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**Department of Transportation  
Headquarters Organization and Staffing Issues**

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for  
North Carolina General Assembly  
Government Performance Audit Committee  
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## Issue Statement

This paper analyzes the organization and staffing of the Department of Transportation (DOT). It primarily focuses on units in DOT's headquarters in Raleigh.

## Background

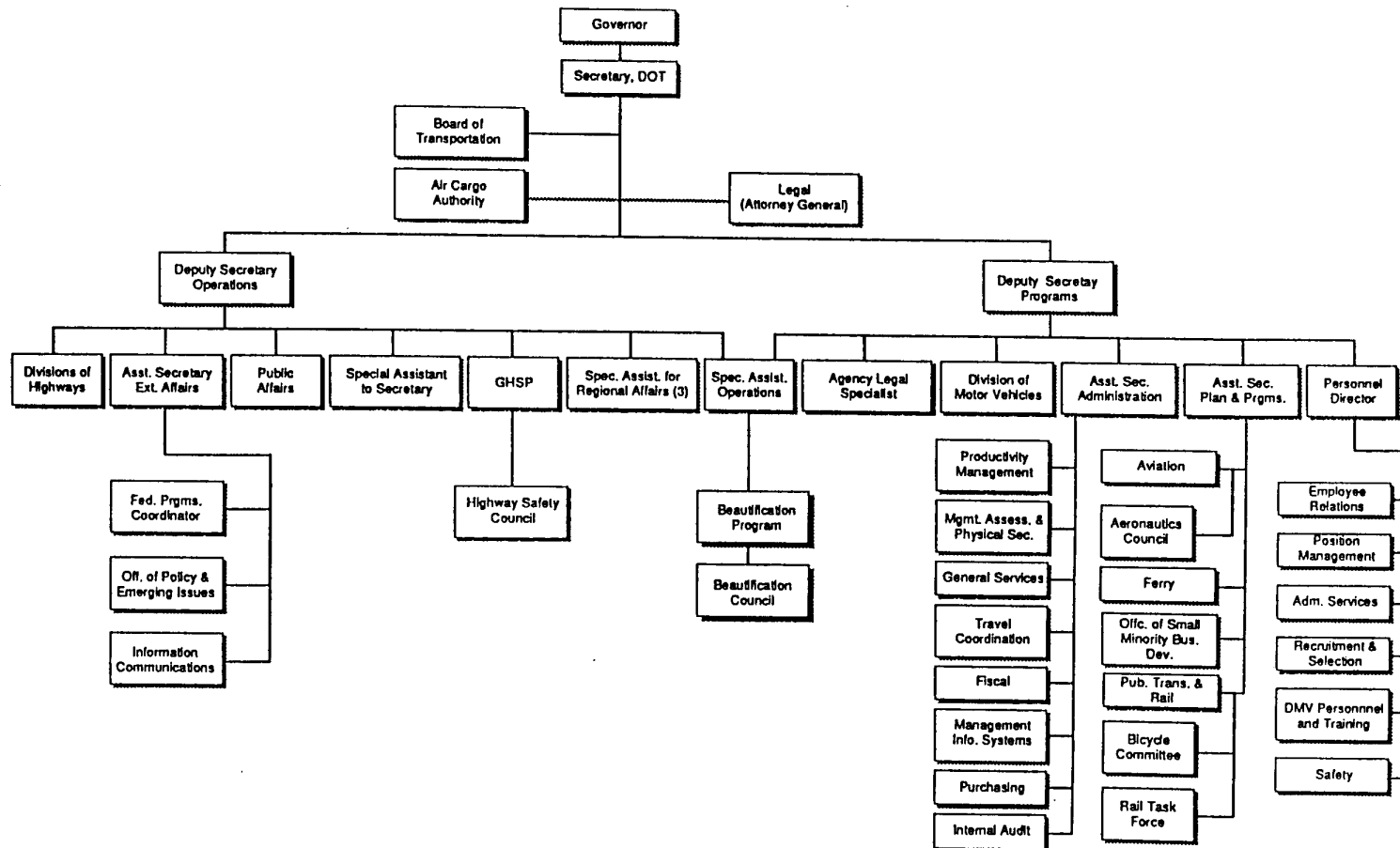
DOT is responsible for essentially all State activities associated with the State's transportation system. It also administers ownership, lien recording, and motor vehicle operator licensing through the Division of Motor Vehicles (DMV).

