



**REPORT OF  
THE  
STATE AUDITOR**

**Department of Transportation  
Transportation Funding**

**Financial Review  
November 2002**

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November 22, 2002

Members of the Legislative Audit Committee:

This report contains the results of a financial review of the Department of Transportation's financing and cash management practices. The audit was conducted pursuant to Section 2-3-103, C.R.S., which authorizes the State Auditor to conduct audits of all departments, institutions, and agencies of state government. The report presents our findings, conclusions, and recommendations, and the responses of the Department of Transportation.

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**RECOMMENDATION LOCATOR**  
**Agency Addressed: The Department of Transportation**

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<b>Rec. No.</b>	<b>Page No.</b>	<b>Recommendation Summary</b>	<b>Agency Response</b>	<b>Implementation Date</b>
1	11	Improve data accuracy. Develop information systems that facilitate systemwide decision making, such as development of tools to accurately predict project expenditures and manage cash inflows and outflows.	Agree	January 2004
2	17	Improve utilization of cash flows by developing and implementing criteria for evaluating construction projects for possible task order contracting. Increase use of task orders.	Partially Agree	Ongoing
3	21	Establish time lines for the completion of the public input process, the implementation of the cash and project management system discussed in Recommendation No. 1, and the development of a revised 7 <sup>th</sup> Pot planning schedule.	Agree	September 2003

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# Background

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## Scope and Methodology

This review was conducted in response to legislative concerns regarding the Department of Transportation's (the Department's) budgeting and financing practices and the impact of anticipated reductions in sales tax revenue earmarked for transportation projects under Senate Bill 97-1. As part of the audit, we reviewed accounting and budget records, reconciled information on the Department's internal systems to encumbrance and expenditure data on the statewide accounting database (COFRS), assessed statewide contracting rules, and evaluated the Department's progress in implementing the recommendations contained in the Office of the State Auditor's February 2000 Performance Audit of Cash and Project Management.

The following report presents information on transportation funding and provides recommendations for improving the Department's cash management, project management, and planning processes. We recommend that the Department develop systems to facilitate decision making and cash management, evaluate the feasibility of instituting additional task order contracts, and establish time lines for developing a revised schedule for projects delayed as a result of reductions in Senate Bill 97-1 transfers. The following presents information on transportation funding along with our findings and recommendations.

## Transportation Funding Sources

The State Highway Fund is the Department's primary source of revenue for funding highway-related construction and maintenance costs. Between Fiscal Years 1998 and 2002, revenues into the State Highway Fund have decreased from \$891 million to about \$876 million, or by about 2 percent. As is shown later, this decrease is mainly attributable to cuts in Senate Bill 97-1 transfers in Fiscal Year 2002. Senate Bill 97-1 funds in Fiscal Year 2001 (prior to reductions) represented 12.2 percent of the Department's total revenues, including proceeds from the issuance of Transportation Revenue Anticipation Notes (TRANs). Excluding TRANs proceeds, Senate Bill 97-1 funds represented 19.1 percent of the Department's total revenues in that year. In addition to State Highway Fund revenues, the Department has issued just over \$1.2 billion in TRANs bonds to fund transportation, generating total proceeds (including bond premiums and interest revenue) of nearly \$1.4 billion, including \$539 million in Fiscal Year 2000, \$582 million in Fiscal

Year 2001, and \$264 million in Fiscal Year 2002. The State Highway Fund receives funds from a number of revenue sources, including the following:

- **Highway Users Tax Fund (HUTF)**—According to the Department's Fiscal Year 2003 budget request, the Highway Users Tax Fund receives monies primarily from excise taxes on motor fuel (72 percent) and motor vehicle registrations and other fees (28 percent). When funds are distributed from the HUTF, a portion is used to pay the highway-related expenditures of the Department of Revenue, Ports of Entry Division, and the Department of Public Safety. These distributions are commonly referred to as off-the-top deductions. After off-the-top deductions, portions of the HUTF collections are distributed to the cities, counties, and the State Highway Fund. The following table shows the allocation of HUTF funds in Fiscal Year 2002.

	<b>FY 2002 Allocation</b>	<b>Percentage of Total</b>
<b>Off-the-Top Deductions</b> (Transfers to Departments of Revenue and Public Safety)	\$82.4	11.1%
<b>Transfers to Cities</b>	\$100.4	13.6%
<b>Transfers to Counties</b>	\$152.7	20.6%
<b>Transfers to the State Highway Fund</b>	\$404.3	54.7%
<b>Total</b>	<b>\$739.8</b>	<b>100.0%</b>
<p><b>Source:</b> Office of the State Auditor Analysis of COFRS data.  <b>Note:</b> This analysis is to show how funds from the Highway Users Tax Fund are distributed. However, this information is typically presented with off-the-top deductions being taken from HUTF first, and then the remaining HUTF funds being distributed in proportions with about 40 percent going to cities and counties combined and 60 percent going to the State Highway Fund.</p>		

- **Transportation Revenue Anticipation Notes (TRANS)**—The Department of Transportation has authority under a voter-approved referendum to issue bonds to accelerate projects that are part of the Strategic Transportation Project Investment Program, referred to as the Strategic 28 or 7<sup>th</sup> Pot. The 7<sup>th</sup> Pot consists of about 28 projects throughout the State considered to be of the highest priority. Some of the projects in the 7<sup>th</sup> Pot include the Southeast Corridor, or T-REX, and I-70 from Denver International Airport to Eagle County. It should be

noted that while the Department has designated 28 strategic projects, a strategic project may comprise smaller individual projects. Additional information on the projects in the 7<sup>th</sup> Pot is located in Appendix A. TRANs was a major Colorado effort to speed up high-priority transportation construction projects. As shown in Table 3 in the next chapter, the Department's expenditures have risen significantly since the issuance of the TRANs bonds. The TRANs bond debt will be serviced using state and federal funds for approximately the next 15 years. House Bill 99-1325, enacted in Section 43-4-703, C.R.S., establishes a maximum principal amount of \$1.7 billion and a maximum repayment amount of \$2.3 billion for the bonds, including interest.

