

# STATE OF NORTH CAROLINA

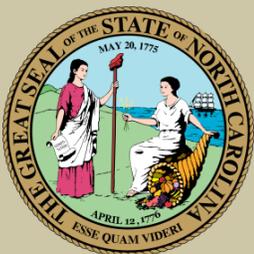
OFFICE OF THE STATE AUDITOR  
BETH A. WOOD, CPA



## ADVANCE CONSTRUCTION REPORT

DEPARTMENT OF TRANSPORTATION

PERFORMANCE AUDIT  
MAY 2021



**NCOSA**  
The Taxpayers' Watchdog

# EXECUTIVE SUMMARY

---

## PURPOSE

The purpose of this audit was to determine whether the Department of Transportation's (Department) **advance construction** report complied with Session Law 2020-91 Section 5.11.(a) and the information was accurate.

If the report did not comply, identify the causes of report deficiencies and the impact on report users.

## BACKGROUND

Session Law 2020-91 Section 5.11.(a) required the Department to submit a detailed report on its use of federal **advance construction** authorizations to fund construction of North Carolina highways.

**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).<sup>1</sup> 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.

The Department's outstanding **advance construction** balance was approximately \$4.05 billion as of September 27, 2020.

Session Law 2020-91 Section 5.11.(b) required the Office of the State Auditor to conduct a performance audit of the Department's **advance construction** report.

## KEY FINDINGS

- The Department's report on **advance construction** did not include **all** information required by state law. The report did not include **all** required information because the Department stated that some information was difficult to obtain.
- The Department's report on **advance construction** was inaccurate. The report was inaccurate for two reasons. The Department:
  - 1) Did not make proper adjustments in its accounting system
  - 2) Did not complete a detailed review of the report

## KEY RECOMMENDATIONS

- Department management should obtain the information required by Session Law 2020-91 Section 5.11.(a) using additional programming or data analysis procedures.
- Before not complying with state law, Department management should consult with appropriate members of the Joint Legislative Transportation Oversight Committee or others in the General Assembly to discuss the difficulty of obtaining the information required by Session Law 2020-91 Section 5.11.(a) and potential modifications to the requirements.

---

<sup>1</sup> Advance construction allows the FHWA to authorize a project without obligating (promise to pay) federal funds at the time of authorization.

# EXECUTIVE SUMMARY (CONCLUDED)

---

- The Department should ensure that proper adjustments are made in its accounting system.
- Department management should ensure that reports are reviewed for accuracy.

## MATTERS FOR FURTHER CONSIDERATION

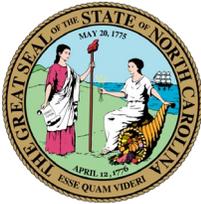
- The Department should include a section in its **advance construction** report that includes explanation and guidance to assist report users.
- The **advance construction** report's section on Grant Anticipation Revenue Vehicle (GARVEE)<sup>2</sup> bond utilization does not meet the needs of report users.

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

---

<sup>2</sup> GARVEE bonds are state debt instruments used in conjunction with **advance construction** to enable using federal-aid funds for future debt service payments.

STATE OF NORTH CAROLINA  
**Office of the State Auditor**



**Beth A. Wood, CPA**  
State Auditor

2 S. Salisbury Street  
20601 Mail Service Center  
Raleigh, NC 27699-0600  
Telephone: (919) 807-7500  
Fax: (919) 807-7647  
<https://www.auditor.nc.gov>

## 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 Advance Construction Report*. The audit objective was to determine whether the Department of Transportation's **advance construction** report complied with Session Law 2020-91 Section 5.11.(a) and the information was accurate. If the report did not comply, identify the causes of report deficiencies and the impact on report users.

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

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

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

Respectfully submitted,

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

Beth A. Wood, CPA  
State Auditor

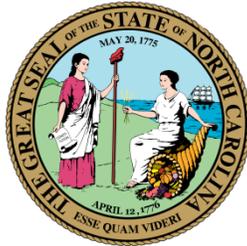


**Beth A. Wood, CPA  
State Auditor**

# TABLE OF CONTENTS

---

	<b>PAGE</b>
BACKGROUND .....	1
OBJECTIVE, SCOPE, AND METHODOLOGY .....	4
RESULTS AND CONCLUSION .....	5
<b>FINDINGS, RECOMMENDATIONS, AND RESPONSES</b>	
1. DEPARTMENT’S REPORT ON ADVANCE CONSTRUCTION DID NOT INCLUDE ALL INFORMATION REQUIRED BY STATE LAW.....	6
2. DEPARTMENT’S REPORT ON ADVANCE CONSTRUCTION WAS INACCURATE.....	9
<b>MATTERS FOR FURTHER CONSIDERATION</b>	
1. DEPARTMENT’S REPORT ON ADVANCE CONSTRUCTION IS LIMITED IN USEFULNESS WITHOUT ADDITIONAL EXPLANATION .....	12
2. ADVANCE CONSTRUCTION REPORT’S PRESENTATION OF GARVEE BOND INFORMATION NOT USEFUL FOR REPORT USERS .....	13
APPENDIX.....	14
STATE AUDITOR’S RESPONSE .....	15
RESPONSE FROM THE DEPARTMENT OF TRANSPORTATION.....	17
ORDERING INFORMATION .....	20



# BACKGROUND

Session Law 2020-91 Section 5.11.(a) required the Department of Transportation (Department) to submit a detailed report on its use of federal **advance construction** authorizations to fund construction of North Carolina highways.

