PERFORMANCE AUDIT

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION
PUBLIC TRANSPORTATION AND RAIL DIVISIONS

APRIL 1999

STATE OF NORTH CAROLINA
Office of the State Auditor

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AUDITOR'S TRANSMITTAL

April 30, 1999

The Honorable James B. Hunt, Jr., Governor
Secretary E. Norris Tolson, Department 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, Public Transportation and Rail Divisions* mandated by the 1998 General Assembly in Senate Bill 1366, Section 27.10. The objectives of the audit were to review: 1) relationships and interactions; (2) planning and policy making procedures; 3) progress on the implementation of *Transit 2001* recommendations; 4) operations of the two divisions; 5) organization and staffing; and 6) compliance with applicable laws and regulations.

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 D, page 85.

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,

Ralph Campbell, Jr.
State Auditor

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EXECUTIVE SUMMARY

We have conducted a performance audit of the Public Transportation and Rail Divisions of the North Carolina Department of Transportation (Department). This audit was mandated by the 1998 General Assembly in Senate Bill 1366, Section 27.10. The main objectives of the audit were: to review the relationships and interactions between and among the entities involved in providing public transportation and rail services in North Carolina, to review policy-making and planning efforts, to review Transit 2001 recommendations and implementation, to review public transportation and rail operations, to examine organizational structure and staffing levels, and to examine compliance with applicable regulations and guidelines.

GS 136-44.20 established statutory authority for the Department to administer all federal and/or State programs relating to mass transportation in 1975. Organized as the Mass Transportation Division, with responsibility for both public transportation programs and rail programs, the division has undergone several name changes. In 1995, Department management separated the divisions into the Public Transportation Division and the Rail Division. While public transportation operations in North Carolina are administered at the local level, it is the responsibility of the Public Transportation Division to support these systems by administering grants and providing technical assistance and training. The major function of the Rail Division is to coordinate and administer state and federal rail grant and safety programs within North Carolina to foster increased use of rail transportation and to preserve and improve the State's rail network.

With North Carolina's growth in population and increase in traffic congestion, more focus has been placed on rail and public transportation in all areas of the State. The Governor's Commission on Transit 2001 developed the transit goals and objectives for the State. In accepting this report, the General Assembly committed significant resources for implementing its recommendations. The Department is challenged to implement the Transit 2001 recommendations while managing programs that are in a constant state of change, with few or no established guidelines. The Public Transportation Division must balance funding and services between the urban and rural areas of the State. The Rail Division must balance the needs of passenger and freight services in the State.

To its credit, North Carolina's Department of Transportation is recognized as a national leader in promoting and providing public transportation and rail programs for its citizens. However, in reviewing the operations of the Public Transportation and Rail Divisions, we noted areas, listed below, where we believe changes can improve the provision of services. The Secretary of Transportation as well as Department management reviewed the draft report. The Secretary's response is included as Appendix D, page 85.

FINDINGS

FINDINGS (concluded)

TRANSIT 2001 IMPLEMENTATION

PUBLIC TRANSPORTATION AND RAIL OPERATIONS

ORGANIZATION AND STAFFING

COMPLIANCE WITH REGULATIONS

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.

This performance audit of the North Carolina Department of Transportation's Public Transportation and Rail Divisions was mandated by the 1998 General Assembly in Senate Bill 1366, Section 27.10. The specific objectives of the audit identified through conversations with legislators were to:

- review relationships and interactions between and among the Department, the North Carolina Railroad, the Ports Railway Commission, the North Carolina Rail Council, and private passenger and freight operators;
- review North Carolina's policy-making and planning efforts in public transportation and rail;
- review *Transit 2001* recommendations and implementation;
- review public transportation and rail operations, revenues, and expenditures, including the *Carolinian*, the *Piedmont*, future plans, and the Piedmont High Speed Corridor;
- examine organizational structure and staffing levels for the Public Transportation and Rail Divisions; and
- examine programs and functions for compliance with Department, State, and federal guidelines.

The scope of the audit encompassed all aspects of the operations of the Public Transportation and Rail Divisions of the North Carolina Department of Transportation (Department) and, to the extent necessary, operations of other entities involved in the provision of public transportation and rail services in the State.

During the period of November 9, 1998 through March 19, 1999, we conducted the fieldwork for the audit of the Public Transportation and Rail Divisions. To achieve the audit objectives, we employed various auditing techniques which adhere to the generally accepted auditing 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 Codes as they relate to Public Transportation and Rail;
- review of policies and procedures of the Public Transportation and Rail Divisions;
- site visits to five local urban and eight local rural transportation programs;
- in-depth interviews with 21 members of the Public Transportation Division, 31 members of the Rail Division, and 107 persons external to the organization;
- observation of Public Transportation and Rail Division staff during meetings and or visits with personnel from local and regional transportation agencies;
- review of existing studies and reports conducted on Public Transportation and Rail;
- examination of organizational charts and job descriptions;

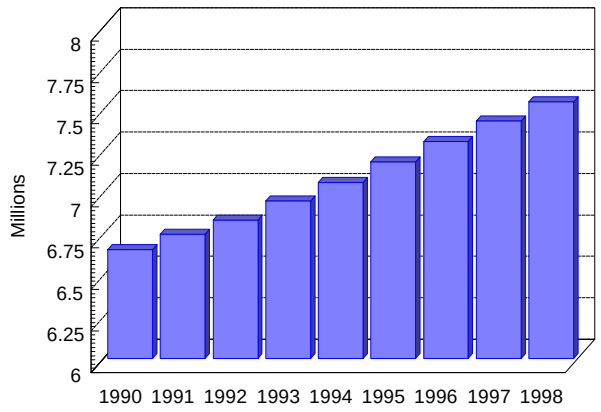
- review of all personnel files for both divisions;
- analyses of a sample of expenditures;
- conduct an inventory of all rail cars and locomotives;
- review of contracts between Public Transportation and/or Rail and vendors; and
- survey of other states' public transportation and rail.

This report contains the results of the audit including conclusions and recommendations. Specific recommendations aimed at improving the operations of the Public Transportation and Rail Divisions of the Department in terms of economy, efficiency, and effectiveness are reported. 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 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 procedures may deteriorate.

Overview of Public Transportation and Rail Issues in North Carolina

North Carolina is a vibrant and growing state, the 10th most populous state in the 1990 census. North Carolina's population has grown steadily, increasing over 13% from 1990 to 1998, as shown in Exhibit 1. During that same period, the focus of our economy shifted even further from rural farming to urban centers with the State's metropolitan population growing at a faster rate than the national average. From 1990 to 1996, North Carolina's metropolitan population grew .8% while the US metropolitan population only grew .1% for the same period. The challenge facing North Carolina is how to alleviate traffic congestion in densely populated centers while accommodating our rural demographics.

Exhibit 1
North Carolina Population Estimates 1990-1998



Source: U.S. Bureau of the Census Estimates

The need for public transit[1] services was recognized over 30 years ago at the federal level. The federal government initiated funding for pilot projects in public transit in 1961 and established the Urban Mass Transportation Administration in 1970 to oversee public transit systems. In 1973, Congress began allocating funds for mass transit.[2]

North Carolina leaders realized that to use these federal funds effectively, the State's efforts needed to be coordinated by one agency. Therefore, in June 1975, the General Assembly designated the North Carolina Department of Transportation as the agency responsible for administering mass transportation related federal programs.

While the Department of Transportation is the State agency with responsibility for mass transit issues and the agency under audit, there are a number of other entities involved in the actual delivery of services. To assist the reader in understanding the role each plays in the public transportation and rail services in the State, we have briefly described each in the following paragraphs.

[1] "Public transit" or "public transportation" refers to a system owned, controlled, or subsidized by any municipality, county, regional authority, state or other governmental agency, including those operated or managed by a private management firm under contract to the government agency owner.

[2] "Mass transit" or "mass transportation" are terms used to describe the movement of a large number of people at one time, usually by bus or train.

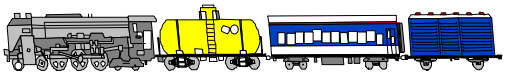
Department of Transportation – Public Transportation and Rail Divisions:

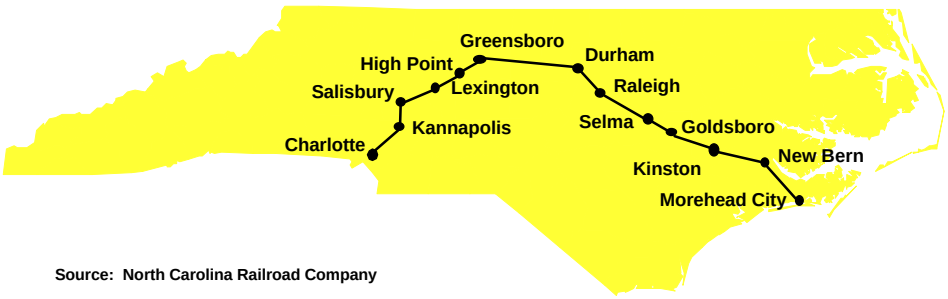
These divisions within the Department of Transportation (Department) have the main responsibility for the coordination and administration of the State's public transportation programs. The mission of the **Public Transportation Division** is to assist local, regional, and State agencies in all activities relating to public transportation and to help them provide safe, effective, and efficient public transportation services. The **Rail Division** has the overall responsibility for the coordination and administration of state and federal rail grant and safety programs that benefit both passenger and freight services within the State. In this capacity, the Rail Division contracts with Amtrak for the operation of two daily passenger trains and helps promote economic development.

North Carolina Railroad Company:

The North Carolina Railroad Company (NCRR) was originally chartered by the State in 1849. In 1989, NCRR was merged with the Atlantic and North Carolina Railroad, a State-owned and leased railroad company. NCRR operates 317 miles of track within the State. (See Exhibit 2). The State was the majority stockholder until 1998, with policy decisions being made by a Board of Directors. In 1998, the General Assembly authorized the purchase of the minority stockholders' shares, making the State the sole owner of NCRR. NCRR is now a separate State entity, with policy decisions still being made by a Board of Directors appointed by the Governor and the legislative leadership. GS 136-16.6 directs that all NCRR dividends be paid to the Department of Transportation. Rail operations within the State, both passenger and freight, are run over NCRR track[3]. However, NCRR does not handle day-to-day rail operations. Norfolk Southern "leases"[4] the track and right of way from NCRR for its freight operations and dispatches freight

EXHIBIT 2
The North Carolina Railroad Company (NCRR)





Source: North Carolina Railroad Company

[3] Other entities do own some track within the State; i.e., Norfolk Southern owns the track and right of way from Salisbury to Asheville.

[4] Norfolk Southern is operating on an interim basis under a Surface Transportation Board order. See footnote #13, page 29 for details.

services for NCRR tracks[5], as well as passenger services, in conjunction with Amtrak.

North Carolina Ports Railway Commission:

The Ports Railway Commission, former owner of the Beaufort and Morehead Railroad Company[6], is currently responsible for providing freight rail services to the State Ports Authority. The Commission owns 3.17 miles of track along the Ports. The Commission has abandoned approximately 1.17 miles of track in Beaufort. The Commission interacts with the Department and NCRR on a limited basis. The Commission is involved with the Department when road projects cross tracks owned by the Commission. Also, the Commission and Department have worked jointly on the replacement of the Newport River Trestle. The Commission's relationship with the NCRR is limited to running on NCRR owned tracks.

Amtrak:

Amtrak is a federally sponsored passenger rail service operating in 44 states. Amtrak operates six passenger trains in North Carolina daily, both inter- and intra-state services. The inter-state routes are part of the system that connects New York to Louisiana and Florida. Additionally, Amtrak contracts with the Rail Division to operate two passenger trains in North Carolina, the *Carolinian* and the *Piedmont*. The *Carolinian* offers a daily round trip between Charlotte and New York. North Carolina stops include Kannapolis, Salisbury, High Point, Greensboro, Burlington, Durham, Cary, Raleigh, Selma, Wilson, and Rocky Mount. The *Piedmont* offers daily round-trip service between Raleigh and Charlotte.

Norfolk Southern and CSX:

These two private freight companies are responsible for the majority of freight service, operating approximately 1,460 and 1,145 track miles, respectively, within the State. Additionally, Norfolk Southern is responsible for directing traffic flow for freight and passenger trains over NCRR tracks, as well as tracks owned and operated by Norfolk Southern. Norfolk Southern dispatches rail service, passenger and freight, and maintains the NCRR track. CSX has a perpetual easement dating from the 1860's on the NCRR right of way between Raleigh and Cary (Boylan to Fetner) and is responsible for dispatching rail traffic for this portion of NCRR track, as well as for tracks owned and operated by CSX within the State.

[5] CSX dispatches freight and passenger traffic between Raleigh and Cary (Boylan and Fetner).

[6] The stock and the Newport River Trestle were transferred from the NC Ports Railway Commission to the Department of Transportation in 1996. The Department of Transportation later transferred the stock to NCRR.

North Carolina State University—Institute for Transportation Research and Education (ITRE):

Chartered by the North Carolina General Assembly in 1977, ITRE conducts research, educational activities, and technical assistance for federal, State, and municipal agencies in North Carolina as well as agencies in surrounding states. All projects are coordinated through ITRE's program areas: Highway Operations and Safety Program, Transit Operations Group (TOG), Pupil Transportation Program, Geographic Information Systems/Global Positioning System Program, and Technology Transfer Program. TOG was established in 1997 to respond to the *Transit 2001* report issues suggesting the need to improve, expand, and link transit services in rural and urban communities. TOG represents a partnership among the university community, the Department, and local transit systems.

North Carolina Rail Council:

The North Carolina Rail Council was established in 1993 to advise the Governor, Secretary of Transportation, and General Assembly on policy concerning the preservation and enhancement of the State's rail system. This 18-member council has been inactive since November 1996.

Local Transportation Programs:

The Department provides support and assistance to 154 regional, urban, rural, and public entities in the State. Below is information on three programs serving metropolitan areas.

- **Triangle Transit Authority** – The establishment of the Research Triangle Regional Public Transportation Authority (TTA) as a regional public transportation authority was made possible by the 1989 General Assembly. The purpose of TTA is to plan, finance, organize, and operate a public transportation system for the Research Triangle Area that includes Wake, Durham, and Orange counties. A 13 member Board of Trustees governs it. Current services offered by TTA include vanpools and buses. TTA is also working on a proposed regional rail service, with the first phase estimated to be completed between 2004 and 2005.
- **Piedmont Authority for Regional Transportation** (PART) – This regional authority was established in 1998 to focus on the enhancement of the quality of transportation for the piedmont region of the State. Representatives on the 15 member (13 voting, 2 ex officio) Board of Trustees are from the following counties: Alamance, Davidson, Forsyth, Guilford, and Randolph. Goals of PART include: better land use coordination and the enhancement of the delivery of human service transportation, ridesharing, and vanpooling services to the region.
- **Metropolitan Transit Commission** – As of this report, this Commission is in the initial organization stage. The Commission is composed of representatives from the following areas: Charlotte, Matthews, Mint Hill, Pineville, Cornelius, Davidson, and Huntersville. The focus of this Commission will be directed toward meeting the transportation needs in these and surrounding areas. Representatives from the

departments of transportation from North Carolina and South Carolina will be included as members of the Commission; however, they will not have voting rights.

There are a number of terms relating to public transportation and rail programs that will be used throughout the report. For the convenience of the reader, we have listed those terms and a brief definition in Table 1.

TABLE 1
List of Public Transportation and Rail Terms

TERM	DEFINITION
Commuter Rail or Regional Rail	A mode of passenger transportation using vehicles with steel wheels on steel rails using tracks that are part of a general rail network. It can be diesel powered or can use electric powered rail cars. Commuter rail may share tracks with railroad freight trains or have separate tracks.
Elderly & Disabled Transportation Assistance	A State funded program to assist local governments and transportation systems to provide additional transportation to the elderly and disabled.
Federal Flexible Funds	Federal programs including the Surface Transportation, Interstate Maintenance, Bridge Replacement and Rehabilitation, National Highway System, and the Congestion Mitigation and Air Quality Improvement program, whose funds can be used for either transit or highway projects. There are programmatic and distributive limitations on the use of some portions of some of these programs.
General Public Transportation	Federal and state funds to assist transportation agencies serving the general public in areas of less than 50,000 population.
Grade Crossings	A crossing of highways, railroad tracks, or pedestrian walks or combinations of these on the same level.
Human Services Transportation	Federal and state funds to assist transportation agencies in meeting the needs of the elderly and disabled in urban, small urban, and rural areas.
Mass Transit or Mass Transportation	Mass transit or mass transportation is used to describe the movement of a large number of people at one time, usually by bus or train.
Metropolitan Planning Organizations (MPOs)	A federally designated organization that is responsible for carrying out the federally-mandated urban transportation and other planning process for an area.
Multi-Modal	A system operating more than one mode of service, such as a single occupant vehicle, bus, train, and airplane.
Public Transportation/ or Public Transit	A system owned, controlled, or subsidized by any municipality, county, regional authority, state, or other governmental agency, including those operated or managed by a private management firm under contract to the government agency owner.
Rail Corridor	A restricted tract of land for the passage of trains.
Regional Authority	An agency that supplements transit services between two or more urban and/or rural systems.
Rural System and Small Urban	A local transit system with a population of less than 50,000.
Seamless Transportation Network	Refers to transportation services and facilities that allow users to move with a high degree of ease and convenience between modes and across service areas.
Shortline	A small railroad that generally moves freight less that 100 miles to an interchange point with a mainline railroad and has annual revenues of less than $40 million.
Urban System	A local transit system operating in an urbanized area with a population of 50,000 or more.
Work First	State funded program to assist local governments and transportation systems to meet employment transportation needs.

Source: Compiled by the Office of the State Auditor from various reports, documents, and conversations.

Statutory Authority

The General Assembly designated the North Carolina Department of Transportation (Department) as the agency to administer "mass transportation related federal programs" on June 2, 1975 with the ratification of General Statute (GS) 136-44.20. As a result of this law, the Department organized the Mass Transportation Division with responsibility for the coordination and administration of all forms of public transportation within the State. In May 1977 Senate Bill 380 amended the law, changing the terminology from "mass" to "public" transportation. At that time the Department changed the name of the division to the Public Transportation Division. In 1993, the Department changed the name to the Public Transportation and Rail Division. The Division operated as a single division until 1995 when Department management decided to split the Rail segment into a separate division.

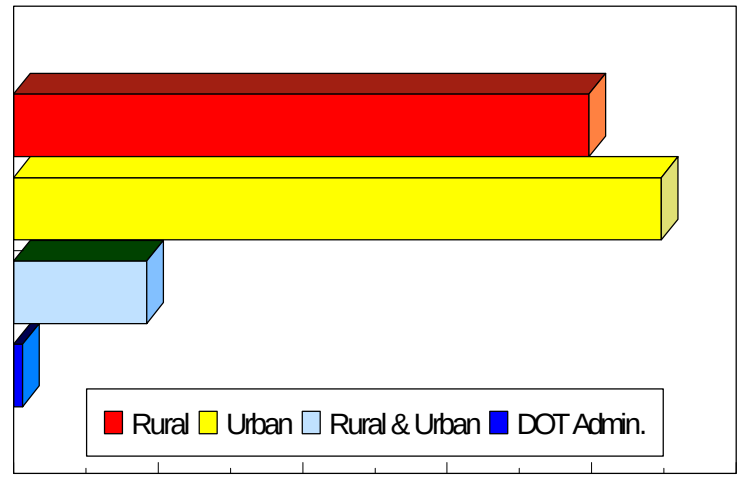
Program Overview

Public Transportation Division--Public transportation operations in North Carolina are administered at the local level. The main function of the Public Transportation Division (PTD) is to support these systems by administering grants and providing technical assistance and training. There are 18 grant programs established with State and federal funds, amounting to over $47 million available to local systems for planning, operating and administration costs, and capital improvements and purchases. Table 2, page 11, details these grant programs, which are divided between urban and rural areas as shown in Exhibit 3.

EXHIBIT 3

Public Transportation Grants–FY1998-99

(Includes Federal and State Funds)



Source: NCDOT Public Transportation Division

TABLE 2
Public Transportation Division's Grant Programs for FY 1998-99

Program	Recipient	Funding Source	Amount	Purpose
Statewide Public Transportation Grant	Urban and Rural	State	$4,646,921	Matching share funds to acquire federal grants
Capital Purchases	Rural	State *Transit 2001**	1,300,000 1,750,000	Capital purchase for buses and vans
Elderly & Disabled Transportation Assistance	Rural	State *Transit 2001*	3,000,000 2,000,000	Operating assistance for elderly and disabled transit needs
General Public Transportation	Rural	State	600,000	Operating assistance for General Public Transportation
Human Service Transportation	Rural	State	400,000	Administrative costs (only when federal funds are not available)
Facility Improvements	Rural	*Transit 2001*	600,000	Construct and/or improve public transportation facilities
Regional and Intercity Transportation Services	Rural	*Transit 2001*	400,000	Operating assistance to expand/improve services
Technology	Rural Urban	*Transit 2001*	500,000 1,000,000	Purchase of technology to improve customer service, convenience and systems effectiveness
Work First & Employment Transportation	Rural	*Transit 2001*	1,000,000	Operating assistance for Work First & Employment transit needs
Work First & Employment Transportation Demonstration	Rural	*Transit 2001*	750,000	Operating assistance for demonstration projects to provide Work First & Employment needs
State Maintenance Assistance	Urban	State *Transit 2001*	6,100,000 2,000,000	Operating assistance New services
Capital Improvements	Urban	*Transit 2001* (Federal Flexible Funds)	8,000,000	Purchase buses and other capital items, construct transit and multi-modal facilities and major new start projects
Capital for Fixed Guideway Modernization/New Start/Buses	Urban	Federal (Section 5309)	4,885,981	New fixed guideways, HOV, commuter rail, buses and related equipment purchases, and construction of bus-related facilities.
Metropolitan Planning	Urban	Federal (Section 5303)	463,930	Conduct transportation planning activities
Nonurban Area Formula	Rural	Federal (Section 5311)	6,023,037	Capital, operating, administration and planning assistance for general public transit services
Elderly and Persons With Disabilities	Rural	Federal (Section 5310)	1,583,068	Capital purchase for meeting elderly and disabled needs
State Planning and Research	State DOT	Federal (Section 5313)	126,681	DOT administrative costs
Rural Transit Assistance	State DOT	Federal (Section 5311b)	143,316	Training to local system employees
TOTAL			**$47,272,934**	

**Transit 2001* funds are composed of $10 million in State appropriations and $8 million in federal flexible funds.
Source: DOT Public Transportation Division

In order to establish a seamless transportation network[7] in North Carolina, PTD is working with local systems to conduct planning on a regional level to avoid duplication of services and improve coordination between systems. Some of the major projects in this area supported by PTD include: the mergers of some city and county transit systems;

[7] Transportation services and facilities that allow users to move with a higher degree of ease and convenience between modes and across service areas.

development of regional transit systems; and county-focused planning studies moving toward regional planning studies. Major urban projects supported by PTD include: regional rail being developed by the Triangle Transit Authority (Raleigh, Durham, Chapel Hill); busways in the Charlotte area; a multimodal[8] transit center in Greensboro; and advanced technology for transit systems.

PTD contracts with the Institute for Transportation Research and Education (ITRE), located at North Carolina State University, to develop, coordinate, and implement a wide range of projects. This relationship, which began in the early 1980's, has continued because of limited personnel and expertise within PTD. Within the last three years, (fiscal years 1995-96 to 1997-98), PTD has entered into 22 project authorizations (contracts) with ITRE with budgeted expenditures of $979,049 as shown in Table 3, page 13. At the conclusion of our fieldwork some of these projects had not been completed since the performance period was beyond the date of the audit.

