

Transportation Asset Management



Statewide Transportation Advisory Committee

September, 2013

CDOT

Agenda

- Asset Management Budgets
- Policy Directive 14 and Asset Management Allocations
- RAMP Asset Management Project Selection Process
- Next Steps



Asset Expenditures and FY14 Budget

Asset	Average Expenditures (5 yrs FY08-FY12)	OFMB Final FY14 Budget
Surface Treatment	\$ 151,642,821	\$ 150,690,472
Bridge + BE	\$ 122,617,281	\$ 140,734,197
MLOS	\$ 233,549,060	\$ 249,029,332
Fleet	\$ 19,089,855	\$ 14,191,591
ITS	\$ 12,247,977	\$ 11,185,068

Note: Historical expenditures from OFMB analysis, except Maintenance, which is based on SAP MLOS Region Report.

Source: FY14 Final Budget 4-18-13

Note: Bridge does not include bridge off system but does include debt service and bond proceeds

Note: Surface Treatment includes \$86M advancement

Note: ITS excludes new capital investment



Asset Expenditures and Draft Budget

Asset	Average Expenditures (5 Yrs FY08-FY12)	OFMB Final FY14 Budget
Rockfall	\$ 5,158,315	\$ 5,174,164
Buildings	\$ 9,080,862	\$ 6,948,491
Tunnels MPA	Included in MPA	\$ 7,486,970
Culverts (incl. in Bridge)	Included in Bridge	\$ 5,600,000
Walls (incl. in Bridge)	Included in Bridge	\$ 500,000

Source: FY14 Final Budget 4-18-13



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ormance Measure:



RAMP Criteria for Asset Management

Summary of Eligible Programs:

For an asset management program to be RAMP-eligible, it must:

1. Be able to **demonstrate** with a **quantified performance measure** the **benefit of additional investment**.
2. Have an **existing asset management system** that has, among other features, the ability to establish a performance target (e.g. maximize life cycle otherwise optimize performance) and at the same time minimize cost in achieving that performance target.
3. **Distinguish between annual maintenance activities and capital preservation, and replacement activities, and fund only capital preservation and replacement.** Crack filling and data gathering, for example, are not RAMP-eligible activities. Those should be addressed through the baseline budget setting process.
4. Be able to **expend its RAMP funding by the December following the fiscal year of advancement.** Fiscal Year 2014 RAMP must be spent by December 2014.



FY 14 Budget and RAMP

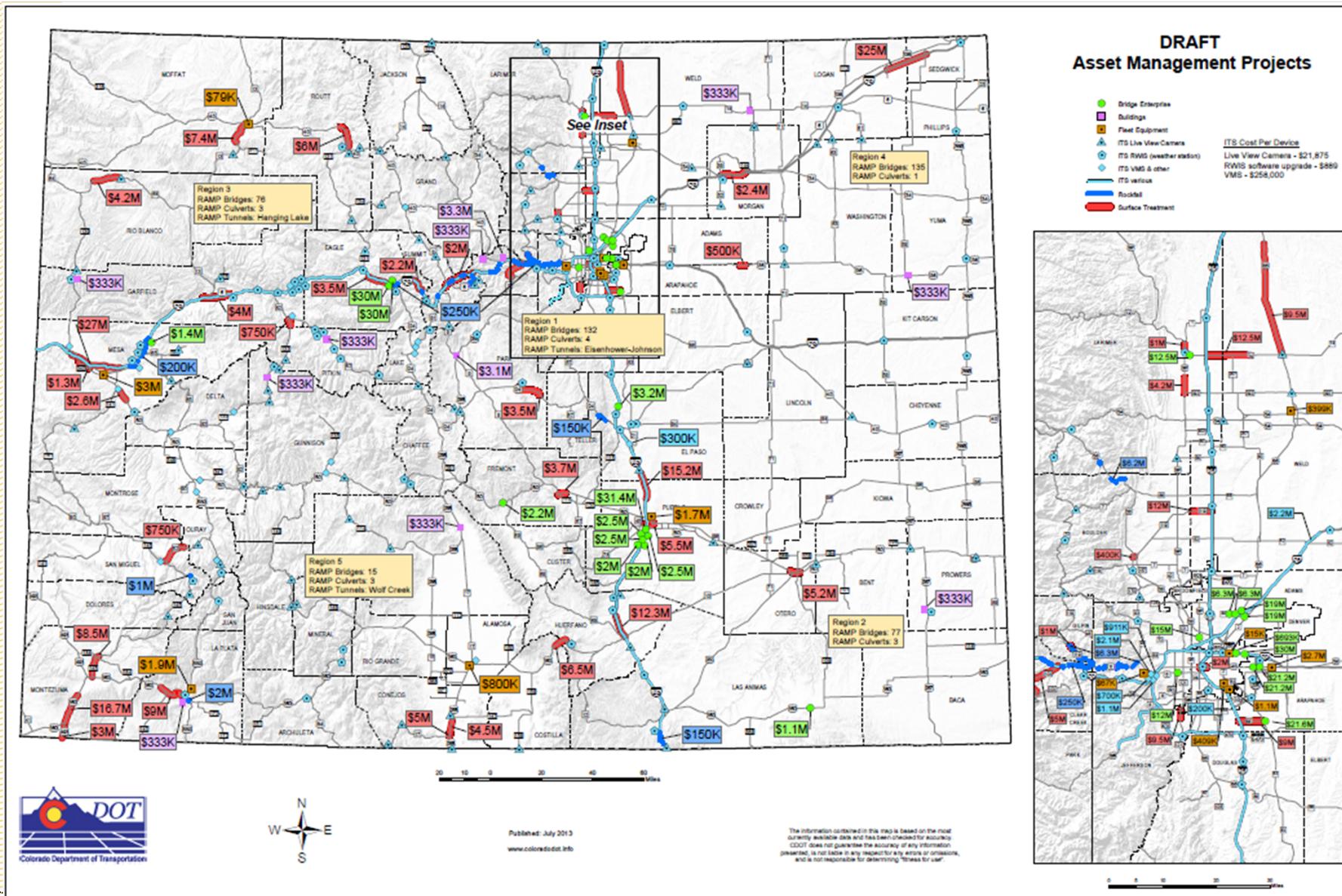
FY14 Budget with FY14 RAMP at \$160M:

	FY14 RAMP = \$160 Million		
<u>Asset:</u>	<u>FY14 Budget</u>	<u>FY14 RAMP</u>	<u>FY14 Budget + RAMP</u>
Surface Treatment	\$150.6	\$88.2	\$238.8
Structures			
Bridge & BE	\$140.6	\$33.3	\$173.9
Tunnels	\$0.0	\$7.4	\$7.4
Culverts	\$5.6	\$5.9	\$11.5
Walls	<i>\$0.5 incl. in Brdg</i>	<i>\$0.0</i>	<i>\$0.0</i>
MLOS	\$249.0	\$0.0	\$249.0
Fleet	\$14.1	\$6.8	\$20.9
ITS (excludes new capital)	\$11.2	\$10.3	\$21.5
Rockfall	\$5.2	\$3.8	\$9.0
Buildings	\$6.9	\$4.4	\$11.3
Total	\$583.2	\$159.9	\$743.1

- FY14 RAMP Dollars must be spent by December, 2014.



FY14 Budget and RAMP Asset Map



MICROSOFT EXCEL
Worksheet

Proposed TC Goals in Draft Policy Directive 14

- **Pavement:**

- Maintain pavement condition level of TBD High and Moderate Drivability Life for Interstates.
- Maintain pavement condition level of TBD High and Moderate Drivability Life for state highway NHS, excluding Interstates.
- Maintain pavement condition level of TBD High and Moderate Drivability Life on the total NHS. (Placeholder; to be revised after Federal guidance issued.)
- Maintain pavement condition level of TBD High and Moderate Drivability Life for state highway non-NHS roadways.
- Maintain pavement condition level of TBD High and Moderate Drivability Life for the state highway system.

- **Bridge:**

- Maintain the percent of NHS bridge total deck area that is not structurally deficient at or above 90%.
- Maintain the percent of NHS state highway bridge total deck area that is not structurally deficient at or above 90%.
- Maintain the percent of state highway total bridge deck area that is not structurally deficient at or above 90%.
- Meet bridge goals in the Risk-Based Asset Management Plan.

- **Maintenance:**

- Maintain an LOS B grade for snow and ice removal.
- Maintain an overall MLOS B- grade for the state highway system.



FY15 Asset Management Budget

- **FY 15 Budget and RAMP Assumption**
 - Assume \$583 M and \$165 M?
 - Staff workshop with Asset Managers and RTDs (Delphi)
 - Initial discussion with Transportation Commission

Present Information to STAC in October for input to TC

Future Budget Process informed by PD 14 and Asset Management Systems



Surface Treatment Project Selection

- Surface Treatment staff run Pavement Management System (PMS) using Drivability methodology for the entire CDOT network of pavements
- PMS recommends various treatments for highway segments based on segment condition, traffic based pavement category, and cost/benefit optimization
- Staff recommends regional planning budgets based on distribution and cost of recommended work from PMS analysis across entire CDOT network.
- Regions use recommended planning budget and refined PMS inputs (e.g. local costs and performance benefits) to again run PMS with DL on their network to produce a final list of PMS project recommendations
- Regions review PMS project recommendations with planning partners and consider input on priorities and needs.
- Regions use the final refined project recommendations lists to develop Surface Treatment plan

Bridge Projects

- Bridge Enterprise staff follow established Prioritization criteria to determine which bridges to replace next
- For non-enterprise bridges, Bridge staff are developing a preventive maintenance program to determine most effective treatments for bridges
- Once treatment recommendations are available from the Bridge asset management system, staff will share the recommendations with Region staff
- Regions will work from the recommendations and discuss with surface treatment, local agencies and others to determine optimal bridge projects



Next Steps

STAC and TC Input:

October: STAC Discussion on Asset Management

November: STAC Recommendation and TC Workshop on Program Distribution

December: TC Adoption of Program Distribution



Questions?

