

PERFORMANCE AUDIT

**DEPARTMENT OF TRANSPORTATION
NORTH CAROLINA HIGHWAY TRUST FUND**

DECEMBER 1998



RALPH CAMPBELL, JR.
STATE AUDITOR

STATE OF NORTH CAROLINA
Office of the State Auditor

300 N. SALISBURY STREET
RALEIGH, N. C. 27603-5903
TELEPHONE: (919) 733-3217
FAX: (919) 733-8443

AUDITOR'S TRANSMITTAL

December 14, 1998

The Honorable James B. Hunt, Jr., Governor
Secretary E. Norris Tolson, Department of Transportation
Members of the Board of Transportation
Members of the North Carolina General Assembly

Ladies and Gentlemen:

We are pleased to submit this performance audit of the *Department of Transportation, North Carolina Highway Trust Fund*. The objectives of the audit were to determine the actual revenues received, compare to original estimates, and estimate anticipated revenues for the duration of the Trust Fund projects; to identify the Trust Fund projects as contained in legislation, determine the status of each project, compare original costs and time estimates to current estimates, and estimate completion dates based on data available; to examine progress on completing paving of secondary roads; and to examine Trust Fund procedures for expenditure and transfer of funds.

This report consists of an executive summary, program overview, and operational findings and recommendations. The Secretary of Transportation has reviewed a draft copy of this report. His written comments are included as Appendix B.

We wish to express our appreciation to Secretary Tolson and his staff for the courtesy, cooperation, and assistance provided us during this effort.

Respectfully submitted,

A handwritten signature in cursive script that reads "Ralph Campbell, Jr.".

Ralph Campbell, Jr.
State Auditor

TABLE OF CONTENTS

	<u>Page</u>
EXECUTIVE SUMMARY	1
AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY	3
BACKGROUND INFORMATION	5
FINDINGS AND RECOMMENDATIONS.....	17
Revenue Projections	17
Project Status	23
Secondary Roads	32
Trust Fund Expenditures and Transfers.....	38
TABLES:	
1 Original Highway Trust Fund Revenue Projections	7
2 Intrastate System Routes Identified by Statute	8
3 Urban Loops Identified by Statute	8
4 Trust Fund Revenues from Motor Fuels Tax	9
5 Trust Fund Revenues from Highway Use Tax	9
6 Fees Related to Motor Vehicle Titles.....	10
7 Trust Fund Revenues from Title Fees	10
8 Highway Trust Fund Revenue from Retirement of Refunding Bonds.....	10
9 Interest Income Earned by The Highway Trust Fund.....	11
10 Highway Trust Fund Expenditures for Secondary Roads and Aid to Municipalities FY89-90 through FY93-94	13
11 1989 Data Supporting Calculation of Highway Trust Fund Equity Distribution.....	15
12 Highway Trust Fund Equity Distribution by Region: FY89-90 through FY96-97	16
13 Estimated Trust Fund Cost and Mileage as of 12-31-97	19
14 Highway Trust Fund: Projected Revenues and Distributions: FY97-98 through FY2012-13 ...	21
15 Highway Trust Fund Project Status as of December 1997.....	24
16 Trust Fund Eligible Projects for Which No Trust Fund Monies Have Been Expended	25
17 Highway Trust Fund Revenues Minus Trust Fund Obligations FY89-90 through FY93-94	29
18 Schedule of Unpaved Secondary Roads as of December 1997.....	34
19 Summary of Secondary Roads With Identified Unavailable Right of Way	36
20 Actual Transfers of Expenditures from the Highway Trust Fund for Construction Projects.....	39
21 Highway Trust Fund Authorized Expenditures by Route: FY89-90 through FY96-97	40
22 Trust Fund Administrative Funds: FY89-90 through FY96-97.....	42
23 Number of Positions Funded by the Trust Fund: FY89-90 through FY96-97	42
EXHIBITS:	
1 Actual Gross Revenues vs. Projected Gross Revenues.....	11
2 Trust Fund Construction Expenditures for Intrastate Routes and Urban Loops	13
3 NC Highway Trust Fund Equity Formula Regions	14
4 Gallons of Motor Fuels Sold: FY89-90 through FY97-98.....	17
5 Number of Vehicles Titled and Registered: 1989 through 1997.....	18
6 Highway Trust Fund: Difference in Actual vs. Projected Revenues FY89-90 through FY96-97	18
7 Highway Trust Fund: Difference in Actual vs. Revised Projected Revenues FY91-92 through FY96-97	19
8 Highway Trust Fund Projects and Costs as Percent of Total TIP Projects and Costs	23
9 North Carolina Intrastate System Project Status (includes Loops).....	27
10 Highway Trust Fund Obligations vs. Limitations: FY89-90 through FY93-94.....	29
11 Changes in Highway Trust Fund Costs Projections	30
12 Highway Trust Fund Construction Costs Per Mile.....	30
13 Miles of Unpaved Secondary Roads by Fiscal Year	33
14 Miles of Secondary Roads Paved vs. Department Goals.....	32
15 Priority System for Paving of Secondary Roads.....	38

TABLE OF CONTENTS

APPENDICES:

A	General Statutes: Article 14, Chapter 136.....	47
B	Auditee Response	55

DISTRIBUTION OF AUDIT REPORT	61
---	-----------

EXECUTIVE SUMMARY

We have conducted a performance audit of the North Carolina Highway Trust Fund administered by the North Carolina Department of Transportation (Department). This audit was undertaken at the request of the legislative leadership. The audit examined original assumptions and projections, and evaluated current assumptions and projections, as well as the Department's compliance with statutory requirements for the Trust Fund.

The North Carolina Highway Trust Fund was established by legislation in 1989 for the purpose of improving identified "primary transportation corridors" within the State (1,844.2 miles) and completing urban loops around seven major metropolitan areas (205.4 miles). Additionally, the Trust Fund was to provide for the paving of all state-maintained dirt roads and for additional assistance to municipalities for city streets. Funds were to come from motor fuel, alternative fuel, and road tax revenues; motor vehicle use tax; revenue from certificate of title fees; revenue from retirement of refunding bonds; and interest income earned by the Fund. Originally estimated to take 13.5 years and \$8.2 billion to complete, the Department now estimates that the Trust Fund will require 23 years and \$11.6 billion to complete. As of December 31, 1997, Department records showed that 27% of the identified miles had been completed, requiring 24% of the current estimated costs.

The draft report was reviewed by the Secretary of Transportation. His response is included as Appendix B, page 55.

FINDINGS

	<u>Page</u>
REVENUE PROJECTIONS	17
DEPARTMENT OFFICIALS MADE OVERLY OPTIMISTIC INITIAL TRUST FUND REVENUE FORECASTS.	17
PROJECTED TRUST FUND REVENUES MAY NOT BE SUFFICIENT TO MEET THE NEEDS OF THE PROGRAM.....	19
PROJECT STATUS	23
THE CURRENT CONSTRUCTION SCHEDULE WILL NOT MEET THE REVISED COMPLETION DATE OF 2013 FOR TRUST FUND PROJECTS.....	25
THE DEPARTMENT WAS NOT ABLE TO SIGNIFICANTLY ACCELERATE TRUST FUND CONSTRUCTION AFTER THE EXPIRATION OF THE INITIAL LIMITATIONS ON CONSTRUCTION EXPENDITURES.	26
ESTIMATED COSTS FOR TRUST FUND PROJECTS HAVE INCREASED 53% SINCE 1989.....	30

EXECUTIVE SUMMARY

FINDINGS (concluded)

	<u>Page</u>
SECONDARY ROADS	32
THE ANNUAL PAVING GOALS FOR SECONDARY ROADS WILL NOT MEET THE STATUTORY TIME REQUIREMENTS.....	33
UNDER CURRENT BOARD POLICY, THE DEPARTMENT WILL NOT BE ABLE TO PAVE <u>ALL</u> UNPAVED SECONDARY ROADS WITH 50+ VEHICLE TRAFFIC.....	35
DEPARTMENT PROCEDURES FOR PRIORITIZING THE PAVING OF SECONDARY ROADS HAVE NOT ASSURED COMPLIANCE WITH STATUTES.	37
TRUST FUND EXPENDITURES AND TRANSFERS	38
FEDERAL MATCHING FUNDS RECEIVED FOR TRUST FUND PROJECTS ARE DEPOSITED INTO THE HIGHWAY FUND ACCOUNT.....	40
TRUST FUND ADMINISTRATIVE EXPENDITURES ARE NOT ACCOUNTED FOR SEPARATELY.....	41
THE DEPARTMENT DOES NOT HAVE A FORMAL PLAN FOR TRUST FUND POSITION REDUCTION.	42
THE DEPARTMENT DOES NOT HAVE WRITTEN POLICIES AND PROCEDURES FOR TRUST FUND EXPENDITURES.	43

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

North Carolina General Statute §147-64 empowers the State Auditor with authority to conduct performance audits of any State agency or program. Performance audits are reviews of activities and operations to determine whether resources are being used economically, efficiently, and effectively. Performance audits may also include financial reviews.

This performance audit of the North Carolina Highway Trust Fund (Trust Fund), within the Department of Transportation (Department), was undertaken at the request of the legislative leadership. The State Auditor was asked to separately review the Trust Fund activities. Specific objectives were to:

- Determine the actual revenues received, compare to original estimates, and estimate anticipated revenues for the duration of the Trust Fund projects;
- Identify the Trust Fund projects as contained in legislation, determine status of each project, compare original cost and time estimates to current estimates, and estimate completion dates based on data available;
- Examine progress on completing paving of secondary roads; and
- Examine Trust Fund procedures for expenditure and transfer of funds, including the use of administrative funds and number and type of positions funded by the Trust Fund.

The scope of the audit encompassed selected aspects of the operation of the North Carolina Highway Trust Fund.

During the period February 9, 1998 through August 10, 1998, we conducted the on-site fieldwork for the audit of the Trust Fund. To achieve the audit objectives, we employed various auditing techniques which adhere to the generally accepted standards as promulgated in *Government Auditing Standards* issued by the Comptroller General of the United States. These techniques included:

- Review of existing General Statutes and North Carolina Administrative Code as they relate to the Trust Fund;
- Review of Department policies and procedures for the administration of the Trust Fund;
- In-depth interviews with Department staff, as well as interviews with persons external to the Department;
- Review of existing studies and reports on the operations of the Trust Fund;
- Examination of position descriptions and payroll data;
- Identification of fund transfers from the Trust Fund to the Highway Fund; and
- Analysis of expenditures from the Trust Fund administrative funds.

This report contains the results of the audit as well as specific recommendations aimed at improving the operations of the Trust Fund in terms of economy, efficiency, and effectiveness. Because of the test nature and other inherent limitations of an audit, together with the limitations of any system of internal and management controls, this audit would not necessarily disclose all weaknesses in the system or lack of compliance. Also, projection of any of the results contained in this report to future periods is subject to the

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

risk that procedures may become inadequate due to changes in conditions and/or personnel, or that the effectiveness of the design and operation of the policies and procedures may deteriorate.

BACKGROUND INFORMATION

In 1989 State leaders decided that North Carolina, on an economic threshold, needed to complete the “primary transportation corridors” in the State to take full advantage of an expanding economy and to attract new industry. Leaders felt the existing Transportation Improvement Program (TIP) was slow in addressing the perceived construction needs. Department of Transportation (Department) management indicated to legislators that the TIP, a planning device, should not be considered an accurate schedule for initiating or completing a highway construction project. As a result, a legislative Joint Transportation Oversight Committee (Committee) was formed to address these concerns.

The Department was directed to assist the Committee and its staff in determining the projected requirements for completing the “primary transportation corridors.” The concept called for completion of all interstate highways within North Carolina and the multi-laning of other cross-state highways. The Committee also determined that urban loops were needed around seven of the major metropolitan areas to assist in the flow of traffic and prevent “bottlenecking” during rush hours. Legislation was drafted outlining the identified needs. (Many of the corridor and urban loop projects identified by the Committee were already in the TIP at various stages of completion.) Stipulations were added to the legislation to ensure that most areas of the State, including rural undeveloped areas, received some financial benefit from the legislation. To this end, the legislation called for the paving of all state-maintained dirt roads and for providing additional assistance to municipalities for city streets.

Department staff gave its “best estimates” for construction costs based on average mileage costs within the major geographic sectors of the State (mountains, piedmont, and coast). However, cost estimates did not include any consideration of annual economic or construction cost inflation or preliminary costs such as planning, engineering, and environmental impact studies. These types of additional costs were not included due to the time constraints for providing information to the Committee. Therefore, the initial costs given to the Committee were significantly underestimated.

The initial estimate of time to complete the Trust Fund construction projects was 13.5 years, beginning in fiscal year 1989 and ending in fiscal year 2003. However, due to the combination of many delaying factors¹, Department management now estimates a project completion time of fiscal year 2013. This means the program will be 23 years duration instead of the original 13.5. (See discussion beginning on page 25 relative to time required to complete all projects.)

Statutory Authority

Article 14, Chapter 136 of the General Statutes contains the legislation establishing the Trust Fund. (See Appendix A, page 47) This article also provides for repeal of the legislation when contracts for all Trust Fund projects have been let and sufficient revenue has been accumulated to pay the contracts.

¹ Delaying factors are discussed in detail in the “project status” section of the report.

BACKGROUND INFORMATION

Creation of the North Carolina Highway Trust Fund:

GS §136-176 created a special account within the State Treasury called the North Carolina Highway Trust Fund. Funds are credited to this account from the following revenue sources:

1. Motor fuel, alternative fuel, and road tax revenue deposited in the Fund under GS §105-449.
2. Motor vehicle use tax deposited in the Fund under GS §105-187.9.
3. Vehicle certificate of title fees and other fees payable under GS §20-85.
4. Revenue from the retirement of refunding bonds issued to repay highway construction bonds and deposited in the Fund under GS §136.83.
5. Interest income earned by the Fund.

Prior to the Trust Fund legislation, the taxes noted above had been received into the State's General Fund. Therefore, a statutory provision was necessary to continue some level of taxation support to the General Fund. GS §105-187.9 provides for the State Treasurer to annually transfer \$170 million from the Trust Fund to the General Fund on either a quarterly or fiscal year basis depending on availability of funds.

GS §136-176 also provides the Department of Transportation with funding to administer the Trust Fund. The administrative funding is set at an annual appropriation not to exceed 4.5%² of the taxes and fees (items 1,2 and 3 above). Any administrative funds not expended in a fiscal year revert back to the Trust Fund for reallocation.

The legislation places the following allocation stipulations on the Trust Fund:

- Sixty-one and ninety-five hundredths percent (61.95%) to plan, design, and construct the projects of the Intrastate System described in GS §136-179.
- Twenty-five and five hundredths percent (25.05%) to plan, design, and construct the urban loops described in GS §136-180.
- Six and one-half percent (6.5%) to supplement the appropriation to cities for city streets under GS §136-181.
- Six and one-half percent (6.5%) for secondary road construction as provided in GS §136-182.

Table 1, page 7, shows the original revenue projections for the Trust Fund as found in the 1989 Transportation Improvement Program (TIP).

² The administrative percentage was originally set at 5% but was adjusted to 4.5% in 1990.

BACKGROUND INFORMATION

Table 1
DEPARTMENT OF TRANSPORTATION
ORIGINAL HIGHWAY TRUST FUND REVENUE PROJECTIONS
(\$ in millions)

	Fiscal Years														13.5 YEAR TOTALS
	1989-90	1990-91	1991-92	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	
FUNDING SOURCES															
25% GAS TAX REVENUES	\$180.4	\$221.9	\$227.4	\$233.1	\$238.9	\$244.9	\$251.0	\$257.3	\$263.7	\$270.3	\$277.1	\$284.0	\$291.1	\$298.4	\$3539.7
3% USE TAX	294.8	404.8	416.9	429.5	451.9	465.5	479.4	493.8	508.6	523.9	539.6	555.8	572.5	589.6	6726.5
TITLE FEE INCREASE \$30	52.5	61.8	63.7	65.6	67.5	69.6	71.6	73.8	76.0	78.3	80.6	83.1	85.6	88.1	1017.7
MISC. FEES \$10	15.6	18.3	18.9	19.4	20.0	20.6	21.3	21.9	22.6	23.2	23.9	24.6	25.4	26.1	301.9
INTEREST ON TRUST FUND	8.4	11.2	17.8	18.4	19.5	20.5	21.3	22.7	23.7	24.4	25.3	26.1	26.9	27.9	294.2
DEBT SERVICE AVAILABILITY	0	0	0	0	0	9.6	12.1	32.2	38.0	38.0	38.0	38.0	38.0	38.0	281.9
TOTAL FUNDING SOURCES	551.7	718.0	744.7	766.0	797.8	830.7	856.7	901.7	932.6	958.1	984.5	1011.6	1039.5	1068.1	12161.9
LESS GENERAL FUND TRANSFER	-279.4*	-356.0*	-170.0	-170.0	-170.0	-170.0	-170.0	-170.0	-170.0	-170.0	-170.0	-170.0	-170.0	-170.0	-2675.4
TOTAL TRUST FUND REVENUES	\$272.3	\$362.0	\$574.7	\$596.1	\$627.8	\$660.7	\$686.7	\$731.7	\$762.5	\$788.1	\$814.4	\$841.6	\$869.5	\$898.1	\$9486.5
*Note: Section 4.3 of the 1989 House Bill 399 authorized these transfers.															
SOURCE: 1989 TRANSPORTATION IMPROVEMENT PROGRAM, <i>Planks, Pavements, and Progress</i>															

BACKGROUND INFORMATION

Intrastate System Trust Fund Projects:

GS §136-178 states that the Intrastate System “transportation corridors” are established to provide high-speed, safe travel service throughout the State, connect major population centers both inside and outside the State, and provide safe, convenient, through-travel for motorists. The Intrastate System is designed to support statewide growth and development objectives and to connect to major highways of adjoining states. All segments of the routes in the Intrastate System must have at least four travel lanes or bypasses.

GS §136-179 designates the specific intrastate highway routes (see Table 2), the specific counties wherein construction is required, and contains a description of the construction requirements to complete the routes to specifications. There are 145 intrastate projects on 28 routes identified under this statute through December 1997.

Urban Loop Trust Fund Projects:

GS §136-180 designates the seven specific urban loops (see Table 3), the county(s) in which the loops are located, and contains a general description of where the loops are to be constructed. Currently, there are 16 projects identified for the loops.

