#### STATE OF NORTH CAROLINA

OFFICE OF THE STATE AUDITOR BETH A. WOOD, CPA







#### DEPARTMENT OF TRANSPORTATION

**CASH SPENDING PLAN** 

PERFORMANCE AUDIT
MAY 2020





#### **EXECUTIVE SUMMARY**

#### **PURPOSE**

The purpose of this audit was to confirm how much the Department of Transportation (Department) exceeded its Spending Plan for state fiscal year (SFY) 2019 and identify causes of the overspending.

As directed by Session Law 2019-251 (Senate Bill 356), 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 for SFY 2019.

#### **BACKGROUND**

*North Carolina General Statute 143B-345* created the Department to provide for the necessary planning, construction, maintenance, and operation of an integrated statewide transportation system.

#### **KEY FINDINGS**

The Department planned to spend approximately \$5.94 billion<sup>1</sup> in SFY 2019, but exceeded that amount by \$742 million (12.5%) and was in danger of falling below the statutory cash floor.<sup>2</sup> The Department exceeded its Spending Plan because the:

- Spending Plan was not based on cost estimates of the specific projects and operations the Department scheduled for the fiscal year
- Chief Engineer's Office<sup>3</sup> did not monitor highway division compliance with the Spending Plan
- Chief Engineer's Office did not enforce highway division compliance with the Spending Plan

#### **KEY RECOMMENDATIONS**

- 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.

<sup>&</sup>lt;sup>1</sup> Comprised of the Department's certified budget (\$5.1 billion), amounts planned from GARVEE and Build NC bond proceeds (\$126 million), and an intentional spend down of cash (\$670 million).

<sup>§ 143</sup>C-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 oversees and directs the engineering and program activities of the Department's 14 highway divisions. The Chief Engineer's Office consists of the Chief Engineer, the Director of Highway Operations, and two Deputy Chief Engineers.

#### **EXECUTIVE SUMMARY (CONCLUDED)**

 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.

#### **MATTERS FOR FURTHER CONSIDERATION**

- The Legislature should consider requiring a level of oversight for the Highway Fund and Highway Trust Fund similar to the level of oversight provided for the state's General Fund.
- The Legislature should consider requiring the Department to periodically report on advance construction<sup>4</sup> for oversight purposes. The outstanding advance construction balance was \$4.8 billion<sup>5</sup> as of January 21, 2020.

<sup>&</sup>lt;sup>4</sup> Advance Construction is a project authorization technique that allows the Federal Highway Administration (FHWA) to authorize a project without obligating (promise to pay) federal funds.

<sup>&</sup>lt;sup>5</sup> \$4,760,287,878.

#### 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 objective was to confirm how much the Department of Transportation (Department) exceeded its Spending Plan for state fiscal year 2019 and identify causes of the overspending.

As directed by Session Law 2019-251 (Senate Bill 356), 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 for state fiscal year 2019.

The Department of Transportation Secretary, Eric Boyette, reviewed a draft copy of this report. His written comments are included starting on page 27.

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,

Let A. Wood

Beth A. Wood, CPA State Auditor



Beth A. Wood, CPA State Auditor

#### **TABLE OF CONTENTS**

	Page
BACKGROUND	1
OBJECTIVE, SCOPE, AND METHODOLOGY	4
RESULTS AND CONCLUSIONS	5
FINDING, RECOMMENDATIONS AND RESPONSES	
THE DEPARTMENT EXCEEDED ITS SPENDING PLAN BY \$742 MILLION	6
MATTERS FOR FURTHER CONSIDERATION	
OVERSIGHT OF THE HIGHWAY FUNDS SHOULD BE IMPROVED	13
\$4.8 BILLION ADVANCE CONSTRUCTION BALANCE SHOULD BE REPORTED AND MONITORED	16
Appendix	23
STATE AUDITOR'S RESPONSE	25
RESPONSE FROM DEPARTMENT OF TRANSPORTATION	27
Oppeding Information	11



### **BACKGROUND**

North Carolina General Statute 143B-345 created the Department of Transportation (Department) to provide for the necessary planning, construction, maintenance, and operation of an integrated statewide transportation system.

The Department is overseen by a 19-member Board of Transportation. Department operations are led by the Secretary of Transportation, a member of the Governor's cabinet.

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.

Construction and maintenance of the State's primary and secondary road systems are managed by the Division of Highways and accounted for in the Department's Highway Fund and Highway Trust Fund. The primary revenue sources are motor fuel taxes, <sup>6</sup> federal funds, <sup>7</sup> highway use taxes, <sup>8</sup> and various fees (including driver license, vehicle title, and vehicle registration fees, etc.) <sup>9</sup>

In August 2014, the North Carolina General Assembly passed Session Law 2014-100 requiring the Department to reduce the combined cash balance of the Highway Fund and the Highway Trust Fund.

However, the cash balance continued to climb each year from \$1.2 billion on June 30, 2014 to \$2.2 billion on June 30, 2017.

To reduce the cash balance, the Department accelerated transportation projects. The Department reported spending \$1.8 billion of the Highway Fund and the Highway Trust Fund balances from July 2017 through March 2019 to accelerate State Transportation Improvement Program (STIP) construction, accelerate highway operations and maintenance projects, and fund disaster relief efforts including snow and ice removal.

Responsible parties discussed in this report include:

Chief Operating Officer (COO) – in addition to other oversight responsibilities, oversees Fiscal and the high-level operations of the Division of Highways.

Chief Financial Officer (CFO) - oversees the Department's financial operations, including accounting operations, cash management, purchasing and support services. Reports to the COO.

Funds Administration Manager - responsible for the oversight of the Department's \$5.94 billion total spend. Oversight includes executive budget analysis & spending reviews, fiscally constrained business work plans, program fund optimization, cash management and innovative financial fiscal guidance. Responsible for funding strategic initiatives, fiscal analysis, and spending control.

<sup>\$2.09</sup> billion in state fiscal year (SFY) 2019.

<sup>&</sup>lt;sup>7</sup> \$1.53 billion in SFY 2019.

<sup>8 \$849</sup> million in SFY 2019.

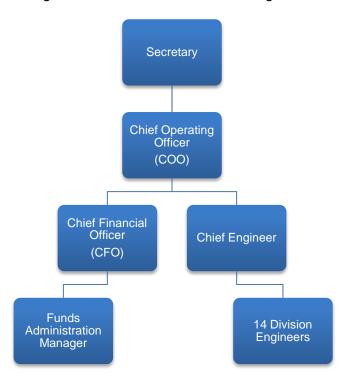
<sup>&</sup>lt;sup>9</sup> \$978 million in SFY 2019.

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 COO.

*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.<sup>10</sup>

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.

Financial Planning Committee - a cross-functional team for the purpose of communicating and coordinating so that projects can be delivered and cash balances can be kept within targets. The committee consists of the CFO (Chair), COO, Chief Engineer, and other executives to discuss financial updates, cash model, construction commitments, preliminary engineering, maintenance, construction letting, etc.



Key terms discussed in this report include:

Certified Budget – the budget as enacted by the General Assembly including adjustments made for (i) distributions to state agencies from statewide reserves appropriated by the General Assembly, (ii) distributions of reserves appropriated to a specific agency by the General Assembly, and (iii) organizational or budget changes mandated by the General Assembly.

<sup>10</sup> The Chief Engineer's Office consists of the Chief Engineer, the Director of Highway Operations, and two Deputy Chief Engineers.

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 certified in the Department's budget, cash not spent in prior years, and bond proceeds from planned sales of NC Build Bonds or GARVEE bonds.



## OBJECTIVE, SCOPE, AND METHODOLOGY

The audit objective was to confirm how much the Department of Transportation (Department) exceeded its Spending Plan for state fiscal year 2019 and identify causes of the overspending.

As directed by Session Law 2019-251 (Senate Bill 356), the audit scope included budget adherence<sup>1</sup> by department, division, and highway division; timeliness of federal reimbursement requests and response to federal inquiries;<sup>2</sup> 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 for state fiscal year 2019.

To achieve the audit objective, auditors interviewed Department personnel as well as personnel at the Office of State Budget and Management and the Office of the State Controller. Auditors reviewed Department policies and procedures, financial information, project construction schedules, and Department communications including reports, memos, and emails. Auditors also 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.

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 on page 23 for internal control components and underlying principles that were significant to our audit objective.

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 support the findings and conclusions in relation to our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

<sup>1</sup>When evaluating budget adherence, auditors determined that **there is no legally adopted budget that accounts for the Department's total spending.** The Highway Fund and Highway Trust Fund certified budgets only reflect current year revenue estimates and appropriations and do not reflect the Department's Spending Plan. The Department spends significantly more than its certified budget because its Spending Plan includes **current year appropriations, unexpended appropriations accumulated in prior years, and bond proceeds.** (See "Matters for Further Consideration" on page 13)

<sup>2</sup>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. Consequently, no additional work was performed for this issue. However, auditors determined that the **Department does not report to the Legislature about a \$4.8 billion outstanding balance** that is "potentially" reimbursable to the State. (See "Matters for Further Consideration" on page 16.)