The legislation was enacted because of an Office of the State Auditor (OSA) May 2020 audit report titled *Department of Transportation Cash Spending Plan*.<sup>3</sup> The audit found there was **no external evaluation** or **oversight** of the Department's **advance construction** practices. OSA recommended that the North Carolina General Assembly consider requiring the Department to periodically provide the detailed information necessary to **monitor** and **evaluate** the use of **advance construction** as a means of funding the construction of North Carolina highways.

The legislation required the Department's **advance construction** report to include:

- 1) The benefits and risks associated with the Department's **advance construction** practices.
- 2) A report showing the **advance construction** balances by funding source<sup>4</sup> for five years.
- 3) A listing of projects currently utilizing **advance construction** with details such as the initial **advance construction** amount, contract amount, amount of expenditures for which **advance construction** has been converted allowing reimbursement by Federal Highway Administration or other sources and a schedule for **advance construction** that is planned to be converted where future reimbursement is anticipated, and the anticipated conversion and reimbursement schedule.
- 4) A listing of projects where it is anticipated **advance construction** will be used in the future with details such as anticipated **advance construction** amount and conversion and reimbursement schedule.
- 5) A listing of projects currently utilizing GARVEE bond funding<sup>5</sup> with details such as total amount of bonds issued, amount of principal and interest repaid, and a schedule of the remaining principal and interest payments.

The report was to be submitted to the Joint Legislative Transportation Oversight Committee, the General Assembly's Fiscal Research Division, and the Office of the State Auditor (OSA) no later than 90 days from the effective date of the legislation (or **September 29, 2020**).<sup>6</sup>

Session Law 2020-91 Section 5.11.(b) required the Office of the State Auditor to conduct a performance audit of the Department's **advance construction** report.

Chart 1 below shows the Department's use of **advance construction** from 1997 through 2020. The Department's outstanding **advance construction** balance as of September 27, 2020, was approximately \$4.05 billion.

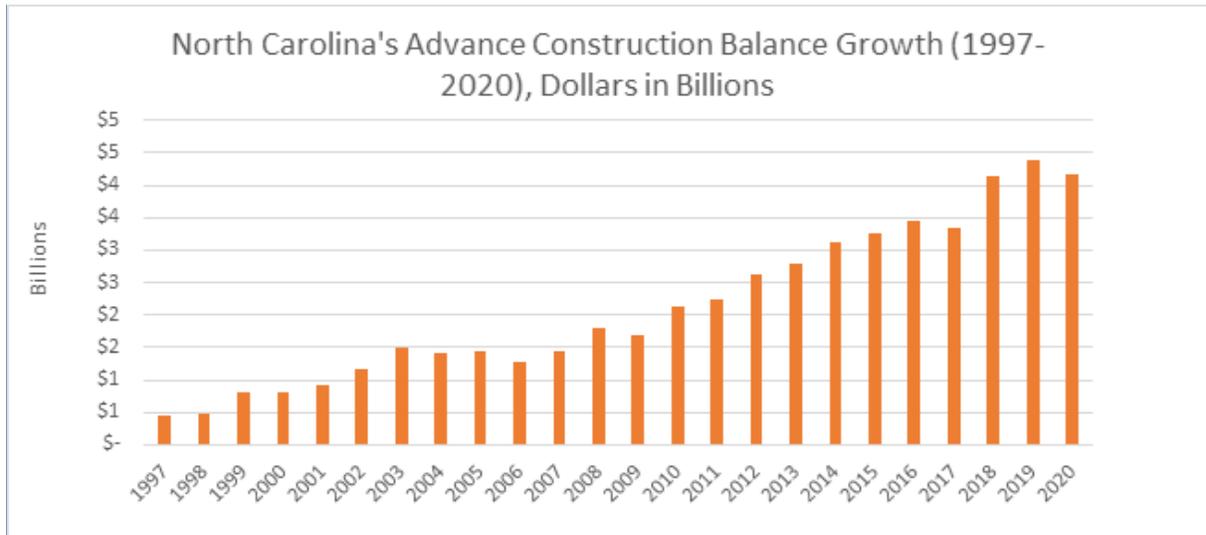
<sup>3</sup> <https://www.auditor.nc.gov/EPSSWeb/reports/performance/PER-2020-4200.pdf>.

<sup>4</sup> The state funding source of authorized advance construction projects prior to being converted for federal reimbursement or to another funding source. Includes the Department's Highway Fund, Turnpike Fund, GARVEE bonds, etc.

