

Trunk Highway Construction Contracts

Performance Audit

May 2022

Financial Audit Division

OFFICE OF THE LEGISLATIVE AUDITOR
STATE OF MINNESOTA

Financial Audit Division

The division has authority to audit organizations and programs in the state's executive and judicial branches, metropolitan agencies, several "semi-state" organizations, state-funded higher education institutions, and state-funded programs operated by private organizations.

Each year, the division selects several of these organizations and programs to audit. The audits examine the policies and procedures—called internal controls—of the organizations to ensure they are safeguarding public resources and complying with laws that govern their financial and program operations. In addition, the division annually audits the State of Minnesota's financial statements and the financial statements of three state public pension systems. The primary objective of these financial audits is to assess whether the statements fairly present the organization's financial position according to Generally Accepted Accounting Principles.

The Office of the Legislative Auditor (OLA) also has a Program Evaluation Division. The Program Evaluation Division's mission is to determine the degree to which state agencies and programs are accomplishing their goals and objectives and utilizing resources efficiently.

OLA also conducts special reviews in response to allegations and other concerns brought to the attention of the Legislative Auditor. The Legislative Auditor conducts a preliminary assessment in response to each request for a special review and decides what additional action will be taken by OLA.

For more information about OLA and to access its reports, go to: www.auditor.leg.state.mn.us.



OFFICE OF THE LEGISLATIVE AUDITOR

STATE OF MINNESOTA • Judy Randall, Legislative Auditor

May 27, 2022

Members
Legislative Audit Commission

Nancy Daubenger, Commissioner
Minnesota Department of Transportation

This report presents the results of our internal controls and compliance audit of trunk highway activity at the Minnesota Department of Transportation for the period July 2017 through February 2020. The objectives of this audit were to determine if the department had adequate internal controls over selected financial activities and complied with significant finance-related legal requirements.

The department does not agree with Finding 2 as stated in their response on page 20. We have considered all additional information presented by the department and believe the evidence we obtained and the testing we performed during the course of the audit support our conclusions.

This audit was conducted by Lori Leysen, CPA (Deputy Legislative Auditor); Heather Rodriguez (Audit Coordinator); and auditors Kelsey Carlson; Lisa Makinen; Paul Rehschuh, CFE; Kris Schutta; and Emily Wiant.

We received the full cooperation of the department's staff while performing this audit.

Sincerely,

A handwritten signature in black ink that reads 'Lori Leysen'.

Lori Leysen, CPA
Deputy Legislative Auditor



OLA

Table of Contents

	<u>Page</u>
Introduction.....	1
Report Summary	3
Conclusions	3
Findings.....	3
Background	5
Trunk Highway Fund Overview	5
Audit Scope, Objectives, Methodology, and Criteria	6
Trunk Highway Construction Contracts	9
System Access Management.....	9
Financial Management.....	10
List of Recommendations	17
Agency Response.....	19