## RESULTS AND CONCLUSIONS

The Department of Transportation (Department) planned to spend approximately \$5.94 billion<sup>11</sup> in state fiscal year 2019, but exceeded that amount by \$742 million (12.5%) and was in danger of falling below the statutory cash floor.<sup>12</sup> The Department exceeded its Spending Plan because the (1) Spending Plan was not based on cost estimates of the specific projects and operations the Department scheduled for the fiscal year, (2) Chief Engineer's Office <sup>13</sup> did not monitor highway division compliance with the Spending Plan, and (3) the Chief Engineer's Office did not enforce highway division compliance with the Spending Plan.

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<sup>&</sup>lt;sup>11</sup> Comprised of the Department's certified budget (\$5.1 billion), amounts planned from GARVEE and Build NC bond proceeds (\$126 million), and an intentional spend down of cash (\$670 million).

<sup>&</sup>lt;sup>12</sup> § 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 oversees and directs the engineering and program activities of the Department's 14 highway divisions. The Chief Engineer's Office consists of the Chief Engineer, the Director of Highway Operations, and two Deputy Chief Engineers.



# FINDING, RECOMMENDATIONS, AND RESPONSES

#### THE DEPARTMENT EXCEEDED ITS SPENDING PLAN BY \$742 MILLION

The Department of Transportation (Department) exceeded its Spending Plan for state fiscal year (SFY) 2019 by \$742 million and was in danger of falling below the statutory cash floor.<sup>14</sup>

As a result, it became necessary for the Department to lend over \$1 billion from the State Highway Trust Fund to the Highway Fund, 15 the North Carolina General Assembly to provide the Department with approximately \$220 million 16 from the General Fund, and the Department to delay \$144 million 16 in payments to contractors.

The Department exceeded its Spending Plan because the:

- Spending Plan was not based on cost estimates of the specific projects and operations 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 Department Overspent by \$742 Million

The Department planned to spend approximately \$5.94 billion<sup>17</sup> in SFY 2019, but exceeded that amount by \$742 million (12.5%) as shown in Table 1 below.

	Tanasa a cara a			
	In millions			
Expenditure Category	Spending Plan	Actual Spending	Difference	% Difference
Construction <sup>18</sup>	\$3,310	\$3,434	\$124	3.7%
Operations & Maintenance <sup>19</sup>	\$1,596	\$2,174	\$578	36.2%
Other Modes <sup>20</sup>	\$364	\$438	\$74	20.3%
Other <sup>21</sup>	\$671	\$637	\$(34)	(5)%
Total:	\$5,941	\$6,68322	\$742	12.5%

Table 1 – SFY 2019 Department Spending vs. Forecast

**Source:** Department SFY 2019 Cash Model Baseline Forecast vs. Actual and auditor analysis. **Analysis did not include determining whether expenses were properly categorized**.

<sup>§ 143</sup>C-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>&</sup>lt;sup>15</sup> According to the Department, the loan would not have been necessary if the Department reclassified planned federal aid projects as State projects. However, if reclassified, the Department would not have been able to request federal aid to fund these projects.

<sup>&</sup>lt;sup>16</sup> The Department's overspend in SFY 2019 resulted in necessary actions taken in SFY 2019 and SFY 2020.

<sup>17</sup> Comprised of the Department's certified budget (\$5.1 billion), amounts planned from GARVEE and Build NC bond proceeds (\$126 million), and an intentional spend down of cash (\$670 million).

Construction expenditures include larger capital projects (over \$10 million) that require 4 to 5 years to complete, GARVEE Expenditures, State Transportation Improvement Projects (STIP), and Right-of-Way (ROW) Expenditures. Map Act Settlements are included in ROW Expenditures which accounted for only \$13 million (10.5%) of the \$124 million overage in Construction.

<sup>19</sup> Operations and Maintenance expenditures include contract resurfacing, pavement preservation, bridge replacement, bridge preservation, roadside environment, general maintenance reserve and disaster funding.

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

<sup>&</sup>lt;sup>21</sup> Other expenditures category includes administration, transfers, state aid to municipalities, debt service, etc.

<sup>&</sup>lt;sup>22</sup> Agrees to 2019 NC Comprehensive Annual Financial Report. However, does not include \$4 million of accruals since Table 1 shows spending on a cash basis.

#### FINDING, RECOMMENDATIONS, AND RESPONSES

To develop the SFY 2019 Spending Plan, the Chief Financial Officer (CFO) delegated authority to the Funds Administration Manager (Manager). The Manager developed the Spending Plan with input from each of the Department's divisions.

As part of the planning process, the Manager developed a baseline forecast and presented it to the Financial Planning Committee.<sup>23</sup> Forecasts drive the Spending Plan and were developed for three main areas:

- Revenue
- Construction (includes preliminary engineering)<sup>24</sup>
- Operations & Maintenance (includes disaster spending)

The forecast methods varied but included use of more sophisticated statistical software for the revenue forecast and was limited to the use of historical and seasonal data for the Operations and Maintenance forecast. Additionally, the disaster spending forecast used neither statistical nor historical data. The same predetermined amount was used for each year.

The SFY 2019 Spending Plan was discussed and finalized during Financial Planning Committee meetings in July and August 2018.

The Chief Engineer then allocated a portion of the total spending plan to each individual highway division based on planned projects, historical spending levels, and other factors.

There was no formal documented process for communicating goals, objectives, and responsibilities for complying with the Spending Plan. According to the CFO, the Chief Engineer was responsible for communicating to the division engineers of the 14 highway divisions and ensuring that the plan's objectives were met.

Procedures for updating, monitoring, and complying with the Department's Spending Plan were limited to the following:

- The Manager updated the cash model monthly with actual expenditures and adjusted forecasts as needed to reflect significant changes (new laws, policy changes, etc.).
- The CFO reviewed daily cash balances and monthly financial statements. He noticed in November 2018 that the Department may be in danger of falling below the statutory cash floor and reported his observation. The CFO has no direct authority over highway division spending. Therefore, the CFO reported it to the Chief Operating Officer (COO), who has the authority.<sup>25</sup>
- The Financial Planning Committee held monthly meetings to discuss the Spending Plan status. The Committee only makes recommendations. As a body, it had no authority to make decisions or implement corrective action. However, the COO, CFO, and Chief Engineer were all committee members.

The Financial Planning Committee includes all program directors and the Chief Engineer as members, but not the Division Engineers of the 14 highway divisions. The Financial Planning Committee meets to discuss updates on the spending plan, but the Committee does not make decisions about corrective actions.

Preliminary Engineering includes the efforts required to plan and design a highway project for construction. It begins when a specific highway project first receives funding authorization for and/or design activities. The delivery of the construction documents for project letting marks the end of Preliminary Engineering.

<sup>&</sup>lt;sup>25</sup> Both the CFO and the Chief Engineer report to the COO.

• The 14 individual highway divisions were responsible for monitoring their own spending plan, made all cash decisions including whether to increase or decrease spending, and were allowed to spend in excess of allocated amounts by **borrowing from the next year's allocation**. The Chief Engineer's Office<sup>26</sup> was responsible for providing oversight and had the authority to stop overspending.

#### Resulted in Need for Additional Funding

Because the Department exceeded its Spending Plan, the following three actions were necessary to ensure the Department had adequate funding to continue operations.

First, the Department loaned approximately \$865.3<sup>27</sup> million from the State Highway Trust Fund to the Highway Fund during SFY 2019.<sup>28</sup>

Second, the General Assembly provided the Department with \$220 million from the General Fund in SFY 2019 and SFY 2020 as follows:

- \$90 million to cash flow expenditures related to disaster relief
- \$64 million as initial funding to establish an emergency reserve to respond to major disasters
- \$36 million for disaster relief and related costs, including Hurricane Dorian
- \$30 million to accelerate repayment from the General Fund to the Highway Fund for economic development costs and Hurricane Florence reimbursements from the Office of Recovery and Resiliency

Third, the Department delayed nearly \$144 million in payments owed to seven contractors in SFY 2020<sup>29</sup> to preserve cash and prevent work stoppage due to unavailability of funds. The Department negotiated a payment schedule with contractors that delayed payments for up to five months. In return, five of the contractors<sup>30</sup> agreed to receive interest payments totaling nearly \$2.4 million.

#### Caused by Not Basing Spending Plan on Cost of Specific Projects and Operations

The Department exceeded its Spending Plan because it did not ensure that spending estimates for preliminary engineering and operations and maintenance were based on cost estimates of the specific projects and operations scheduled for the year. Additionally, the Department did not use readily available historical spending data to estimate disaster spending.<sup>31</sup>

<sup>&</sup>lt;sup>26</sup> The Chief Engineer's Office consists of the Chief Engineer, the Director of Highway Operations, and two Deputy Chief Engineers.

<sup>\$1,140,300,000</sup> as of May 10, 2019. \$275 million was loaned in SFY 2018, and \$865.3 million was loaned in SFY 2019. Then in February 2020, the Department requested an additional \$100 million loan to the Highway Fund from the Highway Trust Fund to meet the requirement of SB356.

