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DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION COMMISSION

## OPERATIONAL RISK AREAS



MAY 2019

PERFORMANCE AUDIT

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## OFFICE OF THE STATE AUDITOR

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State Auditor

Monica Bowers

Deputy State Auditor

Trey Standley

Audit Manager

Jenny Atchley

Team Leader

Robert Regan

Auditor

Kate Sabott

Other Contributor

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# OFFICE OF THE STATE AUDITOR



May 16, 2019

DIANNE E. RAY, CPA  
—  
STATE AUDITOR

Members of the Legislative Audit Committee:

This report contains the results of a performance audit of the Department of Transportation (Department) and Transportation Commission (Commission). The audit was conducted pursuant to Section 2-3-122(1), C.R.S., which required the State Auditor to conduct a risk-based performance audit of the Department, and Section 2-7-204(5), C.R.S., which requires the State Auditor to annually conduct performance audits of one or more specific programs or services in at least two departments for purposes of the SMART Government Act. The report presents our findings, conclusions, and recommendations, and the responses of the Department and Commission.

OFFICE OF THE STATE AUDITOR  
1525 SHERMAN STREET  
7TH FLOOR  
DENVER, COLORADO  
80203

303.869.2800



# CONTENTS



Report Highlights	1
CHAPTER 1 OVERVIEW	3
Department Administration	5
Fiscal Overview	6
Audit Purpose, Scope, and Methodology	7
CHAPTER 2 FINANCIAL ACCOUNTABILITY	11
Budget Transparency	12
RECOMMENDATION 1	19
Annual Spending	24
RECOMMENDATION 2	32
RECOMMENDATION 3	33
Prevention and Detection of Fraudulent Payments	36
RECOMMENDATION 4	47
CHAPTER 3 CONTRACTED WORK	51
Construction Project Debudgeting and Closure	54
RECOMMENDATION 5	60
Master Task Order Contracts	63
RECOMMENDATION 6	74
APPENDIX FISCAL YEAR 2017 BUDGET ALLOCATION PLAN AND OSA BUDGET-TO-ACTUALS	A-1



# REPORT HIGHLIGHTS



OPERATIONAL RISK AREAS  
PERFORMANCE AUDIT, MAY 2019

DEPARTMENT OF TRANSPORTATION  
TRANSPORTATION COMMISSION

## CONCERN

In Fiscal Year 2017, the Department of Transportation (Department) spent 37 percent more than it requested in its Budget Allocation Plan (Budget Plan) for the year. The Budget Plan, which is annually approved by the Transportation Commission, did not include prior-year revenue that was still available to spend. Additionally, the Department lacks processes to detect and deter employee fraud through data analysis, does not always close construction projects in a timely way, and does not always use master task order contracts as designed.

## KEY FINDINGS

- Problems with the completeness and transparency of the Department's Budget Plan and controls over spending based on the Budget Plan include:
  - The Department spent \$582.7 million more than approved in the Fiscal Year 2017 Budget Plan. This was primarily due to prior year revenue that was still available to spend but was not included in the Budget Plan. In addition, a budget-to-actuals analysis cannot be performed for nearly \$1.3 billion (about 80 percent) of the Department's approved budget due to a lack of alignment between the Budget Plan and how the Department tracks expenses in the accounting system.
  - The Department did not include statutorily required information in the Fiscal Year 2017 Budget Plan, including more than \$1 billion carried forward from prior years, and construction and maintenance project information.
  - The Budget Plan did not accurately reflect federal highway funding. In Fiscal Year 2017, the Department received \$718.6 million in federal funding—about \$43.7 million more than was included in the approved Budget Plan.
- The Department does not close construction projects and release unused funds within its required timeframe, delaying the release of \$29.3 million in budgeted construction funds for projects we reviewed.
- Our analysis of the Department's vendor records and Fiscal Year 2017 payment data found suspicious patterns and anomalies that indicate a lack of detective controls to identify and deter potential fraud by employees. We did not identify specific instances of fraud.
- We found problems with all five master task order contracts, as well as 80 of the 84 related task orders, we sampled. The problems included scopes of work that did not align between contracts and task orders, unapproved consultant labor rates, contracts without proper approvals, and contract terms that did not comply with state requirements.

## BACKGROUND

- The Department oversees the State's transportation system. It conducts statewide transportation planning; constructs, operates, and maintains the State highway system; and promotes transportation safety.
- The Transportation Commission (Commission) sets transportation policy, supervises Department spending, and adopts the Department's annual Budget Plan.
- The Fiscal Year 2017 Budget Plan reflected a budget of \$1.56 billion.
- The Department completed construction on 277 State-administered design-bid-build projects between April 2016 and August 2018.

## KEY RECOMMENDATIONS

- Include all required information in the Budget Plan or seek statutory changes, if needed; reflect all planned spending and revenue in the Budget Plan; and routinely analyze budget-to-actual data based on the Budget Plan categories.
- Implement policies and processes to routinely analyze vendor and payment data for suspicious patterns or anomalies, and investigate any indicators of potential fraud.
- Develop reports and implement policies and processes to evaluate the timeliness of construction project closure and release of unused funds.
- Implement controls over the cost, duration, and scope of work in master task order contracts.

The Department and Commission agreed with the recommendations.





# CHAPTER 1

## OVERVIEW

The Department of Transportation (Department) was created to oversee Colorado's multimodal transportation system, which includes roads, bridges, transit and rail, aviation, and bicycle and pedestrian routes. The Department is responsible for providing strategic planning for future transportation challenges, promoting coordination among different modes of transportation, integrating governmental functions to reduce costs, and obtaining the greatest benefit from state expenditures through statewide transportation policy [Section 43-1-101(1), C.R.S.]. The Department's primary functions include the following:

- **STATEWIDE TRANSPORTATION PLANNING.** The Department is charged with planning, developing, and coordinating an integrated transportation system in cooperation with federal, state, regional, and local agencies, as well as with private individuals and organizations concerned with the State’s transportation planning and operations [Section 43-1-105(1)(a), C.R.S.].

Federal law requires the Department to develop a Statewide Transportation Improvement Program (STIP) [23 USC 135(g) and 49 USC 5304(g)]. The STIP is a rolling 4-year planning document that identifies statewide transportation projects based on estimated revenues and priorities determined during the statewide planning process. The STIP should include all federally supported projects. In Colorado’s STIP, the Department also includes state-funded projects and local projects that the Department oversees.

- **CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE STATE HIGHWAY SYSTEM.** The Department is responsible for constructing and maintaining all roads comprising the state highway system, which includes interstate highways, U.S. highways, and state highways [Sections 43-2-101 and 43-2-102, C.R.S.]. The state highway system includes more than 23,000 lane miles, more than 3,400 bridges, 20 tunnels, and 35 mountain passes. To maintain a safe and efficient highway system, the Department provides services including snow and ice operations, roadway maintenance and preservation (e.g., pavement striping and repair), and construction management.
- **SAFETY.** Within the Department, the Office of Transportation Safety was created to consult with state departments, institutions, and agencies; political subdivisions of the state; and appropriate citizen groups and to formulate current and long-range plans and programs involving all aspects and components of transportation safety [Sections 24-42-101(1) and 24-42-103(2)(a), C.R.S.]. Additionally, the Department promotes transportation safety by administering safety education grant programs, safety-specific infrastructure projects, and safety training, as well as working with local law enforcement and communities to address transportation safety needs.

- **TRANSIT AND RAIL.** Within the Department, the Division of Transit and Rail is responsible for the planning, development, operation, and integration of transit and rail into the statewide transportation system, in cooperation with railroads and other transit providers [Section 43-1-117.5(3)(a), C.R.S.].
- **AERONAUTICS.** Under the jurisdiction of the Colorado Aeronautical Board [Section 43-10-104(1), C.R.S.], the Division of Aeronautics has various responsibilities, including promoting aviation safety, developing and maintaining the state aviation systems plan, providing administrative support for the Colorado Aeronautical Board, providing advisory and technical assistance to airports, and administering the state aviation system grant program [Section 43-10-103(2), C.R.S.].

## DEPARTMENT ADMINISTRATION

The Transportation Commission (Commission), which is composed of 11 members appointed by the Governor and confirmed by the Senate [Sections 43-1-106(1) and (4)(a), C.R.S.], is responsible for overseeing the Department. Commissioners represent geographic districts defined in statute, serve 4-year terms, and must meet at least eight times per year [Sections 43-1-106(2), (4)(a), and (6), C.R.S.]. The Commission has various responsibilities, including:

- Formulating general policy with respect to the management, construction, and maintenance of public highways and other transportation systems in the state [Section 43-1-106(8)(a), C.R.S.].
- Prescribing the administrative practices to be followed by the Department and making all necessary and reasonable orders, rules, and regulations in order to carry out its and the Department's statutorily required duties [Section 43-1-106(8)(d) and (k), C.R.S.].
- Promulgating and adopting all Department budgets and supervising and directing the expenditure of all Department funds [Sections 43-1-106(8)(h) and 113(1), C.R.S.].

The Executive Director is responsible for exercising general supervisory control over and coordinating activities, functions, and employees of the Department and its divisions [Section 43-1-105(1)(c), C.R.S.]. The Executive Director leads the Department’s executive management team, which includes the chief engineer, deputy executive director, division and office directors, and the regional transportation directors. In Fiscal Year 2019, the Department reported having more than 3,300 full-time equivalent (FTE) staff.

The Department is administratively divided into five geographic regions. The regions are responsible for designing construction projects, advertising and awarding contracts to private companies, and overseeing construction. Additionally, the regions maintain the state highway system, which includes snow removal. Department headquarters and regional staff work together through both centralized and decentralized processes to carry out the Department’s functions and mission, which is “to provide the best multi-modal transportation system for Colorado that most effectively and safely moves people, goods and information.”

The Department also includes two enterprises created in 2009 by the Funding Advancements for Surface Transportation and Economic Recovery (FASTER) Act: the Colorado Bridge Enterprise (Bridge Enterprise) and the High-Performance Transportation Enterprise (HPTE), which both operate as government-owned businesses [Section 43-4-801, et seq., C.R.S.]. The Bridge Enterprise’s purpose is to finance, repair, reconstruct, and replace certain state-owned bridges [Section 43-4-805(2)(b), C.R.S.]. HPTE’s purpose is to pursue innovative means of more efficiently financing surface transportation infrastructure projects, such as through public-private partnerships [Section 43-4-806(2)(c), C.R.S.].

## FISCAL OVERVIEW

The Department receives funding from both federal and state sources. The federal Fixing America’s Surface Transportation (FAST) Act, which

was signed into law in December 2015, provides funding to the federal-aid highway program [26 USC 9503(c)(1)]. Additionally, the Department is funded with revenue from federal gas taxes [26 USC 4081 and 26 USC 9503], state gas taxes [Colorado Const., art. X, sec. 18], motor vehicle fees and fines [Colorado Const., art. X, sec. 18], interest earnings [Section 43-4-205(5.5)(g), C.R.S.], and proceeds from lease-purchase agreements.

With the exception of 2 percent of the Department's budget that it appropriates, the General Assembly has delegated its budgeting authority to the Commission under Sections 43-1-113(2) and (9)(c)(I), C.R.S. EXHIBIT 1.1 shows the Fiscal Years 2017 through 2019 budgets approved by the Commission (termed Budget Allocation Plans) for the primary Department and both enterprises.

**EXHIBIT 1.1. DEPARTMENT OF TRANSPORTATION  
APPROVED BUDGET, FISCAL YEARS 2017 THROUGH 2019  
(IN MILLIONS OF DOLLARS)**

	2017	2018	2019	PERCENT CHANGE
Primary Department	\$1,432.9	\$1,428.2	\$1,624.1	13%
Bridge Enterprise	126.6	112.2	116.2	-8%
HPTE	5.7	18.7	16.1	182%
<b>TOTAL<sup>1</sup></b>	<b>\$1,563.1</b>	<b>\$1,554.4</b>	<b>\$1,751.3</b>	<b>12%</b>

SOURCE: Final Budget Allocation Plans for Fiscal Years 2017 through 2019.

<sup>1</sup> The Department's total budget amount reflects adjustments to avoid double counting revenue it allocates to both the primary department and HPTE to reflect a fee-for-service agreement between the two entities. This adjustment was equal to \$2.1 million in Fiscal Year 2017, \$4.7 million in Fiscal Year 2018, and \$5.1 million in Fiscal Year 2019.

## AUDIT PURPOSE, SCOPE, AND METHODOLOGY

We conducted this performance audit pursuant to Section 2-3-122(1), C.R.S., which required the State Auditor to conduct a risk-based performance audit of the Department, and Section 2-7-204(5), C.R.S., the State Measurement for Accountable, Responsive, and Transparent (SMART) Government Act. Audit work was performed from July 2017 through April 2019. We appreciate the assistance provided by the

management and staff of the Department and Commission members during this audit.

We conducted this 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.

To develop our audit objectives, we performed a risk assessment to identify the Department's processes with the highest risks based on the magnitude and likelihood of a process deficiency. We also considered risk areas identified by Department management. The key objectives of the audit were to (1) evaluate the completeness, accuracy, and transparency of the Department's annual budget; (2) determine if the Department has appropriate controls over vendor information and payments to mitigate the risk of fraud and abuse; (3) evaluate the timeliness of construction project closure and the release of unused funds; and (4) determine if the Department has adequate policies, procedures, and practices to ensure effective use of master task order contracts.

To accomplish our audit objectives, we performed the following audit work:

- Reviewed the Colorado Constitution; statutes; state fiscal rules; State Controller policies; federal regulations; *Standards for Internal Control in the Federal Government* ("Green Book"); *Federal Highway Administration Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects*; Internal Revenue Service requirements; U.S. Fraud Examiners Manual; Association of Certified Fraud Examiners' materials; Transportation Commission Policy Directives; Department accounting, engineering, construction, and procurement manuals; and Department policies and procedures.

- Conducted site visits to the Department's five regional offices and to six construction project sites, and interviewed more than 40 managers, engineers, and accounting staff.
- Interviewed Department management and staff at headquarters, Transportation Commission members, Legislative Council staff, Joint Budget Committee staff, and Office of the State Controller staff.
- Analyzed the Department's Fiscal Year 2017 Long Bill, Budget Allocation Plan, budget data and reports from its Enterprise Resource Planning software called Systems, Applications and Products (SAP), and revenue and expense data from the Department's general ledger.
- Analyzed the Department's Fiscal Year 2017 payment data and vendor records from SAP, as well as employee address data from the Colorado Personnel Payroll System.
- Analyzed aggregate construction project data from SAP for projects with final acceptance on or after April 14, 2016, as of August 16, 2018.
- Analyzed construction project data from several of the Department's electronic databases, including SAP, which the Department uses to manage budget, accounting, construction project, grant, procurement, and contract data; AASHTOWare Project Preconstruction; AASHTOWare Project SiteManager; and ProjectWise, all of which are used to store and manage information related to construction projects. We also reviewed project documentation provided by the Department for a sample of projects that were closed in SAP during Calendar Year 2017.
- Analyzed a sample of five master task order contracts that were effective from Fiscal Years 2015 through 2017 and their 84 associated task orders for compliance with contract provisions and applicable requirements.

We relied on the following nonstatistical samples to support our audit work:

- A nonstatistical stratified random sample of 12 state-administered design-bid-build construction projects that were closed in SAP during Calendar Year 2017. We selected two projects from each of the five regions and two statewide projects to provide sufficient coverage across the State. We reviewed the sample to test whether the Department is releasing unused construction funds and closing construction projects in a timely manner.
- A nonstatistical sample of five master task order contracts that were effective from Fiscal Years 2015 through 2017. To select our sample, we considered the contract amount, number of task orders issued for each contract, and type of contracted work. The sample was used to test whether the contracts, amendments, and 84 task orders associated with those contracts complied with applicable state and Department requirements, as well as whether the task orders aligned with the contract scope and other provisions.