Table 3 URBAN LOOPS IDENTIFIED BY STATUTE	
Loop	Original Estimated Miles
Asheville	0.0
Charlotte	63.4
Durham	16.4
Greensboro	41.6
Raleigh	39.3
Wilmington Bypass	20.2
Winston-Salem	24.5
TOTAL	205.4
Source: NC General Statutes and 1989 Transportation Improvement Program	

Table 2 INTRASTATE SYSTEM ROUTES IDENTIFIED BY STATUTE	
Intrastate Route	Original Estimated Miles
I-40	21.4
I-77	8.9
I-85	79.5
I-95	0.0
US 1	100.1
US 13	45.9
US 17	200.0
US 19 AND 19(E)	67.1
US 23	30.0
US 23-441	11.4
US 52	22.6
US 64-264	120.0
US 64	74.9
US 70	64.9
US 74 AND 74 (A)	98.6
US 158	245.9
BRIDGE (US 158)	9.9
US 221	57.6
US 220	30.1
US 220/NC 68	30.7
US 264	30.3
US 321	45.5
US 421 AND 421 (A)	108.5
US 24-27	195.2
NC 87	85.1
NC 105	30.0
NC 168	18.5
NC 194*	11.6
TOTAL	1844.2
*The NC 194 project initially identified in legislation was later merged with the US 221 project by the Department.	
Source: NC General Statutes and 1989 Transportation Improvement Program	

Revenues:

The 1989 General Assembly created the North Carolina Highway Trust Fund, designated the sources of revenue for the Fund, and specified the purposes for which Trust Fund revenue may be used. The Highway Trust Fund originally consisted of motor fuel tax, highway use tax, and title fees.

BACKGROUND INFORMATION

Motor Fuel Tax

Twenty-five percent of the excise taxes collected on motor fuels and 25% of the road tax levied on motor carriers for the privilege of using the roads in this State are designated for the Highway Trust Fund. These taxes were increased effective August 1, 1989, from 15.7 cents a gallon to 20.9 cents a gallon, an increase of 5.2 cents a gallon. Table 4 shows the net revenues collected from the motor fuels tax for the first 8 years of the Trust Fund.

Highway Use Tax

The Highway Use Tax, effective October 1, 1989, is levied when a certificate of title for a motor vehicle is issued. Certain

Table 5 TRUST FUND REVENUES (NET) FROM HIGHWAY USE TAX	
FY	Amount Collected
1990	\$ 164,693,276
1991	231,358,005
1992	242,339,363
1993	273,251,863
1994	330,473,708
1995	364,648,614
1996	397,273,096
1997	407,577,335
TOTAL	\$2,411,615,260
Source: DOT Financial Records	

Title Fees

Revenue from the fee increases shown in Table 6, page 10, related to titles for motor vehicles are also deposited in the Highway Trust Fund. These fees are in addition to the highway use tax imposed at the time a certificate of title is issued. The fee increases were effective August 15, 1989. Table 7, page 10 summarizes net title fee revenues.

Table 4 TRUST FUND REVENUES (NET) FROM MOTOR FUELS TAX	
FY	Amount Collected
1990	\$ 184,886,274
1991	206,551,360
1992	213,363,345
1993	212,444,033
1994	222,011,480
1995	223,032,201
1996	232,662,410
1997	243,731,232
TOTAL	\$1,738,682,335
Source: DOT Financial Records	

motor vehicles that will be rented or leased are not taxed. This titling tax replaced the 2%, \$300 maximum sales tax on motor vehicles. The use tax, 3% of the retail value of the vehicle, cannot be less than \$40.00, could not exceed \$1,000 until July 1, 1993, and cannot exceed \$1,500 after that date. Those who lease or rent motor vehicles are given an option of paying the use tax when they purchase a vehicle for lease or rent, or paying a tax on the gross lease or rental receipts³ subsequently received when the vehicle is leased or rented. The maximum use tax applies to lease or rental receipts, but the maximum is computed anew on each lease or rental of the vehicle to a different person. Table 5 summarizes the net revenues collected from the Highway Use Tax.

³ The optional tax on gross receipts is 8% on leases or rentals to the same person for no more than 90 days, and it is 8% for the first 90 days of a lease or rental to the same person for more than 90 days and 3% for the period in excess of 90 days. In 1991, changes in legislation provided that the 3% tax applied to leases greater than 365 days and the 8% tax applied to leases less than 365 days. Revenue from the optional tax is placed in the Trust Fund if it is at the 3% rate and the General Fund if it is at the 8% rate.

BACKGROUND INFORMATION

Table 6 FEES RELATED TO MOTOR VEHICLE TITLES		
Type	Fee Prior to 8/15/89	Fee After 8/15/89
Certificate of Title	\$5.00	\$35.00
Duplicate or Corrected Title	\$7.00	\$10.00
Repossessor of Title	\$5.00	\$10.00
Transfer of Registration	\$4.00	\$10.00
Replacement of Registration Plates	\$9.00	\$10.00
Duplicate of Registration Certificate	\$3.00	\$10.00
Recording Supplementary Lien	\$3.00	\$10.00
Title Transferred to a Dealer when no tax is due	\$0.00	\$10.00
Instant Title	N/A	\$50.00
Source: NC General Statutes 20-85		

Table 7 TRUST FUND REVENUES (NET) FROM TITLE FEES				
Fiscal Year	Certificate of Title Fee	Miscellaneous Registration Fee	Lien Recording Fees	Total Fees
1990	\$ 43,694,744	\$ 5,770,320	\$ 2,032,309	\$ 51,497,373
1991	46,973,156	6,065,620	2,338,557	55,377,333
1992	48,736,498	7,383,069	2,399,322	58,518,889
1993	51,579,599	7,863,727	2,717,483	62,160,809
1994	56,908,904	8,548,719	2,682,036	68,139,659
1995	65,028,791	9,479,502	2,567,991	77,076,284
1996	64,201,381	10,217,217	2,607,998	77,026,596
1997	73,029,553	10,244,618	2,443,177	85,717,348
TOTAL	\$450,152,626	\$65,572,792	\$19,788,873	\$535,514,291
Source: DOT Financial Records				

Transfers from the Highway Fund

Beginning in fiscal year 1994-95, the Trust Fund received revenue from the retirement of refunding⁴ bonds issued to repay highway construction bonds. Legislation directs the State Treasurer to credit to the Highway Trust Fund one-fourth of a set amount for each year within 10 days after the end of each calendar quarter. Table 8 shows the amount credited to the Trust Fund for fiscal years 1994-95 through 1997-98.

Table 8 HIGHWAY TRUST FUND REVENUE FROM RETIREMENT OF REFUNDING BONDS	
Fiscal Year	Yearly Amount Credit to Trust Fund
1994-95	\$ 9,600,000
1995-96	12,100,000
1996-97	32,300,000
1997-98 and each subsequent year until the Trust Fund ends	38,000,000
Source: DOT Financial Records	

⁴ "Refunding bonds" are bonds issued at a lower interest rate to replace higher interest rate bonds.

BACKGROUND INFORMATION

Investment Income

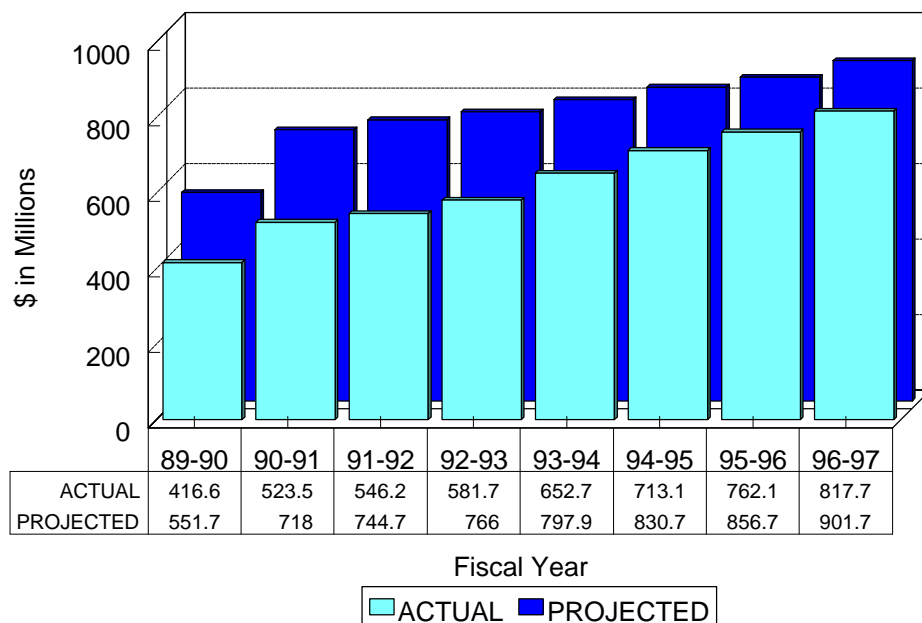
The legislation creating the Trust Fund also set up a special account, designated the North Carolina Highway Trust Fund, within the State treasury in 1989. Interest income earned on the previously-described revenues deposited with the State treasury is maintained in the Highway Trust Fund. Table 9 shows the amount of interest income earned by the Trust Fund since its inception.

Table 9 INTEREST INCOME EARNED BY THE HIGHWAY TRUST FUND	
Fiscal Year	Interest Income
1990	\$ 7,425,858
1991	20,843,501
1992	23,105,860
1993	24,116,084
1994	22,468,967
1995	28,856,582
1996	32,670,600
1997	35,719,382
TOTAL	\$ 195,206,834
Source: DOT Financial Records	

Comparison of Revenues

The original 1989 total estimated revenue requirements to complete all Trust Fund projects by fiscal year 2003 were approximately \$12.1 billion. As of June 30, 1997, actual **gross** revenues from all sources were \$5,013,677,272, approximately \$1.1 billion less than original projected revenues for this 8-year period as shown in Exhibit 1. Gross revenues, both actual and projected, are before any transfers to the General Fund. See page 17 for a complete discussion of Trust Fund revenues.

EXHIBIT 1
ACTUAL GROSS REVENUES VS. PROJECTED GROSS REVENUES



Source: DOT Financial Records

BACKGROUND INFORMATION

Other Revenue Sources

The 1995 General Assembly enacted the “State Highway Bond Act of 1996,” as set forth in Chapter 590 of the 1995 Session Laws, creating the State Highway Bond Fund. The Act authorizes the issuance of \$950,000,000 in bonds for the purpose of providing funds for constructing, improving and relocating roads, bridges, tunnels, and other highway facilities constituting the urban loops, highways in the Intrastate System, or a part of the State secondary highway system as set forth in Chapter 692 of the 1989 Session Laws creating the Highway Trust Fund. The bond issue was approved by a majority of qualified voters of the State of North Carolina in a referendum held on November 5, 1996.

The proceeds of the bonds are appropriated to the Department of Transportation. The legislation gives the Department authority to use bond funds along with other available funds to pay some or all of the costs of Trust Fund projects. The Department is to determine when the bond funds should be used with the following restrictions:

- \$500,000,000 for urban loops;
- \$300,000,000 for highways in the Intrastate System; and
- \$150,000,000 for projects constituting a part of the State Secondary Highway System.

Debt service on the bonds will be provided from amounts deposited to the Highway Trust Fund.

In November 1997, the North Carolina State Treasurer issued bonds totaling \$250,000,000. The Department had allocated approximately \$51,000,000 of this amount for Highway Trust Fund projects as of December 1997.

Expenditures/Transfers

Funds from the Trust Fund are “. . . annually appropriated to the Department of Transportation to be allocated and used as provided . . .” in Article 14, Chapter 136 of the General Statutes. Department management made the decision in 1989 when the Trust Fund was established to use its existing accounting system for all Trust Fund activity. Unlike other State agencies, the Department’s accounting system does not provide for fund accounting.⁵ Rather, it is set up as a “work order” system, which accounts for all expenditures related to the various components of a construction project. These work orders are identified and approved by the Board of Transportation. All work orders are processed by the Department’s Fiscal staff and are paid from the Department’s current operating fund called the Highway Fund. On a monthly basis, funds are transferred from the Highway Trust Fund to the Highway Fund for the **actual expenditures** made on the Trust Fund’s behalf. These expenditures can and do include expenditures made for work orders which have been approved for federal matching funds. Funds requested are subsequently transferred from the Trust Fund to the Highway Fund as reimbursement of costs incurred.

⁵ The Department is developing a system to adapt its current work order accounting system to properly recognize fund accounting principles, with implementation anticipated in 2003.

BACKGROUND INFORMATION

The legislation creating the Highway Trust Fund contains three restrictions on the expenditures of Trust Fund revenue:

- a five-year limitation on construction spending,
- a requirement that highway construction funds be spent evenly throughout the State, and
- a two-year limitation on letting contracts in anticipation of revenue.

Five-Year Construction Expenditure Limitation

The act restricted the amount of Trust Fund revenue (other than revenue allocated for city streets or secondary roads) that could be used to construct or improve highways during the first five years of the Trust Fund program. Exhibit 2 shows the actual revenues, expenditures, and the set limitations for fiscal years 1989-90 through 1993-94.⁶ Trust Fund revenues in excess of the maximum amounts could be used only for preliminary planning and design and the acquisition of rights-of-way for scheduled highways and highway improvements to be funded from the Trust Fund. Table 10 shows the actual expenditures for secondary roads and state aid to municipalities for the same period.

The act restricted the amount of Trust Fund revenue (other than revenue allocated for city streets or secondary roads) that could be used to construct or improve highways during

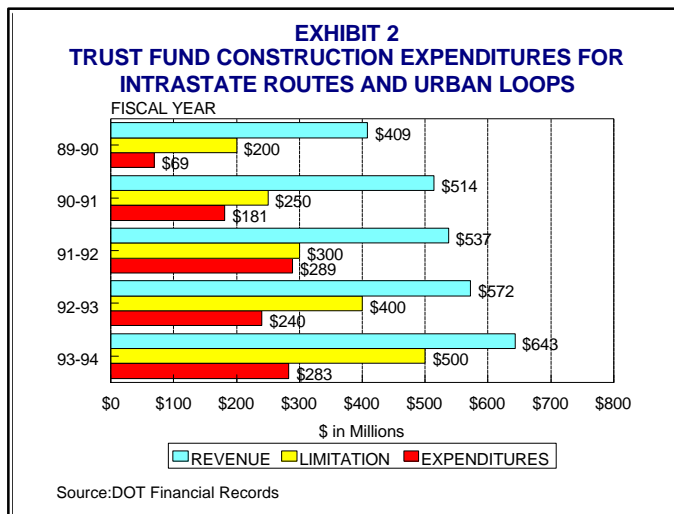


Table 10 HIGHWAY TRUST FUND EXPENDITURES FOR SECONDARY ROADS AND AID TO MUNICIPALITIES			
Fiscal Year	Secondary Roads	Aid To Municipalities	Total
89-90	\$ 23,045,118	\$ -0-	\$ 23,045,118
90-91	42,813,727	13,630,110	56,443,837
91-92	42,663,737	16,129,070	58,792,807
92-93	36,636,616	21,361,164	57,997,780
93-94	49,740,787	23,571,485	73,312,272
TOTALS	\$194,899,985	\$74,691,829	\$269,591,814

Source: DOT Financial Records

Distribution Formula

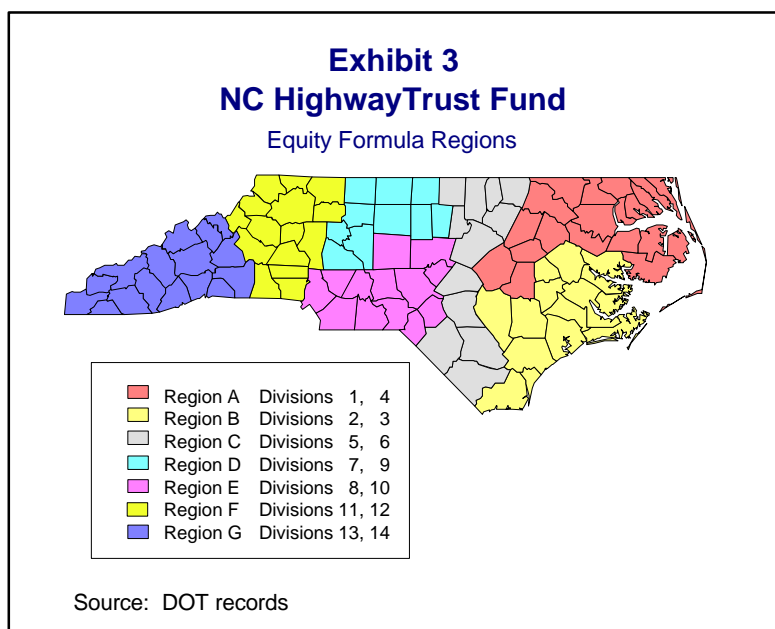
GS §136-17.2A establishes a distribution formula for the expenditure of all highway revenues, including Trust Fund, for: the Intrastate System, Department appropriations, and federal revenue expended on the Transportation Improvement Program (TIP). The formula does not apply to expenditures on urban loops. It also does not apply to secondary roads, contract

⁶ The difference between the expenditure limitation amounts and the actual expenditures may have been obligated to contractors. See page 29 for discussion.

BACKGROUND INFORMATION

resurfacing, and small urban projects because they are not part of the TIP. The formula is designed to ensure that every county in the State receives its fair share of transportation improvements.

To apply the formula, the existing 14 highway divisions are divided into seven distribution regions, each of which contains two highway divisions. These are called the “equity formula regions” as shown in Exhibit 3. In any consecutive seven-year period, each region must receive between 90% and 110% of the amount calculated for it. Calculating a region’s share for a year is a multi-step process. Annually, the Secretary of Transportation is charged with computing the distribution as follows:



- Estimate total anticipated revenues for next seven years beginning October 1.
- Determine each region’s percentage of total State population.
- Determine each region’s percentage of uncompleted intrastate miles in the State.

Each region’s share is the sum of the following numbers divided by 4:

- Region’s percentage share of uncompleted intrastate miles
- Population percentage share
- Population percentage share (repeated)
- 14.29% (equal to 1/7 representing each of the 7 regions).

For example, Region A’s percentage share on October 1, 1989 would have been determined as follows:

Percentage of uncompleted intrastate miles	21.50%
Population percentage	10.20%
Population percentage (repeated)	10.20%
The fraction 1/7 expressed as a percentage	14.29%
TOTAL	<u>56.19% / 4 = 14.05%</u>

Table 11 contains data showing the calculations for each region for 1989. Once a region’s tentative share for a seven-year period is determined, DOT personnel can then determine the region’s dollar share for the current fiscal year by multiplying the funds available for the fiscal year by the region’s calculated percentage.

BACKGROUND INFORMATION

Table 11 1989 DATA SUPPORTING CALCULATION OF HIGHWAY TRUST FUND EQUITY DISTRIBUTION					
Region	Uncompleted Intrastate Miles In Region	% Of Total Uncompleted Intrastate Miles	Population Of Region (000's)	% Of Total Population	Percentage Share Of Highway Funds
A	392.4	21.5	658.7	10.2	14.0
B	256.4	14.0	788.1	12.1	13.2
C	297.4	16.3	1,234.1	19.0	17.2
D	177.6	9.7	1,201.4	18.5	15.3
E	332.7	18.2	1,102.7	17.0	16.6
F	174.2	9.5	854.9	13.2	12.5
G	196.2	10.8	647.5	10.0	11.2
TOTALS	1,826.9	100.0%	6,487.4	100.0%	100.0%
Source: DOT Financial Records					

Table 12, page 16 shows each region's share by fiscal year for the first 8 years of the Trust Fund.