Rail Division—The major function of the Rail Division is to coordinate and administer state and federal rail grant and safety programs within North Carolina to foster increased use of rail transportation and to preserve and improve the State's rail network. This includes setting policy, creating both short- and long-term plans, administering and implementing the crossing safety program, purchasing and maintaining equipment, and sponsorship of inter- and intrastate passenger train service. To provide assistance in these areas, Rail also contracts with ITRE as shown in Table 3. As shown in Exhibit 4, page 15, six passenger trains currently provide service within the State. Amtrak owns and operates five of the intercity passenger trains that provide service to North Carolina. The Department sponsors two of the Amtrak-operated passenger trains, the North Carolina portion of the *Carolinian* (interstate) and the State-owned *Piedmont* (intrastate). Table 4 shows the trains and routes operated by Amtrak.

TABLE 4
AMTRAK INTERCITY PASSENGER TRAINS SERVING NORTH CAROLINA

Train	Route
The Crescent	Operates from New York City, Philadelphia, PA, Washington, D.C. through Greensboro, Charlotte and on to Atlanta, GA and New Orleans, LA
The Silver Star	New York City, Philadelphia, Washington, D. C. through Rocky Mount, Raleigh to Columbia, SC, Savannah, GA, Orlando and Miami, FL
The Silver Meteor	Serves the same northeast corridor, through Rocky Mount, Fayetteville and on to Charleston, SC, Savannah, Orlando and Miami.
The Silver Palm	New York City to Miami through Rocky Mount, Wilson and Fayetteville
The Carolinian	Daily round trip between Charlotte and New York. North Carolina stops include Kannapolis, Salisbury, High Point, Greensboro, Burlington, Durham, Cary, Raleigh, Selma, Wilson and Rocky Mount
The Piedmont	Daily round trip between Raleigh and Charlotte stopping at Cary, Durham, Burlington, Greensboro, High Point, Salisbury and Kannapolis (State-owned)

Source: NCDOT Rail Division

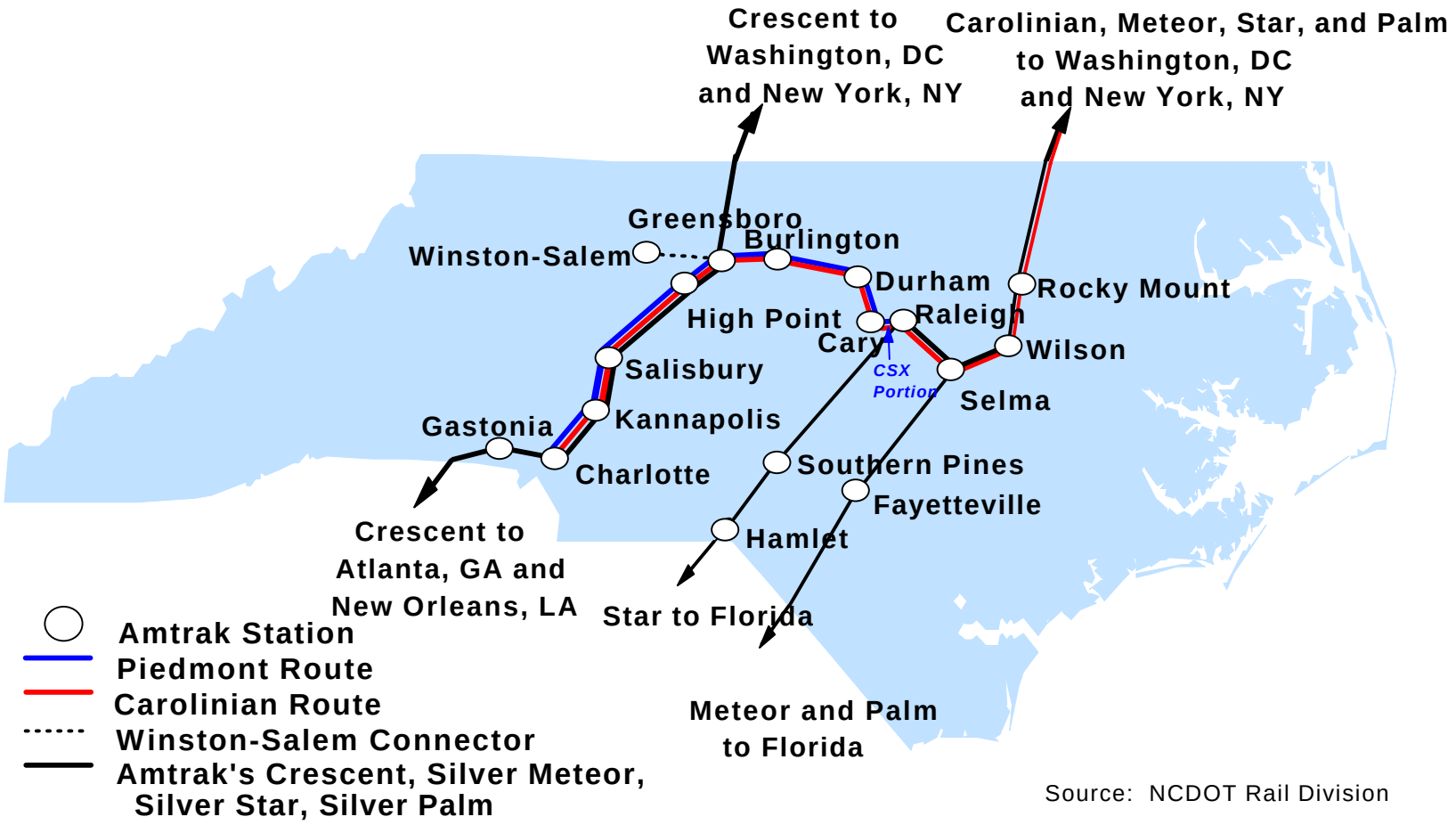
[8] A "multimodal" system is one that operates more than one mode or type of service, such as single occupant vehicles, buses, trains, and airplanes.

TABLE 3
Department of Transportation
Public Transportation and Rail Divisions
Institute for Transportation Research and Education (ITRE) Contracts
Originated In Fiscal Years 1996-1998

Project	Purpose	Performance Period	Contract Maximum
Evaluation of American Maglev Technology's Ground Transportation System	Research the feasibility of maglev rail transportation in North Carolina	4/15/96 – 6/15/96	$10,651
Apprenticeship/Internship Program	Administer the statewide public transportation apprenticeship and internship program on behalf of PTD. Also development of presentations, promotional materials.	7/1/95-6/30/96	16,698
Software Technical Support for Demand Responsive Transit Systems	Monitor the installation of computer assisted scheduling software for rural transportation systems, and provide on-going technical support to 20 small urban systems and serve as liaison with the software vendor.	10/25/95-6/30/99	103,278
Guide for Starting a Private Transportation System	Develop and write a guide to assist individuals interested in starting a privately operated transportation system.	11/29/95-4/30/96	1,662
Lee County Transportation Development Plan Update	Update the four-year transportation plan that serves as the basis for financial assistance provided by the Public Transportation Division.	1/2/96 – 8/31/96	5,365
Policies and Procedures Handbook for NC Rural Transportation Operators	Developed for rural transportation system operators in the planning and operation of services.	1/2/96-6/30/96	14,899
Transit Operations Group (TOG) Planning Service	A group of transportation professionals assembled to coordinate technical assistance and training. Forum was held to coordinate the group's structure and the needs of the rural and urban transit operators.	1/16/96-5/31/96	9,997
Apprenticeship/ Internship Programs	Administer the statewide public transportation apprentice and internship program for PTD.	6/1/96-6/30/97	16,271
Minipass Technical Assistance Program	Provide technical support in Phases II and III of the Minipass software installations and the remaining sites, including on-site installations and on-going help desk support to the installed sites.	8/1/96 – 6/30/97	62,657
Community Transportation Services Alternatives Analysis	Identify opportunities for the expansion of public transportation services and guidance documents on options and procedures for transportation providers and one-stop career centers.	9/25/96 – 4/30/97	22,756
Communicating with the Public and the Media Workshop	Provide training in verbal and non verbal skills for local transit employees in communicating policy and service information to the public through the print and broadcast media.	9/1/96 – 4/30/97	3,221
Computer Learning Center Equipment	Assist in the establishment of computer facility to be shared by ITRE's GIS (Geographic Information Systems) and Public Transportation Programs.	11/18/96 – 6/30/97	20,000
Urban Transit Assistance Program (UTAP)	Provide technical assistance in the areas of management, operations and technology to 18 fixed route operators.	8/1/96 – 6/30/97	129,390
Transportation Demand Management Assessment Plan for the City of Wilmington and the Surrounding Counties	Wilmington Transit Authority has identified a need to implement TDM (Transportation Demand Management) programs that can effectively reduce traffic congestion in the City of Wilmington and surrounding counties.	3/26/97 – 11/28/97	19,303

TABLE 3 (Continued)			
Project	**Purpose**	**Performance Period**	**Contract Maximum**
Transit Operations Group	Designed to join individuals with a high level of technical and managerial expertise in an effort to better support local transit systems staff.	4/17/97 – 11/30/97	45,252
Computer Lab Maintenance Course Development	Develop courses and accompanying materials, conduct courses, and maintain the computer lab.	4/1/97 – 6/30/98	33,882
MiniPass Technical Assistance Program	Provide support at sites that may include on site installations, on-going help desk support, and act as a liaison between transit systems and the software vendor.	7/1/97 – 6/30/98	70,762
Transit Operations Group/Urban Transit Assistance Program (TOG-UTAP)	Provide technical assistance to urban and rural transit systems in the areas of education and technology use.	7/1/97 – 6/30/98	315,255
Workshop Planning	Plan workshops for NC public transportation operators. ITRE will provide technical and production support for 3 scheduled workshops and others identified by NCDOT/PTD during the timeframe of this project.	9/15/97 – 6/30/99	40,515
County Profiles Database	Develop the structure for a database to be used as an information resource by NCDOT/PTD staff to respond to requests for information regarding NC's public transportation systems.	7/1/97 – 3/31/99	8,972
Facilitating Car Ownership for Work First Participants	Develop a statewide program structure to assist Work First participants to become car owners. Demonstration project in up to 7 counties: Craven, Edgecombe, Halifax, Moore, New Hanover, Orange, and Vance.	1/15/98 – 12/31/98	17,639
Intern for 1998-99 Program Year	To serve as the sponsoring agency for the statewide public transportation internship program.	5/12/98 – 4/11/99	10,624
Total PTD Funds Budgeted			$979,049
Planning assistance and support services	Perform rail line capacity and performance simulation consulting on the phased development and implementation of the federally designated Piedmont High Speed Corridor.	4/1/98 – 12/31/98	$694,095
Evaluation of railroad grade crossing signal violators	Evaluate the use of cameras to record railroad grade crossing signal violations. Determine the differences in behavior and demographics of violators and non-violators and the effect of cameras on the signal violation rates.	10/1/96 – 12/31/99	62,509
Planning assistance and support services	Provide assistance with data collection and analysis. Work with Amtrak and the State of Virginia in analyzing data collected for high-speed rail connecting North Carolina to the Northeast corridor.	10/20/97-3/31/98	48,274
Total Rail Funds Budgeted			$804,878
TOTAL FUNDS BUDGETED			**$1,783,927**
Source: Public Transportation and Rail Divisions			

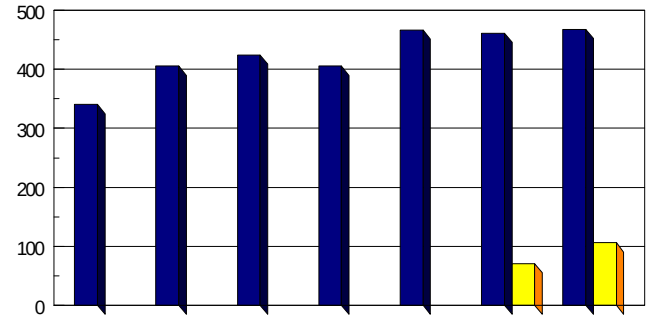
EXHIBIT 4
North Carolina Passenger Rail Routes



Source: NCDOT Rail Division

EXHIBIT 5

AVERAGE ROUND TRIP DAILY RIDERSHIP FOR CAROLINIAN AND PIEDMONT



	91*	92	93	94	95	96**	97
CAROLINIAN	340	405	424	405	466	461	467
PIEDMONT						71	106

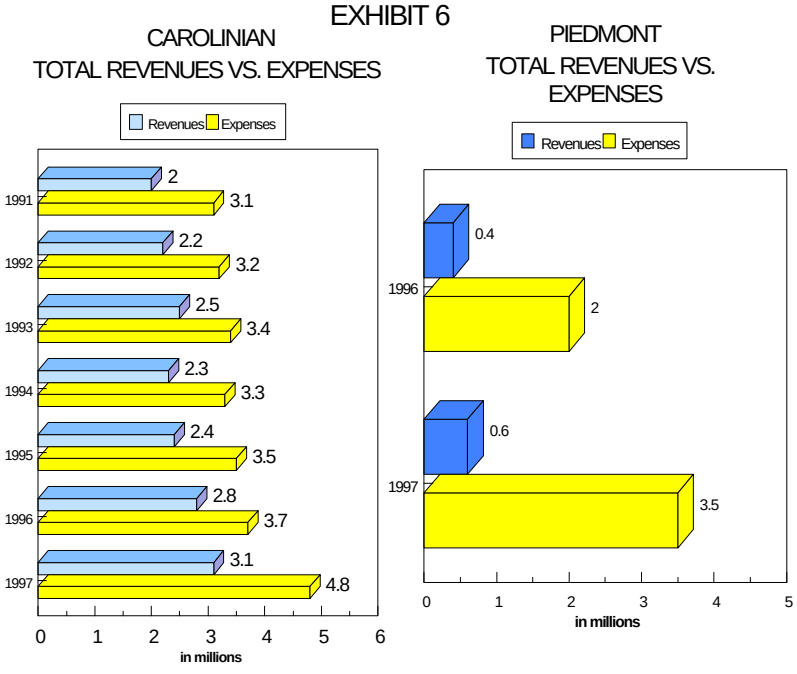
*First full year of operation--Carolinian
**First full year of operation--Piedmont
Source: NCDOT, Rail Division

The Carolinian, which began service in 1990, uses Amtrak equipment and staff. The Department reimburses Amtrak for the in-state prorated portion of Amtrak administrative, operating, station, and other costs in excess of passenger and miscellaneous revenues generated by the train's services. *The Piedmont*, which is State owned, has been operated and staffed mostly by Amtrak personnel since its inception in May 1995. An independent caterer provides food service staffing for this train.

Exhibit 5 shows the average daily ridership of these trains. Expenses for the *Carolinian* have exceeded revenues by $7,708,462 since fiscal year 1990-91. For the two-year period fiscal years 1995-96 and 1996-97, *Piedmont* costs exceeded revenues by $4,504,447. See Exhibit 6.

As previously stated, North Carolina owns the equipment used to operate the *Piedmont* route. The Department recently purchased several additional pieces of equipment for use on existing and future routes. (See discussion on page 50.)

EXHIBIT 6

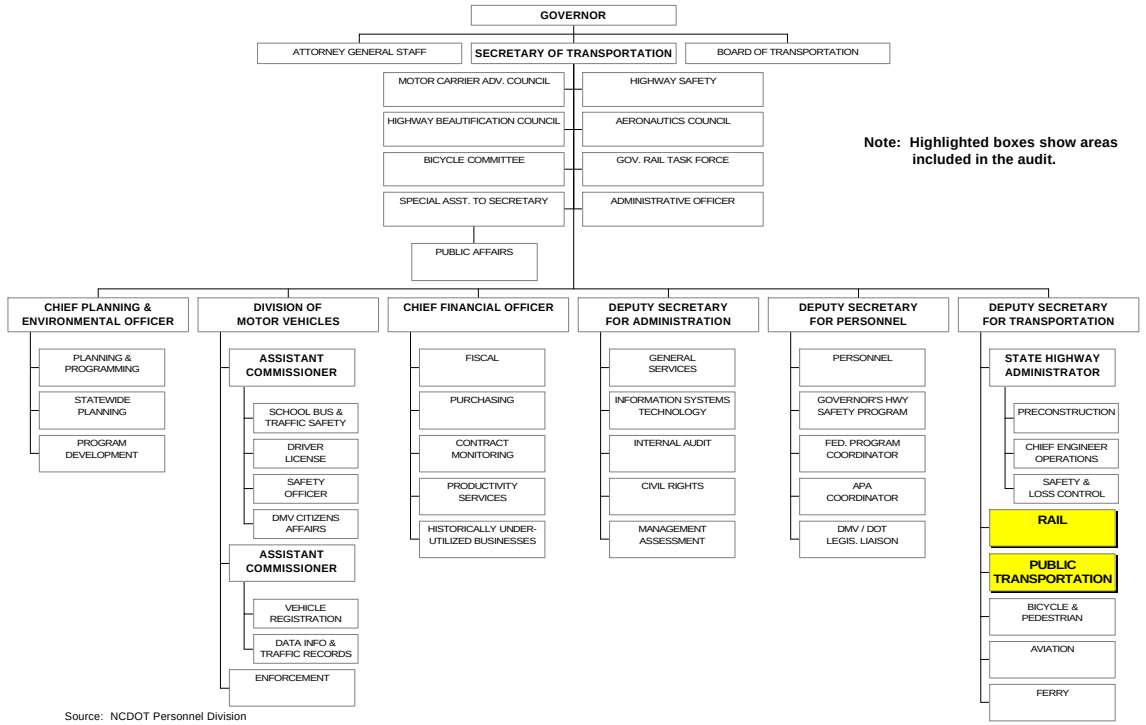


Source:NCDOT Rail Division

Organizational Structure and Staffing

Department management elected to move the rail activities from the Public Transportation Division (PTD) and develop a separate Rail Division (Rail) in 1995. That decision was based on the fact that the mission and purpose of the two sections were different. GS 136-44.35 authorized the Rail Division to perform the actions necessary under applicable State and federal legislation to properly administer all rail revitalization programs within North Carolina. Exhibit 7 shows the current organizational placement of the Public Transportation and Rail Divisions within the Department.

EXHIBIT 7
DEPARTMENT OF TRANSPORTATION
ORGANIZATIONAL CHART--As of August 1998



Source: NCDOT Personnel Division

Public Transportation Division--The mission of the Public Transportation Division (PTD) is to assist local, regional, and State agencies in all activities relating to public transportation and to help them provide safe, effective, and efficient public transportation services. PTD's main functions are the provision of technical and financial assistance, training, and the administration of grant funds awarded to local transit programs. The organizational structure of PTD features two distinct areas: Administrative Services and Planning and Programming. Exhibit 8, page 19, depicts this structure. PTD does not operate any public transportation systems. Instead, PTD provides support to 18 regional and urban and 83 rural, small urban, and county transportation systems. Table 5 contains all public and nongovernmental entities receiving funds from PTD.

TABLE 5 Entities Receiving Funds Administered by the Public Transportation Division				
URBAN	**COUNTIES**			
AppalCART	Alamance	Johnston	Cumberland	Randolph
Asheville	Alexander	Jones	Currituck	Richmond
Chapel Hill	Allegheny	Lee	Dare	Robeson
Charlotte	Anson	Lenoir	Davidson	Rockingham
Durham	Ashe	Lincoln	Davie	Rowan
Fayetteville	Avery	Macon	Duplin	Rutherford
Gastonia	Beaufort	Madison	Durham	Sampson
Greensboro	Bertie	Martin	Edgecombe	Scotland
Greenville	Bladen	McDowell	Forsyth	Stanly
Hickory	Brunswick	Mecklenburg	Franklin	Stokes
High Point	Buncombe	Mitchell	Gaston	Surry
Raleigh	Burke	Montgomery	Gates	Swain
Rocky Mount	Cabarrus	Moore	Graham	Transylvania
Salisbury	Caldwell	Nash	Granville	Tyrrell
Triangle Transit Authority	Camden	New Hanover	Greene	Union
Wilson	Carteret	Northampton	Guilford	Vance
Winston-Salem	Caswell	Onslow	Halifax	Wake
Wilmington	Catawba	Orange	Harnett	Warren
	Chatham	Pamlico	Haywood	Washington
	Cherokee	Pasquotank	Henderson	Watauga
	Chowan	Pender	Hertford	Wayne
	Clay	Perquimans	Hoke	Wilkes
	Cleveland	Person	Hyde	Wilson
	Columbus	Pitt	Iredell	Yadkin
	Craven	Polk	Jackson	Yancey

NON-GOVERNMENTAL ENTITIES	
Choanoke Public Transportation	Lincoln County Group Home for the Handicapped
Kerr Area Transportation Authority	Onslow United Transit System, Inc.
Nash-Edgecombe Transportation Services, Inc.	Randolph County Senior Adults Association, Inc.
Yadkin Valley Economic Development District, Inc.	Richmond Interagency Transportation, Inc.
Inter-County Public Transportation Authority	Rockingham County Council on Aging
Alamance County Transportation System, Inc.	Rowan Area Transit System, Inc.
Community Link (Charlotte)	Sampson County Transportation Advisory Board, Inc.
Salvation Army (Greensboro)	Senior Citizen Services of Pender, Inc.
Family Services Center (Raleigh)	Transportation Administration of Cleveland County
Domestic Violence Shelter (Wilmington)	Eastern Band Cherokee Indians
Alexander County Transportation Authority, Inc.	ATC Vancom, Inc.
Ashe County Transportation Authority, Inc.	Carteret County Area Transportation System, Inc.
Beaufort County Developmental Center, Inc.	Swain County Focal Point on Aging
Brunswick Interagency Transportation System, Inc.	Wilkes Transportation Authority, Inc.
Burke County Transit Administration, Inc.	Western Carolina Community Action, Inc.
Coordinated Transportation System, Inc.	Wayne Interagency Transportation, Inc.
Hyde County Non-Profit Private Transportation Corp.	Columbus Co. Interagency Transportation, Inc.
	Chatham Transit Network
OTHER	
Trailways	

Source: NCDOT Public Transportation Division

EXHIBIT 8
PUBLIC TRANSPORTATION DIVISION
ORGANIZATIONAL CHART--as of November 9, 1998

TOTAL STAFF: 23
Intern: 1
ITRE Liaison: 1

* ITRE employee; however DOT pays his salary

Source: Public Transportation Division management.

PTD assists transportation agencies in obtaining federal funds. However, systems serving populations over 200,000 may apply directly to the Federal Transportation Administration. Systems serving populations of 50,000 to 200,000 may apply directly following approval from the Governor's designee, the Secretary of the Department of Transportation. Table 6 details the major functions of the Public Transportation Division.

TABLE 6
Public Transportation Division Sections and Functions

Section	Function
Planning and Programming Branch	• Provide technical assistance and funding administration to regional, urban, and rural and small urban systems • Aid MPOs and urban transit systems in meeting federal and state transportation planning requirements • Compile and maintain operating statistics of transit systems
Administrative Services Branch	• Administer State and federal funds to the local transportation programs • Provide technical assistance to local systems to enable them to meet federal and State requirements • Implement apprentice and internship programs to encourage students to work in public transportation • Assess local transit system's computer needs • Provide training to local programs • Aid in the procurement and disposal of vehicles of local systems

Source: NCDOT Public Transportation Division

Rail Division--Exhibit 9, page 21, depicts the organizational structure for the Rail Division (Rail) at the beginning of the audit. During the audit, Department management transferred the Rail Safety Section of the Division of Highway's Traffic Engineering and Safety Branch to the Rail Division's Engineering & Safety Branch. This section became the Crossing Safety Program. Exhibit 10, page 22 reflects the organizational structure in place at the completion of the audit fieldwork. The Rail Division is subdivided into: Administration, Planning Branch, Engineering and Safety, and Passenger Operations Branch. The major functions of these sections are listed in Table 7.