The results of our samples cannot be projected to their respective populations. The samples were selected to provide sufficient coverage of the audit objectives and, along with the other audit work performed, provide sufficient, reliable evidence as the basis for our findings, conclusions, and recommendations.

We planned our audit work to assess the effectiveness of those internal controls that were significant to our audit objectives. Our conclusions on the effectiveness of those controls, as well as specific details about the audit work supporting our findings, conclusions, and recommendations, are described in the remainder of this report.

A draft of this report was reviewed by the Department and Commission. We have incorporated their comments into the report where relevant. The written responses to the recommendations and the related implementation dates are the sole responsibility of the Department and Commission.



# CHAPTER 2

## FINANCIAL ACCOUNTABILITY

The process to approve the Department of Transportation's (Department) annual budget involves shared authority between the General Assembly and Transportation Commission (Commission). Through the general appropriation bill (Long Bill), the General Assembly reviews the Department's annual budget but only directly appropriates about 2 percent of the total amount, which is used for the following: administration, the First Time Drunk Driving Offenders Account, the Marijuana Impaired Driving Program, the Southwest Chief Rail Commission, and projects funded from the Capital Construction Fund [Sections 43-1-113(3)(a), 42-2-132 (4)(b)(II), 39-28.8-501, 43-4-1002(1), and 24-75-302, C.R.S.].

The rest of the Department’s budget consists of both federal and state funds, including revenue from state fuel taxes and vehicle license and registration fees, and is continuously appropriated for highway construction, maintenance, and supervision without further appropriation by the General Assembly [Colorado Const., Art. X, Sec. 18 and Section 43-1-219, C.R.S.]. Since 1991, statute has authorized the Commission to approve this portion of the budget by making “the same annual budgeting decisions that the general assembly makes through the appropriation process” [Sections 43-1-113(1) and 43-4-701(2)(b), C.R.S.].

The Department uses Enterprise Resource Planning software called Systems, Applications and Products (SAP) to track its budget and expense data. The structure of SAP is complex and involves a complicated coding system to track budget and expense data for the Department’s various activities.

## BUDGET TRANSPARENCY

The Budget Allocation Plan (Budget Plan) is the primary document that policymakers, including the Commission and General Assembly, use to communicate and understand how the Department will spend its available funding for the year. Although Department staff prepare the Budget Plan for approval by the Commission, the Commission generally has authority to determine the specific budget lines included in the Budget Plan within the requirements of Section 43-1-113, C.R.S. In Fiscal Year 2017, the Budget Plan included a summarized budget for programs and operational activities within the primary Department, Colorado Bridge Enterprise, and High-Performance Transportation Enterprise (HPTE). For each of these entities, there were between three and 63 specific budget lines, such as roadway surface maintenance, snow and ice removal, traffic signals, bridge enterprise and HPTE projects, and administration and legal fees. The Budget Plan was organized to show which activities Department staff versus contractors would perform.

## WHAT AUDIT WORK WAS PERFORMED AND WHAT WAS THE PURPOSE?

We analyzed the Department's Fiscal Year 2017 Budget Plan and SAP reports that reflected the Department's internal budget data. We also reviewed the Colorado Constitution and statutes. Finally, we interviewed Department staff and management, as well as 10 of the 11 Transportation Commissioners.

The purpose of the audit work was to assess whether the Department's Fiscal Year 2017 Budget Plan provided complete, transparent, and reliable information regarding the Department's budget.

## HOW WERE THE RESULTS OF THE AUDIT WORK MEASURED?

**THE BUDGET PLAN IS TO REFLECT ALL REQUIRED INFORMATION.** Statute [Sections 43-1-113(2) and 43-1-113(6)(a), C.R.S.] requires the Budget Plan to include a general state transportation budget summary setting forth the aggregate figures of the budget, as well as the following information:

- Estimates of all available revenues displayed by source, including any anticipated carry forward balances. (Carry forward balances are funds the Department received in prior years but did not spend.)
- Allocation of spending by the following categories of expenditure:
  - ▶ Construction projects on the state highway system.
  - ▶ All construction and maintenance projects, grouped by priority order according to both Transportation Commission district and statewide priority.
  - ▶ Any land acquisitions pursuant to maintenance or construction projects, including those which may be accomplished by eminent domain.

- ▶ As an addendum, a complete list of all projects budgeted in prior years which have not been deleted or progressed to completion, including all funds carried over from the budget of previous years.

THE DEPARTMENT IS TO UPDATE ITS CONSTRUCTION BUDGET TO REFLECT ACCURATE FEDERAL REVENUE. The General Assembly recognized that since the Department relies on federal funding to help pay for construction projects, the Commission needs accurate information about the Department's expected federal revenue in order to approve an accurate construction budget. Therefore, statute also requires that the Department prepare its budget for construction projects as soon as practicable, but not later than 60 days after receipt of notification of the Department's Federal Highway Fund apportionments for the ensuing federal fiscal year [Section 43-1-113(14)(a), C.R.S.].

## WHAT PROBLEMS DID THE AUDIT WORK IDENTIFY AND WHY DID THEY OCCUR?

THE FISCAL YEAR 2017 BUDGET PLAN DID NOT INCLUDE ALL STATUTORILY REQUIRED INFORMATION. The following information was missing:

- **MONEY CARRIED FORWARD FROM PRIOR YEARS.** First, the Budget Plan did not include any information about more than \$1 billion that carried forward from prior years and was available for the Department to spend. According to the Department, funds that carried forward from prior years included a combination of funds that had not yet been budgeted for specific projects or initiatives and funds that were already encumbered for multi-year construction projects. Not reporting that balance was a substantial omission since those funds accounted for 40 percent of the Department's total available funding in Fiscal Year 2017. When we began our audit, Department staff were not aware that reporting carry forward funds

as part of the Budget Plan is a statutory requirement and were instead reporting these amounts to the Commission in the late summer, after staff had reconciled the previous fiscal year's expenses. After we brought the requirement to management's attention, they reported that they are developing a process to estimate the carry forward amount prior to the end of the fiscal year so that information can be included in future Budget Plans.

Second, the budget did not show that the Department had a balance of \$89.9 million available in its contingency reserve, which is used to pay for emergencies or unexpected costs, such as higher-than-expected volumes of ice and snow removal during extreme winters. The Department reports the contingency reserve balance to the Commission on a monthly basis, not as part of the Budget Plan.

- **CONSTRUCTION BUDGET.** The Budget Plan did not specify a budget for construction or land acquisitions associated with construction, such as property on which the Department plans to build a road. The Department told us it regards the sum of budget categories labeled as "contracted out work" as its annual construction budget, which was \$549.3 million for the primary department, \$105.9 million for the Colorado Bridge Enterprise, and \$3.6 million for the High-Performance Transportation Enterprise for Fiscal Year 2017. The Department also reported that funds budgeted for land acquisitions are incorporated into the "contracted out work" amounts that appear in the Budget Plan.
- **PROJECT INFORMATION.** The Budget Plan did not group construction and maintenance projects planned for the year according to Transportation Commission district and statewide priority. In addition, there was no addendum listing all projects budgeted in prior years that were still in progress, including funds carried over from previous years. Although statute requires the Department to include project information with the Budget Plan, based on our interviews with Commissioners, it is not clear the Commission needs that information to effectively review and approve the Department's annual budget. Specifically, eight of the 10 commissioners we

interviewed indicated that they do not necessarily need detailed information about every construction project around the state in order to fulfill their duties. As of January 2018, more than 400 state-administered construction projects were budgeted for pre-construction activities or construction. On the other hand, it is not clear whether General Assembly members would find this information useful if it was available, or if there are other ways the Department could fulfill the need for information that the General Assembly had intended to address when it established the requirement.

**THE BUDGET PLAN WAS NOT UPDATED TO REFLECT ACCURATE FEDERAL REVENUE.** The Department did not update the Fiscal Year 2017 Budget Plan after receiving notification about the amount of federal highway funds it expected to receive. According to the Department's Fiscal Year 2017 revenue reconciliation, which it provided to the Commission in September 2017, the Department received \$718.6 million in federal funding, whereas the approved Budget Plan was based on expected federal revenue of \$674.9 million.

The Department reported that it is challenging to adhere to the 60-day deadline in statute because the federal government notifies the Department about its federal apportionments sporadically throughout the year, after congressional budget actions are decided. Therefore, the Department's approach has been to develop its annual budget and move forward with planned construction projects based on revenue projections without knowing exactly how much federal money it will receive. Since the Department cannot practically comply with the requirement to develop its construction budget *after* learning how much federal revenue it will receive, the Department should work with the Commission to determine a feasible alternative to update the budget to reflect actual federal revenue. For example, the Department and Commission could implement a process to amend the Budget Plan periodically throughout the year (e.g., quarterly), particularly if the Department plans to spend more than its initial revenue estimate.

At the time of our review, the Commission had not directed the Department to include the information we identified as missing from the Budget Plans it approved in recent years. During the audit, Department management reported that the Department and Commission had begun working to update the Budget Plan to include additional information.

## WHY DO THESE PROBLEMS MATTER?

**INCOMPLETE INFORMATION REDUCES THE EFFECTIVENESS OF THE BUDGET PLAN AS A MANAGEMENT TOOL AND DECREASES TRANSPARENCY AND ACCOUNTABILITY OF THE DEPARTMENT'S BUDGET.** Both the Commission and members of the General Assembly use the Budget Plan to understand how Department management plans to spend its funds and make decisions regarding the Department's spending priorities. The information that we found missing from the budget, such as the amount of funds the Department expects to carry forward from prior years, its total construction budget, and projects in progress or planned, are fundamental aspects of the Department's financial planning and would help policymakers make more informed decisions and hold the Department accountable. For example, as we discuss in RECOMMENDATIONS 2 AND 3, the Department overspent its approved Fiscal Year 2017 budget by \$582.7 million because the budget did not reflect all of the carry forward money from prior years' budgets that was available to spend during that year.

Not requiring the Department to include complete and transparent information in its annual budget diminishes the Commission's ability to hold the Department accountable for effectively managing its finances. For example, not reporting in the budget how much money the Department still has available from prior years limits how effectively the Commission can redirect funds carried forward. Specifically, one commissioner told us the Department's budget is hard to understand because it "does not tell the whole story." In addition, not explicitly reporting the Department's annual construction budget or the financial status of projects that are in progress makes it more difficult for the

Commission to ensure that the Department's construction spending is appropriate. For example, one commissioner reported having difficulty tracking finances related to individual construction projects, especially when transferring savings from one project to another project's budget. Multiple commissioners we interviewed also talked about the importance of providing complete and transparent financial information to help the Department communicate its funding needs and maintain credibility with policy makers and the public.



# RECOMMENDATION 1

The Transportation Commission (Commission) and Department of Transportation (Department) should ensure that the Budget Allocation Plan (Budget Plan) provides complete and transparent information about the Department's annual budget by:

- A Ensuring that all statutorily required information is clearly reflected in the Budget Plan, as well as any additional information the Commission needs to fulfill its budgeting responsibilities.
- B Determining what project-specific information the Commission would find useful to have as part of the budget and implementing a process to provide that information. This process should include the Department and the Commission assessing whether to seek statutory changes to align statutory requirements with the information needs of the Commission.
- C Developing a process to periodically amend the Budget Plan throughout each fiscal year so it reflects the most current revenue and budget data.

# RESPONSE

## TRANSPORTATION COMMISSION

- A AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

The Transportation Commission believes that it has exercised its full oversight authority over the Department and has adhered to statutory requirements in adopting a Budget Plan, including the FY 2017 Budget Plan. Our Budget Plan has, in fact, been a Revenue Allocation Plan that does not incorporate carry-overs from prior years. The Department acknowledges providing information in

“different places and at different times during the year, resulting in a disaggregated view of the budget.” The Commissioners, like Legislators with the Long Bill, are provided with a Plan Narrative. Commissioners often utilize the narrative to better understand allocation categories. At the request of the Commission, or a Commissioner, we are provided additional information. Allocations made in a prior year remain in effect until expended or formally reallocated. All of this information assists the Commission in determining how much money the Department has available to spend, how that money will be used, and how much the Department actually spends. We agree that our Budget Plan Allocation Plan should be revised to include carry-over funds and expenses to be charged against those resources in the next year.

The Commission, working closely with management and budget staff, will continue to improve upon its governance process to ensure that the Budget Plan reflects, in a clear and understandable way, the most current revenue and planned spending for expense categories specified in statute.

**B AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.**

As stated in our response to RECOMMENDATION 1, PART A, the Transportation Commission believes that it has exercised its full oversight authority over the Department and has adhered to statutory requirements in adopting a Budget Plan, including the FY 2017 Budget Plan.

The Transportation Commission will work with the Department to find a reasonable approach to meet the intent of the statutory requirements, or if impractical and of limited value, work with the Department and legislature to propose statutory changes.

**C AGREE. IMPLEMENTATION DATE: JUNE 2019.**

As stated in our response to RECOMMENDATION 1, PARTS A and B, the Transportation Commission believes that it has exercised its full

oversight authority over the Department and has adhered to statutory requirements, including the FY 2017 Budget Plan. At the request of the Commission, or a Commissioner, the Department provides additional and updated information. The Commission uses multiple sources of information to assist in determining how much money the Department has available to spend, how that money will be used, and how much the Department actually spends. As additional information becomes available in the course of carrying out the Department's work, the Budget Plan will be updated at least on a quarterly basis in the future.

## RESPONSE

### DEPARTMENT OF TRANSPORTATION

A AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

While the Department asserts most of the statutorily required information is provided today, it acknowledges that it is done so in multiple different places and at different times during the year, resulting in a disaggregated view of the budget. For example, "carry forward" funds are reported to the Commission, but done so outside of the Budget Plan in late summer of each year. The same is true of actual revenues, which are communicated via a revenue reconciliation in the fall of each year, and of Contingency balances, which are reported in monthly Budget Supplements. Additionally, while the Budget Plan does provide an equivalent for total construction budget, this information could be more clearly communicated. Efforts to update the structure and organization of the Budget Plan were initiated in 2018, and included two workshops to discuss changes to the budget with the CDOT Efficiency and Accountability Committee. The Department intends to make interim changes to the FY 2020 Budget Plan, set for adoption in March 2019, with a more complete update to the Budget Plan to address all statutorily required elements, and further improve

transparency, with the adoption of the Proposed FY 2021 Budget Plan in November 2019. As part of this, staff will conduct a series of workshops with the Commission to review proposed changes and provide the Commission an opportunity for input and guidance on what they deem necessary to approve the Budget Plan.

B AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

The FY 2019 Budget Plan, developed in the fall of 2017, incorporated for the first time a listing of all open projects with funds budgeted in prior years. This will be continued in the FY 2020 Budget Plan and expanded to more fully address all elements of this requirement. The Department agrees that it is not compliant with the requirement to include “construction and maintenance projects planned for the year according to Commission district and statewide priority.” While the CDOT website, including the Statewide Transportation Improvement Program (STIP), includes a variety of information on planned construction projects, it is not included as part of the Budget Plan and not in the format required by Statute. The FY 2020 Budget Plan, upon adoption in March 2019, will include a listing of all construction projects planned (for these purposes, defined as having anticipated expenditures during the fiscal year of the budget), organized by Commission district. The project information included going forward, may be further modified based upon direction provided by the Commission in the coming months to ensure what is provided is the most meaningful and useful information to support decision making. Additionally, the Department is currently revamping its STIP/capital planning processes, which will provide a more transparent approach to project prioritization. The Department will attempt to find a reasonable approach to meet the intent of the statutory requirements, or if impractical and of limited value, work with the Transportation Commission and legislature to propose statutory changes.

C AGREE. IMPLEMENTATION DATE: JUNE 2019.

The Department agrees with the recommendation to establish a

routine process to amend the Budget Plan. While changes to the Budget Plan follow approval processes established by Commission Policy Directive (PD) 703, historically only “major” changes such as a new revenue source went through a formal amendment process to update the Budget Plan. The Department is currently developing updated amendment procedures, which will be incorporated into an update to PD 703. The Department plans to put in place these new procedures with the beginning of FY 2020 on July 1, so that beginning with FY 2020 and going forward, the Budget Plan is amended quarterly, or as needed, to reflect changes in revenue, as well as other changes not currently treated as an amendment (for example, a change approved as a budget supplement that moves funds from one budget program to another).