Limit on Contracts Let in Anticipation of Revenue

GS §136-176(d) allows Trust Fund projects to be let in anticipation of revenue. However, the period for which revenue may be anticipated is limited to the two-year period following the year in which the contract is let. Without this limitation, contracts for Trust Fund projects could be let in anticipation of revenue for an indefinite period. The certified, anticipated revenues of the Trust Fund for fiscal years 1997-98 and 1998-99 are \$843,781,305 and \$870,693,348, respectively.

BACKGROUND INFORMATION

Table 12
HIGHWAY TRUST FUND EQUITY DISTRIBUTIONS BY REGION: FY89-90 THROUGH FY96-97
 (\$ in millions)

Region	FY89-90		FY90-91		FY91-92		FY92-93		FY93-94		FY94-95		FY95-96		FY96-97	
	% Share	Total Dollar Share	% Share	Total Dollar Share	% Share	Total Dollar Share	% Share	Total Dollar Share	% Share	Total Dollar Share	% Share	Total Dollar Share	% Share	Total Dollar Share	% Share	Total Dollar Share
A	14.0	\$18.4	14.1	\$21.7	14.0	\$28.6	14.0	\$31.5	14.3	\$38.0	14.4	\$42.5	14.8	\$49.1	14.6	\$52.6
B	13.2	17.3	13.3	20.4	13.4	27.4	13.4	30.1	13.0	34.6	13.0	38.3	13.1	43.4	13.1	47.2
C	17.2	22.6	17.2	26.4	17.5	35.7	17.5	39.4	17.7	47.0	17.8	52.5	17.6	58.4	17.6	63.4
D	15.3	20.0	15.2	23.4	15.1	30.9	15.1	33.9	14.9	39.6	14.8	43.6	14.7	48.7	14.7	53.0
E	16.6	21.8	16.7	25.7	16.7	34.1	16.7	37.6	16.8	44.6	17.0	50.1	16.8	55.7	17.1	61.6
F	12.5	16.4	12.3	18.9	12.3	25.1	12.3	27.7	12.2	32.4	12.1	35.7	12.0	39.8	12.1	43.6
G	11.2	14.7	11.2	17.2	11.0	22.5	11.0	24.7	11.1	29.5	10.9	32.1	11.0	36.5	10.8	38.9
TOTALS	100.0	\$131.2	100.0	\$153.7	100.0	\$204.3	100.0	\$224.9	100.0	\$265.7	100.0	\$294.8	100.0	\$331.6	100.0	\$360.3

Source: DOT Financial Records

SUMMARY OF FUNDS DISTRIBUTIONS BY REGION
 (\$ in millions)

Fiscal Year	A	B	C	D	E	F	G	TOTALS
89-90	\$18.4	\$17.3	\$22.6	\$20.0	\$21.8	\$16.4	\$14.7	\$131.2
90-91	21.7	20.4	26.4	23.4	25.7	18.9	17.2	153.7
91-92	28.6	27.4	35.7	30.9	34.1	25.1	22.5	204.3
92-93	31.5	30.1	39.4	33.9	37.6	27.7	24.7	224.9
93-94	38.0	34.6	47.0	39.6	44.6	32.4	29.5	265.7
94-95	42.5	38.3	52.5	43.6	50.1	35.7	32.1	294.8
95-96	49.1	43.4	58.4	48.7	55.7	39.8	36.5	331.6
96-97	52.6	47.2	63.4	53.0	61.6	43.6	38.9	360.3
TOTALS	\$282.4	\$258.7	\$345.4	\$293.1	\$331.2	\$239.6	\$216.1	\$1966.5

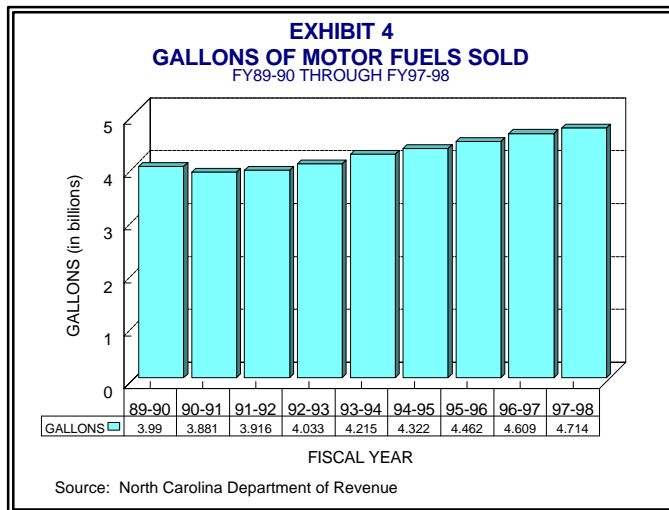
FINDINGS AND RECOMMENDATIONS

REVENUE PROJECTIONS

Objective: To determine the actual revenues received, compare to original estimates, and estimate anticipated revenues for the duration of the Trust Fund projects.

There are numerous uncertainties involved in making any revenue projections over a number of years. When the revenues are sensitive to economic changes, those uncertainties are compounded. Several events can dramatically affect the revenue projections used in the TIP: foreign economic and political events, changes in the federal motor fuels taxes, and the future direction of the national and State economies. Not knowing the eventual outcome of these and other events makes estimating revenues an inexact exercise requiring continuous monitoring and periodic adjustments. Given these factors, we have identified several issues that we feel need the attention of the Board of Transportation, the Department, and the General Assembly.

Conclusion: Overly optimistic initial revenue projections presented an unrealistic expectation for completion of Trust Fund projects. In fiscal year 1991-92, the Department began to make more conservative projections. In our opinion, any future revenue projections should be based on actual revenues collected. Using this methodology, we project a \$1.1 billion shortfall in the funds needed to fully pay for all Trust Fund projects.



**DEPARTMENT OFFICIALS
MADE OVERLY OPTIMISTIC
INITIAL TRUST FUND REVENUE
FORECASTS.**

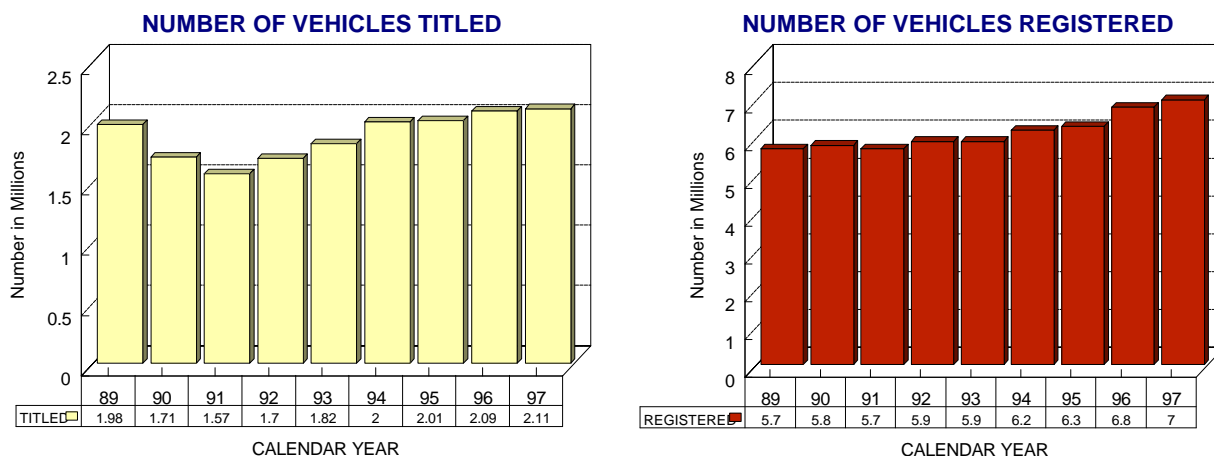
The primary revenue sources for the Highway Trust Fund are the motor fuels tax and a portion of the 3% highway use tax. Both of these sources are sensitive to changes in the national and State economies. Years of moderate growth in motor fuels usage (Exhibit 4) and tax collections have

resulted in fairly steady revenues. Additionally, the Highway Trust Fund has not collected the projected use tax revenues due to declining car sales and fewer motor vehicle title transactions than anticipated. Exhibit 5 depicts the number of vehicles titled and

FINDINGS AND RECOMMENDATIONS

registered each year for calendar years 1989 through 1997.⁷ While these graphs show some fluctuations, overall changes have been minimal.

EXHIBIT 5



Source: North Carolina Division of Motor Vehicles

EXHIBIT 6
HIGHWAY TRUST FUND
 DIFFERENCE IN ACTUAL VS. PROJECTED REVENUES:
 FY89-90 thru FY96-97*

FISCAL YEAR	ACTUAL	PROJECTED	DIFFERENCE
89-90	\$416.6	\$551.7	-\$135.1
90-91	\$523.5	\$718.0	-\$194.5
91-92	\$546.2	\$744.7	-\$198.5
92-93	\$581.7	\$766.0	-\$184.3
93-94	\$652.7	\$797.9	-\$145.2
94-95	\$713.1	\$830.7	-\$117.6
95-96	\$762.1	\$856.7	-\$94.6
96-97	\$817.7	\$901.7	-\$84.0

*Includes all sources of revenues

Source: DOT Financial Records

(\$ in millions)

During the first year of the Highway Trust Fund, fiscal year 1989-90, the Department projected \$294.8 million in highway use tax collection for the 10 months of the year the tax was in effect. Actual highway use tax revenues were \$164.9 million, a shortfall of \$129.9 million in revenues for fiscal year 1989-90. For the following fiscal year 1990-91, the Department projected that highway use tax would continue to increase by roughly 37% to \$404.8 million for the full 12 months. Actual revenues were \$231.4

million for 1990-91, a shortfall of \$173.4 million for the year. For the initial two-year period, the revenue shortfall in highway use tax **alone** amounted to \$303.3 million less than the projections made by the Department in 1989. This shortfall is related to the conditions identified above and an overly optimistic forecast by officials at the State level. Exhibit 6 shows the difference between the actual revenue collections and the original projected revenues for the period fiscal years 1989-90 through 1996-97.

⁷ DMV records shows a cumulative total of 12,148,187 vehicles titled in North Carolina as of 12-31-97.

FINDINGS AND RECOMMENDATIONS

Because of changes in general economic conditions, forecasts need to be reviewed and revised annually for the individual revenue categories and the Trust Fund in general. After the first two years, Department officials began to change revenue projections annually to show a more conservative growth rate of approximately 3% per year. In fiscal year 1992-93, the Department began to use budget projections from the Office of State Budget and Management. The annually revised projections are shown in Exhibit 7 for fiscal years 1991-92 through 1996-97. As can be seen, the revised projections were lower than the actual revenues.

EXHIBIT 7 HIGHWAY TRUST FUND DIFFERENCE IN ACTUAL VS. REVISED PROJECTED REVENUES: FY91-92 thru FY96-97*			
FISCAL YEAR	ACTUAL	PROJECTED	DIFFERENCE
91-92	\$546.2	\$534.7	\$11.5
92-93	\$581.7	\$517.9	\$66.8
93-94	\$652.7	\$587.4	\$65.3
94-95	\$713.1	\$667.3	\$45.8
95-96	\$762.1	\$698.4	\$63.7
96-97	\$817.7	\$716.5	\$56.2
<small>*Includes all sources of revenues Source: DOT Financial Records (\$ in millions)</small>			

RECOMMENDATION

The Department should continue to use realistic projections for revenue growth from the Office of State Budget and Management. All projections of revenues for the Highway Trust Fund should be reviewed and revised annually. Projections should be based on the actual revenues collected for the most recent prior year. (See finding below.) Projection procedures should take into account changes in economic conditions at both the State and federal levels.

PROJECTED TRUST FUND REVENUES MAY NOT BE SUFFICIENT TO MEET THE NEEDS OF THE PROGRAM.

Department officials are now projecting that all Trust Fund projects will be completed by fiscal year 2013. Total costs for the Trust Fund projects are currently projected to be \$11.6 billion. (See Table 13)

Table 13 ESTIMATED TRUST FUND COST AND MILEAGE as of December 31, 1997		
	Cost	Miles
Intrastate System	\$ 8,237,863,000	1,848.1
Urban Loops	3,373,196,000	225.9
TOTAL TRUST FUND COSTS	\$11,611,059,000	2,074.0
Source: 1997-98 – 2003-04 Transportation Improvement Program		

Using the actual fiscal year 1996-97 revenues as the starting point, we projected total Trust Fund revenues for fiscal years 1997-98 through 2012-13. We used a conservative 3% growth factor for revenues. Table 14, page 21 shows that calculation with total revenues from all sources, including interest income and transfers from the Highway Fund, to be \$16.6 billion for that period. However, as previously pointed out, the Trust Fund legislation restricts the percentage of total revenues that can be used to plan, design, and construct the intrastate routes to

FINDINGS AND RECOMMENDATIONS

61.95% of revenues and 25.05% for the urban loops. Assuming a conservative estimate for inflation (3%) and project growth (6%)⁸, Table 14 also shows an estimated shortfall of \$1.1 billion for construction of intrastate routes and urban loops. Therefore, it would require an additional two years of revenue at 3.0% growth to have sufficient funds for the construction of the intrastate routes and urban loops as currently identified. As we noted earlier, the State has approved the issuance of \$950,000,000 of bonds for the construction of various trust fund projects. While the bonds will supply cash for immediate construction, they will have to be repaid. Therefore, based on our projections, the Department will still need an additional \$1.1 billion to fully pay for all Trust Fund projects.

RECOMMENDATION

Department officials and the Board of Transportation should objectively review the current timetable for completion of the intrastate routes and urban loops. Consideration should be given to extending the completion dates for these projects beyond the year 2013 unless revenue increases are significantly more than three percent per year.

⁸ The projections for inflation and project growth are those used by Peat Marwick, LLP, in the audit of the Department of Transportation released in May, 1998. "Project growth" refers to unanticipated changes to the project such as increased costs for environmental impact or increased costs as the result of terrain.

FINDINGS AND RECOMMENDATIONS

Table 14 HIGHWAY TRUST FUND PROJECTED REVENUES AND DISTRIBUTIONS: FY1997-98 THROUGH FY2012-13																		
	Actual 1997 Net Revenues	Projected Revenues Using A 3.00% Inflation Factor																
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	TOTAL
REVENUE (in dollars)																		
TITLE FEES	73,029,553	75,220,440	77,477,053	79,801,364	82,195,405	84,661,267	87,201,105	89,817,139	92,511,653	95,287,002	98,145,612	101,089,981	104,122,680	107,246,361	110,463,751	113,777,664	117,190,994	1,516,209,471
LIEN RECORDING	2,443,177	2,516,472	2,591,966	2,669,725	2,749,817	2,832,312	2,917,281	3,004,800	3,094,944	3,187,792	3,283,426	3,381,928	3,483,386	3,587,888	3,695,524	3,806,390	3,920,582	50,724,233
GASOLINE TAX	243,731,232	251,043,169	258,574,464	266,331,698	274,321,649	282,551,298	291,027,837	299,758,672	308,751,433	318,013,976	327,554,395	337,381,027	347,502,457	357,927,531	368,665,357	379,725,318	391,117,077	5,060,247,358
HIGHWAY USE TAX	407,577,335	419,804,655	432,398,795	445,370,759	458,731,881	472,493,838	486,668,653	501,268,712	516,306,774	531,795,977	547,749,856	564,182,352	581,107,823	598,541,057	616,497,289	634,992,208	654,041,974	8,461,952,603
MISCELLANEOUS REGISTRATION FEES	10,244,618	10,551,957	10,868,515	11,194,571	11,530,408	11,876,320	12,232,610	12,599,588	12,977,576	13,366,903	13,767,910	14,180,947	14,606,376	15,044,567	15,495,904	15,960,781	16,439,604	212,694,537
INTEREST ON FUNDS INVESTED BY TREASURER	35,719,382	36,790,963	37,894,692	39,031,533	40,202,479	41,408,553	42,650,810	43,930,334	45,248,244	46,605,692	48,003,863	49,443,978	50,927,298	52,455,117	54,028,770	55,649,633	57,319,122	741,591,081
SUBTOTAL REVENUES	772,745,297	795,927,656	819,805,485	844,399,650	869,731,639	895,823,588	922,698,296	950,379,245	978,890,624	1,008,257,342	1,038,505,062	1,069,660,213	1,101,750,020	1,134,802,521	1,168,846,595	1,203,911,994	1,240,029,353	16,043,419,283
TRANSFER FROM THE HIGHWAY FUND	32,300,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	38,000,000	608,000,000
TOTAL REVENUES	805,045,297	833,927,656	857,805,485	882,399,650	907,731,639	933,823,588	960,698,296	988,379,245	1,016,890,624	1,046,257,342	1,076,505,062	1,107,660,213	1,139,750,020	1,172,802,521	1,206,846,595	1,241,911,994	1,278,029,353	16,651,419,283
Less Statutory Requirements																		
42.857% title fee collections	31,298,275	32,237,224	33,204,341	34,200,471	35,226,485	36,283,279	37,371,778	38,492,931	39,647,719	40,837,151	42,062,265	43,324,133	44,623,857	45,962,573	47,341,450	48,761,693	50,224,544	649,801,894
Administration	22,046,617	25,060,476	26,041,790	27,052,544	28,093,620	29,165,929	30,270,407	31,408,019	32,579,760	33,786,652	35,029,752	36,310,145	37,628,949	38,987,317	40,386,437	41,827,530	43,311,856	536,941,183.91
Transfer to General Fund	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	170,000,000	2,720,000,000
Total Statutory Requirements	223,344,892	227,297,700	229,246,131	231,253,015	233,320,105	235,449,208	237,642,185	239,900,950	242,227,479	244,623,803	247,092,017	249,634,278	252,252,806	254,949,890	257,727,887	260,589,223	263,536,400	3,906,743,077
Adjusted Revenue to be Distributed as Follows	581,700,405	606,629,956	628,559,354	651,146,635	674,411,534	698,374,380	723,056,111	748,478,295	774,663,145	801,633,539	829,413,045	858,025,935	887,497,214	917,852,631	949,118,708	981,322,771	1,014,492,953	12,744,676,206
Interstate @61.95%	360,363,400	375,807,258	389,392,520	403,385,341	417,797,946	432,642,929	447,933,261	463,682,304	479,903,818	496,611,977	513,821,381	531,547,067	549,804,524	568,609,705	587,979,040	607,929,456	628,478,385	7,895,326,912
Urban Loops @ 25.05%	145,715,951	151,960,804	157,454,118	163,112,232	168,940,089	174,942,782	181,125,556	187,493,813	194,053,119	200,809,202	207,767,968	214,935,496	222,318,052	229,922,084	237,754,236	245,821,355	254,130,484	3,192,541,390
State Aid to Municipalities @ 6.5%	37,810,526	39,430,947	40,856,358	42,324,531	43,836,750	45,394,335	46,998,647	48,651,089	50,353,104	52,106,180	53,911,848	55,771,686	57,687,319	59,660,421	61,692,716	63,785,980	65,942,042	828,403,953
Secondary Roads @ 6.5%	37,810,526	39,430,947	40,856,358	42,324,531	43,836,750	45,394,335	46,998,647	48,651,089	50,353,104	52,106,180	53,911,841	55,771,686	57,687,319	59,660,421	61,692,716	63,785,980	65,942,042	828,403,953
Total Adjusted Revenues	581,700,404	606,629,956	628,559,354	651,146,635	674,411,534	698,374,380	723,056,111	748,478,295	774,663,145	801,633,539	829,413,045	858,025,935	887,497,214	917,852,631	949,118,708	981,322,771	1,014,492,953	12,744,676,206
Trust Fund Revenue Distributions																		
Interstate @61.95%	360,363,400	375,807,258	389,392,520	403,385,341	417,797,946	432,642,929	447,933,261	463,682,304	479,903,818	496,611,977	513,821,381	531,547,067	549,804,524	568,609,705	587,979,040	607,929,456	628,478,385	7,895,326,912
Urban Loops @ 25.05%	145,715,951	151,960,804	157,454,118	163,112,232	168,940,089	174,942,782	181,125,556	187,493,813	194,053,119	200,809,202	207,767,968	214,935,496	222,318,052	229,922,084	237,754,236	245,821,355	254,130,484	3,192,541,390
State Aid to Municipalities @6.5%	37,810,526	39,430,947	40,856,358	42,324,531	43,836,750	45,394,335	46,998,647	48,651,089	50,353,104	52,106,180	53,911,848	55,771,686	57,687,319	59,660,421	61,692,716	63,785,980	65,942,042	828,403,953
Secondary Roads																		
@ 6.5%	37,810,526	39,430,947	40,856,358	42,324,531	43,836,750	45,394,335	46,998,647	48,651,089	50,353,104	52,106,180	53,911,848	55,771,686	57,687,319	59,660,421	61,692,716	63,785,980	65,942,042	828,403,953
@ 42.857%	31,298,275	32,237,223	33,204,341	34,200,471	35,226,485	36,283,279	37,371,778	38,492,931	39,647,719	40,837,151	42,062,265	43,324,133	44,623,857	45,962,573	47,341,450	48,761,693	50,224,544	649,801,894
Total Secondary Roads	69,108,802	71,668,170	74,060,699	76,525,002	79,063,235	81,677,614	84,370,425	87,144,020	90,000,823	92,943,331	95,974,113	99,095,819	102,311,176	105,622,994	109,034,166	112,547,673	116,166,586	1,478,205,847
Total Revenue Distributions	612,998,680	638,867,179	661,763,695	685,347,106	709,638,020	734,657,660	760,427,889	786,971,226	814,310,864	842,470,690	871,475,310	901,350,068	932,121,071	963,815,204	996,460,158	1,030,084,464	1,064,717,497	13,394,478,100
Combined Intrastate/Urban Expenditure Projections (see Note)		605,273,000	623,431,000	642,134,000	661,398,000	681,240,000	701,677,000	722,727,000	744,409,000	766,741,000	789,744,000	813,436,000	837,839,000	862,974,000	888,864,000	915,529,000	942,995,000	12,200,411,000
Total Intrastate/Urban Revenue Availability		527,768,062	546,846,638	566,497,573	586,738,035	607,585,711	629,058,817	651,176,117	673,956,937	697,421,179	721,589,349	746,482,563	772,122,576	798,531,789	825,733,276	853,750,811	882,608,869	11,087,868,302
Overages (Shortages)		(77,504,938)	(76,584,361)	(75,636,427)	(74,659,965)	(73,654,289)	(72,618,183)	(71,550,883)	(70,452,063)	(69,319,821)	(68,154,651)	(66,953,437)	(65,716,424)	(64,442,211)	(63,130,724)	(61,778,189)	(60,386,131)	(1,112,542,698)
NOTE: The projections for inflation and project growth are those used by Peat Marwick, LLP, in the audit of the Department of Transportation released in May, 1998. "Project growth" refers to unanticipated changes to the project such as increased costs for environmental impact or increased costs as the result of terrain.																		
Source: DOT Financial Statements for 1997 figures; OSA projections for remainder of table																		