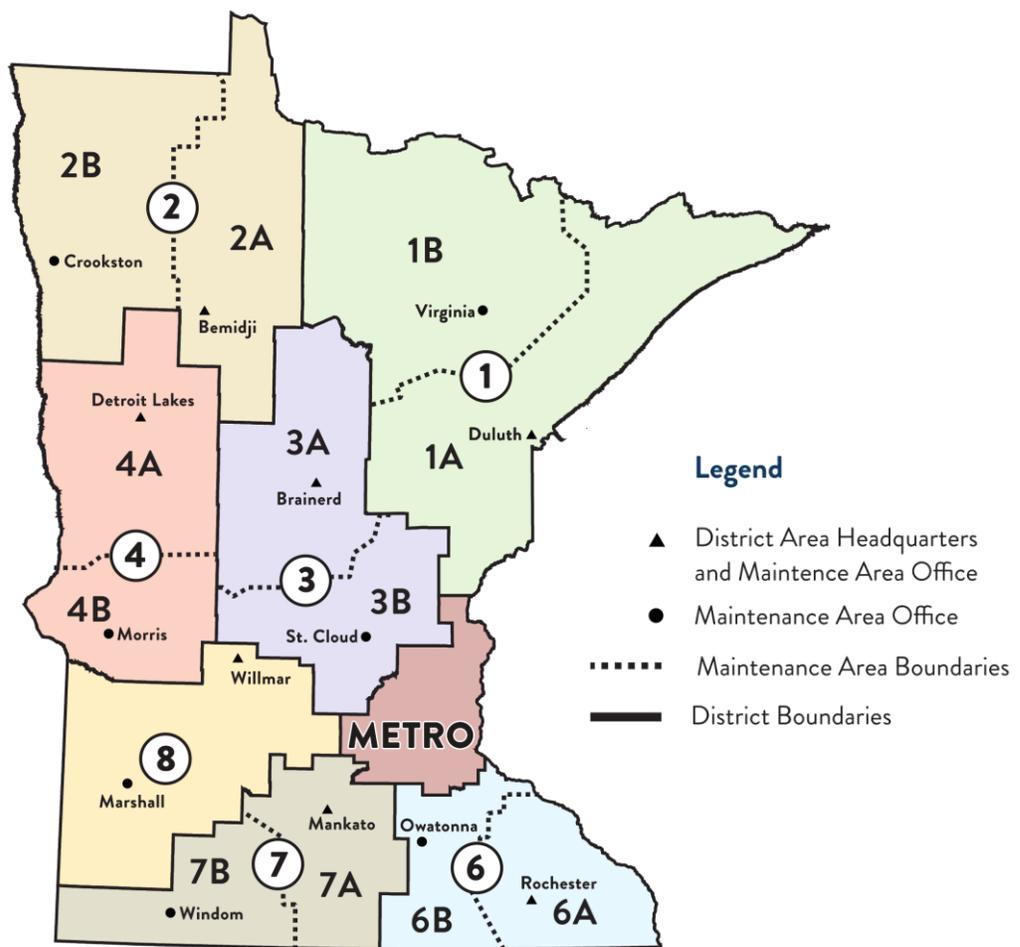
OLA

Introduction

The Minnesota Department of Transportation is the agency responsible for the development, implementation, administration, consolidation, and coordination of state transportation policies, plans, and programs.¹ Governor Tim Walz appointed Nancy Daubenberger as commissioner in May 2022. Prior to being appointed, she served as the interim commissioner after the position was vacated by Margaret Anderson Kelliher in March 2022.

The department is organized with a central office located in Saint Paul and eight districts, including one Metropolitan District in the Twin Cities, and seven in greater Minnesota. The districts manage daily operations, including highway construction projects and maintenance activities. The central office is responsible for administration.

Exhibit 1: Minnesota Department of Transportation Districts



SOURCE: Minnesota Department of Transportation.

¹ Minnesota Statutes 2021, 174.01, subd. 1.

Internal controls are the policies and procedures management establishes to govern how an organization conducts its work and fulfills its responsibilities. A well-managed organization has strong controls across all of its internal operations. If effectively designed and implemented, controls help ensure, for example, that inventory is secured, computer systems are protected, laws and rules are complied with, and authorized personnel properly document and process financial transactions.

Auditors focus on internal controls as a key indicator of whether an organization is well managed. In this audit, we focused on whether the department had controls to ensure that it administered Trunk Highway construction contracts in compliance with good management practices, department policies and procedures, and requirements in state and federal laws.

Minnesota Law Mandates Internal Controls in State Agencies

State agencies must have internal controls that:

- Safeguard public funds and assets and minimize incidences of fraud, waste, and abuse.
- Ensure that agencies administer programs in compliance with applicable laws and rules.

The law also requires the commissioner of the Department of Management and Budget to review OLA audit reports and help agencies correct internal control problems noted in those reports.

— *Minnesota Statutes 2021, 16A.057*

Report Summary

Conclusions

The Minnesota Department of Transportation generally had adequate internal controls to ensure compliance with applicable legal requirements. However, the department had some internal control weaknesses related to contract management system access, project oversight duties, and code of conduct training or recertification. The department also generally complied with the finance-related legal requirements we tested, but there were some specific instances of noncompliance related to change orders and documentation supporting highway contract payments.

Findings

	Internal Controls Not Adequate	Did Not Comply with Legal Requirements
Finding 1. The Minnesota Department of Transportation does not have formal access recertification procedures for AASHTOWare and did not retain evidence of access privilege recertifications. (p. 10)	✓	
Finding 2. The Minnesota Department of Transportation did not always use change orders to document significant changes in major items. (p. 12)		✓
Finding 3. The Minnesota Department of Transportation did not always have documented support for highway contract payments. (p. 13)		✓
Finding 4. The Minnesota Department of Transportation did not appropriately segregate project oversight duties. (p. 14)	✓	
Finding 5. The Minnesota Department of Transportation did not ensure that employees completed annual code of conduct training or recertification. (p. 15)	✓	



OLA

Background

Trunk Highway Fund Overview

The Minnesota Constitution requires the state to establish a trunk highway system and establishes the revenue sources that must be deposited in a Trunk Highway Fund for the construction, improvement, and maintenance of public highways.² “Trunk highways” include major roadways, such as interstates, U.S. highways, and state highways.

As shown in Exhibit 2, the Trunk Highway Fund has two major revenue sources: state taxes and federal funding. Sixty-two percent of three transportation-related state taxes (motor fuel taxes, motor vehicle registration taxes, and motor vehicle sales taxes) are allocated from the Highway User Tax Distribution Fund to the Trunk Highway Fund.³ The Trunk Highway Fund also receives reimbursements for the federal share of highway construction projects from the Federal Highway Administration. Less significant revenues include shared construction funds from local units of government and investment income.

Exhibit 2: Trunk Highway Fund Activity Fiscal Years 2018 through 2021 (in thousands)

	Fiscal Years			
	2018	2019	2020	2021
Balance Forward	\$ 376,507	\$ 436,605	\$ 424,314	\$ 491,015
Prior Year Adjustments	33,366	61,699	27,739	46,061
Adjusted Balance Forward	\$ 409,873	\$ 498,304	\$ 452,053	\$ 537,076
Net Revenue and Transfers-In				
Transfer from HUTD Fund ^a	\$1,310,570	\$1,347,707	\$1,382,200	\$1,430,204
Federal Aid Agreements	601,332	627,708	547,643	528,939
Other Income and Transfers-In	71,558	78,228	84,713	59,553
Total Net Revenue and Transfers-In	\$1,983,460	\$2,053,643	\$2,014,556	\$2,018,696
Expenditures and Transfers-Out				
Transportation Department	\$1,640,971	\$1,796,050	\$1,652,140	\$1,841,885
Public Safety and Other Depts.	104,748	116,680	113,632	132,427
Other Expenditures and Transfers-Out	0	0	0	68,589
Debt Service	211,009	214,903	209,821	177,571
Total Expenditures and Transfers-Out	\$1,956,728	\$2,127,633	\$1,975,593	\$2,220,472
Ending Balance	\$ 436,605	\$ 424,314	\$ 491,016	\$ 335,300

NOTES: This table includes all Fiscal Year 2020 and 2021 financial activity. However, the scope of our audit only included activity through February of Fiscal Year 2020. Line totals were adjusted from the amounts reported by the department due to rounding.