<sup>5</sup> GARVEE advance construction allows states to issue debt, use that debt for highway construction, and then repay the debt with future federal reimbursements.

<sup>6</sup> Session Law 2020-91 became effective July 1, 2020.

Chart 1



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

### Key terms discussed in this report include:

*Advance Construction* - **Advance construction** is one of two **project authorization techniques** that allow for road construction projects to be financed with federal-aid highway funds administered by the Federal Highway Administration (FHWA).

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 FY 2021, North Carolina's **obligation authority** was **\$1 billion**.

In **advance construction**, the FHWA 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 billable 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**.

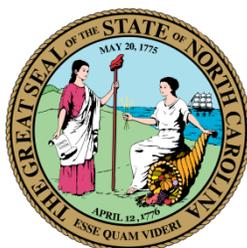
*Grant Anticipation Revenue Vehicle (GARVEE) Bonds* - GARVEE bonds are state debt instruments used in conjunction with **advance construction** to enable using federal-aid funds for future debt service payments.

**Responsible parties discussed in this report include:**

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

*North Carolina Board of Transportation* - The North Carolina Board of Transportation is composed of 20 people from across the state. Each member represents a specific transportation division or is an at-large, state-wide member. All members work with the Secretary of Transportation and team to make decisions about transportation priorities.

*Federal Highway Administration (FHWA)* - A division of the United States Department of Transportation that specializes in highway transportation. FHWA's major activities are grouped into two programs: the Federal-Aid Highway Program and the Federal Lands Highway Program.



# **OBJECTIVE, SCOPE, AND METHODOLOGY**

The audit objective was to determine whether the Department of Transportation's (Department) **advance construction** report complied with Session Law 2020-91 Section 5.11.(a) and the information was accurate.

If the report did not comply, identify the causes of report deficiencies and the impact on report users.

Session Law 2020-91 Section 5.11.(b) required the Office of the State Auditor to conduct a performance audit of the Department's **advance construction** report.

To achieve the audit objective, auditors:

- Interviewed Department personnel and members of the Board of Transportation and North Carolina General Assembly
- Reviewed Department policies and procedures
- Reviewed financial information
- Reviewed Department communications including reports, memos, and emails
- Reviewed state and federal transportation laws relevant to **advance construction**

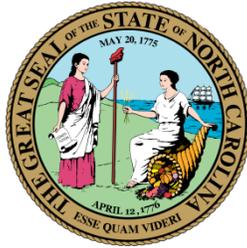
To determine whether the Department's **advance construction** report **complied** with Session Law 2020-91 Section 5.11.(a), auditors inspected the report and compared it to the requirements of Session Law 2020-91 Section 5.11.(a).

To determine whether the Department's **advance construction** report was **accurate**, auditors checked the math in each report schedule, recalculated amounts in report schedules where applicable (e.g., Trustee Reimbursements in GARVEE Bond Schedules), and verified that various schedule balances agreed with one another where applicable (e.g., **advance construction** balances). In addition, auditors traced a limited number of figures within the report to supporting documentation such as accounting records and GARVEE bond Trustee payment schedules.

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 the Appendix 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 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.

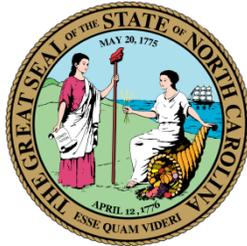


# **RESULTS AND CONCLUSIONS**

The Department of Transportation's report on **advance construction** did not comply with Session Law 2020-91 Section 5.11.(a) and was inaccurate. As a result, users of the report had limited ability to monitor and evaluate **advance construction** risks and could potentially have made erroneous decisions concerning the use and risks of **advance construction**.

Risks associated with the use of **advance construction** include:

- The increased need for cash in the short term until the Department can receive federal reimbursement
- Delayed or denied reimbursement if federal funds are not available when the State requests project conversion and reimbursement
- Denied reimbursement if the Department cannot demonstrate compliance with federal-aid highway project requirements



# **FINDINGS, RECOMMENDATIONS, AND RESPONSES**

---

## 1. DEPARTMENT'S REPORT ON ADVANCE CONSTRUCTION DID NOT INCLUDE ALL INFORMATION REQUIRED BY STATE LAW

---

The Department of Transportation's (Department) report on **advance construction** did not include **all** information required by state law. As a result, oversight bodies had limited ability to monitor and evaluate **advance construction** risks. The report did not include **all** required information because the Department stated that some information was difficult to obtain. However, state law required specific details to be included in the Department's **advance construction** report.

### Advance Construction Report Did Not Comply with State Law

The Department's report on **advance construction** did not comply with three of the information requirements outlined in state law.<sup>7</sup> Specifically, the report did not contain a schedule that provided the:

1. "**Initial advance construction amount**" which is the total amount of a project that the Federal Highway Administration (FHWA) approved as being eligible for federal funding.

Consequently, oversight bodies cannot use the report to determine the full amount of project costs that the Department anticipates funding with federal-aid highway funds.