According to the Department, the loan would not have been necessary if the Department reclassified planned federal aid projects as State projects. However, if reclassified, the Department would not have been able to request federal aid to fund these projects.

<sup>&</sup>lt;sup>29</sup> Also includes a payment to one contractor owed in May 2019.

Two contractors agreed to receive no interest. Of the two, one contractor waived interest of 5% as long as the Department makes payments in compliance with the delayed payment schedule. The other contractor required no interest payment.

<sup>31</sup> Disaster spending includes snow and ice removal, federally declared disasters (hurricanes, floods, mudslides, etc.), and non-declared events.

#### FINDING, RECOMMENDATIONS, AND RESPONSES

#### Preliminary Engineering

The Department did not estimate SFY 2019 spending for preliminary engineering based on cost estimates of specific projects or operations.

Instead, the Department based preliminary engineering spending estimates entirely on prior-year spending. Additionally, spending estimates were not updated when additional projects were planned to begin throughout the year.

In SFY 2019, preliminary engineering accounted for \$194 million (94%) of the \$207 million overage in construction spending.<sup>32</sup>

#### Operations and Maintenance

The Department did not base the \$1.59 billion SFY 2019 operations and maintenance<sup>33</sup> spending plan on actual planned maintenance projects for the year.

Instead, the Department used seasonal spending estimates and 10-year historical averages to develop the plan. The Chief Engineer's Office then allocated the statewide funds to the local highway divisions based on a formula.

Additionally, the Department did not use its own advanced statistical modeling that was readily available to develop the estimates. The Department has used advanced statistical modeling to estimate construction expenditures, but has not taken advantage of it for operations and maintenance.

Because the Department spent \$2.17 billion for operations and maintenance in SFY 2019, spending exceeded the forecast by \$578 million.<sup>34</sup>

#### Disaster Spending

The Department did not estimate SFY 2019 disaster spending based on historical spending information or any other type of available data.

Instead, the Department set-aside the same \$50 million for disaster spending as it had for the last four fiscal years despite actual disaster spending that exceeded the planned spend every year by at least \$28 million.

<sup>\$207</sup> million only accounts for overspending in Preliminary Engineering and Right-of-Way. The Department spent \$83 million under forecast for construction resulting in overall overspend of \$124 million for all construction expenditures.

<sup>&</sup>lt;sup>33</sup> 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.

Because the Department spent \$296 million for disasters in SFY 2019, spending exceeded the forecast by \$246 million as shown in Table 2 below.

Table 2 - Disaster Spend Forecast vs. Actual

	In millions			
Fiscal Year	Forecasted Amount	Actual Spend	Amount Spent in Excess of Forecast	
2015	\$50	\$78	\$28	
2016	\$50	\$86	\$36	
2017	\$50	\$200	\$150	
2018	\$50	\$171	\$121	
2019	\$50	\$296	\$246	

Source: Department management reports and auditor analysis. Analysis did not include determining whether expenses were properly categorized.

According to the CFO and Chief Engineer's Office, the Department was hesitant to plan more spending in disaster areas because it did not know whether there would be disasters in any given year. If disasters did not occur, then the money set aside for disasters would not be available for other priorities.

Yet when disasters occurred, the Department did not adjust its operations and maintenance forecasted amount and continued to overspend.

#### Also Caused by Chief Engineer's Office Not Monitoring Highway Division Spending

The Department also exceeded its Spending Plan because the Chief Engineer's Office did not regularly monitor spending within the 14 highway divisions.

While the Chief Engineer's Office had internal expenditure reports available for monitoring the highway divisions, it did not use the reports regularly during the fiscal year. The Chief Engineer's office approved division contracts greater than \$5 million<sup>35</sup> but otherwise did not review or approve any division expenditures.

The Chief Engineer also held monthly in-person operational staff meetings with the 14 Division Engineers. Budget allocations and overages were occasionally discussed, but they were not part of the standard agenda.

Instead, the Chief Engineer's Office provided the full fiscal year's allocation up-front for each division and allowed each Division Engineer to manage division spending however they chose. For example:

• Some divisions ran spending reports every two weeks, others every four weeks, some at varying frequencies.

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<sup>&</sup>lt;sup>35</sup> Auditors did not perform procedures to evaluate the approval process.

#### FINDING, RECOMMENDATIONS, AND RESPONSES

- Some divisions looked at spending as a whole, while others tracked by program or county (each division is made up of multiple counties). The divisions did not manage spending by project.
- Each division created its own management report that calculated spending differently.
   For example, reports could use varying combinations of unit costs, activity rates, fixed costs, and project location.
- Divisions had different positions primarily responsible for managing spending. In some divisions the Division Engineer monitored while in others the Maintenance Engineer or Business Officer did so.
- Some divisions discussed spending regularly at monthly staff meetings while others discussed at varying frequencies.

#### Also Caused by Chief Engineer's Office Not Enforcing Compliance with Spending Plan

The Department exceeded its Spending Plan in part because the Chief Engineer's Office did not enforce highway division compliance with the Spending Plan.

For example, the Chief Engineer's Office did not reject a division's contracts waiting to be executed if the division's remaining unspent budget allocation was insufficient.

Also, the Chief Engineer's Office did not implement mid-year budget reductions to slow down overspending. Instead, the division's allocation for the next fiscal year was decreased, or "borrowed against." However, borrowed allocations were allowed to continue across multiple fiscal years, reducing the incentive for divisions to stay within the current year's allocation.

For example, some divisions intentionally let contracts that caused the division to exceed the current year's allocation with the expectation that the division's allocation would be reduced for the next fiscal year. This borrowing from future years prioritized allowing a project to proceed versus staying within budget.

Additionally, the Chief Engineer's Office did not require divisions to delay or terminate any construction contracts that had already been executed. All contracts included standard language from NCGS §143C-6-11 which gave the Department the "right to terminate or suspend any transportation project contract...if funds will not be available for payment of the work to be performed during that fiscal year".

However, the Chief Engineer offered three reasons why delaying or terminating a contract may not be feasible.

First, a construction contract cannot be immediately stopped; it must reach a "major milestone" that makes sense for the project (for example, the Department cannot easily or safely stop a half-completed bridge).

Second, the Chief Engineer stated that delaying or terminating executed contracts can lead to additional costs that the Department must pay:

- Costs for materials already fabricated specifically for the project
- Cost of idle labor and equipment that cannot be used on other projects
- Increased bonding and insurance costs for delayed projects
- Possible legal fees due to challenges from contractors for unpaid costs
- Cost to re-bid the contract if the original contractor cannot accommodate the delayed timeframe
- Subcontractor concerns when an original subcontractor takes on a different project during the delay, requiring the contractor to wait until the subcontractor is available or seek a replacement

Third, the Chief Engineer stated that delaying or terminating contracts increases the risk to the contractor which may be reflected in higher prices for future contracts.

However, state statute requires that:36

Transportation Project funds shall be **budgeted**, **expended**, and **accounted** for on a "cash flow" basis. **Pursuant to this end**, transportation project contracts shall be **planned and limited** so payments due at any time **will not exceed** the cash available to pay them. [Emphasis Added]

#### RECOMMENDATIONS

The Department should base its Spending Plan on cost estimates of 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.

#### **AGENCY RESPONSE**

See page 27 for the Department's response to this finding.

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<sup>&</sup>lt;sup>36</sup> § 143C-6-11(b).



# MATTERS FOR FURTHER CONSIDERATION

#### 1. Oversight For The Highway Funds Should Be Improved

The Legislature should consider requiring a level of oversight for the Department of Transportation's (Department) Highway Fund and Highway Trust Fund similar to the level of oversight provided for the State's General Fund<sup>37</sup> agencies.

Currently, oversight of the Department differs significantly from the oversight of other state agencies in that the:

- Department manages billions of dollars in cash without external controls
- Department does not have a legislatively approved comprehensive spending plan
- Department spending is not adequately monitored

#### **Department Manages Billions of Dollars in Cash Without External Controls**

The Department manages billions of dollars in the Highway Fund and Highway Trust Fund without external controls in place to prevent overspending.

For example, state statute requires the Department to manage cash in the Highway Fund and Highway Trust Fund so that the balance falls under a **targeted** cash ceiling (maximum) to maximize cash financing of transportation projects and stays above a **statutorily required** cash floor (minimum) to protect the state's financial position.<sup>38</sup>

In state fiscal year (SFY) 2017, the Department had a cash balance of about \$2.2 billion. The Department planned to accelerate projects and spend down its cash balance below the cash ceiling.

During SFY 2019, the Department spent its cash balance down to \$432 million and was in danger of falling below the statutory cash floor.

As a result, it became necessary for the:

- Department to lend over \$1 billion from the State Highway Trust Fund to the Highway Fund<sup>39</sup>
- North Carolina General Assembly to provide the Department with about \$220 million from the General Fund
- Department to delay \$144 million in payments to contractors

The overspending and resulting crisis could not have happened with the State's General Fund agencies because the Office of State Budget and Management (State Budget) oversees General Fund cash management.