As of June 2002, the Transportation Commission has issued over \$1.2 billion in TRANs bonds. The Commission issued these bonds in three offerings, the first of \$524 million in Fiscal Year 2000, the second of \$506 million in Fiscal Year 2001, and the third of \$208 million in Fiscal Year 2002. (Proceeds from bond premiums on each offering are not included in these totals, since they are not considered debt or repayable.) The debt service payments for these bonds is about \$70 million per year for Fiscal Years 2003 through 2005, \$152 million per year from Fiscal Year 2006 to 2015, \$94 million in Fiscal Year 2016, and \$30 million in Fiscal Year 2017. The Department plans to pay the debt service with 50 percent state and 50 percent federal funds. The Department put the investment of TRANs proceeds out for bid to qualified investment firms, with the highest responsive bidder receiving the right to invest the funds at a guaranteed rate. The bid is based on investing in acceptable low-risk instruments, such as U.S. government bonds and obligations issued by federal agencies (e.g., the Federal Housing Administration). Wells Fargo currently manages these investments as trustee for the Department. As of June 2002, the Fiscal Year 2000 and 2001 issuances were invested at about 7 percent and 4.7 percent respectively. In contrast, the yield payable for the 2000 series bonds is 5.7 percent and for the 2001 series bonds is 4.5 percent.

- **Senate Bill 97-1**—This legislation, as subsequently amended (Section 39-26-123, C.R.S.), authorizes diversion of roughly 10 percent of state sales and use tax revenues to the HUTF for transportation purposes. By statute, in order for Senate Bill 97-1 transfers to occur, the State must have enough revenues to meet its general fund appropriations for that year as well as to fulfill the statutory general fund reserve requirement. If these tests are not met, the Department will not receive any Senate Bill 97-1 funds. The Senate Bill 97-1 revenues are to be used for 7<sup>th</sup> Pot projects. In Fiscal Year 2001, Senate Bill 97-1 revenues were about \$197.2 million. In Fiscal Year 2002, revenues from Senate Bill 97-1 were reduced from an estimated \$212.3 million to an actual of \$35.2 million due to a shortfall in general fund collections. The Department of Transportation does not forecast receipt of any Senate Bill 97-1 funds until Fiscal Year 2006.

- **Federal Appropriations**—The primary source of federal funds for transportation is through the Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), administered by the Federal Highways Administration (FHWA). TEA-21 is set to expire at the end of Federal Fiscal Year 2003, or in September 2003, and is funded primarily through federal motor fuel taxes. TEA-21 will likely be replaced by a revised version of the Transportation Equity Act in September 2003. These funds are provided to states for construction, reconstruction, resurfacing, restoration, rehabilitation, planning, traffic monitoring, and highway research for both the Interstate System and the National Highway System. The I-25 Southeast Corridor Project, or T-REX, and the I-225/Parker Road Interchange are examples of federal-aid projects. Generally, a state match is required for the State to receive federal funds for a project. The state match varies based on the type of construction project, but most projects require a 20 percent state share. In Fiscal Year 2002 the Department received about \$317 million in federal funds under TEA-21.
- **Capital Construction Fund**—The Transportation Commission is required by statute to submit a prioritized list of recommended state highway reconstruction, repair, and maintenance projects to the Capital Development Committee on or before October 1 of each year. The Capital Development Committee decides which projects to fund through the Capital Construction Fund. The Department has not received a new appropriation of capital construction funds since Fiscal Year 2001. In Fiscal Year 2002 the Department spent approximately \$28.8 million in capital construction funds from the Fiscal Year 2001 appropriation. The remaining \$4.4 million will likely be spent in Fiscal Year 2003. The Department does not anticipate receiving new capital construction appropriations in Fiscal Year 2003.
- **Interest Income**—The Department earns interest income on cash deposits it holds with the State Treasurer and on its investment of the TRANs proceeds with Wells Fargo (the bond trustee). In Fiscal Year 2002 the Department earned approximately \$62.7 million in interest. Of this amount, about \$44.2 million was interest earned on the TRANs bond proceeds and \$18.5 million was interest earned on monies in the State Highway Fund held by the State Treasurer. Under federal law, a portion of the interest earned on the TRANs bond proceeds will have to be paid back to the federal government because the TRANs bonds are currently earning interest at a rate higher than the bond yield rate. This payment is called a "rebate." According to estimates made by the Department's bond counsel, the Department currently owes a rebate of \$12.9 million for the Series 2000 and 2001 bonds. This rebate will be paid using revenues generated from interest earned in excess of interest payable on the bonds. The first payment of rebate is due in June 2005, or five years from the date the first bonds were issued.

The Department has reserved funds based on bond counsel estimates of rebate due, although these amounts will likely be adjusted between now and Fiscal Year 2005.

- State Gaming Funds**—Under Section 12-47.1-701, C.R.S., the State's Limited Gaming Fund transfers a portion of gaming proceeds to the State Highway Fund for construction and maintenance associated with the impact of gaming on state highways. The Limited Gaming Fund comprises revenues generated through taxes and fees on Colorado casinos. In Fiscal Year 2002 the Department received about \$4.8 million in gaming funds.

The table below demonstrates the Department's sources of funding for the last five fiscal years.

Funding Source	FY 1998	FY 1999	Percent Change From Prior Year	FY 2000	Percent Change From Prior Year	FY 2001	Percent Change From Prior Year	FY 2002	Percent Change From Prior Year	Percent Change 1998 - 2002	Funding Source As Percentage of Total FY 2002
<b>HUTF Transfers</b>	\$356.8	\$376.7	5.6%	\$397.7	5.6%	\$396.0	-.4%	\$404.3	2.1%	13.3%	35.5%
<b>Senate Bill 97-1 Funds<sup>1</sup></b>	\$153.1	\$171.9	12.3%	\$186.8	8.7%	\$197.2	5.6%	\$35.2	-82.2%	-77.0%	3.1%
<b>TRANS Bonds</b>	—	—	—	\$538.9	N/A	\$581.8	8.0%	\$264.2	-54.6%	N/A	23.2%
<b>Federal Funds</b>	\$249.4	\$328.0	31.5%	\$364.1	11.0%	\$301.1	-17.3% <sup>2</sup>	\$317.0	5.3%	27.1%	27.8%
<b>Other<sup>3</sup></b>	\$132.1	\$107.3	-18.8%	\$103.9	-3.2%	\$137.9	32.7%	\$119.2	-13.6%	-9.8%	10.4%
<b>Total</b>	<b>\$891.4</b>	<b>\$983.9</b>	<b>10.4%</b>	<b>\$1,591.4</b>	<b>61.7%</b>	<b>\$1,614.0</b>	<b>1.4%</b>	<b>\$1,139.9</b>	<b>-29.4%</b>	<b>27.9%</b>	<b>100.0%</b>

**Source:** Office of the State Auditor analysis of COFRS data.

<sup>1</sup> Senate Bill 97-1 funds are transfers from the General Fund that flow through the Highway Users Tax Fund to the State Highway Fund.