^a HUTD is the abbreviation for Highway User Tax Distribution.

SOURCE: Minnesota Department of Transportation, *Transportation Funds Forecast*, February 2022.

² *Minnesota Constitution*, art. XIV.

³ *Ibid.*, sec. 5.

Audit Scope, Objectives, Methodology, and Criteria

The Office of the Legislative Auditor (OLA) conducted this audit to determine whether the Minnesota Department of Transportation had adequate internal controls and complied with significant finance-related legal requirements. The audit scope included Trunk Highway construction contracts and system access to the related information system. The audit scope did not include project selection, pre-letting, bidding, or finalization processes. The period under examination was from July 2017 through February 2020.

System Access Management

This part of the audit focused on general system access controls and targeted compliance testing for AASHTOWare, the system the department used to manage construction projects.⁴ OLA designed its work to address the following questions:

- Did the Minnesota Department of Transportation have adequate internal controls over the management of AASHTOWare system access?
- Did the Minnesota Department of Transportation comply with key legal requirements on the management of AASHTOWare system access?

To answer these questions, OLA:

- Interviewed key staff responsible for managing AASHTOWare system access, from the Office of Construction Innovative Contracting, the Project Data Management Section, and the department's Minnesota IT Services partner. The purpose of the interviews was to gain an understanding of the controls in place to ensure compliance with applicable department policies and procedures.
- Evaluated AASHTOWare system administrators' ability to ensure they had separate accounts for nonadministrative work.
- Reviewed role access rights within AASHTOWare to verify that only administrators had the ability to add, modify, and delete users.
- Tested a random nonstatistical sample of 60 internal users, including department employees and consultants, to determine if access requests were submitted by a supervisor or manager with knowledge of the user's access needs and on the department's template form.
- Tested a random nonstatistical sample of 60 internal users, including department employees and consultants, to determine if they were active employees or actively working on a project that required system access. Additionally, we verified that the access granted to a user was appropriate for their job duties.
- Tested a random nonstatistical sample of 60 contractors to determine if their access was limited to contracts they were awarded. We also tested 61 users from those

⁴ AASHTOWare Project Software is trademarked construction software from the American Association of State Highway and Transportation Officials.

contractors to ensure that the request for access was submitted on the department's template form, was approved by the company's officer, and was notarized.

Financial Management

This part of the audit focused on Trunk Highway construction contracts. OLA designed its work to address the following questions:

- Did the Minnesota Department of Transportation have adequate internal controls over the financial activities of Trunk Highway construction contracts?
- Did the Minnesota Department of Transportation comply with significant legal requirements regarding monitoring the financial activities of Trunk Highway construction contracts?
- Did the Minnesota Department of Transportation resolve a prior audit finding on the allowability of Trunk Highway activities?

To answer these questions, OLA:

- Interviewed key staff from the Office of Construction Innovative Contracting, the Office of Financial Management, and the district offices. The purpose of the interviews was to gain an understanding of the controls in place to ensure compliance with the Minnesota Constitution, federal regulations, applicable statutes, and state and department policies and procedures.
- Conducted on-site observations of bituminous paving, coring, and testing at the department's material lab, to understand how density incentives and disincentives were determined and validated.
- Tested a random nonstatistical sample of 60 of approximately 455 Trunk Highway construction contracts that closed and had payments during the audit scope to ensure:
 - The project was for construction, improvement, or maintenance of public highways.
 - Payments were supported and applied to the correct funding source.
 - Payments were for the allowable costs of the contracts and change orders.
 - Material quantities used on a contract were entered and approved by separate individuals with knowledge of the work.
 - Proposed payments were approved by the project engineer and the construction payment supervisor prior to payment.
 - Contracts were completed on time or a disincentive was assessed.

- Reviewed the ten State Transportation Improvement Program (STIP) documents related to projects in the audit scope, to ensure federal approval was granted. The STIP is a comprehensive four-year schedule of planned transportation projects for the state.
- Randomly selected two of four fiscal years and analyzed employee compliance with annual code of conduct training and recertification requirements.

We conducted this performance audit in accordance with generally accepted government auditing standards.⁵ 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. When sampling was used, we used a sampling method that complies with generally accepted government auditing standards and that supports our findings and conclusions. That method does not, however, allow us to project the results we obtained to the populations from which the samples were selected.

We assessed internal controls against the most recent edition of the internal control standards, published by the U.S. Government Accountability Office.⁶ To identify legal compliance criteria for the activity we reviewed, we examined state and federal laws, state contracts, and policies and procedures established by the Minnesota Department of Transportation and Minnesota IT Services.

⁵ Comptroller General of the United States, Government Accountability Office, *Government Auditing Standards* (Washington, DC, December 2011).