2. "**Amount of expenditures for which Advance Construction has been converted allowing reimbursement by FHWA**" which is the amount of state-funded construction costs that the FHWA approved for conversion to reimbursable federal-aid highway project costs.

The "Converted Expenditures" column in the report's "NCDOT Advance Construction Report" schedule included construction costs converted to all funding sources (state and federal), but it did not separately identify the costs converted just for reimbursement from the FHWA.

Consequently, oversight bodies cannot use the report to determine the portion of eligible **advance construction** projects that have been converted and are awaiting reimbursement from the FHWA.

3. "**Schedule for Advance Construction that is planned to be converted where future reimbursement is anticipated, and the anticipated conversion and reimbursement schedule.**"

The "Conversion Schedule for Authorized Federal Projects" that the Department included in the report did not meet state law requirements because it shows the deadline for conversion<sup>8</sup> instead of showing when the Department expects **advance construction** costs to be converted<sup>9</sup> for reimbursement from the FHWA.

---

<sup>7</sup> Session Law 2020-91 Section 5.11.(a)(2).

<sup>8</sup> According to the Department, the deadline (i.e., Agreement End Date) in the Conversion Schedule should correlate with the period during which project work is performed and expenditures are incurred. However, project work may be accelerated, delayed, or never take place.

<sup>9</sup> After the FHWA approves a project eligible for federal funding through advance construction the Department begins the project and pays construction costs using state funds. At some point in the future, the Department can ask FHWA to convert these construction costs allowing the Department to request reimbursement from the FHWA.

Consequently, oversight bodies cannot use the report to determine when eligible **advance construction** projects are planned to be converted and when to anticipate federal reimbursement.

### **Resulted in Limited Ability to Monitor Advance Construction Risks**

Because the report did not contain **all** required information, oversight bodies had limited ability to monitor and evaluate the Department's use of **advance construction** and the associated risks.

Risks associated with the use of **advance construction** include:

- Increased need for cash in the short term until the Department can receive federal reimbursement
- Delayed or denied reimbursement if federal funds are not available when the State requests project conversion and reimbursement
- Denied reimbursement if the Department cannot demonstrate compliance with federal-aid highway project requirements

### **Caused by Difficulty in Obtaining the Required Information**

The Division of Planning and Programming Director stated that the **advance construction** report did not include **all** required information because it was difficult to obtain.<sup>10</sup>

For example, the **initial advance construction amounts** were not included because it would have required pulling each project up individually. The Director stated there were 972 unique work breakdown structure<sup>11</sup> (WBS) elements representing phases of projects.

The Director stated that a detailed history of each WBS project level is in its information system (SAP), but SAP cannot simply be queried to obtain a report of the original **advance construction** amount. Staff would have to look up each WBS element individually and review the "allotment tab"<sup>12</sup> in SAP to obtain the initial **advance construction** balance.

Additionally, the **anticipated conversion and reimbursement schedule** was not included for all authorized federal projects because of the difficulty in predicting the rate of project costs at the time the report was written.

The Director explained that estimating a rate of conversion for every project to be able to estimate **advance construction** conversions on a monthly or quarterly basis - during the pandemic while so many projects were on hold - was not something the Division could do accurately. The Director stated the conversion schedule would have required monthly or quarterly conversion amounts for each project over the life of each project, and that was too difficult to estimate with so many projects on hold.

---

<sup>10</sup> The Department's advance construction report was created by personnel in the Accounting Operations and Budget Division's Federal Funds Management Unit. The effort was led by the Accounting Operations and Budget Division's Director and the Division of Planning and Programming Director

<sup>11</sup> A deliverable-oriented breakdown of a project into smaller components.

<sup>12</sup> The allotment tab shows the history of the WBS element including the original advance construction funded amount, the dates of federal authorization, and conversions.

**State Law Required Specific Details in Advance Construction Report**

Session Law 2020-91 Section 5.11.(a)(2) required the Department to include in its report a listing of projects currently utilizing **advance construction** with details such as:

1. The initial **advance construction** amount
2. The amount of expenditures for which **advance construction** has been converted allowing reimbursement by Federal Highway Administration or other sources
3. A schedule for **advance construction** that is planned to be converted where future reimbursement is anticipated, and the anticipated conversion and reimbursement schedule

**RECOMMENDATIONS**

The Division of Planning and Programming Director or other appropriate members of Department management should use additional programming or data analysis procedures to obtain the information required by Session Law 2020-91 Section 5.11.(a) from the Department's information system (SAP).

Before not complying with state law, Department management should consult with appropriate members of the Joint Legislative Transportation Oversight Committee or others in the General Assembly to discuss the difficulty of obtaining the information required by Session Law 2020-91 Section 5.11.(a) and potential modifications to the requirements.

The Department's Secretary should have a means to ensure that the Department complies with state law.

**AGENCY RESPONSE**

See page 18 for the Department's response to this finding.