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<sup>&</sup>lt;sup>37</sup> 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.

<sup>&</sup>lt;sup>38</sup> The Department is required by § 143C-6-11(f) and (k) to manage transportation spending so that the total cash remains between a **statutorily required** floor equal to at least 7.5% of total appropriations for the current fiscal year and a **targeted** ceiling equal to between 15%-20% of the total appropriations for the current fiscal year.

According to the Department, the loan would not have been necessary if the Department reclassified planned federal aid projects as State projects. However, if reclassified, the Department would not have been able to request federal aid to fund these projects.

State Budget allots<sup>40</sup> cash to General Fund agencies on a monthly or quarterly basis, and then monitors revenue collections and agency spending. This process enables State Budget to identify trends and implement budgetary and cash controls with support of the Office of State Controller (State Controller) to meet the state's financial obligations and avoid deficit spending.

However, this safety net is not present for the Highway Fund and Highway Trust Fund.

While State Budget monitors to ensure that the Department's cash remains above the statutory cash floor, it does not allot or otherwise control the Department's cash. And the State Controller simply releases cash at the Department's request and monitors only to ensure that the Department's daily use of cash will not result in a negative cash balance.

Consequently, the Department largely self-manages and self-monitors the billions of dollars that flow through the Highway Fund and Highway Trust Fund without external budgetary controls to ensure the State can meet its current and long-term transportation obligations.

#### Department Does Not Have a Legislatively Approved Comprehensive Spending Plan

Unlike other state agencies, the Department's certified annual budget is not what the Department spends against throughout the year. Instead, the Department starts with the legislatively enacted annual appropriation and then adds unspent prior year appropriations, and bond proceeds to develop a "comprehensive spending plan." Neither the General Assembly, State Budget, nor the State Controller review or approve the Department's comprehensive spending plan.

As a result, Department spending is significantly greater than the legislatively approved budget. For example, the Department spent about \$1.55 billion (30%) more than the SFY 2019 certified budget as shown in Table 3 below.

In millions Certified **Spending Actual Spend** Amount Spent in % Spent in Fund **Budget Excess of Certified** Excess of Plan **Certified Budget** Budget Highway Fund \$3,593 \$3,593 \$4,896 \$1,303 36% Highway Trust Fund \$1,540 \$1,540 \$1,791 \$251 16% Intentional Spend Down of Cash \$670 Amounts Planned from Bond \$126 **Proceeds** \$6,68742 \$5,133 \$5,929 \$1,554 30% Total:

Table 3 – SFY 2019 Budget to Actual Expenditures

**Source:** NC Certified Budgets (BD 307(R)), Department SFY 2019 Cash model Baseline Forecast, and 2019 NC Comprehensive Annual Financial Report

<sup>40</sup> North Carolina State Budget Manual, Section 3.7.1 Maintenance of a Balanced Budget, Allotment Process. The allotment account serves as the control for the requisition of funds and represents the maximum available for the quarter.

<sup>&</sup>lt;sup>41</sup> Comprised of the Department's certified budget (\$5.1 billion), amounts planned from GARVEE and Build NC bond proceeds (\$126 million), and an intentional spend down of cash (\$670 million).

<sup>&</sup>lt;sup>42</sup> Includes \$4 million of accruals not included in Table 1, which shows spending on a cash basis.

According to the Department, the State Budget Act<sup>43</sup> authorizes and necessitates spending that differs from the certified budget. For example, the Department states that spending will differ because:

- The statute gives the Department the authority to cashflow transportation projects.
- The Department must accelerate and decelerate spending to comply with the cash balance floor and ceiling.
- The Department spends federal allocations and reimbursements received after the budget is enacted for transportation projects and declared disasters.

While the additional spending may be within the Department's authority, the Spending Plan is established without benefit of legislative review and approval.

By contrast, the certified budget for General Fund agencies represents total planned spending from all sources, and each agency is required to spend accordingly. Similarly, agencies that operate outside of the General Fund (referred to as special revenue funds) also have legislatively enacted budgets that are considered total spending plans.

A legally adopted budget that accounts for the Department's total authorized spending each year (current revenues, cash from prior years, and bond sales) would improve the Legislature's and State Budget's ability to oversee the Department's spending.

#### **Department Spending Is Not Adequately Monitored**

Budgetary oversight of the Highway Fund and Highway Trust Fund is limited.

The role and function of State Budget includes ensuring that the entire state budget enacted by the legislature is properly certified and monitored to ensure that appropriations are used only for the purposes for which they were authorized.

As it does for other state agencies, State Budget certifies the Department's budget at the start of each fiscal year.

However, State Budget's ability to monitor budgetary compliance becomes limited as the Department adds unspent prior year appropriations and bond proceeds to the certified budget to develop its comprehensive spending plan.

In fact, State Budget says that it has neither the human nor technological resources to effectively monitor the Highway Fund and Highway Trust Fund because:

- The Department's multi-year capital projects and unique authority to spend outside of the enacted budget make oversight of its budget complex.
- The state's budgeting and accounting technology does not support monitoring of the Department's multi-year capital cash flow processes.

Consequently, State Budget's monitoring is largely dependent on what the Department self-reports.

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<sup>&</sup>lt;sup>43</sup> § 143C-6-11.

To improve its ability to monitor transportation funds, State Budget offered the following recommendations:

- State Budget needs a statistician/economist position to work with the Department's cash modeling group to develop a consensus project cash flow forecasting statement. The statement would allow for comparison of project budget and spending that would facilitate comprehensive and timely monitoring.
- The consensus five-year project cash flow estimate should be a part of the
  Department's budget request and included in the Governor's and General Assembly's
  budget. This would create transparency in project cash flow requirements during the
  budgeting process. The cash flow estimate would allow State Budget to develop a cash
  allotment policy to the Department in order to control current fiscal year cash flow
  approved for projects.
- Restructure Department budget codes to facilitate an allotment process similar to general fund agencies and improve budgeting and cash flow reporting by having one budget code specifically for administrative expenses and one for projects and maintenance.
- Create an accessible project reserve for the Department to adjust for unexpected changes in cash flow such as the need to accelerate projects or to account for under collection of anticipated revenues.

#### 2. \$4.8 BILLION ADVANCE CONSTRUCTION BALANCE SHOULD BE REPORTED AND MONITORED

The Legislature should consider requiring the Department of Transportation (Department) to periodically provide a detailed report on "advance construction" for oversight purposes.

**Advance** Construction is **one of two project authorization techniques** that allows for road construction projects to be financed with Federal-Aid Highway funds, administered by the Federal Highway Administration (FHWA). However, advance construction allows the FHWA to **authorize** a project **without obligating** [promise to pay] **Federal funds**"<sup>44</sup> at the time of authorization.

Currently, there is no external evaluation of the Department's **advance** construction practices because the Department does not provide a detailed report on its use of **advance** construction or on the outstanding **advance** construction balance, which was \$4.8 billion<sup>45</sup> as of January 21, 2020.

The Department includes some information about **advance** construction in its financial statement schedules and in its State Transportation Improvement Program (STIP) document. However, there is no single document that provides the Legislature with a discussion of advance construction (1) benefits, (2) risks, (3) beginning balance, (4) expenditures, (5) contracted amounts, (6) planned additions, (7) planned conversions, and (8) ending balance.

<sup>&</sup>lt;sup>44</sup> American Association of State Highway Transportation Officials, <u>Use of Advance Construction in Financing Transportation Projects</u>, 2011.

<sup>&</sup>lt;sup>45</sup> \$4,760,287,878.

#### Advance Construction Uses State Funds to Accelerate Federal-Aid Highway Projects

Every state has access to federal-aid highway funds to finance road construction. States access federal-aid by asking the FHWA to approve of and obligate (promise to pay) funds to a project. The state must then incur and pay for project expenditures and apply for reimbursement.

The federal budget limits the overall annual federal-aid highway program obligation. A portion of the overall limitation is distributed among the states as formula obligation limitation. This distribution is the state's "obligation authority" - the total amount of federal funds that the FHWA will obligate (promise to pay) for a state's highway projects in a federal fiscal year. For FY2019, North Carolina's **obligation authority** was **\$1.1 billion**.

If a state does not use all of its obligation authority during a federal fiscal year, the federal government will redistribute the unused obligation authority to other states after August 1 of each fiscal year. The August redistribution process ensures that all of the annual obligation limitation will be used before it expires at the end of the federal fiscal year (September 30).

The FWHA allows states to use federal-aid highway funding in two ways - through the FWHA **traditional** financing or through **advance** construction.

In **traditionally** financed federal-aid highway projects, the FHWA approves the project and **obligates** (promise to pay) federal funds (80% of eligible costs) at the start of the contract. The Department then begins construction, pays construction costs with state funds, and **submits weekly** federal reimbursement requests to FHWA.