⁶ Comptroller General of the United States, Government Accountability Office, *Standards for Internal Control in the Federal Government* (Washington, DC, September 2014). In September 2014, the State of Minnesota adopted these standards as its internal control framework for the executive branch.

Trunk Highway Construction Contracts

System Access Management

The Minnesota Department of Transportation managed its construction contracts in the Construction Management System (CMS) until October 2016, when the department migrated to AASHTOWare.⁷ AASHTOWare is a Web-based system used by transportation departments nationwide. While there are many modules within the system, we focused on the construction module because it aligns with the scope and objectives of the audit.

AASHTOWare system administrators are responsible for managing system access for employees, consultants, external auditors, prime contractors, and various tiers of subcontractors. Administrators primarily provide access through position-based roles. Access can be further restricted to specific modules, contracts, district offices, etc.

Prime contractors determine the subcontractors that are given access to AASHTOWare. It is the prime contractor's responsibility, not the department's, to ensure the correct subcontractor roles are requested. Prime contractors can only request subcontractor access for the contracts they have been awarded, which minimizes the risk of information being viewed inappropriately. For these reasons, we determined that the department's risk related to subcontractor access to the system is low, and we excluded subcontractors from our testing.

According to state policy, "Identity and access management controls must be in place to ensure users...have appropriate access to only that which is necessary to perform their function."⁸ Minnesota IT Services has established baseline requirements for executive branch agencies, including those we tested for access recertification and approval, account management and inactivation, and privileged account use.⁹ It is the agency's responsibility to determine how to implement Minnesota IT Services' requirements.

Based on the tests we conducted, the department had sufficient controls in all areas regarding system access management, with the exception of access recertification.

⁷ AASHTOWare Project Software is trademarked construction software from the American Association of State Highway and Transportation Officials.

⁸ Minnesota IT Services, *Identity and Access Management Policy*, version 1.4, effective January 1, 2016, https://mn.gov/mnit/assets/enterprise-identity-access-management-policy_tcm38-323780.pdf.

⁹ Minnesota IT Services, *Identity and Access Management Standard*, version 1.4, effective January 1, 2016, https://mn.gov/mnit/assets/Identity%20and%20Access%20Management%20Standard_tcm38-323781.pdf.

FINDING 1

The Minnesota Department of Transportation does not have formal access recertification procedures for AASHTOWare and did not retain evidence of access privilege recertifications.

The Minnesota Department of Transportation did not have procedures to ensure compliance with Minnesota IT Services' recertification requirements for AASHTOWare access. In particular, the department did not have procedures to review user accounts annually, review privileged (administrator) accounts every six months, and maintain relevant documentation for at least two years.¹⁰

System access reviews protect information by validating that access privileges are still needed and authorized. While Minnesota IT Services establishes the baseline requirement to conduct the review, departmental procedures are necessary to identify system-specific risks, detail the procedures and frequency required to address the risk, and assign responsibility for accountability.

Although the department did not have formalized procedures, system administrators explained the access-related reviews they perform. Historical evidence of the reviews was not retained, so we were unable to evaluate the frequency and effectiveness of the reviews.

RECOMMENDATIONS

- **The Minnesota Department of Transportation should design and implement access recertification procedures for AASHTOWare to ensure compliance with Minnesota IT Services' requirements.**
 - **The Minnesota Department of Transportation should document and retain its review of user accounts.**
-

Financial Management

Most Trunk Highway construction projects are awarded through a competitive bidding process to source the best work and materials at the lowest cost. Minnesota Department of Transportation's engineers create an estimate of items and the quantities they believe are needed to complete a highway construction project. Items on an engineer's estimate could be specific materials, such as seed mixture, or an activity like sign removal. Contractors enter bids for each item, at the quantities established in the engineer's estimate, and a total bid amount is calculated.

¹⁰ Minnesota IT Services, *Identity and Access Management Standard*, version 1.4, effective January 1, 2016, https://mn.gov/mnit/assets/Identity%20and%20Access%20Management%20Standard_tcm38-323781.pdf.

After the department awards a contract, changes are primarily documented through two levels of change orders. Level one change orders document contingencies contemplated within the original contract. They are reviewed by contract change specialists and approved by the department's project engineers. Examples include incentives and disincentives related to timeliness and quality standards.

Level two change orders formalize amendments to the contract when, for example, the scope of the contract or the character of the work changes. Level two change orders are reviewed by contract change specialists and approved by the contractor and the department's project engineers, the Office of Chief Counsel, and the Office of Construction Innovative Contracting. Additional approvals from local agencies and the state construction engineer are required under certain circumstances.

Other cost changes do not require additional documentation or approval. These include price adjustments for fuel escalations and general overruns of contract items.

Exhibit 3 shows the awarded bid for contract items and final expenditures by category for the contracts we sampled. We were unable to conduct a broad analysis of all of the contracts in the audit scope due to limitations in the contract management systems.

Exhibit 3: Awarded Bids and Expenditures by Category for Sampled Contracts

<u>Category</u>	<u>Dollars</u>
Awarded Bid for Contract Items	\$176,833,808
Actual Items Paid	\$173,363,795
Net Incentives and Disincentives ^a	588,348
Fuel Adjustments	(215,752)
Other Changes Allowed by Contract	364,509
Contract Amendments	<u>6,393,454</u>
Final Amount Paid	\$180,494,354

NOTES: This exhibit includes expenditures for 52 of the 60 contracts sampled. The remaining eight contracts, with expenditures of \$233,234,195, were Indefinite Delivery/Indefinite Quantity and Construction Manager/General Contractor contracts. Under these delivery methods, expenditures are authorized and paid by task, rather than by item. Together, the final population of tested contracts totaled \$413,728,549.