---

## 2. DEPARTMENT'S REPORT ON ADVANCE CONSTRUCTION WAS INACCURATE

---

The Department of Transportation's (Department) report on **advance construction** was inaccurate. As a result, report users could have made erroneous judgments and decisions. The report was inaccurate for two reasons: (1) the Department did not make proper adjustments in its accounting system and (2) the Department did not complete a detailed review of the report. Best practices state that Department procedures should provide reasonable assurance that information is accurate.

### Advance Construction Report was Inaccurate

The Department's **advance construction** report that it issued to the Joint Legislative Oversight Transportation Committee and the General Assembly's Fiscal Research Division on September 29, 2020, was inaccurate.

Auditors reviewed the report and found the following three errors:

1. The total **advance construction** balance was overstated by \$114 million (2.7%).<sup>13</sup> The Department's **advance construction** report listed the amount as \$4.16 billion instead of \$4.05 billion.

This error prevented oversight bodies from accurately evaluating the amount of project costs that the Department anticipates funding with federal-aid highway funds instead of state funds.

2. The amount of principal to be repaid to the trustee for Grant Anticipation Revenue Vehicle (GARVEE) bonds<sup>14</sup> was understated by \$142 million (56%). The "GARVEE Bond for Series 2017, 2012 and 2015" schedule listed the amount as \$252 million instead of \$394 million.

This error prevented oversight bodies from accurately evaluating the amount the Department is required (committed) to repay the Trustee.

3. The amount of premium applied<sup>15</sup> to projects for GARVEE bonds was overstated by \$7.7 million (6%). The "GARVEE Bond for Series 2017, 2012 and 2015" schedule listed the amount as \$137 million instead of \$129.3 million.

This error prevented oversight bodies from accurately evaluating the amount of reimbursements the Department received from the Trustee that it will not have to repay.

**After** auditors brought the errors in the **advance construction** report to the Department's attention, the Department corrected the two GARVEE Bond errors noted above and issued a revised report on February 15, 2021.

---

<sup>13</sup> Portion of advance construction balance that was inaccurate was the advance construction balance for projects funded with GARVEE bonds.

<sup>14</sup> GARVEE bonds are state debt instruments issued in anticipation of paying principal and interest with future federal-aid reimbursements. Advance construction allows states to issue debt, use that debt for highway construction, and then repay the debt with future federal reimbursements.

<sup>15</sup> Premiums are proceeds from the GARVEE bond sale received above the principal amounts.

However, the revised report still contained the incorrect total **advance construction** balance noted above.

### **Resulted in Potential for Erroneous Decision-Making**

Errors in the Department's **advance construction** report could have resulted in report users making erroneous judgments and decisions concerning the use and risks of **advance construction**.

Risks associated with the use of **advance construction** include:

- Increased need for cash in the short term until the Department can receive federal reimbursement
- Delayed or denied reimbursement if federal funds are not available when the State requests project conversion and reimbursement
- Denied reimbursement if the Department cannot demonstrate compliance with federal-aid highway project requirements

### **Caused by Failure to Make Proper Adjustments in the Accounting System**

The Department's **advance construction** report was inaccurate because the Department's Accounting Operations and Budget Division did not make the proper adjustments in its accounting system.

Specifically, personnel in the Accounting Operations and Budget Division's Federal Funds Management Unit did not close out **advance construction** projects funded by GARVEE bonds when the bonds had been fully repaid. Personnel also failed to adjust the GARVEE bond premium amounts.

The Federal Highway Administration's (FHWA) also identified this issue in its January 2021 review of the Department's GARVEE Bond Program.<sup>16</sup> The FHWA reported:

During this review, we noted that full repayment had occurred on GARVEE Bond Series 2012. There were three projects under the bond series that have been completed; however, **NCDOT had not taken procedures to close the projects.** *[Emphasis Added]*

### **Also Caused by Lack of Detailed Review**

Additionally, the Department's **advance construction** report was inaccurate because the Accounting Operations and Budget Division Director and the Division of Planning and Programming Director did not perform a detailed review of the completed report.<sup>17</sup>

According to the Division of Planning and Programming Director, "The range of people who could do that review is short." So, no detailed review was performed.

<sup>16</sup> FHWA. North Carolina Department of Transportation Grant Anticipation Revenue Vehicle (GARVEE) Bond Review. January 15, 2021.

<sup>17</sup> The Department's advance construction report was created by personnel in the Accounting Operations and Budget Division's Federal Funds Management Unit. The effort was led by the Accounting Operations and Budget Division's Director and the Division of Planning and Programming Director.

### **Best Practices Require Reasonable Assurance that Data is Accurate**

GAO<sup>18</sup> best practices state that agency procedures should provide reasonable assurance that management information, such as public reports are “complete, accurate, and consistent to support performance and decision making.”

In addition, the Committee on Sponsoring Organizations (COSO) states that the failure to use reliable data could result in erroneous decision-making:

Inaccurate or incomplete data, and the information derived from such data, could result in potentially erroneous judgments, estimates or other management decisions.