FINDINGS AND RECOMMENDATIONS

[This page left blank intentionally.]

FINDINGS AND RECOMMENDATIONS

PROJECT STATUS

Objective: To identify the Trust Fund projects as contained in legislation, determine the status of each project, compare original cost and time estimates to current estimates, and estimate completion dates based on data available.

In 1989, the General Assembly mandated specific roadways be constructed or improved as part of the Trust Fund. Table 2, page 8, lists the 28 Intrastate System routes identified for inclusion in the Highway Trust Fund program; the 7 urban loops are listed in Table 3, page 8. Since the legislation was passed, the estimated mileage has been amended for several of the projects. Mileage for intrastate routes has been increased from 1844.2 miles estimated in 1989 to 1847.929 miles as of December 31, 1997. Mileage for urban loops has been increased from the 1989 estimate of 205.4 to 225.924 miles in December 1997. Overall, this is only a 1.2% increase in mileage. Table 15, page 24, shows each project and its status as of December 31, 1997. As discussed in the “Background” section, specific revenue sources were identified for the purpose of funding these improvements. Trust Fund projects account for only 6% of the total projects included in the fiscal year 1997-98 through 2003-2004 TIP, but constitute approximately 55% of the projected costs in the TIP. (See Exhibit 8.)

The Trust Fund legislation gives the Department authority to “. . . add a route to the Intrastate System if the route is a multilane route and has been designed and built to meet the construction criteria of the Intrastate System projects. No funds may be expended from the Trust Fund on routes added by the Department.” However, the Department has, and should, update the list of qualified Trust Fund projects that fall within the parameters of projects included in the legislation.

EXHIBIT 8
HIGHWAY TRUST FUND PROJECTS AND COSTS
AS PERCENT OF TOTAL TIP PROJECTS AND COSTS

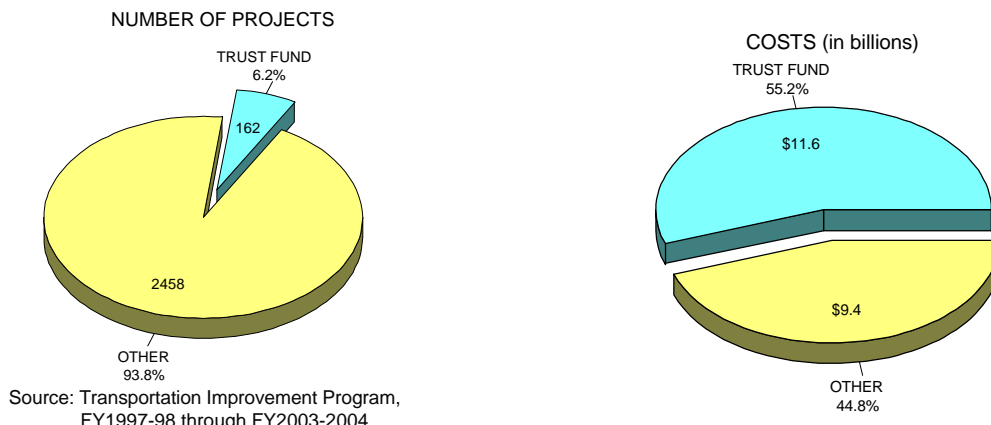


TABLE 15 HIGHWAY TRUST FUND -PROJECTS STATUS AS OF DECEMBER 1997													
Route	1989		Changes in Miles per TIP			Changes in Cost Estimates per TIP (\$ in 000)			Trust Fund Cost of Projects (\$ in 000)			Percent of Completion	
	Prior Costs*	Estimated Costs (000)	1989 Estimate	Subsequent Estimate	Increase/Decrease	1990 Estimate**	Subsequent Estimate	Increase/Decrease	Actual ** Expenditures	Est. To Complete	Total Cost** Of Project	Miles	Dollars
I-40	11,823	88,460	21.4	21.1	(0.3)	76,637	184,879	108,242	49,524	135,355	184,879	10%	27%
I-77	400	35,400	8.9	13.6	4.7	35,000	64,176	29,176	62,338	1,838	64,176	90%	97%
I-85	139,989	514,927	79.5	78.6	(0.9)	374,938	557,347	182,409	361,248	196,099	557,347	75%	65%
I-95	50	2,260	0.0	0.9	0.9	2,210	3,580	1,370	0	3,580	3,580	100%	0%
US 1	1,994	248,291	100.1	100.9	0.8	246,297	337,027	90,730	186,331	150,696	337,027	55%	55%
US 13	0	104,000	45.9	45.7	(0.2)	104,000	164,155	60,155	1,822	162,333	164,155	0%	1%
US 17	29,127	600,405	200.0	220.0	20.0	571,278	995,863	424,585	152,779	843,084	995,863	27%	15%
US 19/(E)	0	98,250	40.0	39.5	(0.5)	98,250	145,300	47,050	8,669	136,631	145,300	0%	6%
US 19	19,297	306,477	27.1	27.8	(0.7)	287,180	335,195	48,015	3,050	332,145	335,195	9%	1%
US 23	1,037	136,737	30.0	28.9	(1.1)	138,700	282,389	143,689	2,235	280,154	282,389	22%	1%
US 23-441	629	19,929	11.4	11.6	0.2	19,300	32,030	12,730	114,875	0	114,875	100%	100%
US 52	25,010	118,857	22.6	26.0	3.4	93,847	131,116	37,269	116,793	14,323	131,116	99%	89%
US 64/264	37,413	366,908	120.0	121.5	1.5	329,495	556,090	226,595	149,655	406,435	556,090	39%	27%
US 64	1,015	152,504	74.9	74.4	(0.5)	151,489	231,008	79,519	87,104	143,904	231,008	34%	38%
US 70	30,102	296,312	64.9	66.8	1.9	266,210	444,654	178,444	45,386	399,268	444,654	17%	10%
US 74	60,606	381,944	80.3	75.7	(4.6)	321,338	464,164	142,826	135,544	328,620	464,164	26%	29%
US 74 (A)	22,620	84,220	18.3	18.0	(0.3)	61,600	42,435	(19,165)	28,104	14,331	42,435	100%	66%
US 158	856	517,737	245.9	249.2	3.3	516,881	662,819	145,938	45,471	617,348	662,819	7%	7%
Bridge (US 158)	0	39,000	9.9	9.9	0.0	39,000	82,250	43,250	0	82,250	82,250	0%	0%
US 221	25,493	204,093	69.2	68.9	(0.3)	178,600	208,319	29,719	21,604	186,715	208,319	8%	10%
US 220	6,517	120,009	30.1	30.8	0.7	113,492	161,184	47,692	75,445	85,739	161,184	46%	47%
US220/NC68	10,652	88,538	30.7	32.7	2.0	77,886	141,827	63,941	42,835	98,992	141,827	49%	30%
US 264	46,529	207,999	30.3	31.7	1.4	161,470	170,955	9,485	73,611	97,344	170,955	33%	43%
US 321	48,149	158,938	45.5	39.5	(6.0)	110,789	149,520	38,731	78,162	71,358	149,520	63%	52%
US 421	29,846	148,046	37.5	36.3	(1.2)	118,200	198,726	80,526	132	198,594	198,726	35%	0%
US 421(A)	11,144	171,984	71.0	63.669	(7.331)	160,840	321,271	160,431	78,124	243,147	321,271	16%	24%
NC 24-27	17,809	466,439	195.2	191.551	(3.649)	448,630	734,478	285,848	102,172	632,306	734,478	22%	14%
NC 87	13,770	211,395	85.1	85.971	0.871	197,625	247,286	49,661	64,862	182,424	247,286	15%	26%
NC 105	0	34,700	30.0	18.303	(11.697)	42,925	52,340	9,415	0	52,340	52,340	20%	0%
NC 168	0	25,589	18.5	18.435	(0.065)	25,589	52,635	27,046	38,754	13,881	52,635	66%	74%
INTRASTATE	591,877	5,950,348	1844.2	1847.929	3.729	5,369,696	8,155,018	2,785,322	2,126,629	6,111,234	8,237,863	29%	26%
Asheville	0	99,300	0	3.5	3.5	99,300	118,100	18,800	691	117,409	118,100	0%	1%
Charlotte	49,904	863,016	63.4	72.946	9.546	813,112	969,287	156,175	322,636	646,651	969,287	32%	33%
Durham	0	101,516	16.4	19.499	3.099	101,516	143,036	41,520	845	142,191	143,036	0	0.01
Greensboro	600	315,338	41.6	41.782	0.182	314,738	733,464	418,726	75,416	658,048	733,464	1%	10%
Raleigh Loop	1,590	509,490	39.3	42.636	3.336	507,900	652,066	144,166	190,311	461,755	652,066	13%	29%
Wilmington Bypass	0	108,800	20.2	19.95	(2.5)	108,800	328,460	219,660	3,983	324,477	328,460	0%	1%
Winston/Salem	0	209,856	24.5	25.611	1.111	209,856	428,783	218,927	20,457	408,326	428,783	0%	5%
URBAN LOOPS	52,094	2,207,316	205.4	225.924	20.524	2,155,222	3,373,196	1,217,974	614,339	2,758,857	3,373,196	14%	18%
Leg. Oversight Comm									664		664		
Total	643,971	8,157,664	2049.6	2073.853	24.253	7,524,918	11,528,214	4,003,296	2,741,632	8,870,091	11,611,723	27%	24%
Percent Increase					1.2%			53%					
Source: General Statutes, Board of Transportation Minutes; DOT Financial Records							Notes: *Paid from Highway Fund prior to Trust Fund enactment; **Exclude costs prior to 1990						

FINDINGS AND RECOMMENDATIONS

Conclusions: Initial cost estimates for Trust Fund projects were significantly understated, with Department cost estimates increasing 53% since 1989. While the Department has attempted to present more realistic estimates since 1989, those estimates still do not factor in inflation or cost overruns⁹. Trust Fund projects, comprising approximately 55% of total TIP costs, are significantly affected by underestimated costs. Additionally, the availability of funds affects the completion date of Trust Fund projects.

The second major conclusion in this segment is that the Department was not able to construct Trust Fund projects at the anticipated rate during the first five years. Nor was the Department able to significantly accelerate construction of Trust Fund projects after the initial five-year spending limitations expired. These factors have had a significant effect on project completion dates. In our opinion, the current construction schedule will not allow completion of all Trust Fund projects by fiscal year 2013, as projected by the Department. Assuming the magnitude of Trust Fund projects remains as currently identified, continuation of construction at the current rate will put the completion date in fiscal year 2018-19, making it a 29 to 30 year project.

THE CURRENT CONSTRUCTION SCHEDULE WILL NOT MEET THE REVISED COMPLETION DATE OF 2013 FOR TRUST FUND PROJECTS.

The initial projection for the completion of Trust Fund projects was 13.5 years, with all projects being completed by fiscal year 2003. As of December 31, 1997, only three trust fund projects have been completed. However, there are 7 other projects that could have been considered Trust Fund projects. Department officials chose not to use any Trust Fund monies on these projects since it was anticipated they would be completed in a relatively short period of time. These projects are listed in Table 16.

Table 16 TRUST FUND ELIGIBLE PROJECTS FOR WHICH NO TRUST FUND MONIES HAVE BEEN EXPENDED				
Route	TIP ID #	County Affected	Description	Status
I-40	I-900	Guilford, Forsyth	Construct 21 mile multi-lane freeway added to TIP in 1983; only 3 miles in Guilford would have been eligible for Trust Fund	Completed 1993
I-40	I-100 (changed to I-40AJ)	Buncombe	Identified in TIP as "Trust Fund" but Board has not approved any funds for project, nor has any Trust Fund monies been expended	34% complete
US-1	R-501	Vance	Widen Henderson Bypass added to TIP 1978; eligible for Trust Fund	Completed 1992
US-17	R-1009	Perquimans	Widen US-17 from north of Hertford to SR 1367 added to TIP in 1983; eligible for Trust Fund	Completed 1992
US-64	R-510	Martin, Washington	Widen US-64 from Jamesville to NC 45 added to TIP in 1978; eligible for Trust Fund	Completed 1990
US-158	R-520	Currituck	Widen US-158 from Point Harbor to Barco added to Tip in 1978; eligible for Trust Fund	Completed 1991
US-158	R-2227	Dare	Identified in TIP as "Trust Fund" but Board has not approved any funds for project, nor has any Trust Fund monies been expended	Inactive as of 1992
Source: Transportation Improvement Program FY1995 to FY2001; Board minutes; DOT Financial Records				

⁹ The May 1998 Peat Marwick, LLP report on the Department of Transportation found that cost estimates for the projects contained in the TIP did not include inflation or project growth. Our audit of the Trust Fund activities confirmed this finding.

FINDINGS AND RECOMMENDATIONS

Since 1989, Department staff have revised the completion date for Trust Fund projects to 2013, making the Trust Fund a 23 year undertaking. However, for the eight years ending December 1997, only 27% of the Trust Fund projects estimated to be completed by fiscal year 2003 had been completed and only 24% of the Trust Fund dollars had been expended. (See discussion following for funding issues.) If construction continues at the same pace, this would mean that it would take 29.6 years to complete all projects currently identified.¹⁰ Exhibit 9, page 27, depicts the trust fund projects as well as their status as of December 1997, as supplied by the Department of Transportation. Examination of Department records showed that environmental considerations, right of way acquisitions, planning and design requirements, and the number and frequency of public meetings significantly impact the construction schedule. The majority of these factors are outside the Department's control, many being driven by legal requirements.

$$\begin{aligned}.27x &= 8 \text{ years} \\ x &= 8/.27 \\ x &= 29.6 \text{ years}\end{aligned}$$

RECOMMENDATION

The Department should reexamine its construction scheduling procedures to identify areas where delays can be prevented or minimized. Steps should be taken to ensure that the projected completion date for each project is realistic.

Auditor's Note: This finding and recommendation supports the May 1998 Peat Marwick finding relating to the need for strengthening the construction scheduling requirements.

THE DEPARTMENT WAS NOT ABLE TO SIGNIFICANTLY ACCELERATE TRUST FUND CONSTRUCTION AFTER THE EXPIRATION OF THE INITIAL LIMITATIONS ON CONSTRUCTION EXPENDITURES.