The Secretary of Transportation supervises a staff of over 13,000 and administered fiscal 1991 expenditures of \$1.4 billion. As illustrated in DOT's organizational chart on Exhibit 1, there are two major units reporting to the Secretary - Operations and Programs.

The Deputy Secretary of Operations is responsible for highways, public affairs, and safety programs. The largest division in DOT, the Division of Highways, is under this deputy. The Division of Highways manages and coordinates all activities related to the planning, construction, maintenance, and operation of the Statewide highway system which covers 77,439 miles, the largest state-maintained system in the nation. The State Highway Administrator supervises a staff of approximately 11,000. This division administers the Transportation Improvement Program, including the recently established Highway Trust Fund. The division's organizational structure includes the following four key units and numerous subunits:

- Preconstruction Section - responsible for all highway design activities up until bids are received and has approximately 1,600 positions. Subunits include planning and environmental, highway design, traffic engineering, support services, and right of way.
- Operations Section - manages operations pertaining to construction and maintenance of highways as well as field operations. Subunits include construction and materials, maintenance and equipment, and 14 highway divisions with 35 districts.
- Programs Section - is responsible for tracking the status of approved projects and coordinating schedules with other branches. Subunits include program development, facility management, research and development, and statewide planning.
- Secondary Roads Office - is responsible for administering the policies and procedures of the Board of Transportation for the State-maintained secondary roads system in North Carolina.

**EXHIBIT 1**  
**Department of Transportation**  
**Current Organization Chart**



The Deputy Secretary of Programs is responsible for administrative support, public transportation, and the Division of Motor Vehicles. One assistant secretary directs the Fiscal, Management Information Systems, Purchasing, Internal Audit, Management Assessment and Physical Security, Travel Coordination, General Services, and Productivity Management divisions. A second assistant secretary supervises planning and program activities related to the State's intermodal transportation needs plus the Aviation, Ferry, and Public Transportation divisions and the Office of Small Minority Business Development. The Commissioner of Motor Vehicles oversees DMV, the second-largest division in the Department.

The Division of Motor Vehicles ensures the protection and personal safety of the public with respect to the operation of motor vehicles and use of highway facilities by administering a wide variety of laws. In doing so, the Commissioner of Motor Vehicles supervises a staff of nearly 2,000. Organizationally, the division has six sections:

- Vehicle Registration - administers licensing, titling, and lien recording activities related to motor vehicles. In addition to State-operated offices in Raleigh and Charlotte, 125 contractor-operated branch offices are involved in this process.
- Driver's License - issues and maintains records on all operators' licenses. This section employs 589 people in 10 branches and units. A total of 173 people are assigned to the division's headquarters in Raleigh, and the remaining 416 are divided among the field offices. There are 194 driver's license offices distributed among the State's 100 counties.
- Enforcement - provides services to enforce regulations relating to weight control, vehicle theft, safety inspections, licensing of dealers and manufacturers as well as motor carriers engaged in interstate and intrastate commerce. The 600 employees included in this section also serve notices revoking license plates and drivers' licenses and collect funds to cover bad checks.
- Collision Reports and General Services - provides a central collection agency for reports of accidents in order to produce a statistical data base for motor vehicle safety programs and handles administrative functions dealing with printing, reproduction, and mailing services. There are approximately 100 staff in this section.
- School Bus and Traffic Safety - trains and certifies all school bus drivers in the State for the 13,000 public school buses and provides traffic safety education programs and materials to highway users. This section employs approximately 120 people.
- International Registration Plan - administers a registration reciprocity compact covering member states and one Canadian province. The plan provides for payment of license fees on commercial vehicles based on fleet miles of

operation in each state. During fiscal 1991, the section's 30 employees issued 79,616 license plates.

DOT operations are funded by the Highway Fund, Highway Trust Fund, and federal funds.

