

STATE OF NORTH CAROLINA

OFFICE OF THE STATE AUDITOR
BETH A. WOOD, CPA



DEPARTMENT OF TRANSPORTATION

RALEIGH, NORTH CAROLINA

STATEWIDE FEDERAL COMPLIANCE AUDIT PROCEDURES
FOR THE YEAR ENDED JUNE 30, 2015



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STATE OF NORTH CAROLINA
Office of the State Auditor



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AUDITOR'S TRANSMITTAL

The Honorable Pat McCrory, Governor
Members of the North Carolina General Assembly
Nicholas J. Tennyson, Secretary
Department of Transportation

As part of our audit of the State of North Carolina's compliance with requirements applicable to its major federal programs, we have completed certain audit procedures at the Department of Transportation for the year ended June 30, 2015. We conducted our audit in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Governmental Auditing Standards*, issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments and Non-Profit Organizations*. Our audit was performed by authority of Article 5A of Chapter 147 of the *North Carolina General Statutes*.

Our audit objective was to render an opinion on the State of North Carolina's, and not the Department's, administration of major federal programs. However, the report included herein is in relation to our audit scope at the Department and not to the State of North Carolina as a whole. The State Auditor expresses an opinion on the State's compliance with requirements applicable to its major federal programs in the State's *Single Audit Report*.

The audit findings in this report are also evaluated to determine their impact on the State's internal control and the State's compliance with rules, regulations, contracts and grants. If determined necessary in accordance with *Government Auditing Standards*, these findings are reported in the State's *Single Audit Report*.

North Carolina General Statutes require the State Auditor to make audit reports available to the public. Copies of audit reports issued by the Office of the State Auditor may be obtained through one of the options listed in the back of this report.

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

Beth A. Wood, CPA
State Auditor



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State Auditor

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Article V, Chapter 147 of the North Carolina General Statutes, gives the Auditor broad powers to examine all books, records, files, papers, documents, and financial affairs of every state agency and any organization that receives public funding. The Auditor also has the power to summon people to produce records and to answer questions under oath.



INDEPENDENT AUDITOR'S REPORT

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**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE WITH REQUIREMENTS
THAT COULD HAVE A DIRECT AND MATERIAL EFFECT ON EACH MAJOR
PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE IN
ACCORDANCE WITH OMB CIRCULAR A-133**

Nicholas J. Tennyson, Secretary
and Management of the Department of Transportation

Report on Compliance

As part of our audit of the State of North Carolina's compliance with the types of requirements described in the OMB Circular A-133 Compliance Supplement that could have a direct and material effect on each of its major programs for the year ended June 30, 2015, we have performed audit procedures at the Department of Transportation. Our report on the State of North Carolina's compliance with requirements that could have a direct and material effect on each major program and on internal control over compliance in accordance with OMB Circular A-133 is included in the State's Single Audit Report. Our federal compliance audit scope at the Department of Transportation included the following:

- CFDA 20.205, 20.219, and 23.003 Highway Planning and Construction Cluster
- CFDA 20.319 High-Speed Rail Corridors and Intercity Passenger Rail Service – Capital Assistance Grants
- CFDA 20.509 Formula Grants for Rural Areas

The audit results described below are in relation to our audit scope at the Department and not to the State of North Carolina as a whole.

Management's Responsibility

Management is responsible for compliance with laws, regulations, contracts and grants applicable to federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the State of North Carolina's major federal programs based on our audit of the types of compliance requirements referred to above, which we issue in the State's Single Audit Report. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States;

and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations*. Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion. However, our audit does not provide a legal determination of the Department's compliance with those requirements.

Opinion on Each Major Federal Program

As stated above, our opinion on compliance for each of the State of North Carolina's major federal programs is included in the State's Single Audit Report.

Other Matters

The results of our audit procedures at the Department of Transportation disclosed instances of noncompliance that are required to be reported in accordance with OMB Circular A-133 and which are described in findings 1, 3, and 4 in the Findings, Recommendations, and Responses section of this report.