### **RECOMMENDATIONS**

The Accounting Operations and Budget Division Director should ensure that completed projects funded by GARVEE bonds are closed out in the accounting system and GARVEE bond premium amounts are properly adjusted.

The Accounting Operations and Budget Division Director, Division of Planning and Programming Director, and other appropriate members of Department management should ensure that reports are reviewed for accuracy.

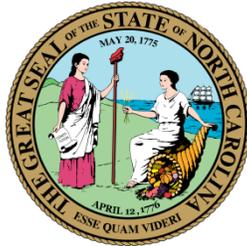
The Department’s Secretary should have a means to ensure that the Department produces accurate reports.

### **AGENCY RESPONSE**

See page 19 for the Department’s response to this finding.

---

<sup>18</sup> GAO, Government Auditing Standards, 2018 Revision.



# **MATTERS FOR FURTHER CONSIDERATIONS**

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

---

## 1. DEPARTMENT'S REPORT ON ADVANCE CONSTRUCTION IS LIMITED IN USEFULNESS WITHOUT ADDITIONAL EXPLANATION

---

The Department of Transportation's (Department) report on **advance construction** is limited in usefulness without additional explanation for report users.

The information in the **advance construction** report is spread across **51 pages** in **seven** different sections/schedules with limited guidance and discussion of what is in the report or how to use the information in the report.<sup>19</sup>

Consequently, the report is **limited** in its **usefulness**.

### Recommendations:

The Department should include a section in its **advance construction** report that includes explanation and guidance to assist report users.

Specifically, the Department should include a "**How to Use**" section in the report that includes the following:

- Title of each section/schedule
- The Section of Session Law 2020-91 Section 5.11.(a) each section/schedule satisfies<sup>20</sup>
- The Purpose of each section/schedule
- A Summary of information contained within each section/schedule
- The page numbers of the report each section/schedule is located

Additionally, the Department should include information to assist users in how to use each section/schedule individually and how the sections/schedules support/tie to other sections/schedules contained in the report (if applicable).

For example, the **advance construction** report's first schedule is a summary of the Department's **advance construction** balances by funding source (Summary Schedule).<sup>21</sup> Subsequent schedules provide detailed listings of projects approved for advance construction, including those using Grant Anticipation Revenue Vehicle (GARVEE) bonds.

However, many of the subsequent schedules do not agree or reconcile to the Summary Schedule or related sections/schedules of the report.

To increase usefulness, the Department should provide additional explanations to each applicable subsequent schedule to agree or reconcile to the **advance construction** balances in the Summary Schedule.

---

<sup>19</sup> Referring to the Department's September 29, 2020 **advance construction** report.

<sup>20</sup> For schedules that contain multiple columns, the Department should consider distinguishing what column satisfies what specific section of Session Law 2020-91 Section 5.11.(a).

<sup>21</sup> The state funding source of authorized **advance construction** projects prior to being converted for federal reimbursement or to another funding source. Includes the Department's Highway Fund, Turnpike Fund, GARVEE bonds, etc.

---

## 2. ADVANCE CONSTRUCTION REPORT'S PRESENTATION OF GARVEE BOND INFORMATION NOT USEFUL FOR REPORT USERS

---

The **advance construction** report's section on Grant Anticipation Revenue Vehicle (GARVEE)<sup>22</sup> bond utilization does not meet the needs of report users.

Specifically, the Department of Transportation's (Department) **advance construction** report does not include a detailed schedule of the principal and interest payments (debt service) due each year for the remaining bond term.

Outstanding GARVEE debt is included in the state's **advance construction** balance. The Department uses GARVEE bond proceeds to finance highway construction projects, and then repays the debt with future reimbursements from the Federal Highway Administration (FHWA) over the bond term (typically 15 years).

Without a detailed schedule of remaining principal and interest payments, report users do not know:

- The amount of required debt service payments, annually
- When the debt service payments are due
- The amount of the State's **annual obligation authority**<sup>23</sup> that will be used each year to make the required GARVEE debt service payments<sup>24</sup>

Without this information, report users have limited ability to monitor and evaluate **advance construction** risks.

Because the bonds are 15-year bonds, future payments could be at risk because the State cannot predict what the federal government might do with FHWA funding or how its funding policies may change that far in the future.

Further, since this information is not included in the Department's **advance construction** report, report users have no idea how much of the **annual obligation authority** is:

- (1) Needed for GARVEE debt service payments
- (2) Left over to fund non-GARVEE financed **advance construction** projects

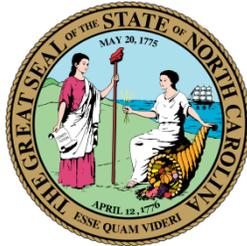
According to the Department's **advance construction** report, GARVEE funded projects accounted for approximately \$1.78 billion of the total **advance construction** balance.

---

<sup>22</sup> GARVEE bonds are state debt instruments used in conjunction with **advance construction** to enable using federal-aid funds for future debt service payments.

<sup>23</sup> 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 FY 2021, North Carolina's **obligation authority** was **\$1 billion**.