<sup>2</sup> The amount of federal funds available to the Department did not actually decrease in Fiscal Year 2001, but rather the amount of federal expenditures that the Department requested FHWA to reimburse decreased in Fiscal Year 2001.

<sup>3</sup> Other includes funds from the capital construction fund, the State Gaming Fund, interest earnings, and other miscellaneous sources, such as private grants.

As shown by the table, about 63 percent of the Department's revenue stream is from HUTF transfers and federal funds, combined. HUTF funds provide the most predictable and reliable source of transportation funding; these funds have increased by about 13 percent over the past five fiscal years, an average of about 3 percent per year. Federal funds also provide a relatively steady stream of revenue, increasing by about 27 percent over the five-year period, an average of nearly 8 percent per year. However, there have been significant variances in the amounts of federal funds spent by the Department from year to year. According to Department staff, the amount of federal funds available in each of the past five years has been steady and growing, but the amount that the Department is able to draw-down of its federal spending authority is dependant upon what qualifying expenditures it had during that year. The amount of federal funding in the table above represents the amount of federal spending authority drawn-down in each Fiscal Year. Senate Bill 97-1 funds are the least predictable, as they are available only when the State has adequate general funds to meet appropriations and fulfill reserve requirements.

## **CDOT Budget**

The bulk of the Department's budget is expended under the supervision and direction of the Transportation Commission. The Transportation Commission comprises 11 commissioners appointed by the Governor and confirmed by the Senate. By statute, monies paid into the State Highway Fund are available without further appropriation from the General Assembly, and the Commission has discretion to adopt budget amendments reflecting unanticipated increases or decreases in revenues or expenditures. Most of the Department's budget is appropriated through two line items: the Construction, Maintenance, and Operations line item, and the Transportation Revenue Anticipation Notes line item. The Department's unspent appropriations are automatically rolled forward for future use at the end of each fiscal year.

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# Transportation Project and Cash Management

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## Project Information Management

As described earlier, the Department of Transportation had revenues in excess of \$1.1 billion in Fiscal Year 2002. These revenues are used to fund various construction and maintenance projects. The Department reports that it currently has about 1,450 active projects. An important factor in managing the Department's revenues, expenditures, and cash balances is its ability to forecast cash inflows and outflows. To accurately predict cash needs, the Department must be able to track critical project information such as project budgets, schedules of expenditures, start and end dates, and project changes. In our February 2000 audit, we found that the Department lacked the necessary systems for managing projects and needed to improve cash management practices to address increasing cash balances. During our current audit, we found that problems with internal information systems continue to limit the Department's ability to track upcoming project expenditures and match these with incoming cash resources, and we determined that the level of cash balances had not been addressed. With respect to information systems and project management, the specific problems we noted include:

- **Basic project information is not easily accessed to manage projects.** Obtaining basic project management information, which should be routinely used to monitor projects, required special database inquiries. The Department was not readily able to provide information such as project budgets, expenditures, encumbrances, or start and end dates, by fiscal year. Additionally, the Department does not currently have a means of forecasting project expenditures by month or by year and comparing that information to estimated cash inflows.
- **Manual systems create duplicative efforts.** Currently Department staff must data enter project information such as project budgets and encumbrances into several systems, including COFRS, STIP/ProMIS (the Department's project information management system), and the Federal Management Information System (FMIS). In other words, these systems are not electronically linked. As a result, Department staff must individually change project budgets or encumber project funds within each of the different systems. This causes duplicative data entry of project information. Duplicative data entry increases the risk of errors,

creates the need to reconcile the different data systems, and results in timing differences between the systems. It is important to have consistent data across systems for decision-making purposes.

- **Data systems are not well documented.** According to Department staff, there is currently no system documentation showing what types of data are collected by its various information systems. This puts the Department at risk of losing institutional knowledge of its systems as individuals familiar with the system design leave employment. Department staff stated that they are in the process of documenting this system in order to begin development of a new system, as discussed below.

Similar problems with the availability and use of project information were noted during audits in 1996, 1997, and 2000. Since the early 1980s the Department has been developing, testing, and piloting various preconstruction project scheduling and tracking systems. However, the Department still does not have the capability of matching project milestones with budget and cash flow information, and its revenues have grown substantially over the years. Department staff realize that there are significant data issues and estimate that there are currently over 50 different information subsystems in use. These subsystems do not work well together and contain inconsistent information. Department staff state that they are currently in the process of standardizing Departmental data and plan to develop a single system that interfaces directly with COFRS and tracks projects from all perspectives. The Department's goal is that the new system would have the ability to forecast cash inflows and outflows and aid the Department in making more informed cash and project management decisions.

Other states have project management and cash management systems in place that could provide a model for Colorado. For example, the state of Texas has a project management system that predicts 10 years of future cash flows based on revenue estimates and current project commitments. Texas uses its cash forecasting system to manage cash balances based on a target for the lowest ending cash balance on any given day. Using this system, Texas was able to manage a budget of over \$5 billion in Fiscal Year 2001 with end-of-year cash balances of around \$440 million. In addition to having comprehensive project and cash management systems, Texas is not required to encumber the full amount of funds for a project in the first year, but rather develops project plans on the basis of using future revenues to make contractor payments. As discussed in the next section, in Colorado the use of a segmented encumbrance approach is much more limited. While Colorado may have some additional opportunities to use incremental encumbering, this approach requires that the Department have in place a more integrated and sophisticated system that compares project budgets and cash needs to incoming revenue streams over time. This should enable the Department to use its cash more efficiently.

While every state's situation is unique, the Texas system or other, similar systems could provide the Department with a model for developing a system that can perform project and cash management in a more comprehensive manner and better assist the Department in its planning processes.

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### **Recommendation No. 1:**

The Department of Transportation should work to improve data accuracy and to develop information systems that facilitate systemwide decision making by providing basic project information, as well as tools the Department and Commission can use to accurately predict project expenditures and manage cash inflows and outflows. The Department should take steps including, but not limited to:

- a. Obtaining feedback from Department staff, the Regional Transportation Districts, Transportation Commission, and members of the General Assembly on what types of data are needed, in what format, and how frequently.
- b. Reviewing information systems used to track critical transportation project information in other states and evaluate such systems for possible use in Colorado.
- c. Developing clear and concise objectives related to what the new system will accomplish and the functions and format of the new system.
- d. Developing time lines for system planning, design, and implementation.
- e. Ensuring that data collection systems are documented and that multiple staff are able to access the data.

