issued	Redemptions
A. Bonds (Total)			
1. Bonds (Refunding Portion)			
B. Notes (Total)			
Notes and Comments: Amount entered for Receipts from FHWA includes funds passed through from MPOs and grants used for highway safety programs such as Click it or Ticket, etc. The local government financial audit reports reviewed to complete this report did not contain enough information to record entries for the following revenue & expenditure Debt service on local obligation bonds; Local Highway Debt Status; Private contributions received for road and street purposes; ; Payments to State for highways; a breakdown of capital outlays by category of cost and project type; and a breakdown of capital outlays for National Highway System roadways			

FORM FHWA-536 (Rev.06/2000)

PREVIOUS EDITIONS OBSOLETE
page 1

Excel

(Next Page)

LOCAL HIGHWAY FINANCE REPORT		STATE: New Jersey YEAR ENDING (mm/yy): 12/2015	
II. RECEIPTS FOR ROAD AND STREET PURPOSES - DETAIL			
ITEM	AMOUNT	ITEM	AMOUNT
A.3. Other local imposts:		A.4. Miscellaneous local receipts:	
a. Property Taxes and Assessments	0	a. Interest on investments	
b. Other local imposts:		Various county revenues	16,418,755
1. Sales Taxes		c. (Specify)	
2. (Specify)		d. (Specify)	
3. (Specify)		e. (Specify)	
4. (Specify)		f. (Specify)	
5. (Specify)		g. (Specify)	
6. Total (1. through 5.)		h. (Specify)	
c. Total (a. + b.)		i. Total (a. through h.)	16,418,755
<i>(Carry forward to page 1)</i>		<i>(Carry forward to page 1)</i>	
III. EXPENDITURES FOR ROAD AND STREET PURPOSES - DETAIL			
ITEM	AMOUNT	ITEM	AMOUNT
C. Receipts from State Government		D. Receipts from Federal Government	
1. Highway-user taxes (from Item I.C.5.)		1. FHWA (from Item I.D.5.)	40,765,404
2. State general funds		2. Other Federal agencies:	
3. Other State funds:		a. Forest Service	
a. State bond proceeds		b. FEMA	
State Grants and Local Aid	164,467,032	c. HUD	
c. (Specify)		d. (Specify)	
d. (Specify)		e. (Specify)	
e. (Specify)		f. (Specify)	
f. Total (a. through e.)	164,467,032	g. Total (a. through f.)	
4. Total (1. + 2. + 3.f)	164,467,032	3. Total (1. + 2.g)	40,765,404
<i>(Carry forward to page 1)</i>		<i>(Carry forward to page 1)</i>	
III. EXPENDITURES FOR ROAD AND STREET PURPOSES - DETAIL			
	ON NATIONAL HIGHWAY SYSTEM (a)	OFF NATIONAL HIGHWAY SYSTEM (b)	TOTAL (c)
A.1. Capital outlay:			
a. Right-Of-Way Costs			
b. Engineering Costs			
c. Construction:			
(1). New Facilities			
(2). Capacity Improvements			
(3). System Preservation	535,558,955		
(4). System Enhancement And Operation			
(5). Total Construction (1)+(2)+(3)+(4)	535,558,955		535,558,955
d. Total Capital Outlay (Lines 1.a. + 1.b. + 1.c.4)	535,558,955		535,558,955
<i>(Carry forward to page 1)</i>			
Notes and Comments:			

Appendices C-H

Municipal Results Summaries

- C. Very Small Mun Results Summary with Estimates Excel Workbook (digital file)
- D. Small Mun Results Summary with Estimates Excel Workbook (digital file)
- E. Medium Mun Results Summary with Estimates Excel Workbook (digital file)
- F. Large Mun Results Summary with Estimates Excel Workbook (digital file)
- G. Very Large Mun Results Summary with Estimates Excel Workbook (digital file)
- H. County Results Summary with Estimates Excel Workbook (digital file)

The Municipal and County Results Summary Estimates are available in digital format only. Each of the Municipal Results Summary Excel Workbook listed above (Appendices C-G) contain the following worksheet tabs:

Worksheet Tab	Description
Mun Spending	Road-related spending by sample municipalities by spending category.
Mun Spending Per-Capita	Road-related per-capita spending of municipalities included in the sample by lane mileage and housing stock age sub-strata.
Mun Spending Per Lane Mile	Road-related per lane mile spending of municipalities included in the sample by lane mileage and housing stock age sub-strata.
Sample Average Spending	Average spending of municipalities included in the sample by lane mileage and housing stock age sub-strata.
Sample Ave Spending Per-Capita	Average per-capita spending of municipalities included in the sample by lane mileage and housing stock age sub-strata.
Sample Ave Spending Per Lane Mi	Average per lane mile spending of municipalities included in the sample by lane mileage and housing stock age sub-strata.
Mun Population & Lane Miles	Population and lane mileage of each municipality in New Jersey in that group.
Sub-Strata Pop & Lane Miles	Total population and lane mileage of all municipalities in that group by lane mileage and housing stock age sub-strata.
Adjustment Factor	Percentage difference between (1) estimate produced through summing total spending per-capita and per lane mile for each sample sub-strata weighted by population and lane miles contained in each sub-strata and (2) estimate produced by summing sample municipalities total spending. Resulting percentage used to adjust initial estimates for each spending category in the two following ESTIMATE worksheets.

ESTIMATE (Per-Capita-Based)	Average per-capita spending of sample municipalities in the group by lane mileage and housing stock age sub-strata multiplied by population of contained in corresponding lane mileage and housing stock age sub-strata. Spending for each municipality sub-strata summed and resulting sum multiplied by adjustment factor to produce estimated statewide spending for each Form FHWA 536 line item.
ESTIMATE (Per Lane Mile-Based)	Average per lane mile spending of sample municipalities in the group by lane mileage and housing stock age categories multiplied by population of all municipalities in the group by lane mileage and housing stock age categories. Spending for each municipality category summed and resulting sum multiplied by adjustment factor to produce estimated statewide spending for each Form FHWA 536 line item.
Municipality Name Audit Report Data Capture Worksheets	Individual municipal audit report data worksheets and accompanying worksheets for gathering line item data.
MUN WORKSHEET TEMPLATE and COMP TEMPLATE	Individual municipal audit report data worksheet template that can be used to add municipalities to the sample and accompanying template worksheet for gathering line item data.

The County Results Summary Excel Workbook (Appendix H) contains the following worksheet tabs:

Worksheet Tab	Description
County Spending	Road-related spending by sample county by spending category.
County Spending Per-Capita	Road-related per-capita spending by counties included in the sample by spending category.
County Spending Per Lane Mile	Road-related per lane mile spending by counties included in the sample by spending category.
Sample Average Spending	Average spending of counties included in the sample by population size by spending category.
Sample Ave Spending Per-Capita	Average per-capita spending of counties included in the sample by population size by spending category.
Sample Ave Spending Per Lane Mi	Average per lane mile spending of counties included in the sample by population size by spending category.
County Pop & Lane Miles	Population and lane mileage for all counties in New Jersey.
Strata Pop & Lane Miles	Population and lane mileage by county population size category for all counties in New Jersey.
Adjustment Factor	Percentage difference between (1) estimate produced through summing total spending per-capita and per lane mile for each sample population size category weighted by population and lane miles contained in each population size category and (2) estimate produced by summing sample county total spending. Resulting percentage used to adjust initial estimates for each spending category in the two following ESTIMATE worksheets.

ESTIMATE (Per-Capita-Based)	Average per-capita spending of sample counties by population size categories multiplied by population of corresponding population size categories. Spending for each county category summed then multiplied by adjustment factor to produce estimated statewide spending for each Form FHWA 536 line item.
ESTIMATE (Per Lane Mile-Based)	Average per lane mile spending of sample counties by population size categories multiplied by population of corresponding population size categories. Spending for each county category summed then multiplied by adjustment factor to produce estimated statewide spending for each Form FHWA 536 line item.
County Name Audit Report Data Capture Worksheets	Individual county audit report data worksheets and accompanying worksheets for gathering line item data.
CNTY WORKSHEET TEMPLATE and COMP TEMPLATE	Individual county audit report data worksheet template that can be used to add counties to the sample and accompanying template worksheet for gathering line item data.

To request a copy of the digital files, please contact:

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