<sup>24</sup> Each year when bond payments are due, the Department requests that the FHWA obligate funds in an amount necessary to make the required GARVEE debt service payments. The Department is required to reserve the first available obligation authority for **advance construction** conversion to fund the annual GARVEE debt service payment.



# APPENDIX

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

The objective of this audit was to determine whether the Department of Transportation's **advance construction** report complied with Session Law 2020-91 Section 5.11.(a) and the information was accurate.

If the report did not comply, identify the causes of report deficiencies and the impact on report users.

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

	<b>Audit Objective</b>
<b>Control Environment</b>	
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.	
4. 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.	
<b>Risk Assessment</b>	
6. Management should define objectives clearly to enable the identification of risks and define risk tolerances.	
7. Management should identify, analyze, and respond to risks related to achieving the defined objectives.	
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.	
<b>Control Activities</b>	
10. Management should design control activities to achieve objectives and respond to risks.	X
11. Management should design the entity's information system and related control activities to achieve objectives and respond to risks.	X
12. Management should implement control activities through policies.	
<b>Information and Communication</b>	
13. Management should use quality information to achieve the entity's objectives.	X
14. Management should internally communicate the necessary quality information to achieve the entity's objectives.	
15. Management should externally communicate the necessary quality information to achieve the entity's objectives.	X
<b>Monitoring Activities</b>	
16. Management should establish and operate monitoring activities to monitor the internal control system and evaluate the results.	
17. Management should remediate identified internal control deficiencies on a timely basis.	



# **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, 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.

In its response, the Department of Transportation (Department) agreed with the results of this audit and it discussed several corrective actions that are in process or have already occurred.

However, the Department's response included statements that could mislead the reader or minimize the importance of the auditor findings. To ensure the availability of complete and accurate information, OSA offers the following clarifications.

**First**, the Department's response stated:

DOT created an Advanced Construction dashboard, developed a policy with programmatic parameters, launched a website that helps detail the process, and provided data that supports the decisions contained within the process.

This audit did not evaluate the dashboard, policy, website, or data mentioned above. Therefore, this audit does not provide any assurance as to whether the Department's above statement is accurate or whether the Department's dashboard, policy, website, and data assist in the Department complying with reporting requirements outlined in Session Law 2020-91 Section 5.11.(a).

**Second**, the Department's response stated multiple times that a "revised advanced construction report" was submitted to the General Assembly in April 2021.

This audit did not evaluate the "revised advanced construction report" submitted in April 2021. This audit determined whether the **advance construction** report submitted to the General Assembly and General Assembly's Fiscal Research Division on September 29, 2020 complied with Session Law 2020-91 Section 5.11.(a) and that the information was accurate.

Therefore, this audit does not provide any assurance as to whether the Department's statements regarding the "revised advanced construction report" are accurate or whether the report complied with Session Law 2020-91 Section 5.11.(a).

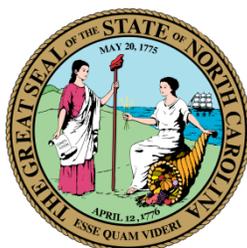
**Third**, the Department's response stated:

The schedules contained within the report agree and reconcile to the Summary Report. NCDOT has the details of such reconciliations for any differences among subsequent reports and can provide if needed to users.

**This is misleading.** This response could **mislead the reader** to believe that the detailed schedules within the **advance construction** report can be easily agreed to the Summary Schedule.

**They cannot.** As our report's first Matters for Further Consideration **clearly states**, the information in the **advance construction** report is spread across **51 pages** in **seven** different sections/schedules. Many of the subsequent schedules **do not agree or reconcile** to the Summary Schedule or related sections/schedules of the report.

Consequently, the report is **limited** in **usefulness** without the detail needed to agree or reconcile the **advance construction** balances in the Summary Schedule to each applicable supporting schedule. Report users should not have to ask for these details.



# **RESPONSE FROM DEPARTMENT OF TRANSPORTATION**



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

J. ERIC BOYETTE  
SECRETARY

May 18, 2021

The Honorable Beth A. Wood, State Auditor  
Office of the 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 *Advance Construction Report Department of Transportation*. While the agency worked to comply with the directives set out in Session Law 2020-19 Section 5.11(a), the agency agrees with the audit findings.

The timeline for the original report was 90 days, which limited the detail the agency was able to provide. The agency continued to work on additional data for the report that was submitted April 27, 2021. Throughout the process of compiling the original report and participating in this audit, the agency staff was committed to finding new and better ways to present and explain the advance construction process. DOT created an Advanced Construction dashboard, developed a policy with programmatic parameters, launched a website that helps detail the process, and provided data that supports the decisions contained within the process. In addition, these tools have been shared with the Financial Planning Committee, the Board of Transportation, the Operations Staff meeting attendees and others.

Working with the Office of the State Auditor was helpful in finding ways to present advance construction in a timely and detailed method. Many of the questions posed by your team helped us create a better method of conveying our processes to all interested parties and NCDOT appreciates the time and professionalism of you and your staff in completing this audit.