### **Department of Transportation Response:**

Agree. While it is true that CDOT does not have a financial system with the capability of accurately predicting expenditures and revenue projections, we have developed several systems that are utilized to aid management and project personnel in making informed decisions. CDOT has worked consistently to enhance our information systems and management.

The Department has begun a rigorous exercise in examining data integrity and validation, as well as documenting all data collection and dissemination mechanisms (part e). This is the first step in moving forward with a new financial

system. Long range plans for this effort are under development, and will incorporate the suggestions given here (parts a-d).

Preliminary implementation planned for July 1, 2003 with full implementation by January 1, 2004.

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## Cash Balances

In the February 2000 audit, the Department recognized the potential for lost construction opportunities resulting from inadequate cash management. In Fiscal Year 1999 the Department's cash balances averaged about \$275 million per month and did not drop below \$200 million. In Fiscal Year 2002 the Department's cash balances averaged \$316 million per month and did not drop below \$225 million (not including the TRANs bond cash invested at Wells Fargo).

As shown in Table 3, increased funding between Fiscal Years 1998 and 2002 has allowed the Department to increase average monthly expenditures from \$63.5 million per month in Fiscal Year 1998 to \$103.3 million per month in Fiscal Year 2002. Revenues over the five-year period totaled \$6.2 billion, while expenditures over the five-year period totaled \$5 billion.

**Table 3: State Highway Fund and Cash Invested with the Trustee  
Revenues, Expenditures, and Cash Balances  
State Fiscal Years 1998 - 2002  
(In Millions)**

	FY 1998	FY 1999	Percent Change From Prior Year	FY 2000	Percent Change From Prior Year	FY 2001	Percent Change From Prior Year	FY 2002	Percent Change From Prior Year
<b>Revenues<sup>1</sup></b>	\$891.4	\$983.9	10.4%	\$1,052.5	7.0%	\$1,032.2	-1.9% <sup>2</sup>	\$875.7	-15.2% <sup>3</sup>
<b>TRANs Proceeds</b>	N/A	N/A	—	\$538.9	—	\$581.8	8.0%	\$264.2	-54.6%
<b>Expenditures</b>	\$762.3	\$911.8	19.6%	\$992.7	8.9%	\$1,134.4	14.3%	\$1,239.6 <sup>4</sup>	9.3%
<b>Average Monthly Expenditures</b>	\$63.5	\$76.0	19.7%	\$82.7	8.8%	\$94.5	14.3%	\$103.3	9.3%
<b>Operating Cash<sup>5</sup></b>	\$269.4	\$336.2	24.8%	\$341.7	1.6%	\$420.7	23.1%	\$358.0	-14.9%
<b>TRANs Cash Balances</b>	N/A	N/A	—	\$538.9	—	\$1,019.2	89.1%	\$911.7	-10.5%

**Source:** Office of the State Auditor's analysis of COFRS Financial Data Warehouse five-year reports.

<sup>1</sup> For additional detail on the changes in funding by revenue source, see Table 2 in the Background chapter.

<sup>2</sup> Decrease is mainly attributable to a decrease in federal funds between Fiscal Years 2000 and 2001. Note that the amount of federal funds available to the Department did not actually decrease in Fiscal Year 2001, but rather the amount of federal expenditures that the Department requested for reimbursement from FHWA decreased in Fiscal Year 2001.

<sup>3</sup> Decrease is mainly attributable to the reduction of Senate Bill 97-1 transfers between Fiscal Year 2001 and 2002.

<sup>4</sup> Of this amount, \$485.7 million in expenditures for Infrastructure Work in Process was reclassified to assets on the State's financial statements for Fiscal Year 2002, in accordance with new financial reporting requirements.

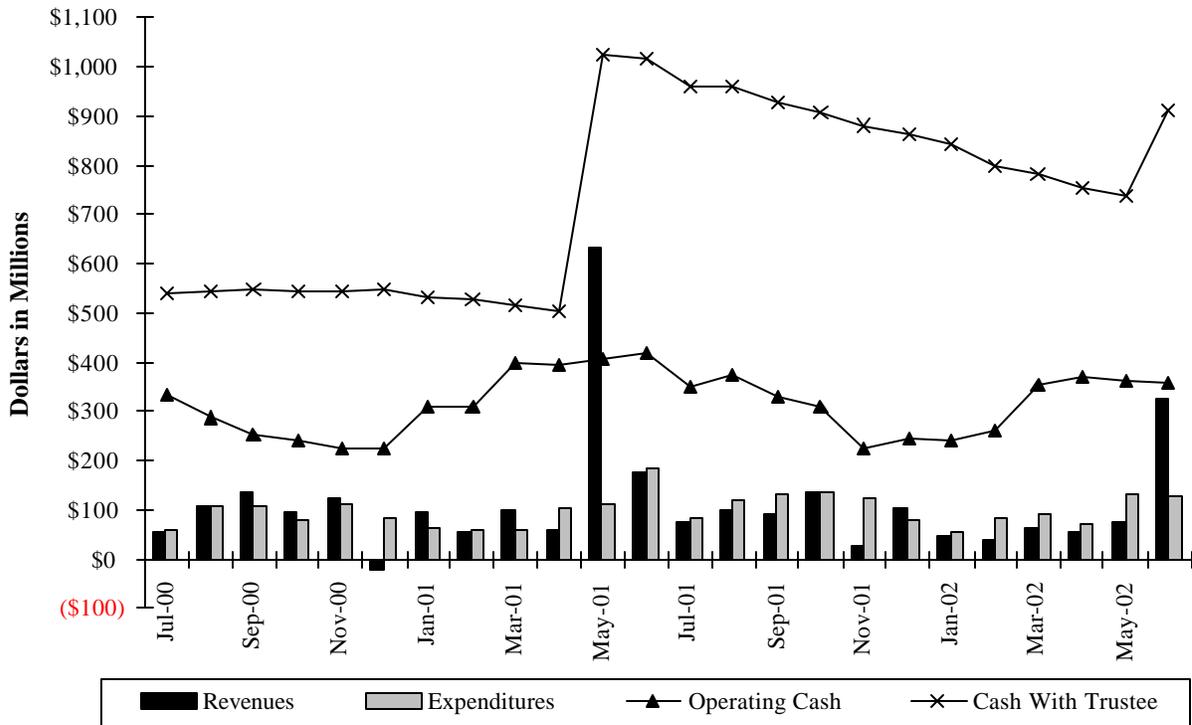
<sup>5</sup> Net of warrants payable at the end of the fiscal year.

As shown in the table, cash balances have built up over the past five fiscal years from approximately \$269 million at to \$358 million at year end (or \$1.3 billion if TRANs bond cash is included).