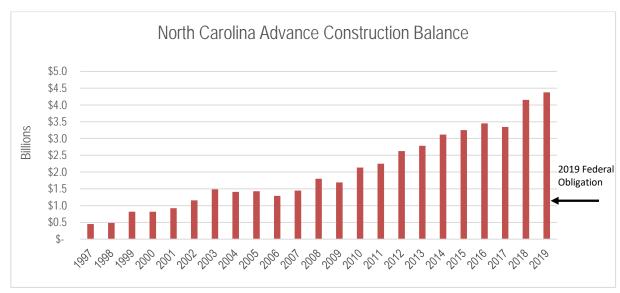
However, in **advance** construction the FHWA only approves a project as being **eligible** for federal funding. The FHWA **does not obligate** (promise to pay) federal funds. The Department then adds the federal share of eligible costs to the advance construction balance, begins construction, and pays construction costs **with state funds**.

At some point in the future (even the same year), the Department can ask the FHWA to convert the advance construction project to a federal-aid project and to obligate federal funds. The Department can then request federal reimbursement for the federal share of eligible project costs **up to the obligated amount**.

The Department has opted to use **advance** construction to finance the **majority** of road construction projects that it anticipates funding with federal-aid highway funds. According to the Department, it chose the **advance** construction financing over **traditional** to ensure the Department would be reimbursed the full amount of the state's allotment annually. The Department also uses advance construction financing to maximize the amount of additional obligation authority it can request during the August redistribution process.

Chart 1 below shows how the State has increased its use of advance construction from 1997 through 2019.

#### Chart 1



**Source:** 2011 AASHTO "Use of Advance Construction in Financing Transportation Projects" report and FHWA Financial Management Information System reports from 2011 - present.

While the State's annual obligation authority is approximately \$1.1 billion, the Department has currently designated \$4.8 billion in projects to be built through **advance** construction. The balance represents the amount of project costs that the FHWA has approved as being **eligible** for federal funding **without obligating** any federal funds.

#### **Advance Construction Benefits the State**

Advance construction provides several benefits to the State including:

#### Acceleration of state projects –

Advance construction allows states to accelerate projects by removing the limitation imposed by the state's obligation authority.

A state's obligation authority is the total amount of federal funds that the FHWA will obligate (promise to pay) to a state's projects in a federal fiscal year. In 2019, North Carolina's obligation authority was \$1.1 billion.

The obligation authority limits the number of federal-aid highway projects that a state can start in a year because FHWA must obligate the total amount of funds needed when it approves a project. Once FHWA has obligated funds equal to a state's obligation authority, the state cannot start any more federal-aid highway projects that federal fiscal year.

But advance construction does not require FHWA to obligate federal funds, so a state is not limited by its obligation authority and can start more projects during the year.

#### Cash management -

Partial Conversion of Advance Construction (PCAC) can help states manage cash flow. The American Association of State Highway Transportation Officials (AASHTO) explains that:<sup>46</sup>

PCAC enables a state to convert an AC project to a Federal-aid project in stages, based on cash flow requirements and availability of obligation authority, rather than all at once. Under PCAC, the state converts, obligates, and receives reimbursement for only a portion of the Federal share of project costs. This removes any requirement to wait until the full amount of obligation authority is available, enabling states to begin some projects earlier and more effectively manage cash flow.

#### Grant Anticipation Revenue Vehicles (GARVEE bonds) -

Advance construction makes GARVEE bonds feasible. GARVEE bonds are state debt instruments issued in anticipation of paying principal and interest with future federal-aid reimbursements.

Advance construction and partial conversion of advance construction allow states to issue debt, use that debt for highway construction, and then repay the debt with future federal reimbursements.

#### However, Advance Construction Also Presents Risks

Advance construction presents risks to the State that should be evaluated and monitored including:

Advance construction is not a federal obligation -

Although there may be little short-term risk that the federal government will not reimburse states for expenses, federal statute makes it clear that advance construction is not a federal obligation. Specifically, federal statute states:<sup>47</sup>

An advance construction project shall meet the same requirements and be processed in the same manner as a regular Federal-aid project, except,

- (1) The FHWA authorization does not constitute any commitment of Federal funds on the project, and
- (2) The FHWA shall not reimburse the State until the project is converted under §630.709. [Emphasis Added]

Additionally, federal statute states:48

The State Department of Transportation may submit a written request to the FHWA that a project be converted to a regular [traditional] Federal-aid project at any time **provided that sufficient Federal-aid funds and obligation authority are available**. [Emphasis Added]

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<sup>&</sup>lt;sup>46</sup> AASHTO, <u>Use Of Advance Construction In Financing Transportation Projects</u>, 2011.

<sup>&</sup>lt;sup>47</sup> 23 CFR 630.705(a).

<sup>&</sup>lt;sup>48</sup> 23 CFR 630.709(a).

Because there is no initial obligation of Federal funds for projects approved by the FHWA for **advance** construction, there is increased risk in the long-term. For example:

- Federal funds may not be available for road construction projects estimated
  to take several years to build through advance construction. The further into
  the future a road construction project is required to take, the greater the risk
  that funds may not be available for the completion of the future construction,
  leaving the completion to be funded with state moneys.
- Advance construction projects that were initially funded with GARVEE Bonds with the intent to repay the bonds with federal-aid highway funding are at risk for federal funding in future years.

The State's GARVEE bonds are 15-year term bonds that represent funds borrowed to pay for **advance** construction projects with the intent to repay the debt with federal-aid highway funds. Each year, the Department converts a portion of the advance construction balance, equal to the principal payment on the bonds and seeks reimbursement for the principal payment. Because the bonds are 15-year bonds, future payments could be at risk because the state cannot predict what the federal government might do or how its funding policies may change that far in the future.

As of January 21, 2020, the State has issued approximately \$1.5 billion<sup>49</sup> of GARVEE bonds to finance projects built through advance construction. Currently, the Department has not yet billed the federal government for approximately \$706 million of GARVEE expenditures that are eligible for conversion and billing.

Consequently, the State accepts some risk that reimbursement could be delayed or even denied if federal funds are not available when the State requests project conversion and reimbursement. For example, federal funds may not be available in the event of another recession, stock market failure, or other financial crisis.

The State also accepts the risk that reimbursement could be denied in future years if the State does not retain documentation to demonstrate compliance with federal-aid project requirements.

Advance construction can increase the need for cash -

Advance construction allows the Department to accelerate projects by undertaking a greater number of concurrent federal-aid eligible projects than would otherwise be possible.

The practice of accelerating federal-aid eligible projects using advance construction requires the Department to expend additional state funding to cover the costs of these projects.

The additional expenditure can increase the need for cash in the short term until the Department can receive federal reimbursement.

<sup>&</sup>lt;sup>49</sup> \$1,522,277,709.

For example, the Department's 2018 financial statements states:

\$865,300,000 has been transferred from the Highway Trust Fund to the Highway Fund to cover increased expenditures resulting from efforts to accelerate construction projects, particularly projects funded through the federal advance construction process. [Emphasis Added]

#### <u>Lack of Advance Construction Details Indicates Need for Better Reporting and Monitoring</u>

As of the completion of this audit, the Department was not able to provide a breakdown of the \$4.8 billion in **advance** construction. When asked for a breakdown into how much of the balance had been spent already, how much has been obligated through contractual agreements, and how much in projects not yet started, the Department responded:

Of the 1.3 Billion in expenditures, \$706,566,464 are GARVEE expenditures that have been reimbursed to NCDOT by the trustee. We still need to convert the Advance Construction funding and ask for reimbursement by FHWA over a 15-year span to pay back the Principal to the Trustee.

\$604,546,592 is the amount of expenditures spent on PE [preliminary engineering], ROW [right-of-way] and Construction projects, paid for with state dollars, and will be reimbursed over time as we convert AC [advance construction] on the individual projects.

The majority of the \$4.8 B balance of advance construction (A/C) was used on the right-of-way or construction phase of projects. For right-of-way projects, much of the time and effort is in obtaining appraisals for properties and negotiating with owners prior to making an offer to purchase. There are signed contracts with appraisers; however, the majority of right-of-way funding is used for purchases. There are instances where we have made an offer to purchase, but have not closed on the property and in those instances, we have created an obligation to pay. However, to quantify this would require that we review every proposed property purchase for every project whose right-of-way phase has been A/C'd. For construction projects, it is safe to assume that we have entered into a contract (or will be shortly) for all A/C's projects.

Because of the risks discussed above, the Legislature should consider requiring the Department to periodically provide the detailed information necessary to monitor and evaluate **advance** construction risks.

Additionally, the Legislature should consider requiring the Department to provide a breakdown of the projects and associated contracts that currently make up the \$4.8 billion in advance construction detailing:

• Expenditures that have been paid with state moneys, the date the expenditures were paid, and the "anticipated" date of reimbursement from the FHWA.

#### MATTERS FOR FURTHER CONSIDERATION

- Expenditures that have been made and were funded with GARVEE bonds and a break-down of the outstanding bonds (i.e. amount outstanding, anticipated annual repayments that will be converted, and end term date of each outstanding bond).
- All other projects with associated contracts/commitments for the which the Department
  is obligated along with the years and annual amounts of the commitments. This
  information is important if a project has contract commitments that cover future years
  as this increases the risk that federal funds may be reduced or, worst case, unavailable
  when requested. Consequently, state funds would then have to be used to complete
  the project.

