

# STATE OF NORTH CAROLINA

OFFICE OF THE STATE AUDITOR  
BETH A. WOOD, CPA



## DEPARTMENT OF TRANSPORTATION

### SFY 2022 CASH SPENDING PLAN

PERFORMANCE AUDIT  
APRIL 2023



**NCOSA**  
The Taxpayers' Watchdog

# EXECUTIVE SUMMARY

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## OBJECTIVE

The objectives of this audit were to determine whether the Department of Transportation (Department):

- 1) Complied with its Spending Plan for state fiscal year (SFY) 2022, and if not, to identify the causes of overspending and the effect on operations and budget.
- 2) Implemented corrective action to address recommendations made in the *Department of Transportation Cash Spending Plan* performance audit report issued by the Office of the State Auditor (OSA) in September 2021.<sup>1</sup>

As directed by Session Law 2020-91, the audit scope included budget adherence by Department, division, and highway division;<sup>2</sup> timeliness of federal reimbursement requests<sup>3</sup> and response to federal inquiries; controls and oversight of divisions and highway divisions related to cash management, project coordination and delivery,<sup>4</sup> and budget adherence; efficacy<sup>5</sup> of communication and coordination; and efficacy of cash management by the Department.

## BACKGROUND

Session Law 2020-91, Section 5.9.(a), required the Office of the State Auditor (OSA) to conduct an annual performance audit of the Department of Transportation's (Department) Spending Plan.

The Department develops an annual Spending Plan comprised of **current year appropriations** in the Department's Certified Budget, **cash not spent in prior years**, and **bond proceeds** from planned sales of Build NC Bonds and Grant Anticipation Revenue Vehicle (GARVEE) bonds. It represents the total dollars "**intended**" to be spent by the Department in a fiscal year.

OSA's September 2021 audit of the Department's Spending Plan for the first half of SFY 2021 (July 2020 through December 2020)<sup>6</sup> found that the Department did not exceed its **developed** Spending Plan.

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<sup>1</sup> <https://www.auditor.nc.gov/documents/reports/performance/per-2021-4200a>.

<sup>2</sup> The highway division as referred to here is the Division of Highways which consists of 14 regional offices and a central office.

<sup>3</sup> Auditors did not review the aging of federal reimbursement requests. This was **not included** in the scope of this audit. The aging of federal reimbursement requests is a topic requiring its own specific audit and will be considered for completion by OSA in the future.

<sup>4</sup> Project expenditures make up a significant portion of the Department's expenditures. As such, this audit's scope included project coordination and delivery as it relates to the development, monitoring, and enforcement of the Department's Spending Plan. A detailed analysis of the activities and procedures of the coordination and delivery of Department's highway construction projects was **not included** in this audit. Project coordination and delivery is a large and complex topic that requires its own audit and will be considered for completion by OSA in the future.

<sup>5</sup> The ability to produce a desired or intended result.

<sup>6</sup> The scope period of July 1, 2020, through December 31, 2020, was selected instead of SFY 2020 to allow the Department an opportunity to implement prior audit recommendations.

# EXECUTIVE SUMMARY (CONCLUDED)

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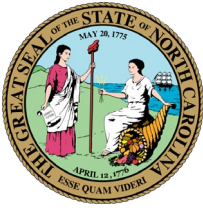
However, the audit found that the Department was **still at risk** for exceeding its Spending Plan in future periods because it had **not implemented** OSA recommendations to (1) develop the spending plan based on specific projects and operations, and (2) monitor and enforce highway division compliance with the Spending Plan.

## **KEY FINDINGS**

The Department did not exceed its **developed** Spending Plan for SFY 2022. The Department planned to spend approximately \$6.86 billion, and actually spent \$6.34 billion (see Finding 1 on page 7).

The Department **implemented** OSA recommendations to (1) develop the Spending Plan based specific projects and operations (see Finding 2 on page 8), and to (2) monitor and enforce highway division compliance with the Spending Plan (see Finding 3 on page 9).

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**Office of the State Auditor**



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## AUDITOR'S TRANSMITTAL

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The Honorable Roy Cooper, Governor  
Members of the North Carolina General Assembly  
J. Eric Boyette, Secretary, Department of Transportation  
Michael S. Fox, Chairman, Board of Transportation

Ladies and Gentlemen:

We are pleased to submit this performance audit report titled *Department of Transportation SFY 2022 Cash Spending Plan*. The objectives of this audit was to determine whether the Department of Transportation:

- 1) Complied with its Spending Plan for state fiscal year 2022, and if not, to identify the causes of overspending and the effect on operations and budget.
- 2) Implemented corrective action to address recommendations made in the *Department of Transportation Cash Spending Plan* performance audit report issued by the Office of the State Auditor in September 2021.

The Department of Transportation Secretary reviewed a draft copy of this report. His written comments are included on page 17.

This audit was conducted in accordance with Chapter 147, Article 5A of the North Carolina General Statutes.

We appreciate the courtesy and cooperation received from management and the employees of the Department of Transportation during our audit.