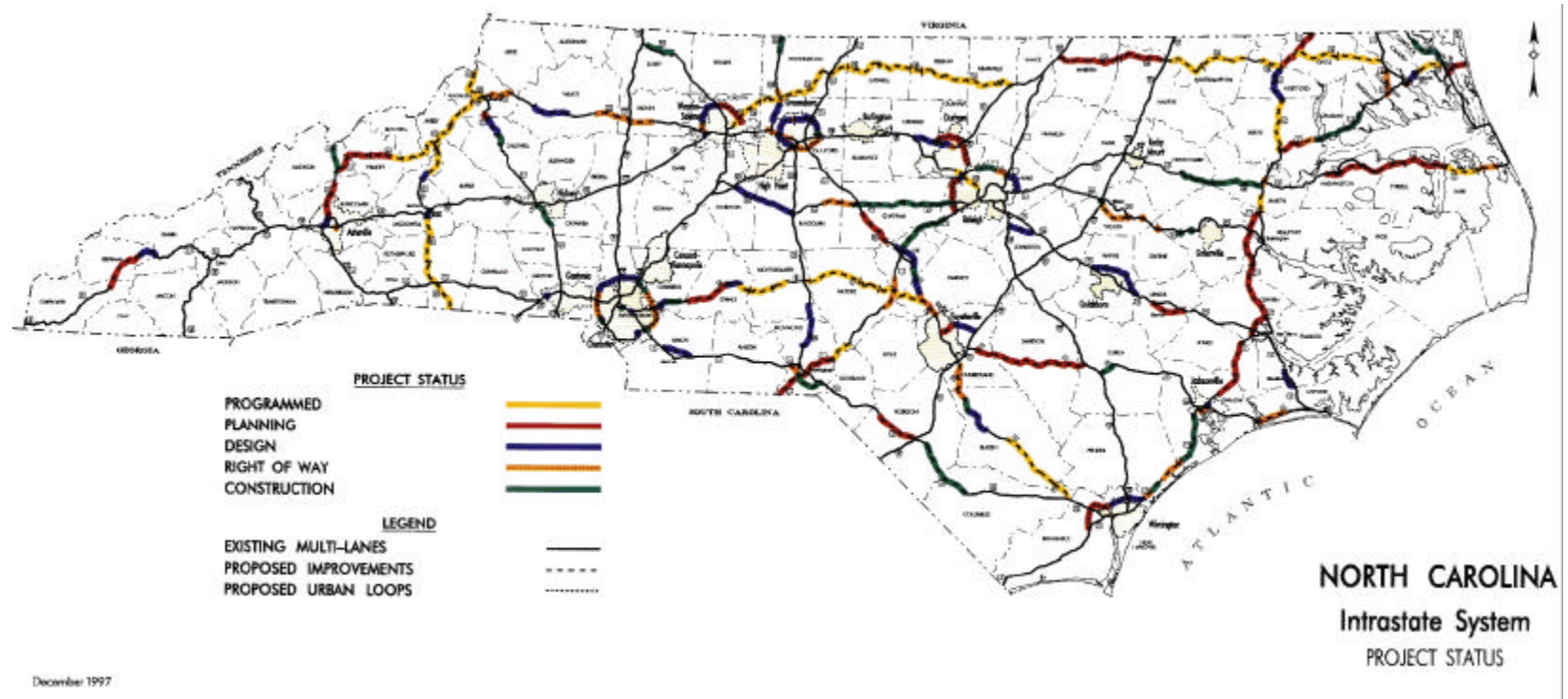
FY89-98	\$200,000,000
FY90-91	\$250,000,000
FY91-92	\$300,000,000
FY92-93	\$400,000,000
FY93-94	\$500,000,000

The legislation establishing the Trust Fund placed limitations on construction obligations for fiscal years 1989-90 through 1993-94 as shown on the left. It appears the limitations were imposed to assure that construction costs did not exceed revenues collected for the first years of the Trust Fund. Actual expenditures for this five-year period did not exceed the limitations, as shown in Exhibit 2, page 13. According to Department management, only those Trust Fund projects already in the fiscal years 1989-90 through 1995-96 TIP were begun or continued during the first five years of the Trust Fund program. (The Trust Fund projects that were in this TIP were at various stages.) That TIP did not contain all the projects identified in the Trust Fund legislation. Subsequent revisions to the list of projects included in the TIP added all Trust Fund projects identified in legislation.

FINDINGS AND RECOMMENDATIONS

FINDINGS AND RECOMMENDATIONS

EXHIBIT 9 North Carolina Intrastate System Project Status (includes Loops)



FINDINGS AND RECOMMENDATIONS

FINDINGS AND RECOMMENDATIONS

Some factors which initially delayed the beginning of construction included: time requirements for preliminary planning and engineering, increased environmental impact requirements, right-of-way acquisitions and public awareness requirements. Department management stated that new construction projects normally require several years of preliminary work before construction can actually begin. Many of these factors affected the Department's ability to accelerate construction on projects already underway.

Table 17 below shows the difference between the available funding and allotments for fiscal years 1989-90 through 1993-94. As shown in Exhibit 10, the Department did not expend or obligate the total funds allowed by the legislation for the first five years. Through December 31, 1997, the eighth year of the Trust Fund, the Department had constructed only 29% of the intrastate routes and only 14% of the urban loops identified in the Trust Fund legislation and had expended only 24% of the Trust Fund monies. For the Trust Fund to be completed within the original time frame of 13.5 years, approximately 7.4% of the construction should have been completed each year. Therefore, at the end of 1997, the Department should have completed 59.2% of the construction to remain on schedule. As of June 30, 1998, the Trust Fund had a cash balance of \$952,524,394 of which \$103,329,468 was uncommitted.

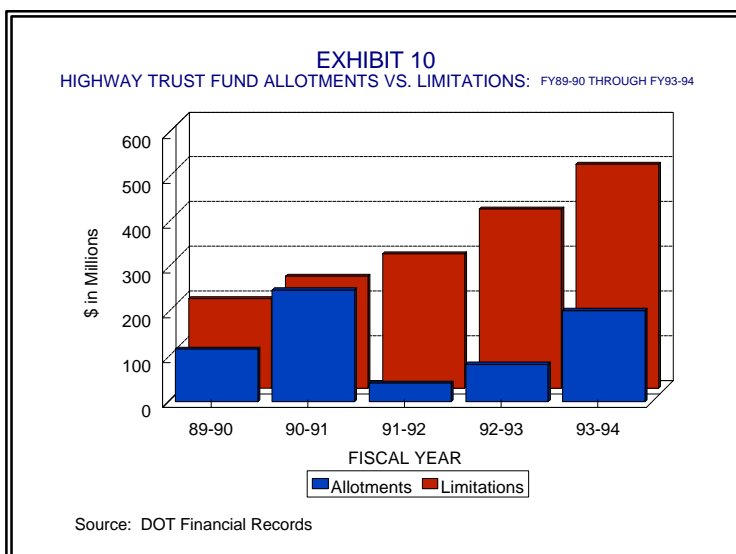


Table 17 HIGHWAY TRUST FUND AVAILABLE FUNDING AND ALLOTMENTS (in millions)					
FY	Net Revenues	Required Transfers*	Net Available Funding	Total Allotments for Intrastate/Urban**	Available Minus Allotments
89-90	\$ 408.7	\$ 252.8	\$155.9	\$116.8	\$ 39.1
90-91	514.1	416.1	98.0	249.3	(151.3)***
91-92	537.3	387.7	149.7	41.1	108.6
92-93	572.0	418.1	153.8	83.3	70.5
93-94	643.1	445.0	198.1	203.7	(5.6)
TOTALS	\$2,675.2	\$1,919.7	\$755.5	\$694.2	\$ 61.3
*Required transfers include allotments for administration, aid to municipalities, secondary road construction, transfers to the highway fund and transfers to the general fund.					
**Total allotments include the cities and towns participation and the property owners' participation.					
***The General Assembly required DOT to transfer \$231,358,005 to the general fund which resulted in the negative balance.					
Source: DOT Financial Records					

FINDINGS AND RECOMMENDATIONS

RECOMMENDATION

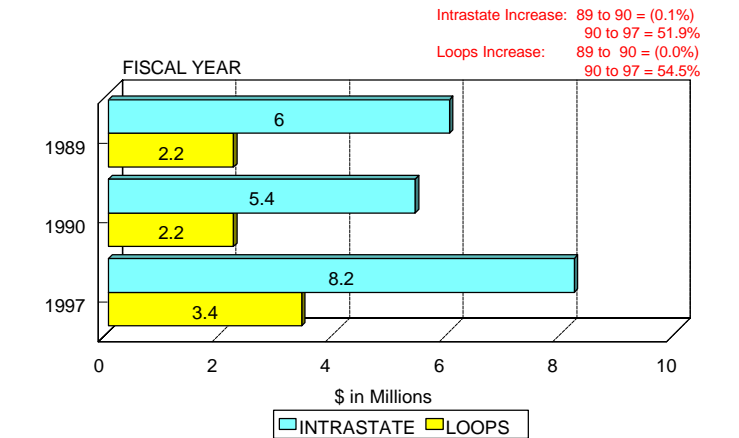
As recommended previously, the Department should identify areas where construction delays can be prevented or minimized. Steps should be taken to more closely monitor construction progress to make sure each project remains on schedule. Additionally, Department management should accelerate existing projects to the extent possible. This information should be shared with the Board of Trustees, members of the General Assembly, and the public.

ESTIMATED COSTS FOR TRUST FUND PROJECTS HAVE INCREASED 53% SINCE 1989.

In 1989 when the Trust Fund was established, the projected costs for the intrastate routes was \$5.4 billion for 28 routes totaling 1,844.2 miles as shown on Table 15, page 24. The original projected costs for the 7 urban loops were \$2.2 billion for 205.4 miles. The Department's most recent estimates of project costs (December 1997) were \$8.2 billion and \$3.4 billion, respectively. Exhibit 11 compares original estimated costs to current estimates. This represents a 53% increase in costs over the eight-year life of the Trust Fund.

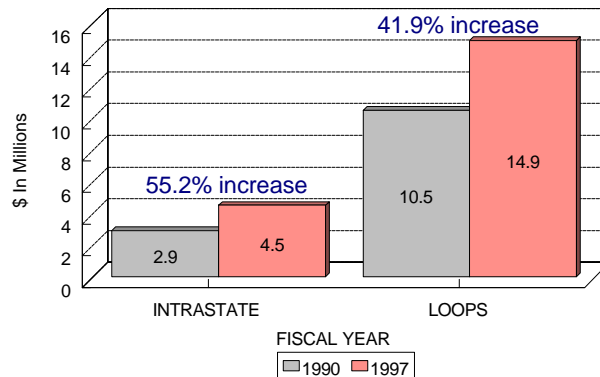
There are a number of reasons for these increases. Original cost projections were done using the historical average cost per mile for construction only and did not consider any preliminary engineering costs, inflation, and/or cost overruns. Overruns can be caused by adding additional mileage to the project, specific needs related to terrain, or changes in environmental regulations. Examination of expenditure records showed that urban loops are more expensive per mile than construction on intrastate routes. Exhibit 12 depicts the difference in cost per mile. Generally, intrastate routes are being

EXHIBIT 11
CHANGES IN HIGHWAY TRUST FUND COSTS PROJECTIONS



Source: Transportation Improvement Program FY1989-90 to 1995-96 and FY1997-98 to FY2003-04

EXHIBIT 12
HIGHWAY TRUST FUND
CONSTRUCTION COSTS PER MILE



Source: DOT Fiscal Year Project Reports

FINDINGS AND RECOMMENDATIONS

improved by adding lanes to existing highways. Urban loops, on the other hand, generally have to be planned, designed, and constructed in areas where no roadway exists. This process requires more up-front costs such as environmental studies and more extensive purchase of land from property owners.

RECOMMENDATION

The Department should review its methodology for determining project costs. The methodology should include consideration of all relevant costs, including preliminary engineering costs, cost overruns, and a conservative estimate for inflation. As discussed on page 19, we estimate revenues to be short of the funds needed to complete the currently identified Trust Fund intrastate and urban loop projects by \$1.1 billion through fiscal year 2012-13.

***Auditor's Note:** In its May 1998 report, Peat Marwick found that 31% of all construction contracts in the last 10 years were not completed on schedule. Frequently, projects that are not completed on schedule also experience cost overruns due to increased materials costs. After examination of this issue, Peat Marwick recommended that the Department strengthen its procedures for monitoring and managing construction projects.*

FINDINGS AND RECOMMENDATIONS

SECONDARY ROADS

Objective: *To examine progress on completing paving of secondary roads.*

Revenue to support the secondary roads program comes from the Trust Fund (6.5% allocation) and \$15 of all motor vehicle title fees collected. GS §136-44.5 describes the distribution of revenues to the respective counties. That statute requires the Department to make an annual study of all state-maintained unpaved roads to determine the:

- number of miles of unpaved state-maintained roads in each county;
- total number of miles of unpaved state-maintained roads in the State;
- number of miles of unpaved state-maintained roads in each county that have vehicular traffic of at least 50 vehicles a day; and
- the total number of miles of unpaved state-maintained roads statewide that have vehicular traffic of at least 50 vehicles a day.

Except for federal-aid programs, the Department allocates all secondary construction funds on the basis of a formula using the study figures determined above. Of the first \$68,670,000 in allocated funds, each county receives a percentage equal to the number of miles of unpaved state-maintained roads in the county in proportion to the total number of miles of unpaved state-maintained miles in the State.

Example: Chatham County: 150 miles of unpaved state-maintained roads. State: 10,000 miles of unpaved state-maintained roads. Allocation in this example, Chatham County would receive \$1,030,050 (1.5% of \$68.67 million).

If funds exceed \$68,670,000, each county receives a percentage equal to the number of

Example: Chatham County: 40 miles of unpaved state-maintained roads with a vehicular count of at least 50 vehicles per day. State: 4,000 miles of unpaved state-maintained roads with a vehicular count of at least 50 vehicles per day. Allocated funds in excess of \$68.67 million = \$40 million. Allocation in this example, Chatham County would receive \$400,000 (1% of \$40 million).

miles of unpaved state-maintained roads in the county with a traffic count of at least 50 vehicles per day in proportion to the number of miles of unpaved state-maintained roads in the State with a traffic vehicular count of at least 50 vehicles per day.

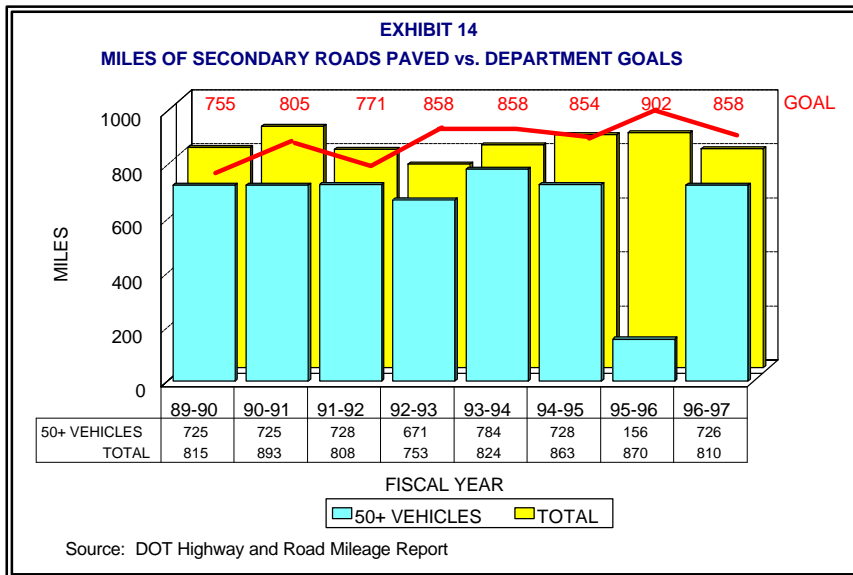
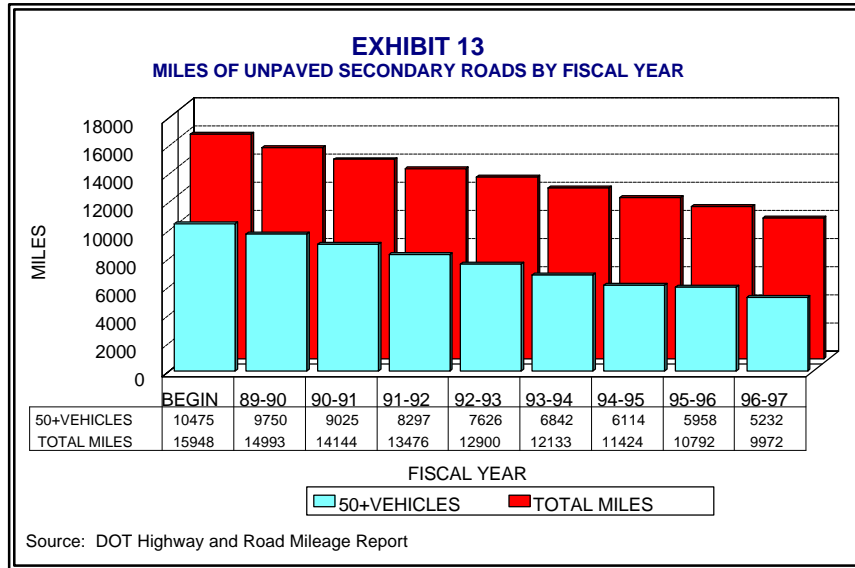
Conclusions: The Department will not be able to meet the statutory requirements set in the Trust Fund legislation regarding paving of all secondary roads with a traffic count of at least 50 vehicles per day by 1999. Our projections show secondary roads with 50+ vehicles a day will not all be paved until fiscal year 2004, with the remaining secondary roads paved by fiscal year 2011.

FINDINGS AND RECOMMENDATIONS

THE ANNUAL PAVING GOALS FOR SECONDARY ROADS WILL NOT MEET THE STATUTORY TIME REQUIREMENTS.

In 1989, North Carolina had 15,948 miles of unpaved state-maintained roads, 10,475 miles of which were roads with a traffic count of 50 vehicles or more per day. GS §136-182 requires the Department to pave, by fiscal year 1999, all unpaved state-maintained roads with a traffic vehicular count of 50 or more vehicles per day. (See related finding on

page 35.) This means the Department should have paved approximately 1,050 miles of



secondary roads per year to achieve this goal. As shown in Exhibits 13 and 14, the annual paving goals set by the Department were not sufficient to meet the 1999 deadline, with only 6,661 miles planned for paving through fiscal year 1996-97. The Department has actually paved a total of 6,636 miles,

of which 5,243 miles were for roads with 50+ vehicles, or only 62.4% of the necessary miles. This leaves some 5,232 miles of roads with 50+ vehicles still to pave at December 31, 1997.¹¹ (See finding on page 37.) As shown in Table 18, all unpaved secondary roads would not be completed, based on the Department's average rate of paving, until fiscal year 2011. The goal of paving all secondary roads with 50 or more vehicles per day would not be reached until fiscal year 2004, again using the Department's average rate for paving through fiscal year 1996-97. While the main factor in not achieving the paving mandate has been setting the paving goal too low, a factor contributing to the delay is the

¹¹ The Department has increased its paving goals for secondary roads for FY97-98 to 1,155 miles.

FINDINGS AND RECOMMENDATIONS

continual change in the number of miles of unpaved state-maintained roads. New unpaved roads (including new housing subdivisions) continue to be accepted into the state-maintained system increasing the total mileage. Conversely, municipal expansions of corporate limits reduce the total mileage to be paved. Approximately 85 miles of unpaved new roads per year have been added to the state-maintained system since the Trust Fund began.

