STATE OF NORTH CAROLINA

OFFICE OF THE STATE AUDITOR
BETH A. WOOD, CPA







DEPARTMENT OF TRANSPORTATION

CASH SPENDING PLAN

PERFORMANCE AUDIT
SEPTEMBER 2021





EXECUTIVE SUMMARY

PURPOSE

The purpose of this audit was to determine whether the Department of Transportation (Department):

- (1) Complied with its Spending Plan for the first half of state fiscal year (SFY) 2021,¹ 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 May 2020.²

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

KEY FINDINGS

The Department of Transportation (Department) did not exceed its **developed** Spending Plan for the first half of state fiscal year (SFY) 2021 (July 2020 through December 2020).

However, the Department's Spending Plan was not developed based on specific projects and operations scheduled for the fiscal year.

Consequently, the fact that the Department had not yet exceeded its Spending Plan was **largely due to chance**. It was not the result of Department management's planning and control based on realistic expectations for the fiscal year (see Finding 1 on page 6).

Furthermore, the Department is **still at risk** for exceeding its Spending Plan in future periods because it **has not implemented** the Office of the State Auditor's (OSA) recommendations³ to (1) develop the Spending Plan based on specific projects and operations (see Finding 2 on page 6) and to (2) monitor and enforce highway division compliance with the Spending Plan (see Finding 3 on page 9).

KEY RECOMMENDATIONS

- 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.

The key findings and recommendations in this summary may not be inclusive of all the findings and recommendations in this report

¹ The scope period of July 1, 2020 – December 31, 2020 was selected instead of SFY 2020 to allow the Department an opportunity to implement prior audit recommendations.

² https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.

³ Ibid.

STATE OF NORTH CAROLINA

Office of the State Auditor



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AUDITOR'S TRANSMITTAL

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 Cash Spending Plan*. The audit objectives were to determine whether the Department of Transportation (Department):

- (1) Complied with its Spending Plan for the first half of state fiscal year (SFY) 2021, 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 May 2020.

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

The Department of Transportation Secretary, Eric Boyette, reviewed a draft copy of this report. His written comments are included starting on page 20.

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,

Betel A. Wood

Beth A. Wood, CPA State Auditor



Beth A. Wood, CPA State Auditor

TABLE OF CONTENTS

	Page
BACKGF	ROUND1
Овјест	TIVES, SCOPE, AND METHODOLOGY
RESULT	rs And Conclusion5
FINDING	SS, RECOMMENDATIONS, AND RESPONSES
	DEPARTMENT DID NOT EXCEED SPENDING PLAN FOR 1ST HALF OF STATE FISCAL YEAR 2021, BUT RISK OF OVERSPENDING REMAINS
	DEPARTMENT DID NOT IMPLEMENT RECOMMENDATION TO DEVELOP SPENDING PLAN BASED ON SPECIFIC PROJECTS AND OPERATIONS
_	DEPARTMENT DID NOT IMPLEMENT RECOMMENDATIONS TO MONITOR AND ENFORCE SPENDING PLAN9
MATTER	RS FOR FURTHER CONSIDERATION
	OPERATIONS AND MAINTENANCE SPENDING BASED ON APPROPRIATIONS
	LEGISLATION INCREASED OVERSIGHT OF THE HIGHWAY FUNDS
APPEND	DICES
APP	PENDIX A
APP	PENDIX B
STATE A	AUDITOR'S RESPONSE19
RESPO	NSE FROM DEPARTMENT OF TRANSPORTATION20
ORDERI	ING INFORMATION25



BACKGROUND

Session Law 2020-91 Section 5.9.(a) required the Office of the State Auditor (OSA) to conduct a performance audit of the Department of Transportation (Department) annually.⁴

The legislation was enacted because of an OSA May 2020 audit⁵ report titled *Department of Transportation Cash Spending Plan*.⁶ The audit 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.⁷ 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.

The May 2020 audit report recommended that:

- The Department should base its Spending Plan on specific projects and operations scheduled for the fiscal year.
- 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 don't overspend, particularly for Operations & Maintenance, Preliminary Engineering, and Disasters.
- The Chief Engineer's Office should delay contract approvals, implement mid-year budget reductions, or take other corrective actions whenever highway divisions are overspending budgeted allocations. The Chief Engineer should consider requiring any necessary corrections on a quarterly basis.

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 80,159 miles of highways and 18,540 bridges. Headed by the Chief Engineer's Office.⁸

⁴ The scope period of July 1, 2020 – December 31, 2020 was selected instead of SFY 2020 to allow the Department an opportunity to implement prior audit recommendations.

⁵ Audit was required by Session Law 2019-251.

⁶ https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.

NCGS §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.

The Chief Engineer's Office consists of the Chief Engineer, the Director of Highway Operations, and three Deputy Chief Engineers.

BACKGROUND

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.

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 NC Build Bonds or GARVEE bonds.