## Findings

The criteria that are the basis for our organization and staffing findings and recommendations are as follows:

- Provide adequate levels of management
- Maintain a reasonable span of control
- Avoid overly fragmented functions
- Avoid duplicative functions and responsibilities
- Organize effective regional service delivery structures
- Delineate clear lines of communication

***Finding 1: The department has 95 to 100 positions involving excess layers of management, excessively narrow spans of control, overlapping functions, and unnecessary positions.***

There are 51 positions in DOT that involve one-to-one reporting relationships, nearly half of which are in the Division of Motor Vehicles. These positions typically involve a supervisor and an assistant supervisor whose duties include "filling in" when the supervisor is gone. Specifically, DOT sections with one-to-one reporting relationships include:

- |  |                          |
|--|--------------------------|
| ■ General Services                           | ■ Roadside Environmental |
| ■ Internal Audit                             | ■ Bridge Maintenance     |
| ■ Governor's Highway Safety Program          | ■ Roadway Maintenance    |
| ■ Hydraulics                                 | ■ Equipment              |
| ■ Right of Way                               | ■ Materials and Tests    |
| ■ Occupational Safety and Emergency Planning |                          |

Most of DMV's one-to-one relationships are in the 10 district Driver's License offices that have a supervisor and an assistant supervisor, which is considered excessive. Other sections in DMV with one-to-one relationships are:

- International Registration Plan
- School Bus & Traffic Safety
- Vehicle Registration

An additional 31 positions are considered excessive because of narrow spans of control.

These are management and supervisory positions where the span of control is frequently two or three, which is very narrow given the duties performed. In many cases, the affected units have small numbers of staff (e.g., often two to five staff) which represents further opportunity to consolidate staff to achieve broader spans of control.

DOT sections with narrow spans of control include the following:

- |                        |                               |
|------------------------|-------------------------------|
| ■ General Services     | ■ Structure Design            |
| ■ Fiscal               | ■ Pavement Management         |
| ■ Photogrammetry       | ■ Traffic Engineering         |
| ■ Design Services      | ■ Equipment Inventory Control |
| ■ Location and Surveys | ■ Program, Policy and Budget  |

There are also 9 to 11 positions that have overlapping or similar functions, some of which are in the External Audit Branch and the Internal Audit Section. The mission of the Internal Audit Section is to promote and ensure proper operational procedures and fair, accurate financial operations within DOT by conducting internal compliance, fiscal, and operational audits and by monitoring fiscal records and operational procedures. There are three units in the External Audit Branch: Engineering Contractors - reviews and audits invoices; Utilities and Railroads - audits charges; and Single Audit - audits grants. While the focus of these two audit units is different, their basic audit functions are similar. If they were combined, certain supervisory and secretarial support staff positions could be eliminated.

In addition, the Civil Rights Office monitors the Disadvantaged Business Enterprise Program; however, certain positions in other units also monitor similar activities. These units include Management Assessment and Compliance, the Construction Branch, and the Right of Way Branch. The monitoring of Civil Rights-related matters in DOT should be centralized in the Civil Rights Office, and the overlap of these functions in other offices should be eliminated.

We further identified 4 to 7 positions whose functions are considered unnecessary. These positions are in the Secretary's Office and the Fiscal Section and include the Special Assistants for Regional Affairs.

The specific positions to be eliminated are detailed in the study's work papers.

***Finding 2: There are misplaced organizational units within DOT.***

The following organizational units within DOT are organizationally misplaced:

- **Internal Audit Section** - the mission of the Internal Audit Section is to promote and ensure proper operational procedures and fair, accurate financial operations within DOT by conducting internal compliance, fiscal, and operational audits and by

monitoring fiscal records and operational procedures. Internal Audit reports to the Assistant Secretary of Administration which weakens the independence of the function. Ordinarily, an internal audit function would report to the chief executive officer, audit committee, or the equivalent.

- **Beautification Program** - the purpose of the Beautification Program is to serve the citizens by improving the appearance of North Carolina highways. Its goals are to establish and maintain effective litter cleanup and litter prevention programs, and to increase public support for the Wildflower Program. This unit reports to both the Deputy Secretary of Operations and the Deputy Secretary of Programs. The dual reporting responsibility does not appear effective, nor does the placement of the program.
- **Charlotte International Registration Plan (IRP) Office** - the IRP section administers a registration reciprocity compact covering member states and one Canadian province. The plan provides for payment of license fees on commercial vehicles based on fleet miles of operation in each state. During fiscal 1991, the section's 30 employees issued 79,616 license plates. The Charlotte IRP office is included in the Vehicle Registration Section, whereas all other IRP activities are included in the separate International Registration Plan Section.