^a Incentives and disincentives are generally allowed by the contract. They include payment adjustments due to work completion time and the quality of work and materials, such as pavement density and smoothness. The category total reflects \$1,936,990 in incentives and \$1,348,642 in disincentives.

SOURCE: Office of the Legislative Auditor, analysis of Minnesota Department of Transportation data.

When the cost of a single item is equal to or exceeds 5 percent of the original contract cost, it is considered a major item. For example, if the original contract was for \$1 million, any individual item that costs \$50,000 or more would be considered a major item. Although overruns on general items are allowed, the Federal Highway Administration has required close monitoring of major contract items that deviate from the engineer's estimate.

FINDING 2

The Minnesota Department of Transportation did not always use change orders to document significant changes in major items.

We found that 7 of the 52 contracts sampled did not have change orders to modify the contract, when the quantity of major items significantly changed from what the department's engineers estimated.¹¹

Federal regulations and the department's guidance state that:

If the alterations or changes in quantities significantly change the character of the work under the contract...an adjustment...will be made to the contract. The term 'significant change' shall be construed to apply only to the following circumstances:

(A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; *or*

(B) *When a major item of work...is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity.*¹²

[Emphasis added.]

According to a staff person, the department interpreted the regulation to mean that a contract adjustment is only necessary if the major item increases or decreases beyond the thresholds established by federal regulations *and* a material change in the character of the work occurs. We believe that the language only requires one of the circumstances to exist before a contract adjustment is needed.

At the conclusion of our audit, the department's legal counsel told us that this has been the department's long-standing practice and it believes "even a change above or below the threshold may not be a significant enough change to the character of the work to *mandate* an adjustment."¹³ The department contacted the Federal Highway Administration (FHWA) for additional guidance, and a staff person at FHWA agreed with its interpretation.

We considered FHWA and the department's legal argument and disagree with the interpretation based on the plain language of the federal regulations and departmental guidance. Federal regulations allow states to deviate from the federal condition clause

¹¹ The requirement was not tested for the eight Indefinite Delivery/Indefinite Quantity and Construction Manager/General Contractor contracts in the testing population. Under these delivery methods, expenditures are authorized and paid by task rather than by item.

¹² 23 *CFR*, sec. 635.109(a)(3)(ii and iv) (2021).

¹³ Jim Cownie, Deputy Chief Counsel, Minnesota Department of Transportation, memorandum to Heather Rodriguez, Office of the Legislative Auditor, *Interpretation of 23 CFR 635.109 "Significant Change,"* May 19, 2022.

stated above with approval from FHWA and the state legislature.¹⁴ While many states have adopted a variety of language adjustments, the Minnesota Department of Transportation has not obtained approval to do so.¹⁵

Change orders are an important tool for the department to evaluate and monitor the accuracy of the engineer's estimate and determine whether changes in contract costs are necessary and reasonable. Essentially, they provide accountability for the contractor and the department.

RECOMMENDATION

The Minnesota Department of Transportation should require level two change orders for significant changes to major items.

The retention of supporting documentation is needed to substantiate most highway contract payments. The department publishes a Contract Administration Manual, which provides guidance on the minimum expectations for how to measure and document contract items that are used on projects. However, for the samples we tested, the documentation retained in the contract records was not always accurate, complete, or detailed enough to support the amounts paid.

FINDING 3

The Minnesota Department of Transportation did not always have documented support for highway contract payments.

Thirty percent, or 18 of 60 highway contracts sampled, were missing support for some contract payments or had support that was not clear. Of those, two samples had payments for items that had been eliminated from the contract and two samples had support that was indecipherable. Additionally, quantities on 17 contracts were missing support, such as tickets, measurements, and computations, or had support that did not match the amount paid.¹⁶ Unsupported amounts totaled \$2,185,021.

The department's Construction Contract Administration Manual states that "contract records and documentation must be sufficiently detailed and maintained in a manner that will withstand an audit and be clear enough to be read and understood by anyone unfamiliar with the project."¹⁷ Specific documentation requirements are detailed within the manual and the department's contracts.

¹⁴ 23 *CFR*, sec. 635.109(b) (2021).

¹⁵ James P. Wiezel, "The "Significant Change in the Character of the Work" Clause: Uncertain Federalism in Highway Construction Contracts," *Public Contract Law Journal* 42 (2013): 327, 333–35.

¹⁶ Support for three contracts had documentation issues that fell into more than one category. Examples of support include weight tickets; measurements for the length, width, or depth of a space; and computation of the area where work was performed or the volume of a backfilled hole.

¹⁷ Minnesota Department of Transportation, *Contract Administration Manual*, issued 2020, 26.

The department explained that the main factors contributing to the lack of support for highway contract payments are related to staff. The department cited the lack of staff experience and knowledge needed to comply with the growing number of construction contracting requirements, and staffing shortages.

Retaining clear support for contract payments is a basic contract-management practice. Further, having clear support is important in the event of a dispute or federal audit and allows the department to monitor the accuracy of payments.