Once the Department provides the details of the \$4.8 billion advance construction balance, the Legislature should consider requiring the Office of the State Auditor perform an audit of the information to verify that the breakdown is complete and accurate so it can be used as the starting point for future reporting to the Legislature, the Governor, and the Transportation Board.



### **APPENDIX**

#### Internal Control Components and Principles Significant to the Audit Objective

Our audit objective was to confirm how much the Department of Transportation exceeded its Spending Plan for state fiscal year 2019 and identify causes of the overspending.

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

	Audit Objective
Control Environment	
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
Management should demonstrate a commitment to recruit, develop, and retain competent individuals.	
5. 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.	X
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.	
9. 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.	

#### **APPENDIX**

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



## 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 the 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, or when planned corrective actions do not adequately address the auditor's recommendations, 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.

## Oversight for The Highway Funds Should Be Improved

The Department of Transportation's (Department) response stated that it "strongly supports transparency and legislative oversight. NCDOT is currently subject to the following annual audits:

- EAGLE Internal Control Audit
- CAFR Audit
- Single Audit for federal compliance
- Financial Statement Audit"

While the Department is subject to the audits listed, this response could mislead the reader to believe that these audits would or could have prevented or detected the issues identified in this audit report or provide the level of additional oversight for the Department's Highway Funds this audit report says should be considered. **They would not.** Each of the audits listed by the Department has certain objectives, by regulations or auditing standards, and their conclusions are limited to those objectives only:

- EAGLE Internal Control Audit a self-assessment of internal controls.
- CAFR Audit an audit of select accounts to support an opinion on the financial position for the State of North Carolina.
- **Single Audit for federal compliance** an audit of certain federal programs to support an opinion on compliance with federal rules and regulations at the state level.
- **Financial Statement Audit** an audit to support an opinion on the Department prepared financial statements to show the financial position of the Department. This audit reflects financial position only, there is no opinion or assurance on whether or not the financial position is good.

Further, audits occur "after the fact" and are never meant to replace management's responsibilities for on-going monitoring of agency budgets and spending.

Therefore, the Legislature should consider requiring a level of oversight for the Department's Highway Fund and Highway Trust Fund similar to the level of oversight provided for the State's General Fund agencies.

# \$4.8 Billion Advance Construction Balance Should Be Reported And Monitored

The Department's response stated,

To aide in efficient project delivery, NCDOT has been utilizing advanced construction practices. Beginning 25 years ago, these practices allow the Department to let projects throughout the whole year. Not only does this provided stability for contractors and consultants within the private sector, but also increases federal revenue...

This audit report is not disputing there are benefits to the use of advance construction. The report very clearly discusses the benefits **and risks** of the use of advance construction.

Despite the risks, there is no single document that provides the Legislature or anyone else with a clear discussion of advance construction (1) benefits, (2) risks, (3) beginning balance, (4) expenditures, (5) contracted amounts, (6) planned additions, (7) planned conversions, and (8) ending balance.

Therefore, the Legislature should consider requiring the Department to periodically provide the detailed information necessary to monitor and evaluate advance construction risks. The Legislature should also consider requiring OSA to audit the information and verify that the breakdown is complete and accurate so it can be used as the starting point for future reporting to the Legislature, the Governor, and the Transportation Board.



# RESPONSE FROM DEPARTMENT OF TRANSPORTATION



# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR J. ERIC BOYETTE SECRETARY

April 30, 2020

The Honorable Beth A. Wood, CPA State Auditor North Carolina Office of the State Auditor 2 South Salisbury Street 20601 Mail Service Center Raleigh, NC 27699-0600

RE: Performance Report titled Department of Transportation Cash Spending Plan

Dear Ms. Wood:

As it relates to the audit conducted by your office concerning the Department's Cash Spending Plan for state fiscal year (SFY) 2019, I would like to thank you for the effort put forth by you, your staff, and the consultant subject matter experts. The Department of Transportation has reviewed the report and provides the attached responses to the findings, recommendations, and matters for consideration.

Thank you for the time and opportunity to review and respond to these findings. Please contact me if you have any questions regarding DOT's response to any of the findings and recommendations.

Sincerely,

I. Eric Boyette

Secretary, Department of Transportation

cc: Robert W. Lewis, Chief Operating Officer

Mailing Address: NC DEPARTMENT OF TRANSPORTATION OFFICE OF THE SECRETARY 1501 MAIL SERVICE CENTER RALEIGH, NC 27699-1501 Telephone: (919) 707-2800 Fax: (919) 733-9150 Customer Service: 1-877-368-4968

Website: ncdot.gov

Location: 1 SOUTH WILMINGTON STREET RALEIGH, NC 27601

#### Introduction

The General Assembly, through General Statutes, and the Secretary's Confirmation Hearing in 2017, directed the Department to reduce its cash balance. The cash balance is the product of unexpended funds in numerous budget accounts from previous spending years' appropriations, Figure 1. Due in part to slow project delivery during SFY 2017, NCDOT established spending targets that were higher than the budget appropriations to spend the cash balance. This continued through SFY 2018 and SFY 2019. Knowing the importance of reliable forecasts when establishing fiscal year target spending plans, NCDOT used its cash modeling tool to provide predicted cash balances for each month over several years. This tool forecasted expenditures using construction expenditures from multi-year contracts and historical expenditure rates for specific programs within the funding categories of Operations & Maintenance and Preliminary Engineering. In addition to expenditure forecasts, the cash modeling tool incorporates the revenue forecast to predict cash balances.

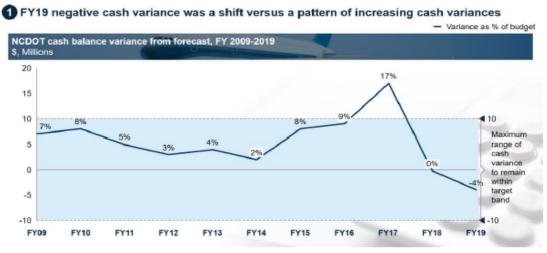


Figure 1: NCDOT's Cash Balance Variance from Forecast

The Department continues to refine its cash forecast tool to enhance its accuracy. The unpredictably of storms, in frequency and impact, is difficult to model. Certain spending programs, disaster and storm spending, do not have the same predictability that they had prior to SFY 2017. Since SFY 2017, NCDOT's response to storms has been at unprecedented frequencies and costs. Because storms are unpredictable and of the lack of budget appropriations for storms, storm response could not be included in the spend plan. This resulted in unbudgeted expenditures. To compensate for this moving forward in FY 2020 the department reduced the spend targets below budget appropriations in efforts to improve the cost balance.

# Finding 1 Part A:

Spending Plan was not based on cost estimates of the specific projects and operations the Department scheduled for the fiscal year

#### Recommendation:

The Department should base its Spending Plan on specific projects and operations scheduled for the fiscal year.

#### Agency Response

The Department agrees with the State Auditor's finding and recommendation listed above.

NCDOT used historical expenditure rates for programs within Operations & Maintenance and Preliminary Engineering, not on a per project basis. Recognizing the need for further accuracy, NCDOT began creating and refining project-level and road system level forecast modeling tools to validate the spending plan on a monthly basis in each program for Operations & Maintenance, Figure 2. The modeling effort for these programs began in March of 2019 and is ongoing. Compared to the construction/contracted modeling tool, there are many differences that will require further refining to achieve good statistical accuracy. Operations and Maintenance spending on General Maintenance Reserve (GMR) contains thousands of projects within the system level that are reacting to conditions within the system that are continuously changing, making it nearly impossible to predict on an activity level.

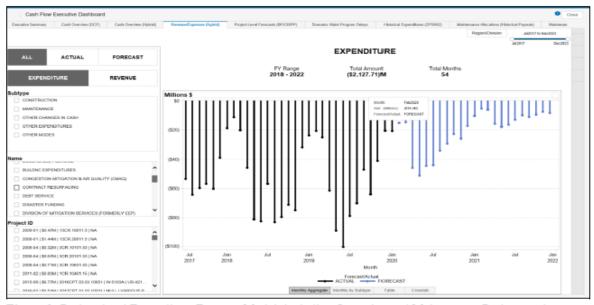


Figure 2: Project-level Expenditure Forecast Model, including Operation and Maintenance Projects and Programs

# Finding 1 Part B:

Chief Engineer's Office did not monitor highway division compliance with the Spending Plan

#### Recommendation:

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.

## Agency Response

The Department agrees with the State Auditor's finding and recommendation listed above.

To align with spending targets, the 14 Highway Divisions are submitting quarterly expenditure forecasts, beginning December of 2019 and continues. All projects and programs, to the detail of the project/system/WBS element level, are included. This allows both the Chief Engineer's Office and respective Highway Division Engineer to compare and monitor actual spending versus the forecasted spending plan. Each Highway Division Engineer is able to view their respective Division's spend plan dashboard, Figure 3, to aide in more frequent monitoring of expenditures by program and adjust accordingly.