OBJECTIVES, SCOPE, AND METHODOLOGY

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

- (1) Complied with its Spending Plan for the first half of state fiscal year (SFY) 2021,⁹ 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 May 2020.¹⁰

As directed by Session Law 2020-91, the audit scope included budget adherence (See Note A) by Department, division, and highway division; timeliness of federal reimbursement requests and response to federal inquiries (See Note B); controls and oversight of divisions and highway divisions related to cash management, project coordination and delivery, 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 the first half of SFY 2021, auditors:

- Inspected the Department's SFY 2021 Cash Model Baseline Forecast vs. Actual.¹¹
- Checked the math in the Department's SFY 2021 Cash Model Baseline Forecast vs. Actual.
- Reconciled cash balances from Department's SFY 2021 Cash Model Baseline Forecast vs. Actual to Cash Management Control System reports from the North Carolina Office of the State Controller.

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

- Interviewed Department personnel and personnel at the Office of the State Controller and Office of State Budget and Management.
- Reviewed Department policies and procedures.
- 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.

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 lack of compliance.

The scope period of July 1, 2020 – December 31, 2020 was selected instead of SFY 2020 to allow the Department an opportunity to implement prior audit recommendations.

https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.

¹¹ As of December 31, 2020.

OBJECTIVES, SCOPE, AND METHODOLOGY

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. See Appendix B for internal control components and underlying principles that were significant to our audit objectives.

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 that found that external oversight of the Department's Highway Funds differed significantly from the oversight of other agencies. Auditors determined that several additional measures have been established to improve external oversight of the Department's Spending Plan. See "Matters for Further Consideration" on page 15 for further discussion.
- **B.** When evaluating timeliness of federal reimbursement requests and response to federal inquiries, auditors determined that the Department was submitting weekly reimbursement requests and had requested the maximum allowable reimbursement each year. Further, an OSA audit report on the Department's advance construction report required by Session Law 2020-91 Section 5.11.(a) was released in May 2021. https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2021-4200.pdf.



RESULTS AND CONCLUSIONS

The Department of Transportation (Department) did not exceed its **developed** Spending Plan for the first half of state fiscal year (SFY) 2021 (July 2020 through December 2020).

However, the Department's Spending Plan was not developed based on specific projects and operations scheduled for the fiscal year.

Consequently, the fact that the Department had not yet exceeded its Spending Plan was **largely due to chance**. It was not the result of Department Management's planning and control based on realistic expectations for the fiscal year (see Finding 1 on page 6).

Furthermore, the Department is **still at risk** for exceeding its Spending Plan in future periods because it **has not implemented** the Office of the State Auditor's (OSA) recommendations¹² to (1) develop the Spending Plan based on specific projects and operations (see Finding 2 on page 6) and to (2) monitor and enforce highway division compliance with the Spending Plan (see Finding 3 on page 9).

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¹² https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.



FINDINGS, RECOMMENDATIONS, AND RESPONSES

1. DEPARTMENT DID NOT EXCEED SPENDING PLAN FOR 1ST HALF OF STATE FISCAL YEAR 2021, BUT RISK OF OVERSPENDING REMAINS

The Department of Transportation (Department) did not exceed its **developed** Spending Plan for the first half of state fiscal year (SFY) 2021 (July 2020 through December 2020). See Appendix A.

However, the Department's Spending Plan was not developed based on specific projects and operations scheduled for the fiscal year.

Consequently, the fact that the Department had not yet exceeded its Spending Plan was **largely due to chance**. It was not the result of Department Management's planning and control based on realistic expectations for the fiscal year.

Furthermore, the Department is **still at risk** for exceeding its Spending Plan in future periods because it **has not implemented** the Office of the State Auditor's (OSA) recommendations¹³ to (1) develop the Spending Plan based specific projects and operations (see Finding 2 below) and to (2) monitor and enforce highway division compliance with the Spending Plan (see Finding 3 on page 9).

AGENCY RESPONSE

See page 21 for the Department's response to this finding.

2. DEPARTMENT DID NOT IMPLEMENT RECOMMENDATION TO DEVELOP SPENDING PLAN BASED ON SPECIFIC PROJECTS AND OPERATIONS

The Department of Transportation (Department) did not base its Spending Plan on specific projects and operations scheduled for the fiscal year as recommended in the Office of the State Auditor's (OSA) May 2020 audit report. As a result, Department management will have a difficult time managing and complying with the Spending Plan which **increases the risk** that the Department could overspend in future periods.

Additionally, the Department is limited in its ability to analyze and determine whether deviations from planned spending occurred due to inaccurate forecasts, changes in the economy, changes in cost, improved operations, or fraud. The Department stated that it did not implement corrective action because (1) it was difficult to forecast project-level costs during a pandemic and (2) a statistical modeling tool was still being developed when the state fiscal year (SFY) 2021 Spending Plan was created.

Best practices identified by the Government Accountability Office (GAO) recommend that corrective actions be implemented on a **timely** basis. Implementing corrective actions **timely** would ensure that the practices that led to the Department's overspending in the past are less likely to occur in future periods.

¹⁴ https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.

https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.

Spending Plan Not Developed based on Specific Projects and Operations

The Department did not implement OSA recommendations related to the development of the Spending Plan. Specifically, the Department's SFY 2021 preliminary engineering and operations and maintenance ¹⁵ spending estimates were not based on specific projects and operations scheduled for the fiscal year.

Preliminary Engineering

The Department did not estimate SFY 2021 spending for preliminary engineering based on **specific** projects or operations for the entire year. ¹⁶

Instead, for October 2020 through June 2021, spending was estimated using assumptions from prior-year spending.