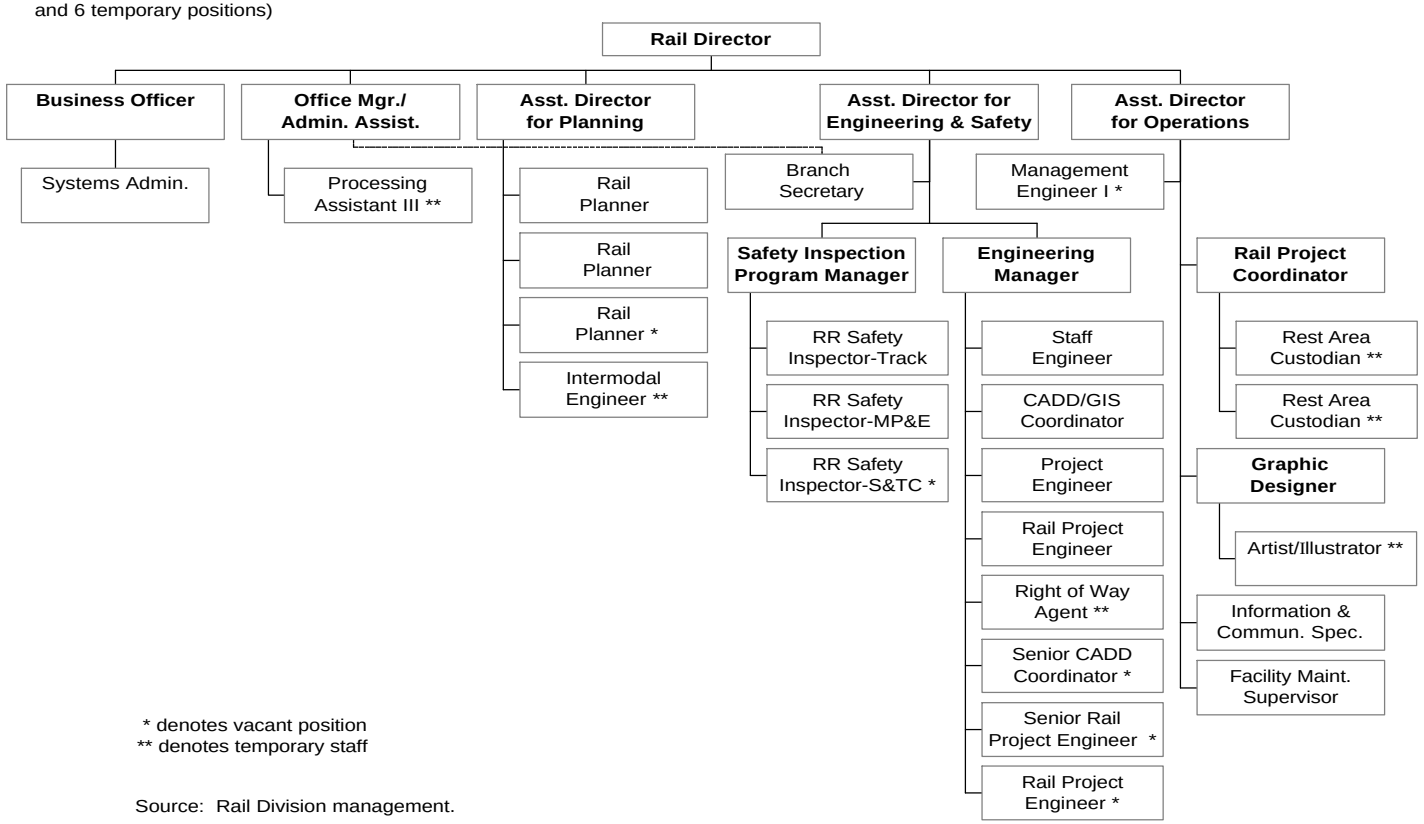
TABLE 7
Rail Division Sections and Functions

Section	Function
Administration	• Managing growth and directing operations of division • Writing and monitoring contracts • Maintaining computer hardware and software • Maintaining project files • Preparing and monitoring passenger traffic statistics
Planning Branch	• Planning and making policy recommendations for the implementation of high-speed rail services • Distributing available shortline rail grant funding • Acquiring and leasing rail corridors • Coordinating Metropolitan Planning Organizations
Engineering and Safety Branch	• Provides in-house engineering services for high-speed rail, rail corridor maintenance, crossing safety, freight line rehabilitation, passenger operations and railroad construction activities • Enforces State and federal railroad safety regulations on the State's rail system under the State Railroad Safety Inspection Program • Improves safety at highway/rail at-grade crossings, including signalization, closing redundant and/or unsafe crossings and evaluating new technologies. • Oversees Rail Industrial Access program • Engineering reviews for rail transit systems • Highway scoping projects impacting the rail system
Operations Branch	• Designs and implements passenger rail service • Designs and oversees construction or reconstruction of state-owned equipment, maintenance facilities, and passenger stations • Administers historic rail station restoration • Insures proper use and maintenance of State owned rail equipment • Purchases services from Amtrak • Designs, administers, directs and markets the passenger rail services program • Monitors quality of customer service on the *Carolinian* and the *Piedmont*.

Source: NCDOT Rail Division

EXHIBIT 9
RAIL DIVISION
ORGANIZATIONAL CHART
as of November 9, 1998

TOTAL STAFF: 34
(includes 6 vacant positions
and 6 temporary positions)

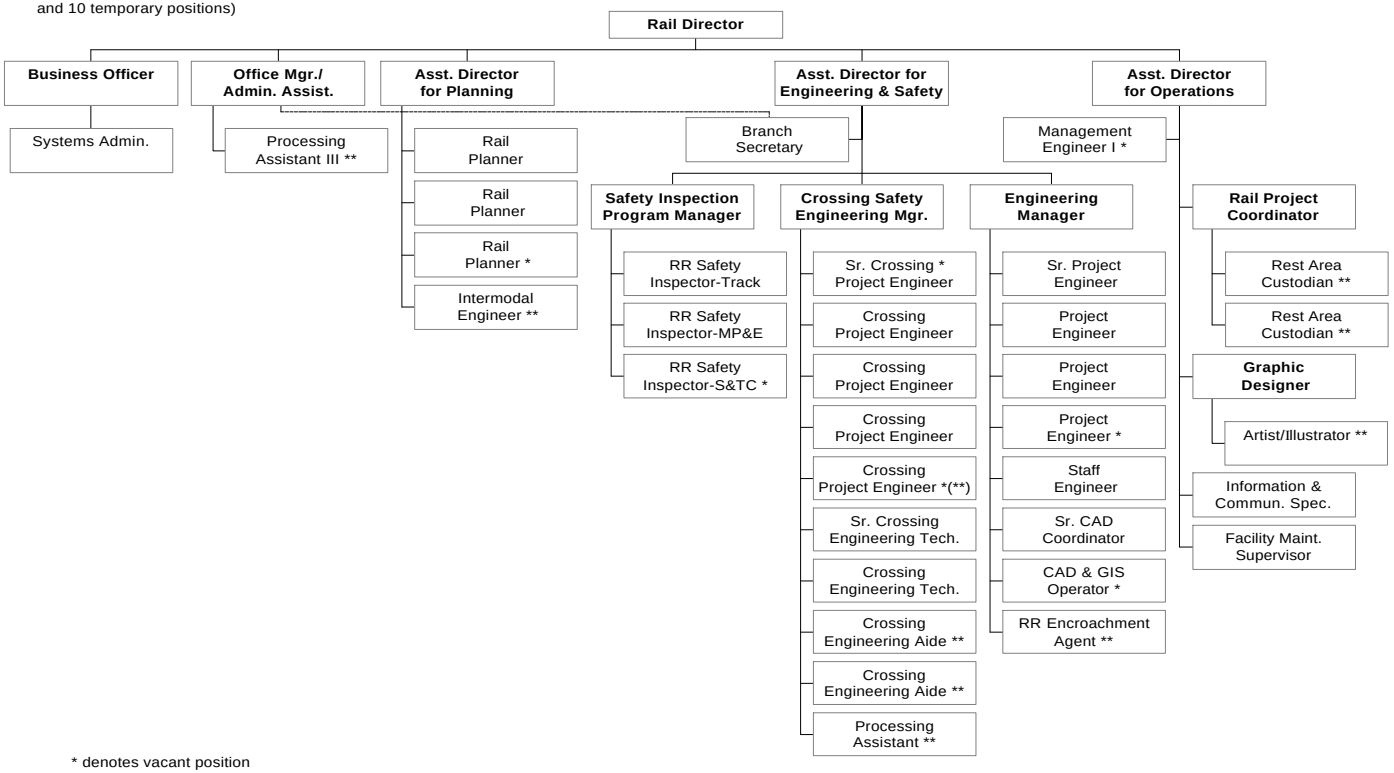


* denotes vacant position
** denotes temporary staff

Source: Rail Division management.

EXHIBIT 10
RAIL DIVISION
ORGANIZATIONAL CHART
as of November 19, 1998

TOTAL STAFF: 45
(includes 7 vacant positions
and 10 temporary positions)



* denotes vacant position
** denotes temporary staff

Source: Rail Division management.

Financial Information

Public Transportation Division – PTD receives general fund appropriations from the General Assembly, as well as federal grants. Table 8 summarizes the financial data for PTD for fiscal years 1993-94 through 1997-98. A review of the revenue data reveals a substantial increase in fiscal year 1994-95. Four million of this increase was from federal funds for capital programs for urbanized areas. Nearly $6 million was non-recurring State appropriations, with $4 million in local funds received for project participation. The remainder of the increase is attributed to unallotted appropriations from prior years. Revenue decreases in fiscal year 1996-97 were due to reductions of $12 million in Federal Capital Programs for Urban and Non-urban programs. Revenues increased again in fiscal year 1997-98 when PTD received $10 million in State and $8 million in federal *Transit 2001* funds.

TABLE 8
Public Transportation Division
Schedule of Revenues and Expenditures - FY1993-94 through FY1997-98

Public Transportation Division	FY 93-94*	FY 94-95	FY 95-96	FY 96-97	FY 97-98
Revenues:**					
State Appropriations	17,798,668	23,339,670	19,415,773	20,781,475	35,315,687
City & Town Participation	0	4,012,545	0	0	574,639
Local Non-Profit Participation	1,339,259	105,255	110,301	278,703	205,612
Federal Grant Funds	16,422,867	27,904,374	32,723,282	17,802,051	19,455,649
State General Fund	300,003	300,000	0	0	0
Total Revenues	35,860,797	55,661,844	52,249,356	38,862,229	55,551,587
Unexpended Allotments from Prior Year ***	15,869,178	25,633,394	39,128,905	41,504,853	21,357,148
Expenditures:					
Administrative	448,124	537,586	337,464	357,035	324,122
Project Costs:					
Non-Urbanized Area Formula Program					
State Administration	400,616	420,138	388,465	378,985	396,561
Local Project Administrative Expense	2,276,877	2,690,030	2,919,884	2,504,023	2,623,665
Local Project Operating Expense	348,863	409,684	347,865	333,794	281,549
Local Project Capital Expense	1,951,225	3,814,296	4,159,162	2,384,551	3,931,371
Rural Planning Projects	116,507	190,091	198,685	261,205	246,030
Rural Transportation Assistance	177,930	160,830	196,876	153,986	149,901
Elderly and Persons with Disabilities Program					
State Administration	76,376	92,201	103,510	68,967	131,372
Local Project Capital Expense	1,726,781	1,922,217	1,704,796	1,377,320	1,084,343
Metropolitan Planning Program					
Local project Planning	674,369	460,596	590,770	398,823	561,447
State Planning Program					
State Administration	111,692	124,415	132,964	105,662	118,314
Capital Program for Urbanized Areas					
Local Project Capital Expenses	2,017,951	3,367,799	10,855,894	17,400,685	6,297,746
State Funded Capital, Human Services Transportation Management Program, Demonstration Projects, Federal Grants Match	1,410,930	2,520,400	1,851,895	1,498,098	3,334,031
Elderly and Disabled Transportation Assistance Program	2,555,399	3,041,432	2,932,393	3,002,475	4,668,746
State Maintenance Assistance Program	3,125,958	5,723,140	6,053,307	6,446,445	6,192,057
Rural General Public Program	254,197	429,977	445,605	474,021	624,814
Work First	0	0	0	0	937,530
Technology	0	0	0	0	196,400
City of Charlotte High Occupancy Vehicle Lane	194,620	611,812	1,653,196	1,834,012	1,187,576
Payments to Local Systems for State-Funded Share of Asset Dispositions	95,703	68,743	57,598	223,077	153,766
Medicaid Transportation Assistance Program	320,962	360,725	-68,017	-2,095	-62,780
Total Project Costs	17,836,956	26,408,526	34,524,848	38,844,034	33,054,439
Total Expenditures	18,285,080	26,946,112	34,862,312	39,201,069	33,378,561

*The Rail Division was a part of the Public Transportation Division until April 1995.
**Revenues include current appropriations and unallotted appropriations from prior years.
***The Department is authorized to carry forward funds to subsequent fiscal years because many DOT projects span several years. This amount reflects any unexpended funds obligated to projects in work orders at the end of the previous fiscal year.

Source: NCDOT Financial Statements

Expenditures for fiscal years 1993-94 and 1994-95 include rail administration costs. Reductions in that line item are reflected in the fiscal years that follow. The primary increase in expenditures for fiscal year 1994-95 relate to State funds expended for State maintenance and operational assistance for urban transit systems and use of Capital Program for Urbanized Areas funds. Reduction of expenditures in fiscal year 1997-98 resulted from several large projects being completed in the previous fiscal year.

Rail Division – The Rail Division also receives funds from the General Assembly, as well as federal grants. Table 9 summarizes the financial data for the Rail Division for fiscal years 1993-94 through 1997-98. Federal and State funds significantly increased in fiscal year 1994-95, with a large portion for funding signal and track improvements on the Amtrak rail corridor, crossing elimination and improvement projects, and high-speed rail studies. Fiscal year 1995-96 increases were largely attributed to the allocation of economic transit alternative funds designated in the Highway Trust Fund legislation. Dividends received from the North Carolina Railroad account for much of the revenue increase in fiscal year 1996-97. Rail received *Transit 2001* funds for fiscal year 1997-98 in the amount of $16 million State and $2 million federal funds.

TABLE 9
Rail Division
Schedule of Revenues and Expenditures
FY1993-94 through FY1997-98

Rail Division	FY 93-94*	FY 94-95	FY 95-96	FY 96-97	FY 97-98
Revenues: **					
State Matching Funds	816,504	3,150,318	1,218,025	1,353,681	17,410,372
City & Town Participation	0	0	0	10	25,000
Non-Profit Participation	123,741	90,000	218,609	964,224	94,305
Federal Grant Participation	121,088	2,506,866	1,452,906	750,140	2,750,140
State General Fund Participation	238,252	317,893	217,227	10,032,966	12,886,081
Highway Trust Fund Participation	0	0	4,860,200	4,769,000	4,944,434
Total Revenues	1,299,585	6,065,077	7,966,967	17,870,021	38,110,332
Unexpended Allotments from Prior Year***	2,029,007	2,210,823	4,719,542	5,416,804	3,147,381
Expenditures:					
Administrative	N/A	97,293	407,418	402,381	454,742
Project Costs:					
Administration	5,374	22,521	75,072	259,945	411,564
Planning & Engineering Studies	19,596	352,036	407,947	868,733	507,568
Legal Services	26,237	10,346	98,652	291,527	263,194
Passenger Train Operation	946,356	1,818,799	5,173,658	6,102,799	4,326,848
Passenger Train Capital	588,395	4,359,553	1,557,278	777,251	75,584
Industrial Access Program	0	190,573	426,784	179,102	170,095
Rail Corridor Purchase & Maintenance	305,742	490,481	2,650,171	190,179	10,616,586
Station Construction	30,164	185,027	421,811	378,808	2,555,432
Grade Crossing Improvements	198,335	58,238	149,234	825,335	397,290
Track & Bridge Construction or Rehabilitation	187,617	660,333	445,790	234,110	1,293
Income	0	0	28,800	787	0
Miscellaneous	156,136	26,379	822	1,189	3,049
Total Expenditures	2,463,952	8,271,579	11,843,437	10,512,146	19,783,245

*The Rail Division was a part of the Public Transportation Division until April 1995.
** Revenues include current appropriations and unallotted appropriations from prior years.
*** The Department is authorized to carry forward funds to subsequent fiscal years because many DOT projects span several years. This amount reflects any unexpended allotments at the end of the previous fiscal year.

Source: NCDOT Financial Records

The establishment of the separate Rail Division accounts for the increase in administrative expenditures in fiscal year 1994-95, while the construction and purchase of equipment for

the capital yard maintenance facility substantially increased capital expenditures. The implementation of the *Piedmont* passenger rail services accounts for the major portion of increased expenditures in fiscal year 1995-96. The acquisition of the private shares of the North Carolina Railroad Company accounts for $9.9 million (railroad dividends) in fiscal year 1996-97 expenditures.

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RELATIONSHIPS AND INTERACTIONS

Objective: *To identify and review relationships and interactions between and among the Department of Transportation, the North Carolina Railroad Company, the N. C. Ports Railway Commission, the North Carolina Rail Council, and private passenger and freight operators.*

To accomplish this objective, we interviewed personnel from the various entities involved in the provision of public transportation and rail services to the State, reviewed reports and studies relative to the roles and operations of the entities, and examined the impact of *Transit 2001* recommendations on the entities. Additionally, we determined statutory authorities, missions, goals, and objectives for the entities, looking specifically for any overlaps or duplication of responsibilities.

Conclusions: The North Carolina Department of Transportation's divisions of Public Transportation and Rail are not the only State entities with responsibilities for provision of services. The provision of public transportation services, for the most part, is the responsibility of local entities, with the Public Transportation Division responsible for providing technical and financial assistance, training, and grant oversight. The provision of rail services for the State is less clear, however. There is considerable confusion relative to the roles of the North Carolina Railroad Company, the Rail Division, and private passenger and freight providers. While the Department and NCRR have made attempts at improving coordination, their progress is hampered by the lack of definition of roles.

THE RESPONSIBILITY FOR NORTH CAROLINA'S RAIL EFFORTS IS UNCLEAR.

The Department of Transportation has been given statutory authority to administer public transportation and rail related programs for the State. Under this authority, the Department prepares plans, administers various State and federal grant programs, purchases and maintains rail equipment, and contracts for the operation of intra- and interstate passenger rail services. The Department, Norfolk Southern, CSX Transportation, Amtrak, and the North Carolina Railroad (NCRR) are all involved in

passenger and/or freight operations in the State on both NCRR track[9] and track owned by Norfolk Southern and CSX. This report concentrates on the NCRR tracks, but we discuss in several places track owned by either Norfolk Southern or CSX. However, NCRR is a separate State-owned entity with an appointed Board of Directors responsible for planning for its use and operation. As of April 1998, the State acquired all shares of NCRR[10] stock, with all dividends now going to the Department.

The State's purchase of NCRR's private shares was for the purpose of removing conflicts and simplifying transactions with other state agencies and railroad companies. Yet, the roles of the Rail Division and the North Carolina Railroad Company have not been clearly defined. During the audit, representatives from both the Department and NCRR raised concerns about the limited communication between the two agencies and questions of which entity is responsible for what. With NCRR owning the tracks and the Department planning for rail services, the effect is the State does not give clear communications on business transactions with railroad companies and other entities. Further complicating the picture is the fact that Norfolk Southern "leases" the track from NCRR to use for freight services. Additionally, Norfolk Southern operates most of the daily freight services on NCRR's tracks in the State. (See footnote #5, on page 7.) In this capacity, Norfolk Southern actually dispatches and regulates most of the freight traffic and passenger traffic on the NCRR tracks. The *Transit 2001* Commission emphasizes a "seamless transportation network". This can only be accomplished by a clear understanding of responsibilities by all affected entities. If several agencies are to have rail responsibilities, then communication must flow freely. All agencies must also work toward the same goals.

RECOMMENDATION

Representatives from the Department and the North Carolina Railroad should develop a plan for the coordinated provision of rail policy and services, passenger and freight, for North Carolina. This plan should identify the roles of each entity involved and make specific recommendations for consideration by the General Assembly. While GS 124-6 addresses the appointment of the NCRR Board of Directors, it does not address the duties of the Board. The General Assembly should clearly delineate the specific duties and responsibilities of the NCRR Board.

[9] Norfolk Southern Corporation "leases" the NCRR tracks to provide freight service in North Carolina. Additionally, Norfolk Southern provides daily dispatching services for most rail services in North Carolina and maintains NCRR tracks under the lease agreement. See footnote # 13, page 29.

[10] In April 1998, the General Assembly approved the State's purchase of the 25 percent private shares of NCRR stock for $71 million. At that time, NCRR became a separate, State-owned entity.

QUESTIONS REMAINING FROM THE PURCHASE OF NCRR STOCK NEED TO BE ANSWERED.

The General Assembly ratified the formation of the North Carolina Railroad Company (NCRR) on January 27, 1849. At that time, the State of North Carolina owned 75 percent of the stock and private shareholders owned the remaining shares. This ownership and voting arrangement has on occasion posed difficulties to effective operation of rail services since the charter and bylaws allowed 13 percent of the stockholders to control the company's actions. In an effort to better manage rail efforts, the General Assembly approved the purchase of the private stock, making NCRR a wholly owned State entity. In so doing, the State now owns 317 miles of railway with a 200-foot right of way (in most places) from Morehead City to Charlotte[11]. NCRR currently operates as a Real Estate Investment Trust (REIT[12]). In order to avoid the risk of triggering federal income tax and other issues, NCRR must continue to operate as a REIT until the federal tax issues can be resolved.

In April 1998, North Carolina completed the purchase of the private shares of the stock of the North Carolina Railroad Company for $71 million. A total of $10,000,000 of this amount was funded by NCRR dividends paid to the State as majority shareholder, and the remaining $61,000,000 was appropriated by the General Assembly. These funds are not subject to repayment of principal or interest prior to action of the 1999 Session of the General Assembly. The primary source of income for NCRR has been from leasing the railroad line and equipment to Norfolk Southern Corporation[13]. Current payments to NCRR average $153,000 a month or $1,836,000 per year. GS 136-16.6 appropriates 100 percent of the dividends generated from North Carolina's ownership of the North Carolina Railroad Company to the Department of Transportation. The legislation directs that these funds ". . . be used for rail purposes". At the time of the audit, the General Assembly had not made a decision on repayment.

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[11] In an effort to streamline the State's purchase of the NCRR, the Department acquired the stock of the Beaufort and Morehead Railroad Company (BMH) from the North Carolina Ports Railway Commission on October 1, 1996. This stock was transferred from the Ports Railway Commission to the Department of Transportation and from the Department to NCRR prior to the purchase of the privately held stock.

[12] A tax status as a for-profit, taxable Real Estate Investment Trust (REIT) for federal income tax purposes and status as a private railroad corporation. Converting NCRR to any other form of entity without addressing certain capital gain issues could result in as much as $95 million in taxes to the corporation. At the time of the audit, NCRR's tax advisors were working with US Senate representatives to prepare federal legislation to enable NCRR to convert to non-profit tax exempt status while preserving NCRR as a railroad entity.

[13] The long-term lease agreements with Norfolk Southern Corporation expired December 31, 1994 and the 30-year extension leases were found to be invalid by a federal judge in July of 1996. In August 1996, two weeks after the court ruling overturning the 1995 Lease Extension Agreement, Norfolk Southern ceased making rent payments. In September 1996, the NCRR filed with the Surface Transportation Board (STB) to collect rent from Norfolk Southern on an interim basis. The STB issued an order in May 1997 requiring Norfolk Southern to pay rent in the amount of the NCRR's "out-of-pocket expenses" for Norfolk Southern's continued use of the line. At the time of the audit, this issue remained unresolved. NCRR personnel estimate that the back payments due to NCRR from Norfolk Southern are approximately $18 million.

RECOMMENDATION

The North Carolina Railroad must continue to operate as a REIT until the federal tax issues can be resolved. The General Assembly should determine how it wishes to handle the repayment of the financing for the purchase of the NCRR stock and communicate this information to NCRR and the Department of Transportation.