Respectfully submitted,

A handwritten signature in cursive script that reads "Beth A. Wood".

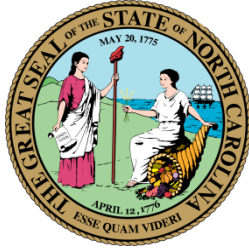
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# TABLE OF CONTENTS

	PAGE
BACKGROUND.....	1
OBJECTIVES, SCOPE, AND METHODOLOGY .....	4
RESULTS AND CONCLUSION .....	6
FINDINGS	
1. DEPARTMENT DID NOT EXCEED SPENDING PLAN FOR STATE FISCAL YEAR 2022.....	7
2. DEPARTMENT IMPLEMENTED RECOMMENDATION TO DEVELOP SPENDING PLAN BASED ON SPECIFIC PROJECTS AND OPERATIONS.....	8
3. DEPARTMENT IMPLEMENTED RECOMMENDATIONS TO MONITOR AND ENFORCE SPENDING PLAN.....	9
APPENDICES	
APPENDIX A .....	14
APPENDIX B .....	15
RESPONSE FROM DEPARTMENT OF TRANSPORTATION .....	17
ORDERING INFORMATION .....	18



# BACKGROUND

Session Law 2020-91, Section 5.9.(a), required the Office of the State Auditor (OSA) to conduct an annual performance audit of the Department of Transportation's (Department) Spending Plan.

The Department develops an annual Spending Plan comprised of **current year appropriations** in the Department's Certified Budget, **cash not spent in prior years**, and **bond proceeds** from planned sales of Build NC Bonds and Grant Anticipation Revenue Vehicle (GARVEE) bonds. It represents the total dollars "**intended**" to be spent by the Department in a fiscal year.

The OSA May 2020 audit<sup>7</sup> report titled *Department of Transportation Cash Spending Plan*<sup>8</sup> found that the Department exceeded its state fiscal year (SFY) 2019 Spending Plan by \$742 million (12.5%) and was in danger of falling below the statutory cash floor.<sup>9</sup> The Department exceeded its Spending Plan because the:

- Spending plan was not based on specific projects and operations the Department scheduled for the fiscal year.
- Chief Engineer's Office did not monitor highway division compliance with the Spending Plan.
- Chief Engineer's Office did not enforce highway division compliance with the Spending Plan.

OSA's September 2021<sup>10</sup> audit of the Department's Spending Plan for the first half of SFY 2021 (July 1, 2020, through December 2020),<sup>11</sup> found that the Department did not exceed its **developed** Spending Plan.

However, the audit found that the Department was **still at risk** for exceeding its Spending Plan in future periods because it had **not implemented** OSA recommendations to (1) develop the spending plan based on specific projects and operations, and (2) monitor and enforce highway division compliance with the Spending Plan.

The September 2021 audit recommended that:

- The Department should implement the prior audit recommendations and adequately address identified deficiencies to mitigate risk of overspending in future periods.
- The Department should base its Spending Plan on specific projects and operations scheduled for the fiscal year. Additionally, the Department should use statistical modeling tools to the extent possible to assist in developing its Spending Plan.
- The Chief Engineer's Office should formally monitor each highway division's spending on a regular basis throughout the fiscal year to ensure that highway divisions do not overspend.

<sup>7</sup> Audit was required by Session Law 2019-251.

<sup>8</sup> <https://www.auditor.nc.gov/documents/reports/performance/per-2020-4200>.

<sup>9</sup> N.C.G.S. § 143C-6-11 requires the Department to maintain a cash balance equal to at least 7.5% of total appropriations for the current fiscal year.

<sup>10</sup> <https://www.auditor.nc.gov/documents/reports/performance/per-2021-4200a>.

<sup>11</sup> The scope period of July 1, 2020, through December 31, 2020, was selected instead of SFY 2020 to allow the Department an opportunity to implement prior audit recommendations.

## Responsible parties discussed in this report include:

*Department of Transportation (Department)* - responsible for the planning, construction, maintenance, and operation of North Carolina's integrated statewide transportation system.

The Department consists of seven divisions. They are the Division of Motor Vehicles, Division of Aviation, Division of Bicycle & Pedestrian Transportation, Ferry Division, Public Transportation Division, Rail Division, and Division of Highways.

*Division of Highways* - responsible for building and maintaining over 80,000 miles of highways and 18,500 bridges. Headed by the Chief Engineer. The Division consists of 14 regional offices and a central office in Raleigh.

*14 Highway Divisions* - part of the Division of Highways. Responsible for building and maintaining state roads and bridges in a defined geographic region. Each of the 14 divisions is led by its own division engineer who is responsible for the management and oversight of the division.