Figure 3: NCDOT Division of Highways Spend Plan Dashboard - Statewide View

In November of 2019, the Chief Engineer's Office began monitoring Preliminary Engineering (PE) expenditures on a weekly basis. The aforementioned project-level projections provided by the Highway Divisions are compared to the actual PE expenditures in the Preliminary Engineering Dashboard, Figure 4, and is resulting in better communication between the Highway Divisions, Technical Services, and the consulting engineers working on the projects.

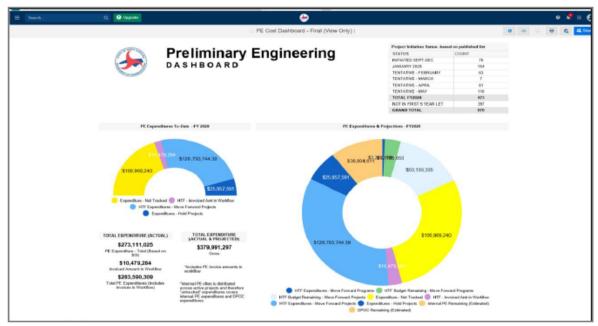


Figure 4: NCDOT Preliminary Engineering Dashboard

The audit states (p. 9) "The Department did not estimate SFY 2019 disaster spending based on historical spending information or any other type of data." The budget of \$50M was presumed an appropriate disaster spending estimate as it was based on historical storm expenditures (averaged \$66M per year through SFY 2016) and federal reimbursements to NCDOT over the same time period which averaged approximately \$17M per year. Beginning in SFY 2017, storm expenditures unexpectedly increased to an average of \$222M per year through SFY 2019, Figure 5.

	FY 200	4 - 2016	FY 201	Increase	
	Cumulative Spend	Avg. Annual Spend	Cumulative Spend	Avg. Annual Spend	Annually
Declared	\$ 300,861,306	\$ 23,143,177	\$ 398,272,125	\$ 132,757,375	\$ 109,614,198
Non-Declared	\$ 566,943,620	\$ 43,611,048	\$ 268,424,883	\$ 89,474,961	\$ 45,863,913
Total	\$ 867,804,926	\$ 66,754,225	\$ 666,697,008	\$ 222,232,336	\$ 155,478,111

Figure 5: Historic Disaster Expenditures

The \$50M budget estimate for disaster spending was not enough to cover the SFY 2017-2019 storm expenditures. As North Carolina was experienced a historically unprecedented increase in storm activity, the Department also experienced a decrease in the GMR appropriation from the General Assembly, Figure 6. The SFY 2018/2019 biennium budget for GMR returned to similar levels of SFY 1992/1993 (not shown). This resulted in the department having to make a choice to either work on disasters, perform maintenance activities often related to safety, or spend more funds than were allocated.

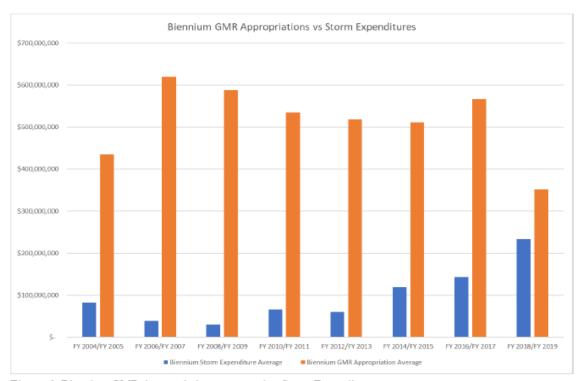


Figure 6: Biennium GMR Appropriations compared to Storm Expenditures

As one of the six programs under Operations & Maintenance, GMR appropriations are not only used to support storm responses but also support the expenditures of all routine road and bridge maintenance. **Figure** 7 shows a selection of only some activities included in GMR outside of storm response.

Activity	Annual Cost		
Shoulder/Ditch	\$	60,000,000	
Pavement Repair	\$	45,000,000	
Removal of Hazards	\$	29,000,000	
Traffic Devices	\$	50,000,000	
Barrier/Guardrail	\$	17,000,000	
Pipe Installation / Replacement / Repairs	\$	72,000,000	
Office Engineer / Inspection / Assessment	\$	50,000,000	
Incident Mangement Assistance Program	\$	7,000,000	
Unpaved Roadway Maintenance	\$	13,500,000	
Electricity for Signals and Roadway Lighting	\$	7,000,000	
Total	\$3	350,500,000	

Figure 7: Selection of non-Storm Response GMR activities and their historical annual costs

The increased expenditures on storm response represent an increasing share of the declining GMR appropriations, **Figure 8**. This figure is a modified chart from Table 3-"Disaster Spend Forecast vs Actual" in the audit report (p. 10) to include the GMR appropriation decline.

	In Millions						
Fiscal Year	Forecasted Amount	Actual Spend	GMR Appropriation				
2015	\$ 50	\$ 78	\$ 449				
2016	\$ 50	\$ 86	\$ 451				
2017	\$ 50	\$ 200	\$ 468				
2018	\$ 50	\$ 171	\$ 285				
2019	\$ 50	\$ 296	\$ 309				

Figure 8: Disaster Spend Forecast vs Actual vs declining GMR Appropriations

Note: This Figure is a supplement to Table 3- "Disaster Spend Forecast vs Actual" on page
10 of the Performance Report titled Department of Transportation Cash Spending Plan

To reduce overspend in GMR, NCDOT has taken steps including: limiting expenditures on non-safety related maintenance activities and repairs from storm damage. Storms from 2018 to present have left the Department with approximately 350 storm sites awaiting repairs and 75 road closures, **Figure 9**.

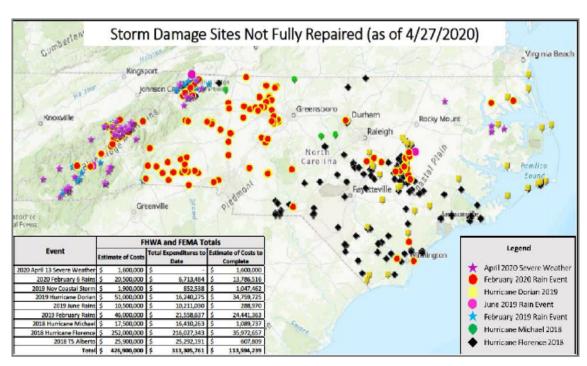


Figure 9: Storm Damage Sites awaiting repair

The Department will continue to reduce overall expenditures but an increase in GMR appropriations is required before NCDOT can increase the disaster spending budget.

Session Law 2019-251 created a Transportation Emergency Reserve that will assist in increased storm activity going forward. The Department will continue to analyze all available data to identify trends and improve forecasts in this area and will utilize the emergency reserve, as necessary. However, the emergency reserve requires a pay back at the beginning of each SFY, which comes from Department funds.

#### Finding 1 Part C:

Chief Engineer's Office did not enforce highway division compliance with the Spending Plan

#### Recommendation:

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.

#### Agency Response

The Department agrees with the State Auditor's finding and recommendation listed above.

As mentioned previously, as of December 2019, the Highway Divisions are required to produce quarterly reports for the Chief Engineer's Office of anticipated expenditures at the project/WBS element level. These expenditure estimates are uploaded into the Department's Spend Plan Dashboard and used to compare project-level expenditures with spending targets, Figure 10, allowing the Chief Engineer's Office to make corrections throughout the year and improve the oversight of the Highway Divisions.

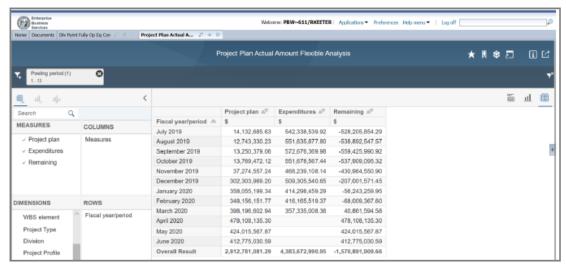


Figure 10: Comparison of Project-level Planned Expenditures to Actual Expenditures by Month in Spend Plan Dashboard

The Chief Engineer's Office continues to review anticipated expenditure amounts within each program and adjust any anticipated contract lettings as necessary to prevent potential overspending across all programs. The challenge of this task is that the Department has existing contracts where the monthly expenditures can span up to three fiscal years. Allocations for maintenance and operations programs have historically been on an annual basis but starting SFY 2020, the 14 Highway Divisions receives a 6-month allocation. This allows the Chief Engineer's Office flexibility to adjust for the second half of the fiscal year based on available revenue and expenditure forecasts. This allows the Department to adjust but does not solve the overall funding issues. The Session Law 2019-251 allows the Department to spread the disaster expenditures across more programs other than GMR but does not solve the funding issue.