Report on Internal Control Over Compliance

Management is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered internal control over compliance with the types of requirements that could have a direct and material effect on a major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of internal control over compliance.

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. *A material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. *A significant deficiency in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of the internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all

deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies, and therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as described in the accompanying Findings, Recommendations, and Responses section, we identified certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies. We consider the deficiencies described in findings 1, 3, and 4 in the Findings, Recommendations, and Responses section of this report to be material weaknesses in internal control over compliance. Furthermore, we consider the deficiencies described in findings 2 and 5 in the Findings, Recommendations, and Responses section of this report to be significant deficiencies in internal control over compliance.

Department of Transportation's Response to Findings

The Department's responses to the findings identified in our audit are included in the Findings, Recommendations, and Responses section of this report. The Department's responses were not subjected to the auditing procedures applied in the audit of compliance or consideration of internal control over compliance, and accordingly, we express no opinion on them.

Purpose of Report on Internal Control Over Compliance

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of OMB Circular A-133. Accordingly, this communication is not suitable for any other purpose.



Beth A. Wood, CPA
State Auditor

Raleigh, North Carolina

March 28, 2016



FINDINGS, RECOMMENDATIONS, AND RESPONSES

Matters Related to Federal Compliance Audit Objectives

The following audit findings were identified during the current audit and describe conditions that represent deficiencies in internal control or noncompliance with laws, regulations, contracts, grant agreements, or other matters. Finding numbers 1, 4, and 5 were also reported in the prior year.

CFDA 20.205 – HIGHWAY PLANNING AND CONSTRUCTION CLUSTER

1. HIGHWAY QUALITY POTENTIALLY AT RISK DUE TO INSUFFICIENT TESTING

The Department did not ensure the minimum tests were performed, as required by the Minimum Sampling Guide¹, for asphalt used in highway and other construction projects funded by Highway Planning and Construction grants.

Auditors tested quality assurance compliance for 60 out of 880 asphalt mix formulas and tested asphalt roadway density on 60 out of 1,055 unique asphalt pavings². The following errors were identified:

- 14 out of 60 (23%) asphalt mix formulas did not receive sufficient asphalt mix testing. The vendor producing the asphalt mix and the Department perform separate tests on the mix to verify the quality of the product. The vendor performed sufficient tests, but the Department did not perform the minimum tests required per the Minimum Sampling Guide.
- 10 out of 60 (17%) unique asphalt pavings did not receive sufficient asphalt density testing. The contractor laying the asphalt pavement and the Department perform separate density tests on the asphalt. Neither the paving contractor nor the Department performed the minimum testing required by the Minimum Sampling Guide.

The Department's failure to ensure minimum testing is performed could result in the use of lower quality materials. Materials that do not meet quality standards could result in roads with shorter useful lifespans and increased highway maintenance cost. Quality assurance testing programs are the principal means by which the State verifies construction, material and product quality is within the minimum safety and durability standards set for highway projects.

According to the Department, it is reviewing reports to determine the number of quality assurance tests performed for asphalt; however, corrective measures were not taken when testing levels were insufficient.

Per 23 CFR 637.207(a)(1)(i)(A), each state transportation department's quality assurance program shall provide for an acceptance program that consists of frequency guide schedules for verification sampling and testing. The Department's federally approved Minimum Sampling Guide details the minimum testing and the intervals at which samples must be taken, for asphalt formulas and asphalt pavings.

¹ The federally approved Minimum Sampling Guide specifies the minimum standards and tests to be performed to ensure the quality of materials used in North Carolina highway construction projects.

² A unique asphalt paving is an individual combination of contract, asphalt type, and calendar year.

Significant aspects of this finding for asphalt formulas and density were reported in the prior year.

Federal Award Information: CFDA 20.205 Highway Planning and Construction Cluster 2015

Recommendation: The Department should ensure that corrective actions are taken when deficiencies in required minimum tests for asphalt are identified to ensure quality assurance testing is in accordance with the federally approved Minimum Sampling Guide.

