DATE: August 16, 2017
TO: Colorado Transportation Commission
FROM: Joshua Laipply, Chief Engineer
Debra Perkins-Smith, Division of Transportation Development Director
William Johnson, Performance and Asset Management Branch Manager
SUBJECT: Asset Management Planning Budget Recommendation for FY2020-21

<u>Purpose</u>
This memorandum summarizes the FY2020-21 Planning Budget for Transportation Asset Management (TAM) recommended by CDOT staff for consideration by the Transportation Commission (TC).

<u>Action</u>
Department staff seek TC approval of the FY2020-21 TAM Planning Budget, which includes budgets for individual assets that will be used to inform planning. The final TAM FY2020-21 budget will be adopted by the TC around September 2019, during CDOT's annual budget-setting process.

<u>Background</u>
In September 2012, the TC formed its Asset Management Committee (TC-AM), which operated until July 2015. This small group was created to focus discussion on asset management and to develop an asset management program at CDOT. The committee's initial priorities were to seek alternative surface-treatment analysis, to improve fleet-equipment management, and to develop a budget-tradeoff tool. The TC emphasized that asset management must be incorporated into CDOT's annual budget discussion. According to guidance from the January 2015 TC-AM Committee meeting, funds freed up by retirement of TransBond debt service will be allocated to asset management for planning purposes.

During the joint TC-AM and Statewide Plan TC Committee meeting in January 2015, performance metrics and targets for CDOT's 11 asset programs were approved by the TC-AM Committee. The full TC subsequently approved incorporating the asset-management performance metrics and targets into CDOT's Policy Directive 14 (PD-14).

The TC-AM Committee approved planning budget recommendations for FY2013-14 through FY2017-18. However, the committee was dissolved in July 2015. Starting with the FY2018-19 planning budget, the full TC has been providing guidance on, and/or concuring with, staff's planning budget recommendations.

CDOT's asset-management program focuses on asset preservation and replacement and does not fund projects that increase the capacity of Colorado's transportation system. To qualify for asset-management funding, individual asset programs must be able to demonstrate, with a quantified performance measure, the benefit of additional investment. To provide predictability to CDOT's Transportation Regions and to the construction stakeholders, Department staff will use the TAM planning budget to develop a rolling four-year program of projects, which will be published by CDOT's Chief Engineer.

Starting with the FY2013-14 planning budgets, staff recommendations for asset program allocations have been informed by CDOT's Asset Investment Management System (AIMS). AIMS is a modeling tool developed to forecast asset performance based on investment; to perform tradeoff analysis among multiple asset classes; and to perform cross-asset optimization. The process optimizes funding within (and between) asset classes to achieve the greatest possible return on investments.

Details

On March 17, 2017, CDOT staff met in a budget-setting workshop convened by Deputy Executive Director Mike Lewis. Staff reviewed the projected performance and needs for FY2021-21 Asset Management funding for CDOT's 11 asset classes. At the workshop, it was assumed that the total available planning budget would be $755M, comprising $588M of baseline budget and $167M from the retirement of TransBond debt service. By contrast, the total request from CDOT's asset managers was $923M.

Workshop participants included executive management, Regional Transportation Directors, region staff, asset managers and staff from the Division of Transportation Development, and the Division of Accounting and Finance. The group reviewed information presented by the Performance and Asset Management Branch Manager and asset managers, which included data on the funds needed to achieve performance targets. Participants also reviewed forecasted performance based on past planning budgets and asset program budget requests. (AIMS has the ability to analyze 10 asset classes—all assets except MLOS. Staff continue to refine analyses for future budget allocation processes.)

After all information was presented, participants provided their individual budget recommendations for each asset program. There was variation on staff recommended budgets for all asset programs due in large part to the $168M shortfall between funding requests and available funding. However, after two rounds of recommendations, there was little variation in the overall average of budget recommendations for asset classes.

Department staff requests that the TC concur with the staff recommendation for FY2020-21 TAM planning budgets, as detailed in Table 1. To provide context, Chart 1 shows the percentage of total FY2020-21 funds by asset class. Of note is the Colorado Bridge Enterprise, which receives a significant portion of funds allocated to asset programs, including the bulk of funds used for the overall bridge program. Finally, this information, presented to the TC in February 2016, provides a detailed description of CDOT's asset management program.