# Estimated Date for Implementing

All the recommendations are currently implemented, except for adjusting the disaster budget. Session Law 2019-251 requires the Transportation Emergency Reserve to be effective in SFY 2021. Additionally, the Department, and specifically the Chief Engineer's Office, continues to refine processes to manage the funding provided while at the same time building and maintaining North Carolina's valuable transportation assets.

# Matters for Consideration (MFC):

The Legislature should consider requiring a level of oversight for the Highway Fund and Highway Trust Fund similar to the level of oversight provided for the state's General Fund.

The Legislature should consider requiring the Department to periodically report on advance construction for oversight purposes. The outstanding advance construction balance was \$4.8M billion as of January 21, 2020.

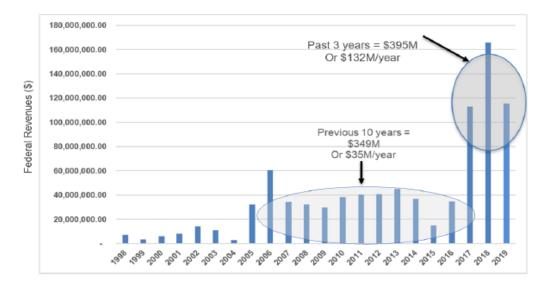
# Agency Response to Matters for Consideration

The department strongly supports transparency and legislative oversight. NCDOT is currently subject to the following annual audits:

- · EAGLE Internal Control Audit
- CAFR Audit
- Single Audit for federal compliance
- Financial Statement Audit

In addition, the Department provides numerous reports, per legislation. Included is a weekly cash report similar to the General Fund Cash Watch provided by the Office of the State Controller (OSC).

To aide in efficient project delivery, NCDOT has been utilizing advanced construction practices. Beginning 25 years ago, these practices allow the Department to let projects throughout the whole year. Not only does this provided stability for contractors and consultants within the private sector, but also increases federal revenue, **Figure 11**. **Figure 12** shows the advance construction balances for all states.



# RESPONSE FROM DEPARTMENT OF TRANSPORTATION

Response to Performance Report - Department of Transportation Cash Spending Plan

Figure 11: NCDOT Federal Revenues per year, demonstrating increased revenues due to Advance Construction Authorization

# Advance Construction Balances

		240444	DV.	D		
D 4 0°	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	As of 3/31/20
Puerto Rico		\$83,426,484	75.854.084.44	80 200 004 44	10,119,838.23	10,119,838.23
Virgin Islands	800 450 400	4	34.825.828.38	68,280,084.44	60,704,584.44	58,835,106.94 135.867.403.96
Wisconsin	\$23,150,123	\$29,713,707		295,029,730.26	74,469,037.63	
Montana South Dobata	\$123,762,957	\$80,838,161	65,681,558.10	65,935,014.71	102,019,137.21	29,709,273.03
South Dakota	\$87,647,027	\$118,229,705	102,339,983.21	76,910,797.20	105,658,651.85	270,517,587.47
Utah	\$40,915,154	\$58,152,199	57,141,927.31	55,959,222.97	110,480,935.81	55,731,249.34
Wyoming	\$111,450,833	\$93,498,584	116,200,266.49	99,347,641.09	119,041,909.90	182,076,126.90
Hawaii Nebraska	\$41,410,348	\$46,978,950	152,953,497.44	155,246,350.25 136,421,687,25	124,958,801.95	90,996,295.29
	\$130,346,411	\$87,470,234	111,190,880.34		125,652,589.64 160,654,306.60	183,025,527.64
New Hampshire	\$247,275,638	\$212,387,735		134,257,840.86		154,149,732.21
North Dakota	\$204,701,827	\$210,644,375	213,437,550.38	217,469,554.20	189,635,244.09	199,926,792.04
Missouri	\$313,503,294	\$230,677,227	129,204,931.48	151,102,700.27	199,190,961.59	454,174,474.48
Vermont	\$158,880,381	\$140,619,981	165,529,892.94	157,263,677.56	208,099,105.98	291,418,683.61
Oklahoma	\$267,631,664	\$231,265,091	211,823,203.29	158,325,328.71	208,781,837.37	194,514,475.03
Oklahoma	\$162,661,265	\$302,525,238	194,446,538.41	249,862,501.77	231,643,652.90	117,459,761.80
New Jersey	\$125,800,443	\$306,911,955	222,604,277.10	31,425,075.00	240,857,911.78	246,037,206.78
Maine	\$163,649,748	\$201,270,902	229,836,131.49	153,064,936.94	248,144,671.67	310,853,133.48
Kansas	\$611,399,855	\$517,120,119	389,663,610.11	285,408,693.99	263,303,988.03	477,125,346.70
Alaska	\$366,406,212	\$317,232,300	311,498,685.51	284,092,568.00	312,519,609.35	423,999,827.43
Arizona	\$842,345,759	\$771,343,578	554,804,653.69	384,984,515.61	378,558,499.13	346,975,893.42
District Of Columbia	\$132,678,494	\$509,005,713	497,232,221.99	485,460,209.49	478,459,418.75	466,684,881.25
Minnesota	\$384,729,262	\$273,585,917	443,395,316.97	587,197,895.78	479,133,559.57	551,038,394.35
Oregon	\$343,316,693	\$237,384,042	206,848,989.89	445,031,346.98	506,059,402.44	469,561,882.87
Connecticut	\$441,409,094	\$535,214,173	377,940,611.04	736,334,011.81	548,009,407.27	508,659,592.36
Indiana	\$898,823,928	\$603,629,705	559,234,466.63	461,541,710.20	592,479,217.16	1,716,294,070.32
Washington	\$1,308,354,632	\$898,885,170	794,679,207.50	647,090,977.74	601,555,871.46	474,636,249.90
lowa	\$440,115,779	\$429,594,876	674,212,027.59	645,789,295.94	604,953,314.69	864,311,243.91
Illinois	\$1,421,853,526	\$795,787,647	597,201,488.30	460,284,385.77	626,853,058.31	1,382,438,072.66
Louisiana	\$342,702,826	\$506,930,556	472,454,154.56	380,849,760.29	629,049,099.23	840,918,170.33
West Virginia	\$255,454,891	\$399,819,292	708,952,936.00	504,806,197.87	634,614,423.17	611,986,442.89
Tennessee	\$240,987,161	\$302,858,577	383,189,549.85	556,096,038.85	656,685,652.39	656,566,628.85
Idaho	\$913,027,287	\$880,015,231	836,914,355.27	711,142,534.42	706,700,049.14	780,046,202.41
Georgia	\$1,023,102,749	\$1,136,966,106	1,174,880,104.69	930,270,034.30	714,446,015.15	322,655,851.73
Nevada	\$828,471,324	\$1,254,106,381	1,108,450,348.96	1,000,354,101.78	952,190,307.14	862,879,494.33
Mississippi Colorado	\$1,167,731,981 \$1,569,124,568	\$1,178,963,330	1,213,760,027.55	1,142,638,129.08	1,097,074,520.73	1,266,471,422.18
	4 - 1 1 1	\$1,810,329,988	1,692,583,436.26	1,287,326,352.71	1,103,457,287.90	1,097,379,112.93
Massachusetts	\$1,295,434,211	\$1,142,317,121	1,117,238,902.01	1,200,181,421.36	1,133,922,800.35	1,092,136,649.66
Pennsylvania Rhode Island	\$1,141,487,970 \$617,769,683	\$875,718,708	913,502,132.64 928,255,018.65	1,273,295,381.60	1,290,424,529.11	1,800,828,253.98
		\$605,021,395		-,,		
Arkansas Alabama	\$844,867,506 \$811,292,005	\$987,947,536	1,029,664,643.00	1,276,224,092.00	1,346,140,934.00	1,267,810,759.00
					.,,,	.,,,
New Mexico	\$1,067,065,700					1,662,680,879.82
South Carolina Kontucky	\$1,247,854,216				1,840,255,907.41	
Kentucky New York	\$1,469,529,246				1,864,114,302.47 2,087,279,832.00	
Ohio	\$2,004,527,502 \$2,279,628,956					
Michigan	\$768,654,026				2,200,410,679.19	
	\$4.087.924.870					
Horida North Carolina	\$3,248,421,112				4,035,052,071.00	
California						4,722,455,927.00
	\$2,855,473,832				6,107,403,658.63	
Texas	\$3,596,440,182				8,186,645,982.75	
Virginia	\$6,249,685,768	\$6,476,668,243	9,187,990,517.80	9,322,417,361.37	9,615,808,918.80	10,194,562,583.82

Figure 12: Advance Construction Balances of States

# RESPONSE FROM DEPARTMENT OF TRANSPORTATION

Response to Performance Report - Department of Transportation Cash Spending Plan

# Conclusion

The audit highlights the complexity of the Department's financial and accounting systems. This performance report only examines SFY 2019, without the benefits of incorporating historical budgets and operations. The Auditor's recommendations have been or are currently being incorporated into NCDOT with the exception of increasing the budget for disasters within GMR. Without an increase in appropriation for GMR, increasing the disaster budget would have severe impacts on other Highway Fund programs.

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