In the first half of SFY 2021, the Department planned to spend approximately \$130 million for preliminary engineering and only spent \$106 million (-18%). The significant variance highlights how the Department's planned spending was not based on actual planned projects for the year. Further, since planned spending was not based on actual planned projects, it will be difficult for management to determine the causes of the variances and take appropriate corrective actions.

Operations and Maintenance

The Department did not estimate SFY 2021 spending for operations and maintenance based on **actual planned** maintenance projects for the year or use advanced statistical modeling.

Instead, the Department based estimated spending on the amount appropriated by the General Assembly for SFY 2021.¹⁷ According to the Director of Highway Operations, the Department then set targets for each highway division's operations and maintenance programs "conservatively at an amount below the legislative appropriation in order to help build our cash." ¹⁸

In the first half of SFY 2021, the Department planned to spend approximately \$656 million for operations and maintenance and only spent \$499 million (-24%). According to the Chief Financial Officer, the variance was caused by a mild winter leading to less money spent on snow and ice removal and abnormally large amounts of rainfall leading to less money spent on maintenance. However, since the Department's planned spending was not based on **actual planned** maintenance projects, it will be difficult for management to ensure funds are available to complete all appropriate maintenance projects during the year.

¹⁵ Operations and Maintenance has six program areas: (1) contract resurfacing, (2) pavement preservation, (3) bridge replacement, (4) bridge preservation, (5) roadside environment, and (6) general maintenance reserve.

¹⁶ Spending estimates for July 2020 through September 2020 were based on some project-level data.

¹⁷ Total appropriations for Operations and Maintenance for State Fiscal Year 2021 were \$1.61 billion.

Disaster spending is included in the general maintenance reserve. In SFY 2021, the Department did begin estimating some disaster spending based on historical spending information and project-level data. (e.g. snow and ice removal).

Resulted in Continued Risk of Overspending

Since the Department did not implement recommendations to base its Spending Plan on **specific projects and operations** scheduled for the fiscal year, Department management will have a difficult time managing and complying with the Spending Plan. As a result, there is an **increased risk** that the Department could exceed its Spending Plan in future periods.

The Department has overspent in the past because it did not develop the Spending Plan based on specific projects and operations scheduled for the year. For example, the Department:

- Overspent in preliminary engineering by \$194 million (61%) in SFY 2019
- Overspent in operations and maintenance by \$578 million (36%) in SFY 2019

Also Resulted in Limited Ability to Determine Causes of Spending Variance

Also, since the Department did not plan spending on specific projects scheduled for the fiscal year, the Department would not be able analyze spending variances and determine whether they were caused by:

- Inaccurate forecasts
- Changes in the economy
- Fraud
- Changes in costs
- Improved operations

Without knowing what **caused** spending variances, the Department cannot take appropriate corrective actions.

Department Stated It Was Difficult to Forecast Projects During the Pandemic

The Director of Technical Services stated that preliminary engineering spending was developed based on a percentage of estimated total construction project costs rather than project-level data because of uncertainties during the COVID-19 pandemic.

The Director stated the Department did not estimate spending for preliminary engineering based on specific projects because it was not sure how many projects would be able to move forward or the timing for projects to start up due to the economic decline caused by the COVID-19 pandemic. According to the Director, the economic decline made it increasingly difficult to estimate spending for preliminary engineering at the project-level.

Also Caused by Lack of Fully Developed Statistical Forecasting Model

The Director of Highway Operations stated that operations and maintenance spending was not based on specific projects and operations scheduled for the year because a statistical modeling tool that would estimate the spending was still being developed at the time the SFY 2021 Spending Plan was created.

According to the Director, compared to the statistical modeling tool used to estimate construction spending, there are many differences that required further refining for the operations and maintenance tool to achieve good statistical accuracy.

However, according to the Department, the modeling tool has been developed and is expected to be used to estimate operations and maintenance spending beginning with the SFY 2022 Spending Plan.

Best Practices Recommend Timely Implementation of Corrective Action

Government Accountability Office (GAO)¹⁹ best practices recommend that management should implement corrective action **timely**:

Management should remediate identified internal control deficiencies on a timely basis...These corrective actions include resolution of audit findings.

OSA recommended the Department base its Spending Plan on specific projects and operations scheduled for the fiscal year in a May 2020 report. As of the date of this report, this recommendation was not implemented.

RECOMMENDATIONS

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 Department should implement the prior audit recommendations timely and adequately address identified deficiencies to mitigate risk of overspending in future periods.

AGENCY RESPONSE

See page 21 for the Department's response to this finding.

3. DEPARTMENT DID NOT IMPLEMENT RECOMMENDATIONS TO MONITOR AND ENFORCE SPENDING PLAN

The Department of Transportation (Department) did not formally monitor and enforce each highway division's spending against the Department's state fiscal year (SFY) 2021 Spending Plan as recommended in the Office of the State Auditor's (OSA) May 2020 audit report.²⁰ As a result, there continued to be a risk that the Department could overspend in future periods.

Staff in the Chief Engineer's Office stated that corrective action was not implemented because the Department was waiting to create and fill new financial positions before it established and developed forms, policies, and procedures for formal highway division monitoring.

¹⁹ United States Government Accountability Office, <u>Standards for Internal Control in the Federal Government</u>, September 2014.