RECOMMENDATIONS

- **The Minnesota Department of Transportation should ensure it retains supporting documentation required by the Construction Contract Administration Manual and the department's contracts.**
- **The Minnesota Department of Transportation should ensure it allocates construction projects to individuals with the skill levels needed to comply with documentation requirements.**

Department management is responsible for segregating key duties, such as recording and reviewing transactions or events.¹⁸ Preventing one individual from controlling all phases of a transaction reduces the likelihood of error or fraud. While there are many areas that require segregation of duties during highway contracts, our testing focused on ensuring that the individuals who performed calculations of the quantity of an item used and entered the final quantities into the Daily Work Reports were different than those individuals who approved them.¹⁹

FINDING 4

The Minnesota Department of Transportation did not appropriately segregate project oversight duties.

The daily record of materials used and supporting calculations were not completed and reviewed by separate individuals for 35 of 60 samples, representing a 58.3 percent deviation rate.

The department requires that Daily Work Reports (DWR) and some calculations be created by one individual and approved by a different individual. A DWR contains a record of the quantity of items used on the project and is the basis for contractor payments. The segregation of these responsibilities is necessary to reduce the risk of payment errors or fraud, and to ensure information is reliable in case of disputes. For example, a timely review by individuals familiar with the project may have prevented

¹⁸ Comptroller General of the United States, Government Accountability Office, *Standards for Internal Control in the Federal Government* (Washington, DC, September 2014), 47.

¹⁹ In addition to item quantities, Daily Work Reports record the weather, contractors and the personnel that were on the construction site, contractor equipment used, information on the amount of time assessed, and other notations the project inspector deems important to document.

some of the documentation issues discussed in Finding 3 and calculation errors we found in 6 of the 60 samples tested, which totaled \$17,824.

The department acknowledged that inspectors have not always complied with the requirements. As a result, the department has relied instead on the project engineer's approval of the payment estimate to offset some of the risk. While all of the samples we tested were approved by the project engineer prior to payment, their review typically happens monthly, rather than daily. To ensure accuracy, it is best to obtain timely reviews that occur close to completion of the work.

RECOMMENDATION

The Minnesota Department of Transportation should monitor Daily Work Reports and supporting calculations to ensure they are created and approved by separate individuals on a timely basis, and take corrective action as necessary.

The potential for conflicts of interest commonly arise in highway contracting. For example, the department often awards contracts to the same companies so employees may work with the same contractors on multiple projects over time. While we found no evidence of it, conflicts of interest can result in familiarity or relationships that are at odds with the department's best interest.

The department has established a framework to help manage conflicts of interest. The framework includes required conflict of interest training to enforce the department's expectations and commitment to "avoid any action, whether or not specifically prohibited by law or regulation, which might result in a conflict of interest or the appearance of a conflict of interest."²⁰ However, the department did not always comply with related training and recertification requirements.

FINDING 5

The Minnesota Department of Transportation did not ensure that employees completed annual code of conduct training or recertification.

The department's code of conduct training program includes a review of conflicts of interest. Employees must complete initial code of conduct training within 30 days of being hired, and recertify their understanding of and commitment to it each fiscal year.²¹ In 2019, the department modified the requirement from being applicable to select groups of employees to being required for all employees.

²⁰ Minnesota Department of Transportation, Human Resource Policy HR008, *Code of Ethics*, issued August 6, 2013.

²¹ Minnesota Department of Transportation, Financial Management Policy FM024, *Code of Conduct*, issued March 23, 2020.

When the change was implemented, the training system was not updated to send out reminders to employees affected by the modification. As a result, in Fiscal Year 2021, approximately 60 percent of employees did not meet the requirement.

There could be a financial impact if the department does not inform and remind employees of their conflict of interest duties. Employees are responsible for negotiating prices that are in the best interest of the department and ensuring payments are only for materials and labor used on the project. Conflicts of interest could impair their ability to fulfill these duties impartially.

RECOMMENDATIONS

- **The Minnesota Department of Transportation should update the training system to send reminders to all employees that have not completed annual code of conduct training or recertification.**
 - **The Minnesota Department of Transportation should monitor annual code of conduct training and recertifications to ensure completion by all employees.**
-

List of Recommendations

- The Minnesota Department of Transportation should design and implement access recertification procedures for AASHTOWare to ensure compliance with Minnesota IT Services' requirements. (p. 10)
- The Minnesota Department of Transportation should document and retain its review of user accounts. (p. 10)
- The Minnesota Department of Transportation should require level two change orders for significant changes to major items. (p. 13)
- The Minnesota Department of Transportation should ensure it retains supporting documentation required by the Construction Contract Administration Manual and the department's contracts. (p. 14)
- The Minnesota Department of Transportation should ensure it allocates construction projects to individuals with the skill levels needed to comply with documentation requirements. (p. 14)
- The Minnesota Department of Transportation should monitor Daily Work Reports and supporting calculations to ensure they are created and approved by separate individuals on a timely basis, and take corrective action as necessary. (p. 15)
- The Minnesota Department of Transportation should update the training system to send reminders to all employees that have not completed annual code of conduct training or recertification. (p. 16)
- The Minnesota Department of Transportation should monitor annual code of conduct training and recertifications to ensure completion by all employees. (p. 16)



OLA



**395 John Ireland Boulevard
St. Paul, Minnesota 55155**

May 25, 2022

Judy Randall
Legislative Auditor, Office of the Legislative Auditor
658 Cedar Street
St. Paul, Minnesota 55155

Dear Ms. Randall,

Thank you for the opportunity to review and comment on your office's report titled "Trunk Highway Construction Contracts." We appreciate the role the Office of the Legislative Auditor performs with respect to identifying ways in which the Minnesota Department of Transportation can improve certain internal controls related to Trunk Highway construction contracts, system access and employee training.