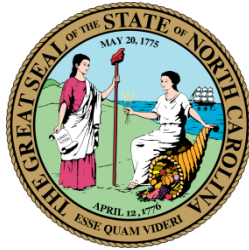
Department of Transportation Highway Divisions by County						
Division 1	Division 2	Division 3	Division 4	Division 5	Division 6	Division 7
Northampton Hertford Gates Bertie Martin Washington Tyrell Dare Hyde Chowan Currituck Camden Pasquotank Perquimans	Beaufort Pitt Greene Lenoir Craven Jones Pamlico Carteret	Sampson Duplin Onslow Pender New Hanover Brunswick	Halifax Nash Edgecombe Wilson Johnston Wayne	Person Durham Wake Franklin Granville Vance Warren	Harnett Cumberland Bladen Roberson Columbus	Rockingham Guilford Alamance Orange Caldwell
Division 8	Division 9	Division 10	Division 11	Division 12	Division 13	Division 14
Randolph Chatham Lee Moore Montgomery Richmond Scotland Hoke	Stokes Forsyth Davie Davison Rowan	Mecklenburg Cabarrus Stanly Union Anson	Avery Watauga Ashe Allegany Surry Yadkin Wilkes Caldwell	Alexander Iredell Catawba Lincoln Gaston Cleveland	Madison Buncombe Yancey Mitchell McDowell Burke Rutherford	Cherokee Clay Graham Swain Jackson Haywood Transylvania Henderson Polk Macon

*Chief Engineer* - oversees and directs the engineering and program activities of the Department's 14 highway divisions, Transportation Safety & Mobility Division, the Central Units, and the Technical Services Division. Reports to the Chief Operating Officer.



**Key terms discussed in this report include:**

*Department's Spending Plan* - This is the total dollars "**intended**" to be spent by the Department. The "Spending Plan" is comprised of **current year appropriations** in the Department's Certified Budget, **cash not spent in prior years**, and **bond proceeds** from planned sales of Build NC Bonds or GARVEE bonds.



# **OBJECTIVES, SCOPE, AND METHODOLOGY**

The objectives of this audit were to determine whether the Department of Transportation (Department):

- 1) Complied with its Spending Plan for state fiscal year (SFY) 2022, and if not, to identify the causes of overspending and the effect on operations and budget.
- 2) Implemented corrective action to address recommendations made in the *Department of Transportation Cash Spending Plan* performance audit report issued by the Office of the State Auditor (OSA) in September 2021.<sup>12</sup>

The audit scope included the period of July 1, 2021 through June 30, 2022.

As directed by Session Law 2020-91, the audit scope included budget adherence (**See Note A**) by Department, division, and highway division;<sup>13</sup> timeliness of federal reimbursement requests<sup>14</sup> and response to federal inquiries (**See Note B**); controls and oversight of divisions and highway divisions related to cash management, project coordination and delivery,<sup>15</sup> and budget adherence; efficacy of communication and coordination; and efficacy of cash management by the Department.

To determine whether the Department complied with its Spending Plan for SFY 2022, auditors:

- Inspected the Department's SFY 2022 Spending Plan Forecast vs. Actual.
- Reconciled total actual (1) revenue, (2) expenses, and (3) cash balances from Spending Plan Forecast vs. Actual to the Department's internal financial statements prepared by the Financial Management Division using the financial accounting system.

To determine whether the Department implemented corrective action to address recommendations, auditors:

- Interviewed Department personnel.
- Reviewed Department policies and procedures for the development, monitoring, and enforcement of the Spending Plan.
- Reviewed financial information.
- Reviewed Department communications including reports, memos, monitoring dashboards, and emails.
- Reviewed state and federal transportation laws relevant to highway construction and cash management.
- Reviewed the Department's Five-Year Revenue Model.
- Reviewed Department organizational charts and employment information.

<sup>12</sup> <https://www.auditor.nc.gov/documents/reports/performance/per-2021-4200a>.

<sup>13</sup> Refers to the Department's Division of Highways which consists of 14 regional highway division offices and a central office.

<sup>14</sup> Auditors did not review the aging of federal reimbursement requests. This was **not included** in the scope of this audit. The aging of federal reimbursement requests is a topic requiring its own specific audit and will be considered for completion by OSA in the future.

<sup>15</sup> Project expenditures make up a significant portion of the Department's expenditures. As such, this audit's scope included project coordination and delivery as it relates to the development, monitoring, and enforcement of the Department's Spending Plan. A detailed analysis of the activities and procedures of the coordination and delivery of Department's highway construction projects was **not included** in this audit. Project coordination and delivery is a large and complex topic that requires its own audit and will be considered for completion by OSA in the future.

Whenever sampling was used, auditors applied a non-statistical approach. Therefore, test results could not be projected to the population. This approach was determined to adequately support audit conclusions.

Because of the test nature and other inherent limitations of an audit, together with limitations of any system of internal and management controls, this audit would not necessarily disclose all performance weaknesses or instances of noncompliance.