²⁰ https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.

Best practices identified by the Government Accountability Office (GAO) recommend that corrective actions be implemented on a timely basis. Implementing corrective actions timely would assist Department management in managing and complying with the Spending Plan by **monitoring** and **enforcing** each highway division's spending.

Chief Engineer's Office Did Not Formally Monitor and Enforce Spending

The Department did not implement OSA recommendations for the Chief Engineer's Office to formally monitor and enforce each highway division's spending on a regular basis. Specifically, the Chief Engineer's Office did not establish policies and procedures or provide guidance to the 14 highway divisions to ensure:

- Monitoring activities were consistent among all highway divisions.
- Monitoring dashboards²¹ were updated timely and accurate.
- Highway divisions did not overspend their allotments.

Highway Divisions Monitoring Was Not Consistent

Although required to by state law,²² the Chief Engineer's Office did not ensure that Department highway divisions performed monitoring activities consistently.

The extent and frequency of monitoring was still largely left up to each highway division and the resulting inconsistencies included:

- Divisions ran spending reports at varying frequencies including weekly, bi-weekly, or monthly.
- Divisions used reports that varied in presentation and level of details. The various reports used for monitoring construction spending included reports that showed cost over/under-run by individual contract line items, reports that showed cost over/under-run at the contract level, and reports that showed cost over/under-run by work breakdown structure (WBS) element.²³
- Divisions had different positions primarily responsible for managing spending of contracted programs.²⁴ Those primarily responsible included the Division Engineer, the Maintenance Engineer, or the Program Manager.

Monitoring Dashboards Were Not Updated Timely Nor Were They Accurate

The Department's Finance Metrics dashboards, which were created as tools for the Chief Engineer's Office, highway divisions, and oversight bodies to monitor forecasted versus **actual spending**, were not updated timely nor were they accurate.

Not Updated Timely - When auditors reviewed the 'Cash Spend Plan Variance' dashboard on January 7, 2021, auditors found that the information in the dashboard was only updated through October 31, 2020. According to the Manager of Performance Metrics & Management, the dashboard was supposed to be updated monthly by the Enterprise Business Services team, and it was an oversight that it was not.

²³ A deliverable-oriented breakdown of a project into smaller components.

²¹ Tools created for the Chief Engineer's Office, highway divisions, and oversight bodies to monitor forecasted verses **actual spending**.

²² Session Law 2020-91 Sections 5.6.(a) and 5.6.(b).

²⁴ Includes Contract Resurfacing, Pavement Preservation, and Bridge Preservation.

• **Not Accurate** - Total expenditures were understated by at least \$49 million (9.5%). The Department's 'Highway Maintenance Spend Plan' dashboard listed total expenditures as \$462 million instead of \$511 million. ²⁵ According to the Business Systems Analyst, the error was due to a glitch in the dashboard's programming and was not fixed until March 2021.

Until auditors brought these issues to the Department's attention, no one within the Department had verified the accuracy of the information in the dashboard. According to the Manager of Performance Metrics & Management, the Department **relied on dashboard users to verify** the accuracy of the information.

Since these issues were not identified and corrected, users of the dashboards had inaccurate information to monitor and manage spending. However, it also calls into question how frequently and to what extent the dashboards were **actually used for monitoring** the Spending Plan. When asked, the Chief Engineer stated that his office **does not use** the dashboards to monitor spending.

Highway Divisions Can Overspend Allocations²⁶

The Department's highway divisions are still allowed to exceed their allocations without enforcement. The Department has not yet set any threshold or put into place any procedures to hold highway divisions accountable for over-spending that would require corrective action or adjustment to the Spending Plan.

Instead, if highway divisions exceed an allocation, the division's allocation for the next period is reduced or "borrowed against." This practice is still allowed to continue over multiple periods without consequence, reducing the incentive for divisions to adhere to the Spending Plan and increasing the risk the Department will fall below the statutory cash floor.²⁷

Resulted in Continued Risk of Overspending

Since the Department did not implement recommendations to formally monitor and enforce each highway division's spending on a regular basis, there remains an increased risk that the Department could exceed its Spending Plan in future periods.

The Department has overspent in the past because it lacked procedures to monitor and enforce its Spending Plan. For example, the Department:

- Overspent in preliminary engineering by \$194 million (61%) in SFY 2019.
- Overspent in operations and maintenance by \$578 million (36%) in SFY 2019.
- Overspent highway division allocations by \$272 million (12%) in SFY 2020, requiring highway divisions to use SFY 2021 allocations to cover the SFY 2020 overdrafts.

²⁶ Session Law 2020-91 Section 5.10. required the Department to develop a uniformly applicable formula for the allocation of funds and to allocate funds to highway divisions on a quarterly basis.

²⁵ Per the Department's accounting records as of December 31, 2020.

²⁷ NCGS §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.

Caused by Decision to Delay Implementation Until New Positions Filled

The Department stated that corrective action was not implemented because it was waiting to create and fill new financial positions before it established and developed forms, policies, and procedures for formal highway division monitoring.

According to the Department, these positions were filled in March 2021 and policies and procedures for the consistent monitoring and enforcement of highway division spending are currently being developed. The Department expects oversight procedures to be fully developed and implemented in July or August 2021.