RECOMMENDATION

Department management should request a modification to the legislation for a more realistic date to complete paving of secondary roads with 50+ vehicles per day traffic. The Department should take steps to modify its time goal for paving all unpaved secondary roads with traffic of 50 or more vehicles per day. Maximum effort should be extended to pave as many miles of the mandated secondary roads as possible each year.

Table 18 SCHEDULE OF UNPAVED SECONDARY ROADS As of December 1997 (bold numbers indicate projected values)					
Year End June 30	Total Unpaved Secondary Miles			Unpaved Miles Of 50+ Vehicles	
	Actual Miles Paved	Net Change Additions (Removals) To System	Total Unpaved Miles	Miles Paved Each Year	Total Miles
Begin 89			15,948		10,475
1990	815	(140)	14,993	725	9,750
1991	893	44	14,144	725	9,025
1992	808	140	13,476	728	8,297
1993	753	177	12,900	671	7,626
1994	824	57	12,133	784	6,842
1995	863	154	11,424	728	6,114
1996	870	238	10,792	156	5,958
1997	810	(10)	9,972	726	5,232
1998	830	85	9,227	655	4,577
1999	830	85	8,482	655	3,922
2000	830	85	7,737	655	3,267
2001	830	85	6,992	655	2,612
2002	830	85	6,247	655	1,957
2003	830	85	5,502	655	1,302
2004	830	85	4,757	647	0
2005	830	85	4,012		
2006	830	85	3,267		
2007	830	85	2,522		
2008	830	85	1,777		
2009	830	85	1,032		
2010	830	85	287		
2011	372	85	0		

Source: DOT Highway and Road Mileage Report; OSA projections in bold

Auditor's Note: The State Auditor is in the process of reviewing operations at maintenance units. Maintenance units are responsible for paving secondary roads.

FINDINGS AND RECOMMENDATIONS

UNDER CURRENT BOARD POLICY, THE DEPARTMENT WILL NOT BE ABLE TO PAVE ALL UNPAVED SECONDARY ROADS WITH 50+ VEHICLE TRAFFIC.

The Department of Transportation accepted all existing unpaved secondary roads into the state-maintained system in 1931. A number of these roads were accepted with only a “ditch-to-ditch” right of way. At the time they were accepted, there was no statutory requirement that the Department acquire right-of-ways. In 1959, the General Assembly passed legislation (GS §47-27) that requires the Department to record deeds of easement with the local Register of Deeds office. The Board of Transportation adopted policy requiring that all unpaved roads accepted into the state-maintained system include the appropriate right-of-way easement, approximately 30 feet on each side. It is also Board policy that all property owners on any unpaved secondary road must donate the right-of-way before the Department will pave it. Thus far, Department personnel have identified through the priority ranking system (see finding on page 37) 1,171 roads constituting approximately 822 miles of unpaved roads in the system which do not meet the right-of-way requirements for paving. Of these, approximately 726 miles are for roads with a traffic vehicle count of 50+, as shown in Table 19, page 36. Therefore, the Department cannot meet the statutory requirement of paving **all** unpaved roads in the State with a daily traffic vehicle count of 50+.

RECOMMENDATION

The Department should immediately undertake identifying all state-maintained unpaved secondary roads that do not have the appropriate right-of-ways. This information should also contain data, where known by the Department, regarding the willingness of property owners to donate the right-of-ways. This information should be used as a basis for requesting modification of the Trust Fund legislation requiring the paving of all secondary roads with a daily traffic vehicle count of 50+. (See previous recommendation.)

FINDINGS AND RECOMMENDATIONS

Table 19
SUMMARY OF SECONDARY ROADS WITH IDENTIFIED UNAVAILABLE RIGHT-OF-WAY

DIV.	COUNTY	TOTAL NUMBER	LENGTH OF ROADS WITH 50+ VEHICLE TRAFFIC	TOTAL MILEAGE WITH UNAVAILABLE RIGHT-OF-WAY	DIV.	COUNTY	TOTAL NUMBER	LENGTH OF ROADS WITH 50+ VEHICLE TRAFFIC	TOTAL MILEAGE WITH UNAVAILABLE RIGHT-OF-WAY
1	Bertie	6	4.50	11.20	8	Chatham	18	12.42	13.12
	Camden	11	6.59	7.92		Hoke	6	4.39	6.29
	Chowan	3	0.90	1.50		Lee	5	1.00	1.21
	Currituck	10	5.36	5.71		Montgomery	3	2.90	2.90
	Dare	0	0.00	0.00		Moore	20	11.25	14.69
	Gates	12	12.65	14.16		Randolph	14	5.54	5.74
	Hertford	4	3.80	7.50		Richmond	10	4.94	5.60
	Hyde	12	6.76	11.64		Scotland	19	11.18	16.71
	Martin	3	4.90	4.90		Division Totals	95	53.62	66.26
	Northampton	12	12.20	14.33	9	Davidson	15	6.32	6.99
	Pasquotank	5	2.65	2.65		Davie	14	10.31	12.65
	Perquimans	1	0.63	0.63		Forsyth	22	7.32	8.27
	Tyrrell	7	1.30	6.10		Rowan	8	3.71	4.06
	Washington	1	1.20	1.20		Stokes	12	6.19	6.90
	Division Totals	87	63.44	89.44		Division Totals	71	33.85	38.87
2	Beaufort	10	7.90	8.60	10	Anson	4	1.05	4.25
	Carteret	1	1.06	1.06		Cabarrus	0	0.00	0.00
	Craven	1	0.40	0.40		Mecklenburg	8	2.62	3.92
	Greene	0	0.00	0.00		Stanly	2	1.10	1.10
	Jones	2	1.30	1.49		Union	4	2.80	2.80
	Lenoir	1	0.60	0.60		Division Totals	18	7.57	12.07
	Pamlico	4	1.21	1.43	11	Alleghany	9	7.93	8.88
	Pitt	2	0.00	1.20		Ashe	15	10.20	10.40
	Division Totals	21	12.47	14.78		Avery	16	7.07	7.19
3	Brunswick	6	2.64	2.64		Caldwell	18	6.80	6.92
	Duplin	12	7.63	8.23		Surry	12	1.47	2.13
	New Hanover	2	0.78	0.78		Watauga	23	21.53	25.09
	Onslow	3	1.00	1.10		Wilkes	12	5.22	5.87
	Pender	8	5.49	6.26		Yadkin	4	2.09	2.24
	Sampson	2	1.60	1.60		Division Totals	109	62.31	68.72
	Division Totals	33	19.14	20.61	12	Alexander	0	0.00	0.00
4	Edgecombe	1	1.50	1.50		Catawba	0	0.00	0.00
	Halifax	18	13.89	14.12		Cleveland	1	0.00	0.20
	Johnston	12	11.96	12.50		Gaston	0	0.00	0.00
	Nash	1	0.60	0.60		Iredell	8	6.53	6.89
	Wayne	1	1.20	1.20		Lincoln	8	0.00	0.00
	Wilson	4	2.30	3.00		Division Totals	17	6.53	7.09
	Division Totals	37	31.45	32.92	13	Buncombe	18	4.80	6.03
5	Durham	1	0.26	0.26		Burke	13	4.19	4.32
	Franklin	1	0.10	0.10		Madison	13	9.14	9.94
	Granville	1	2.00	2.00		McDowell	19	6.35	6.90
	Person	5	1.40	1.55		Mitchell	11	6.92	6.92
	Vance	1	0.70	0.70		Rutherford	7	1.54	2.19
	Wake	5	4.14	4.14		Yancey	13	9.45	9.45
	Warren	3	1.82	1.82		Division Totals	94	42.39	45.75
	Division Totals	17	10.42	10.57	14	Cherokee	25	14.18	14.96
6	Bladen	15	20.59	20.89		Clay	22	10.80	12.66
	Columbus	23	19.07	19.76		Graham	17	10.03	12.35
	Cumberland	16	14.76	14.76		Haywood	50	29.59	30.29
	Harnett	19	12.55	13.26		Henderson	50	40.05	40.67
	Robeson	67	54.43	67.95		Jackson	59	34.52	36.36
	Division Totals	140	121.40	136.62		Macon	78	57.11	58.92
7	Alamance	8	2.98	3.00		Polk	16	8.58	10.68
	Caswell	7	5.95	6.65		Swain	28	10.00	12.71
	Guilford	21	6.45	6.99		Transylvania	12	7.07	7.40
	Orange	18	8.32	8.37		Division Totals	357	221.93	237.0
	Rockingham	29	15.85	16.65					
	Division Totals	83	39.55	41.66		GRAND TOTALS	1,171	726.07	822.36

Source: DOT, Division of Secondary Roads

FINDINGS AND RECOMMENDATIONS

DEPARTMENT PROCEDURES FOR PRIORITIZING THE PAVING OF SECONDARY ROADS HAVE NOT ASSURED COMPLIANCE WITH STATUTES.

The Department uses a “points rating system” to schedule paving of unpaved state-maintained roads. Each unpaved road is evaluated by the Department’s Division personnel and is awarded points based on three categories of impact as shown in Exhibit 15.

EXHIBIT 15 PRIORITY SYSTEM FOR PAVING OF SECONDARY ROADS	
	Points
<i>Land Use and Public Service Characteristics:</i>	
Homes (6 points each [seasonal homes 3])	
Schools (10 points each)	
Churches (10 points each)	
Businesses (10 points each)	
Industries (10 points each)	
Recreational Facilities (5 points each)	
Sub-Total	
Sub-Total divided by length of road (not less than 1 mile)	
<i>Traffic Characteristics</i>	
School Bus Route (10 points)	
Average Annual 24-hour traffic volume	
Total	
<i>General Route Characteristics</i>	
Value of the road as a County Thoroughfare (10 points)	
TOTAL OF THE THREE CHARACTERISTICS	
Source: DOT Division of Secondary Roads	

The unpaved roads within a county are then ranked according to total points, and the top 10 roads are listed on the annual work plan for the county. (See Auditor’s Note page 34.) The priority list for paving of secondary roads becomes a public document at this point. When a secondary road in a county is placed on the “to be paved list”, it cannot be removed until it is paved. It is Department policy that all secondary roads in a county be paved, insofar as possible, in the priority order of the list. When a road is paved, it is removed from the list and the next highest ranked secondary road is moved up. The local Board of County Commissioners may recommend to the Board of Transportation deviations in the paving projects and/or the priority of paving projects after holding a pre-announced public meeting. Any recommendation for a deviation must state the specific reason(s). The Board of Transportation considers such recommendations in light of compatibility with its general plans, standards, criteria, and available funds, while giving due regard to development plans of the county and to the maintenance and improvement needs of all existing roads in the county. As seen in the finding on page 34, this process has not worked to assure compliance with the statutory requirement of having all unpaved roads with 50+ vehicle traffic paved by 1999.

RECOMMENDATION

Department management should review the procedures for prioritizing secondary roads for paving, identifying any changes needed. Further, Department, Division, and District management should more closely monitor each county maintenance unit’s progress in paving secondary roads with 50+ vehicle traffic.

FINDINGS AND RECOMMENDATIONS

TRUST FUND EXPENDITURES AND TRANSFERS

Objective: *To examine Trust Fund procedures for expenditure and transfer of funds, including the use of administrative funds and the number and type of positions charged to the Trust Fund.*

The Highway Fund requests monthly reimbursement from the Federal Highway Administration for the federal matching funds on approved projects. Once the federal matching funds are received, the money is deposited in the Highway Fund. Table 20, page 39 shows the actual expenditure transfers from the Highway Trust Fund to the Highway Fund for construction of intrastate and urban loop projects. At June 30, 1997, the Trust Fund had a cash balance of \$701,621,362. The same general procedures are followed for the Trust Fund administrative monies in that the actual payments are made by the Highway Fund, which is reimbursed by the Trust Fund. (See Table 23, page 42.)

To examine the procedures used in the expenditure and transfer of Trust Fund monies, we reviewed a sample of transfers and expenditures from fiscal years 1989-90 to 1997-98. Additionally, we reviewed existing policies and procedures governing the use of Trust Fund monies. To determine the number and type of positions charged to the Trust Fund, we examined organizational charts, position descriptions, and payroll data. We discussed with Department management in detail the functions and duties assigned to positions supported with Trust Fund monies.

Conclusions: **Allowing the Trust Fund to be reimbursed any federal matching funds for qualifying Trust Fund projects would provide additional funds to reduce the completion timeframe for Trust Fund projects. However, this change would require a major policy shift in the State's transportation priorities. Such a change would need to be carefully considered by the General Assembly and the Department.**

Additionally, administrative expenditures for the Trust Fund and the Highway Fund are lumped together, not accounted for separately. The Highway Trust Fund pays for 1,133 positions located throughout the Department's organizational structure due to the many functions necessary to support the planning, administering, designing, and constructing of the Trust Fund projects. While "work order" (field) positions perform duties directly related to Trust Fund projects, administrative positions funded by the Trust Fund provide support for both Trust Fund and Highway Fund projects. Administrative positions are not required to capture the time spent on each type fund, nor has the Department prepared a formal plan for the reduction or reassignment of Trust Fund positions as the projects are completed. Lastly, the Department does not have written procedures for expenditure of Trust Fund monies.

FINDINGS AND RECOMMENDATIONS

Table 20
HIGHWAY TRUST FUND
ACTUAL TRANSFERS TO THE HIGHWAY FUND FOR CONSTRUCTION PROJECTS

	Fiscal Year 89-90	Fiscal Year 90-91	Fiscal Year 91-92	Fiscal Year 92-93	Fiscal Year 93-94	Fiscal Year 94-95	Fiscal Year 95-96	Fiscal Year 96-97
July	\$	\$	\$ 35,484,699	\$	\$	\$	\$	\$
Aug.		35,486,742			8,970,063	36,308,767	21,501,142	
Sept			21,199,099	26,653,398	19,739,455	21,758,802	12,545,632	46,792,488
Oct.		26,760,736		5,259,471	9,193,369	16,797,475	53,395,864	18,927,293
Nov.			10,016,723	8,498,105	37,136,517	23,094,368	9,758,206	4,603,601
Dec.				14,765,778	18,030,111	14,733,425	20,390,808	6,529,394
Jan			6,983,062	10,746,824	6,540,693	14,436,529	18,034,879	14,450,098
Feb.	27,116,077	11,524,698	3,335,160	5,950,835	14,481,637	13,540,853	8,808,248	25,727,213
March			19,924,000	6,005,136	11,294,157	6,092,031	4,908,025	19,069,728
April		27,087,828		9,304,674	9,890,864	10,384,242	25,039,914	3,334,869
May		2,924,000	14,174,535	6,986,403	18,573,400	18,152,933	19,199,402	38,888,512
June	21,094,032	9,015,202	34,720,939	33,110,281	30,716,067	38,818,911	11,194,277	27,450,317
Total	\$ 48,210,109	\$ 112,799,206	\$ 145,838,217	\$ 127,280,905	\$ 184,566,333	\$ 214,118,336	\$ 204,776,397	\$ 205,773,513
Cumulative	\$ 48,210,109	\$ 161,009,315	\$ 306,847,532	\$ 434,128,437	\$ 618,694,770	\$ 832,813,106	\$1,037,589,503	\$1,243,363,016

Fiscal Year	Intrastate	Urban	Total
1989-90	\$ 40,393,052	\$ 7,817,057	\$ 48,210,109
1990-91	68,877,280	43,921,926	112,799,206
1991-92	67,954,052	77,884,165	145,838,217
1992-93	74,932,473	52,348,432	127,280,905
1993-94	104,520,993	80,045,340	184,566,333
1994-95	109,949,086	104,169,250	214,118,336
1995-96	147,603,619	57,172,778	204,776,397
1996-97	107,658,169	98,115,344	205,773,513
Total	\$721,888,723	\$521,474,292	\$1,243,363,016

FINDINGS AND RECOMMENDATIONS

FEDERAL MATCHING FUNDS RECEIVED FOR TRUST FUND PROJECTS ARE DEPOSITED INTO THE HIGHWAY FUND ACCOUNT.

Each year the Department requests approval from the Federal Highway Administration for federal matching funds for qualifying projects, including Trust Fund projects. The typical funding ratio is 80% federal and 20% State funds for all federally approved work orders. As expenditures are incurred on federally approved Trust Fund work orders, the Department pays the bills through the Highway Fund with State funds. At the end of each month, the Trust Fund reimburses the Highway Fund total costs for Trust Fund projects. Each month, the Department requests reimbursement from the federal government for expenditures on federally approved work orders, including Trust Fund work orders. Currently, the Department deposits federal matching funds received for Trust Fund projects into the Highway Fund, not back into the Trust Fund. GS §136-176(c) says that the Secretary *may* transfer “ . the amount of federal

funds received [for a Trust Fund project] plus the amount of any funds from the Highway Fund that were used to match the federal funds . . .” from the Trust Fund to the Highway

Table 21 HIGHWAY TRUST FUND AUTHORIZED EXPENDITURES BY ROUTE For 1989 through 1997			
Project	Federal	Trust Fund	Total
INTRASTATE ROUTES			
I-40	\$ 33,784,997	\$ 17,903,311	\$ 51,688,308
I-77	22,546,250	39,863,548	62,409,798
I-85	277,311,065	84,163,812	361,474,877
US 1	35,504,651	147,973,982	183,478,633
US 13	900,000	2,055,000	2,955,000
US 158	980,000	25,184,221	26,164,221
Bridge US 158	0	2,100,000	2,100,000
US 17	76,450,116	168,687,012	245,137,128
US 19	9,915,669	32,762,867	42,678,536
US 220	40,448,953	42,255,683	82,704,636
US 220/NC 68	5,747,701	46,366,258	52,113,959
US 221	6,640,000	15,495,000	22,135,000
US 23	38,088,226	20,984,313	59,072,539
US 23/44	5,449,600	28,275,744	33,725,344
US 264	62,178,661	33,188,040	95,366,701
US 321	55,099,855	49,796,298	104,896,153
US 421	10,160,000	103,185,786	113,345,786
US 421A	17,419,535	5,388,513	22,808,048
US 52	30,544,420	98,355,810	128,900,230
US 64	79,236,305	53,948,435	133,184,740
US 64/264	18,639,326	174,806,245	193,445,571
US 70	14,018,564	30,600,768	44,619,332
US 74	43,693,610	196,864,550	240,558,160
US 74A	15,583,551	18,152,320	33,735,871
NC 24	28,913,230	85,737,246	114,650,476
NC 87	27,276,807	49,776,386	77,053,193
NC 105	3,553,562	1,198,502	4,752,064
NC 168	0	52,486,417	52,486,417
STATEWIDE	0	750,000	750,000
Intrastate Totals	\$ 960,084,654	\$ 1,628,306,067	\$ 2,588,390,721
	37.1%	62.9%	100.0%
LOOPS			
Asheville Loop	\$ 520,000	\$ 130,000	\$ 650,000
Charlotte Loop	271,364,938	151,382,221	422,747,159
Durham Loop	0	1,800,000	1,800,000
Greensboro Loop	57,092,288	125,238,704	182,330,992
Raleigh Loop	186,534,616	106,889,365	293,423,981
Wilmington Bypass	3,200,000	7,760,000	10,960,000
Winston/Salem Loop	13,200,000	24,745,000	37,945,000
Loop Totals	\$ 531,911,842	\$ 417,945,290	\$ 949,857,132
	56.0%	44.0%	100.0%
GRAND TOTALS	\$1,491,996,496	\$ 2,046,251,357	\$ 3,538,247,853

FINDINGS AND RECOMMENDATIONS

Fund. Those funds can then be used for any project in the Transportation Improvement Plan

Based on the language in the legislation, the Department's policy is to deposit all federal matching funds received, including those for Trust fund projects, into the Highway Fund. These funds are in turn used for TIP-approved projects that are not Trust Fund projects. While the legislation clearly allows this practice, the effect is that State funds are used for all Trust Fund projects even though some of these projects qualify for federal matching. The Department's position is that State funds pay for all Trust Fund projects and that any federal matching funds received for Trust Fund projects are "extra."