# ANNUAL SPENDING

The Department and Commission share responsibility for managing the Department's finances. The Commission is responsible for approving the annual budget and for supervising and directing the Department's spending [Sections 43-1-113(9)(c)(I) and (1), C.R.S.]; the Department is responsible for establishing internal controls over its funding and carrying out day-to-day financial activities, which include initiating, approving, and tracking expenditures.

## WHAT AUDIT WORK WAS PERFORMED AND WHAT WAS THE PURPOSE?

We analyzed the Department's Fiscal Year 2017 Budget Plan, various financial reports from SAP, and raw data from the Department's general ledger. We also reviewed the Colorado Constitution, statutes, and Commission and Department policies and procedures related to the annual budget. Finally, we interviewed Department staff and management, as well as 10 of the 11 Transportation Commissioners.

The purpose of the audit work was to determine whether the Department's Fiscal Year 2017 spending stayed within its approved budget.

## HOW WERE THE RESULTS OF THE AUDIT WORK MEASURED?

**THE DEPARTMENT'S ANNUAL SPENDING SHOULD ALIGN WITH BUDGETED AMOUNTS.** The General Assembly established the Budget Plan as "the budget for the department for the ensuing fiscal year," which must include an "allocation of spending" by various "categories of expenditure" [Sections 43-1-113(2)(c) and 43-1-113(9)(c)(I), C.R.S.]. Thus, despite most of the Department's revenue being continuously appropriated, the Commission has authority to limit the Department's

spending by promulgating and adopting an annual budget in the Budget Plan [Colorado Const., Art. X, Sec. 18; Johnson v. McDonald; and Section 43-1-106(8)(h), C.R.S.]. Statute provides the Commission with authority over the Department's spending in the same way that the General Assembly has authority over other agencies' spending through Long Bill appropriations in conjunction with fiscal rules prohibiting state agencies from overspending their appropriations [1 CCR 101-1, Rule 7-3 (3.1)]. In addition, nine of the 10 commissioners we interviewed said they believe the Budget Plan should function as an annual spending plan for the Department.

**THE DEPARTMENT SHOULD HAVE CONTROLS OVER EXPENDITURES.** As an Executive Branch agency, the Department is required to institute and maintain systems of internal accounting and administrative control, including adequate record-keeping procedures to provide effective accounting control over its expenditures [Section 24-17-102(1)(c), C.R.S.]. According to Department management, the Department's general ledger, which is maintained in SAP, serves as the official record of the Department's accounting activity.

Based on these statutory provisions and the expectations of the commissioners, we expected that the Department would have controls in place to ensure that its annual expenses align with the approved Budget Plan.

## WHAT PROBLEMS DID THE AUDIT WORK IDENTIFY?

**THE DEPARTMENT SPENT MORE IN FISCAL YEAR 2017 THAN WAS INCLUDED IN THAT YEAR'S APPROVED BUDGET PLAN.** Based on our review of the Department's general ledger, the Department spent \$582.7 million more in Fiscal Year 2017 than was reflected in the approved Budget Plan. This is a difference of 37 percent more than the \$1.56 billion approved budget. Although the Department overspent its approved annual budget, because it had more than \$1 billion in funds

that, according to the Department, were approved in prior years' annual budgets, it had enough cash available to pay its expenses. EXHIBIT 2.1 shows the overall budget-to-actuals for the primary department and both enterprises.

EXHIBIT 2.1. DEPARTMENT OF TRANSPORTATION FISCAL YEAR 2017 BUDGET-TO-ACTUALS (IN MILLIONS)			
	BUDGET	EXPENSES	EXCESS OF EXPENSES OVER BUDGET
Primary Department	\$1,433	\$1,975	\$542
Colorado Bridge Enterprise	126	140	14
High-Performance Transportation Enterprise (HPTE)	6	31	25
<b>TOTAL<sup>1</sup></b>	<b>\$1,563</b>	<b>\$2,146</b>	<b>\$583</b>

SOURCE: Office of the State Auditor analysis of the Fiscal Year 2017 Budget Plan (approved by the Commission in June 2016) and the Department's general ledger.

<sup>1</sup> The Department's total budget amount reflects a \$2 million adjustment to avoid double counting revenue it allocates to both the primary department and HPTE to reflect a fee-for-service agreement between the two entities.

A BUDGET-TO-ACTUALS ANALYSIS CANNOT BE PERFORMED FOR A MAJORITY OF THE DEPARTMENT'S APPROVED BUDGET. We attempted to compare the 72 budget lines in the Fiscal Year 2017 Budget Plan to expense data in the general ledger to see how closely the Department's spending aligned with approved budget amounts. However, the Department does not track expenses according to the budget lines but instead tracks them in relation to individual programs, construction projects, grants, and other types of operational activities. Since some budget lines provide funding for multiple projects or other activities, and some projects and activities use funds from multiple budget lines, there is no direct way to compare the budgeted and actual expenses for more than 80 percent of the Department's budget, as shown in EXHIBIT 2.2.

The types of expenses that cannot be compared to the budget include most of the Department's core operations, including:

- Maintenance (e.g., roadway surface and appearance, tunnel activities, snow and ice control, etc.)
- Roadway surface treatment



- Construction, inspection, and management of structures, such as bridges, walls, tunnels, and culverts
- Mitigation of geohazards such as landslides, rockslides, and sink holes
- Road safety projects funded by the Funding Advancements for Surface Transportation and Economic Recovery (FASTER) Act
- Regional Priority Program projects, which can include a variety of transportation projects identified and prioritized for each Department region
- Congestion Mitigation and Air Quality program
- Transit and rail grants
- Colorado Bridge Enterprise projects
- High-Performance Transportation Enterprise projects

**EXHIBIT 2.2. DEPARTMENT OF TRANSPORTATION  
BUDGET AMOUNTS THAT CAN AND CANNOT BE ANALYZED IN  
A BUDGET-TO-ACTUALS ANALYSIS  
FISCAL YEAR 2017 (IN MILLIONS)**

	TOTAL BUDGET	AMOUNT OF BUDGET LINES THAT CAN BE DIRECTLY COMPARED TO EXPENSE AMOUNTS	PERCENTAGE OF TOTAL BUDGET	AMOUNT OF BUDGET LINES THAT CANNOT BE DIRECTLY COMPARED TO EXPENSE AMOUNTS	PERCENTAGE OF TOTAL BUDGET
Primary Department	\$1,433	\$279	19%	\$1,154	81%
Colorado Bridge Enterprise	126	20	16%	106	84%
High-Performance Transportation Enterprise	6	3	50%	3	50%
<b>TOTAL<sup>1</sup></b>	<b>\$1,563</b>	<b>\$302</b>	<b>19%</b>	<b>\$1,261</b>	<b>81%</b>

SOURCE: Office of the State Auditor analysis of the Fiscal Year 2017 Budget Allocation Plan and general ledger expense data.

<sup>1</sup> The Department's total budget amount reflects a \$2 million adjustment to avoid double counting revenue it allocates to both the primary department and HPTE to reflect a fee-for-service agreement between the two entities.

We were able to complete a budget-to-actuals analysis on \$302 million of the budget and found there were wide variations in how much the

Department underspent or overspent on certain programs, as follows:

- The primary department's expenses ranged from underspending its federal transit budget by \$28.7 million, with 0 percent of the budgeted amount spent, to overspending its construction engineering budget by \$32 million, with 177 percent of the budgeted amount spent. The federal transit budget contributes to the Department's efforts to plan, develop, finance, operate, and integrate transit and rail services. Construction engineering reflects costs associated with ensuring compliance with various construction requirements, including construction oversight, materials testing, and design services under construction.
- The Colorado Bridge Enterprise's expenses ranged from underspending its indirect costs budget by \$11.4 million, with 0 percent of the budgeted amount spent, to underspending its maintenance budget by \$161,000, with 36 percent of the budgeted amount spent.
- The High-Performance Transportation Enterprise's expenses ranged from underspending its indirect costs budget by \$390,000, with 0 percent of the budgeted amount spent, to underspending its administration and legal fees budget by \$52,000, with 98 percent of the budgeted amount spent.

APPENDIX A includes the complete Fiscal Year 2017 Budget Plan, along with the results of our budget-to-actuals analysis for each budget line.

## WHY DID THESE PROBLEMS OCCUR?

The Department reported that underspending relative to the approved budget can occur because of a time lag between when funds are budgeted for contracted work and when spending actually begins. Conversely, overspending relative to the approved budget can reflect the expenditure of funds approved in previous fiscal years. These explanations highlight that the Department does not have processes in place to ensure that its aggregate annual spending aligns with the total

approved Budget Plan for a given year. We identified the following factors that contributed to the Department's overspending of the Fiscal Year 2017 Budget Plan.

**MANAGEMENT DOES NOT CONSIDER THE BUDGET PLAN TO BE A BLUEPRINT FOR OR LIMIT ON ITS ANNUAL SPENDING.** Department management reported that they have used the Budget Plan to show the Transportation Commission, policy makers, and other stakeholders (e.g., construction industry representatives) how they plan to allocate new revenue across the Department's various programs and operational areas, not as a plan for how much the Department will spend during the ensuing fiscal year, or as a tool to track and manage its spending.

**THE DEPARTMENT DOES NOT RECORD EXPENSES IN A WAY THAT ALLOWS IT TO EFFICIENTLY, ACCURATELY, AND COMPREHENSIVELY TRACK HOW SPENDING COMPARES TO THE BUDGET LINES.** For many of the Department's primary operational activities, including construction projects and grants, SAP data is not structured to facilitate budget-to-actuals tracking. The Department keeps money for these activities in various "pools" that are assigned to different programs (e.g., surface treatment) until it allocates dollars to an individual project, grant, or other initiative. Each pool correlates to a category in the Budget Plan. However, expenses are tracked in SAP in relation to the specific project, grant, or program budget—not the larger pools from which the budget dollars originated. As a result, although we could determine that, overall, the Department spent \$1.45 billion on construction projects, \$45.3 million on grants, and \$224.1 million on maintenance during Fiscal Year 2017, there was no direct way to track how much money the Department spent from each category in the Budget Plan that provided funds for these activities. In addition, the Department lacks a tool, such as a crosswalk, that shows how detailed budget and expense data in SAP correlate to each budget category in the Budget Plan. To perform our budget-to-actuals analysis, we manually compiled a crosswalk using information provided by the Department.

The Department also does not use budget lines in the Budget Plan as the

basis for its required budget-to-actuals reporting to the State Controller. Every month, the Department is required to report “on a form approved by the [state] controller...the expenditures made from each budget category and the unexpended and unencumbered balance of each such budget subcategory” [Section 43-1-113(10), C.R.S.]. The Department complies with this requirement by submitting reports based on its six budget categories in the Long Bill, rather than the 70-plus budget categories in the Budget Plan. However, because the Long Bill is not the authoritative budget for the majority of the Department’s spending, this practice does not accomplish the intent of the requirement, which appears to be for an independent third party (the State Controller) to ensure that the Department’s spending stays within its authorized budgetary limit.

According to the Office of the State Controller (OSC) and the Department, the requirement is problematic for several reasons. First, the intent of the requirement appears to be for the OSC to serve as an independent control on spending by state departments. When the OSC determines that a department has overspent the budget lines appropriated in the Long Bill, it can disallow the overage, meaning that the department’s spending authority is reduced by that amount in the following fiscal year. However, since the Commission has authority over the Department’s budget, the OSC reported that it is unclear of its authority to take such actions if it determined that the Department overspent the Commission-approved Budget Plan. Second the State’s accounting system, the Colorado Operations Resource Engine (CORE), is not configured to facilitate reporting by the Department according to the budget lines in the Budget Plan, which are more detailed than the line items in the Long Bill. In addition, the Department’s accounting system (SAP) tracks expenses in a detailed manner while CORE only shows summarized accounting data for the Department. Thus, to comply with the statutory requirement in a meaningful way, the Department and OSC would need to work together to determine the purpose of such reporting and review by the OSC and establish a means of reporting that is workable for both entities. Conversely, if the OSC and the Department believe that the required reporting by the Department is not needed, they could work with the General Assembly to seek statutory change.

**THE BUDGET PLAN DOES NOT REFLECT A SIGNIFICANT PORTION OF FUNDING THAT THE DEPARTMENT INTENDS TO SPEND IN THE ENSUING FISCAL YEAR.** As discussed in the previous section of the report, the Budget Plan does not reflect the balance of funds carried forward from prior years that is still available to spend. Excluding these funds from the Budget Plan contributes to the discrepancies we found between the Department's Fiscal Year 2017 spending and the amounts reflected in the approved Budget Plan for the year.

## WHY DO THESE PROBLEMS MATTER?

**THE DEPARTMENT DOES NOT ENSURE THAT ALL OF ITS SPENDING ALIGNS WITH THE APPROVED BUDGET PLAN.** Since the Department exceeded its approved Fiscal Year 2017 budget by \$582.7 million, that portion of its spending occurred outside of the statutorily required supervision and direction of the Transportation Commission for that year's budget [Section 43-1-113(1), C.R.S.]. In fact, the Commission cannot fulfill its oversight responsibilities if the budget it approves does not contain all relevant information about the Department's finances, including the total amount of funding available to spend each year.

Further, since the Department lacks a process to efficiently conduct a comprehensive annual budget-to-actuals analysis based on the Budget Plan, it does not demonstrate transparency and accountability for how much of those funds it spent during the fiscal year and for what purpose. As a result, legislators and the general public, in addition to the Commission, cannot obtain a clear understanding of how much money the Department has available to spend, how that money will be used, and how much the Department actually spends on a given purpose. In addition, the Department is not fulfilling a basic tenet of the State Measurement for Accountable, Responsive, and Transparent (SMART) Government Act, which states, "It is important that state government be accountable and transparent in such a way that the general public can understand the value received for the tax dollars spent by the state" [Section 2-7-201(1)(a), C.R.S.].

## RECOMMENDATION 2

The Transportation Commission should ensure that the Department of Transportation’s (Department) annual budget adheres to statutory requirements by only approving annual Budget Allocation Plans that show how much money the Department plans to spend on each budget category based on all available funding.

## RESPONSE

### TRANSPORTATION COMMISSION

AGREE. IMPLEMENTATION DATE: NOVEMBER 2019.

As stated in our responses to Recommendation 1, Part A-C, the Transportation Commission believes that it has exercised its full oversight authority over the Department and has adhered to statutory requirements, including the FY 2017 Budget Plan. Our Budget Plan has, in fact, been a Revenue Allocation Plan that does not incorporate carry-overs from prior years and does not provide direct matching of expenditures. The Department, in its response to RECOMMENDATION 1A, acknowledges that information is provided in “different places and at different times during the year, resulting in a disaggregated view of the budget.” The Transportation Commission is also provided with a Budget Plan Narrative, which Commissioners often utilize to better understand funding and costs. At the request of the Commission, or a Commissioner, the Department provides additional information. Allocations made in a prior year remain in effect until expended or formally reallocated. All of this information together assists the Commission in determining how much money the Department has available to spend, how that money will be used, and how much the Department actually spends. We agree that our “Budget” should be revised to include carry-over funds and identify the planned spending for expense categories specified in statute. Periodic updates will be made to incorporate changes in funding as well as planned spending.

## RECOMMENDATION 3

The Department of Transportation (Department) should implement controls to ensure that its spending during each fiscal year does not exceed the budget for each line item in the Budget Allocation Plan (Budget Plan) by:

- A Establishing a process to conduct ongoing budget-to-actuals analyses based on the Budget Plan categories, which could include establishing new Systems, Applications and Products (SAP) controls and reporting that perform this analysis automatically and/or developing a crosswalk that correlates budget and expense data the Department tracks internally to the Budget Plan categories.
- B Routinely reporting to the Transportation Commission the results of ongoing budget-to-actuals analyses established in response to PART A.
- C Either (1) working with the Office of the State Controller to identify the intent of monthly budget-to-actuals reporting and establish a process to comply with the requirement or (2) working with the General Assembly to change the statutory requirement.