MnDOT's mission is to plan, build, operate and maintain a safe, accessible, efficient and reliable multimodal transportation system that connects people to destinations and markets throughout the state, regionally and around the world. State law further requires MnDOT to ensure the safety, maintenance and preservation of Minnesota's transportation infrastructure. One of the core values MnDOT relies upon to carry out this work is accountability — which is the assumption of responsibility for our actions and decisions, and which reflects our willingness to keep our commitments and honestly assess our strengths and liabilities.

The Department has had a strong system of internal controls in place for many years and recognizes that an effective internal control system can help improve accountability in achieving an entity's mission and objectives and can allow an entity to adapt to shifting environments, evolving demands, changing risks and new priorities. It is important to note, however, that no matter how well designed, implemented or operated, an internal control system cannot provide *absolute assurance* that all of an organization's objectives will be met¹ (emphasis added).

As stated in the audit report, MnDOT has adequate internal controls to ensure compliance with applicable legal requirements, and some weaknesses related to contract management system access, project oversight duties and code of conduct training or recertification. MnDOT is committed to continuous improvement and appreciates the opportunity to provide further context and feedback surrounding the report's findings and recommendations.

¹ U.S. Government Accountability Office, *Standards for Internal Control in the Federal Government (Green Book)*, September 2014.

OLA Report Finding: The Minnesota Department of Transportation does not have formal access recertification procedures for AASHTOWare and did not retain evidence of access privilege recertifications.

Recommendation – *The Minnesota Department of Transportation should design and implement access recertification procedures for AASHTOWare to ensure compliance with Minnesota IT Services’ requirements.*

Recommendation – *The Minnesota Department of Transportation should document and retain its review of user accounts.*

MnDOT Response: The Project Data Management Section (PDMS), AASHTOWare Project (AWP) Unit formed a Governance Team several years ago to manage the various functions surrounding the AWP Enterprise System. The team is made up of 10 MnDOT subject matter experts from each of the module areas, including a MNIT System Administrator and 6 members from the PDMS and AWP Unit. The Team meets every month to discuss the many joint issues between modules that surround the AASHTOWare Database, including roles and access processes.

This group has worked to develop the governing policy: *Guidelines for Adding, Disabling, and Maintaining AASHTOWare Project Users and Vendors*. The policy has been updated as of May 17, 2022, taking into consideration the findings in the OLA Report. The primary focus of the updates was to provide additional guidance on the review of the user accounts, setting the document retention schedule and storage of documents in a central location for easier review. We have also established a management review of administrator roles and other roles within the system between the AWP Supervisor and MNIT System Administrator. Additionally, we have validated that AASHTOWare cannot be accessed by any internal staff who are not part of the MnDOT MN\AD Domain, which is controlled by MNIT and follows their standards and policies.

Responsible Staff: Charles Groshens, AASHTOWare Supervisor, Project Data Management Section.

Timeline: The *Guidelines for Adding, Disabling and Maintaining AASHTOWare Project Users and Vendors* policy was updated on May 17, 2022, and now addresses the above recommendations.

OLA Report Finding: The Minnesota Department of Transportation did not always use change orders to document significant changes in major items.

Recommendation – *The Minnesota Department of Transportation should require level two change orders for significant changes to major items.*

MnDOT Response: The Department will work with the Federal Highway Administration to seek additional clarity on this finding and subsequent recommendation and will consider escalating this regulatory interpretation issue to the FHWA’s Office of Chief Counsel. MnDOT will also examine its internal documentation processes. It is important to note that the purpose of the federally required clause is to provide an opportunity for the contractor and the State Transportation Department to negotiate certain contract unit prices when those prices are no longer fair and reasonable due to a change to the project. The contracts addressed in the report reflect cases where MnDOT and the contractor believed the contract unit prices remained fair and reasonable and there was no need to negotiate those contract unit prices.

The OLA report includes reference to the long-standing interpretation and processes used by the Department with respect to “significant changes” in construction contracts. While the OLA disagrees with the agency and

indicates that MnDOT did not comply with legal requirements, it should be noted that the FHWA has never cited MnDOT for non-compliance with 23 CFR 635.109, nor has it advised the agency it would be pursuing possible legal remedies for non-compliance as authorized under 2 CFR 200.339. In fact, the Minnesota Division Office of the FHWA agrees with MnDOT's interpretation of the FHWA's own regulation.

Responsible Staff: Tom Ravn, Director, Office of Construction and Innovative Contracting.

Timeline: MnDOT expects to seek and receive additional clarity from the FHWA by September 30, 2022.

OLA Report Finding: The Minnesota Department of Transportation did not always have documented support for highway contract payments.

***Recommendation** – The Minnesota Department of Transportation should ensure it retains supporting documentation required by the Construction Contract Administration Manual and the department's contracts.*

***Recommendation** – The Minnesota Department of Transportation should ensure it allocates construction projects to individuals with the skill levels needed to comply with documentation requirements.*

MnDOT Response: MnDOT has made a substantial investment in technology for contract administration by implementing AASHTOWare. Due to the implementation of this software, processes for contract administration and documentation have changed. With this change in software and processes, MnDOT expects to have better compliance with documentation retention by virtue of utilizing more electronic documentation.