Agency Response: The Department agrees with the findings under this section while noting the following. To put the finding in perspective, the 14 hot mix asphalt mix designs identified as insufficient testing was 30,200 tons. The Department tested 622,492 tons of the same hot mix asphalt mixes. Nine of the fourteen findings occurred before March 1, 2015 which was when the Department began to implement corrective actions from last year's findings. The total tonnage represented by the five occurrences post March 2015 was 3,765 tons. The Department feels the corrective action plan was a positive step towards future compliance and will continue with similar efforts.

For the hot mix asphalt density deficiencies, only one of these instances occurred after the implementation of our corrective actions from the previous audit cycle.

The corrective actions are as follows:

Asphalt Mix QA and V Testing:

In addition to the corrective actions that were implemented last year, the QA Supervisors responsible for QA and V asphalt mix testing have been instructed to pull their samples as early as possible in the production of a given mix design. The finding appears to show a problem with small quantities of mix being produced for short periods of time. Best practices surrounding notification to QA Supervisors when particular mix designs are used will be discussed between the Department and asphalt contractors.

Asphalt Roadway Density QC, QA and V Testing:

All corrective actions developed as a result of last year's audit findings have been implemented. Since only one of the instances found during this audit cycle occurred after the initiation of those corrective actions (March 2015), the Department feels that the corrective actions are working. Additionally, the findings from this year are being discussed at Division Asphalt Summits occurring in each Division from February through March 2016.

2. MANAGEMENT OVERSIGHT OF HIGHWAY MATERIALS ACCEPTANCE TESTING NOT PERFORMED

The Department did not perform quarterly project reviews designed to increase compliance with required minimum acceptance testing requirements for materials used in highway construction projects. During the first three quarters of state fiscal year 2015, three out of 14 highway divisions were not reviewed, resulting in 37 out of 197 (19%) scheduled reviews not being performed.

The quarterly project reviews were designed to enhance the quality assurance program by educating and assisting resident engineers in meeting the minimum materials acceptance testing requirements during the project. The reviews help to minimize issues and/or discrepancies in the final end of project materials certification. Failure to conduct the quarterly project reviews increases the risk that acceptance testing deficiencies would not be identified until the end of the project and potentially results in the use of lower quality materials that may impact highway durability.

Per Department personnel, the quarterly project reviews were not performed for the three divisions due to staff changes and absences.

The Department's procedures require a review of one project from each resident engineer office, within each highway division, on a quarterly basis to ensure the required minimum acceptance testing requirements for materials used in highway construction projects is met.

Federal Award Information: CFDA 20.205 Highway Planning and Construction Cluster 2015

Recommendation: The Department should ensure that quarterly project reviews for minimum acceptance testing are being completed.

Agency Response: The Department agrees with the finding and as noted by the end of the audit period the function was being performed according to plan.

The corrective actions are as follows and have already been implemented. The employee responsible for conducting these reviews for the 3 Divisions in question was instructed to perform the reviews and began performing them upon returning to work after a long absence. To prevent similar instances of this occurring, the supervisor responsible for conducting these reviews statewide is now required to submit monthly progress reports to the State Materials Engineer and ensure adequate staffing for absences. The progress for this function is monitored by the management at the Materials and Tests Unit at its monthly staff meetings.

3. ESTIMATED \$1.4 MILLION IN COST-SAVING RECOMMENDATIONS LEFT OUT OF FINAL PROJECT PLANS

The Department did not ensure that approved cost-saving recommendations from value engineering analyses were included in the final design of projects funded with Highway Planning and Construction Cluster funds.

During fiscal year 2015, three Highway Planning and Construction Cluster construction projects were initiated that required a value engineering analysis. The three projects had a total estimated cost of \$341.9 million. Although the Department performed the required studies for of these projects, it did not ensure that the accepted recommendations from the studies were included in the final plans for the projects. The estimated cost savings for the approved recommendations were valued at \$1.4 million.