Table 4 shows that total expenditures in Fiscal Years 2001 and 2002 did not exceed \$186 million in any given month, while the lowest monthly operating cash balance for the State Highway Fund was \$225 million, excluding TRANs bond cash held by the trustee. Our analysis indicates that the Department's cash balances have not dropped below \$200 million since December 1997, and its end-of-year cash balances have grown by about 33 percent since Fiscal Year 1998 (not including the TRANs cash). Due to the long-term

nature of construction projects, cash balances can be expected to build up under the full encumbrance process and then be depleted, once the project has been finished and

**Table 4: Monthly Cash Balances, Revenues, and Expenditures  
Fiscal Years 2001 and 2002**



**Source:** Office of the State Auditor Analysis of COFRS data.

**Note:** Revenue spikes are related to the 2001 and 2002 issuances of TRANs bonds.

encumbered funds have been spent. The fact that the Department’s cash balances have remained above \$200 million for the last five years raises questions about whether cash is being used in the most efficient manner.

As a result of the February 2000 audit, the Department stated that after it determined a reasonable amount of cash to be maintained on hand, it would make recommendations to the Transportation Commission on how to stabilize operating cash balances at the desired level. The Department has not yet made any such recommendations. The Department reports that it conducted a study of best practices in 2000 and determined a cash reserve balance adequate to cover two months of expenditures could be used as a reasonable target for its cash balance. In Fiscal Year 2002 the Department's average monthly

expenditures were \$103 million. Based on the Department's study, a reasonable target level of operating cash for Fiscal Year 2002 would have been around \$206 million.

It is not uncommon to use a monthly reserve threshold as part of an entity's cash management practice. The Department's proposed use of a monthly average method provides a starting point for analyzing cash balances. However, there is no substitute for a good cash and project management system. The Department must analyze cash on hand, develop systems for forecasting revenues, and then match project outlays to available cash. This is essential for ensuring an appropriate balance between speeding up much needed transportation projects and maintaining adequate availability of funds.

In addition to developing a system for project and cash management, changes in contracting and encumbrance methods could assist the Department with using its cash more efficiently.

## **Contract Encumbrance Practices**

The level of the Department's cash balances are affected by its current contract encumbrance practices. The Department typically uses fixed-unit price contracts that span anywhere from a few months to five years in length. Many projects span multiple fiscal year periods. A contract is executed for the total amount the State will pay for a given construction project, and as a result, the State Controller's Office requires the Department to encumber the total amount of the contract in the year in which the contract is awarded. This process results in setting aside current year revenues to meet expenditures that will not occur for one or more years in the future, thus creating the buildup of cash balances.

In some instances, the State Controller's Office allows agencies to divide contracts into a series of distinct tasks or projects. Task order contracts segment construction projects into smaller tasks, allowing each task to be encumbered separately. According to the Controller's Office, each task in a task order contract should have stand-alone value, i.e., each task should add value independent of future tasks. Task order contracts allow current revenues to be more closely matched with current expenditures, resulting in a more efficient use of funding. The use of segmented encumbrances could allow the Department to free up spending authority which would otherwise be reserved under full encumbering, thus enabling the Department to start additional construction projects.

During the 2000 audit, the Department stated that it was planning to use task order contracting for projects of \$25 million or more. Currently 24 of the approximately 1,450 total active projects are budgeted at \$25 million or more. These 24 projects have budgets totaling nearly \$886 million (excluding T-REX). Although Department staff report that they

use task order contracts frequently for project design and resurfacing contracts, the Department reports that it has two task order contracts in place for construction projects: one for the T-REX project and one for the North I-25 project. The T-REX project is currently budgeted at about \$795 million and the I-25 North project is budgeted at nearly \$685 million (prior to the recent cuts in Senate Bill 97-1 funding). The Department has not been routinely evaluating larger construction projects to determine whether a task order is an appropriate contracting tool. Our evaluation of project expenditure data for 7<sup>th</sup> Pot projects that were started in Fiscal Year 2001 showed that on average, about 29 percent of the project budget is spent in the first year. If discrete, add-value projects could be started simultaneously, the Department could speed up the completion of projects. Cumulatively, the spending authority freed up as a result of task order contracts could equate to beginning several smaller projects earlier. It should be noted that the more expensive a planned construction project, the greater the potential benefits of using task orders, since comparatively more spending authority is freed up for alternative uses.

There is recognition at the federal level that encumbering the full amount of federal funding for a project limits the number of construction projects that can be started in any given year. FHWA allows obligation (similar to encumbrance) of federal highway monies through a process called "partial conversion of advance construction." Partial conversion of advance construction is a cash flow technique that permits obligations to be staged over time such that they reflect the multi-year pattern of actual expenditures. This process allows states to encumber or set aside federal spending authority for projects incrementally, rather than requiring the states to set aside the entire amount of the project's budget at the beginning of the project. FHWA recognizes that obligating the full amount of a project in the initial year requires states to defer other important projects until spending authority becomes available. As FHWA has acknowledged, "expediting project construction generates real economic returns to highway users and other project beneficiaries." One such economic return includes avoidance of inflation costs, which can be particularly significant in the case of highway projects.

While the value of speeding up projects is clear, the Department must overcome internal and external constraints that limit the Department's ability to begin more projects consecutively. Internal constraints include the Department's ability to get a sufficient number projects designed and ready for bid and the resources available to manage and oversee contracts. External constraints include the number of contractors able to do the work and the ability to obtain right of ways, among others. Department staff believe that contractors build a premium into task order contracts because of the uncertainty of future funding.

For task order contracting to be successful, the Department must implement the processes discussed in Recommendation No. 1 to improve the availability of project data and be

better able to predict cash inflows and outflows. As noted earlier, the Department has relatively predictable revenue streams in its HUTF and federal funding and should, with appropriate forecasting tools, be able to reasonably forecast income. Without appropriate management of project expenditures and cash, the Department could risk over-committing future years' resources. With appropriate cash and project management systems in place and the use of task orders, the Department may be able to speed up projects.

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## **Recommendation No. 2:**

The Department of Transportation should improve utilization of cash flows and reduce operating cash balances by:

- a. Developing criteria for evaluating projects for possible task order contracting.
- b. Implementing formal procedures for evaluating projects for possible task order contracting.
- c. For projects meeting the evaluation criteria, increasing the use of task order contracting to better match current cash inflows with current project expenditures and thereby reduce cash balances.

## **Department of Transportation Response:**

Partially agree. All business management factors that affect the Department and the industry as a whole will be used to determine proper utilization of cash management. Implementation of this recommendation will be an ongoing process.