MnDOT will continue to provide training and resources to individuals administering and documenting construction contracts.

The Table of Findings in the OLA report indicates that MnDOT failed to comply with legal requirements with respect to documentation retention for highway contract payments. However, the report itself does not specify which legal requirements were not met.

Responsible Staff: Tom Ravn, Director, Office of Construction and Innovative Contracting.

Timeline: MnDOT will discuss documentation compliance requirements at the bi-weekly construction update meetings conducted by the Office of Construction and Innovative Contracting throughout the 2022 construction season. MnDOT will emphasize Construction Contract Administration Manual documentation requirements during annual construction staff training conducted during the winter of 2022-2023.

OLA Report Finding: The Minnesota Department of Transportation did not appropriately segregate project oversight duties.

***Recommendation** – The Minnesota Department of Transportation should periodically monitor Daily Work Reports and supporting calculations to ensure they are created and approved by separate individuals on a timely basis and take corrective action as necessary.*

MnDOT Response: Staff from MnDOT's Office of Construction and Innovative Contracting perform real-time reviews on selected contracts and provide feedback to district project staff. These reviews include evaluating timing of Daily Work Report (DWR) creation, by whom DWRs are created and approvals. In addition to procedural resources, OCIC staff provide guidance that the creators of DWRs should not approve their own

DWRs, and that, calculations must be checked by someone other than the person making the original computation.

In addition to planned staff training, MnDOT and MNIT staff are investigating options for AASHTOWare software changes which would prevent creators from approving their own DWRs. MnDOT has submitted a request to Info Tech, Inc., the software creator/vendor, to provide an enhancement to the software that will disallow approval of DWRs by the creator of the report.

Responsible Staff: Tom Ravn, Director, Office of Construction and Innovative Contracting.

Timeline: MnDOT will continue to discuss documentation compliance requirements at the bi-weekly construction update meetings conducted by OCIC throughout the 2022 construction season. MnDOT, along with several other State DOTs, have requested the AASHTOWare enhancements to address this finding. We will continue to advocate for this change in AASHTOWare. If adopted, this software update could be completed by April 30, 2023.

OLA Report Finding: The Minnesota Department of Transportation did not ensure that employees completed annual code of conduct training or recertification.

***Recommendation** – The Minnesota Department of Transportation should update the training system to send reminders to all employees that have not completed annual code of conduct training or recertification.*

***Recommendation** – The Minnesota Department of Transportation should monitor annual code of conduct training and recertifications to ensure completion by all employees.*

MnDOT Response: The Department believes strongly in the importance of ethical conduct and conflicts of interest. MnDOT is in the process of revising the agency’s Code of Ethics policy to fully adopt MMB’s new Code of Ethical Conduct policy, which combines the statewide Code of Ethics and Code of Conduct policies. Once the Code of Ethics policy is revised, the agency’s Code of Conduct policy will be retired. In conjunction with the new policy, the Department will transition to MMB’s Code of Ethical Conduct online training and policy acknowledgment with a conflicts of interest disclosure process.

Responsible Staff: Karin van Dyck, Director, Office of Human Resources.

Timeline: All employees need to complete the acknowledgement form by June 30, 2022. MnDOT expects to revise the Code of Ethics policy by September 30, 2022.

Thank you for identifying these opportunities for improvement to the administration of MnDOT’s Trunk Highway Construction Contracts. MnDOT will continue to work with stakeholders and agency staff in the administration of our projects.

Sincerely,



Nancy Daubenberger, P.E.
Commissioner

Equal Opportunity Employer



OLA



OLA

Financial Audit Staff

Judy Randall, *Legislative Auditor*
Lori Leysen, *Deputy Legislative Auditor*

Audit Directors

Mark Mathison
Scott Tjomsland

Audit Coordinators

Ryan Baker
Jordan Bjonfald
Kayla Borneman
Heather Rodriguez
Joe Sass
Valentina Stone
Zach Yzermans

Senior Auditors

Tyler Billig
Bill Dumas
Scott Dunning
Daniel Hade
Shannon Hatch
Gabrielle Johnson
Lisa Makinen
Alec Mickelson
Crystal Nibbe
Duy (Eric) Nguyen
Erick Olsen
Sarah Olsen
Amanda Sayler
Emily Wiant

Staff Auditors

Ria Bawek
Nicholai Broekemeier
Sarah Bruder
Zachary Kempen
Zakeeyah Taddese
Peng Xiong

For more information about OLA and to access its reports, go to: www.auditor.leg.state.mn.us.

To offer comments about our work or suggest an audit, evaluation, or special review, call 651-296-4708 or e-mail legislative.auditor@state.mn.us.

To obtain printed copies of our reports or to obtain reports in electronic ASCII text, Braille, large print, or audio, call 651-296-4708. People with hearing or speech disabilities may call through Minnesota Relay by dialing 7-1-1 or 1-800-627-3529.



Printed on Recycled Paper



OFFICE OF THE LEGISLATIVE AUDITOR
CENTENNIAL OFFICE BUILDING – SUITE 140
658 CEDAR STREET – SAINT PAUL, MN 55155