POLICY-MAKING AND PLANNING EFFORTS

Objective: *To review North Carolina's policy-making and planning efforts in public transportation and rail.*

To accomplish this objective, we reviewed copies of the Public Transportation and Rail Divisions' plans and programs. The documents included:

- *Transit 2001*, Executive Summary and Technical Report, Submitted by the *Transit 2001* Commission to Governor James B. Hunt, Jr., January 1997.
- *North Carolina State Rail Improvement Program*, fiscal year 1999 to 2006, NC DOT Rail Division, November 1998.
- Update on Public Transportation Activities in the *Transit 2001* Action Agenda, Service Design and Delivery, Expand and Enhance Coordination of Transit Services, Undated.
- Update on the Rail-Related Activities in the *Transit 2001* Action Agenda, Service Design and Delivery, Passenger Train Operations, Support and Planning, Undated.

Moreover, we have examined information available at the North Carolina Department of Transportation web sites. The *Transit 2001* plan and the *NC State Rail Improvement Program* were analyzed using content analysis. This technique is used to examine the presence or absence of important criteria within a plan. The evaluation criteria are developed first, enabling the reviewer to make inferences about the comprehensiveness, completeness and value of the plan. Content analysis can also identify the weaknesses and assumptions embedded in the plan.

Conclusion: **In 1995, Governor James B. Hunt, Jr. established a commission for the purpose of assisting the Department of Transportation in developing a master plan for public transportation in North Carolina. That plan, the *Transit 2001* report, was accepted by the General Assembly as the official public transit plan for North Carolina. It represents the pragmatic vision for rail services in the State. Content analysis of the *Transit 2001* plan indicates that it is relatively comprehensive in terms of goals and objectives and alternatives examined. While the plan met the scope of the Commission's charge, it does not quantify the benefits of transit investments in terms of increased accessibility, congestion and pollution reduction, noise abatement, and aesthetics. Further, neither the Public Transportation Division nor the Rail Division had detailed division plans on how to implement the recommendations in *Transit 2001*. Rather, they used the action agenda items outlined in the report as their operational plans.**

THE *TRANSIT 2001* PLAN, WHILE A VALUABLE STARTING POINT, FAILS TO ADDRESS SOME KEY ISSUES AND DOES NOT CLEARLY DEFINE PRIORITIES.

In 1995, Governor James B. Hunt, Jr. appointed a *Transit 2001* Commission charged with making recommendations on how to improve public transportation in North Carolina for the 21st Century. The resulting document, *Transit 2001*, is a strong endorsement of public transportation and rail in North Carolina. Furthermore, it is intended to provide a plan for the future of public transportation and rail in the State. The *Transit 2001* plan reflects the collective wisdom of the Commission members. Below we discuss the major strengths and weaknesses of the plan.

- While the transit vision and goals and objectives stated in the *Transit 2001* plan are relatively comprehensive, the plan does not clearly define how the goals differ between rural and urban areas. Also, the goals are not clearly prioritized.
- Valuable information about changes in the North Carolina transportation system performance is provided and gaps in public transportation/rail service are identified. Furthermore, cities that can be emulated (Portland, Oregon) and avoided (Houston and Los Angeles) are identified. North Carolina transit systems are compared with Portland and other "peer group" US cities.
- The plan examines a relatively comprehensive list of public transportation/rail alternatives and strategies.
- The technical analysis portion is weak in that:
  - The impacts of alternative transit investments, while meeting the scope of the study, are not evaluated rigorously, i.e., the potential impacts are simply listed without a quantitative assessment. Cost benefit analysis of transit alternatives is needed to make a stronger case for public transportation in relation to the highway system.
  - Relationships between transportation, land use, and economic development are presented, without empirical evidence. For example, it is indicated that transit will enhance the state economy, without consideration of data or in-depth analysis on how and where and by how much it will help the economy develop.
  - The study estimated the increase in transit use based on the relationship between increases in service provided and increased usage. However, more realistic forecasts of future transit ridership are needed to quantitatively account for future changes in the population, number of households, employment, licensed drivers, vehicles in use, and vehicle miles traveled.
  - To better focus transit expansion, "high impact" and underserved areas need to be clearly identified. Furthermore, the plan needs to clarify certain tradeoffs, especially those between expanding transit services to lower-density (suburban and rural) areas versus improving and increasing transit service to denser (urban) areas.
  - The plan should consider integration of transit with other transportation modes such as air transportation and automobiles (e.g., park and ride).
- The plan identifies the non-use of flexible fund transfers to public transportation in North Carolina. It does not suggest a strategy that encourages using flexible funds for transit or explore transit privatization efforts and review of transit fare structure to allow greater recovery of costs.
- The plan outlines broad actions/strategies to meet transportation goals and suggests transit alternatives and important considerations in decision making. This plan does not commit to

implementing transportation improvement actions within specific time frames. Since the Commission did not have authority to implement actions, the report is a source of information and a guide for future public transportation actions.

- A plan update mechanism is outlined and the "Update Reports" discuss the progress made on items outlined in the plan's action agenda. However, to monitor future transit performance, clear performance indicators need to be outlined, e.g., revenue vehicle hours per dollar operating cost, vehicle miles per dollar maintenance expense, passengers per revenue vehicle hour, vehicle miles per collision, operating revenue per operating cost, subsidy per passenger.
- To enhance continuity and achieve the action agenda outlined, a clear timeline is needed for major milestones and re-evaluation efforts.
- While there is discussion about involving various stakeholders, a clear strategy for such involvement does not emerge.

RECOMMENDATION

Using the *Transit 2001* plan as a base, the Department of Transportation, as the agency responsible for administration of public transit in the State, should develop a supplemental plan. The plan should address the issues outlined above and other issues that could affect public transit in North Carolina. This plan should be presented to the Governor and the General Assembly for consideration. The revised plan should include specific, measurable goals and objectives.

NEITHER THE PUBLIC TRANSPORTATION NOR RAIL DIVISIONS HAS A WRITTEN PLAN FOR PROGRAM IMPLEMENTATION.

The Public Transportation Division (PTD) was unable to supply any written plan for the division. Division management stated that the *Transit 2001* plan was the plan followed by staff. The Rail Division (Rail) provided copies of its Rail Improvement Program updates. However, the rail improvement program document does not reflect a comprehensive approach to rail planning. It is simply a summary of rail activities. Reference was made to another document, the "Rail Plan." We learned that this plan, originally developed in 1980, had not been updated since 1990.[14] Both PTD and Rail indicated that programs and improvements are determined by appropriations.

RECOMMENDATION

Department management should instruct management for both the Public Transportation and Rail Divisions to prepare specific short- and long-term plans. These plans should take into account the broad goals identified in the *Transit 2001* report. Both plans should include specific, measurable performance indicators. Plans, once approved by Department management, should be shared with staff.

[14] The State Rail Plan was prepared as a requirement to receive funds through the Federal Rail Administration's Local Rail Freight Assistance Program.

THE NORTH CAROLINA RAIL COUNCIL IS NOT FULFILLING ITS STATUTORY RESPONSIBILITIES.

In 1993, the General Assembly created the North Carolina Rail Council to advise the Department of Transportation on issues relating to the provision of rail services in the State (GS 143B-362). The General Assembly charged the Council with the following duties and responsibilities:

- Advise the Governor, Secretary of Transportation, Board of Transportation, and the General Assembly on policy concerning the preservation and enhancement of the State's rail system, including the acquisition and management of existing rail corridors, revitalization, and rehabilitation of active freight and passenger railways, improvements in rail safety, and promotion of competitive rail passenger services;
- Designate a Strategic Rail System, with the North Carolina Railroad as its foundation, to be approved by the Board of Transportation;
- Recommend to the Board of Transportation funding sources and levels to accomplish the purposes of this Act;
- Plan and recommend the distribution of financial assistance for the revitalization of railroads and conservation of rail corridors as authorized in GS 136-44.36;
- Plan and recommend the acquisition of rail corridors for future use as authorized in GS 136-44.36A and oversee the protection and maintenance of preserved rail corridors;
- Otherwise assist in the preservation of the rail system in North Carolina through branch line rehabilitation and revitalization and through corridor acquisition by the Department of Transportation, and encourage cooperation between the Department and railroad companies in preserving the linear integrity of strategic corridors;
- Promote and assist in the preservation of rail access to the facilities operated by the State Ports Authority and to passenger and cargo airport facilities; and
- Perform any other duties relating to the promotion and preservation of railroads which the Secretary may recommend.

The Council is composed of 18 members, 14 of which are appointed by the Governor. The Gubernatorial appointees included one person from each of the 14 transportation engineering divisions within the State. Further, the 14 members were to include at least two persons possessing broad knowledge of railroad operations; at least two members to represent local government interests; and at least two persons to represent the interests of shippers or passengers using rail service. The remaining four members were appointed two each by the President Pro Tempore of the Senate and the Speaker of the House of Representatives. The Council was divided into three committees: passenger operations, rail freight, and long-range planning to examine related issues.

The Council convened its first meeting on March 29, 1994. The Council met a total of 19 times, conducting its last meeting on November 7, 1996. We learned during the audit that currently the Council only has three members whose terms have not expired. The Department has not recommended persons to be appointed to the Council as members' terms have expired. According to Department management, it was difficult to get

members to attend meetings and, since the Council had no legislative or executive authority, its continuance did not seem worthwhile. It was felt that Board of Transportation along with the North Carolina Railroad Board of Directors diminished the need for an additional council. In our opinion, since the General Assembly established the Council through legislation, the decision to continue or discontinue it also rests with the General Assembly.

RECOMMENDATION

The General Assembly should determine whether the Council should continue or be abolished through legislation.

TRANSIT 2001 IMPLEMENTATION

Objective: *To review Transit 2001 recommendations and implementation.*

To accomplish this objective, we reviewed the recommendations contained in the *Transit 2001* report, reviewed the minutes from the Joint Legislative Transportation Oversight Committee meetings, and examined specific funding appropriations for public transit purposes. Finally, we ascertained the implementation status for each of the recommendations contained in the *Transit 2001* report.

Conclusion: **At the direction of the General Assembly, the Department has been working on the implementation of the recommendations contained in the *Transit 2001* report. The Department has achieved progress in the areas of promoting awareness of public transportation options and benefits and expanding rail services in the State. The Department's use of *Transit 2001* funds generally has been consistent with the report recommendations. However, approximately 5% of the approved funds were spent on items not directly approved by the General Assembly. The Rail Division has obligated 74% of the approved funds for fiscal year 1997-98 but had not been able to obligate 26%. Similarly, the Public Transportation Division has awarded 90% of State funds available for rural and urban programs for the same period, but had not awarded any of the available federal flexible funds.**

Overview of Transit 2001

Governor James B. Hunt, Jr. appointed the *Transit 2001* Commission in September 1995. The Commission's purpose was to provide recommendation on how to improve public transportation in North Carolina for the 21st Century. The Commission's report was released January 1997 and established a set of goals in an effort to plan for a "seamless transportation network". The Commission recommended the State increase funding by $75 million per year.

TABLE 10
Allocation of *Transit 2001* Funds

	Public Transportation Division		Rail Division	
FUNDS	**FY 97-98**	**FY 98-99**	**FY 97-98**	**FY 98-99**
State	$10,000,000	$10,000,000	$16,000,000	$16,000,000
Federal	8,000,000	8,000,000	2,000,000	2,000,000
Total	$18,000,000	$18,000,000	$18,000,000	$18,000,000

Source: NCDOT Public Transportation and Rail Divisions

The General Assembly, in response to these recommendations, included a $26 million increase for each of two years (fiscal years 1997-98 and 1998-99) and a directive to use $10 million of federal flexible

funds[15] for implementation of the *Transit 2001* programs. Table 10 shows the allocation of these funds.

Senate Bill 352, Section 32.17 required the Department to prepare a plan for the use of these funds and set specific, quantitative goals to be met. The goals developed by the Department address the following:

- Travel time, cost recovery, and business ridership of passenger rail service between Raleigh and Charlotte;
- Extension of passenger rail service to Asheville;
- Assessment of the feasibility and costs of extending passenger rail services in Eastern North Carolina;
- Increases in the number of routes served by rural, urban, and regional public transportation systems;
- Public transportation service to Work First clients; and
- Cost savings achieved by rural, urban, and regional public transportation systems through the use of new technologies.

The Department presented its plan to the North Carolina General Assembly, Joint Transportation Oversight Committee in October 1997. Table 11 summarizes the plan for expending *Transit 2001* funds for passenger rail and public transportation services within North Carolina.

TABLE 11
Plan for *Transit 2001* Funds
(October 1, 1997)

	Passenger Rail		Public Transportation	
CATEGORY	**FY 97-98**	**FY 98-99**	**FY 97-98**	**FY 98-99**
Stations	$8,750,000	$3,350,000	$	$
Infrastructure/ Right of Way	0	2,700,000		
Equipment	8,500,000	4,500,000		
Planning and Equipment	750,000	750,000		
Operating Assistance			6,150,000	6,150,000
Capital/New Starts			10,350,000	3,650,000
Advanced Technologies			1,500,000	1,500,000
Total	**$18,000,000**	**$11,300,000**	**$18,000,000**	**$11,300,000**

Source: NCDOT Rail and Public Transportation Divisions

USE OF *TRANSIT 2001* FUNDS FOR RAIL SERVICES GENERALLY HAS BEEN CONSISTENT WITH *TRANSIT 2001* REPORT RECOMMENDATIONS.

The General Assembly appropriated $26 million in State funds and directed the use of $10 million of federal flexible funds for fiscal years 1997-98 and 1998-99 for the implementation of the *Transit 2001* recommendations. The Rail Division received $18

[15] Federal programs including the Surface Transportation, Interstate Maintenance, Bridge Replacement and Rehabilitation, National Highway System, and the Congestion Mitigation and Air Quality Improvement program, whose funds can be used for either transit or highway projects. There are programmatic and distributive limitations on the use of some portions of some of these programs.

million in each of these fiscal years. The *Transit 2001* report contained the following four recommendations related to rail services. The $36 million approved by the General Assembly for fiscal years 1997-98 and 1998-99 was to be used to implement these recommendations.

- Introduce two-hour rail passenger service between Charlotte and Raleigh. Connection of this service to the Northeast Corridor through Richmond, Virginia was projected to significantly increase its economic sufficiency and potential for public-private partnership.
- Preparation of an eastern North Carolina rail passenger plan. Candidate proposals for study include, but are not limited to, Charlotte-Wilmington, Morehead City-Goldsboro-Raleigh, Wilmington-Fayetteville-Raleigh, Greenville-Wilson-Raleigh, Elizabeth City-Norfolk, commuter service and Raleigh-Roanoke Rapids-Hampton Roads, Virginia services.
- Restore western North Carolina rail passenger service with daily round trips between Asheville, Hickory, Salisbury, Greensboro and Raleigh.
- Provide a source of funding for preserving endangered rail corridors that can be accessed and used relatively quickly when a railroad company decides to dispose of a corridor. Corridors should be preserved for future freight, commuter, and high-speed rail use.

While Department expenditures have generally been consistent with *Transit 2001*, our examination of Rail Division records indicates that certain of these funds were spent in ways other than to directly implement these recommendations. Table 12 shows encumbrances that are not directly related to the implementation of the *Transit 2001* recommendations, 10.3% of the total approved. At the time of the audit, $904,885 of these encumbered funds had been expended.

TABLE 12
***TRANSIT 2001* RAIL FUNDS NOT SPENT TO DIRECTLY IMPLEMENT RAIL RECOMMENDATIONS**

Encumbrance		Explanation
$281,350		Administration costs of the Engineering and Safety Branch. This includes the purchase of a modular building to house staff, utilities and maintenance on the building.
250,000		Operating and marketing cost for a demonstration train which ran in North Carolina for a short period.
124,864		Cover overdrafts on work orders for Amtrak contract payments and marketing for *the Piedmont* and *Carolinian*.
1,195,000		Train operations and support costs related to *the Piedmont* and *Carolinian*. This includes marketing cost and installation of BYTRAIN highway signs.
$1,851,214		Total

Source: DOT Rail Division

RECOMMENDATION

The Department should make an annual report to the Governmental Operations Committee as well as to the Joint Legislative Transportation Oversight Committee on the status of implementation of *Transit 2001* recommendations. The annual report should include details of the amounts appropriated, the amounts expended, any amounts carried forward, along with an explanation of why these funds could not be expended within the last reporting cycle. The Rail Division should use the *Transit 2001* funds for activities directly related to the implementation of the recommendations cited in the

report. Any deviations should be clearly communicated to the General Assembly along with justification for use of the funds for activities not directly related to *Transit 2001* recommendations.

THE RAIL DIVISION DID NOT OBLIGATE 26% OF THE APPROVED *TRANSIT 2001* FUNDS FOR FISCAL YEAR 1997-98.

Examination of Rail Division records shows that approximately 26%, $4,784,058, of the funds approved for *Transit 2001* rail services were not spent or obligated (encumbered) at the time of the audit. Table 13 shows Rail's budgeted amounts for fiscal year 1997-98 *Transit 2001* funds and where these funds have been obligated. To obligate funds, the Rail Division must receive approval from the Board of Transportation. According to Division management, delays have occurred related to grade crossing improvements, implementation of the western North Carolina passenger rail services, and travel time reductions of passenger train service between Charlotte and Raleigh. Many of these have been impacted by the on-going negotiation between Norfolk Southern and the North Carolina Railroad. (See footnote 13 on page 29.)

TABLE 13
Rail *Transit 2001* Funds Budgeted and Obligated-- FY1997-98

	Budgeted	Encumbered	Expended
Engineering and Planning	$2,212,292	$2,436,042	$123,697
Grade Crossing	2,050,000	50,000	0
Passenger Train Operation and Support	3,494,058	845,000	311,034
Passenger Train Related Capital	5,370,000	4,700,000	0
Property and Buildings	3,718,000	0	0
Rail Corridor Purchase	944,300	1,293,550	611,408
Station Engineering and Construction	211,350	3,650,000	0
Administration	0	241,350	243
Total	$18,000,000	$13,215,942	$1,046,382
Percent to Total		73.4%	5.8%

Source: DOT Rail Division

RECOMMENDATION

The Department should fully document reasons for any delays in obligating approved *Transit 2001* funds. This information should be shared with the General Assembly and specific agreement sought for carrying these unobligated funds forward.

THE DEPARTMENT HAS NOT BEEN ABLE TO UTILIZE ALL AVAILABLE FUNDING SOURCES FOR ADVANCING PASSENGER RAIL SERVICE AND ALTERNATIVE TRANSPORTATION IN NORTH CAROLINA.

In 1993, the Department was authorized to use National Highway System funds for civil engineering improvements to reduce passenger train time from Charlotte to Raleigh. The specific authorization was for reducing running time by 23 minutes. As of March 31, 1998, the Department has expended or encumbered only $900,000 of $9,000,000 of these funds for high-speed rail planning, leaving $8,100,000 unencumbered. Delays have been

caused, in part, by the negotiations between NCRR and Norfolk Southern. Norfolk Southern had begun some of the work relative to reducing running time between Charlotte and Raleigh, but has suspended work until the negotiations are completed. There is no time limit on when these funds must be spent.

Additionally, the Department had not encumbered $20,930,287 in *Transit 2001* funds available during fiscal years 1997-98 and 1998-99. Approximately $16,000,000 has been affected, according to management, by the lack of staff to implement the programs and the on-going negotiations with Norfolk Southern. These federal flexible funds compose another $4,000,000 that could be used to advance rail service and public transportation in the State. Federal flexible funds are Congestion Mitigation Air Quality (CMAQ) Improvement program funds that can be used to address non-attainment situations and maintenance areas. In North Carolina, these areas are Charlotte, Durham, Gastonia, Greensboro, High Point, Raleigh, and Winston-Salem. CMAQ funds can be carried over for three years; if they are not obligated within that period, the State will lose the funds. At the time of the audit, the Department had not used any of these funds. To obligate these funds, the Department must receive approval from the Federal Transportation Administration for a specific project that has been included in the State's *Transportation Improvement Program*. Eligible projects include:

- Transit facilities (stations, transit centers, etc.)
- Planning and project development activities that lead directly to construction of facilities or new services
- High occupancy vehicle (HOV) lanes for cars or buses
- Transit vehicles and equipment
- Transit operation for new services for the first three years
- Travel demand management including marketing and research
- Telecommuting including planning technical and feasibility studies
- Alternative fuels where an entire fleet is replaced
- Outreach activities such as public education on transportation and air quality, advertising of transportation alternatives and technical assistance to employers
- Direct fare and fee subsidies used to attract new riders

RECOMMENDATION

The Department of Transportation should continue to identify all available sources of funding for promotion and advancement of public transportation and rail services in North Carolina. A detailed plan, with measurable performance indicators, should then be developed taking into account any time limitations on use of the funds. This plan should be presented to the General Assembly for concurrence. (See pages 31 through 35 for discussion of planning weaknesses.)

THE PUBLIC TRANSPORTATION DIVISION HAS NOT BEEN ABLE TO AWARD ALL *TRANSIT 2001* FUNDS AS ALLOCATED FOR RURAL AND URBAN PROGRAMS.

TABLE 14
Grant Programs Supported by *Transit 2001* Funds-- FY1997-98

Program	Program Type	Funds Available	# of Awards
Urban:			
State Maintenance Assistance (SMAP)	Existing*	$2,000,000	14
Capital/New Start (federal flexible funds)	New	8,000,000	0
Technology	New	1,000,000	14
Rural:			
Elderly & Disabled Transportation Assistance (EDTAP)	Existing	2,000,000	100
Work First Employment Transportation	New	1,000,000	100
Work First Employment Transportation Demo	New	750,000	7
Facilities	New	600,000	6
Technology	New	500,000	52
Regional and Intercity Assistance	New	400,000	5
Capital	Existing	1,750,000	48
TOTAL		$18,000,000	

*Existing program with new requirements for *Transit 2001* funds.
Source: Public Transportation Division

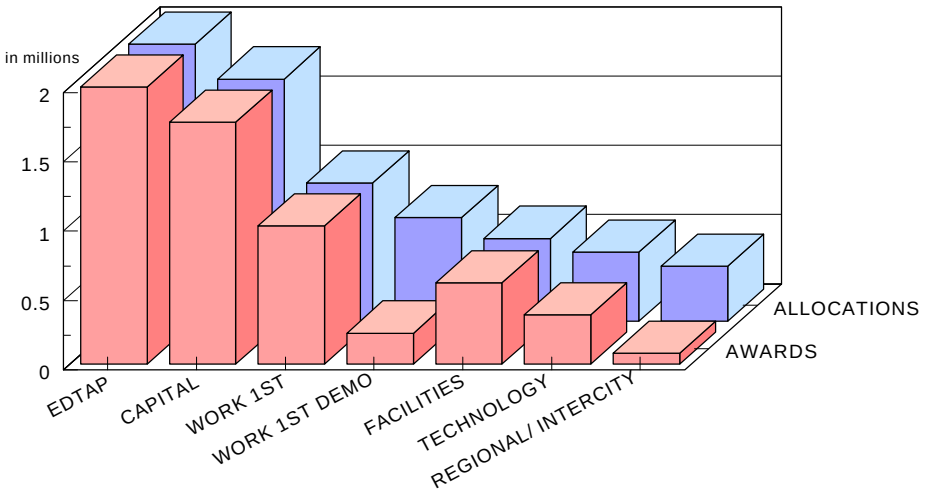
The Public Transportation Division (PTD) has allocated *Transit 2001* funds between urban and rural systems, 61% and 39%, respectively. These funds were used to supplement three existing grant programs and to establish seven new grant programs (see Table 14). Funds awarded to local transit providers are used for operating expenses, capital investments, and capital improvements. For fiscal year 1997-98, detailed award data is contained in Appendix A, page 67. In summary, funds were awarded as follows:

- A total of 346 grants were awarded to local transit providers and nonprofit organizations;
- Approximately 50% of the *Transit 2001* funds were awarded;
- The average amount of *Transit 2001* funds awarded to a urban system was $107,000; and
- The average amount of *Transit 2001* funds awarded to a rural system was $19,000.