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## **Senate Bill 97-1 Reductions**

As discussed previously, Senate Bill 97-1 authorized transfers of roughly 10 percent of state sales and use tax revenues to the HUTF for transportation purposes. In order for the Senate Bill 97-1 transfer to be available, the State first must have enough revenues in the General Fund to meet its general fund appropriations for that year as well as to fulfill the statutory general fund reserve requirement. If these tests are not met, the Department of Transportation will not receive any Senate Bill 97-1 transfers. According to Section 43-4-206, C.R.S., Senate Bill 97-1 transfers are to be used for the 28 Statewide Strategic (7<sup>th</sup> Pot) projects. It should be noted that while the Department has designated 28 strategic

projects, a strategic project may comprise smaller individual projects. In Fiscal Year 2002 the Department received only a portion of its total estimated Senate Bill 97-1 transfer (\$35.2 million of an estimated \$212.3 million). The Department does not currently forecast receipt of any Senate Bill 97-1 funds until Fiscal Year 2006. Several concerns were raised as a result of the Senate Bill 97-1 funding cuts, including:

- Why were Departmental cutbacks not equivalent to the amount of Senate Bill 97-1 funds lost?
- Has the loss of the Senate Bill 97-1 funds resulted in increased scrutiny of the TRANs and future TRANs offerings by bonding companies?
- What is the Transportation Commission's flexibility in absorbing reductions in 7<sup>th</sup> Pot funding sources?

The results of our review of information from the Department regarding these questions are discussed below.

## Departmental Funding Cuts

Due to the \$177.1 million shortfall in Senate Bill 97-1 funding in Fiscal Year 2002, the Department made budgetary cuts of \$161.7 million and supplemented the remaining funding shortage by reallocating \$15.4 million in TRANs bond proceeds to Fiscal Year 2002 (rather than Fiscal Year 2003). Below is a summary of these budgetary adjustments.

<b>Table 5: Department of Transportation FY02 Senate Bill 97-1 Budgetary Adjustments by Program Area (In Millions)</b>	
<b>Program Area</b>	<b>Amount of Reduction</b>
<b>7<sup>th</sup> Pot</b>	\$147.3
<b>Other Regional Priorities Program</b>	\$13.4
<b>Savings in Noise Barrier Program</b>	\$1.0
<b>TRANs Bond Proceeds Forwarded to FY02</b>	\$15.4
<b>Total Reductions</b>	\$177.1
<b>Source:</b> Department of Transportation, Office of Finance, Management, and Budget.	

The cuts to the 7<sup>th</sup> Pot involve delaying seven distinct projects and some miscellaneous funding adjustments, totaling \$147.3 million. A list of the 7<sup>th</sup> Pot projects delayed include:

<b>Table 6: Department of Transportation 7<sup>th</sup> Pot Projects Delayed Due to Reductions in Senate Bill 97-1 Transfers Fiscal Year 2002 (In Millions)</b>	
<b>Project</b>	<b>Amount Delayed</b>
US 50, Grand Junction to Delta	\$12.9
US 160, Wolf Creek Pass	\$12.0
US 287, Broomfield to Loveland	\$43.2
Powers Blvd in Colorado Springs	\$29.1
I-70 MIS: DIA to Eagle County Airport	\$6.1
I-25 South Corridor MIS: Denver to C Springs	\$29.3
I-25 North Corridor MIS: Denver to Fort Collins	\$20.4
<b>Total Project Cuts</b>	<b>\$153.0</b>
Other Funding Adjustments <sup>1</sup>	(\$5.7)
<b>Net Cuts to 7<sup>th</sup> Pot</b>	<b>\$147.3</b>
<b>Source:</b> Department of Transportation, Office of Finance, Management, and Budget.	
<sup>1</sup> Other funding reductions, including refining of cost estimates and reductions in bonding costs totaled \$5.7 million, thereby reducing the total impact on the 7 <sup>th</sup> Pot.	

With respect to the other budgetary adjustments, the \$13.4 million cut to the Other Regional Priorities Program involved delaying 12 different projects in the six Regional Transportation Districts. Delays totaled between \$1.3 million and \$3 million per region. The \$1 million reduction to the Noise Barrier Program was achieved because that program was completed under budget. The projects that were affected by reallocating \$15.4 million in TRANS bond proceeds from Fiscal Year 2003 to Fiscal Year 2002 were not specifically identified.

## Bond Ratings

Legislative concern also arose regarding the impact on future bond ratings of losing the Senate Bill 97-1 funding for several years, as currently predicted. Our review indicates that the ratings for subsequent bond offerings were not affected. There have been two bond offerings since the cessation of Senate Bill 97-1 transfers, one of which was an advance bond refunding. Both offerings received the same bond ratings as the previous two in Fiscal Year 2000 and Fiscal Year 2001. All TRANs bonds issued thus far are rated as high-grade, high-quality bonds. Discussions with Department staff and bond analysts at Moody's, Fitch, and Standard and Poors indicate that the Department has sufficient flexibility within its budget to meet the State's share of future debt repayments even without Senate Bill 97-1 funding. The Department can pay its share of the debt service with any type of state funding available. The highest debt service payment in any given year is \$152 million, half of which must come from state sources. In Fiscal Year 2002 the State Highway Fund received over \$400 million in state taxes on motor fuel and various fees. In addition, the Department is nearing its statutory limitations for TRANs bond issuances (\$1.7 billion in bond principal and \$2.3 billion in total bond repayment), and tentatively plans its last issuance of approximately \$200 million for July 2003. After this issuance, the Department will have issued all debt allowable by statute.

## Future Projects

As with any other type of funding loss, loss of Senate Bill 97-1 funds will impact the Department's ability to start additional transportation projects, both in the 7<sup>th</sup> Pot and in Other Regional Programs, because other funds will have to be redirected to debt service payments.

The Department has provided planning documents to the Transportation Commission showing that cuts of \$919 million in Senate Bill 97-1 funds between Fiscal Years 2002 and 2006 will result in \$4.9 billion in 7<sup>th</sup> Pot projects being delayed until sometime in the future. More information on 7<sup>th</sup> Pot projects can be found in Appendix A. In November 2001, after it was apparent that Senate Bill 97-1 funds would continue not to be available for some period, the Department changed the method it uses to schedule projects in future years. Prior to November, the Department had scheduled some projects through Fiscal Year 2020; however, the new planning documents no longer schedule projects past Fiscal Year 2005. The Department does, however, continue to forecast revenues beyond 2005. Department staff state that the planning document methodology changed because it is too difficult to estimate, so far in the future, which projects will be the first priorities for the Transportation Commission, or when funds will become available. Putting projects on the plan often makes interested parties believe that a particular project has been scheduled.