## RESPONSE

### DEPARTMENT OF TRANSPORTATION

- A AGREE. IMPLEMENTATION DATE: JUNE 2019.

The Department has controls in SAP that are designed to ultimately prevent spending in excess of the budget line items, but does not have an automated means of analyzing budget-to-actual expenses based on the Budget Plan categories. The Department has an indirect, manual methodology allowing for budget to actuals analysis, although this has not been implemented previously in the

format of the Budget Plan. A new report has been developed that provides year to date budgeted amounts and actual expenditures. This process will be further refined to improve data quality, and address data challenges such as reporting project balances (i.e. funds budgeted to projects but not expended) at the budget line item level. The Department will also assess the feasibility of making changes to the configuration of SAP that would allow for systematic generation of budget to actuals data directly from SAP transaction data. Feasibility and level of effort have not yet been assessed, and as such a timeline has not been identified. For the year reviewed by OSA, the Department's multi-year total budget available, including carry forward of \$1 billion, was over \$2.56 billion, meaning total expenses did not exceed total budget allocations, including prior year budget allocations.

B AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

The Department initiated quarterly budget to actuals reporting to the Commission in February 2019 using the report described in the response to 3A. Additionally, the Department has updated the Budget Plan to include budget carry forward amounts. Budget carry forward are amounts that have either not been expended from cost centers, or in the case of budget pools, not yet budgeted to a project. The Department has not yet incorporated project carry forwards (i.e. unexpended balances in projects). The Department intends to incorporate project carry forwards at the budget line item level, first on an interim basis using an indirect, manual methodology, and if feasible, in the future based on data generated systematically from SAP. Once implemented, this will provide transparency demonstrating expenditures by budget line item do not exceed the total amount of budget available.

C AGREE. IMPLEMENTATION DATE: MAY 2020.

The Department has historically reported monthly budget to actuals to the Office of the State Controller (OSC) based on Long Bill lines. This is the format identified in the State Fiscal Procedures Manual,



and is also the format required of other state agencies and for which the state's accounting system, CORE, is configured. The Department has discussed with OSC instead reporting based on the Budget Plan. OSC has indicated concern with how this could be implemented given the current configuration of CORE and the requirement for other state agencies to report using Long Bill lines. OSC has also questioned the utility of the reporting. The Department will work with the OSC to either identify a process to comply with this requirement, or if impractical, to seek a change to statutory requirements.

# PREVENTION AND DETECTION OF FRAUDULENT PAYMENTS

The Department distributes a significant amount of money to outside vendors every year. In Fiscal Year 2017, the Department paid almost \$1.5 billion to vendors. The Department uses SAP to store vendor records and process payments. Since the Department is decentralized, employees in its five regional business offices are responsible for processing vendor payments. The only exception is payments related to right-of-way land acquisitions for construction projects, which are processed at its headquarters.

All state government agencies, including the Department, are susceptible to occupational fraud, which is fraud committed against an organization by its own employees. According to the Association of Certified Fraud Examiners' (ACFE) *2018 Report to the Nations*, from January 2016 through October 2017 the third most common type of occupational fraud perpetrated against government agencies was billing schemes, which occur when perpetrators misappropriate funds without directly handling cash or checks while at work. Instead, perpetrators “trick” the victim organization into remitting a payment so it appears to be a normal disbursement of cash. For example, a perpetrator might process a fake invoice through the normal accounts payable system so that the method of payment is legitimate, even if the recipient or amount is not.

## WHAT AUDIT WORK WAS PERFORMED AND WHAT WAS THE PURPOSE?

We reviewed Internal Revenue Service (IRS) requirements and Department policies, and we interviewed staff to understand the Department's controls over its vendor records and payment data. In addition, we reviewed the *U.S. Fraud Examiners Manual* and other

ACFE materials to obtain information about fraudulent billing schemes and data analytics designed to identify patterns indicative of those schemes. We applied that guidance to analyze the Department's 28,600 vendor records, Fiscal Year 2017 payment data, and Department employee address data.

The Department told us it has generally focused fraud detection and prevention efforts on mitigating known strategies that individuals outside of the Department have used to attempt fraud, such as posing as vendor representatives and requesting unauthorized changes to vendors' bank account information. However, the Department also reported that it has programmed controls in SAP to help mitigate the risk of fraud by employees. These include having defined user roles that prevent an individual who has access to create and modify vendor records from entering and posting invoices, and vice versa, and requiring secondary approvals to post payments.

The focus of our work was to identify patterns that could indicate gaps in the Department's controls that could allow occupational fraud to occur. For example, we reviewed specific types of transactions, looking for anomalies and relationships between data fields that should not have a relationship (e.g., the same address for companies with different names). Management indicated that vendor payments are a risk area for the Department and requested that we perform audit work in this area.

## HOW WERE THE RESULTS OF THE AUDIT WORK MEASURED AND WHAT PROBLEMS DID THE WORK IDENTIFY?

The Office of the State Controller has adopted the *Standards for Internal Control in the Federal Government* (Green Book) as the State's standard for internal controls, which all state agencies must follow. The Green Book states that management should consider the types of fraud that can occur within the entity, assess risk factors (including the opportunity,

motive, and rationalization for an employee to commit fraud), and analyze and respond to identified fraud risks so that they are effectively mitigated [Principles 8.02, 8.04, and 8.06]. According to the ACFE, fraudulent data often looks like legitimate data when viewed in the raw, so it is important to apply analytical techniques specifically designed to identify control breakdowns and anomalies in accounting records.

Our work identified several types of suspicious patterns and anomalies that indicate the potential for fraud, as well as control weaknesses that could make it easier for some employees to commit fraud. Because the purpose of our testing was to identify potential control weaknesses and data anomalies, *not* to uncover or investigate any specific instances of fraud by Department employees, we did not perform further work to determine whether actual fraud occurred or is occurring based on the suspicious patterns and gaps in controls we found.

## INDICATORS OF POTENTIALLY FICTITIOUS VENDORS

We reviewed the Department's 18,245 active vendor records against standards provided by IRS requirements, Department policy, and the ACFE's *U.S. Fraud Examiners Manual*. As shown in EXHIBIT 2.3, some vendor records did not adhere to established standards or had characteristics that can be associated with fictitious vendor records. An employee with access to the Department's payment system could potentially use these records to make fraudulent payments that look legitimate. Although the error rates appear to be relatively low, a perpetrator would only need one fictitious vendor record to facilitate fraudulent payments.

**EXHIBIT 2.3. INDICATORS OF POTENTIALLY FICTITIOUS VENDORS**

CRITERIA	PROBLEM
<p>Department staff are required to enter nine-digit federal employer identification (ID) numbers for vendors to avoid duplicate vendor accounts and verify the legitimacy of vendor records [IRS requirements and Department policy].</p>	<p>No federal ID-223 vendor records had no federal employer identification number listed in SAP.</p>
<p>More than one vendor with the same address can indicate fictitious vendors [U.S. Fraud Examiners Manual].</p>	<p>Multiple vendor records—At least 42 vendors had unique vendor identification numbers (numbers assigned by the Department to identify each vendor with a distinct record in SAP) but the same name, address, and federal employer identification number as at least one other vendor. These included 11 instances when two vendors shared the same information, and five instances when three or more vendors shared the same information.</p>
<p>Vendors with only a post office (P.O.) box address can indicate fictitious vendors [U.S. Fraud Examiners Manual].</p>	<p>P.O. Box address—More than 4,000 vendors had a P.O. Box address.</p> <p>P.O. Box and physical address—In addition, at least 8 vendors had one record listing a P.O. Box address as well as a separate record listing a physical street address. These present a heightened risk that a perpetrator could use records with only a P.O. Box address to process fraudulent payments, while the Department could still use records with a physical mailing address for legitimate payments.</p>
<p>Vendors and employees with matching addresses can indicate fictitious vendors [U.S. Fraud Examiners Manual].</p>	<p>Employees and vendors with same address—2 Department employees had the same address as Department vendors. Therefore, there is a risk that payments sent to these vendors could be fictitious and are actually fraudulent payments benefiting the employees.</p>

SOURCE: Office of the State Auditor analysis of the Department’s vendor records, Department policies, IRS Publication 15, and the U.S. Fraud Examiners Manual.

## SUSPICIOUS PAYMENT PATTERNS

We used two methods to identify suspicious payments. First, we compared invoice dates to payment dates to determine whether any payments cleared prior to the date the vendor provided an invoice supporting the payment. Such payments are suspicious because they indicate that the Department may have made payments without having documentation that the vendor provided the applicable goods or services. Furthermore, employees with access to the accounts payable system could deliberately enter an invoice date that occurs after a payment date to avoid detection through aging analyses that focus on identifying overdue payments. We found 27 payments worth \$347,500

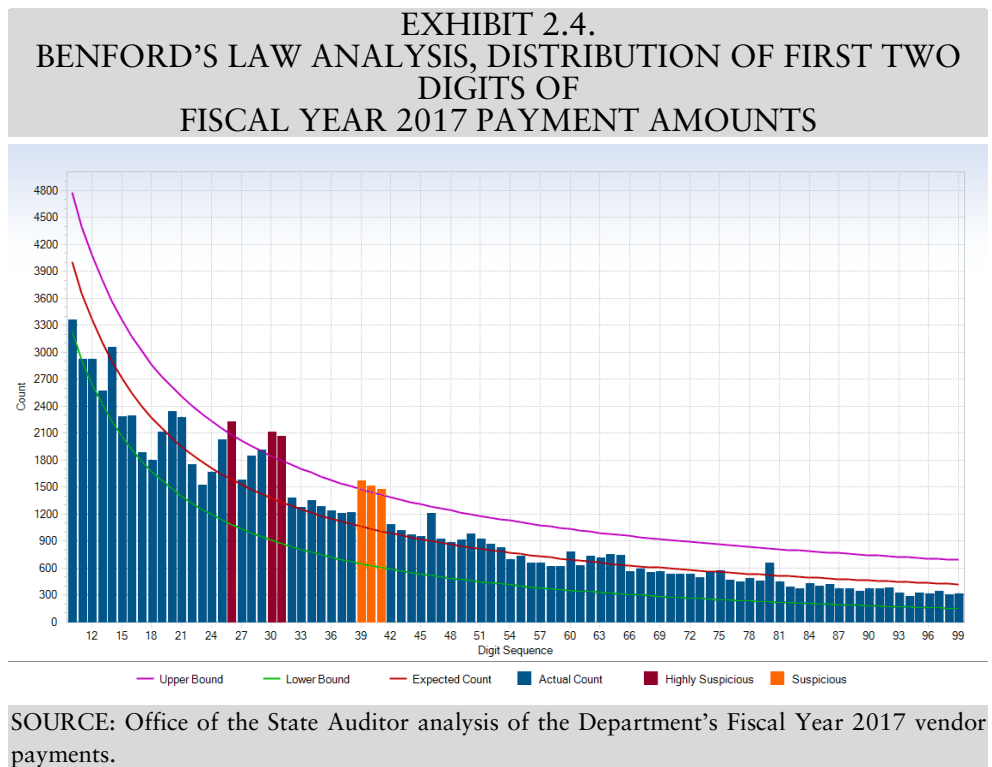
that cleared before the invoice dates, including 17 warrant payments totaling about \$338,000 and 10 EFT payments totaling about \$9,500. While the Department explained that errors may have caused these issues, such as an invoice date being entered incorrectly, even a small number of suspicious payments have the potential to be fraudulent.

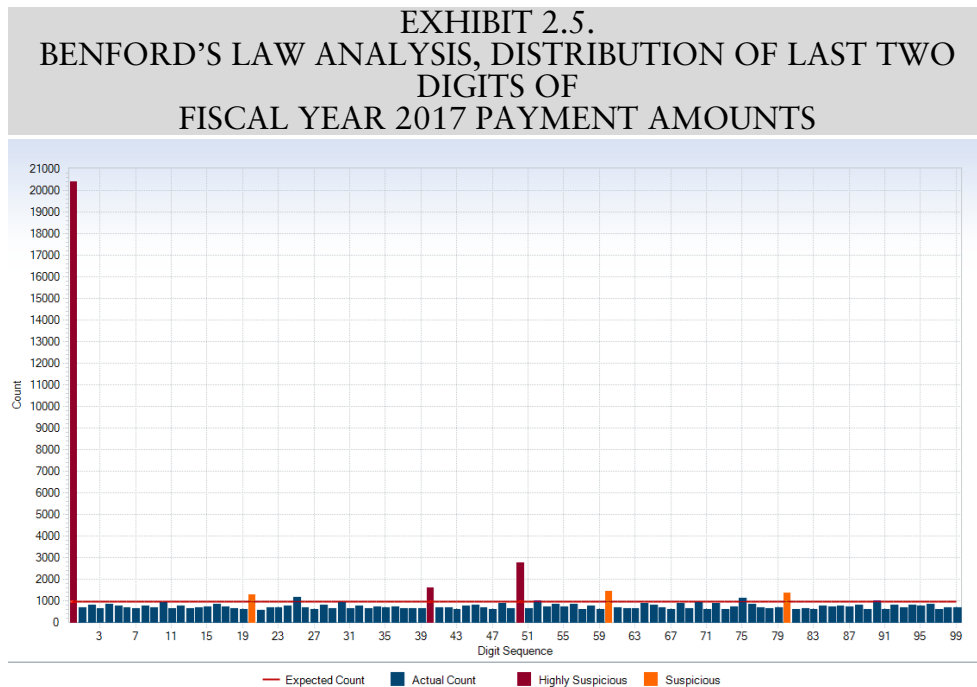
Second, we applied a commonly used analytical technique that compares payment data to patterns predicted by Benford's Law, a mathematical theory that states that in a population of naturally occurring multi-digit numbers, certain digits, including the first two and last two digits of each number, should be distributed in a predictable way. For example, lower numbers (1, 2, 3, etc.) should occur as the first digit more frequently than higher numbers (7, 8, and 9). The goal of a Benford's Law analysis is to identify numbers that fall outside of the predictable pattern, which could indicate that the numbers (i.e., payments) are not legitimate. According to the *U.S. Fraud Examiners Manual*, many perpetrators of fraud fail to consider the Benford's Law pattern when creating false documentation or transactions to cover their tracks, so reviewing payment records' conformity with the patterns predicted by Benford's Law can reveal suspicious patterns that indicate potential fraud and records that warrant further review.

We analyzed the Department's more than 98,000 Fiscal Year 2017 vendor payments to assess their conformance with Benford's Law. Our analysis identified several notable outliers that warrant further review by the Department to determine which payment amounts have legitimate explanations versus which ones could indicate potential fraud. More than 6,400 payment amounts starting with "26," "30," and "31" were considered "highly suspicious" outliers because they occurred more frequently than expected. These payments totaled \$69.4 million. In addition, we identified nearly 24,800 payment amounts that ended with "00," "40," and "50." In other words, these payments were for various even-dollar amounts (i.e., they ended with 0 cents), or were for amounts ending with 40 cents or 50 cents. These payments totaled \$287.7 million. Although transactions beginning or ending with these digits are labeled as highly suspicious, it is important to note that the

transactions may be valid and are not necessarily associated with fraudulent or otherwise inappropriate activity, but may warrant further review by the Department.

EXHIBITS 2.4 and 2.5 provide a graphical representation of the actual and expected counts of the first two digits (in the upper chart) and last two digits (in the lower chart) of the Department’s Fiscal Year 2017 payment amounts, respectively. The red line displays the expected count for each two-digit combination based on Benford’s Law, while the pink and green lines display the upper and lower boundaries, respectively, in which the results should occur based on the statistical distribution pattern predicted by Benford’s Law. Values outside of these boundaries are statistically improbable under a naturally occurring data set and could indicate transactions that warrant further review. Our data analysis software identified three “highly suspicious” digit combinations (signified by the red bars) that were the most significant outliers occurring more frequently than the upper bound of the expected values.