Our examination of PTD records showed that the Division was not able to award all funds for a variety of reasons. For example, some of the grant proposals received for Work First were weak; in other areas such as technology, the locals did not have the required 10% matching funds or chose not to participate in the project. PTD determined that prior to awarding regional/intercity grants, a study was needed to identify which areas needed intercity bus service. That study has now been completed, showing intercity bus services are most needed in the western and northeastern parts of the State. Exhibit 11, page 42, shows a comparison of the amount allocated for rural programs versus the amount awarded to transit providers, and Exhibit 12, page 42, shows a comparison of the amount allocated for urban programs versus the amount awarded to urban transit providers.

EXHIBIT 11

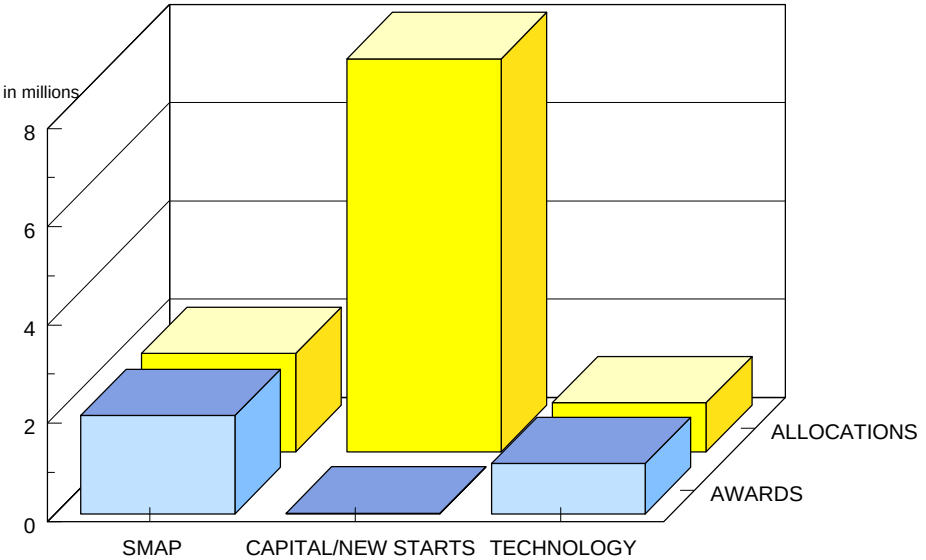
FY 1997-98 TRANSIT 2001 FUNDS
RURAL PROGRAM ALLOCATIONS VS. AWARDS



Source: NCDOT Public Transportation Division

EXHIBIT 12

FY 1997-98 TRANSIT 2001 FUNDS
URBAN PROGRAM ALLOCATION VS. AWARDS



Source: NCDOT Public Transportation Division

Based on the allocation of funds shown in Table 14, the Public Transportation Division generally followed the plan for the use of the fiscal year 1998 *Transit 2001* funds, as presented to the Joint Transportation Oversight Committee in October 1997.

RECOMMENDATION

The Public Transportation Division should fully document reasons for not awarding all the *Transit 2001* funds allocated for use by urban and rural programs. These reasons should be shared with the General Assembly and concurrence to carry the funds forward should be sought.

PUBLIC TRANSPORTATION AND RAIL OPERATIONS

Objective:	*To review public transportation and rail operations, revenues, and expenditures, including the Carolinian, the Piedmont, future plans, and the Piedmont High Speed Corridor.*

To achieve this objective, we reviewed internal Department reports, studies, and financial data relative to operation of the two divisions. Specific data on the operation of the *Carolinian* and the *Piedmont* was also reviewed in detail, along with contracts with Amtrak. Finally, we determined what recommendations were contained in the *Transit 2001* report relative to future plans and implementation of a high-speed rail.

Conclusions: **Neither the Public Transportation Division nor the Rail Division has developed formal policies and procedures manuals. Employees report frequent changes in plans, especially for the Rail Division. We also found it difficult to obtain reliable financial data for the Rail Division. Examination of data available on the revenues and expenditures for the *Carolinian* and the *Piedmont* show that neither train is self-supporting, with taxpayers supplementing both. However, taxpayer support is not unique to the trains serving North Carolina. With the exception of one nation-wide route, all of Amtrak's routes reflect a loss per passenger. As of 1997, the *Carolinian* and the *Piedmont* ranked among the most efficient of Amtrak's routes. Finally, examination of future plans revealed that the Department has purchased costly rail equipment for use on routes that may not be feasible for some time to come.**

Operational Issues:

NEITHER THE PUBLIC TRANSPORTATION DIVISION NOR THE RAIL DIVISION HAS ADEQUATE, CLEARLY WRITTEN POLICIES AND PROCEDURES.

We reviewed policies and procedures in both the divisions as part of the audit procedures. PTD had no formal policies and procedures manuals for the Planning and Programming Branch and limited policies and procedures manuals in the Administrative Service Branch. PTD relies on the policies and procedures contained in federal circulars for the administrative oversight of federal projects. Additionally, the goals and objectives of PTD are vague and lack measurable outcomes and time requirements. This is a concern given

that the turnover rate for PTD for the last four fiscal years has been 52% (see discussion on page 56).

During the audit, Rail Division employees expressed concerns about the lack of direction from management. Employees reported being unclear on the goals, objectives, and mission of the Division. Additionally, staff report that priorities are changed on a frequent basis. Because of these factors, employees are unable to properly plan; instead they respond to crises. Many rail projects are not being completed in a timely manner. Table 15 outlines work orders that have been funded, but no monies have been expended and projects have remained idle from seven to 43 months. Table 16 contains examples of other delayed projects.

TABLE 15
Rail Division
Work Orders with Zero Expenditures--As of December 31, 1998

Work Order Number	Allocations	Months Inactive	Type of Project	Reason for Inactive Status
9.9080114	$1,000,000	43	Track & Signal Construction	Norfolk Southern halted work due to invalidation of NCRR lease.
9.9080125	75,000	39	Track Rehabilitation	Inspectors not confident with Railroad spending plan. Developing new budget.
9.9080135	300,000	31	Rail Industrial Access	Industry in dispute with contractor.
9.9080143	104,605	28	Purchase of Railroad	Delay is due to planning by Railroad for Caldwell county project.
9.9080144	225,000	28	Crossing Closure	Ongoing project with Division of Highways. Crossing has been closed.
9.9080303	55,000	17	Crossing Protective Device	Not top priority project due to other projects under way.
9.9080301	50,000	17	Crossing Protective Device	Not top priority project due to other projects under way.
9.9080154	66,500	16	Rail Industrial Access	No payments due to a lack of documentation supporting charges.
9.9080162	20,000	15	Station Renovations	Project completed, Amtrak has not billed DOT.
9.9080164	84,000	14	Rail Industrial Access	Project canceled by industry. Plans to reallocate funds.
9.9080163	124,000	11	Rail Industrial Access	Contract not executed due to industry not returning signed agreement.
9.9080171	200,000	7	Legal Expenses	Designated to cover anticipated legal fees for State buy-out of private shares to purchase NCRR.
9.908016P	50,000	7	Environmental Services	Ongoing project with Division of Highways
9.9080172	208,000	7	Track Construction	Ongoing project with Division of Highways
Total	$2,562,105*			

* Department Rail Division had a balance of $7,153,573 on contracts with zero expenditures at Dec. 31, 1998. However, $4,591,468 of this amount pertains to contracts with estimated completion dates within the next six months. Therefore, reflected in the above table are only those contracts deemed as being outstanding for an unreasonable period without expenditures.

Source: NCDOT Fiscal Section and Rail Division

TABLE 16
Rail Division Project Delays

SECTION	PROJECT DESCRIPTION	REASON FOR DELAY
Safety & Engineering	Commuter Rail Safety Program	Not in place due to shortage of staff to work on plan.
Safety & Engineering	Corridor Management	Shortage of staff contributes to this delay.
Safety & Engineering	Grade Crossings	Has a multiple year backlog due to shortage of staff.
Safety & Engineering	Sealed Corridor Program	Have not been able to implement due to a shortage in staff.
Planning	Rail Industrial Access and Rehabilitation Program Management	Shortage of staff and changing priorities causes these delays.
Operations	Station Renovations	Station Renovation projects are delayed due to a shortage of staff and other delays resulting from negotiations with local governments and the Railroads.

Source: NCDOT Rail Division

For an entity to operate most effectively, staff should have a clear understanding of its goals, objectives, and mission. Projects should be identified and prioritized with implementation and completion date projections. Employees should be aware of these priorities and informed of changes. Due to the lack of goals, objectives, and mission, employees are not clear about the direction of the divisions. Additionally, delays in beginning projects result in ineffective use of allocated funds, which have to be carried over to subsequent years instead of being used in the current year.

RECOMMENDATION

Both the Public Transportation Division and the Rail Division should determine their respective overall missions, and develop goals and objectives that are measurable and time-bound. This information should be shared with staff, as well as any changes to planned work. Division management should improve utilization of staff and funding by forming plans and procedures to better manage project implementation and completion.

SOME RAIL AND PUBLIC TRANSPORTATION EXPENDITURES ARE MISCLASSIFIED IN THE DEPARTMENT'S FINANCIAL STATEMENTS.

Prior to March 1995, all rail related expenditures were included as a part of the Public Transportation and Rail Division. When the Rail Division was created in March 1995, all related workorders were supposed to be transferred to the new division. However, seven rail workorders were not transferred (see Table 17). New work orders were established under budget codes for Rail in October 1995 to replace these seven work orders. No additional funds were added to the existing work orders since they were primarily funded from "Special Appropriations for Highways" through the Public Transportation Division. Charges that were directed to the old work orders were made and recorded in several succeeding years; however, these charges were being made against funds encumbered by PTD when the two divisions were combined. As outstanding contracts were completed, the old work order numbers were closed. Therefore, the expenditures, while properly recorded against the funds that were encumbered, misrepresent the project expenditures for PTD and Rail for this period. The resulting understatement/overstatement varied from a low of $18,584 for fiscal year 1997-98 to a high of $6,184,016 for fiscal year 1994-95. Therefore, both public transportation and rail expenditures reported to the General Assembly for fiscal years 1994-95 through 1997-98 have been incorrect. Agency personnel were not aware of this error.

TABLE 17
Rail Division Misclassified Work Orders

Work order #	6/30/98	6/30/97	6/30/96	6/30/95	6/30/94
99050637	$3,233	$3,968	$11,671	$15,348	$5,374
99050727	0	(535)	245,575	1,187,325	875,201
99050739	2,418	175,429	438,314	3,482,879	485,421
99050793	0	29,433	290,517	866,990	102,974
99050828	519	138,437	182,116	217,813	61,859
99050930	0	0	0	0	0
99051032	12,414	(41,592)	280,507	413,661	9,296
Total	$18,584	$305,140	$1,448,700	$6,184,016	$1,540,125

Source: NCDOT Financial Records

Obtaining financial data for the Rail Division proved to be difficult during the audit. We found that Rail has established special work orders to track *Transit 2001* funds. However, we noted one instance where the purchase of two locomotives for $4.5 million was not applied against the *Transit 2001* work order but instead was applied against a job order. Job orders are related to one or more work order numbers and are set up to capture cost from different divisions within the Department or to allocate costs by percentage to more than one work order. Job orders are periodically transferred to the related work order numbers. Since the job orders are only periodically transferred to the work orders, we are uncertain if all expenditures occurring in fiscal year 1998-99 were captured in the data supplied. Rail does not fully use the Department's accounting system, but rather keeps many records manually.

The proper classification of expenditures is critical to insure that expenditures are properly reflected on the agency's financial statements. Since Rail does not have a position responsible for the management of financial information, obtaining financial data is made more difficult. Without adequate access and monitoring of financial information it may be difficult to insure plans are being followed and projects are being completed.

RECOMMENDATION

The General Assembly should review the corrected expenditure data shown in Tables 8 and 9 on pages 23 and 24 in this report for both the Public Transportation and Rail Divisions for fiscal years 1994-95 through 1997-98. The Department should require the Rail Division to fully use its accounting system and provide the necessary support to make that possible. Lastly, the Department should consider assigning the responsibility for financial data for the division to appropriate staff to facilitate access to information.

The Carolinian and the Piedmont:

RIDERS OF THE *CAROLINIAN* AND THE *PIEDMONT* ARE SUPPLEMENTED BY TAXPAYERS AT AN AVERAGE ROUND TRIP RATE OF $7.14 AND $68.08, RESPECTIVELY.

The *Carolinian* is an Amtrak-owned and operated train running daily from New York to Charlotte with stops in North Carolina at Charlotte, Kannapolis, Salisbury, High Point, Greensboro, Burlington, Durham, Cary, Raleigh, Selma, Wilson, and Rocky Mount. Service began in 1990, and the Department of Transportation reimburses Amtrak for the in-state prorated portion of costs in excess of revenues. Amtrak also operates the *Piedmont*, a State-owned train, under contract to the Department. Service began in 1995 with daily round trips between Raleigh and Charlotte with stops in Cary, Durham, Burlington, Greensboro, High Point, Salisbury, and Kannapolis.

As is the case with most passenger rail service in the United States, both of these trains are operating at a loss. Data on Amtrak operations shows that the *Carolinian* and the *Piedmont* have the 3rd and 4th best operating ratio (expenses/revenues) for Amtrak operated trains in the nation. Table 18, page 48, shows the average daily expenses, revenues, supplement, ridership, and supplement per rider paid by taxpayers for each of the trains. As can be seen, the *Carolinian*, from its inception, has cost State taxpayers less in supplements than the *Piedmont*. However, the daily expenses for the *Carolinian* jumped by 30% from 1996 to 1997 as a result of a renegotiation with Amtrak to reflect the full costs of operating the trains. Neither the *Carolinian* nor the *Piedmont* operate near capacity, (68.2% and 33.3%[16], respectively). While the *Piedmont* and the *Carolinian* stop at the same locations, they are going in different directions with the *Piedmont* running from Raleigh to Charlotte and the *Carolinian* running from Charlotte to Raleigh.

TABLE 18
Average Round Trip* Daily Supplement
for the Carolinian and the Piedmont

Fiscal Year	AVERAGE DAILY				
	EXPENSES	REVENUES	SUPPLEMENT	RIDERSHIP	SUPPLEMENT PER RIDER
CAROLINIAN					
91	$8,440	$5,518	$2,922	340	$8.59
92	8,818	5,981	2,836	405	7.00
93	9,305	6,951	2,353	424	5.55
94	9,146	6,419	2,727	405	6.73
95	9,603	6,622	2,981	466	6.40
96	10,212	7,762	2,450	461	5.31
97	13,285	8,435	4,850	467	10.39
PIEDMONT					
96	5,504	1,205	4,299	71	60.55
97	9,706	1,664	8,042	106	75.87

*Round trip = data for the northbound and southbound runs combined.
Source: NDOT, Rail Division Financial Records

RECOMMENDATION

The General Assembly and the Department should critically examine the public need versus the cost and frequency of service provided.

Future Plans:

Overview

Passenger service between Raleigh and Charlotte (the *Carolinian* and the *Piedmont*) currently takes about three hours and forty minutes travel time. One of the recommendations contained in *Transit 2001* was to reduce the time to two hours. The Department has developed an improvement program to incrementally reduce the travel time. The ultimate goal is to achieve two-hour passenger service between the two cities by the year 2005, according to information contained in the *North Carolina Rail Improvement Plan, FY2000 to 2006*, prepared by the Rail Division. The first

[16] The *Carolinian*, combined north and southbound routes, has 622 available seats; North Carolina's average daily ridership of 424 equates to 68.2% of capacity. The *Piedmont* has 264 available seats both ways; average daily ridership of 89 equates to 33.3% of capacity.

infrastructure enhancements will include signal upgrades, crossing improvements, and track adjustments along existing rights of way.

In conjunction with reducing travel time from Raleigh to Charlotte, the Department is also proceeding with acquisitions of right of way to implement the Piedmont High Speed Corridor (PHSC). The PHSC is also referred to as the Southeast High Speed Rail Corridor. The PHSC is a 477-mile federally designated corridor that runs from Washington, D.C. through Richmond, VA, Raleigh, Greensboro, and Charlotte, continuing to Macon, GA and Jacksonville, FL. Upon completion, the current travel time of three hours and thirty-five minutes between Raleigh and Richmond, VA could be reduced to one hour and forty-five minutes. Table 19 shows the planned incremental actions and associated anticipated costs to implement the PHSC.

TABLE 19
Piedmont High Speed Corridor Incremental Improvement Actions

Action	Estimated Cost (Millions)	Estimated Completion Date	Travel Time Charlotte-Raleigh (hours:minutes)	Travel Time Raleigh-Richmond (hours:minutes)
Current Schedule			3:45	3:35
• Upgrade Signalization Greensboro to Raleigh • Straighten curves along existing right of way • Upgrade crossings, Charlotte to Raleigh • Begin engineering design for additional Charlotte to Raleigh congestion improvements • Acquire right of way from Durham-Apex-Raleigh to Virginia state line	$ 16 10 11 8 50	1999	3:20	3:35
• Add new equipment • Complete congestion improvements, Charlotte to Raleigh • Begin full engineering design, Charlotte to Richmond, VA • Begin right of way acquisition, Charlotte to Raleigh	40 100 96[1] 7[1]	2001-2002	2:50	3:35
• Improve track, crossings & realign right of way between Greensboro and Raleigh • Rebuild track line between Norlina, NC to Petersburg, VA • Improve track, crossings, & realign right of way between Raleigh and Norlina	218[1] 118 73	2003	2:30	2:30
• Improve track, crossings & realign right of way between Greensboro and Charlotte • Complete improvements from Petersburg, VA to Richmond, VA	135[1] 7	2005	2:00	1:45
Total	**$889**			

[1]Does not include the cost of bypasses
Source: North Carolina State Rail Improvement Program Report (FY 1999 to 2006)

Along with the PHSC initiatives, the Department is also pursuing efforts to extend passenger rail service to Asheville, often referred to as the western route. Responding to a request from the General Assembly, the Rail Division commissioned the Babcock Graduate School of Management at Wake Forest University to conduct a passenger demand study of extending passenger rail service to western North Carolina. The Babcock School issued a report dated January, 1997, concluding that, based on projected ridership along with overall estimated costs and revenues, service between Raleigh and Asheville via Salisbury under Alternative 1 would be preferred for implementation. Appendix B, page 73, contains a summary of the report's findings. The study projected track work costs (including platforms, tracks and signal relocations and other road improvements) under Alternative 1 at $1,226,340 plus an additional cost for stations and support facilities of $1,887,645. The Department is also considering two service options. The first option would provide daily round-trip service from Raleigh to Asheville. The second option would provide round-trip weekend service from Friday through Monday. Although no definitive time frame has been established, the Department estimates service to begin between 2001 and 2003.

The Department also promotes freight rail projects. In July 1993 the Rail Division began the Rail Industrial Access Program as part of a statewide effort to attract new industry to North Carolina. The program assists companies in obtaining needed access to rail for transporting freight and materials. Under this program the State pays a percentage of the costs to construct and repair access (spur) tracks. Local governments, community development organizations, rail companies, and industries are eligible to receive funds. (See Table 20.) Funds not expended in a given fiscal year are carried forward to the next fiscal year. Fiscal year 1998-99 shows $0 expenditures. This is due to the time required for the individual companies to obtain a contractor, have the work done, and then bill the Rail Division for reimbursement.

TABLE 20
Schedule of Industrial Access Grants
From FY 1993-94 through December 31, 1998*

Fiscal Year	Budget	Grant Obligations	Expenditures against Obligations
1994	$210,000	$206,131	$206,131
1995	800,000	640,857	640,857
1996	800,000	512,798	212,798
1997	800,000	1,047,055	632,442
1998	800,000	779,634	230,000
1999*	800,000	961,399	0
Total	$4,210,000	$4,147,874	$1,922,228

*Funds obligated for Rail Safety Program are shown as expenditures as the end of the fiscal year.
Source: NCDOT Rail Division

THE RAIL DIVISION HAS SPENT *TRANSIT 2001* FUNDS TO PURCHASE RAIL EQUIPMENT IT WILL NOT BE ABLE TO USE IN A TIMELY MANNER.

One of the four recommendations contained in the *Transit 2001* report was to ". . . restore western North Carolina rail passenger service with daily round trips between Asheville, Hickory, Salisbury, Greensboro and Raleigh." Table 21, page 51 shows the steps necessary to achieve this recommendation. Table 22, page 51, shows the estimated costs associated with implementation.

TABLE 21
Steps Required To Implement Western North Carolina Passenger Service

STEP	DESCRIPTION
1	OPERATING AGREEMENT--Both the Department and Amtrak must negotiate an operating agreement to use the tracks between Salisbury and Asheville that are owned by Norfolk Southern Railroad Company (NS). However, talks cannot begin until on-going negotiations between NS and the North Carolina Railroad Company (NCRR) are completed. Currently, NS is negotiating an agreement with NCRR to allow NS to use NCRR owned track from Morehead City to Charlotte. NS will not begin discussions with Amtrak or the Department until an agreement has been reached with NCRR.
2	REFURBISH EQUIPMENT--With the recent purchase of two new locomotives, the Department now has enough locomotives to operate the daily *Piedmont* service and extended service to Asheville. Additional equipment including food service cars, baggage cars and coaches will require refurbishment before they can be put into service.
3	RAILROAD IMPROVEMENTS--Track and platform improvements between Salisbury and Asheville will be necessary before implementing the new service. The Western North Carolina Rail Passenger Study Summary Report estimated that $1,216,340 would be required to complete track, platform, signal and other route improvements.
4	CONSTRUCTION AND RESTORATION OF TRAIN STATIONS--The preferred route between Salisbury and Asheville will require either building or restoring eight stations and support facilities. The Western North Carolina Rail Passenger Study Summary Report estimated the costs of building or refurbishing train stations and support facilities at $1,887,645. (See Table 22 for estimated station and support facility costs).

Source: NCDOT Rail Division

TABLE 22
Estimated Station and Support Facility Costs for Western Route

STATION	WORK REQUIRED	ESTIMATED COST
Salisbury	Modifications to existing *Piedmont* corridor platform and construction of an Asheville platform along with equipment layover facilities	$ 195,200
Statesville	Construction of a new platform and parking area	171,410
Hickory	Construction of a new station	255,590
Morganton	Pay moving costs of existing occupant plus various improvements to the structure and site	192,760
Marion	Purchase of land and construction of a new facility	222,650[1]
Old Fort	Improvements to existing structure, platform and parking areas	168,970
Black Mountain	Improvements to existing structure, platform and parking areas	147,315
Asheville	Construction of a new station and train servicing facility	533,750
	Total	$1,887,645

[1]Estimate does not include new land acquisition cost
Source: Western North Carolina Rail Passenger Study (Intrastate Rail Plan) Summary Report, January 1997

In an effort to begin implementation of this recommendation and to improve service on the *Piedmont*, Rail purchased 5 rail cars for use on the proposed western route, 6 rail cars for the existing *Piedmont* route, and 2 locomotives for use on either route, at a cost of $5,290,655 excluding refurbishing. That cost is estimated to be between $5,250,000 to $5,450,000. However, based on information obtained during the audit, it does not appear the western route is a viable alternative for the near future. Additionally, ridership of the *Piedmont* route, while low, has been increasing but it should be critically examined to determine the need versus cost and frequency of services provided.

As discussed on pages 6 through 8, there are a number of entities involved in providing rail service in North Carolina. One of these, Norfolk Southern, is the owner of the tracks between Salisbury and Asheville. According to a Norfolk Southern spokesperson, this route is not capable of supporting passenger rail service because of the type and condition of the tracks. In fact, it is Norfolk Southern's opinion that these tracks are "totally

unsuitable" for passenger rail service in their current state. However, the Department sponsored a demonstration passenger run on this route in February 1998 which supports the Department's contention that passenger service is feasible.