This audit was designed to identify, for those programs, activities, or functions included within the scope of the audit, deficiencies in internal controls significant to our audit objectives. As a basis for evaluating internal control, auditors applied the internal control guidance contained in professional auditing standards. However, our audit does not provide a basis for rendering an opinion on internal control, and consequently, we have not issued such an opinion.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

### Notes:

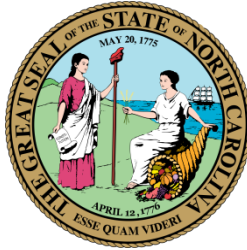
- A. When evaluating budget adherence, auditors followed-up on a Matter for Further Consideration from the May 2020 audit<sup>16</sup> that found that external oversight of the Department's Highway Funds differed significantly from the oversight of other agencies. OSA's September 2021 audit<sup>17</sup> determined that several additional measures were established to improve external oversight of the Department's Spending Plan. Auditors determined that the Department was in compliance with the legislative oversight requirements. See Appendix B.
- B. When evaluating timeliness of federal reimbursement requests<sup>18</sup> and response to federal inquiries, auditors determined that the Department submitted weekly reimbursement requests and had requested the maximum allowable reimbursement each year.

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<sup>16</sup> <https://www.auditor.nc.gov/documents/reports/performance/per-2020-4200>.

<sup>17</sup> <https://www.auditor.nc.gov/documents/reports/performance/per-2021-4200a>.

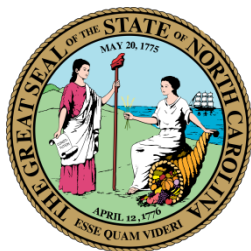
<sup>18</sup> Auditors did not review the aging of federal reimbursement requests. This was **not included** in the scope of this audit. The aging of federal reimbursement requests is a topic requiring its own specific audit and will be considered for completion by OSA in the future.



# **RESULTS AND CONCLUSIONS**

The Department did not exceed its **developed** Spending Plan for state fiscal year 2022. The Department planned to spend approximately \$6.86 billion, and actually spent \$6.34 billion (see Finding 1 on page 7).

The Department **implemented** the Office of the State Auditor recommendations to (1) develop the Spending Plan based specific projects and operations (see Finding 2 on page 8), and to (2) monitor and enforce highway division compliance with the Spending Plan (see Finding 3 on page 9).



# FINDINGS

## 1. DEPARTMENT DID NOT EXCEED SPENDING PLAN FOR STATE FISCAL YEAR 2022

The Department of Transportation (Department) did not exceed its **developed** Spending Plan for state fiscal year (SFY) 2022.

The Department planned to spend approximately \$6.86 billion, and actually spent \$6.34 billion.

### Department of Transportation Spending vs. Forecast State Fiscal Year 2022 (July 2021 – June 2022)

Expenditure Category	In Millions			
	Spending Forecast	Actual Spending	Amount Overspent/ (Underspent)	% Amount Overspent/ (Underspent)
Construction <sup>19</sup>	\$3,723	\$3,352	\$(371) <sup>20</sup>	(10.0) %
Operations & Maintenance <sup>21</sup>	\$1,861	\$1,849	\$(12)	(0.6) %
Other Modes <sup>22</sup>	\$571	\$495	\$(76)	(13.3) %
Other <sup>23</sup>	\$707	\$647	\$(60)	(8.5) %
<b>Total:</b>	<b>\$6,862</b>	<b>\$6,343</b>	<b>\$(519)</b>	<b>(7.6) %</b>

**Source:** Department SFY 2022 Spend Plan Forecast (as amended)<sup>24</sup> and auditor analysis.  
**Analysis did not include determining whether expenses were properly categorized.**

The Department's cash balance was \$2.4 billion as of June 30, 2022.

<sup>19</sup> Construction expenditures include larger capital projects (over \$10 million) that require four to five years to complete, Build NC Bond expenditures, Grant Anticipation Revenue Vehicle (GARVEE) bond expenditures, State Transportation Improvement Projects (STIP), and Right-of-Way (ROW) expenditures.

<sup>20</sup> In SFY 2022, labor shortages and supply-chain issues resulted in underspending. GARVEE expenditures account for \$271 million of the construction difference. GARVEE expenditures represent specific, federally funded projects and funding cannot be reallocated to non-GARVEE projects without approval from the U.S. Department of Transportation's Federal Highway Administration.

<sup>21</sup> Operations and maintenance expenditures include contract resurfacing, pavement preservation, bridge program, bridge preservation, roadside environmental, general maintenance reserve, and disaster funding.

<sup>22</sup> Other modes expenditures include public transportation, ferry, railroads, and airports.

<sup>23</sup> Other expenditures category includes administration, transfers, state aid to municipalities, debt service, and other.

<sup>24</sup> The Department's SFY 2022 Spending Plan was amended twice during SFY 2022. See Appendix B for more details on amendments per Session Law 2020-91, Section 5.4.