Table 22 TRUST FUND ADMINISTRATIVE FUNDS			
Fiscal Year	Total Administrative Funds Available	Expenditures And/Or Transfers	Amount Reverted To Trust Fund
89-90	11,268,800	10,166,000	1,102,800
90-91	11,922,106	11,141,990	780,116
91-92	14,393,481	13,160,822	1,232,579
93-94	18,897,668	15,711,750	3,285,918
95-96	20,096,319	15,823,188	5,297,188
96-97	22,046,617	22,046,617	-0-
Total was \$185.7 million			

(Source: DOT Fiscal Division)

From July 1989 through December 1997, the Board of Transportation has approved \$1.492 billion of federal funds (Table 21) to be spent on intrastate and urban loop projects. Through December 31, 1997, \$1.247 billion had been transferred from the Trust Fund to the Highway Fund for the State and federal portions of Trust Fund projects. We could not readily determine from the Department's accounting system how much of this was for federal matching. If the federal match reimbursement for Trust Fund projects was deposited back into the Trust Fund to be used on other Trust Fund projects, there would be additional funds to complete Trust Fund projects in a more timely manner. (See discussion on project status beginning on page 23.)

RECOMMENDATION

The General Assembly and the Department should consider this issue in detail. A decision should be made as to whether the construction and completion schedule for Trust Fund projects should be given priority over all other State road construction. The federal-matching funds could be used to supplement the Trust Fund by replacing the Trust Fund monies transferred to the Highway Fund for the federal match share of Trust Fund work orders. Allowing the Trust Fund to be reimbursed any federal matching funds, while benefiting the Trust Fund, would require a major policy shift and could significantly impact the State's overall road construction program. However, this change would provide additional funds to reduce the completion timeframe for Trust Fund projects.

TRUST FUND ADMINISTRATIVE EXPENDITURES ARE NOT ACCOUNTED FOR SEPARATELY.

GS §136-176 (b) states that "... a sum, not to exceed four and one-half percent (4.5%) of the amount of revenue ... may be used each fiscal year by the Department for expenses to administer the Trust Fund." Administrative funds not expended during a given fiscal year revert back to the Trust Fund for use on Trust Fund projects, as mandated by legislation. Table 22 shows the amount of administrative funds for the Trust Fund since

FINDINGS AND RECOMMENDATIONS

its inception. The Trust Fund was initiated to fund specific projects as discussed on page 8. All other Department operations are supported by the Highway Fund. The actual administrative expenditures for Trust Fund projects are combined with those for Highway Fund operations. Department management's rationale for this accounting practice is that most Trust Fund administrative expenditures also provide support for Highway Fund operations. However, setting up each fund so that it would have a set of segregated accounts for actual expenditures would allow for more accurate budgeting and accounting for funds actually used to support each type of activity.

RECOMMENDATION

To more accurately reflect actual expenditures, the Department should develop a chart of accounts which is dedicated strictly to Trust Fund operations.

THE DEPARTMENT DOES NOT HAVE A FORMAL PLAN FOR TRUST FUND POSITION REDUCTION.

The Highway Trust Fund, established in 1989, was initially planned to be a 13.5-year undertaking. Although the Department will not be able to meet the 13.5 year goal, the Trust Fund will cease to exist when the projects are completed and the revenues supporting the Trust Fund are statutorily repealed. (General Statutes Article 14, Chapter 136) In order to handle the anticipated acceleration of the projects specified in the Trust Fund legislation, the

Department has created a total of 1,133 new positions. Table 23 contains a breakdown of the total number of positions funded through the Trust Fund by year. According to Department management, these positions are used to support both Trust Fund and Highway Fund projects. While "work order" or field staff charge their time to specific work orders showing fund type, no breakdown of time spent on each fund has been performed for administrative positions. In our opinion, the positions supported by the Trust Fund should be directly related to the workload generated by Trust Fund projects. Therefore, as Trust Fund projects are completed, it should be possible to reassign and/or eliminate some of the positions now supported by the Trust Fund. At the time of the audit, the Department did not have a formal plan for staff reduction. Without a formal plan in place, efficient Trust Fund position management is impaired as projects are completed. Approximately 27% of the road miles associated with Trust Fund projects have been completed at December 31, 1997.

Table 23 NUMBER OF POSITIONS FUNDED THROUGH THE TRUST FUND BY YEAR			
Fiscal Year	Administrative Positions	Work Order Positions	Cumulative Totals
89-90	167.6	503	670.6
90-91	7	86	763.6
91-92	38	256	1057.6
92-93	9	16	1082.6
93-94	3	43	112.6
94-95	(4)	1	1125.6
95-96	3	0	1128.6
96-97	4	0	1132.6
97-98	0.4	0	1133.0
TOTALS	228	905	
Source: DOT Personnel Division			

FINDINGS AND RECOMMENDATIONS

RECOMMENDATION

An analysis should be performed on all positions paid for by the Trust Fund to determine the percentage of time associated with responsibilities directly related to projects supported by this fund. The time spent on Trust Fund operations should be billed to the appropriate Trust Fund account. Department management should also review job descriptions for accuracy after the position analysis is complete. The Department should develop a Trust Fund position reduction schedule to better plan adjustment of positions as projects are completed. The Department should employ resources from its Human Resources and Project Engineering Divisions in coordinating the position reduction plan.

THE DEPARTMENT DOES NOT HAVE WRITTEN POLICIES AND PROCEDURES FOR TRUST FUND EXPENDITURES.

GS §136-176(b) states that the Highway Trust Fund is to be used to administer, plan, design, and construct projects of the interstate system and urban loops, supplement appropriations for city streets, and provide for secondary road construction. The only legislative guidelines for expenditures of the Highway Trust Fund are a limit of 4.5% of the total revenue for use on administrative functions.

During the audit, we learned that Trust Fund administrative procedures, such as the expenditure approval process, have not been formalized as written procedures. A written manual was not deemed a priority due to the high experience level of personnel involved in the administration of the Trust Fund. However, as the Department continues to reorganize and retirements arise, employees placed in these positions who are unfamiliar with the procedures are without a tool necessary for efficient and consistent operations. Written procedures are critical to guide employees in the performance of their job duties. The broad guidelines contained in the legislation, along with the absence of departmental written administrative policies and procedures for the Highway Trust Fund, have provided management with tremendous freedom in making decisions on expenditures to be supported by this Fund.

RECOMMENDATION

The Department should modify its existing policies and procedures manuals to include Trust Fund administration. The manual should include step-by-step procedures required to perform the administrative duties supported by this fund. A standard procedure for updating and distribution should also be developed. Management should require strict adherence to these policies and procedures. These guidelines would provide management with an important tool to assist in decision making.

APPENDICES

Appendix	Description	Page
A	General Statutes: Article 14, Chapter 136	47
B	Response from the Secretary of the Department of Transportation	55

APPENDICES

[This page left blank intentionally.]

ARTICLE 14. NORTH CAROLINA HIGHWAY TRUST FUND

Current through end of 1997 legislation

REPEAL OF ARTICLE

Laws 1989, c. 692, § 8.4, provides, in part:

"When contracts for all projects specified in Article 14 of Chapter 136 of the General Statutes have been let and sufficient revenue has been accumulated to pay the contracts, the Secretary of Transportation shall certify this occurrence by letter to the Speaker of the House of Representatives, the President Pro Tempore of the Senate, and the Secretary of State. The changes below shall become effective on the first day of the calendar quarter following the date the Secretary sends the letter, unless there is less than 30 days between the date the letter is sent and the first day of the following quarter. In that circumstance, the changes shall become effective on the first day of the second calendar quarter following the date the Secretary sends the letter.

"(1) Article 14 of Chapter 136 of the General Statutes is repealed."

§ 136-175. Definitions

Current through end of 1997 legislation

The following definitions apply in this Article:

(1) Intrastate System. The network of major, multilane arterial highways composed of those projects listed in G.S. 136-179, I-240, I-277, US-29 from I-85 to the Virginia line, and any other route added by the Department of Transportation under G.S. 136-178.

(2) Transportation Improvement Program. The schedule of major transportation improvement projects required by G.S. 143B-350(f)(4).

(3) Trust Fund. The North Carolina Highway Trust Fund.

§ 136-176. Creation, revenue sources, and purpose of North Carolina Highway Trust Fund

Current through end of 1997 legislation

(a) A special account, designated the North Carolina Highway Trust Fund, is created within the State treasury. The Trust Fund consists of the following revenue:

(1) Motor fuel, alternative fuel, and road tax revenue deposited in the Fund under G.S. 105-449.125, 105-449.134, and 105-449.43, respectively.

(2) Motor vehicle use tax deposited in the Fund under G.S. 105-187.9.

(3) Revenue from the certificate of title fee and other fees payable under G.S. 20-85.

(4) Revenue available from the retirement of refunding bonds issued to repay highway construction bonds and deposited in the Fund under G.S. 136.183.

(5) Interest and income earned by the Fund.

(b) Funds in the Trust Fund are annually appropriated to the Department of Transportation to be allocated and used as provided in this subsection. A sum, not to exceed four and one-half percent (4.5%) of the amount of revenue deposited in the Trust Fund under subdivisions (a)(1), (2), and (3) of this section, may be used each fiscal year by the Department for expenses to administer the Trust Fund. The rest of the funds in the Trust Fund shall be allocated and used as follows:

APPENDICES

Appendix A

(1) Sixty-one and ninety-five hundredths percent (61.95%) to plan, design, and construct the projects of the Intrastate System described in G.S. 136-179 and to pay debt service on highway bonds and notes that are issued under the State Highway Bond Act of 1996 and whose proceeds are applied to these projects.

(2) Twenty-five and five hundredths percent (25.05%) to plan, design, and construct the urban loops described in G.S. 136-80 and to pay debt service on highway bonds and notes that are issued under the State Highway Bond Act of 1996 and whose proceeds are applied to these urban loops.

(3) Six and one-half percent (6.5%) to supplement the appropriation to cities for city streets under G.S. 136-181.

(4) Six and one-half percent (6.5%) for secondary road construction as provided in G.S. 136-182 and to pay debt service on highway bonds and notes that are issued under the State Highway Bond Act of 1996 and whose proceeds are applied to secondary road construction.

The Department must administer funds allocated under subdivisions (1), (2), and (4) of this subsection in a manner that ensures that sufficient funds are available to make the debt service payments on bonds issued under the State Highway Bond Act of 1996 as they become due.

(c) If funds are received under 23 U.S.C. Chapter 1, Federal-Aid Highways, for a project for which funds in the Trust Fund may be used, the amount of federal funds received plus the amount of any funds from the Highway Fund that were used to match the federal funds may be transferred by the Secretary of Transportation from the Trust Fund to the Highway Fund and used for projects in the Transportation Improvement Program.

(d) A contract may be let for projects funded from the Trust Fund in anticipation of revenues pursuant to the cash-flow provisions of G.S. 143-28.1 only for the two bienniums following the year in which the contract is let.

Amended by Laws 1995, c. 390, § 27, eff. Jan. 1, 1996; Laws 1995, c. 590, § 6, eff. Nov. 26, 1996; Laws 1996, 2 Ex.Sess., c. 18, § 19.4(a), eff. July 1, 1996.

HISTORICAL NOTES

HISTORICAL AND STATUTORY NOTES

Laws 1995, c. 590, §§ 9, 17, provide:

"Sec. 9. Election. The question of the issuance of the bonds authorized by this act shall be submitted to the qualified voters of the State at the general election in November 1996. Any other primary, election, or referendum validly called or scheduled by law at the time the election on the bond question provided for in this section is held may be held as called or scheduled. Notice of the election shall be given in the manner and at the times required by G.S. 163-33(8). The election and the registration of voters for the election shall be held under and in accordance with the general laws of the State. Absentee ballots shall be authorized in the election.

"The State Board of Elections shall reimburse the counties of the State for all necessary expenses incurred in holding the election which are in addition to those which would have otherwise been incurred, these expenses to be paid out of the Contingency and Emergency Fund or other funds available to the State Board of Elections.

"Ballots, voting systems authorized by Article 14 of Chapter 163 of the General Statutes, or both may be used in accordance with rules prescribed by the State Board of Elections. The bond question to be used in the ballots or voting systems shall be in substantially the following form:

"[] FOR [] AGAINST

APPENDICES

Appendix A

"The issuance of nine hundred fifty million dollars (\$950,000,000) State of North Carolina Highway Bonds constituting general obligation bonds of the State secured by a pledge of the faith and credit and taxing power of the State for the purpose of providing funds, with any other available funds, through the application of not in excess of five hundred million dollars (\$500,000,000) of the bonds to pay the capital costs of urban loops, the application of not in excess of three hundred million dollars (\$300,000,000) of the bonds to pay the capital costs of Intrastate System projects, and the application of not in excess of one hundred fifty million dollars (\$150,000,000) of the bonds to pay the capital costs of projects constituting a part of the State secondary highway system resulting in the paving of unpaved roads.

"If a majority of those voting on the bond question vote in favor of the issuance of the bonds, the bonds may be issued as provided in this act. If a majority of those voting on the bond question vote against the issuance of the bonds, the bonds shall not be issued.

"The results of the election shall be canvassed and declared as provided by law for the holding of elections for State officers; the results of the election shall be certified by the State Board of Elections to the Secretary of State, in the manner and at the time provided by the general election laws of the State."

"Sec. 17. Effective date. This act is effective upon ratification, except that Sections 6, 7, 15, and 16 shall become effective upon the certification of a favorable vote on the bonds by the State Board of Elections to the Secretary of State as provided in Section 9 of this act."

Laws 1995, c. 590, was ratified June 20, 1996.

The bond question proposed by Laws 1995, c. 590, § 9, was approved at the 1996 general election, and was certified Nov. 26, 1996.

§ 136-177. Limitation on funds obligated from Trust Fund

Current through end of 1997 legislation

In a fiscal year, the Department of Transportation may not obligate more Trust Fund revenue, other than revenue allocated for city streets under G.S. 136-176(b)(3) or secondary roads under G.S. 136-176(b)(4) and G.S. 20-85(b), to construct or improve highways than the amount indicated in the following table:

Fiscal Year	Maximum Expenditure
1989-90	\$200,000,000
1990-91	250,000,000
1991-92	300,000,000
1992-93	400,000,000
1993-94	500,000,000
1994-95 and following years	Unlimited

The amount of revenue credited to the Trust Fund in a fiscal year under G.S. 136-176(a) that exceeds the maximum allowable expenditure set in the table above may be used only for preliminary planning and design and the acquisition of rights-of-way for scheduled highways and highway improvements to be funded from the Trust Fund.

§ 136-177.1. Requirement to use federal funds for Intrastate System projects and urban loops

Current through end of 1997 legislation

For fiscal years 1996-97 through 2010-11, the Department of Transportation must use ten million dollars

APPENDICES

Appendix A

(\$10,000,000) of the funds it receives each year under 23 U.S.C. Chapter 1, Federal-Aid Highways, to construct the Intrastate System projects described in G.S. 136-179. For fiscal years 1996-97 through 2011-12, the Department of Transportation must use ten million dollars (\$10,000,000) of the funds it receives each year under 23 U.S.C. Chapter 1, Federal-Aid Highways, to construct the urban loops described in G.S. 136-180. G.S. 136-176(c) does not apply to federal funds required to be used under this section for Intrastate System projects or urban loops, nor does it apply to any funds from the Highway Fund that were used to match these federal funds.

Added by Laws 1995, c. 590, § 15, eff. Nov. 26, 1996.

§ 136-178. Purpose of Intrastate System

Current through end of 1997 legislation

The Intrastate System is established to provide high-speed, safe travel service throughout the State. It connects major population centers both inside and outside the State and provides safe, convenient, through-travel for motorists. It is designed to support statewide growth and development objectives and to connect to major highways of adjoining states. All segments of the routes in the Intrastate System shall have at least four travel lanes and, when warranted, shall have vertical separation or interchanges at crossings, more than four travel lanes, or bypasses. Access to a route in the Intrastate System is determined by travel service and economic considerations.

The Department of Transportation may add a route to the Intrastate System if the route is a multilane route and has been designed and built to meet the construction criteria of the Intrastate System projects. No funds may be expended from the Trust Fund on routes added by the Department.