SOURCE: Office of the State Auditor analysis of the Department’s Fiscal Year 2017 vendor payments.

## BEHAVIORAL SIGNS

According to the ACFE, employees who commit fraud often do so during non-business hours to avoid detection. Therefore, an effective strategy to identify potential fraud is to look for transactions, such as payments, that occur outside of normal business hours. We analyzed the dates when Department staff entered the 98,000 payments we analyzed and found:

- 282 payments totaling \$2 million were entered on a weekend day (Saturday or Sunday).
- 245 payments totaling \$3.1 million were entered on state holidays (Columbus Day; Veterans Day; Martin Luther King, Jr. Day; President’s Day; and Memorial Day).

A legitimate reason for payments entered outside of business hours is employees who work overtime. Nonetheless, these transactions are inherently risky and may warrant further review.



As shown in EXHIBIT 2.6, we cross-tabulated the potentially suspicious vendor records with each type of suspicious payments our audit work identified and found some overlap, which could indicate a heightened risk for fraudulent activity. Since we did not compare the results in each column to each other, we did not conclude on whether any vendors were associated with more than one type of suspicious payment.

EXHIBIT 2.6. CROSS-TABULATION OF VENDORS AND PAYMENTS THAT APPEARED IN FRAUD DETECTION ANALYSES FISCAL YEAR 2017					
			BENFORD'S LAW HIGHLY SUSPICIOUS PAYMENTS		
		PAYMENTS CLEARED BEFORE INVOICE DATES	FIRST TWO DIGITS	LAST TWO DIGITS	PAYMENTS ENTERED OUTSIDE OF NORMAL BUSINESS HOURS
No federal ID <sup>1</sup>	223 vendor records had no federal ID	None	None	4 payments = \$226,800	None
Multiple vendor records	At least 42 vendors had unique vendor identification numbers but the same name, address, and federal ID as at least one other vendor.	None	90 payments = \$403,400	258 payments = \$500,700	27 payments = \$7,600
P.O. Box address	More than 4,000 vendors had a P.O. Box address.	13 payments = \$100,200	3,310 payments = \$9 million	8,387 payments = \$55.8 million	226 payments = \$432,900
P.O. Box and physical address <sup>2</sup>	At least 8 vendors had one record listing a P.O. Box address and a separate record listing a physical street address.	None	2 payments = \$6,000	17 payments = \$115,300	None
Employees and vendors with same address	2 Department employees had the same address as Department vendors.	None	None	15 payments = \$8,600	None

SOURCE: Office of the State Auditor analysis of the Department's vendor records and Fiscal Year 2017 payment data.

<sup>1</sup> EXHIBIT 2.3 provides more information about each indicator of fictitious vendors listed in this column.

<sup>2</sup> Vendor with P.O. Box addresses reflected in this row are also included among the vendors with P.O. Box addresses listed in the previous row. The distinction is that vendors in this row also have separate records in SAP with physical street addresses.

## WHY DID THESE PROBLEMS OCCUR?

We identified several control weaknesses that could allow occupational fraud to occur without detection as well as opportunities for the Department to strengthen its efforts to prevent and detect billing fraud.

**VENDOR NUMBER CONTROLS ARE NOT PROGRAMMED IN SAP.** The Department reported that SAP is not set up to require the vendor's federal tax identification number to be populated and contain nine digits, even though Department staff regard that field as a primary indicator of whether a vendor is legitimate. International vendors need more space for longer alphanumeric identification numbers, but international companies only account for 0.3 percent of the Department's vendors. The Department also reported that some vendors associated with right-of-way acquisitions do not need a tax identification number, but there is no system requirement that some type of notation be entered in the tax identification number field so the Department can easily distinguish those vendors from others. After we raised this issue, the Department reported that it is exploring ways to strengthen system controls over that data field, particularly for U.S. vendors that should have a nine-digit federal tax identification number.

**THE DEPARTMENT HAS NOT USED AGGREGATE DATA ANALYSIS TO PREVENT AND DETECT FRAUD.** The Department has no policy or process to regularly conduct any type of aggregate or comprehensive detective review of vendor payments or vendor records to identify suspicious payments or patterns, review them to determine their legitimacy, detect and correct errors or fraudulent payments, and generally use the results to improve controls as needed.

The Department believes that many of the concerns we identified are explained by the nature of its business. For example, the Department theorized that:

- The patterns of payments ending in "00" were likely due to the large volume of payments it makes to utility companies for the same

amount every month; grant payments to local governments that receive federal pass through funds from the Department for transportation projects; or per diem payments to Department staff, such as engineers who traveled to construction project sites.

- Some duplicate vendor records exist because both accounting and real estate staff manage separate records for general vendor payments and those associated with right-of-way acquisitions, respectively.
- Some vendors have multiple addresses (e.g., a P.O. Box and a physical address) on file because they sometimes request that payments be remitted to different addresses based on the location and nature of the work performed.

We recognize that there may be legitimate reasons for the results of our analyses. However, implementing a process to analyze vendor records and payments on a routine schedule, similar to the work we conducted, could help the Department be proactive in detecting and mitigating potential fraud.

## WHY DO THESE PROBLEMS MATTER?

**INCOMPLETE FRAUD DETECTION AND PREVENTION CONTROLS INCREASE THE RISK OF FRAUD.** Although all government agencies are at risk of becoming victims of fraud, the Department is particularly susceptible to billing fraud because:

- It pays a significant amount to outside vendors each year (about \$1.5 billion during Fiscal Year 2017) and processes a high volume of payments, making it easier for a perpetrator to conceal fraudulent payments.
- It has identified attempts to commit fraud, presumably by individuals outside of the Department posing as vendors in order to divert funds to fraudulent bank accounts. Although the Department has mitigated the attempts it has identified, there is still a risk that individuals could collude with Department employees to commit fraud.

- It has been the victim of occupational fraud, which the Department reported was detected by its internal control processes. Specifically, a former employee was criminally charged with embezzling \$29,000 from the Department using a state purchasing card. Although our testing focused on a different method employees could use to perpetrate occupational fraud (i.e., processing illegitimate payments directly through the Department’s accounting system), that incident demonstrates that employees with the opportunity and motivation to steal money from the Department could do so.
- It has employees around the state who have access to the accounting system. The Department’s decentralized organizational structure could make it more difficult for headquarters staff to detect fraudulent activity.

The types of anomalies we found in the Department’s data are known risk factors and can be indicators that fraud is occurring. The Department can reduce the likelihood of fraud by conducting routine reviews of its vendor and payment data using best practices provided by the ACFE, and using the results of such reviews to strengthen controls going forward. According to the ACFE’s *2018 Report to the Nations*, data monitoring and analysis, as well as surprise audits, were correlated with the largest reductions in occupational fraud loss and duration. Organizations that conducted routine data monitoring and analysis experienced 52 percent lower losses and detected fraud schemes 58 percent faster than organizations that did not employ those methods. Further, according to the ACFE, if employees know that every accounting transaction is being monitored, they are less inclined to engage in wrongful behavior.

## RECOMMENDATION 4

The Department of Transportation (Department) should strengthen its controls and processes to deter and detect occupational fraud schemes using the Department's payment system, as well as errors, by:

- A Implementing system controls in SAP to ensure that all federal taxpayer identification numbers align with Internal Revenue Service requirements.
- B Implementing policies and processes to (1) routinely analyze its vendor and payment data, which could include searching for duplicate records; conducting statistical analysis using Benford's Law; and identifying suspicious patterns, such as payments that occur prior to invoice dates or that are processed outside of normal business hours; and (2) investigate any unusual patterns or anomalies that could indicate potential fraud based on these analyses, and make necessary control improvements.
- C Investigating the suspicious payments and vendor records the audit identified and taking appropriate action if any appear to be illegitimate.

## RESPONSE

### DEPARTMENT OF TRANSPORTATION

- A AGREE. IMPLEMENTATION DATE: JUNE 2019.

The Department agrees, and will initiate SAP system controls to require entry of the Federal Employer Identification Number (FEIN) field to conform to Internal Revenue Service requirements of 9 digits for all US vendors. There are instances when the vendor FEIN cannot be populated. This includes contested Right of Way (ROW) legal proceedings with uncooperative property owners and foreign

vendors who will not meet the 9 digit IRS requirements. The Department will establish exception processes where each case of creating a vendor without FEIN will require prior approval from the Department Controller and documentation explaining the absence of FEIN will be kept with the master vendor data record. Modifications to SAP to accomplish this are currently in development and should be operational within the next few months.

B AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

While the Department relies on solid preventive controls such as segregation of duties, separate SAP user roles, secondary approvals, adequate documentation and physical control over assets, the Department sees the value of detective controls. Detective controls provide evidence that the preventive controls are functioning and preventing losses, but can also identify whether there are instances of fraud and gaps in preventive controls. The Department has purchased additional licenses of ACL, a risk and control analytics software platform, and will assign staff to developing and implementing an ongoing process of monitoring and analysis of vendor and payment data. This process will include both efforts to “advertise” the use of fraud detection as a diversion technique to reduce the likelihood of fraud in the first place, as well as regular reporting to management on fraud detection practices.

C AGREE. IMPLEMENTATION DATE: IMPLEMENTED.

The Department investigated the payments and vendor records identified by the audit and did not find any instances of fraud or suspicious payment activity. For example, the Benford’s Law analysis identified 6,409 suspicious payments. However, the Department’s investigation noted that 3,044 of these payments were utility companies’ payments with recurring or very similar dollar payments. As an example, a one utility company has 960 instances of recurring payments. Another utility company had 136 recurring payments, many of which were duplicate amounts. Nevertheless, the Department agrees that performing a regular analysis of payments

identified by Benford's Law would be useful. The Department also examined two instances cited in which CDOT employees shared the same address as vendors. We did not find any conflicts of interest or violations of procurement rules or code of ethics. Going forward, the Department will incorporate this type of analysis into practice to detect and prevent occupational fraud schemes using the Department's payment system.





# CHAPTER 3

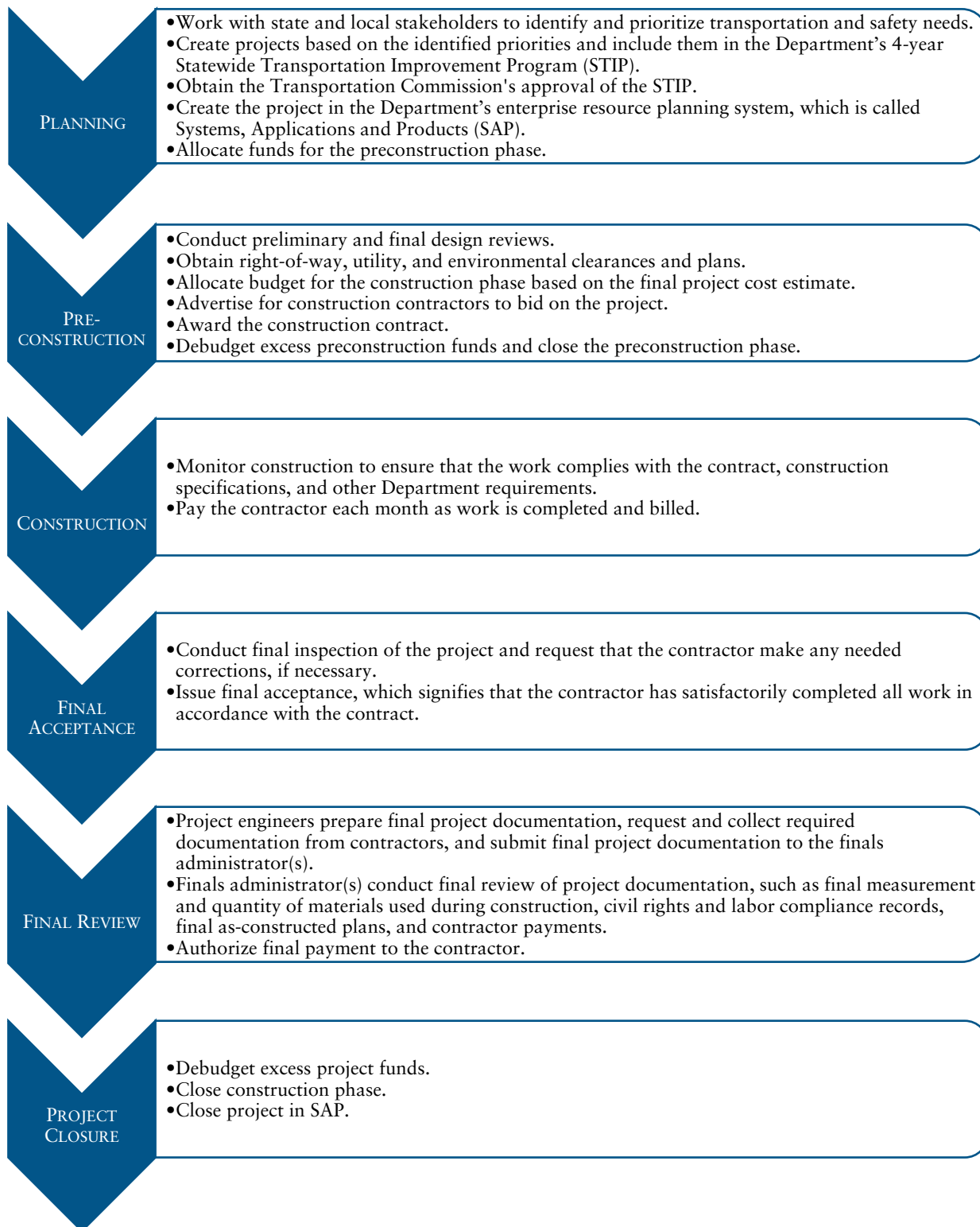
## CONTRACTED WORK

The Department of Transportation (Department) is responsible for the construction and maintenance of all roads comprising the state highway system, and management of the State's transportation system [Sections 43-2-102 and 43-1-106(8)(a), C.R.S.]. The Department fulfills these responsibilities by contracting with private businesses that perform work related to construction projects and various other operational needs. The majority of the Department's construction projects are state-administered design-bid-build projects, which have three major phases: planning and budgeting, pre-construction, and construction. When construction is complete, the Department

reviews the work to make sure that it fulfills requirements, then closes the project. Department staff track the progress and timeliness of construction projects through different milestones.

EXHIBIT 3.1 summarizes the key process steps the Department conducts and milestones the Department tracks within each phase.

### EXHIBIT 3.1. SUMMARY OF CONSTRUCTION PROJECT MILESTONES



SOURCE: Office of the State Auditor summarization of the Department's Project Development Manual, Construction Manual, and Project Manager Process Map.

# CONSTRUCTION PROJECT DEBUDGETING AND CLOSURE

As shown in EXHIBIT 3.1, the final stage of a construction project is closure, which includes debudgeting funds that were not used on the project. Debudgeting in a timely manner is important so that the funds made available can be budgeted for other projects, thereby maximizing the Department's use of transportation funding.

## WHAT AUDIT WORK WAS PERFORMED AND WHAT WAS THE PURPOSE?

We reviewed data in several ways to evaluate whether the Department closed out construction projects in a timely manner. First, we analyzed construction project data for an aggregate population of 243 state-administered design-bid-build projects for which final acceptance occurred between April 14, 2016, and February 15, 2018. We only reviewed projects with final acceptance during this timeframe because new deadlines to release unused funds and close projects went into effect on April 14, 2016, with the enactment of Senate Bill 16-122, and February 15, 2018, was the date that projects in our population could have potentially been overdue for closure based on the requirements we tested against.

Second, we reviewed project files and analyzed electronic data for a stratified random sample of 12 state-administered design-bid-build construction projects, which were randomly selected from all state-administered design-bid-build projects that were closed in SAP during Calendar Year 2017. Our sample included two projects from each of the five regions, as well as two statewide projects, which are managed by staff at the Department's headquarters office. Three of the sampled projects had final acceptance prior to April 14, 2016, and, therefore,

were not subject to the Senate Bill 16-122 requirements. The other nine sampled projects were subject to the requirements and are included in the population of 243 state-administered design-bid-build projects referenced above.