## 2. DEPARTMENT IMPLEMENTED RECOMMENDATION TO DEVELOP SPENDING PLAN BASED ON SPECIFIC PROJECTS AND OPERATIONS

The Department of Transportation (Department) **implemented** the Office of the State Auditor's (OSA) recommendation<sup>25</sup> to develop the Department's Spending Plan based on **specific projects and operations** scheduled for the fiscal year. Specifically, the Department's SFY 2022 spending estimates for:

- Preliminary engineering<sup>26</sup> **were** based on specific projects and operations scheduled for the fiscal year.
- Operations and maintenance<sup>27</sup> **were** based on specific projects scheduled for the fiscal year and used statistical modeling.

### *Preliminary Engineering<sup>28</sup>*

The Department **did** estimate SFY 2022 spending for preliminary engineering based on actual planned projects and operations scheduled for the year.

Spending estimates for preliminary engineering included planned project expenditures, labor costs, and purchase order contracts.<sup>29</sup>

Auditors reviewed the spending estimates for preliminary engineering and found that the estimates were developed using specific projects scheduled for the year, employee staffing planned for the year, and historical expenditures.

For SFY 2022, the Department planned to spend \$285 million for preliminary engineering and spent \$291.6 million, an overspend of \$6.6 million (2.3%). However, total Construction expenditures were underbudget.

### *Operations and Maintenance*

The Department **did** estimate SFY 2022 spending for operations and maintenance based on actual planned maintenance projects for the year and using statistical modeling.

<sup>25</sup> September 2021 performance audit report titled *Department of Transportation Cash Spending Plan*.

<sup>26</sup> Preliminary engineering includes pre-construction activities, such as finding a location, designing the project, and planning work necessary to advance the project to physical construction.

<sup>27</sup> Operations and maintenance has six program areas: (1) contract resurfacing, (2) pavement preservation, (3) bridge program, (4) bridge preservation, (5) roadside environmental, and (6) general maintenance reserve.

<sup>28</sup> Preliminary engineering is included within the Construction expenditures category.

<sup>29</sup> Estimated spending for purchase order contracts was not based on projects. Instead it was estimated based on historical expenditures and updated for any known changes. The Department uses this method because purchase order contract estimate does not fluctuate year-to-year and makes up an insignificant portion of total preliminary engineering spending (6.32% for SFY 2022).

Spending estimates for Secondary Roads, Spot Safety, Contingency, Mobility/Modernization, General Maintenance Reserve, Roadside Environmental, Emergency General Maintenance Reserve (Undeclared Disasters),<sup>30</sup> and FEMA Disaster Funding were based on known or predicted projects for each highway division.<sup>31</sup>

Auditors reviewed the spending estimates for the above operations and maintenance program areas and found that the estimates were developed using specific projects scheduled at all 14 highway divisions.

Spending estimates for Contract Resurfacing, Pavement Preservation, Bridge Program, and Bridge Preservation were developed using a statistical modeling tool that was developed with the SAS Institute.<sup>32</sup> The statistical modeling tool used data from the Department's construction and financial accounting systems to create project-level forecasts for projects planned for the fiscal year.

Auditors reviewed the spending estimates for the above operations and maintenance program areas and noted the estimates agreed to the SAS forecasts.

In SFY 2022, the Department planned to spend \$1.86 billion for operations and maintenance and spent \$1.85 billion (-0.6%).

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### 3. DEPARTMENT IMPLEMENTED RECOMMENDATIONS TO MONITOR AND ENFORCE SPENDING PLAN

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The Department of Transportation (Department) **implemented** the Office of the State Auditor's (OSA) recommendations<sup>33</sup> to formally **monitor and enforce** each highway division's spending against the Department's Spending Plan.<sup>34</sup>

The Department implemented OSA's recommendations for the Chief Engineer's Office to formally **monitor and enforce** each highway division's spending on a regular basis throughout the fiscal year to ensure highway divisions do not overspend. Specifically, the Department developed and implemented:

- Procedures to ensure that the Spend Plan dashboards are accurate and updated timely.
- Monitoring and enforcement activities that were consistent among all 14 highway divisions.<sup>35</sup>

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<sup>30</sup> The Emergency General Maintenance Reserve (Undeclared Disasters) was not based on projects due to the nature of disasters not being known prior to occurrence.

<sup>31</sup> General Maintenance Reserve and FEMA, while project based, did have reserves (not project based) for unexpected events.

<sup>32</sup> The SAS Institute is a third-party statistical analysis firm that is assisting the Department revamp its forecasting processes.

<sup>33</sup> September 2021 performance audit report titled *Department of Transportation Cash Spending Plan*.

<sup>34</sup> State law required the Department to establish uniform and consistent monitoring practices. Session Law 2020-91, Sections 5.6.(a) and 5.6.(b), required the Department to develop and establish uniform (1) financial management structure, (2) report formats, and (3) policies and procedures.

<sup>35</sup> Includes implementation of uniform (1) financial management structure, (2) report formats, and (3) policies and procedures as required by Session Law 2020-91, Sections 5.6.(a) and 5.6.(b).

### **Monitoring Dashboards Were Accurate and Updated Timely**

The Department implemented procedures to ensure that the Department's 'Cash Spend Plan' dashboards are accurate and updated timely.