Best Practices Recommend Timely Implementation of Corrective Action

Government Accountability Office (GAO)²⁸ best practices recommend that management should implement corrective action **timely**:

Management should remediate identified internal control deficiencies on a timely basis...These corrective actions include resolution of audit findings.

OSA recommended the Department formally monitor and enforce each highway division's spending on a regular basis throughout the year in a May 2020 report. As of the date of this report, this recommendation was not implemented.

State Law Required Department to Monitor Spending Consistently

State law²⁹ required the Department to develop and establish policies and procedures to ensure that highway divisions monitor spending in a consistent manner.

The Department of Transportation shall develop and establish a **uniform financial management personnel structure** within all Highway Division offices. Each position shall have clear responsibilities for financial management of accounts payable, accounts receivable, contract oversight, and budgets. Each Highway Division office is required to maintain personnel competent in Department cash management practices and Division project management as it relates to project spending.

The Department of Transportation shall develop and establish uniform report formats and policies and procedures that calculate spending and track cash management in a **consistent manner among Highway Divisions**. The Department shall provide training on all forms, systems, and policies developed by the Department pursuant to this section. (*Emphasis Added*)

RECOMMENDATIONS

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.

²⁸ United States Government Accountability Office, <u>Standards for Internal Control in the Federal Government</u>, September 2014.

²⁹ Session Law 2020-91 Sections 5.6.(a) and 5.6.(b).

FINDINGS, RECOMMENDATIONS, AND RESPONSES

The Department should develop and establish (a) a uniform financial management personnel structure within all highway division offices and (b) uniform report formats and policies and procedures to ensure that highway divisions monitor spending in a consistent manner.

The Chief Engineer's Office should set a threshold or put into place necessary procedures to hold divisions accountable for spending that would require corrective action or adjustment to the Spending Plan.

The Department should ensure that the Finance Metrics dashboards are accurate and updated timely.

The Department should implement the prior audit recommendations timely and adequately address identified deficiencies to mitigate risk of overspending in future periods.

AGENCY RESPONSE

See page 22 for the Department's response to this finding.



MATTERS FOR FURTHER CONSIDERATION

During an audit, Office of the State Auditor staff may uncover potential items that are outside of the audit objective. Although the items may not have been part of the planned objective, the items need to be presented to those charged with governance of the organization under audit. Below are two such items.

1. OPERATIONS AND MAINTENANCE SPENDING BASED ON APPROPRIATIONS

As was noted in Finding 2 (page 6), the projected spending for operations and maintenance, included in the Spending Plan for state fiscal year (SFY) 2021, was based on the amount appropriated for operations and maintenance by the General Assembly for SFY 2021. **The Department then sets** targets for each highway division's operations and maintenance programs conservatively at an amount below the legislative appropriation in order to build cash. This methodology does not take into account what the total costs of Operations and Maintenance of North Carolina transportation system for a fiscal year should be.

As a result, there could be a gap between what is budgeted and what is needed to **effectively operate and maintain** the state's transportation system each fiscal year. If timely maintenance of North Carolina's transportation system falls behind, the condition of a highway may dictate repairs or replacement not planned for in a given fiscal year and may place an undue burden on the Department's cash flow.

LEGISLATION INCREASED OVERSIGHT OF THE HIGHWAY FUNDS

The Office of the State Auditor (OSA) performance audit report titled Department of Transportation Cash Spending Plan issued in May 202030 included a Matter for Further Consideration that stated that oversight of the Department of Transportation's (Department) Highway Fund and Highway Trust Fund differed significantly from the oversight of other state agencies. The Matter for Further Consideration stated:

The Legislature should consider requiring a level of oversight for the Department of Transportation's (Department) Highway Fund and Highway Trust Fund to the level of oversight provided for the State's General Fund³¹ agencies.

In response, the Legislature passed Session Law 2020-91 that included several measures designed to increase external oversight for the Department's Highway Funds. See Chart below for the implementation status of legislative requirements

Legislative Reference	Requirement	Status
Section 5.1.(a)	Increased Board of Transportation's powers and duties related to oversight of the Department's Spending Plan. Legislation required the Board to: Expand to 20 voting members. Ensure the solvency of the State Highway Funds. Develop accountability and performance metrics and hold the Department accountable to those metrics. To review and act on the Department's Spending Plan. To ensure the Department is operating within the approved Spending Plan.	 Beginning in state fiscal year (SFY) 2021, the Board: Has 20 board members. Reviews the Department's weekly cash balance reports. Reviews budget-to-actual financial reports at least monthly. Discusses the Department's financial condition during monthly Board of Transportation meetings. Works with the Department's General Counsel to confirm that it is in compliance with Session Law 2020-91 requirements. The Board of Transportation's Chairman is a member of the Department's Financial Planning Committee and attends committee meetings.
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 Section 5.3.(a) through December 2020. Note: Reports were not prepared in consultation with the Office of State Budget and Management through December 2020 as the Transportation Oversight Manager position was not filled until January 25, 2021. See below.

³⁰ https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.

³¹ The General Fund is made up of tax revenues (non-transportation) such as sales tax, individual income tax, corporate tax, insurance premium tax, and franchise tax. In addition, the general fund includes non-tax revenues such as income from the State Treasurer's investments, fees received from the court system, miscellaneous fees charged for state services, transfers from the Highway Fund and the Highway Trust Fund, and Medicaid disproportionate share receipts.