§ 136-179. Projects of Intrastate System funded from Trust Fund

Current through end of 1997 legislation

Funds allocated from the Trust Fund for the Intrastate System may be used only for the following projects of the Intrastate System:

Route	Improvements	Affected Counties
I-40	Widening	Buncombe, Haywood, Guilford, Wake, Durham
I-77	Widening	Mecklenburg
I-85	Widening	Durham, Orange, Alamance, Guilford, Cabarrus, Mecklenburg, Gaston
I-95	Widening	Halifax
US-1	Complete 4-laning from Henderson to South Carolina Line (including 6-laning of Raleigh Beltline)	Vance, Franklin, Wake, Chatham, Lee, Moore, Richmond
US-13	Connector from I-95 to NC-87	Cumberland
US-13	Complete 4-laning from Virginia Line to US-17	Gates, Hertford, Bertie
US-17	Complete 4-laning from Virginia Line to South Carolina Line (including Washington, New Bern, and Jacksonville Bypasses)	Camden, Pasquotank, Perquimans, Chowan, Bertie, Martin, Beaufort, Craven, Jones, Onslow, Pender, New Hanover, Brunswick
US-19/US-19E	Complete 4-laning from US-23 to NC 194 in	Madison, Yancey, Mitchell,

APPENDICES

Appendix A

	Ingalls	Avery
US-19	Complete 4-laning	Cherokee, Macon, Swain
US-23	Complete 4-laning and upgrading existing 4-lanes from Tennessee Line to I-240	Madison, Buncombe
US-23-441	Complete 4-laning from US-19/US-74 to Georgia Line	Macon
US-52	Complete 4-laning from I-77 to Lexington (including new I-77 Connector)	Surry, Davidson
US-64	Complete 4-laning from Raleigh to Coast (including freeway construction from I-95 to US-17)	Edgecombe, Pitt, Martin, Washington, Tyrrell, Dare
US-64	Complete 4-laning from Lexington to Raleigh	Davidson, Randolph, Chatham, Wake
US-70	Complete 4-laning from Raleigh to Morehead City (including Clayton, Goldsboro, Kinston, Smithfield-Selma, and Havelock Bypasses predominately freeways on predominately new locations)	Wake, Johnston, Wayne, Lenoir, Craven
US-74	Complete 4-laning from Charlotte to US-17 (including multilaning of Independence Blvd. in Charlotte, and Bypasses of Monroe, Rockingham, and Hamlet)	Mecklenburg, Union, Richmond, Robeson, Columbus
US-74	Complete 4-laning from I-26 to I-85	Polk, Rutherford
US-158	Complete 4-laning from Winston-Salem to Whalebone	Forsyth, Guilford, Rockingham, Caswell, Person, Granville, Vance, Warren, Halifax, Northampton, Gates, Hertford, Pasquotank, Camden, Currituck, Dare
	New bridge over Currituck Sound	Currituck
US-221	Complete 4-laning from Linville to South Carolina	Avery, McDowell, Rutherford
US-220	Complete 4-laning from I-40 to US-1	Guilford, Randolph, Montgomery, Richmond
US-220/NC-68	Complete 4-laning from Virginia Line to I-40	Rockingham, Guilford
US-264	Complete 4-laning from US-64 to Washington (including Wilson and Greenville Bypasses) (including freeway construction from I-95 to Greenville)	Wilson, Greene, Pitt
US-321	Complete 4-laning from Boone to South Carolina Line	Caldwell, Catawba, Lincoln, Gaston
US-421	Complete 4-laning from Tennessee Line to I-40	Watauga, Wilkes, Yadkin
US-421	Complete 4-laning from Greensboro to Sanford (including Bypass of Sanford)	Chatham, Lee
NC-24	Complete 4-laning from Charlotte to Morehead City	Mecklenburg, Cabarrus, Stanly, Montgomery, Moore, Harnett, Cumberland, Sampson, Duplin, Onslow, Carteret

APPENDICES

Appendix A

NC-87	Complete 4-laning from Sanford to US-74	Lee, Harnett, Cumberland, Bladen, Columbus
NC-105	Complete 4-laning from Boone to Linville	Watauga, Avery
NC-168	Complete multilaning from Virginia Line to US-158	Currituck
NC-194	Complete 4-laning from US-19E to US-221	Avery

§ 136-180. Urban loops

Current through end of 1997 legislation

Funds allocated from the Trust Fund for urban loops may be used only for the following urban loops:

Loop	Description	Affected Counties
Asheville Western Loop of Asheville	Multilane facility on new location from I-26 west to US-19/23 north of Asheville for the purpose of connecting these roads. The funds may be used to improve existing corridors	Buncombe
Charlotte Outer Loop	Multilane facility on new location encircling City of Charlotte	Mecklenburg
Durham Northern Loop	Multilane facility on new location from I-85 west of Durham to US-70 east of Durham	Durham, Orange
Greensboro Loop	Multilane facility on new location encircling City of Greensboro	Guilford
Raleigh Outer Loop	Multilane facility on new location from US-1 southwest of Cary northerly to US-64 in eastern Wake County	Wake
Wilmington Bypass	Multilane facility on new location from US-17 northeast of Wilmington to US-17 southwest of Wilmington	New Hanover
Winston-Salem Northbelt	Multilane facility on new location from I-40 west of Winston-Salem northerly to I-40 in eastern Forsyth County	Forsyth

§ 136-180.1. Proposed Durham Northern loop

Current through end of 1997 legislation

The Department of Transportation shall notify the owners of all property that is within a corridor located in Durham County and is being considered as a possible alignment of the proposed Durham Northern loop of at least one informational workshop, if one is held, and any public hearings on that urban loop. These notifications shall be made by first-class mail and shall be made no less than 30 days prior to the scheduled workshop or public hearing. Prior to a decision on the proposed Durham Northern loop, the Department of Transportation shall consider all alternatives advanced by interested parties including improvements to existing corridors and consider neighborhood growth, economic development patterns and trends, the best protection for the environment, and limitation on encroachment upon State parks. A public report shall be made by the Department of Transportation of its findings and the basis for its decision.

APPENDICES

Appendix A

Added by Laws 1995, c. 590, § 14, eff. June 20, 1996.

§ 136-181. Supplement for city streets

Current through end of 1997 legislation

Funds allocated to supplement the appropriations for city streets made under G.S. 136-41.1 shall be distributed to cities as provided in that statute.

§ 136-182. Supplement for secondary road construction

Current through end of 1997 legislation

Funds are allocated from the Trust Fund to increase allocations for secondary road construction made under G.S. 136-44.2A so that all State-maintained unpaved secondary roads with a traffic vehicular equivalent of at least 50 vehicles a day can be paved by the 1998-99 fiscal year. This supplement shall be discontinued when the Department of Transportation certifies that, with funds available from sources other than the Trust Fund, all State-maintained unpaved secondary roads, regardless of their traffic vehicular equivalent, can be paved during the following six years. If the supplement is discontinued before the Trust Fund terminates, the funds that would otherwise be allocated under this section shall be added to the allocation from the Trust Fund for projects of the Intrastate System.

§ 136-183. Revenue available from retirement of bonds credited to Highway Trust Fund

Current through end of 1997 legislation

Beginning with the 1994-95 fiscal year, the State Treasurer shall credit the following amounts of revenue to the Trust Fund:

Fiscal Year	Yearly Amount
1994-95	\$ 9,600,000
1995-96	12,100,000
1996-97	32,300,000
1997-98 and each subsequent year until the Trust Fund ends	38,000,000

These amounts represent increased revenue resulting from the retirement of refunding bonds issued to repay highway construction bonds. In each fiscal year, the State Treasurer shall credit to the Trust Fund one-fourth of the amount set in the table for that year within 10 days after the end of each calendar quarter.

§ 136-184. Reports by Department of Transportation

Current through end of 1997 legislation

(a) The Department of Transportation shall develop, and update annually, a report containing a completion schedule for all projects to be funded from the Trust Fund. The report shall include a separate schedule for the Intrastate System projects, the urban loop projects, and the paving of unpaved State-maintained secondary roads that have a traffic vehicular equivalent of at least 50 vehicles a day. The annual update shall indicate the projects, or portions thereof, that were completed during the preceding fiscal year, any changes in the original completion schedules, and the reasons for the changes. The Department shall submit the report and the annual updates to the Joint Legislative Transportation

APPENDICES

Appendix A

Oversight Committee.

(b) The Department of Transportation shall make quarterly reports to the Joint Legislative Transportation Oversight Committee containing any information requested by the Committee. The Department shall provide the Committee with all information needed to determine if funds available under the Trust Fund and the Transportation Improvement Program are being spent in accordance with G.S. 136-17.2A.

Amended by Laws 1993, c. 321, § 169.2(e), eff. July 1, 1993.

HISTORICAL NOTES

HISTORICAL AND STATUTORY NOTES

Laws 1993, c. 321, §§ 321, 322, provide:

"Sec. 321. Except for statutory changes or other provisions that clearly indicate an intention to have effects beyond the 1993-95 biennium, the textual provisions of this act shall apply only to funds appropriated for and activities occurring during the 1993-95 biennium.

"Sec. 322. If any section or provision of this act is declared unconstitutional or invalid by the courts, it does not affect the validity of the act as a whole or any part other than the part so declared to be unconstitutional or invalid."

Laws 1993, c. 321, was ratified July 9, 1993.

§ 136-185. Maintenance reserve created in certain circumstances

Current through end of 1997 legislation

If the Highway Trust Fund has not terminated but all contracts for the projects of the Intrastate System described in G.S. 136-179 have been let and the amount collected and allocated for the Intrastate System is enough to pay the contracts and retire any bonds issued under the State Highway Bond Act of 1996 for projects of the Intrastate System, all subsequent allocations of revenue for the Intrastate System shall be credited to a reserve account within the Trust Fund. Revenue in this reserve may be used only to maintain the projects of the Intrastate System.

If the Highway Trust Fund has not terminated but all contracts for the urban loops described in G.S. 136-180 have been let and the amount collected and allocated for the urban loops is enough to pay the contracts and retire any bonds issued under the State Highway Bond Act of 1996 for the urban loops, then all subsequent allocations of revenue for the urban loops shall be credited to a reserve account within the Trust Fund. Revenue in this reserve may be used only to maintain the urban loops.

Added by Laws 1995, c. 590, § 16, eff. Nov. 26, 1996.



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

JAMES B. HUNT, JR.
GOVERNOR

P.O. BOX 25201, RALEIGH, N.C. 27611-5201

E. NORRIS TOLSON
SECRETARY

December 4, 1998

The Honorable Ralph Campbell, Jr.
State Auditor
300 North Salisbury Street
Raleigh, North Carolina 27603-5903

Dear Mr. Campbell:

Thank you for the opportunity to comment on the findings and recommendations resulting from your performance audit of the Highway Trust Fund. I commend you and your staff for your careful review and analysis of this complex subject.

Attached are our responses to each specific finding and conclusion presented in your report. As you will see from our responses, our staff agrees, in large measure, with your findings and will implement your recommendations.

Soon after I came to the Department of Transportation ten months ago, an audit under the watch of your office found significant over-programming in the Transportation Improvement Program.

The reasons for that \$2.1 billion deficit are reflected in your audit of the Highway Trust Fund. Your findings show that projects outlined in the Trust Fund lag behind the original Trust Fund plan. Your audit also points out that revenues are short of those predicted when the Trust Fund became law in 1989 and that construction delays have occurred primarily because project costs exceeded the estimates used in the original Trust Fund legislation.

During the nine years beginning in 1989-90 and ending in 1997-98, \$3.474 billion was appropriated to fund Highway Trust Fund projects. During those years \$3.411 billion of that sum (98 percent) was obligated for preliminary engineering, right-of-way and construction.

We believe the changes we have put in place over the past ten months will help us move projects faster, providing that environmental permits are issued for these projects. It will however, take many more years than originally anticipated to complete the program because of revenue shortfall and increased project costs.

APPENDICES

Appendix B


The Honorable Ralph Campbell, Jr.

December 4, 1998

Page 2

We have balanced the TIP, accounting for the first time ever for inflation and cost overruns. We have also budgeted \$25 million per year over the next seven years to cover environmental mitigation costs. The draft TIP also includes 56 median guardrail projects to be installed on 992 miles of highways across the state at a cost of \$117.8 million. These projects would be completed in the early years of the 7-year plan.

Thank you again for the commitment of your staff and resources to this project.

Sincerely,

E. Norris Tolson

ENT/lwm

ATTACHMENT RESPONSES TO SPECIFIC CONCLUSIONS AND RECOMMENTATIONS

Page 19

Recommendation: The Department should continue to use more realistic revenue projections from the Office of State Budget and Management.

Response: We agree. The Department will continue to adjust estimates of future revenues annually using estimates prepared by the Office of State Budget and Management.

Page 25:

Conclusions: Initial cost estimates for Trust Fund projects were significantly understated...

Response: We agree. This fact, more than any other, has created the enormous gap between the expectations of policy makers and interested citizens in North Carolina and the ability of the Department to complete Trust Fund projects.

Conclusions: The Department was unable to significantly accelerate construction of Trust Fund projects after the initial five year spending limitations expired.

Response: Projects have been funded at the rate revenues would permit. In the fiscal years 1989-90 through 1993-94, \$1.374 billion in revenue was available to commit to intrastate and urban loop projects. The Department committed over 98% of those funds to projects during that period. At June 30, 1994 only \$24.2 million of the total available had not been committed. Similarly, over the entire life of the Trust Fund through June 30 1998 \$3.474 billion had been available to commit to these projects while \$3.411 billion had been committed. Again, over 98% of the available funds had been committed.

It is also important to note that the total amount of funds that were committed to Trust Fund projects during the above referenced period included \$501 million in Federal Funds and \$56.1 million in Highway Bond Funds. When these extra amounts are added to the \$3.411 billion in Trust Funds committed, the total amount committed to Trust Fund projects through June 30, 1998 comes to \$3.968 billion. The original Trust Fund plan contemplated that \$4.131 billion would be committed through the same date. Thus, 96% of the funds that had been projected to be available for Intrastate and Urban Loops in the original Trust Fund plan had been committed to those projects by June 30, 1998. This fact, again, underscores the point that the main factor in the slower than expected progress in the Trust Fund program has not been construction delays or revenue shortfalls, but higher than expected project costs.

Page 26:

Recommendation: The Department should reexamine construction scheduling...

Response: We agree and are pursuing this issue with vigor. However, we should not lose sight of the fact, as discussed in the foregoing item, that the overall slow progress of Trust Fund program stems from insufficient revenues to meet current project costs, not construction delays. When delays have slowed projects, funds have been shifted to projects that are ready to go forward. Thus, overall construction of Trust Fund projects has proceeded at a level that available funds can sustain.

Page 27:

Recommendation: The Department should identify areas where construction delays can be prevented or minimized.

Response: Same as response to the recommendation on page 26.

Page 31:

Recommendation: The Department should review its methodology for determining project costs.

Response: We agree and have already addressed this issue in the draft of the 1999-2006 Transportation improvement program.

Page 32:

Conclusion: The Department will not be able to meet statutory paving goals in Trust Fund legislation.

Response: We agree. In fact our analysis indicates that the completion dates for all such paving may extend well beyond 2004 in some counties.

Page 34:

Recommendation: The Department should request a change in the Trust Fund statute to reflect a revised date for the completion of secondary road paving.

Response: We agree.

Page 35:

Recommendation: The department should identify unpaved secondary roads that do not have appropriate right of ways.

Response: We have done this.

Page 37:

Recommendation: Procedures for prioritizing for secondary road paving should be reviewed. Management should monitor progress in paving more closely.

Response: We agree.

Pages 38:

Conclusion: Allowing the Trust Fund to be reimbursed any federal matching funds for qualifying Trust Fund projects would provide additional funds to reduce the completion time frame for Trust Fund projects.

Response: This conclusion is obviously true. Bear in mind, however, that as of June 30, 1998 the Trust Fund intrastate and urban loop projects had already received over \$500 million more in Federal funds than had been transferred out of those funding sources. In other words the use of the provisions of GS136-176(c) had provided \$501 million more in funding to those projects than using only Trust Fund revenue would have provided. Of greater concern however, is the fact that no state funds are available for TIP projects except those from the Trust Fund. Thus, the application of all Federal aid reimbursements back to the Trust Fund would create a situation where no state funded projects could be initiated except those listed in the Trust Fund law.

Recommendation: The General Assembly and the Department should consider this issue (ie. Applying all federal aid reimbursements for Trust Fund projects back to the Trust Fund for use only on Trust Fund projects) in detail.

Response: We agree that this issue deserves careful attention and debate. The implementation of such a procedure would eliminate scores of projects from the TIP because state funds would not be available to finance them.

Pages 42 and 43.

Recommendation: To more accurately reflect actual expenditures the Department should develop a chart of accounts that is dedicated strictly to Trust Fund operations.

Recommendation: An analysis of all positions paid for by the Trust Fund should be performed to determine the percentage of time associated with responsibilities directly related to projects supported by this fund.

Response: We assume these recommendations relate primarily to Trust Fund administrative expenses. All positions and charges that can be directly related Trust Fund projects are already charged directly to those projects and a chart of accounts exists to allocate those costs to the appropriate budget funds. Administrative costs are overhead costs that, by their very nature, are not so readily associated with projects. Such overhead costs are recognized in all business organizations.

At the beginning of the Trust Fund program the Office of State Budget and Management established the procedures by which Trust Fund related overhead costs would be identified,

APPENDICES

Appendix B

budgeted and paid. The Department has followed these procedures explicitly and carefully. In addition, in many cases the Department and OSBM have engaged in prior consultation with staff of the Legislative Fiscal Research Division concerning the use of Trust Fund administrative funds.

Now that the Trust Fund program is in its tenth year we believe it is reasonable to review these procedures and make a reassessment of the current use of the Trust Fund administrative allowance. We will perform that reassessment in conjunction with OSBM and make those recommendations for change which appear to be appropriate.

Page 43.

Recommendation: The Department should develop a Trust Fund position reduction schedule.

Response: Your analysis and that of other observers reveals the likelihood that the Trust Fund program will continue at least another 20 years under current legislation. Given this program horizon we believe it is premature to develop a Trust Fund position reduction plan at this time.

Page 44.

Recommendation: The Department should modify its existing policies and procedures manuals to include Trust Fund administration.

Response: We agree. We will initiate these revisions in the coming year.

DISTRIBUTION OF AUDIT REPORT

In accordance with G.S. § 147-64.5 and G.S. § 147-64.6(c)(14), copies of this report have been distributed to the public officials listed below. Additional copies are provided to other legislators, state officials, the press, and the general public upon request.

EXECUTIVE BRANCH

The Honorable James B. Hunt, Jr.	Governor of North Carolina
The Honorable Dennis A. Wicker	Lieutenant Governor of North Carolina
The Honorable Harlan E. Boyles	State Treasurer
The Honorable Michael F. Easley	Attorney General
Mr. Marvin K. Dorman, Jr.	State Budget Officer
Mr. Edward Renfrow	State Controller
Mr. E. Norris Tolson	Secretary, Department of Transportation

LEGISLATIVE BRANCH

Appointees of the Joint Legislative Commission on Governmental Operations

Senator Marc Basnight, Co-Chairman	Representative Harold J. Brubaker, Co-Chairman
Senator Austin Allran	Representative James W. Crawford, Jr.
Senator Frank W. Ballance, Jr.	Representative Billy Creech
Senator Betsy L. Cochrane	Representative N. Leo Daughtry
Senator Roy A. Cooper, III	Representative Theresa H. Esposito
Senator Wilbur P. Gulley	Representative Robert Grady
Senator David Hoyle	Representative Lyons Gray
Senator Howard N. Lee	Representative George M. Holmes
Senator Fountain Odom	Representative Larry T. Justus
Senator Beverly M. Perdue	Representative Richard T. Morgan
Senator Aaron W. Plyler	Representative Liston B. Ramsey
Senator Anthony E. Rand	Representative Carolyn B. Russell
Senator Robert G. Shaw	Representative Timothy N. Tallent
Senator Ed N. Warren	Representative Stephen W. Wood
Senator Allen H. Wellons	

Other Legislative Officials

Representative James B. Black	Minority Leader of the N.C. House of Representatives
Mr. Thomas L. Covington	Director, Fiscal Research Division

Members of the North Carolina Board of Transportation

December 14, 1998

ORDERING INFORMATION

Copies of this report may be obtained by contacting the:

Office of the State Auditor
State of North Carolina
300 North Salisbury Street
Raleigh, North Carolina 27603-5903

Telephone: 919/733-3217

Facsimile: 919/733-8443

E-Mail: reports@aud.osa.state.nc.us

A complete listing of other reports issued by the Office of the North Carolina State Auditor is available for viewing and ordering on our Internet Home Page. To access our information simply enter our URL into the appropriate field in your browser:

<http://www.osa.state.nc.us>.

As required for disclosure by GS §143-170.1, 600 copies of this public document were printed at a cost of \$726.00 or \$1.21 per copy.