While these are valid concerns, the Department's change of planning processes makes it appear as though the loss of the Senate Bill 97-1 transfers for five years will result in \$4.9 billion in projects that will not be completed. In reality the Department has not included these projects on its planning schedules until additional funding is available and priorities for various projects can be redetermined. According to the Department, the Transportation Commission decided to remove all 7<sup>th</sup> Pot projects not currently in process from the planning schedule until Senate Bill 97-1 transfers resume. In addition, the Department reports that it must undergo a federally-mandated planning process to obtain public input in order to determine the priorities for future projects.

The completion of transportation projects has been a high priority for the State. As the Department completes the public input process, information on priorities should become available for future projects. As noted earlier, the Department reports that it is in the process of improving the quality of its data and developing a better system for project and cash management and predicting cash flows. These two factors—the results of the public input process and an improved system for managing cash flows—should enable the Department to provide decision makers with comprehensive information on the timing and costs of future projects. This information is of particular interest with respect to the \$4.9 billion in projects that are no longer shown on the 7<sup>th</sup> Pot planning schedule, as well as with respect to the impact of the loss of an estimated \$919 million in Senate Bill 97-1 funding. Because of the importance of transportation projects to decision makers and citizens, we believe the Department should develop specific time lines for completing revisions to the 7<sup>th</sup> Pot planning schedule.

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### **Recommendation No. 3:**

The Department of Transportation should establish time lines for the completion of the public input process, the implementation of the cash and project management system discussed in Recommendation No. 1, and the development of a revised 7<sup>th</sup> Pot planning schedule.

### **Department of Transportation Response:**

Agree. The Department is actually in the process of developing this time line. In November, the Transportation Commission discussed a plan of action. The Commission considered new revenue projections for Senate Bill 97-1, and decided on a scenario that it felt was appropriate. The Commission has begun consideration of bonding scenarios, and will hopefully decide whether it is advisable to issue the final debt allowable under the TRANs legislation. Once this

is completed, the Department will have revenue projections with which to begin the public involvement process necessary to move forward. This is a twofold process. The Department will have to coordinate a simplified planning process for the new vision of the 7<sup>th</sup> Pot Program. This process is abbreviated slightly, as the projects have already been selected in previous years. The Department must collect status on each project and coordinate with the regions and local agencies affected on which projects will be moved forward first. The more complex portion of the program, the Other Regional Priorities, will take from 3 to 9 months to complete the process, depending upon the area. This process is coordinated by the Department, but in many areas, it is limited by procedures dictated by federally mandated planning organizations. For this reason, we anticipate that the entire planning process should be completed, and a newly amended STIP will be in place within the following time lines:

7<sup>th</sup> Pot Program: February 2003

Other Regional Priorities Programs for Regions utilizing Transportation Planning Regions for their planning process\*: April 2003

Other Regional Priorities Programs for Regions utilizing Metropolitan Planning Organizations for their planning process\*: September 2003

\* Which type of planning organization a Region uses is determined by federal regulations, and based upon criteria such as population and air quality.

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# Appendices

Department of Transportation							
Unaudited Budget and Funding Information for the 7th Pot							
7th Pot Project #	Project Description	Region	Constant Dollar Budget As of November 2000 (Uninflated) <sup>1</sup>	Project Budget Prior to Loss of SB 97-1 Funds and 2002 Bond Issuance As of September 2001 <sup>2,3</sup>	Amount Funded As of October 16, 2002 <sup>4,5</sup>	Project Complete or Fully Funded	Delayed Due to Reductions in SB 97-1 Transfers
SP4001	I-25 / SH 50 / SH 47 Interchange	2	\$69,249,000	\$69,249,000	\$81,256,244	✓	
SP4002	I-25, S. Academy to Briargate	2	\$344,004,000	\$409,864,000	\$233,846,821		✓
SP4003	I-25 / US 36 / SH 270	6	\$146,448,000	\$162,447,000	\$129,751,786		✓
SP4004	I-225 and Parker Phase II	6	\$86,126,000	\$92,812,000	\$103,775,233	✓	
SP4005	I-76 / 120 TH Ave.	6	\$43,452,000	\$45,623,000	\$49,085,369	✓	
SP4006	I-70 / I-25 Mousetrap Reconstruction	6	\$106,119,000	\$108,313,000	\$121,126,725	✓	
SP4007	I-25, Owl Canyon Rd to Wyoming #92018	4	\$29,861,000	\$29,861,000	\$30,931,458	✓	
SP4008	East I-70, Tower Rd. to Kansas	1	\$124,388,000	\$130,792,000	\$133,499,609	✓	
SP4009	North I-25, SH 7 to SH 66	4	\$81,490,000	\$89,402,000	\$106,852,358	✓	
SP4010	US 50, Grand Junction to Delta	3	\$72,199,000	\$82,725,000	\$66,466,613		
SP4011	US 285, Goddard Ranch Ct. to Foxton Rd.	1	\$63,137,000	\$66,059,000	\$67,051,232	✓	
SP4012	South US 287, Campo to Hugo	1,2	\$184,417,000	\$237,019,000	\$104,486,313		✓
SP4013	US 160, Wolf Creek Pass	5	\$68,359,000	\$84,409,000	\$45,647,107		✓
SP4014	US 40, Berthoud Pass	1	\$74,838,000	\$86,665,000	\$57,243,533		✓
SP4015	SH 550, New Mexico State Line	5	\$48,819,000	\$58,170,000	\$26,306,235		✓
SP4016	SH 160, Jct SH 3 to Florida River	5	\$60,069,000	\$72,932,000	\$31,146,364		✓
SP4017	C-470 Extension	6	\$18,810,000	\$18,810,000	\$20,248,431	✓	
SP4018	US 34, I-25 to US 85 Greeley Bypass SH 257 to 71st St #11202	4	\$15,761,000	\$15,761,000	\$17,503,281	✓	
SP4019	US 287 Broomfield to Loveland	4	\$92,378,000	\$101,312,000	\$115,154,583	✓	
SP4020	Powers Blvd. in Colorado Springs	2	\$220,219,000	\$352,719,000	\$95,562,002		✓
SP4021	SH 82, Basalt to Aspen	3	\$198,655,000	\$208,034,000	\$249,975,154	✓	
SP4022	Santa Fe Corridor in Denver	6	\$15,641,000	\$15,641,000	\$45,898,051	✓	
SP4023	Southeast, East, West Corridor Denver	HQ	\$649,583,000	\$794,996,000	\$669,200,288		
SP 4024/4025	East & West Corridor MIS's		\$148,000,000	\$562,705,000	N/A <sup>6</sup>		✓
SP4026	I-70 West Corridor	1,3	\$1,100,350,000	\$3,658,232,000	\$63,532,280		✓
SP4027	South I25 Corridor	1,2	\$369,150,000	\$601,138,000	\$148,082,188		✓
SP4028	North I25 Corridor	4	\$303,912,000	\$684,869,000	\$73,131,718		✓
<b>TOTAL</b>			<b>\$4,735,434,000</b>	<b>\$8,840,559,000</b>	<b>\$2,886,760,976</b>		