In addition, we conducted site visits to all five regions and interviewed more than 40 regional staff, including Regional Transportation Directors, engineers and project managers, final administrators (staff who ensure that projects reasonably conform to Department requirements and technical specifications), and accounting staff, as well as Department management and engineering and accounting staff who work at headquarters. During our site visits, we also visited project sites for six of the sample projects.

Finally, we reviewed statutes, Department and Transportation Commission policies, and the Federal Highway Administration (FHWA) Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects.

The purpose of our audit work was to evaluate whether the Department closes construction projects and releases unused funds in accordance with its policies and statute.

## HOW WERE THE RESULTS OF THE AUDIT WORK MEASURED AND WHAT PROBLEMS DID THE WORK IDENTIFY?

**DELAYS IN CLOSING PROJECTS AND RELEASING EXCESS CONSTRUCTION FUNDS.** Section 43-1-123(1), C.R.S., generally requires the Department to “close each transportation project and release any money budgeted for the project as quickly as feasible and within one year following the substantial completion of the project.” This provision applies to all projects that were substantially complete on or after April 14, 2016. Because the Department has not defined or tracked “substantial

completion” of projects, we could not determine whether the Department is complying with the statutory requirement. Instead, we evaluated the Department’s compliance with its own policy requiring that the construction phase close within 6 months after “final acceptance,” where closing the phase includes releasing any excess funds, and found that:

- There were 243 projects for which final acceptance had occurred between April 14, 2016, and February 15, 2018. We found that 102 of the 243 projects (42 percent) had excess construction funds released more than 6 months after final acceptance. On average, construction funds for these 102 projects were released approximately 9 months after final acceptance. Delays ranged from 2 days for a bridge rehabilitation project to 482 days for an Interstate 25 corridor management project.
- For eight of the 12 state-administered design-bid-build construction projects in our sample, the Department did not release excess construction funds within 6 months of final acceptance. These delays ranged from 2 days past 6 months after final acceptance for a highway resurfacing project to 1,374 days (i.e., nearly 4 years) past 6 months after final acceptance for an information technology capital improvement construction project.

## WHY DID THESE PROBLEMS OCCUR?

FINAL REVIEW IS NOT ALWAYS COMPLETED IN A TIMELY MANNER. According to the Department’s *Construction Manual*, project managers are required to submit final project documentation to the finals administrators within 45 days following final acceptance, and finals administrators must complete their review within 45 days after receiving the documentation. We found that both the submission and final review of documentation sometimes exceeded these time frames, as follows:

- For seven of the eight projects in our sample for which unused construction funds were not released within 6 months of final acceptance, the project managers did not submit documentation to

the finals administrators on time. The delays ranged from 35 to 448 days past the 45-day requirement.

- For three of the eight projects in our sample for which unused construction funds were not released within 6 months of final acceptance, the finals administrators did not complete their review on time. These delays ranged from 16 to 45 days past the 45-day requirement. Similar delays in the final review affected three other projects in our sample (even though construction funds were debudgeted within 6 months).

The Department reported that staff workload and problems obtaining documentation from contractors often contribute to such delays. Nonetheless, the Department's *Construction Manual* states that project engineers are "responsible for ensuring that final documentation is completed in a timely manner" and that they "will actively pursue completion of the final [review], even if the Contractor has not submitted all required paperwork."

**LACK OF OVERSIGHT OF THE FINAL REVIEW AND CLOSURE PROCESSES.** Department management has not implemented controls to monitor if construction projects are undergoing final reviews, closing in SAP, and debudgeting on time. First, the Department has not created reports in SAP to facilitate monitoring the end of the construction phase. According to staff, about 5 years ago the Department explored developing a tab in SAP that would provide additional information about the final review portion of the closure process, but the initiative was never funded due to other priorities. In addition, the Department has not leveraged the data it does have available to monitor the timely release of funds and project closure. Specifically, the Department has not created reports based on the final acceptance date that show how long projects have been open and how much money is still budgeted to the projects after final acceptance. The Department also lacks policies or processes for management to review this information and take action when delays occur.

Second, the Department has not defined “substantial completion” or established policies regarding how it intends to comply with Senate Bill 16-122. Although the bill does not define “substantial completion,” according to FHWA standards, substantial completion is the “point at which the project is complete such that it can be safely and effectively used by the public without further delays, disruption, or other impediments.” Therefore, substantial completion could be considered to occur prior to “final acceptance” based on the Department’s use of that term. For example, a road project could be considered substantially complete if the work has finished and the road is fully open for use by the public, but the Department has not yet formally issued its final acceptance letter to the contractor. On the other hand, substantial completion could be considered to occur at the same time as final acceptance since final acceptance is a milestone signifying project completion, and until the Department issues its final acceptance, it could require the contractor to complete additional work. As of December 2018, the Department reported that it had drafted a policy clarifying its interpretation of “substantial completion,” but it was not clear when that would be finalized.

## WHY DO THESE PROBLEMS MATTER?

**THE DEPARTMENT IS NOT MAXIMIZING ITS AVAILABLE FUNDING.** According to Department project budgeting policies, the Department should “maximize the flow of funds” to construction projects by “applying effective and efficient cash management strategies” [Policy Directive 703]. However, our audit work found that delays in releasing excess construction funds within 6 months of final acceptance for the construction projects we reviewed affected \$29.3 million that could have been available sooner for other purposes. In addition, when we analyzed whether the Department released excess funds budgeted to projects within a year of final acceptance, as required by Senate Bill 16-122, we found that \$4 million was still allocated to those project budgets more than a year after the final acceptance date.



Given that in 2014 the Department estimated a \$24.9 billion funding shortfall for the State's transportation needs through 2040, it is important that any unused project funds are redirected to other transportation needs as quickly as possible. During our site visits to the Department's five regions, 20 different engineers and managers expressed a need for more money to address pressing transportation and safety needs in their areas. Although recognizing the delays in project closure and debudgeting, the Department reported that because it operates on a cash-flow basis and projects expenditures on a monthly basis, the delay in debudgeting funds does not necessarily constrain its pace of new construction advertisement, which is based on both available cash and available budget.

**THE DEPARTMENT CANNOT DEMONSTRATE COMPLIANCE WITH THE GENERAL ASSEMBLY'S INTENT TO ENSURE THAT CONSTRUCTION PROJECTS ARE CLOSED IN A TIMELY MANNER.** Although the Department did not have data we could analyze to determine if projects were closed within a year of substantial completion, we used the final acceptance date to test whether the Department closed projects within that timeframe for the 277 projects subject to the 2016 law we reviewed (as of August 2018) and found significant delays. Specifically, 49 projects (18 percent) were not closed within a year of final acceptance. In addition, we found one project that was closed nearly 2 years (628 days) after the final acceptance date and another project that remained open more than 2 years (807 days) after final acceptance.

By not establishing processes to analyze how quickly funds are released and projects are closed after final acceptance, Department management may not be aware that some projects experience significant delays and take the necessary corrective action.

## RECOMMENDATION 5

The Department of Transportation (Department) should maximize its current and future construction funding through timely closure of construction projects and release of unused project funds by:

- A Developing Systems, Applications and Products (SAP) reports that enable the Department to easily evaluate the timeliness of the final review process, project phase closure, release of unused funds, and project closure.
- B Implementing written policies and processes for management to routinely review the SAP reports developed in PART A to ensure that the final review process, project phase closure, release of unused funds, and project closure occur in accordance with timeliness requirements in statute and Department policy. The policies and processes should also address what actions management will take to ensure that projects are closed and unused funds are released for other purposes.
- C Implementing written policies and procedures to comply with statutory requirements under Senate Bill 16-122, including defining substantial completion.

## RESPONSE

### DEPARTMENT OF TRANSPORTATION

- A AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

The Department will develop reports identifying the status of the final review process, release of unused funds, and project closure. These reports will identify projects approaching required completion dates, as well as open projects that have passed required completion dates. Guidance and procedures currently in development will also address

“unusual circumstances” which may cause a project to deviate from the required closure timeline, and a process for review of these projects on a case by case basis. A process will also be established for management review of projects approaching or passing required completion dates, as well as exception projects. In addition to reports established in SAP, a new project management platform (“On-Track”) is currently in development. As this platform comes online in 2020, additional monitoring and reporting capabilities addressing the final review process, release of unused funds, and project closure will be incorporated.

B AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

The Department’s Construction Manual and Financial Management Manual identify CDOT’s current process to close projects 30 days after award for design phase projects, and 6 months after final acceptance for construction, utility, ROW, miscellaneous, and environmental phase projects. Currently CDOT closes upwards of 700 projects annually. As noted in the audit findings, many projects are not closed according to established timelines. Additionally, the Department acknowledges that it has not formally defined substantial completion, although practice is to consider final acceptance its equivalent. The Department is currently working to finalize guidance and procedures documenting project closure process and requirements in order to comply with Senate Bill 16-122. This will include assessing the closure process, and the development of reports to monitor the status of the final review process, release of unused funds, and project closure. Guidance and procedures will also clarify requirements and expectations for project closure and release of unused funds, management review processes, and processes for elevating and assessing exceptions (i.e. projects with unusual circumstances unable to meet required timelines).

C AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

As noted in responses to RECOMMENDATIONS 5A and 5B, the Department is currently finalizing guidance and procedures relating

to compliance with Senate Bill 16-122. This will include definition of “substantial completion,” timelines for final acceptance, release of unused funds, and project closure. This will further define exception review processes, reporting processes, and a management review process. Reporting processes will be developed both to inform Project Managers and other staff of project status relative to established timelines, and to put in place a management review process to ensure compliance and accountability.

# MASTER TASK ORDER CONTRACTS

The Department hires various consultants to provide both professional services, such as engineering, land surveying, and landscape architecture (among others), as well as personal services, which include goods and services that benefit the Department's operations, such as information technology consulting and real estate appraisal services (among others) [Sections 24-30-1402(6) and 24-50-502(2), C.R.S.]. The Department uses different types of contracts, including master task order contracts, which grant flexibility for the Department when it anticipates needing work to be developed and performed on multiple different projects within a general scope and requirements, but specific requirements are unknown when the contract is executed [State Controller Policy, Model Contracts, Section (1)(c)].

Over the term of a master task order contract, separate agreements called task orders define and authorize specific projects [State Controller Policy, Modifications of Contracts—Tools and Forms, Section (1)(e)]. For example, the Department uses a master task order contract for road clearing and rock fall mitigation services because the Department cannot predict in advance when rockslides will occur. When those events do happen, the Department can quickly issue task orders that specify the cost and scope of work without having to undergo a lengthy procurement process.

## WHAT AUDIT WORK WAS PERFORMED AND WHAT WAS THE PURPOSE?

We reviewed a non-statistical sample of five master task order contracts and related amendments that were effective from Fiscal Years 2015 through 2017, along with 84 task orders associated with these contracts. The contracts in our sample had a total value of about \$34 million and covered a range of services including engineering, rock fall

mitigation, public relations and advertising, and information technology-related consulting. The task orders associated with these contracts had a total value of \$21.8 million. We also reviewed statutes, State Fiscal Rules, Office of the State Controller policies, and Department policies.

The purpose of our audit work was to determine whether the task orders in our sample aligned with contract provisions that established the maximum dollar amount and type of work that could be performed through task orders. We also evaluated whether the contracts and task orders were consistent with applicable requirements.

## HOW WERE THE RESULTS OF THE AUDIT WORK MEASURED AND WHAT PROBLEMS DID THE WORK IDENTIFY?

Overall, we found problems and control weaknesses related to the amount and scope of work in, as well as approvals of, the Department's master task order contracts. Specifically, we found problems with all five of the master task order contracts and 80 of the 84 related task orders (95 percent) we reviewed. Some contracts and task orders had more than one problem. The sections below describe the requirements we applied and issues we identified.

### IMPRECISE SCOPES OF WORK

Each master task order contract includes a specified scope of work and, according to State Controller policy, a task order may only direct work that is within the contract scope of work. Furthermore, the Department may not use a task order to modify the terms, requirements, or scope of the master task order contract under which the task order is issued, but may use task order amendments to extend deadlines. We found problems associated with the scopes of work for four of the five contracts in our sample and/or their associated task orders:

**MISALIGNMENT OF WORK SPECIFIED IN TASK ORDERS, TASK ORDER AMENDMENTS, AND MASTER CONTRACTS.** The work described in 65 of the task orders (or related amendments), valued at about \$11.2 million, did not clearly align with either (1) the master contracts under which they were issued or (2) the original task orders that were amended. For example:

- For one contract with 57 task orders totaling \$6.6 million, the contract scope of work referenced public relations and media buying services, but also contained language written so broadly that the contractor could have provided virtually any type of service. Specifically, the contract stated that the “scope of work describes many tasks” and the “list is not intended to be exhaustive.” Neither fiscal rules nor State Controller or Department policies permit this type of undefined scope of work. Furthermore, we could not determine whether services described in any of the 57 task orders aligned with the types of services that were listed in the contract scope of work. The contract specified numerous tasks related to media outreach, such as placing ads with media and providing evaluations and reports of completed media buys; however, the task orders themselves did not reference any of the tasks listed, instead only noting project names, such as “FFY 2016 CIOT.” We also identified six instances in which the exact same project name appeared in multiple task orders. The Department told us that the tasks in each instance were unique, but we had no way to verify this assertion. To address these issues, the Department reported that it has revised its contract templates and provided training to staff to help ensure that contract scopes of work and task orders contain sufficient detail.
- For one contract, the Department amended a \$323,000 task order with a revised scope of work that stated, “The specific work assignments under this task order are unknown at this time.” There was no way to tell if the task order work aligned with the scope of the contract or original task order.
- For one contract, the Department issued a \$117,700 task order for a consultant to monitor services related to express lanes in the Denver

metropolitan area, but the master contract scope was unrelated to monitoring. Instead, the contract required the consultant to create a “major project development program” and develop “specifically identified projects from conception to procurement for construction.”

- For one contract, the Department issued a \$97,000 task order that originally described general program support services that appeared to be consistent with the contract scope of work. However, the task order was amended with a description of work related to completing the replacement of a failed bridge joint along a mountain highway. Since the original task order did not reference any specific project, the task order amendment appeared to inappropriately change the scope of work.

The Department disagreed with a number of the task orders we identified as problematic, stating that since any activities mentioned in task orders constituted “specifically identified projects,” those activities were therefore allowable under the contract. The Department did agree that (1) the \$6.5 million contract related to public relations and media buying services and the associated task orders should have been more specific regarding the scopes of work, and (2) one \$76,500 task order for engineering services between two specific mile-markers along an interstate (not listed in our examples above) was problematic because the contract’s scope of work specified that the contractor would provide those services along a different section of road.

## LACK OF APPROVED LABOR RATES IN CONTRACTS

With regard to the hourly labor rates for prime contractors and subcontractors, State Controller policies state that a task order may “only use rates already included in a master task order contract, and may not introduce new or modified rates.” Each contract in our sample contained provisions that mirrored this policy. Department policy also states, “Like the prime consultant, the rates/costs for sub-consultants need to be...included in the contract cost exhibit” [Selection Process for



Professional Consultant Services Contracts Manual, Section 9-3]. We found that 79 of the 84 task orders in our sample, worth a total of \$19.3 million in services, did not fully comply with these requirements regarding approved labor rates. Specifically, the 79 task orders referenced services to be provided by prime and/or subcontractors whose hourly rates were not included in the master contracts or amendments.