Table 1

FY14-FY21 Asset Management Planning Budgets							
	Final Budgets					Planning Budget		Recommendation
Asset Class	FY2013-14	FY2014-15	FY2015-16	FY2016-17**	FY2017-18	FY2018-19	FY2019-20	FY2020-21
Surface Treatment	$238.8	$235.2	$235.9	$252.1	$231.4	$225.4	$222.0	$223.2
Bridge, BE & Bridge Fixed Costs	$173.9	$168.2	$164.1	$163.2	$155.4	$142.5	$151.2	$155.3
MLOS	$249.0	$251.3	$254.4	$272.6	$263.5	$272.8	$265.7	$260.7
Buildings	$11.3	$20.8	$12.9	$21.4	$17.5	$20.2	$17.6	$18.1
Culverts	$11.5	$9.6	$8.2	$11.9	$9.1	$7.6	$7.5	$8.3
Tunnels	$7.4	$12.4	$5.2	$10.5	$6.4	$8.4	$10.3	$10.0
ITS*	$21.5	$27.6	$21.4	$24.5	$23.0	$23.5	$29.2	$24.9
Road Equipment	$20.9	$20.9	$18.4	$26.4	$23.0	$26.8	$22.1	$21.6
Geohazards	$9.0	$9.1	$9.2	$11.8	$8.5	$8.4	$9.7	$12.3
Walls	$0.0	$0.0	$2.4	$10.2	$4.6	$4.6	$5.1	$5.5
Traffic Signals	$0.0	$0.0	$5.7	$16.9	$12.6	$14.8	$14.6	$15.1
TOTAL	$743.3	$755.1	$738.0	$821.5	$755.0	$755.0	$755.0	$755.0

*ITS for FY20 includes $7M for salaries/pass-thrus

**Adjusted for budget increases per TC

Chart 1: FY2020-21 Recommendations—Asset Class Percent of Total
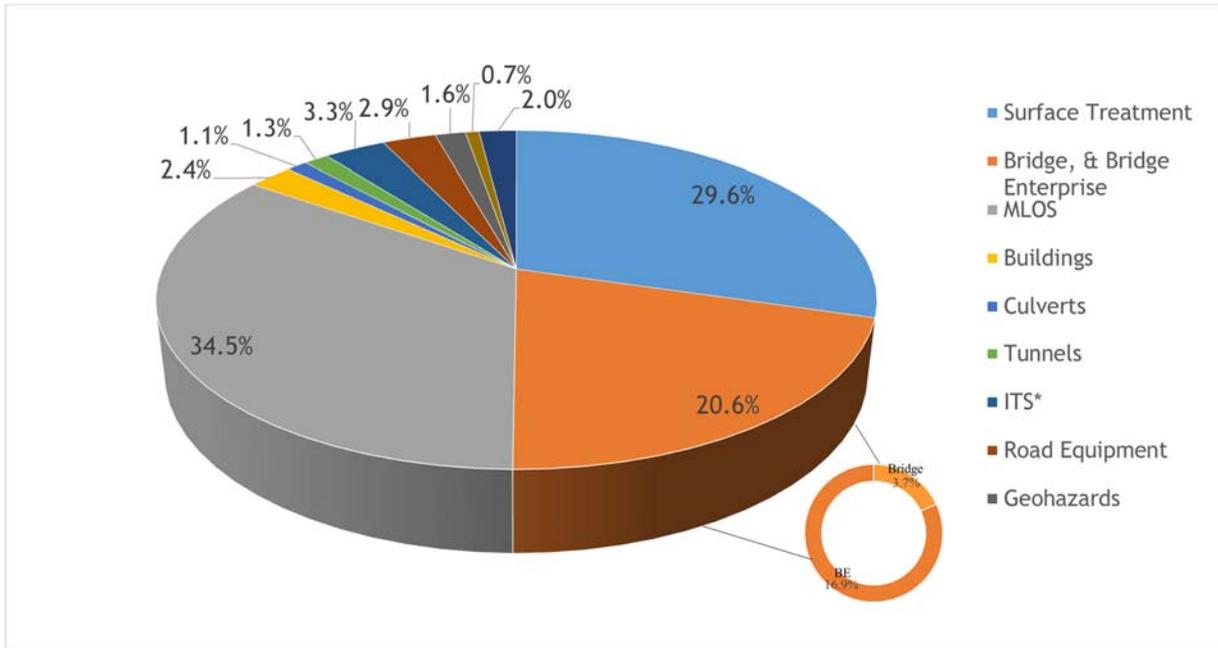
Next Steps

FY2020-21 Planning Budget:
- Should the TC approve the staff FY2020-21 planning budget recommendation, staff will use the asset budgets to continue planning and developing the next year of the rolling four-year Program of Projects.

PD-14 Report and Target Refinements:
- As part of the Department's annual budget-setting process with the TC, staff this month (August 2017) will present performance results for certain goal areas in PD-14. In September 2017, the PD-14 reporting will continue, with staff focusing on performance of CDOT's asset programs. Also at this time, staff and the TC will discuss any needed refinements to targets and metrics.

FY2018-19 Annual Budget for Asset Management:
- As part of CDOT's annual budget-setting process, the TC this fall will be asked to approve the Department's FY2018-19 budget, including the FY2018-19 TAM budget.