Source: Data provided by the Department of Transportation's Office of Financial Management and Budget

<sup>1</sup> Constant dollar budget is the Department's original estimate for the corridor project, without any inflation. This represents the Department's estimate of what the costs would have been if each project could have been bid at that time.

<sup>2</sup> Project budget prior to loss of SB 97-1 funding and 2002 bond issuance represents the Department's estimates for project budgets, in inflated dollars under the assumption that the Department would be receiving Senate Bill 97-1 funds in all future fiscal years.

<sup>3</sup> Although the Department has project budget estimates after Senate Bill 97-1 cuts were made, those estimates do not provide reasonable information for comparison. This is because, as discussed in Recommendation No. 3, the Department removed a number of projects from the schedule, until a new plan can be developed for delayed projects. This results in some projects being inflated for a period of 15 years, which will likely not happen once the Department again receives Senate Bill 97-1 transfers.

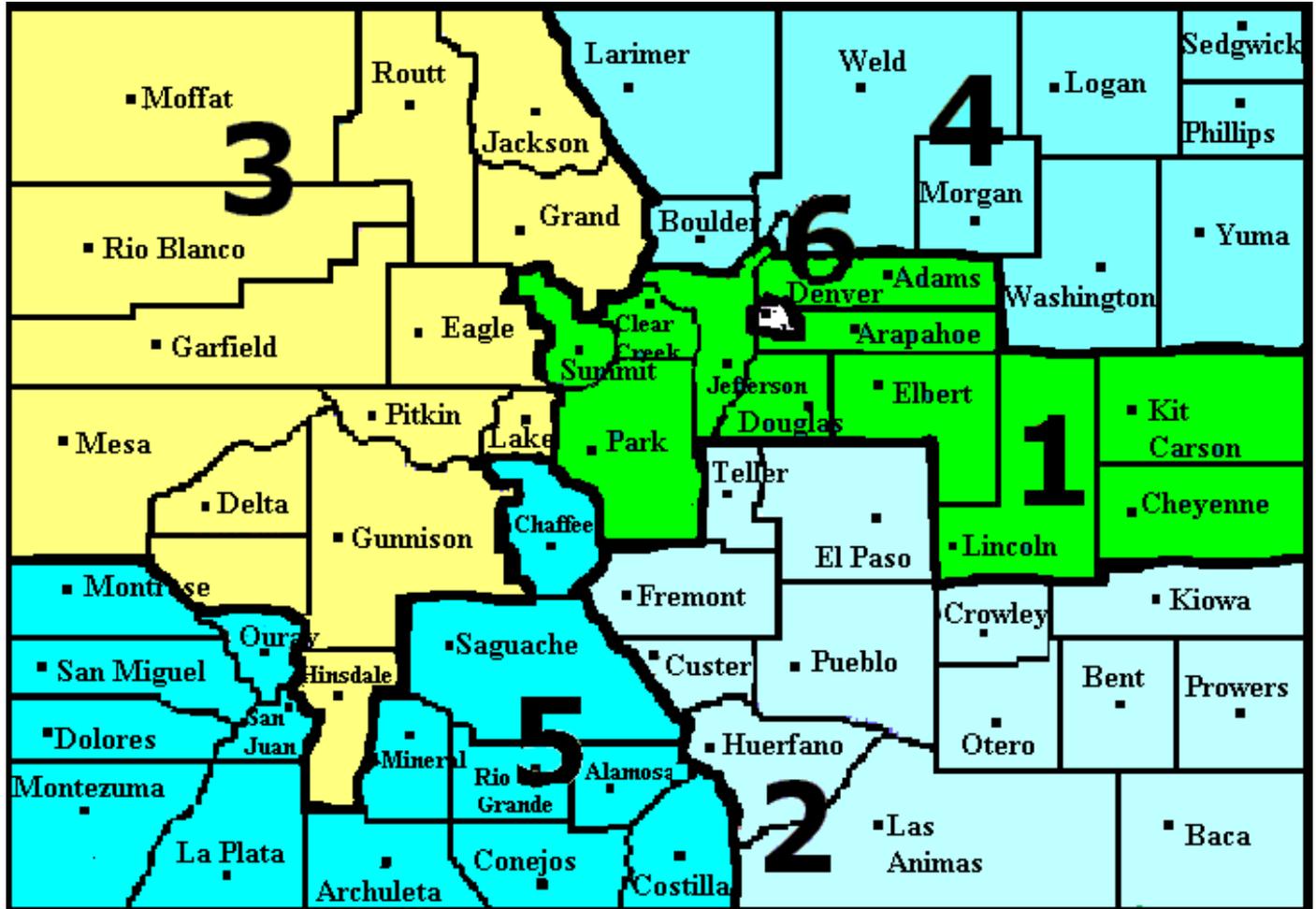
<sup>4</sup> Current amount budgeted in ProMIS is the amount shown in the Department's Project Information Management system for each project. Note that each of the 28 strategic projects is made up of multiple sub-projects, some of which have been funded, and others that have been delayed. With the exception of TREX (SP 4023) and North I-25 (SP 4028), project budgets listed are the amounts currently funded (or for which funds have already been encumbered). For TREX and the North I-25 Corridor, the Department is doing incremental encumbrances because it is using task order contracts.

<sup>5</sup> Some projects listed here actually began prior to when the 7th Pot Program was started, in 1998. Additionally, some projects have funds included that are not part of the 7th Pot funding allocations, but rather are funds from local sources for improvements on projects already under construction. Under both circumstances, the projects would not have funding included in the original 7th Pot budget estimates.

<sup>6</sup> There is not currently any amount budgeted in ProMIS for project numbers SP 4024 or 4025 because the Department does not know when it may begin these projects and budgetary estimates could significantly change.

Appendix B

Map of Six Transportation Regions



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