Failure to ensure that accepted recommendations get included in the final project design could result in the Department losing measureable benefits to the quality and overall cost of projects on the National Highway System. The purpose of a value engineering

analysis is to have projects reviewed and analyzed by a multi-disciplined team not directly involved in project planning or development to provide recommendations for improvements related to safety, reliability, efficiency, overall life-cycle cost, project quality and value, and time to complete the project.

According to Department personnel, the cost-saving recommendations were omitted because there was no independent review of final plans. The Value Management Unit relied upon the persons responsible for developing the plans, specifications, and estimates to ensure that approved recommendations were included rather than performing an independent review.

Federal regulation 23 CFR §627.5(a) requires state transportation agencies to perform value engineering analysis and ensure approved recommendations are included in the project plans. Specifically, federal regulations state:

“A VE analysis shall be conducted prior to the completion of final design on each applicable project that utilizes Federal-aid highway funding, and **all approved recommendations shall be included in the project’s plans**, specifications and estimates...” (*Emphasis added*)

Federal Award Information: CFDA 20.205 Highway Planning and Construction Cluster 2015

Recommendation: The Department of Transportation should implement independent review procedures to ensure that approved value engineering recommendations are included in the final plans, specifications, and estimates for all Highway Planning and Construction Cluster funded projects.

Agency Response: We have reviewed the results of the audit report and agree that the Department did not review the accepted recommendations to verify if they were implemented into the design prior to letting. This audit finding presented an area in the Department’s internal processes which needed to be clarified to better address this situation.

The Transportation Program Management Unit's Value Management Office will revise the guidelines and implement these changes by April 29, 2016.

4. REVIEW PROCEDURES NOT CONSISTENTLY FOLLOWED TO ENSURE CONTRACTOR COMPLIANCE WITH FEDERAL PAY RATES

The Department did not consistently follow its procedures to identify and obtain the contractor payrolls for construction projects funded by the Highway Planning and Construction Cluster. A test of 63 out of 2,816 construction expenditures and the related project files revealed 16 items with one or more errors. This resulted in 26 errors as follows:

- For 12 out of 63 (19%) items tested, the required certified payrolls were not obtained.

- For 6 out of 63 (10%) items tested, the FAP-1³ did not properly list all contractors documented as having performed work on the project during the invoice period.
- For 4 out of 63 (7%) items tested, the FAP-1 report was missing.
- For 2 out of 63 (4%) items tested, the FAP-1 was not signed by the Resident Engineer, or their designee.
- For 2 out of 63 (4%) items tested, the FAP-1 was reviewed by the same person who prepared the FAP-1.

Because the procedures used to identify and obtain contractor payrolls were not consistently followed, there was an increased risk that the Department would fail to identify instances of contractor noncompliance and take any necessary corrective action. Corrective action could include suspension of payments, termination of the contract, and/or debarment from future contracting opportunities.

According to the Department, staff was aware of the required procedures and the instances of inconsistent application were simply oversights and errors.

Federal regulation 29 CFR section 5.5 requires that contractors and subcontractors that work on construction contracts in excess of \$2,000 submit to the awarding agency a copy of their weekly payroll and statement of compliance (certified payroll) for any week where contract work is performed. Per the Federal Highway Administration Davis-Bacon and Related Acts Questions and Answers, the Department is responsible for properly applying and enforcing wage rate requirements in construction contracts, which includes reviewing certified payrolls in a timely manner to ensure all laborers and mechanics are paid wages not less than those established by the U.S. Department of Labor for the locality of the project.

Aspects of this finding were reported in the prior year.

Federal Award Information: CFDA 20.205 Highway Planning and Construction Cluster 2015

Recommendation: The Department should ensure that staff properly completes the required weekly reports and executes the Department's designed procedures to ensure the payment of the required wages.

Agency Response: The Department agrees with the findings in the audit. It should be noted that the implementation of the corrective action plan for the FY 2014 audit began immediately upon receipt of the audit findings (March 2015). Thirteen items were audited with dates occurring after implementation of the prior year's corrective action plan, only two had a finding. The Department feels that the corrective action plan was a positive step towards future compliance and will continue with similar efforts.