The responses have been prepared for each of the two audit findings and corrective actions to address the issues identified.

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
OFFICE OF THE SECRETARY  
1501 MAIL SERVICE CENTER  
RALEIGH, NORTH CAROLINA 27699-1501

*Telephone:* 919-707-2800  
*Fax:* 919-733-9150  
*Customer Service:* 1-877-368-4968

*Website:* [ncdot.gov](http://ncdot.gov)

*Location:*  
1 SOUTH WILMINGTON STREET  
RALEIGH, NORTH CAROLINA 27601

**1. DEPARTMENT'S REPORT ON ADVANCE CONSTRUCTION DID NOT INCLUDE ALL INFORMATION REQUIRED BY STATE LAW**

**RECOMMENDATIONS**

The Division of Planning and Programming Director or other appropriate members of Department management should use additional programming or data analysis procedures to obtain the information required by Session Law 2020-91 Section 5.11.(a) from the Department's information system (SAP).

Before not complying with state law, Department management should consult with appropriate members of the Joint Legislative Transportation Oversight Committee or others in the General Assembly to discuss the difficulty of obtaining the information required by Session Law 2020-91 Section 5.11.(a) and potential modifications to the requirements.

The Department's Secretary should have a means to ensure that the Department complies with state law.

**AGENCY RESPONSE**

We agree with this finding and the recommendations to enhance the reporting needs. The information provided to governing bodies was submitted with the information available in SAP at the time and with further development, the Department has continued efforts with our IT partners to ensure the ability to provide information. Item 1 is now available, and the report was resubmitted the end of April 2021.

The Advance Construction expenditures converted is the amount that has already been reimbursed by FHWA or covered with state or local participation. As conversions take place, eligible costs are billed in a weekly cycle and reimbursed by FHWA. There is no time lag between eligible to bill and billed beyond the week.

DOT does not use a detail schedule for conversion by "project" for Advance Construction. Programmatic parameters are used to dictate when projects will be converted. These parameters are expenditures against the project, available federal funding balances for that program, obligational authority, and project end dates. Projects are reviewed, converted, and billed to FHWA weekly. In general, large construction projects span three to four years. They can be partially converted or completely converted within prescribed parameters allowing DOT to optimize the funds management tool by billing actuals.

**Corrective Action:**

A revised Advance Construction Report was resubmitted to the General Assembly with the initial Advance Construction amount and other information on April 27, 2021. The Department will continue efforts to provide visibility and reporting of the information.

The Department can provide more narrative within the reports to make it more easily understood based on this feedback. The agency provided an explanation at the top of each report to explain the content and provide insight to its use that can be built upon for further clarity.

The schedules contained within the report agree and reconcile to the Summary Report. NCDOT has the details of such reconciliations for any differences among subsequent reports and can provide if needed to users.

**2. DEPARTMENT'S REPORT ON ADVANCE CONSTRUCTION WAS INACCURATE**

**RECOMMENDATIONS**

The Accounting Operations and Budget Division Director should ensure that completed projects funded by GARVEE bonds are closed out in the accounting system and GARVEE bond premium amounts are properly adjusted.

The Accounting Operations and Budget Division Director, Division of Planning and Programming Director, and other appropriate members of Department management should ensure that reports are reviewed for accuracy.

The Department's Secretary should have a means to ensure that the Department produces accurate reports.

**AGENCY RESPONSE**

The agency agrees with this finding and the recommendations to ensure projects are closed out. The total of the advance construction balance was overstated due to two of the 972 projects not being closed. The Department has completed the necessary actions to close two of the three projects identified in the audit in the FHWA system and DOT's accounting system SAP. DOT's Federal Funds Management Unit (FFMU) has reconciled the third project, which is a Right of Way project to the final numbers; however, this project cannot be closed in the Federal system at this time, because the construction GARVEE project (which is on the same federal project agreement number) is open and cannot be closed until the final debt payment in March of 2023.

Corrective actions are complete. The Director of Accounting Operations and Budget will ensure information presented to the Secretary agrees with reports issued by the Financial Management Division by adding additional layers of review.

Sincerely,



J. Eric Boyette  
Secretary

# ORDERING INFORMATION

---

COPIES OF THIS REPORT MAY BE OBTAINED BY CONTACTING:

Office of the State Auditor  
State of North Carolina  
2 South Salisbury Street  
20601 Mail Service Center  
Raleigh, North Carolina 27699-0600

Telephone: 919-807-7500  
Facsimile: 919-807-7647  
Internet: <http://www.auditor.nc.gov>



To report alleged incidents of fraud, waste or abuse in state government contact the  
Office of the State Auditor Fraud Hotline:

**Telephone:** 1-800-730-8477

**Internet:** <http://www.auditor.nc.gov/pub42/Hotline.aspx>

For additional information contact the  
North Carolina Office of the State Auditor at:  
**919-807-7666**



---

This audit required 1,290 hours of auditor effort at an approximate cost of \$134,160.