Additionally, Norfolk Southern questions whether these tracks could support dual-purpose (passenger and freight) rail service because of the limited number of spurs that could allow passing. In the words of the Norfolk Southern spokesperson, "In essence, what you have is a curving, steep, one lane road on which you would be trying to support two-way traffic." In order to effectively provide both passenger and freight service on this route, Norfolk Southern believes the issues of double-tracking, passing tracks, and coordination of services must first be resolved.[17]

This situation, one track to support both passenger and freight, is true for all rail traffic in the State. While passenger and freight services are operating concurrently on NCRR track between Charlotte and Raleigh, no overall solution has been agreed to. Therefore, the expansion of passenger rail service, while feasible, may require considerable infrastructure improvements and considerable time to resolve the issues raised above. The Rail Division has proceeded, however, as if this issue will be resolved imminently and has been purchasing rail equipment to implement or improve existing passenger service. According to Division management, the decision to purchase rail equipment before the equipment is actually needed was made because of the "mandate" contained in the *Transit 2001* report. Additionally, management says that it is very difficult to locate viable used rail equipment. So, when satisfactory equipment is located, the Division purchases it in order to be sure to have it when it is possible to initiate the passenger routes envisioned in *Transit 2001*. That is, the Department is investing for the future. Table 23, page 53, shows the Rail Division's current equipment inventory and costs.

RECOMMENDATION

Department and Rail Division management should objectively review the feasibility of expanding the existing passenger rail service in North Carolina or of implementing new routes. The recommendations contained in *Transit 2001* should be re-examined and re-evaluated based on current conditions. Factors promoting and impeding implementation should be fully examined, and, where warranted, alternative proposals should be developed. This information should be shared with the Governor and the General Assembly for

[17] The Department has obligated $300,000 of *Transit 2001* funds to begin studying the feasibility of an eastern route that would run from Charlotte to Wilmington on tracks owned by CSX. According to a CSX spokesperson, the track between Wilmington and Charlotte is currently used and maintained to support freight traffic. The Wilmington to Charlotte route is the route used to move container traffic from the State Ports to the Charlotte intermodal facility. Any variance from that use would have to be supported by enhanced infrastructure improvements. CSX foresees continued and, in fact, increased freight service over this line into the 21st century.

consideration and an updated direction for rail services in North Carolina.

TABLE 23
Rail Division Equipment List
As of March 4, 1999

Car Number	Name	Type	Status	Purchase Cost	Refurbishment Cost
1755	City of Salisbury	Locomotive, F59PHI	New*	$2,300,000	none
1768	City of Charlotte	Locomotive, GP40H-2	Refurbished	928,500	N/A
1792	City of Raleigh	Locomotive, GP40H-2	Refurbished	928,500	N/A
1797	City of Asheville	Locomotive, F59PHI	New*	2,300,000	none
400000	Gov. John Motley Morehead	Business Car	Awaiting Refurbishment***	108,333	(est.) 700,000
400001	Cardinal	Coach, 66 Seat	Refurbished	43,400	618,932
400002	Dogwood	Coach, 66 Seat	Refurbished	43,400	616,305
400003	Honeybee	Coach, 66 Seat	Refurbished	43,400	886,090
400004	Long Leaf Pine	Coach, 66 Seat	Refurbished	43,400	619,053
400005	Scotch Bonnet	Coach, 66 Seat	Refurbished	43,400	616,305
400010	Emerald	Coach, 56 Seat	Awaiting Refurbishment***	34,500	(est.) 700,000 to 725,000
400011	Box Turtle	Coach, 56 Seat	Awaiting Refurbishment***	32,000	(est.) 700,000 to 725,000
400012	Gray Squirrel	Coach, 56 Seat	Awaiting Refurbishment***	34,000	(est.) 700,000 to 725,000
400101	Nantahala Forest	Baggage, 50 foot	Awaiting Refurbishment**	9,995	(est.) 175,000
400102	Pisgah Forest	Baggage, 50 foot	Awaiting Refurbishment**	9,995	(est.) 175,000
400201	Pamlico Sound	Lounge	Refurbished	42,500	537,536
400202	Albemarle Sound	Lounge	Refurbished	37,500	741,894
400203	Core Sound	Lounge	Awaiting Refurbishment***	28,500	(est.) 600,000 – 625,000
400210	Cape Fear	Diner / Conference	Awaiting Refurbishment***	108,333	(est.) 700,000
400301	Mt. Mitchell	Dome, Full	Refurbished	108,333	747,889
400401	Lake Mattamuskeet	Sleeper, 8 Bedroom	Awaiting Refurbishment***	108,333	(est.) 300,000
400402	Lake Norman	Sleeper, 8 Bedroom	Awaiting Refurbishment***	108,333	(est.) 300,000
400500		Caboose	Refurbished	5,000	26,990
400600	Fontana Dam	Power Car	Awaiting Refurbishment***	108,333	(est.) 200,000 – 300,000
Total				$7,557,988	$10,660,994 to 10,860,994

*Purchased to replace the two older refurbished locomotives.
**Purchased in March 1998, but still in Florida waiting for new brakes before moving to North Carolina.
***Cars are either at the Capital Railyard or the Fairgrounds Maintenance Yard.

Source: NCDOT Rail Division

THE DEPARTMENT DOES NOT HAVE THE NECESSARY AUTHORITY TO CLOSE OR MOVE GRADE CROSSINGS NEEDED TO MAKE THE PIEDMONT HIGH SPEED CORRIDOR A REALITY.

Currently, both freight and passenger trains run on the same track throughout a good portion of North Carolina. To implement the Piedmont High Speed Corridor and improve basic rail-highway safety as envisioned, the Department will have to complete a detailed environmental assessment, engineering design, realigning corridor track outside of existing rights of way, and rebuilding track line between Norlina, NC and Petersburg, VA. (See the following finding re: right of way.) We learned that to make high-speed rail travel a reality, the track must be banked in certain areas and a large number of grade crossings[18] would have to be closed to increase safety. Due to the banking necessary for the high-speed trains, normal passenger and freight trains may have difficulty using the same track.[19] Therefore, it appears the State may need a separate high-speed track. (See discussion on page 51.) At the time of the audit, no estimates were available as to the cost for this track.

Additionally, the issue of authority to close or move a grade crossing must be resolved before high-speed trains can be put in operation. At present, the Department can only close or move a grade crossing that is on a State road. Many of the crossings that would affect high-speed travel are on private land or on city streets controlled by the local municipality. The Department is in the process of conducting a study to identify all crossings that would be affected by high-speed travel. Until the issues of separate tracking and closing grade crossings are resolved, high-speed train travel in North Carolina is not a viable option.

RECOMMENDATION

The Department should continue its efforts to improve basic rail-highway safety through its identification and evaluation of grade crossings. The Department and NCRR should solicit cooperation from the private landowners and municipal leaders in developing a plan to accommodate high-speed rail. The plan should include estimates of cost and time to complete this project. This information should be shared with the Governor and the General Assembly for consideration and direction in how the State wishes to proceed with the project before any funds are expended to begin implementation.

[18] A "grade crossing" is a crossing of highways, railroad tracks, or pedestrian walks or combination of these on the same level.

[19] Department personnel believe that a compromise banking of 5 inches is possible that would allow both higher speed passenger trains and freight trains to use the same tracks.

NUMEROUS ENCROACHMENTS HAVE OCCURRED ON THE NORTH CAROLINA RAILROAD RIGHT OF WAY.

The North Carolina Railroad Company (NCRR) generally owns a 200-foot right of way (100 feet on each side of the tracks) from Morehead City to Charlotte. However, in some areas, the actual right of way is much narrower. For instance, in areas from Durham to Raleigh the right of way is as narrow as 45 feet. Additionally, while NCRR may have access to or control 200 feet, the terrain may be such that construction of a second track would require considerable engineering and construction efforts. Yet, the biggest barrier to double tracking may be the encroachments on the right of way. During the audit we learned that the Department of Transportation has located numerous roads and buildings in the right of way. Additionally, there are many other commercial, residential, and utility related encroachments that limit the amount of useable property. NCRR and the Department are in the process of identifying the encroachments, with a report expected in the near future. Before any major expansion of passenger rail can be undertaken, especially high-speed rail, the encroachment issues will have to be resolved.

RECOMMENDATION

Department and North Carolina Railroad staff should continue to work cooperatively to identify all encroachments into the railroad right of way. As part of the required NCRR business plan, a detailed plan of how to correct the problems should be developed and shared with the General Assembly. Additionally, the plan should contain data on areas of the right of way that would require considerable engineering and construction efforts to support additional tracks.

ORGANIZATION AND STAFFING

> ***Objective***: *To examine organizational structure and staffing levels for the Public Transportation and Rail Divisions.*

To satisfy this objective, we examined the organizational charts, job descriptions, and staffing for both the Public Transportation and Rail Divisions. Additionally, we conducted detailed interviews with staff members to clearly identify duties and responsibilities and to understand workflow and procedures.

Conclusions: The workloads for staff in both the Public Transportation and Rail Divisions have increased as the funding and programs have increased. Based on discussions with staff, it is our opinion that the organizational structure and staffing levels for the Rail Division may not be sufficient for current responsibilities. However, due to the lack of documentation on the number of hours in excess of 40 per week needed by current staff , we were unable to determine specific need. Documentation on specific increases in workloads supplied by the Public Transportation Division indicate that this division lacks the number of staff necessary to effectively perform the duties assigned to it. Further, we estimate regional assignment of PTD staff could save the State $46,984 in travel cost.

LACK OF RESOURCES LIMITS THE EFFICIENCY AND EFFECTIVENESS OF THE PUBLIC TRANSPORTATION DIVISION (PTD).

There has been a significant increase in workloads within PTD in the last four years without any increase in resources, as shown in Table 24. Many additional duties are programmatic and administrative in nature and take time away from working with local transit providers, the major mission of PTD. Additional responsibilities include, in part:

TABLE 24
Summary of Changes Within PTD

	FY96	FY99	Change
Staffing levels	23	23	0%
Local entities	147	154	5%
Grant Programs	12	18	50%
Funds	$40,337,745	$46,664,831	16%

Source: DOT Public Transportation Division

- Minipass program
- *Transit 2001* study and reporting for *Transit 2001* funds
- Federal Transportation Administration grants management systems
- Transportation Demand Management
- Community Transportation program and planning
- Smart Start/Work First Initiative/support
- Transportation Improvement Program (TIP) outreach meetings

- Expanded local efforts for Triangle Transit Authority (TTA) and Charlotte; special studies and activities for TTA
- New training activities
- Initiation of regional plans

In this same time period, PTD has experienced a 52% employee turnover rate, with as many as five vacancies at one time. (It has taken between three and eight months to fill positions.) During interviews with PTD staff, many stated they have insufficient time to complete all tasks required and work overtime without compensation. They also stated that management frequently changes the priority of tasks which results in "putting out fires" as opposed to systematically working to complete tasks. The PTD Director has requested three new consultant positions for the division, but no action had been taken on the request at the time of the audit. To handle the workload, PTD has out-sourced some activities and functions, such as rural planing and training activities. (See Table 3, page 13 for listing of types of items out-sourced.)

Issues identified during the audit that may be attributed to the lack of resources include lack of documentation of grant files (page 60), insufficient policies and procedures (page 61), and inconsistencies between urban and rural consultants (below).

RECOMMENDATION

The Public Transportation Division should evaluate the current organizational structure to identify ways to improve efficiency and effectiveness (see the following finding and recommendation). Once this evaluation is completed, PTD should determine whether it is more cost effective to increase staff and/or to continue to out-source certain activities. Efforts should be concentrated on filling vacant positions in as timely a manner as possible. Finally, detailed policies and procedures manuals should be developed and distributed to all staff (see page 62) to facilitate workflow during periods of transition.

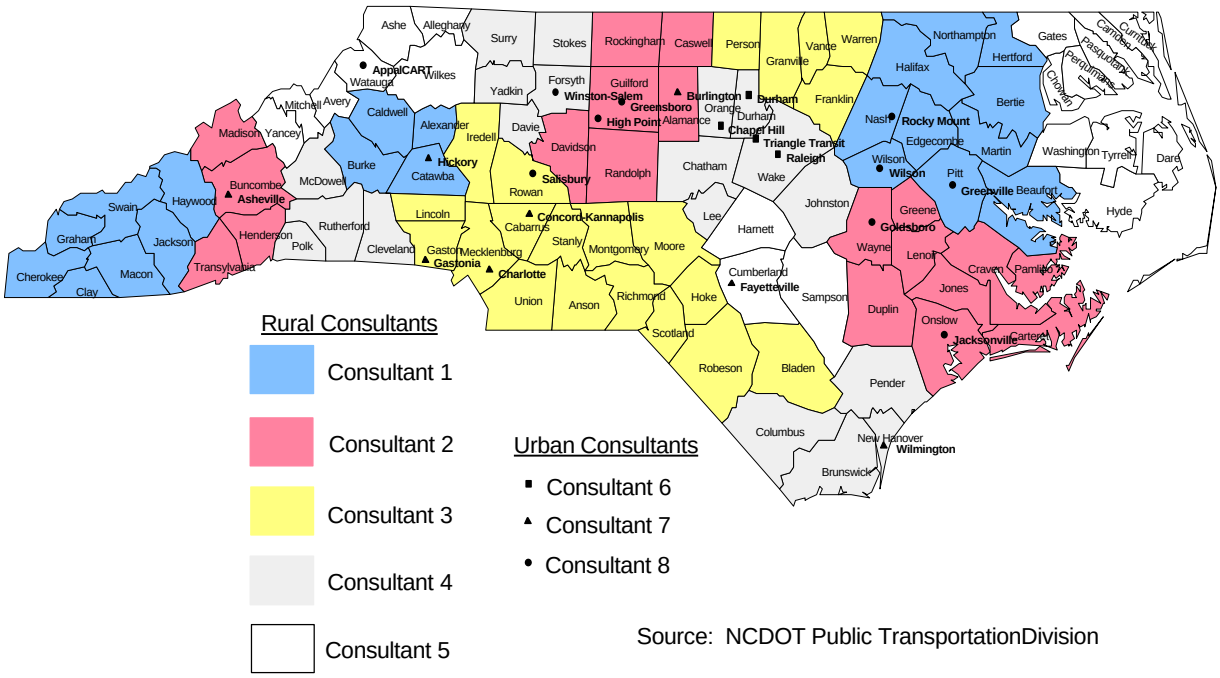
THE CURRENT ORGANIZATION STRUCTURE OF THE PUBLIC TRANSPORTATION DIVISION (PTD) IS NOT CONDUCIVE TO THE DEVELOPMENT OF A SEAMLESS TRANSPORTATION NETWORK.

The *Transit 2001* report recommends strengthening regional planning, coordination and service delivery. Transit planning is generally done at the local level and may not provide the most desirable results for multi-county regions. In keeping with the *Transit 2001* recommendation, PTD's recent efforts have moved toward encouraging more planning at the regional level. Responsibilities of PTD consultants include providing technical support to local transit providers, aid in planning, and conducting site visits twice a year. PTD's current organizational structure divides consultants into urban units assisting cities or rural units assisting counties. Review of procedures showed that rural consultants have a site visit checklist, must document their site visits, and have established a standard criteria

checklist for reviewing applications. However, the urban consultants have different requirements and do not document in the same manner.

Rural consultants are assigned groups of counties in different geographical areas of the state. Urban consultants are assigned transit systems located in different cities. These assignments require all consultants to travel around the State to provide technical assistance. In an effort to ensure equity in travel distances since all consultants now work out of the Raleigh office, management has assigned consultants responsibilities for both western and eastern areas. Exhibit 13 shows current assignments. Current assignments result in a lack of coordination between urban transit systems that reside within a county rural system and lack of coordination between the two groups. Additionally, rural and urban consultants may occasionally attend the same county or regional planning meetings thereby duplicating costs and efforts.

EXHIBIT 13
Rural and Urban Transportation Consultant Assignments



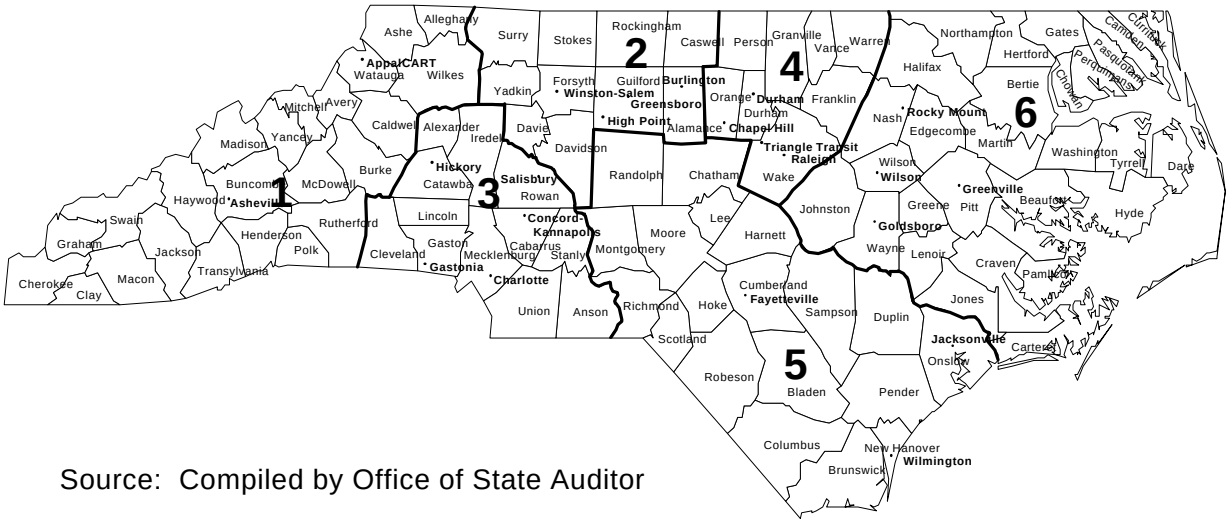
Over the period of January 1997, through February 1999, consultants spent 421 days traveling, 17% of time (based on 6 consultants traveling). Assigning consultants to a specific planning area or as shown in Exhibit 14, page 59, and designating the most populous city in the region as their duty station could reduce costs and travel time, as shown in Table 25. Additionally, it could improve the relationship between the State and local transit providers since more time could be spent working with providers; and improve coordination between rural and urban transit providers since one consultant would have knowledge of all transit services and plans within the region. We learned during the audit that having one consultant provide support for both urban and rural providers has worked effectively in certain instances in the past. However, this assignment structure has not been implemented for all consultants.

TABLE 25
Potential Saving from Decentralization

	Actual[1]	Regional/ Decentralized[2]	Savings	% Savings
Miles	114,238	37,765	76,473	
Travel Time[3] in hours	2077.1	686.6	1390.4	
Travel Cost	$ 25,819	$ 8,513	$ 17,306	
Meals and Lodging	$ 11,912	$ 6,900	$ 5,012	
Employee Time Costs[4]	$36,846	$12,180	$24,666	
Total Cost	$ 74,577	$27,593	$46,984	63%
Average miles/trip	329	109	220	67%
Average Time per Trip[3]	6	2	4	67%

[1] Based on actual travel from January 1997 to December 1998
[2] Duty Station is the most populous city in the region
[3] Based on 55 MPH
[4] Computed based on average salary costs
Source: NCDOT Fiscal Division

EXHIBIT 14
Proposed Consultant Assignments



Source: Compiled by Office of State Auditor

RECOMMENDATION

The Public Transportation Division should consider establishing regional planning areas, reassigning consultants' duty stations to specific regional areas, and assigning one consultant to each regional planning area to handle both urban and rural programs. Additionally, to effectively implement decentralization, PTD should establish a detailed policies and procedures manual and utilize electronic communication (telecommuting or telework) to the extent possible for filing required forms and reports.

COMPLIANCE WITH REGULATIONS

Objective:	*To examine programs and functions for compliance with Department, State and federal laws, regulations, and guidelines.*

To satisfy this objective, we identified relevant State and federal laws, regulations, and rules affecting the programs and functions assigned to the Public Transportation and Rail Divisions within the Department of Transportation. We then tested actual operations against the applicable law, regulation, or rule.

Conclusions: Lack of detailed procedures, increased workloads, and staffing restrictions have resulted in some problems with compliance in both the Public Transportation and Rail Divisions. The major concern is the inaccuracy of the Rail Division's fixed asset system, with approximately $10 million in assets not properly recorded. Additionally, Department management needs to implement procedures to assure compliance with State Performance Management Program regulations.

THE PUBLIC TRANSPORTATION DIVISION'S FILES WERE NOT ADEQUATELY DOCUMENTED OR MONITORED.

We examined a sample of 113 grant files, transportation development plans, and site visits in the Public Transportation Division. We found that while all payments were made on time and all awards and funding levels had proper approval, a number of files did not contain the necessary documentation as follows:

- 20% of the files had documents missing;
- 10% of timeframes not met;
- 20% of TDP's reviewed had errors (5 were out dated and 1 was missing); and
- 51% of site visits were not documented.

Further, in a review of 47 inactive work orders totaling $6,428,515, we found that 3 (6% representing $749,717) were not actively monitored. One should have been closed and two others showed no funds expended before the period of performance has elapsed. In one of these two, funds were expended after the period of performance without an approved extension of time.

RECOMMENDATION

Public Transportation Division management should develop specific procedures to assure that all files contain the necessary documentation

and approval signatures, and that all grants are monitored in a timely fashion.

PUBLIC TRANSPORTATION DIVISION CONTRACT MONITORING PROCEDURES NEED TO BE STANDARDIZED.

Several divisions within the Department contract with North Carolina State University's Institute for Transportation Research and Education (ITRE) to research, develop, coordinate, and implement projects. We reviewed a sample of 25 contracts totaling $1,783,927 for the Rail and Public Transportation Divisions. ITRE contracts are initiated after division management, ITRE, and NCSU management agree to an estimated project budget. To obtain payment for these services, ITRE provides the division with an invoice showing the current and cumulative expenditures for each project. A written description of the work performed to date (a progress report) is also provided as documentation for the expenditures. Division personnel compare the expenditures to the project progress report and the estimated project budget as controls for payment. Additionally, the Rail Division requests supporting documentation for expenditures as a step in its payment review process, but the Public Transportation Division does not.

During the review of contract files, we noted one instance (a 4% error rate) where $2,589 was returned to the Department by NCSU due to overpayment. We also noted that some of the same ITRE personnel perform contracting services on multiple contracts for different divisions with the Department during the same time periods. If a detailed summary of expenditures was requested, reviewed, and compared to the invoice amounts and a summary of contractor labor hours per week for all divisions was analyzed, the potential for improper payments would be minimized.

RECOMMENDATION

The Department should develop uniform written procedures for the review of contractor invoices for payment. These formal procedures should be communicated throughout the Department to facilitate consistent review of invoices. All contractors should be required to submit for review and comparison a detailed summary of expenditures and supporting documentation. Also, there should be communication between the different divisions of the Department that regularly contract with ITRE to ensure efficiency and effectiveness in their contractual efforts. Finally, senior management should perform a periodic review of the types of services being contracted to ITRE to ensure that resources are being used in the most efficient manner. This would allow for a reasonable determination of whether the fees being incurred would be better spent by providing additional staff or training.

THE RAIL DIVISION LACKS POLICIES AND PROCEDURES NECESSARY TO ASSURE ACCOUNTABILITY FOR CONTRACTS AND RELATED FINANCIAL DATA.

As part of the audit, we attempted to obtain a complete listing of all contracts for the Rail Division. Because of the nature of the projects for which Rail contracts, the process could be controlled by either General Statute Chapter 136 (Roads and Highways for a construction project) or by Article 3 of Chapter 143 (Purchases and Contracts for personal services.) We found that Rail has no consistent written procedures in place outlining the criteria used to determine which General Statute Chapter to follow when accounting for contracts. Further, Rail did not have a centralized list of all contracts by contract category showing expenditures by fiscal year, anticipated completion date, explanation for delays, contractual results, and cost break-down by contract participant. The current system does not provide management with contractual financial information for each category of contracts entered into. Not having such a system precludes management from readily determining the amount of available funds within a funding source without extensive analysis. While we reviewed the contract files in the Rail Division offices, we could not assure ourselves that we had a complete list of Rail contracts.