³ The FAP-1 is the internal report used to indicate the payrolls that should be received. The Department requires the Resident Engineer, or their designee, to sign the FAP-1 to document the receipt and review of the certified payrolls. Department personnel review the wages for compliance.

Corrective Action Plan FY 2015

The audit finding was addressed with both NCDOT contract administration staff and contractors at 3 regional workshops in February and March 2016. For the offices where audit findings occurred, the specific findings will be reviewed with the Contract Administrator and the office staff responsible for reviewing payroll data.

Procedures that were modified in July 2015 will again be reviewed with all offices administering Federal Aid projects to ensure they understand the procedures and have processes and sufficient staff assigned to perform the reviews. One example to be reviewed is appropriate use of electronic payrolls and acceptable signatures. This will be completed by April 30, 2016.

CFDA 20.319 – HIGH-SPEED RAIL CORRIDORS AND INTERCITY PASSENGER RAIL SERVICE – CAPITAL ASSISTANCE GRANTS

5. REVIEW PROCEDURES NOT CONSISTENTLY FOLLOWED TO ENSURE CONTRACTOR COMPLIANCE WITH FEDERAL PAY RATES

The Department did not consistently follow its procedures to identify and obtain the contractor payrolls for projects funded by High-Speed Rail Corridors and Intercity Passenger Rail Service – Capital Assistance Grants. A test of 40 out of 199 construction expenditures and the related project files revealed the following deficiencies:

- Four out of 40 instances (10%) where the person responsible for preparing the FAP-1⁴ reports was the same person who signed as the designee of the Resident Engineer's review.
- Two out of 40 instances (5%) in which the required statement of compliance accompanying the payroll was not signed by the representative for the subcontractor.
- One out of 40 instances (3%) in which there was no evidence that the FAP-1 was reviewed by the Resident Engineer or their designee.

Because the procedures used to identify and obtain contractor payrolls were not consistently followed, there is an increased risk that the Department would fail to identify instances of noncompliance and take necessary corrective action. Although the process to review the certified payrolls was not consistently followed, we did not note any compliance errors in our test.

Per the Department, personnel did not initially understand the need for a different person from the preparer of the FAP-1 report to review the report. Additionally, staff was aware of the required procedures and the instances of inconsistent application were simply oversights and errors.

Federal regulation 29 CFR section 5.5 requires that contractors and subcontractors that work on construction contracts in excess of \$2,000 submit to the awarding agency a copy of their weekly payroll and statement of compliance (certified payroll) for any week where contract work is performed. Per the Department's Construction Manual, a

⁴ See footnote 3.

Department representative, assigned by the Resident Engineer and working under his/her direction, shall review the contractor's payroll to determine if there is reasonable compliance with contract requirements.

Aspects of this finding were reported in the prior year.

Federal Award Information: CFDA 20.319 High-Speed Rail Corridors and Intercity Passenger Rail Service – Capital Assistance Grants, Agreement Number FR-HSR-0006-10-01-05, funding period May 24, 2010 – September 30, 2017

Recommendation: The Department should ensure that staff properly completes the required weekly reports and executes the Department's designed procedures to ensure the payment of the required wages.

Agency Response: The Department agrees with the findings of the audit. It should be noted that all required documentation (payrolls and FAP 1 forms) was in place, but in three instances required signatures were omitted.

Corrective Action Plan FY 2015

The audit finding was addressed with both NCDOT contract administration staff and contractors at 3 regional workshops in February and March 2016. In addition, for the offices where audit findings occurred, the specific findings were reviewed with the Contract Administrator and the office staff responsible for reviewing payroll data.

Procedures that were modified in July 2015 will again be reviewed with all offices administering Federal Aid projects to ensure they understand the procedures and have processes and sufficient staff assigned to perform the reviews. One example to be reviewed is appropriate use of electronic payrolls and acceptable signatures. This will be completed by April 30, 2016.

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This audit was conducted in 2,966 hours at an approximate cost of \$297,535.50.