The Department's 'Cash Spend Plan' dashboard was created as a tool for the Chief Engineer's Office, highway divisions, and oversight bodies<sup>36</sup> to monitor forecasted versus actual spending. The 'Cash Spend Plan' dashboard is used to generate various other dashboards that assist with monitoring, including the 'Highway Maintenance Spend Plan' dashboard.

To ensure that the dashboards are accurate and updated timely, the Department's Funds Administration Section reconciles the dashboards monthly to the Department's internal financial statements.

Auditors reviewed the 'Cash Spend Plan' dashboard and the monthly reconciliations performed by the Funds Administration Section during SFY 2022, and found that all months were completed. Auditors tested four of the monthly reconciliations and found that the dashboards agreed to the Department's internal financial statements for each month. Therefore, auditors determined that the dashboards were accurate and updated monthly.

### **Highway Division Monitoring and Enforcement Was Consistent**

As required by state law,<sup>37</sup> the Department implemented policies and procedures to ensure that highway divisions monitored spending consistently and on a regular basis. Specifically, across all 14 highway divisions, the Department implemented uniform (1) highway division financial management structure, and (2) monitoring and enforcement reports and activities.

#### *Financial Management Structure*

As of March 2021, the Department established seven Regional Accountant positions. Each Regional Accountant is assigned two highway divisions and is responsible for managing and monitoring their assigned highway division spending for operations, maintenance, and construction.

The Regional Accountants received training from various members of the Chief Engineer's Office and the Enterprise Business Services<sup>38</sup> team during meetings and virtual calls. For example, during the 2021 meetings, topics included:

- Roles of the Regional Accountants.
- Disaster reporting.
- Cost planning.
- Dashboard/bi-weekly reporting and review due dates.
- Work breakdown structure<sup>39</sup> (WBS) elements.

<sup>36</sup> Oversight bodies include the Department's Board of Transportation and Financial Planning Committee as well as the Office of State Budget and Management.

<sup>37</sup> Session Law 2020-91, Sections 5.6.(a) and 5.6.(b).

<sup>38</sup> Team responsible for the Department's financial accounting system.

<sup>39</sup> A deliverable-oriented breakdown of a project into smaller components.

During SFY 2022, the Regional Accountants reported to the Director of Highway Operations in the Chief Engineer's Office.<sup>40</sup>

Auditors verified that all seven Regional Accountant positions existed on the Department's organization chart. Additionally, auditors verified that all positions were filled as of March 2021.

### *Monitoring and Enforcement Activities*

The Department established uniform activities to manage, monitor, and enforce highway division spending. Specifically,

**Bi-Weekly Monitoring** – Beginning in May 2021, the Department implemented and required each highway division to conduct bi-weekly monitoring reviews of Spending Plan maintenance expenditure activities.<sup>41</sup>

Bi-weekly monitoring reviews were conducted by the Regional Accountants using Bi-Weekly Reports generated from the Department's 'Highway Maintenance Spend Plan' dashboard.<sup>42</sup>

The Bi-Weekly Reports presented the annual spending target, the expenditures to-date, percentage of spending target spent to-date, and the remaining amount available. The Regional Accountants monitored spending targets and actual expenditures for all maintenance categories for each division. Variances between planned and actual spending were communicated to each division's Division Engineer, Construction Engineer, and Maintenance Engineer bi-weekly.

Auditors reviewed 28 out of 336 (8%)<sup>43</sup> Bi-Weekly Reports and related communication materials and verified the monitoring was implemented, uniform, and consistent throughout the year.

**Quarterly Monitoring** – Beginning January 2022, the Department also implemented quarterly variance reviews of planned and actual maintenance expenditure activities for all 14 highway divisions and the statewide division.<sup>44</sup>

Quarterly variance reviews were conducted by the Regional Accountants, the Director of Highway Operations, and the Chief Engineer or Deputy Chief Engineer using the Quarterly Variance Review Spreadsheet. The Quarterly Variance Review Spreadsheet is prepared by the Regional Accountants using information from the Bi-Weekly Monitoring reviews.

<sup>40</sup> The Department is in the process of filling a Business Manager position in the Chief Engineer's Office that will oversee the Regional Accountants.

<sup>41</sup> Maintenance expenditures include other construction, general maintenance reserve, contract resurfacing, roadside environmental, pavement preservation, bridge program, bridge preservation, and disasters.

<sup>42</sup> Generated from the 'Cash Spend Plan' dashboard created to monitor forecasted versus actual spending for maintenance expenditure.

<sup>43</sup> Auditors selected two Bi-Weekly Reports for each highway division, one from the first half and one from the second half of SFY 2022.

<sup>44</sup> The Statewide Division is used to record statewide maintenance funded expenditures, such as state park maintenance, historical markers, beaver control, etc.

The Quarterly Variance Review Spreadsheet presented the highway division, applicable maintenance category, cumulative spending target to-date (based on quarter being monitored), cumulative expenditures to-date, annual spending target, and variance amounts and percentages.