***Finding 3: The Division of Highways has 14 divisions, which is the highest in the southeast.***

We analyzed the divisional office structure for the Division of Highways and determined that North Carolina has the highest number of divisions among the southeastern states. As shown in Exhibit 2, the average for the 10 southeastern states is 9, and North Carolina has 14. However, DOT compares favorably with other state DOT's in terms of miles of state-maintained highways per division office as shown in Exhibit 2. Based on this comparison, the number of highway divisions appears reasonable.

## **Recommendations**

***Recommendation 1: The 95 to 100 positions involving one-to-one relationships, narrow spans of control, overlapping functions, and unnecessary functions should be eliminated.***

The 95 to 100 excessive positions noted in Finding 1 should be eliminated. Based on the average DOT employee salary of \$24,059, including benefits in the amount of \$6,351, we estimate that potential annual savings as a result of eliminating these positions would be \$2.9 to \$3.0 million. Exhibit 3 illustrates the financial savings over a 10-year period if 100 positions are eliminated.

**EXHIBIT 2**  
**1990 Highways Expenditures of North Carolina**  
**and the Southeast States**

State	Number of Divisions *	State-Maintained Street Mileage#	Land Area (Sq. Miles)^	Street Mileage Per Division	Land Area Per Division
Alabama	9	10,988	50,767	1,221	5,641
Florida	7	11,791	54,153	1,684	7,736
Georgia	7	17,790	58,056	2,541	8,294
Kentucky	12	27,544	39,669	2,295	3,306
Maryland	7	5,375	9,837	768	1,405
North Carolina	14	77,439	48,843	5,531	3,489
South Carolina	7	41,406	30,203	5,915	4,315
Tennessee	4	14,548	41,155	3,637	10,289
Virginia	9	55,727	39,704	6,192	4,412
West Virginia	10	30,662	24,119	3,066	2,412
Total	86	293,270	396,506	32,852	51,297
Average	9	29,327	39,651	3,285	5,130

- \* AASHTO Reference Book of Member Department Personnel & Committees 1990-1991  
# "Highway Statistics 1989" from the U.S. Dept. of Transportation - Federal Highway Admin.  
^ "The Book of the States 1990-91 Edition" from The Council of State Governments



**EXHIBIT 3**  
**Estimated Annual Savings**  
**(1992 dollars)**

	Fiscal Year ending June 30										
	Current	1994	1995	1996	1997	1998	1999	2000	2001	2002	
Yearly	--	\$3,041,000	\$3,041,000	\$3,041,000	\$3,041,000	\$3,041,000	\$3,041,000	\$3,041,000	\$3,041,000	\$3,041,000	
Cumulative	--	\$3,041,000	\$6,082,000	\$9,123,000	\$12,164,000	\$15,205,000	\$18,246,000	\$21,287,000	\$24,328,000	\$27,369,000	

***Recommendation 2: The Internal Audit Section, Beautification Program, and the Charlotte IRP Office should report through a revised organization structure to eliminate fragmentation and improve program effectiveness.***

To improve DOT's overall effectiveness, the following organizational changes should be made:

- The Internal and External Audit units should be consolidated into one audit group reporting directly to the Secretary of Transportation.
- The Beautification Program should be moved under the Maintenance Branch in the operations section of the Division of Highways.
- All IRP functions, including those of the Charlotte office, should be included in the IRP section in DMV. This will eliminate the current fragmentation of this function, improve consistency, and achieve operating efficiencies.

While these organizational changes will not affect the number of positions or facilities in these units, they will make the units more effective by moving them closer to their actual areas of responsibility and accountability. Internal Audit will be raised to a proper accountability level, the beautification program will be moved to where the functions are actually being carried out, and the Charlotte IRP office will have a reporting relationship that is consistent with other IRP activities.

**Implementation Considerations**

The staffing reductions will yield savings that can be used to fund other highway program needs. It is possible that individuals occupying the unnecessary positions can fill other positions in DOT that are or may become vacant through retirements and other personnel actions.

The recommended organizational changes can be immediately implemented.