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 2021 Spending Plan and first Spending Plan amendment were reviewed and approved by the Board of Transportation and the State Budget Director. Note: Neither was approved by the Transportation Oversight Manager as the position was not filled until January 25, 2021. See below.
Section 5.5.(a)	Created the Transportation Oversight Manager position at the Office of State Budget and Management for the purpose of: Monitoring and assisting the Department develop its Spending Plan. Monitoring the Department's finances. Collaborating on assessing the Department's financial risks. Making revenue and cash projections Ensuring the Department's budget is executed consistent with the State Budget Act.	The position was filled as of January 25, 2021.
Section 5.7.	Created Financial Analyst position at the Department of the State Treasurer for the purpose of: Reviewing and monitoring the Department's bond program and activities that use bond proceeds. Monitoring spending and approval of projects using bond proceeds. Reviewing compliance for repayment and debt service.	The position was filled as of April 5, 2021.
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.	The Department developed forecasting methodology and presented it to the Board of Transportation and General Assembly on December 31, 2020. Note: The methodology was not developed with the Transportation Oversight Manager as the position was not filled until January 25, 2021. See above.

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



APPENDICES

APPENDIX A

Department of Transportation Spending vs. Forecast State Fiscal Year 2021 (July 2020 – December 2020)

	In millions			
Expenditure Category	Baseline Spending Forecast	Actual Spending	Difference	% Difference
Construction ³²	\$1,620	\$1,495	\$(125)	(7.7) %
Operations & Maintenance ³³	\$656	\$499	\$(157)	(24.0) %
Other Modes ³⁴	\$233	\$191	\$(42)	(18.2) %
Other ³⁵	\$339	\$338	\$(1)	(0.2) %
Total:	\$2,848	\$2,523	\$(325)	(11.4) %

Source: Department SFY 2021 Cash Model Baseline Forecast vs. Actual and auditor analysis. Analysis did not include determining whether expenses were properly categorized.

The Department's cash balance was \$1.1 billion as of December 31, 2020.36

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³² Construction expenditures include larger capital projects (over \$10 million) that require four to five years to complete, GARVEE Expenditures, State Transportation Improvement Projects (STIP), and Right-of-Way (ROW) Expenditures.

³³ Operations and Maintenance expenditures include contract resurfacing, pavement preservation, bridge replacement, bridge preservation, roadside environment, general maintenance reserve and disaster funding.

³⁴ Other modes expenditures include public transportation, ferry, railroads, and airports.

³⁵ Other expenditures category includes administration, transfers, state aid to municipalities, debt service, and other.

³⁶ As a result of the increased cash balance, the Department requested and received approval from the Board of Transportation and the Office of State Budget and Management to amend its initial Spending Plan to increase spending by \$270 million during the remainder of SFY 2021.

APPENDIX B

Internal Control Components and Principles Significant to the Audit Objectives

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

- (1) Complied with its Spending Plan for the first half of state fiscal year (SFY) 2021,³⁷ 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 May 2020.³⁸

Internal control components and underlying principles that were significant to our audit objectives are identified in the table below.

	Audit Objectives
Control Environment	
1. The oversight body and management should demonstrate a commitment to integrity and ethical values.	
2. The oversight body should oversee the entity's internal control system.	
3. Management should establish an organizational structure, assign responsibility, and delegate authority to achieve the entity's objectives.	Х
4. Management should demonstrate a commitment to recruit, develop, and retain competent individuals.	
 Management should evaluate performance and hold individuals accountable for their internal control responsibilities. 	
Risk Assessment	
6. Management should define objectives clearly to enable the identification of risks and define risk tolerances.	Х
7. Management should identify, analyze, and respond to risks related to achieving the defined objectives.	Х
8. Management should consider the potential for fraud when identifying, analyzing, and responding to risks.	
Management should identify, analyze, and respond to significant changes that could impact the internal control system.	
Control Activities	
10. Management should design control activities to achieve objectives and respond to risks.	Х
11. Management should design the entity's information system and related control activities to achieve objectives and respond to risks.	
12. Management should implement control activities through policies.	
Information and Communication	
13. Management should use quality information to achieve the entity's objectives.	Х
14. Management should internally communicate the necessary quality information to achieve the entity's objectives.	Х
15. Management should externally communicate the necessary quality information to achieve the entity's objectives.	
Monitoring Activities	
16. Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.	Х
17. Management should remediate identified internal control deficiencies on a timely basis.	Х

³⁷ The scope period of July 1, 2020 – December 31, 2020 was selected instead of SFY 2020 to allow the Department an opportunity to implement prior audit recommendations.

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³⁸ https://www.auditor.nc.gov/EPSWeb/reports/performance/PER-2020-4200.pdf.



STATE AUDITOR'S RESPONSE

The Office of the State Auditor (OSA) is required to provide additional explanation when an agency's response could potentially cloud an issue, mislead the reader, or inappropriately minimize the importance of auditor findings.

Generally Accepted Government Auditing Standards state,

When the audited entity's comments are inconsistent or in conflict with the findings, conclusions, or recommendations in the draft report, the auditors should evaluate the validity of the audited entity's comments. If the auditors disagree with the comments, they should explain in the report their reasons for disagreement.