During the quarterly variance review, cumulative spending and planned spending is reviewed for each maintenance category to determine whether it is within established quarterly variance thresholds.

The Department developed and implemented quarterly variance thresholds for maintenance expenditures, including procedures to hold divisions accountable for spending that would require corrective action or adjustment to the Spending Plan.

- Quarter 1 (July – September) variances should be within 20% of the approved spending plan at the end of each month during the quarter.
- Quarter 2 (October – December) variances should be within 15% of the approved spending plan at the end of each month during the quarter.
- Quarter 3 (January – March) variances should be within 10% of the approved spending plan at the end of each month during the quarter.
- Quarter 4 (April – June) variances should be within 5% of the approved spending plan at the end of each month during the quarter.<sup>45</sup>

If variances that exceed thresholds are noted during the quarterly variance reviews, the Regional Accountants, the Director of Highway Operations, and the Chief Engineer or Deputy Chief Engineer discuss and document the cause of the variance and the planned corrective actions, including the anticipated month to be back within target. Potential actions included:

- Reallocation adjustments within the division spending plan allocations.
- Suspending the start of new projects.
- Halting spending on projects currently in progress.
- Proposing Spending Plan amendments.<sup>46</sup>

Auditors reviewed the March 2022 and June 2022 Quarterly Variance Review Spreadsheets and verified the monitoring was implemented, uniform, and consistent for all 14 highway divisions and the statewide division. From review of the March 2022 Quarterly Variance Review Spreadsheet, auditors found the following examples of variances and corrective actions:

- Division 6 underspent its resurfacing target by \$5.51 million (40.69%) due to staffing limitations and other contractual obligations that resulted in delays on active contracts.

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<sup>45</sup> See Appendix A.

<sup>46</sup> Spending Plan amendments require approval from the Financial Planning Committee, Office of State Budget and Management, and the Board of Transportation.

A reduction in annual spending target expenditures from \$26.23 million to \$21.05 million was suggested and approved to be reallocated to other highway divisions for resurfacing projects.

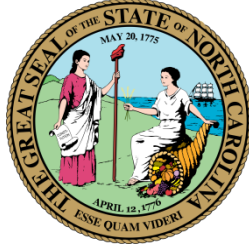
- Division 4 overspent its resurfacing target by \$7.2 million (35.38%) due to the contractor completing work ahead of schedule which enabled more work to be completed.

The suggested action was to increase annual spend target expenditures from \$41.16 million to \$50 million (increase of \$8.84 million) using reallocations from resurfacing projects from other highway divisions. Other options included delaying resurfacing projects and extending completion of four recently awarded contracts. The **reallocation adjustment** was approved.

Previously, the extent and frequency of monitoring and enforcement was largely left up to each highway division, resulting in inconsistencies such as:

- Divisions running spending reports at various frequencies, including weekly, bi-weekly, or monthly.
- Divisions using reports that varied in presentation and level of details.
- Divisions having different positions primarily responsible for managing spending.

Consistent, uniform monitoring and reporting helps reduce the risk that the Department would exceed its Spending Plan in a future period or fail to act when significant overages are identified.



# APPENDICES

## APPENDIX A

Auditors reviewed the variances between maintenance spending allocations and actual expenditures for each division to determine whether divisions were within the 5% threshold at year-end. Auditors verified that divisions outside the 5% threshold were addressed during the June 2022 quarterly variance review.

**Highway Division Maintenance Spending vs. Allocation**  
**State Fiscal Year 2022 (July 2021 – June 2022)**

	In Millions			
Division	Maintenance - Spending Allocation	Maintenance - Actual Spending	Amount Overspent/ (Underspent)	% Amount Overspent/ (Underspent)
1	\$72	\$77	\$5	6.9 %
2	\$81	\$86	\$5	6.2 %
3	\$82	\$100	\$18	22.0 %
4	\$113	\$116	\$3	2.7 %
5	\$133	\$121	\$(12)	(9.0) %
6	\$81	\$81	\$0	0.0 %
7	\$117	\$117	\$0	0.0 %
8	\$98	\$96	\$(2)	(2.0) %
9	\$84	\$82	\$(2)	(2.9) %
10	\$89	\$89	\$0	0.0 %
11	\$95	\$92	\$(3)	(3.2) %
12	\$104	\$100	\$(4)	(3.8) %
13	\$89	\$90	\$1	1.1 %
14	\$100	\$102	\$2	2.0 %
19 <sup>47</sup>	\$330	\$244	\$(86)	(26.1) %

**Source:** Department SFY 2022 Highway Maintenance Spend Plan Dashboard<sup>48</sup> and auditor analysis.

<sup>47</sup> Division 19 is the Statewide Division used to record statewide maintenance funded expenditures.

<sup>48</sup> Maintenance expenditures included in the quarterly variance review monitoring at the divisions includes general maintenance reserve, contract resurfacing, roadside environmental, pavement preservation, bridge program, bridge preservation, and disasters.