RECOMMENDATION

The Rail Division should develop formal written procedures to account for its contracts. These formal procedures should define contract categories, give clear directions on criteria used to determine the category and the method used for accounting and reporting related information. All contracts, regardless of type, should be accounted for in a centralized list showing relevant data to assist management in administration of these contracts. Periodic reports should be generated for management to assist in analysis and financial planning. Once established, procedures should be communicated throughout the Division to facilitate consistency.

FIXED ASSET RECORDS MAINTAINED BY THE RAIL DIVISION ARE NOT ACCURATE.

The State Controller requires that all fixed assets purchased by an agency be added to the State's fixed asset system at the time of purchase and any additions to the cost of the asset be properly reflected. To assess compliance with this policy we performed a physical inventory of all rail cars and locomotives assigned to the Rail Division. In comparing the inventory to Rail's fixed asset records, we found that the purchase of two rail cars and two locomotives and the refurbishment cost of nine rail cars are not reflected in the system. Specifically,

- Two used rail cars purchased in April 1998 at a cost of $9,995 each were not recorded in the fixed asset system.

- Two new locomotives purchased at a cost of $2,266,963 each, and received on January 14, 1999, had not been entered in the system as of March 5, 1999.
- Nine rail cars purchased from 1994 to 1997 at costs ranging from $5,000 to $108,333 have been refurbished. However, the total cost to refurbish these cars, estimated at approximately $5,410,994, have not been added to the cost of the individual rail cars in the fixed asset system.

Therefore, approximately $10 million dollars worth of fixed assets are not reflected in the fixed asset system maintained by Rail. Agency personnel stated this was due to oversight and a breakdown in communication between those responsible for overseeing the work and those recording the assets.

RECOMMENDATION

The Division should update the fixed asset system to reflect all assets at their appropriate value. In addition, the Division should properly train and instruct staff in the recording of fixed assets. Also, management should ensure that any additional costs incurred to improve assets are properly tracked and communicated to appropriate agency personnel.

THE RAIL DIVISION IS NOT CONDUCTING ANNUAL PERFORMANCE EVALUATIONS AS REQUIRED BY THE OFFICE OF STATE PERSONNEL.

The North Carolina Office of State Personnel (OSP) sets forth policy requiring each State agency to initiate and maintain an operative Performance Management System. The purpose of the system is to establish, monitor, and evaluate organizational goals; and to establish individual expectations, monitor progress, and appraise performance. At the end of the performance cycle, an official performance appraisal summary is required on an annual basis for all employees rating them on their overall performance. In turn, this rating is entered into the Personnel Information Management System (PMIS) to support career growth, cost-of-living, and performance bonus increases established by the General Assembly for each fiscal year. Under the State Personnel Act, the State Personnel Commission may recommend sanctions to be levied against any agency with a deficient Performance Management System.

Review of personnel files revealed that although the Rail Division entered a rating into PMIS at the end of the rating cycle for each employee, the Division did not always complete or document interim and annual performance evaluations as shown in Table 26. We noted that four Division employees, including three supervisors, had not received a performance evaluation within the past two years.

TABLE 26
Department of Transportation—Rail Division
Interim and Annual Performance Appraisals Not Documented

	Interim Evaluations			Annual Evaluations		
Evaluation Period	Number Evaluations	Number Not Completed	%	Number Evaluations	Number Not Completed	%
04/01/95-03/31/96	11	1	9%	11	1	9%
04/01/96-03/31/97	15	8	53%	15	6	40%
04/01/97-03/31/98	16	8	50%	18	4	22%

Source: Rail Division Personnel Files

The failure to provide performance evaluations to each employee diminishes important communication between employees and supervisors and decreases the likelihood that all employees are aware of what is expected of them. Additionally, by not complying with OSP regulations, the Department could be assessed sanctions that could affect all employees.

RECOMMENDATION

Department management should take steps to ensure that the Rail Division is in compliance with OSP policies regarding providing and documenting annual performance evaluations. It is the responsibility of Department management to monitor all performance evaluations to make sure the process is effectively administered. The annual evaluation summary report submitted to OSP should be completed only after all evaluations have been completed, discussed with the employee, and properly documented. Lastly, Department management should carefully consider whether specific sanctions against Rail management are called for.

Auditor's Note: *This information has been forwarded to the Office of State Personnel for action.*

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Public Transportation Division Awards to Urban Systems—FY 1997-98

Local System	Total	State Maintenance Assistance	Capital/ New Starts	Technology
Asheville	$13,928	$ 0	$ 0	$13,928
Chapel Hill	193,449	179,994	0	13,455
Charlotte	781,343	544,643	0	236,700
Durham	188,701	124,819	0	63,882
Fayetteville	263,921	121,982	0	141,939
Gastonia	121,793	54,293	0	67,500
Greensboro	253,281	222,771	0	30,510
Greenville	163,760	50,000	0	113,760
Hickory	53,150	50,000	0	3,150
High Point	0	0	0	0
Piedmont Triad	0	0	0	0
Raleigh	244,754	210,554	0	34,200
Rocky Mount	50,000	50,000	0	0
Triangle Transit Authority	420,177	137,774	0	282,403
Wilmington	68,061	58,611	0	9,450
Winston-Salem	144,559	144,559	0	0
Wilson City	5,850	0	0	5,850
AppalCART	51,890	50,000	0	1,890
Total	$3,018,617	$2,000,000	$ 0	$1,018,617
Budgeted	11,000,000	2,000,000	8,000,000	1,000,000
Funds not Awarded	$7,981,383	$ 0	$8,000,000	$(18,617)
Percent of funds Awarded	27%	100%	0%	102%
Average Urban Program Awarded				$107,808

Source: NCDOT Public Transportation Division

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Public Transportation Division Awards to Rural Systems								
Local System/Counties/Agencies	Total	Elderly/ Disabled	WorkFirst/ Employment	WorkFirst Demo.	Facilities	Technology	Regional Assistance	Capital
Community Link (Charlotte)	$7,500	$	$	$	$	$	$7,500	$
Salvation Army (Greensboro)	1,250						1,250	
Family Services Center (Raleigh)	6,500						6,500	
Domestic Violence Shelter (Wilmington)	1,500						1,500	
Alamance/Alamance Co. Transportation Authority	98,306	26,675	15,194		28,020			28,417
Alexander/Alexander Co. Transportation	36,194	14,079	4,900			5,157		12,058
Alleghany	15,009	13,043	1,966					
Anson	26,026	15,009	5,070			5,947		
Ashe/Ashe Co. Transportation	51,543	14,706	4,001			9,053		23,783
Avery/Avery County Transp. Authority	24,192	13,085	2,802			8,305		
Beaufort/Beaufort Co. Developmental Center, Inc.	43,278	17,435	8,215			7,028		10,600
Bertie	39,446	15,497	5,237	18,712				
Bladen	24,830	16,137	6,893			1,800		
Brunswick/Brunswick Interagency Transportation System, Inc.	69,416	18,625	9,238			457		41,096
Buncombe	135,462	36,911	17,268	21,300		3,150		56,833
Burke/Burke Co. Transit Adm.	102,357	20,910	12,323			9,477		59,647
Cabarrus	106,592	24,241	14,000			5,157		63,194
Caldwell/Caldwell Co. Area Transit System	34,735	20,001	10,234			4,500		
Camden	15,820	13,836	1,984					
Carteret/Carteret Co. Area Transportation	26,739	18,456	8,283					
Caswell	18,697	14,281	4,416					
Catawba	38,263	26,359	11,904					
Chatham/Chatham Transit Network	72,401	16,601	6,673			12,312		36,815
Cherokee	44,522	14,771	4,066					25,685
Chowan	17,124	12,951	4,173					
Clay	43,872	13,133	1,935			5,157		23,647
Cleveland/Trans. Adm. of Cleveland Co.	93,004	22,442	15,388					55,174
Columbus/Columbus Co. Interagency Transportation, Inc.	32,298	18,281	10,156			3,861		
Craven/Craven Area Rural Transportation	81,253	20,883	13,926			3,104		43,340
Cumberland	143,013	38,894	29,967	74,152				
Currituck	16,079	13,100	2,979					

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Public Transportation Division Awards to Rural Systems								
Local System/Counties/Agencies	Total	Elderly/ Disabled	WorkFirst/ Employment	WorkFirst Demo.	Facilities	Technology	Regional Assistance	Capital
Dare	23,206	14,339	3,710			5,157		
Davidson	54,725	27,565	17,710			9,450		
Davie	18,835	14,391	4,444					
Duplin	69,698	17,084	8,287			3,240		41,087
Durham	56,559	33,473	23,086					
Eastern Band Cherokee Indians	36,805							36,805
Edgecombe	32,688	18,339	14,349					
Forsyth	77,326	47,287	30,039					
Franklin	22,776	16,165	6,611					
Gaston	112,312	34,190	21,244			1,431		55,447
Gates/Gates Co. Ag. Ext. Service	21,849	14,166	2,526			5,157		
Graham	15,874	13,985	1,889					
Granville	23,563	16,311	7,252					
Greene	26,654	13,169	3,700					9,785
Guilford	124,287	57,302	33,030			33,955		
Halifax	62,320	19,144	16,152	27,024				
Harnett	83,895	19,385	14,040			15,984		34,486
Haywood	26,679	18,373	8,306					
Henderson/W. Carolina Community Action	49,828	22,689	11,065			16,074		
Hertford	20,030	14,368	5,662					
Hoke	54,091	13,839	7,024					33,228
Hyde/Hyde Co. Nonprofit Private Transp.	32,372	17,882	1,929			3,357		9,204
Iredell/Iredell Vocational Workshop Inc.	93,478	23,625	14,226			4,257		51,370
Jackson	53,692	14,761	5,107			19,269		14,555
Johnston/Coordinated Transp. System	135,720	21,914	14,163	14,820		8,397		76,426
Jones	17,175	15,019	2,156					
Lee	32,481	16,167	7,548					8,766
Lenoir	62,858	18,773	14,466			5,157		24,462
Lincoln/Lincoln Co. Group Home	63,455	16,970	8,161					38,324
Macon	35,483	15,663	4,063			5,157		10,600
Madison/Madison Co. Transp. Authority	30,337	14,207	3,818			12,312		
Martin	56,842	14,607	5,977			3,357		32,901
McDowell	22,008	16,112	5,896					
Mecklenburg	155,431	73,559	51,557			10,440		19,875
Mitchell/Mitchell Co. Transp. Authority	133,471	13,202	2,569		117,000	700		

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Public Transportation Division Awards to Rural Systems								
Local System/Counties/Agencies	Total	Elderly/ Disabled	WorkFirst/ Employment	WorkFirst Demo.	Facilities	Technology	Regional Assistance	Capital
Montgomery	19,522	14,729	4,793					
Moore/Moore Co. Transp. System, Inc.	34,343	20,798	10,324			3,221		
Nash	32,628	20,834	11,794					
New Hanover	149,390	26,389	12,407	50,364		3,609		56,621
Northampton	40,327	14,895	5,432	20,000				
Onslow/Onslow United Transit System	87,742	24,739	21,418					41,585
Orange	33,890	21,153	7,845					4,892
Pamlico	16,579	13,605	2,974					
Pasquotank	22,468	14,921	7,547					
Pender/Sr. Citizen Services of Pender	36,198	16,095	6,241					13,862
Perquimans	16,524	13,201	3,323					
Person	20,235	15,226	5,009					
Pitt	41,729	23,520	18,209					
Polk/Polk Co. Transportation Authority	28,816	13,766	2,738			12,312		
Randolph/Randolph County Sr. Adults Assoc.	72,177	24,727	13,938			12,312		21,200
Richmond/Richmond Interagency	54,940	17,215	10,410			3,465		23,850
Robeson/Lumber River Council of Gov.	169,795	24,225	23,771			8,397		113,402
Rockingham/Rockingham Co. Council on Aging	97,961	22,817	14,366					60,778
Rowan/Rowan Area Transit System	107,700	27,043	15,124		9,270			56,263
Rutherford	54,075	19,265	10,080			5,040		19,690
Sampson/Sampson Co. Transp. Advisory Board	88,087	18,223	9,072			8,378		52,414
Scotland	42,389	14,947	8,423			5,157		13,862
Stanly	99,260	18,138	7,774		31,194	6,480		35,674
Stokes	21,317	15,485	5,832					
Surry	27,610	19,741	7,869					
Swain/Swain Co. Focal Point on Aging, Inc.	18,229	15,098	3,131					
Transylvania	22,876	15,099	4,420			3,357		
Tyrrell	17,926	16,385	1,541					
Union	45,324	20,902	13,414					11,008
Vance	25,782	16,003	9,779					
Wake	116,551	58,781	41,344			16,426		
Warren	19,312	14,305	5,007					
Washington	17,735	13,539	4,196					
Watauga	19,339	15,110	4,229					

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Public Transportation Division Awards to Rural Systems								
Local System/Counties/Agencies	Total	Elderly/ Disabled	WorkFirst/ Employment	WorkFirst Demo.	Facilities	Technology	Regional Assistance	Capital
Wayne/Wayne Interagency Transportation, Inc.	47,744	23,487	21,017			3,240		
Wilkes/Wilkes Co. Transportation Authority	32,838	19,024	10,574			3,240		
Wilson	31,025	19,406	11,619					
Yadkin	20,034	15,145	4,889					
Yancey	37,103	13,652	3,174		11,250	9,027		
Salisbury City	44,949							44,949
Choanoke Public Transportation	52,884					3,696		49,188
Kerr Area Transportation Authority	103,236					3,696		99,540
Nash-Edgecombe Transportation Services	39,751							39,751
Yadkin Valley Economic Develop. District	10,600							10,600
Inter-County Public Transportation Authority	390,716				390,716			
Trailways	63,000						63,000	
Total	$5,998,679	$2,000,000	$1,000,000	$226,372	$587,450	$358,369	$79,750	$1,746,739
Budgeted	7,000,000	2,000,000	1,000,000	750,000	600,000	500,000	400,000	1,750,000
Funds not Awarded	$1,001,321	$ 0	$ 0	$523,628	$12,550	$141,631	$320,250	$3,261
Percent of funds awarded	86%	100%	100%	30%	98%	72%	20%	100%
Average Rural Program Award								$18,864
Source: NCDOT Public Transportation Division								

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APPENDIX B

APPENDIX B ALTERNATIVES FOR WESTERN NORTH CAROLINA PASSENGER RAIL SERVICE		
ALTERNATIVE	**STRENGTHS**	**WEAKNESSES**
1. Through service, Raleigh to Asheville via Salisbury	• Central North Carolina passengers could travel to Asheville without changing trains. • Service could be extended further to provide complete through service from the coast to the mountains.	• Operating a through train from Raleigh to Asheville is greater than operating a connecting train from either Salisbury or Greensboro to Asheville as discussed in Alternatives 3 and 4.
2. Through service, Raleigh to Asheville via Greensboro and Winston-Salem	• Central North Carolina passengers could travel to Asheville without changing trains. • Service could be extended further to provide complete through service from the coast to the mountains. • The service would provide passenger service to Winston-Salem, the largest North Carolina metropolitan community currently not serviced by Amtrak.	• Current track conditions between Winston-Salem and Barber Junction would require substantial expenditures to improve track conditions. Otherwise, the train would have to operate at significantly lower speed increasing travel time. • Operating a through train from Raleigh to Asheville is greater than operating a connecting train from either Salisbury or Greensboro to Asheville as discussed in Alternatives 3 and 4.
3. Through service, Charlotte to Asheville via Salisbury	• Passengers from Charlotte could travel to Asheville without changing trains. • Service could eventually be extended to cover additional markets such as Greenville and Spartanburg, SC and Atlanta, GA.	• Operating a through train from Charlotte to Asheville is greater than operating a connecting train from Salisbury to Asheville. • The distance between Charlotte and Asheville is relatively short and is accessible by a direct highway route. This would limit the ability of rail passenger service to compete for Charlotte travelers to western North Carolina. • This route would not serve the Triad (Greensboro-High Point) or the Triangle (Raleigh-Durham) area effectively. • This alternative would prevent any future expansion to provide through service from the coast to the mountains.
4. Salisbury to Asheville with connecting service at Salisbury	• Operating a train from Salisbury to Asheville with Raleigh/Charlotte connecting service would be less than operating through service from either Raleigh or Charlotte.	• Non-through service could be a significant deterrent to users due to the increase in travel time and the inconvenience of changing trains. • The larger markets of the Triad, Triangle and potential additional points east would be better served by Alternatives 1 or 2.
5. Greensboro to Asheville via Winston-Salem with connections at Greensboro	• Operating a connection at Greensboro would cost less than offering through service from either Raleigh or Charlotte to Asheville. • This alternative would include direct service to Winston-Salem.	• As in alternative 2, poor track conditions between Winston-Salem and Barber Junction would increase travel time due to slower speeds or substantial expenditures for track improvements. • Inconvenience of non-through service plus the ability to provide better eastern service as discussed above under Alternative 4.
Source: Western North Carolina Passenger Study (Intrastate Rail Plan) Summary Report, January 1997		

APPENDIX C

OTHER STATES' DATA

We conducted a survey of all 50 states on public transportation and rail services. Results were inconclusive due to the varying methods of administering transportation services in the different states. Therefore, we have not included this data in the report. The survey was then sent to 30 local transit authorities. The results of the seven responding authorities are shown on pages 75 through 83. Again, methods of administering transit services varied greatly from authority to authority. Because of this, we were unable to draw any conclusions as to how North Carolina compares to other states.

We examined documentation from federal agencies, including statistical data compiled by the Federal Transit Administration (FTA) through a National Transit Database. The FTA provided us with their 1996 Transit Profiles on both Urban transit agencies (over 200,000 population) and a separate Profile for Urban and Rural (population under 200,000). The statistical information does not provide one hundred percent of the transportation agencies since some smaller agencies are exempt from reporting requirements and some others are eliminated after investigation. The database information includes figures submitted by 462 individual reporting agencies; 60 agencies had received exemptions and 19 were deleted. Of the 462 agencies reporting, 190 are included in a publication targeting populations under 200,000 while the other 272 are included in those with populations over 200,000. Eleven of the seventeen North Carolina transit agencies are included in the 1996 database.

The database provided the most consistent information for comparative purposes. The profiled information includes capital funding, operating funding and expenses, and services supplied and consumed. We used the data from the profiles and the National Summary and Trends to show how North Carolina transit compares to similar states and to the nation as a whole. See Table 27 for the Urban Population over 200,000 and Table 28 for the Urban Population under 200,000 respectively.

APPENDIX C

Table 27
National Transit Profile 1996
Database Information (Urban--Population Over 200,000)

		(TA's Serve same population)												
	National (%)	Charlotte	Chapel Hill	Durham	Research Triangle	Fayetteville	Raleigh		Orlando, FL	Richmond,VA	Nashville, TN	Columbia,SC	Houston, TX	Spokane, WA	Louisville, KY
Service Area Population		488,325	49,829	136,611	768,527	75,695	237,500		1,246,311	308,505	528,103	183,500	2,457,673	362,625	761,002
Service Area Square Miles		225	20	74	3,948	43	84		2,538	374	529	115	1,279	371	261
Annual Passenger Miles		44,895,996	6,231,356	10,030,148	12,004,844	3,616,326	10,947,993		103,199,909	35,126,700	37,122,832	595,429	401,444,377	38,956,949	58,341,540
Fares collected to Total Revenues (%)	39%	27%	27%	22%	15%	20%	19%		36%	45%	40%	29%	14%	14%	20%
Vehicles Operated at Maximum Service															
Bus	58%	128	42	24	114	12	37		152	128	103	34	915	120	205
Demand Response	17%	27	6		44	11			0		27			54	9
Vanpool		21			20		13				26			25	
Purchased Transportation	21%	6		27					150	24		11	487	23	78
Heavy Rail	11%														
Light Rail	1%														
Commuter Rail	5%														
Other	6%														
Sources of Operating Funds Expended															
Passenger Fares	39%	5,980,770	1,341,984	1,126,413	510,191	484,987	1,313,668		15,361,329	9,015,207	5,888,810	1,586,325	43,970,126	4,330,902	6,856,958
Local Funds	32%	11,659,309	1,537,139	2,549,315	2,506,035	1,015,854	3,686,169		17,622,332	4,594,363	5,595,375	3,752,769	259,413,393	25,114,520	24,114,737
State Funds	21%	2,163,956	1,459,526	512,433	374,080	78,052	576,935		3,650,337	4,823,864	1,858,631	0	0	276	407,342
Federal Assistance	3%	1,295,794	590,260	758,716	0	787,543	1,233,913		4,560,080	1,081,102	901,684	91,274	-35,674	546,781	1,895,628
Other Funds	3%	906,583	26,636	172,351	34,916	65,494	21,172		1,743,016	524,985	611,410	94,503	19,479,137	802,433	913,189
Totals		$ 22,006,412	$ 4,955,545	$ 5,119,228	$ 3,425,222	$ 2,431,930	$ 6,831,857		$ 42,937,094	$ 20,039,521	$ 14,855,910	$ 5,524,871	$ 322,826,982	$ 30,794,912	$ 34,187,854
Summary of Operating Expenses															
Salaries/Wages/Benefits	73%	14,949,820	3,739,359	3,034,011	1,477,566	1,589,847	4,097,516		23,756,107	14,087,711	12,142,921	4,788,674	158,265,119	21,130,725	25,335,880
Materials and Supplies	9%	3,246,246	462,727	478,219	461,243	198,662	863,074		4,945,241	2,398,553	2,034,335	1,685,290	27,076,005	4,068,172	2,932,786
Purchased Transportation	7%	437,067	0	1,149,216	0	0	1,371,285		7,926,063	1,479,343	0	1,041,301	19,115,577	1,936,642	3,694,473
Other Operating Expenses	8%	3,352,895	753,459	841,161	928,246	636,808	825,907		5,891,633	2,073,914	1,549,497	-1,997,087	-13,179,236	3,607,425	2,820,121
Totals		$ 21,986,028	$ 4,955,545	$ 5,502,607	$ 2,867,055	$ 2,425,317	$ 7,157,782		$ 42,519,044	$ 20,039,521	$ 15,726,753	$ 5,518,178	$ 191,277,465	$ 30,742,964	$ 34,783,260
Reconciling Items:		$ 24,980		$ 1,035	$ 558,167	$ 6,613	No data		$ 197,064		$ 12,294	$ 6,693	$ 131,565,846	$ 51,948	$ (595,406)
Sources of Capital Funds Expended															
Local Funds	36%	337,217	275,233	34,733	461,983	17,427	95,027		814,426	55,023	117,896	374,463	53,565,979	1,364,554	1,135,285
State Funds	12%	199,760	483,873	34,733	29,867	111,383	93,343		13,018	87,585	117,897	13,450	0	0	0
Federal Assistance	50%	2,238,954	3,701,501	277,866	0	137,473	754,378		10,298,510	609,114	2,232,164	106,986	79,298,109	33,504	4,786,508
Totals		$ 2,775,931	$ 4,460,607	$ 347,332	$ 491,850	$ 266,283	$ 942,748		$ 11,125,954	$ 751,722	$ 2,467,957	$ 494,899	$ 132,864,088	$ 1,398,058	$ 5,921,793
Uses of Capital Funds															
Bus	27%	2,048,226	4,460,607	347,332	387,729	266,283	942,748		10,332,388	751,722	2,467,957	353,422	128,103,018	1,127,029	5,921,793
Vanpool	1%	167,335	0	0	104,121	0	0		679,605	0	0	0	0	2,876	0
Demand Response	No data	560,370	0	0	0	0	0		0	0	0	141,477	4,761,070	268,153	0

APPENDIX C

Table 27
National Transit Profile 1996
Database Information (Urban--Population Over 200,000)