The Department of Transportation's (Department) response included statements that could mislead the reader. To ensure the availability of complete and accurate information, OSA offers the following clarification.

In its response, the Department **agreed with the results** of this audit and discussed several corrective actions that are planned, in process, or have occurred **subsequent to the audit period**.

As such, this audit did not verify or validate any of the corrective actions included in the Department's response. As the audit report states, the audit period was the first half of state fiscal year 2021 (July 1, 2020 – December 31, 2020).

Therefore, this audit does not provide any assurance as to whether the Department's statements regarding corrective actions are accurate.

Because the Department has not implemented the Office of the State Auditor's (OSA) recommendations to (1) develop the Spending Plan based specific projects and operations and to (2) monitor and enforce highway division compliance with the Spending Plan, the Department is **still at risk** for exceeding its Spending Plan in future periods.



RESPONSE FROM DEPARTMENT OF TRANSPORTATION



STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR

J. ERIC BOYETTE SECRETARY

August 10, 2021

The Honorable Beth A. Wood State Auditor 20601 Mail Service Center Raleigh, NC 27699-0600

Dear Auditor Wood:

Thank you for providing the Department of Transportation the opportunity to respond to the performance audit entitled *Department of Transportation Cash Spending Plan*. As noted in your report, the audit objectives were to determine whether the Department:

(1) Complied with its Spending Plan for the first half of SFY 2021, and if not, to identify the causes of overspending and the effect on operations and budget.

The Department agrees with finding (1) that it did not exceed its developed Spending Plan. In addition, the Department recognizes that there is some continued risk, but is working to implement the OSA's recommendations and to add additional processes to:

- develop a Spending Plan based on the most accurate data, and
- · procedures to monitor adherence to the Spending Plan, and
- procedures/processes to initiate corrective actions as needed.

(2) Implemented corrective action to address recommendations made in the "Department of Transportation Cash Spending Plan" performance audit report issued by the Office of State Auditor in 2020.

While the Department agrees with both finding (2) and (3) that there is additional work to be done, and that while full implementation is not complete, progress has been made and is continuing.

Please see below responses to the audit findings. Thank you for the opportunity to review and respond to the report and findings. The Department appreciated the opportunity to work corroboratively with your team. Please contact me if you have any questions regarding DOT's response to any of the findings and recommendations.

Sincerely

Eric Boyette

Secretary

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1. DEPARTMENT DID NOT EXCEED SPENDING PLAN FOR 1ST HALF OF STATE FISCAL YEAR 2021, BUT RISK OF OVERSPENDING REMAINS

- Department agrees that the spend plan was not developed based on specific projects for Maintenance, but it should be noted that it was for Construction.
- Construction projects are modeled and provided by the SAS forecasting tool to feed into the model based on projected payouts.
- SAS forecasting tool is now available for Contract Resurfacing, Pavement Preservation, Bridge Program and central let Bridge.
- Department provides visibility on spend plan activities monthly to oversight bodies.
 Variances are identified with business unit input.
- Spend Plans, including two Spend Plan Amendments, were approved by the BOT and OSBM based on forecasted expenditures, revenue indicators, and actual performance during the year.

2. DEPARTMENT DID NOT IMPLEMENT RECOMMENDATION TO DEVELOP SPENDING PLAN BASED ON SPECFIC PROJECTS AND OPERATIONS

RECOMMENDATIONS:

 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 Department is actively working to base spending plans to the extent possible on specific projects by utilizing the SAS forecasting tool for more programs. There are limitations that must be considered in forecasting general maintenance activities.

The Department is utilizing internal dashboard tools for the Maintenance programs. Quarterly allocations are being made to divisions and these allocations and expenditures are being monitored by the seven Regional Accountants.

 The Department should implement the prior audit recommendations and adequately address identified deficiencies to mitigate risk of overspending in future periods.

In the third quarter of FY 2021, the Department started utilizing statistical modeling for contracted maintenance programs to set spend plans for each of the divisions and central units. The Department will continue to refine and increase the level of modeling that is used for other maintenance programs. Spend plans for Contract Resurfacing, Pavement Preservation, Bridge Program, and central let Bridge Preservation Programs are statistically modeled based on existing committed and upcoming projects. Spend plans for General Maintenance (GMR), Roadside Environmental (RE), and Division managed Bridge Preservation (BPR) are allocated to the Division and central units base on

a formula. Planned maintenance activities (Routine Maintenance Improvement Plans, RMIP) represent 45% of allocated dollars and budgeted activities represent the remaining 55%. The 55/45% split is an aggressive goal set by the Chief's Office for the Divisions.

3. <u>DEPARTMENT DID NOT IMPLEMENT RECOMMENDATIONS TO MONITOR AND ENFORCE</u> SPENDING PLAN

RECOMMENDATIONS:

 The Chief Engineer's Office should <u>formally monitor</u> each highway division's spending on a regular basis throughout the fiscal year to ensure that highway divisions do not overspend.

Please see information below regarding formal monitoring.

 The Department should develop and establish (a) a uniform financial management personnel structure within all highway division offices and (b) uniform report formats and policies and procedures to ensure that highways divisions monitor spending in a consistent manner.