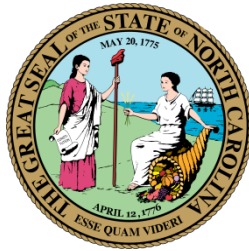
## APPENDIX B

**Legislative Oversight for the Department's Spending Plan  
Session Law 2020-91**

Legislative Reference	Requirement	Status
Section 4.1.(d)	Beginning with the 2021 – 2022 fiscal year, the Department, in collaboration with the Office of State Budget and Management, shall develop a five-year revenue forecast. The five-year revenue forecast will be used (1) to develop the five-year cash flow estimates included in the biennial budgets, (2) to develop the Strategic Transportation Improvement Program, and (3) by the Department of the State Treasurer to compute transportation debt capacity.	The Department's five-year revenue forecast was prepared in collaboration with the Office of State Budget and Management.
Section 5.2.(a)	Requires the Department to maintain an available cash balance at the end of each month equal to at least 7.5% of the total appropriations for the current fiscal year from the Highway Fund and Highway Trust Fund.	The Department's cash balance exceeded the required minimum cash balance every month during SFY 2022.
Section 5.3.(a)	Required the Department to prepare new monthly and annual financial reports created in consultation with the Office of State Budget and Management and deliver to the Board of Transportation and the Legislature's Joint Legislative Transportation Oversight Committee and Fiscal Research Division.	The Department has prepared and provided monthly financial statement reports that contain all information required by Section 5.3.(a) during SFY 2022.
Section 5.4	Required the Department's Spending Plan to be approved by the Board of Transportation, Transportation Oversight Manager at the Office of State Budget and Management, and the State Budget Director.  Required modifications to or expenditures outside of the Department's Spending Plan to be approved by the Board of Transportation, Transportation Oversight Manager at the Office of State Budget and Management, and the State Budget Director.	The Department's SFY 2022 Spending Plan had the following amendments during SFY 2022:  Amendment #1 was approved in December 2021 to incorporate the passage of the state's budget.  Amendment #2 was approved in March 2022 to incorporate revised project forecasts.  Auditors verified that both amendments were reviewed and approved by the Board of Transportation and the Office of State Budget and Management.
Section 5.5.(a)	Created the Transportation Oversight Manager position at the Office of State Budget and Management for the purpose of: <ul style="list-style-type: none"> <li>Monitoring and assisting the Department develop its Spending Plan.</li> <li>Monitoring the Department's finances.</li> <li>Collaborating on assessing the Department's financial risks.</li> <li>Making revenue and cash projections</li> <li>Ensuring the Department's budget is executed consistent with the State Budget Act.</li> </ul>	The position was initially filled as of January 25, 2021, and was filled during SFY 2022.

Section 5.6.(a) – (b)	Requires the Department to develop and establish uniform financial management personnel structure in all Highway Divisions. Additionally, the Department is required to develop and establish uniform report formats and policies and procedures that calculate spending and track cash management.	The Department has established uniform personnel structure and uniform, consistent reporting formats and policies.
Section 5.7	<p>Created Financial Analyst position at the Department of the State Treasurer for the purpose of:</p> <ul style="list-style-type: none"> <li>• Reviewing and monitoring the Department's bond program and activities that use bond proceeds.</li> <li>• Monitoring spending and approval of projects using bond proceeds.</li> <li>• Reviewing compliance for repayment and debt service.</li> </ul>	The position was initially filled as of April 5, 2021, and was filled during SFY 2022.
Section 5.8.(a)	Required the Department and Transportation Oversight Manager to develop and implement forecasting methodology, best practices, and accuracy standards for forecasting of spending.	<p>The Department initially developed forecasting methodology and presented it to the Board of Transportation and General Assembly on December 31, 2020. During SFY 2022, the Department has continued to implement and adjust forecasting methodology.</p> <p>Note: The methodology was not developed with the Transportation Oversight Manager as the position was not filled until January 25, 2021. See above.</p>

**Source:** Requirements from Session Law 2020-91. Status identified through auditor analysis.



# **RESPONSE FROM DEPARTMENT OF TRANSPORTATION**



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

April 21, 2023

The Honorable Beth A. Wood, State Auditor  
Office of the State Auditor  
2 South Salisbury Street  
20601 Mail Service Center  
Raleigh, North Carolina 27699-0601

I have reviewed the audit of the State Fiscal Year 2022 Cash Spending Plan required by Session Law 2020-91, Section 5.9.(a). We agree that the Department did not exceed the Spend Plan for SFY 2022, and it was developed based on specific project analysis. The Cash Spend Plan is monitored, and any adjustments are made to ensure highway division compliance.

The Department will continue to make necessary improvements in spend plan development and execution to ensure compliance and optimal performance measures are met.

We would like to commend the professional staff that worked with us throughout this audit.

Sincerely,

A handwritten signature in dark ink, appearing to be "J. Eric Boyette", with a long horizontal line extending to the right.

J. Eric Boyette  
Secretary of Transportation

# ORDERING INFORMATION

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