## TASK ORDERS THAT EXCEEDED THE MAXIMUM CONTRACT AMOUNT

Department contracts must clearly state the total maximum amount payable under the contract. However, we found that the aggregate amount authorized in the hard copy task orders issued under one contract in our sample was higher than the contract maximum of \$6.5 million. The total of all task orders was \$86,000 more than the contract maximum. According to the Department, it did not pay the full amount of some of the task orders. The Department also told us that since the \$6.5 million total contract amount had been encumbered, SAP would not have allowed total spending in excess of that encumbered amount. Although the encumbrance process and SAP controls provide protection from overpayment, the discrepancies between the task orders issued, the amounts paid under each task order, and the contract maximum could cause confusion on the part of the contractor. Further, the contractor in this case may have had legal authority under the contract to provide and request payment for services up to the amount specified in each task order, which would have exceeded the maximum allowable contract amount.

## CONTRACTS LACKING END DATES AND PROPER APPROVALS

Two contracts in our sample totaling \$26 million did not specify contract end dates, which did not comply with State Fiscal Rules and a State Controller policy that requires contracts to clearly show the date on which the initial contract term will end, absent the exercise of any

extension or early termination [1 CCR 101-1, Rule 3-3 (5.1.1.5) and State Controller Policy, Content-Mandatory Provisions in State Contracts, Section 6(b)]. As a result, the Department could have potentially issued task orders for an indefinite period of time once the contracts were executed.

In addition, Department staff who signed two task orders worth \$3.3 million, as well as one contract amendment that had no financial impact on the contract amount, did not have signature authority according to the Department's delegation agreement. Only those individuals identified in the Department's delegation agreement with the State Controller's Office are authorized to sign contracts and related task orders, thereby making the documents binding and enforceable [Section 24-30-202(1), C.R.S.; 1 CCR 101-1, Rule 3-3, Section 8.4.1; and 1 CCR 101-1, Rule 3-1, Section 7].

## USE OF IMPROPER CONTRACT TYPE

Department policies describe two types of professional services contracts:

- **PROJECT-SPECIFIC CONTRACTS**, which are generally defined as those for “as-needed” services for a specific project location or corridor.
- **NON-PROJECT-SPECIFIC CONTRACTS**, whose definition includes work that is emergent and/or time-critical; small in scope; and normally has a term of 2 years, with an option for a single 1-year extension.

One contract in our sample was not consistent with these Department policies. In May 2014, the Department entered into a project-specific contract with an engineering firm for “program management and support services.” The contract covered many types of activities, including administrative services, transportation planning, environmental services, technical design, and oversight of construction-related activities. More than 3 years after the contract went into effect, the Department changed it to non-project-specific through a contract

amendment, increased the maximum payable amount from the original \$2.5 million to \$20 million (eight times the original value), and specified a further 5-year performance period plus a 2-year extension option, which effectively made the entire contract term last more than 8 years. Given the extensive scope of work, the overall contract dollar maximum, and the lengthy term of the contract, this change appears inconsistent with the Department's definition of a non-project-specific contract as being for work that is emergent and small in scope.

## WHY DID THESE PROBLEMS OCCUR?

**THE DEPARTMENT INCORPORATES BROAD SCOPES OF WORK INTO MASTER TASK ORDER CONTRACTS INSTEAD OF PROCURING MULTIPLE CONTRACTS WITH MORE DISCRETE SCOPES OF WORK.** Although master task order contracts provide the Department with flexibility to hire a single contractor to carry out a range of work, and then define specific tasks as needed through task orders, these types of contracts may increase the risk that the Department is not obtaining the best value for its contract dollars. For example, the \$20 million master task order contract in our sample had such a broad scope of work that it allowed the contractor to perform work across a wide variety of functions, ranging from engineering and transportation planning to construction oversight and financial services, over 8 years. Thus, for the 8-year period of this contract, a single contractor was awarded a \$20 million contract without being required to compete with other contractors that may have been able to offer some of the services at a lower cost. Furthermore, we found that six of the 16 task orders issued under this contract were for work that did not clearly align with the work specified in the contract. Procuring multiple contracts, each containing more discrete scopes of work, may have given the Department more control over and accountability for the work and promoted competition for the best value.

**THE DEPARTMENT HAS NOT ENSURED THAT STAFF ENFORCE REQUIRED CONTRACT PROVISIONS.** The Department attributed problems we found with vague and duplicate scopes of work in task orders to errors by the staff responsible for preparing those contracts. For example, the

Department reported that engineers are responsible for detailing the technical requirements in task orders for professional services (e.g., engineering) and ensuring that the scope of work in the task orders is complete and aligns with the contract. Staff who prepare task orders for personal services (e.g., public relations) have similar responsibilities. Since we found issues with master task order contracts used to procure both professional and personal services, there appears to be a need for more stringent review by supervisors and staff with signature authority before the Department finalizes and executes master task order contracts and related task orders.

**DEPARTMENT GUIDANCE AND USE OF MASTER PRICING AGREEMENTS CONTRADICTS CONTRACT PROVISIONS RELATED TO CHANGING CONSULTANT RATES.** To justify the 79 task orders that referenced consultant employees and subcontractors whose rates were not listed in the original contracts, staff cited Department guidance issued in August 2016, which stated that “the consultant and project engineer may coordinate changes to staffing assignments which serve the needs of the project without pre-approval documentation” to avoid causing “burdens to the consultants, Region Business Offices and project engineers.” However, this guidance contradicts contract provisions that require the Department’s prior approval before consultant employees are added to a task order or a formal task order amendment when subcontractors are added.

The Department reported that it reflects approved rates for contracted employees through annual Master Pricing Agreements, but this approval does not legally apply to the Department’s master task order contracts because the contracts do not reference the Master Pricing Agreements. The Department also reported that it audits the rates contained in task orders to ensure that they are fair and reasonable. Nonetheless, the Department agreed that to address this issue, it should include language in future contracts that reference master pricing agreements as the official sources of approved consultant rates.

**THE DEPARTMENT'S MASTER TASK ORDER CONTRACT TEMPLATES FOR PROFESSIONAL SERVICES DID NOT INCLUDE REQUIRED ELEMENTS.** The Department reported that the templates used for two contracts worth \$26 million were not structured to specify an exact expiration date, but rather to allow for a calculation of the contract end date based on the execution date. In fact, the contracts did *not* establish a contract period based on the date of contract execution. Instead, both contracts stated that the contract period would last until "the date of final payment for the work or final audit of the work." Going forward, the Department reported that it plans to update its contract templates to specify an exact expiration date.

**THE DEPARTMENT DID NOT HAVE APPROVAL FROM THE STATE CONTROLLER TO EXECUTE MASTER TASK ORDER CONTRACTS AND RELATED TASK ORDERS.** In the Department's delegation agreement with the State Controller, only one of the six staff authorized as delegates who could execute contracts on the State Controller's behalf was approved to sign high-risk contracts, including master task order contracts and related task orders. In March 2012, the Department sought a waiver from the State Controller allowing the Department's other delegates to sign those contracts. However, the waiver expired in March 2018, which means that any master task order contracts and task orders Department staff signed after that date, including the two task orders and contract amendment we reviewed in our sample, were invalid.

The Department reported that it was in communication with the State Controller about this issue and, after we brought this to the Department's attention in December 2018, it obtained a written renewal of the waiver. At that time, the State Controller also retroactively approved the master task order contracts and task orders that were signed between March and December 2018.

## WHY DO THESE PROBLEMS MATTER?

**THE DEPARTMENT CANNOT HOLD CONTRACTORS ACCOUNTABLE FOR PROVIDING AGREED-UPON SERVICES.** The scope of work provides the

basis for the Department to evaluate whether contractors complete work in a satisfactory manner, in accordance with State Fiscal Rules [1 CCR 101-1, Rule 3-3(10.2.3)]. Since master task order contracts contain a general scope until specific requirements are added through task orders [State Controller Policy, Model Contracts, Section (1)(c)], it is important that the task orders clearly describe what work contractors will perform. In the event that a contractor does not fulfill its contractual obligations, the Department could have difficulty pursuing remedies unless the scope of work is clearly documented.

**THE DEPARTMENT LIMITS ITS ABILITY TO EFFECTIVELY MANAGE CONSULTANT COSTS** by not referencing master pricing agreements in master task order contracts. First, the Department creates a risk of being contractually obligated to pay rates that are not consistent with the original contract or approved in the Master Pricing Agreement. For example, one contract did not list 43 staff who later appeared on 16 associated task orders with rates ranging from \$50 to \$332 per hour. Those staff were expected to provide \$1.7 million in services.

Second, unapproved rate changes could also unexpectedly increase the cost of contracted services if hourly rates listed in task orders do not align with approved rates. For example, the hourly rate for one subcontractor's staff person was \$162 in the contract but appeared as \$195 in two task orders (which is 20 percent higher than the approved amount).

**THE DEPARTMENT COULD BE LIMITING OPPORTUNITIES FOR CONTRACTORS TO COMPETE FOR BUSINESS WITH THE STATE.** By entering master task order contracts with indefinite terms and broad scopes of work, the Department may not be fulfilling the General Assembly's intent for companies to seek professional services work with the State. The legislative declaration for Section 24-30-1401, et seq., C.R.S., which establishes requirements for professional services procurements, indicates that the State's policy is to "encourage all qualified persons to put themselves in a position to be considered for a [professional services] contract, and to negotiate contracts for such professional

services on the basis of demonstrated competence and qualification...and on the basis of the furnishing of such professional services at fair and reasonable fees.” The \$20 million contract in our sample with an 8-year performance period and broad scope of work that covered various aspects of the Department’s operations did not, on its face, seem to fulfill this intent.

**NOT HAVING VALID CONTRACTS IN PLACE CREATES RISKS FOR DEPARTMENT STAFF AND CONTRACTORS.** Since statute and fiscal rules prohibit the Department from incurring expenses that are not authorized by an approved contract, any such obligation can become the liability of the person who incurs it (i.e., the Department staff who approved the contract), unless the State Controller retroactively approves the contracts [Section 24-30-202(3), C.R.S., and 1 CCR 101-1, Rule 3-1 (8.1)]. From March through mid-December 2018, the Department did not have State Controller approval for most of its signature delegates to execute master task order contracts and related task orders, so there is a risk that those staff could have been liable for any payments made under the contracts. In addition, if any contractors had failed to perform or otherwise comply with the contract terms, the Department would not have been able to exercise any of the remedies specified in the contracts, such as withholding payment, since those contractors were providing services without a valid contract in place. Similarly, the contractors did not have any legal protection in place under the contracts until the State Controller retroactively approved those agreements in December 2018.

## RECOMMENDATION 6

The Department of Transportation (Department) should ensure that it has effective controls over the cost, duration, and scope of work in master task order contracts by:

- A Ensuring that contract scopes of work (1) conform with the Office of the State Controller’s policy regarding when master task order contracts should be used and (2) include discrete categories of project deliverables so that potential contractors have an opportunity to compete for these contracts.
- B Ensuring that (1) supervisors review all contracts and task orders to ensure compliance with all applicable requirements and (2) staff with authority to sign the contracts and task orders perform a secondary review before executing those documents.
- C Requiring staff to document preapproval of additions or changes to consultant and subcontractor rates through either (1) formal amendments to the contract or task orders, or (2) incorporating Master Pricing Agreements into the contracts and referencing those documents as the authoritative source of rate amounts.
- D Updating the template for master task order contracts used to obtain professional services to ensure that the contracts specify an exact end date.
- E Updating the Department’s delegation agreement with the State Controller to specify which staff have authority to sign high-risk contracts, which include master task order contracts and related task orders.



# RESPONSE

## DEPARTMENT OF TRANSPORTATION

### A AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

The Department agrees that master task order contracts should only be used when the scope of work (SOW) conforms with Office of State Controller (OSC) policy and that the SOW should include discrete categories of project deliverables. Master task order contracts are only used when the SOW is for work that will be developed and performed in multiple different projects and phases within a general scope and requirements, but the specific requirements are unknown at the time of execution of the contract.

While the Department acknowledges issues identified with respect to SOWs, improvements made since the end of FY 2017 have improved controls to ensure that the Department's current and future use of master task orders comply with the OSC policy. In the summer of 2017 new SOW templates, Task Order Proposal templates, a Guide for Preparing SOWs, and associated training were deployed to improve SOW and task order proposals for personal services contracts. Joint meetings were also initiated prior to solicitation with the project manager, purchasing agent and contract writer to identify the scope of need, stakeholders, business requirements, and solicitation and contracting method. Through this analysis, the procurement specialist ensures the SOW conforms with OSC policy. To ensure that procurement staff, customers and other stakeholders have an understanding of how decisions are made with regard to solicitation and contract type, the Department will update guidance to clarify appropriate uses of master task order contracts and outline the process from pre-solicitation to contract award. The Department is also establishing a new SOW review and approval process, which will include elevated review and approval of SOWs, procurement and contracting method, and authorization

to proceed. Different thresholds will be established to delineate between staff, management, and executive management approval requirements.

B AGREE. IMPLEMENTATION DATE: SEPTEMBER 2019.

The Department agrees that additional controls over the cost, duration, and scope of work in master task order contracts are warranted. The Department is developing a new procedural directive outlining review and approval processes based on dollar value and type of good/service. Review and approval will include, depending on value and type of good/service, review by Supervisors, Division Director, and Executive Management. It will also outline where additional legal review by the Office of the Attorney General is required. This is in addition to any existing requirements for review by the Office of the Attorney General, Office of State Controller, and Office of Information Technology, and in addition to existing internal QA/QC review processes and CDOT Controller review processes. Additionally, with respect to professional services contracting, a Professional Engineer's (PE) review will be required for each SOW and task order. The PE's review will be documented in the routing sheet used for contract execution which will be maintained in the CDOT Controller's contract file following execution.

C AGREE. IMPLEMENTATION DATE: JUNE 2019.

The Department will ensure that it has effective controls over the cost, duration, and scope of work in master task order contracts by incorporating reference to the Master Price Agreement ("MPA") document in the master task order contracts. The MPA will provide evidence of the fair and reasonable analysis by CDOT, which documents preapproval of additions or changes to consultant and subcontractor rates through formal amendments to the MPA. These in turn will be applied to the master task order contract and associated task orders. The Department's standard practice has been to execute and audit MPAs, but it has not been appropriately referenced in the master task order contract previously.

D AGREE. IMPLEMENTATION DATE: MAY 2019.

The Department agrees that master task order contracts for both professional and personal services should specify an exact end date. CDOT personal service contracts already include expiration dates in the Master Task Order Contract and on all executed task orders. The master task order contract template for professional services will be updated to include an end date for the contract term.

E AGREE. IMPLEMENTATION DATE: JUNE 2019.

The Department's delegation agreement with the State Controller to specify which staff have authority to sign high-risk contracts is up to date. The department was granted the waiver of Fiscal Rule 3-1, OSC's Policy "Review and Approval-Delegated Agencies", §2(a), "Automatic High Risk" and OSC's Policy "Modification of Contracts-Tools and Forms", §5, "Who must Sign the Modification Form" to allow CDOT to perform internal reviews, obtain CDOT required approvals, and allow delegated Controller signature on Master Task Order Contracts ("Master TO Contracts"), amendments to such Master TO Contracts, task orders related to such Master TO Contracts ("TO") and TO amendments ("TOA") relating to such Master TO Contracts, that are automatically high risk. This waiver has been active since March 14, 2012 and was renewed in December 2018. The Department will work with OSC to determine if the delegation agreement with the State Controller can be further amended to incorporate the delegation currently subject to waivers, in order to avoid the need to separately secure and maintain waivers for these types of approvals. The Department will also establish processes to increase transparency with respect to the delegation agreements and expiration of those agreements to ensure there are no lapses, or signatures by parties without appropriate authorization per the delegation agreement.