During the Audit period, the Department was working to establish a uniform financial management personnel structure within each highway division as set out in S.L. 2020-91, Section 5.6. The Department filled seven regional accountant positions, each position overseeing two divisions and has been working to fully define the roles as follows:

- The primary responsibility of these positions is to monitor budgets, spend plans, outstanding commitments, plans for future work prior to commitment and financial reports to actively engage with the Divisions and the Chiefs Office to identify risk and mitigate issues monthly.
- Monthly meetings (will transition to Quarterly) are conducted by the Chief's
 Office with the legislatively mandated accountants to ensure consistent
 messages are delivered to the division staff.
- The Regional Accountants send Bi-Weekly Dashboard Updates to the Division staff and uploaded to the Chief Engineer's Shared Drive for review. The Director of Highway Operations monitors the Bi-weekly reports and discusses the status at the Division of Highways Staff meeting, held monthly.

Specifically, preliminary engineering was not tracked or monitored and reported at the division level; rather it was tracked at the project level which is the lowest level of accountability. Beginning in SFY 2022 the Technical Services Director will ensure that preliminary engineering expenditures will also be tracked and reported at the division level.

The Department has utilized project-specific monthly projections to manage the PE spend plan since September 2019. These projections have been used to monitor spend on a weekly/monthly basis which has provided data for weekly financial analysis and reporting. This analysis led to targeted monthly coordination with project managers to discuss topics such as overspend, under spend and/or unauthorized spend.

The Chief Engineer's Office should set a threshold or put in place necessary procedures
to hold divisions accountable for spending that would require corrective action or
adjustment to the Spending Plan.

Division Engineers are provided Reports needed to monitor their maintenance program spend bi-weekly, including monthly peer exchanges during Division of Highway staff meetings. If a division trends out of recommended spending ranges at quarter ends (+/- 25% compared to first quarter plans, +/- 20% for second quarter, +/- 15% for third quarter and within +/- 10% of year end spending) an individual meeting with that Division and the Chief Engineer, Deputy Chief Engineer, and Director of Highway Operations will occur to determine a plan for addressing the needs within the Division. Please note the percentages listed above are being refined by the Department to ensure the appropriate trend in spend for each of the maintenance programs. These monitoring measures will ensure transparency in spending impacts as it relates to annual budgets, contractor resources, reactive maintenance, weather related disasters (declared/nondeclared), etc.

Reports provided to the Division Engineers at the Monthly staff meeting include: the "Highway Maintenance Spend Plan Dashboard." The Dashboard is available to all NCDOT staff and is managed by the Business System Analyst in the Chief's Office. Data in the dashboard has a one-day lag time due to the nightly interfacing with SAP but is a tool for Division Staff to monitor their spending against established spend plans. Divisions can drill down into the data to get specifics on expenditures associated with each program. Newly defined Regional Accountants send this report via email to Division staff Bi-Weekly.

Also, the 2022 Routine Maintenance Report (RMIP) from the Maintenance Management System (MMS) which monitors the success of completing budgeted and planned maintenance activities for GMR, RE, and BPR. The reports in MMS are available to the Division staff at any time for their independent review, outside the monthly staff meeting.

 The Department should ensure that Finance Metrics dashboards are accurate and updated timely.

The Department has taken further steps to ensure Finance Metrics dashboards are accurate, check ins on how our financial system (SAP) feeds the dashboard occur continuously. Once issues are defined by the Department, the actual updating of the Dashboards requires an action from NCDIT.

 The Department should implement the prior audit recommendations timely and adequately address identified deficiencies to mitigate risk of overspending in future periods.

The Department is reviewing expenditures levels measured against approved spend plans. The level of spending compared to the timing in the year is reviewed by the CFO, Chief Engineer's Office, and other executive leadership. This is shown to the BOT monthly. Efforts will continue in FY22 to better

identify early indicators to manage project activities that impact spend plans in a more granular level.

In the interim the agency has continued to control spending throughout the year.

- Any purchase/expense over \$500 for all of DOT must be approved by the Chief Engineer's Office. In FY 2022, purchases that range from \$500-\$25,000 are reviewed for approval by the Division Engineer/Unit Head and any purchases above \$25,000 are reviewed for approval by the Chief's Office. The Department was able to limit spending for divisions if they see their spending has exceeded their target.
- Any overspend on non-declared disasters, including snow & ice removal, will be spread across all modes within Operations by reducing planned spending for all modes. The Chief's Office can redistribute Emergency GMR (i.e Snow & Ice redistribution per the June agenda) in the 4th quarter as well. This allows adjustments in funds allocated to Divisions for these events, accounting for the unknowns of winter weather such as location & snow fall/ice amounts during the season & redistribute to non-declared disaster configuration expenditures if needed.
- The Department monitors the cash balance weekly and can control the 12month letting schedule to reduce future expenditures if overspending is forecasted.
- The Chief Engineer's Office can freeze/postpone the letting of contracts if they see any cash problems. We have staggered letting schedules throughout the year to allow for frequent review of cash balances to ensure availability of funds before advertising/letting contracts. Once a contract is awarded, it is difficult to slow/stop those contract expenditures.
- Any new WBS (projects) requested by Central, or Division staff were sent to the Chief Engineer's Office by Fiscal prior to being released for charges.
 These Approvals were granted only if the funds were available and within the Spend plan.

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