					(TA's Serve same population)												
			National (%)	Charlotte	Chapel Hill	Durham	Research Triangle	Fayetteville	Raleigh		Orlando, FL	Richmond,VA	Nashville, TN	Columbia,SC	Houston, TX	Spokane, WA	Louisville, KY
Heavy Rail			32%														
Light Rail			12%														
Commuter Rail			24%														
Other			2%														
Totals				$2,775,391	$4,460,607	$347,332	$ 491,850	$ 266,283	$ 942,748		$ 11,125,954	$ 751,722	$ 2,467,957	$ 494,899	$ 132,864,088	$ 1,398,058	$ 5,921,793
Note A: Difference between Operating Funds Expended and Operating Expense is Reconciling Item (interest, leases and rentals, etc.)																	
Note B: Purchased transportation is included in totals used to calculate percentages.																	
Source: National Transit Association Database--Federal Transit Administration+A39																	

APPENDIX C

Table 28
National Transit Profile 1996
(Urban--Population Under 200,000)

		Selected North Carolina Transit Authorities						Comparable Transit Authorities in Other States								
	National (%)	Asheville	Greensboro	High Point	Wilmington	Winston-Salem		Tallahassee, FL	Beaumont, TX	Lynchburg,VA	Huntsville, AL	Green Bay,WI	Danbury,CT	Charleston,W.VA	Lancaster, PA	Topeka, KS
Service Area Population		64,692	196,000	69,424	55,530	162,595		138,863	82,731	80,846	159,880	162,382	184,220	231,414	420,920	145,000
Service Area Square Miles		31	82	44	32	100		94	41	72	168	60	298	908	952	151
Annual Passenger Miles		3,237,565	5,371,914	2,083,093	2,871,112	17,198,835		11,418,376	5,223,413	5,119,840	2,569,254	7,044,032	2,997,762	10,638,996	9,723,215	4,401,550
Fares Collected to Total Revenue (%)	39%	24%	24%	31%	28%	29%		25%	19%	31%	15%	18%	14%	19%	30%	20%
Vehicles Operated at Maximum Service																
Bus	58%	11	20	13	9	41		44	12	17	9	36	15	44	32	23
Demand Response	17%			3	2	12		12	5	2	9		15	10		6
Vanpool	No figures					60										
Purchased Transportation	21%	4	15	3				1			19	19			49	10
Heavy Rail	11%															
Light Rail	1%															
Commuter Rail	5%															
Other	6%															
Sources of Operating Funds Expended																
Passenger Fares	39%	454,276	813,941	413,712	386,639	1,764,957		2,003,274	442,914	747,816	203,473	813,893	427,374	1,356,307	1,735,021	595,347
Local Funds	32%	813,485	506,812	342,296	481,490	2,546,781		4,214,000	712,992	333,449	561,644	1,066,527	653,740	4,598,694	117,424	1,345,242
State Funds	21%	30,295	729,506	96,550	49,773	632,300		833,622	245,063	565,365		1,928,400	1,328,146	47,375	2,392,264	12,334
Federal Assistance	3%	557,380	1,122,943	435,080	473,152	968,739		851,720	941,550	714,897	558,681	579,814	520,707	668,361	1,285,882	896,155
Other Funds	3%	6,774	159,933	42,078	9,588	106,144		21,844	17,650	70,044		175,838	54,478	297,082	313,741	112,495
Totals		$1,862,210	$ 3,333,135	$ 1,329,716	$ 1,400,642	$ 6,018,921		$ 7,924,460	$ 2,360,169	$ 2,431,571	$ 1,323,798	$ 4,564,472	$ 2,984,445	$ 6,967,819	$ 5,844,332	$ 2,961,573
Summary of Operating Expenses																
Salaries/Wages/Benefits	73%	1,173,760		979,388	948,559	3,969,661		5,028,504	1,559,006	1,586,020	866,894	3,174,055	2,340,439	5,128,812	3,190,433	2,050,762
Materials and Supplies	9%	252,129		96,993	249,914	897,134		1,073,026	409,433	440,806	115,605	457,154	316,920	1,052,162	483,014	550,148
Purchased Transportation	7%	190,253	1,090,353	134,111				14,871			67,805	307,503			1,818,000	36,123
Other Operating Expenses	8%	246,068		119,224	202,169	1,152,126		1,290,391	391,730	404,745	251,366	594,727	327,086	727,782	352,885	320,931
Totals		$1,862,210	$ 1,090,353	$ 1,329,716	$ 1,400,642	$ 6,018,921		$ 7,406,792	$ 2,360,169	$ 2,431,571	$ 1,301,670	$ 4,533,439	$ 2,984,445	$ 6,908,756	$ 5,844,332	$ 2,957,964
Reconciling Items (see Note A)								$ 517,668			$ 27,573	$ 31,034		$ 59,063		$ 3,609
Sources of Capital Funds Expended																
Local Funds	36%	359,589	30,140	5,353	1,187	459,169		81,221	7,871	158,523	50,527	45,932		333,794	61,622	7,380
State Funds	12%	359,588	27,960	5,353	55,839	458,382				79,107			602,063		362,759	12,586
Federal Assistance	50%	2,876,709	228,621	42,824	9,497	3,659,160		225,901	31,483	986,711	202,108	374,296	2,408,249	604,391	76,045	75,922
Totals		$3,595,886	$ 286,721	$ 53,530	$ 66,523	$ 4,576,711		$ 307,122	$ 39,354	$ 1,224,341	$ 252,635	$ 420,228	$ 3,010,312	$ 938,185	$ 500,426	$ 95,888
Uses of Capital Funds																
Bus	27%	3,595,886	286,721	53,530	66,523	3,983,494		$ 307,122	$ 39,354	$ 1,224,341	$ 206,861	$ 420,228	$ 3,010,312	$ 820,427	$ 169,599	$ 95,532
Heavy Rail	32%															

APPENDIX C

Table 28
National Transit Profile 1996
(Urban--Population Under 200,000)

				Selected North Carolina Transit Authorities						Comparable Transit Authorities in Other States								
			National (%)	Asheville	Greensboro	High Point	Wilmington	Winston-Salem		Tallahassee, FL	Beaumont, TX	Lynchburg,VA	Huntsville, AL	Green Bay,WI	Danbury,CT	Charleston,W.VA	Lancaster, PA	Topeka, KS
Other			2%															
Light Rail			12%															
Vanpool								591,267										
Demand Response			1%					1,950					$ 45,774			$ 117,758	330,827	356
Commuter Rail			24%															
Totals				$3,595,886	$ 286,721	$ 53,530	$ 66,523	$ 4,576,711		$ 307,122	$ 39,354	$ 1,224,341	$ 252,635	$ 420,228	$ 3,010,312	$ 938,185	$ 500,426	$ 95,888
Note A: Difference between Operating Funds Expended and Operating Expenses are Reconciling Items such as interest expense, leases, rentals, etc.																		
Q--Questionable per Profile report																		
Source: National Transit Association Database--Federal Transit Association																		

APPENDIX C

North Carolina Department of Transportation
Public Transportation and Rail Division
Performance Audit
Survey of Other States Local Transportation Systems

NUMBER AND PERCENTAGE OF RESPONSES ARE SHOWN BELOW. PERCENTAGES MAY NOT ADD BACK TO 100% BECAUSE OF ROUNDING.

General Information

1. Name_____ (please print)
   Title _____
2. Telephone number _____
3. Entity Name_____
4. E-mail address_____
5. Which category does your transportation system or service fall under? **7 RESPONSES**
   - ❑ Rural (Population less than 50,000)
   - ❑ Urban (Population between 50,000 & 200,000)
   - ❑ Urban (Population over 200,000) **7 100%**

6. Are any of your public transportation or rail services consolidated with other transportation systems or organizations such as a regional transportation authority.? **7 RESPONSES**
   - ❑ Yes – Which services are consolidated? **1 14.3%**
     With what other systems? **1 14.3%**
   - ❑ No **5 71.4%**

7. Do you coordinate your public transportation or rail system efforts with other transportation systems or organizations? **7 RESPONSES**
   - ❑ Yes - With what other systems? **7 100%**
   - ❑ No

8. What sources fund public transportation capital expenditures? **26 RESPONSES**

❑ **Federal funds**	**6 23.1%**	❑ **Local tax assessment**	**5 19.3%**
❑ **State funds**	**4 15.4%**	❑ **Motor fuel tax**	**1 3.8%**
❑ **Municipal funds**	**2 7.7%**	❑ **Vehicle registration tax**	**0 0.0%**
❑ **Bond issue**	**4 15.4 %**	❑ **Other (Please list): Users**	**2 7.7%**
		Private business partnership	**1 3.8%**
		Leaseholds	**1 3.8%**

Passenger Rail Service (heavy rail, street car or light rail, commuter rail)

PLANNING

9. Do you coordinate your public transportation or rail system efforts with other transportation systems or organizations? **7 RESPONSES**
   - ❑ Yes – (if yes go to question 12) **5 71.4%**
   - ❑ No **2 28.6%**

10. Do you have plans to implement: **3 RESPONSES**

Commuter Rail Services (Transporting individuals to and from work using above, below or ground level trains.)	❑ Yes **1 33.3%** Implementation Date_____	
	❑ No	
Intercity Rail Service (Transporting individuals from one city to another for reasons other than getting to and from work, such as Amtrak.)	❑ Yes Implementation Date_____	
	❑ No **1 33.3%**	
High-Speed Rail Service (Transporting individuals from one city to another at speeds equal to or greater then 110 mile per hour.)	❑ Yes Implementation Date_____	
	❑ No **1 33.3%**	

11. Have you developed a planning document for any of the types of rail service you plan to implement in the future? **4 RESPONSES**
    - ❑ Yes **4 100%**
    - ❑ No **0 0%**

APPENDIX C

OPERATIONS

12. Do you operate or support operations of passenger rail services? If yes, list hours of operations. **6 RESPONSES**
❑ Yes **5 83.3%** ❑ No **1 16.7%**
Weekday hours _____; Weekend hours _____

13. How long have you operated or supported operations of rail services? **6 RESPONSES**

Commuter:	❑ None	❑ Less than 1 year	❑ 1 to 5 years	❑ 6 to 10 years	❑ over 10 years **4 66.7%**
Intercity:	❑ None	❑ Less than 1 year	❑ 1 to 5 years	❑ 6 to 10 years	❑ over 10 years **2 33.3%**
High Speed:	❑ None	❑ Less than 1 year	❑ 1 to 5 years	❑ 6 to 10 years	❑ over 10 years **0 0%**

14. What types of engines power the following? **6 RESPONSES**

Commuter rail system?	❑ None	❑ Diesel	❑ Electric **2 33.3%**	❑ Other Diesel/Electric **2 33.3%**	
Intercity rail system?	❑ None	❑ Diesel	❑ Electric **2 33.3%**	❑ Other _____	
High speed rail system?	❑ None	❑ Diesel	❑ Electric **0 0%**	❑ Other _____	

15. How many rail lines (tracks) does the following systems operate? **6 RESPONSES**

Commuter rail system?	❑ None	❑ 1 **1 16.7%**	❑ 2 to 5 **1 16.7%**	❑ 6 to 10 **1 16.7%**	❑ over 10 **1 16.7%**
Intercity rail system?	❑ None	❑ 1 **1 16.7%**	❑ 2 to 5	❑ 6 to 10 **1 16.7%**	❑ over 10
High-speed rail system?	❑ None	❑ 1	❑ 2 to 5	❑ 6 to 10	❑ over 10

16. Which of the following is within 4 blocks or ¼ mile of your commuter rail line? (tracks/routes): **38 RESPONSES**

❑ Airports **2 5.3%**	❑ Hospitals **5 13.2%**	❑ Museums **4 10.5%**	❑ Downtown Area **5 13.2%**	❑ Sport Facilities **2 5.3%**
❑ Colleges/ Universities **5 13.2%**	❑ State Gov't Complex **3 7.8%**	❑ Major Shopping Centers **5 13.2%**	❑ Recreational Park **4 10.5%**	❑ Other Casino **1 2.6%** Fin'l district **1 2.6%** Conven. ctr **1 2.6%**

17. How many total miles of rail are currently operational? **5 RESPONSES**

Commuter:	Intercity:	High Speed: _____ miles
21.4 miles 1 20%	**21.5 miles 1 20%**	
43 miles 1 20%		
796 miles 1 20%		
546 miles 1 20%		

18. What is the average ridership of your largest system during the following periods: **4 RESPONSES**

	Weekdays	Weekends	Annual
Commuter rail system? **3 75%**	243,669	101,610	68,700,000
Intercity rail system? **1 25%**	45,800	17,100	13,482,522
High-speed rail system? **0 0%**			

19. How many stations (stops) of your largest system are included in an end-to-end vehicle trip? **6 RESPONSES**

Commuter:	❑ None	❑ 1	❑ 2 to 5	❑ 6 to 10 **1 16.7%**	❑ over 10 **3 50.0%**	
Intercity:	❑ None	❑ 1	❑ 2 to 5	❑ 6 to 10 **1 16.7%**	❑ over 10 **1 16.7%**	
High Speed:	❑ None	❑ 1	❑ 2 to 5	❑ 6 to 10 **0 0%**	❑ over 10 **0 0%**	

20. How many stations of your largest system have the following connecting transportation services at or within 4 blocks of the station? **4 RESPONSES**

Commuter: **3 75%**	Fix Bus Route **69.33 average**	Intercity Rail (i.e. Amtrak) **5 average**
	Intercity Bus Route (i.e. Greyhound) _____	Taxi Cabs **not calculable**
	Other Commuter Rail Lines **11 average**	Other _____
Intercity: **1 25%**	Fix Bus Route _____	Other Intercity Rail (i.e. Amtrak)_____
	Intercity Bus Route (i.e. Greyhound) **10**	Taxi Cabs _____
	Commuter Rail Lines _____	Other _____
High Speed Rail: **0 0%**	Fix Bus Route	Intercity Rail (i.e. Amtrak)_____
	Intercity Bus Route (i.e. Greyhound)	Taxi Cabs
	Commuter Rail Lines _____	Other

21. How many one way vehicle trips are made daily on each rail line? **10 RESPONSES**

Commuter:	Peak Hours 6-9 a.m./4-7 p.m.	❑	None	❑	1	❑	2 to 5	❑	6 to 10	❑	over 10	**3**	**30%**
	Off Peak Hours	❑	None	❑	1	❑	2 to 5	❑	6 to 10	❑	over 10	**3**	**30%**
	Weekend	❑	None	❑	1	❑	2 to 5	❑	6 to 10	❑	over 10	**3**	**30%**
Intercity:		❑	None	❑	1	❑	2 to 5	❑	6 to 10	❑	over 10	**1**	**10%**
High Speed:		❑	None	❑	1	❑	2 to 5	❑	6 to 10	❑	over 10	**0**	**0%**

22. What is the percentage of on-time performance? **5 RESPONSES**

❑ Less than 50% ❑ 50% to 75% ❑ 76% to 95% **1 20%** ❑ More than 95% **4 80%**

23. What type of fare system do you use? **6 RESPONSES**

Commuter Rail

❑ Fixed rate (Please provide rate.) $1.13 average **2 33.3%**

❑ Distance Based (Please provide average fare.) $3.52 average **2 33.3%**

Intercity Rail

❑ Fixed rate (Please provide rate.) $ 1.13 average **2 33.3%**

❑ Distance Based (Please provide average fare.) $_____

High Speed Rail

❑ Fixed rate (Please provide rate.) $_____

❑ Distance Based (Please provide average fare.) $_____

24. What percentage of expenses (excluding capital expenditures) is covered by the system's fare box revenue? **4 RESPONSES**

Commuter rail system? 46.85% **4 100%**

Intercity rail system? _____ **0 0%**

High speed rail system? _____ **0 0%**

25. Please provide financial information for fiscal year ending June 30, 1998 in dollars. **3 RESPONSES**

	Commuter Rail		**Intercity Rail**		**High Speed Rail**	
Source of Funds	Funds Received	Expenditures Incurred	Funds Received	Expenditures Incurred	Funds Received	Expenditures Incurred
Federal Government	3,258,278					
State Government	18,573,739					
Municipal Government	15,130,079					
Local Tax Assessment	73,146,610					
Fare Box	186,665,605					
Other (Specify)	35,915,538					
	3 100%	**0 0%**	**0 0%**	**0 0%**	**0 0%**	**0 0%**

26. Which of the following actions have you taken to encourage ridership? **24 RESPONSES**

Commuter rail service?

❑ Elimination of Downtown Parking **1 4.2%**
❑ Adequate Parking at Station **4 16.7%**
❑ Senior Citizen Discounts **2 8.3%**
❑ Connecting Transportation at Station **4 16.7%**
❑ Student Discounts **2 8.3%**
❑ 24 hour Security **1 4.2%**
❑ Advertisement **4 16.7%**
❑ Discounts (monthly pass) **4 16.7%**
❑ Other (Specify) **Advisory grps 1 4.2%** Station improvements 1 4.2%

Intercity rail service? **5 RESPONSES**

❑ Elimination of Downtown Parking
❑ Adequate Parking at Station **1 20%**
❑ Senior Citizen Discounts **1 20%**
❑ Connecting Transportation at Station **1 20%**
❑ Student Discounts **1 20%**
❑ 24 hour Security
❑ Advertisement **1 20%**
❑ Discounts (monthly pass)
❑ Other (Specify)

High speed rail service? **0 RESPONSES**

❑ Advertisement
❑ Adequate Parking at Station
❑ 24 hour Security
❑ Connecting Transportation at Station
❑ Senior Citizen Discounts
❑ Other (Specify)
❑ Student Discounts
❑ Discounts (monthly pass)

APPENDIX C

Other Public Transportation (articulated bus, full size bus, mid-size bus, para-transit, small bus, vans)

PLANNING

27. Do you currently operate public transportation other than rail? **7 RESPONSES**
- ❑ Yes – (if yes go to question 37) **4 57.1%**
- ❑ No **3 42.9%**

28. **Do you plan to implement:** 3 RESPONSES

Human services transportation?
- ❑ Yes **2 66.7%** Implementation Date_____
- ❑ No

General public transportation?
- ❑ Yes **1 33.3%** Implementation Date_____
- ❑ No

OPERATIONS

29. Do you have high occupancy vehicle lanes on your freeways/highways? **5 RESPONSES**
- ❑ Yes
  - ❑ Bus lanes only
  - ❑ 2 person minimum-private vehicle **3 60%**
  - ❑ 3 person minimum-private vehicle **1 20%**
- ❑ No **1 20%**

30. Do you provide or support: **8 RESPONSES**

		Hours of Operations Weekday	Hours of Operations Weekend	How long have you Provided service?	
Fixed route services?	❑ Yes	_____	**4 50%** _____	_____ years	❑ No
Dial-A-Ride services?	❑ Yes	_____	**2 25%** _____	_____ years	❑ No
Van pools?	❑ Yes	_____	**2 25%** _____	_____ years	❑ No
Rural human service transportation?	❑ Yes	_____	**0 0%** _____	_____ years	❑ No
Rural general public transportation?	❑ Yes	_____	**0 0%** _____	_____ years	❑ No
(or) Consolidated rural human service and general public transportation?	❑ Yes	_____	**0 0%** _____	_____ years	❑ No

31. What types of bus are used for your fixed bus routes? **11 RESPONSES**

❑ Articulated **2 18.2%** ❑ Full-size **4 36.3%** ❑ Mid-size **3 27.3%** ❑ Small **2 18.2%**

32. What is the average passenger per bus mile? **6 RESPONSES**

Fixed route services **2.62 4 66.7%** Dial-A-Ride services **5.54 2 33.3%** Van pool services _____

Rural human service _____ Rural general public _____ **(or)** Consolidated system _____

33. What is the average passenger per bus hour? **6 RESPONSES**

Fixed route services **32.58 4 66.7%** Dial-A-Ride services **1.69 2 33.3%** Van pool services _____

Rural human service _____ Rural general public _____ **(or)** Consolidated system _____

34. What is the percentage of on-time performance? **4 RESPONSES**

	Less than 50%	50% to 75%	76% to 95%	More than 95%
Fixed route service	❑	❑ **1 25%**	❑ **3 75%**	❑
Rural-human service	❑	❑	❑	❑
Rural general public	❑	❑	❑	❑
Dial-A-Ride services	❑	❑	❑	❑
Van pool services	❑	❑	❑	❑
(or) Consolidated system	❑	❑	❑	❑

35. What is the average fare box revenue per passenger? **6 RESPONSES**

Fixed route services **$.87 4 66.7%** Dial-A-Ride services **$1.69 2 33.3%** Van pool services _____

Rural human service _____ Rural general public _____ **(or)** Consolidated system _____

APPENDIX C

36. What percentage of the expenses (excluding capital expenditures) does the fare box revenue cover? **6 RESPONSES**

Fixed route services **28.63% 4 66.7%** Dial-A-Ride services **3.4% 2 33.3%** Van pool services _____

Rural human service _____ Rural general public _____ **(or)** Consolidated system _____

37. Please provide financial information for fiscal year ending June 30, 1998. ***(dollars in thousands)***

	Fixed Route Services		**Dial-A-Ride Services**		**Van pool Services**	
Source of Funds	Funds Received	Expenditures Incurred	Funds Received	Expenditures Incurred	Funds Received	Expenditures Incurred
Federal Government						
State Government						
Municipal Government						
Local Tax Assessment						
Other (Specify)						

	Human Service Transport.		**General Public Transport.**		**(or) Consolidated System**	
Source of Funds	Funds Received	Expenditures Incurred	Funds Received	Expenditures Incurred	Funds Received	Expenditures Incurred
Federal Government						
State Government						
Municipal Government						
Local Tax Assessment						
Other (Specify)						

Answers for #37 were incalculable.

38. Are you using technology to better manage your operation (i.e. intelligent transportation system)? **2 RESPONSES**

- ❑ No
- ❑ Yes (Please describe) **2 100%**

AVL/AVM
KIOSK
INTERNET SOFTWARE
SCHEDULING SOFTWARE
SENSORS EMBEDDED IN ROAD
CENTRAL COMMAND PERSONAL COMPUTERS
PHONES

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APPENDIX D

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

April 27, 1999

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

Dear Ralph:

Thank you for sharing with me your audit of the North Carolina Department of Transportation's Rail and Public Transportation divisions. I believe it is comprehensive and highlights changes that need to be made in these programs.

Basically the rail and public transportation programs are good ones. They are part of a long-term vision the state has for transportation infrastructure. In spite of the Department of Transportation's traditional focus on building highway infrastructure, the demand for public transit and rail services is growing rapidly.

North Carolina's increasing growth and prosperity have fueled the economic and environmental need for safe, fast and reliable transit services across the state. Our growing economy and tourism industry continues to demand that we expand our existing transit services. As we have traveled the state asking citizens what they want in their Transportation Improvement Program, rail and other forms of transit continue to emerge as a priority.

The Rail and Public Transportation divisions have experienced rapid growth in recent years. These programs provide public transit services in all 100 counties. The rail division has developed a comprehensive highway-rail crossing safety improvement program that is a national model -- and sponsors two passenger trains which are at the top of Amtrak's national network for return on investment and customer satisfaction.

But there is still much to do.

The response from the Department has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

The Honorable Ralph Campbell, Jr.
Page Two
April 27, 1999

As this audit recommends, improvements are needed in several areas. Better communication and coordination is needed among the department, the North Carolina Railroad Company and local freight rail companies. Both the rail and public transportation divisions need stronger, clearer policies, procedures and plans to better administer and audit programs recommended in the Transit 2001 report. Good business management demands such action and it will be done.

Nationwide the public has become more sensitive to and demanding of public transportation choices that are environmentally friendly and balance citizen need. The audit questions whether the state should be involved in passenger rail services. In January, we got the answer to that question. Nearly 500 mayors and local government leaders from across the state responded overwhelmingly that North Carolina needed to step up and meet this challenge. As our state embarks on an era of smart growth, the Department of Transportation will work harder with community leaders across the state to develop an integrated transportation system.

This audit will serve as a guide to help the department improve its rail and transit services to the people of North Carolina. We are grateful for the work of your staff.

Sincerely,

E. Norris Tolson

The response from the Department has been reformatted to conform with the style and format of the rest of the audit report. However, no data has been changed.

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April 30, 1999

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