# APPENDIX



APPENDIX  
Fiscal Year 2017 Budget Allocation Plan and OSA Budget-to-Actuals

COLORADO DEPARTMENT OF TRANSPORTATION FISCAL YEAR 2016-17 FINAL ANNUAL BUDGET ALLOCATION PLAN					
BUDGET CATEGORY <sup>1</sup>	PROGRAM AREA	FISCAL YEAR 2016-2017 BUDGET	FUNDING SOURCE	OSA ANALYSIS FISCAL YEAR 2017 EXPENSES	OSA ANALYSIS BUDGET MINUS EXPENSES
					<ul style="list-style-type: none"> <li>• A positive amount means the Department was under budget.</li> <li>• A negative amount means the Department was over budget.</li> </ul>
	Indirect Costs (primary department)	\$72,494,669		\$91,030,192	(\$18,535,523)
	Construction Engineering (primary department)	\$41,706,919		\$73,724,359	(\$32,017,440)
Maintain - Maintaining What We Have					
	<b>CDOT PERFORMED WORK</b>				
	Roadway Surface	\$39,207,301	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Roadside Facilities	\$22,031,593	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Roadside Appearance	\$8,582,670	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Structure Maintenance	\$12,206,661	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Tunnel Activities	\$7,181,237	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Snow and Ice Control	\$76,064,129	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Traffic Services	\$66,254,514	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Planning and Scheduling	\$15,584,857	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Material, Equipment and Buildings	\$15,487,037	SH	Expense amount cannot be determined for budget line	Cannot be calculated
		\$262,600,000		\$224,072,807	\$38,527,193
	<b>CONTRACTED OUT WORK</b>				
	Surface Treatment /2	\$120,477,318	FHWA/ SH/	Expense amount cannot be determined for budget line	Cannot be calculated
	Structures On-System Construction /1 /2	\$29,112,135	FHWA/ SH/ 09-108: \$13.1M	Expense amount cannot be determined for budget line	Cannot be calculated
	Structures Inspection and Management /2	\$3,762,296	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Geohazards Mitigation /1	\$8,301,624	09-108: \$10.0M	Expense amount cannot be determined for budget line	Cannot be calculated
	Highway Safety Improvement Program	\$25,153,428	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Railway-Highway Crossings Program	\$2,719,487	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Hot Spots	\$1,799,090	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Traffic Signals /1 /2	\$14,029,745	FHWA/ SH/ 09-108: \$16.9M	Expense amount cannot be determined for budget line	Cannot be calculated
	FASTER - Safety Projects	\$48,027,516	09-108	Expense amount cannot be determined for budget line	Cannot be calculated
	Permanent Water Quality Mitigation	\$5,396,056	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Maintain-Related Indirects/Overhead /2	\$33,607,270		See grand total above	See above
	Maintain-Related CDOT Construction Engineering /2	\$19,334,604		See grand total above	See above
		\$311,720,568		Total expense amount cannot be determined	Cannot be calculated
	<b>CAPITAL EXPENDITURE</b>				
	Road Equipment /2		SH	\$26,248	(\$26,248)
	Capitalized Operating Equipment	\$3,760,247	SH	\$1,020,510	\$2,739,737
	Property /2	\$10,000,000	SH	\$1,265,844	\$8,734,156
		\$13,760,247		\$2,312,603	\$11,447,644
	<b>TOTAL</b>	\$588,080,815		Total expense amount cannot be determined	Cannot be calculated
Maximize - Safely Making the Most of What We Have					
	<b>CDOT PERFORMED WORK</b>				
	TSM&O: Performance Programs and Services	\$607,619	SH	\$581,596	\$26,023
	TSM&O Traffic Incident Management	\$1,989,156	SH	\$2,533,558	(\$544,402)
	TSM&O: ITS Maintenance	\$17,600,000	SH	\$17,050,719	\$549,281
		\$20,196,775		\$20,165,874	\$30,901
	<b>CONTRACTED OUT WORK</b>				
	Safety Education	\$11,496,250	NHTSA / SSE	\$4,571,631	\$6,924,619
	TSM&O: Congestion Relief	\$3,943,271	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Regional Priority Program	\$40,353,364	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Road X	\$10,042,080	FHWA / SH	Only a portion of expenses (\$1,365,886) can be determined for budget line	Cannot be calculated
	Maximize-Related Indirect/Overhead /2	\$7,994,735		See grand total above	See above
	Maximize-Related CDOT Construction Engineering /2	\$4,599,452		See grand total above	See above
		\$78,429,153		Total expense amount cannot be determined	Cannot be calculated
	<b>CAPITAL EXPENDITURE</b>				
	TSM&O: ITS Investments	\$10,000,000	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
		\$10,000,000		Total expense amount cannot be determined	Cannot be calculated
	<b>TOTAL</b>	\$108,625,928		Total expense amount cannot be determined	Cannot be calculated
Expand - Increasing Capacity					
	<b>CDOT PERFORMED WORK</b>				
	<b>CONTRACTED OUT WORK</b>				
	Strategic Projects	\$118,049,093	09-228	Expense amount cannot be determined for budget line	Cannot be calculated
	National Freight Program	\$14,064,225	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Expand-Related Indirect /2	\$17,157,394		See grand total above	See above
	Expand-Related CDOT Construction Engineering /2	\$9,870,823		See grand total above	See above
		\$159,141,535		Total expense amount cannot be determined	Cannot be calculated
	<b>TOTAL</b>	\$159,141,535		Total expense amount cannot be determined	Cannot be calculated

APPENDIX  
Fiscal Year 2017 Budget Allocation Plan and OSA Budget-to-Actuals

BUDGET CATEGORY <sup>1</sup>	PROGRAM AREA	FISCAL YEAR 2016-2017 BUDGET	FUNDING SOURCE	OSA ANALYSIS FISCAL YEAR 2017 EXPENSES	OSA ANALYSIS BUDGET MINUS EXPENSES
Deliver - Program Delivery/Administration	Operations [including maintenance support]	\$32,738,361	SH	\$24,755,201	\$7,983,160
	Projects Initiatives	\$1,855,000	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	DTD Planning and Research - SPR	\$13,251,519	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Administration (Appropriated)	\$29,863,386	SH	\$29,863,400	(\$14)
	HPTE Fee for Service	\$2,080,000	SH	\$5,317,110	(\$3,237,110)
	FY2016 Common Policy Anticipated Salary Increase				
	<b>TOTAL</b>	<b>\$79,788,266</b>		Only a portion of expenses (\$59,935,711) can be determined for budget line	Cannot be calculated
Pass-Through Funds/Multi- modal Grants	<b>AERONAUTICS</b>				
	Division of Aeronautics to Airports	\$16,800,860	SA	\$18,799,533	(\$1,998,673)
	Division of Aeronautics Administration	\$972,237	SA	\$922,411	\$49,827
	<b>TOTAL</b>	<b>\$17,773,097</b>		<b>\$19,721,943</b>	<b>(\$1,948,846)</b>
	<b>HIGHWAY</b>				
	Recreational Trails	\$1,591,652	FHWA	Expense amount cannot be determined for budget line	Cannot be calculated
	Safe Routes to School	\$2,500,000	FHWA	Only a portion of expenses (\$392,245) can be determined for budget line	Cannot be calculated
	Transportation Alternatives Program	\$12,023,531	FHWA / LOC	Expense amount cannot be determined for budget line	Cannot be calculated
	STP-Metro	\$51,830,022	FHWA / LOC	Expense amount cannot be determined for budget line	Cannot be calculated
	Congestion Mitigation/Air Quality	\$47,411,168	FHWA / LOC	Expense amount cannot be determined for budget line	Cannot be calculated
	Metropolitan Planning	\$8,263,775	FHWA / FTA / LOC	Expense amount cannot be determined for budget line	Cannot be calculated
	Bridge Off-System - TC Directed	\$3,164,139	FHWA / SH / LOC	Expense amount cannot be determined for budget line	Cannot be calculated
	Bridge Off-System - Federal Program	\$6,286,788	FHWA / SH / LOC	Expense amount cannot be determined for budget line	Cannot be calculated
	<b>TOTAL</b>	<b>\$133,071,075</b>		Total expense amount cannot be determined	Cannot be calculated
	<b>TRANSIT</b>				
	Federal Transit	\$28,725,739	FTA / LOC	\$0	\$28,725,739
	Strategic Projects -Transit	\$15,800,000	09-228	Only a portion of expenses (\$23,334) can be determined for budget line	Cannot be calculated
	Transit and Rail Local Grants	\$5,000,000	09-108	Expense amount cannot be determined for budget line	Cannot be calculated
	Transit and Rail Statewide Grants	\$6,000,000	09-108	Expense amount cannot be determined for budget line	Cannot be calculated
	Bustang	\$3,000,000	09-108	\$2,681,509	\$318,491
	Transit Administration and Operations	\$1,000,000	FTA / 09-108	\$900,938	\$99,062
	<b>TOTAL</b>	<b>\$59,525,739</b>		Total expense amount cannot be determined	Cannot be calculated
	<b>INFRASTRUCTURE BANK</b>				
	Infrastructure Bank	\$420,804	SIB	\$0	\$420,804
	<b>TOTAL</b>	<b>\$210,790,715</b>		Total expense amount cannot be determined	Cannot be calculated
Transportation Commission Contingency / Debt Service	<b>PERMANENT RECOVERY</b>				
	Permanent Recovery	\$105,762,690	FHWA	Expense amount cannot be determined for budget line	Cannot be calculated
	Recovery-Related Indirect/Overhead /2	\$13,735,270		See grand total above	See above
	Recovery-Related CDOT Construction Engineering /2	\$7,902,040		See grand total above	See above
	<b>TOTAL</b>	<b>\$127,400,000</b>		Total expense amount cannot be determined	Cannot be calculated
	<b>CONTINGENCY</b>				
	TC Contingency	\$16,858,570	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Snow & Ice Reserve	\$10,000,000	SH	Expense amount cannot be determined for budget line	Cannot be calculated
	<b>TOTAL</b>	<b>\$26,858,570</b>		Total expense amount cannot be determined	Cannot be calculated
	<b>DEBT SERVICE</b>				
	Strategic Projects - Debt Service	\$128,869,125	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated
	Certificates of Participation-Property	\$2,364,664	SH	\$2,364,664	\$0
	Certificates of Participation-Energy	\$993,850	SH	\$1,047,799	(\$53,949)
	<b>TOTAL</b>	<b>\$132,227,639</b>		Total expense amount cannot be determined	Cannot be calculated
	<b>TOTAL</b>	<b>\$286,486,209</b>		Total expense amount cannot be determined	Cannot be calculated
	<b>\$1,432,913,468</b>				
<b>REVENUE</b>	<b>\$1,432,913,468</b>		Primary Department Total		
			\$1,974,847,673	(\$541,934,205)	



APPENDIX  
Fiscal Year 2017 Budget Allocation Plan and OSA Budget-to-Actuals

STATE BRIDGE ENTERPRISE FISCAL YEAR 2016-17 FINAL ANNUAL BUDGET ALLOCATION PLAN						
BUDGET CATEGORY	PROGRAM AREA	FISCAL YEAR 2016-2017 BUDGET	FUNDING SOURCE	OSA ANALYSIS FISCAL YEAR 2017 EXPENSES	OSA ANALYSIS BUDGET MINUS EXPENSES	
Maintain - Maintaining What We Have	<b>CDOT PERFORMED WORK</b>					
	Maintenance	\$250,000	09-108	\$88,764	\$161,236	
	Scoping Pools	\$300,000	09-108	\$47,442	\$252,558	
		\$550,000		\$136,206	\$413,794	
	<b>CONTRACTED OUT WORK</b>					
	Bridge Enterprise Projects	\$87,917,598	09-108	Expense amount cannot be determined for budget line	Cannot be calculated	
	Maintain-Related Indirects/Overhead /1	\$11,417,750		\$0	\$11,417,750	
	Maintain-Related CDOT Construction Engineering /1	\$6,568,748		\$0	\$6,568,748	
		\$105,904,096		Total expense amount cannot be determined	Cannot be calculated	
	<b>TOTAL</b>	\$106,454,096		Total expense amount cannot be determined	Cannot be calculated	
Maximize - Safely Making the Most of What We Have	<b>CDOT PERFORMED WORK</b>					
	<b>CONTRACTED OUT WORK</b>					
	<b>TOTAL</b>	-				
Expand - Increasing Capacity	<b>CDOT PERFORMED WORK</b>					
	<b>CONTRACTED OUT WORK</b>					
	<b>TOTAL</b>	-				
Deliver - Program Delivery/Administration	Administration and Legal Fees	\$1,911,904	09-108	\$1,538,255	\$373,649	
	<b>TOTAL</b>	\$1,911,904		\$1,538,255	\$373,649	
Pass-Through Funds/Multi- modal Grants	<b>HIGHWAY</b>					
	<b>TOTAL</b>	-				
Transportation Commission Contingency / Debt Service	<b>CONTINGENCY</b>					
	Bridge Enterprise - Contingency	-	09-108			
	<b>DEBT SERVICE</b>					
	Bridge Enterprise - Debt Service	\$18,234,000	FHWA / SH	Expense amount cannot be determined for budget line	Cannot be calculated	
	<b>TOTAL</b>	\$18,234,000		Total expense amount cannot be determined	Cannot be calculated	
		\$126,600,000				
	<b>REVENUE</b>	\$126,600,000		Bridge Enterprise Total	\$140,006,093	
				(\$13,406,093)		

APPENDIX  
Fiscal Year 2017 Budget Allocation Plan and OSA Budget-to-Actuals

HIGH PERFORMANCE TRANSPORTATION ENTERPRISE FISCAL YEAR 2016-17 FINAL ANNUAL BUDGET ALLOCATION PLAN					
BUDGET CATEGORY	PROGRAM AREA	FISCAL YEAR 2016-2017 BUDGET	FUNDING SOURCE	OSA ANALYSIS FISCAL YEAR 2017 EXPENSES	OSA ANALYSIS BUDGET MINUS EXPENSES
Maintain - Maintaining What We Have	<b>CDOT PERFORMED WORK</b>				
	<b>CONTRACTED OUT WORK</b>				
	TOTAL	-			
Maximize - Safely Making the Most of What We Have	<b>CDOT PERFORMED WORK</b>				
	<b>CONTRACTED OUT WORK</b>				
	TOTAL	-			
Expand - Increasing Capacity	<b>CDOT PERFORMED WORK</b>				
	High Performance Transportation Enterprise-Maintenance	-	Tolls/Managed Lanes Revenue		
		-	Tolls/Managed Lanes Revenue		
	<b>CONTRACTED OUT WORK</b>				
	High Performance Transportation Enterprise--Projects	\$3,000,366	Tolls/Managed Lanes Revenue	Only a portion of expenses (\$11,274,074) can be determined for budget line	Cannot be calculated
	Expand-Related Indirect /1	\$389,654		\$0	\$389,654
	Expand-Related CDOT Construction Engineering /1	\$224,172		\$0	\$224,172
		\$3,614,192	Tolls/Managed Lanes Revenue	Total expense amount cannot be determined	Cannot be calculated
	TOTAL	\$3,614,192		Total expense amount cannot be determined	Cannot be calculated
	Deliver - Program Delivery/Administration	High Performance Transportation Enterprise-Administration and Legal Fees	\$2,088,800	Fee for Service	\$2,036,767
TOTAL		\$2,088,800			
Pass-Through Funds/Multi- modal Grants	<b>HIGHWAY</b>				
	TOTAL	-			
Transportation Commission Contingency / Debt Service	<b>CONTINGENCY</b>				
	<b>DEBT SERVICE</b>				
		-	Fee for Service		
	TOTAL	-			
		\$5,702,992			
	REVENUE	\$5,702,992		HPTE Total \$30,970,829	(\$25,267,837)
	HPTE Fee For Service Revenue & Allocation Adjustment	-\$2,080,000			
	<b>TOTAL CONSOLIDATED ALLOCATIONS</b>	<b>\$1,563,136,460</b>		<b>Department Grand Total \$2,145,824,595</b>	<b>(\$582,688,135)</b>
	Total Consolidated Revenue	\$1,563,136,460			

SOURCE: Department's approved Fiscal Year 2017 Budget Allocation Plan (Budget Plan) and OSA analysis of the Budget Plan and Department accounting data.

<sup>1</sup>The column headings appear exactly as they did in the Department's approved Fiscal Year 2017 Budget Plan. The last two columns were added to show results from the OSA's budget-to-actuals analysis.