

4201 East Arkansas Avenue Suite 200 Denver, CO 80222-3400



MEMORANDUM

TO:

REGION STAFF AND PROJECT SUPPORT UNITS

FROM:

JERAD ESQUIBEL, DIRECTOR OF PROJECT SUPPORT

DATE:

DECEMBER 25, 2018

SUBJECT:

DIVISION OF PROJECT SUPPORT MEMO 2018-01 / SURFACE TREATMENT PROGRAM

DISTRIBUTION FOR REGIONAL PLANNING FY2023 & FY2024

The Materials and Geotechnical Branch Manager, with direction from the Pavement Management Program (PMP) and CDOT Regional Directors, is requesting ratification by the Chief Engineer, and the Chief Financial Officer to utilize the following recommendations to establish Regional planning budgets for delivery of the Surface Treatment Program (STP) in FY 2023 and 2024. In addition, the methods for managing the statewide Surface Treatment design and construction pools are included. This Division of Project Support Memo (DPSM) establishes Engineering Division practices in support of Policy Directive 1400, Surface Treatment Program (dated 1/23/03).

This memo establishes Regional planning budgets as percentages of the total annual STP funds in order to:

- ensure that the pavement management program (PMP) effectively directs project delivery,
- establish annual project plans that reflect statewide pavement asset needs,
- provide reliable annual planning budgets for effective project planning and delivery,
- recognize the optimal statewide design and construction budgeting methods,
- implement the Drivability Life (DL) analysis method and associated traffic-based pavement category condition targets and treatment guidelines, and
- meet the pavement asset practices and condition goals established in Policy Directive 14.

The need for statewide perspective in CDOT's application of asset management practices is established by both the Executive Director and the Transportation Commission (Policy Directive 14). DPSM 2018-01 establishes Regional planning budgets based directly on the recommendations of the PMP program to ensure that PMP project recommendations determine statewide planning budgets for surface treatment project delivery.

Annual STP funding is distributed for Regional planning purposes based on the total cost of PMP recommended treatments in each Region from the statewide network analysis conducted by the Materials and Geotechnical Branch's PMP staff. The PMP recommended Regional planning budgets from the analysis are the direct output from the network analysis as an eight-year average dollar value. The 2023 allocations are the average model outputs from 2021 - 2028. This averaging technique is used to stabilize potential large annual planning budget fluctuations typical from individual-year PMP network analysis output.

The following table states the recommended percentages for the Regional planning budgets utilizing the 2017 PMP model. Model adjustments were made by the Pavement Management Technical Committee to allow rehabilitation treatments on pavements with 0 years of DL. This creates more treatment opportunites for CDOT's Interstates, High Volume Roads, and



Medium Volume Roads. The budget used for this assessment is based upon expected allocation from the Budget Setting Workshop for FY19 - FY22, and is set at \$223.5M (the average STP allocations from FY19 - FY22) for FY23 - FY37. The k-factor, which controls the extent that traffic impacts benefit calculations within the model, was set at 0.18.

Table 1 - Statewide Distribution of Surface Treatment Funds for Regional Planning

	Planning Budget for Fiscal Year (%)				
	2021	2022	2023	2024	Region Design Pool (%
Region	(1)	(1)	(2)	(2)	of Region Budget) (3)
1	20.7	21.6	18.6	17.8	10
2	19.8	18.4	22.1	21.9	7
3	25.8	24.7	26.1	25.4	7
4	19.7	20.5	20.7	20.8	8
5	14.0	14.8	12.5	14.1	10

- 1. Final values based on 2016 DL PMP Analysis
- 2. Final values based on 2017 DL PMP Analysis
- 3. Design Pool is the percentage of total planning budget assigned to each Region.

The planning budgets will be calculated every two years utilizing the current Pavement Management model. Table 2 identifies the schedule for future recalculations of STP allocations to the Regions. Annually by December 30, Regions may request a change to their next fiscal year default design pool amount. The RTD shall submit written request to the Chief Engineer itemizing anticipated project design costs for the requested change from the default design pool amount

Table 2 - Future Schedule for calculation of Region Planning Budget percentages

Planning Budget % calculation date (1)	Planning Budget % set for FY ⁽²⁾		
December 2018	FY 23, 24		
December 2020	FY 25, 26		
December 2022	FY 27, 28		

- 1. Future planning budget changes will be presented at the October PE3 and November RTD meeting.
- 2. Each designated December, a revised DPSM will be approved.

Changes in economic conditions, unforeseen system demands, and other budget variables that cannot be predicted allow the Executive Director, Chief Engineer, Director of Transportation Development, Chief Financial Officer and the Region Transportation Directors the option to propose modifications to this program distribution policy memo at any time as required by changes in budget or other parameters. To facilitate CDOT's 4-year planning and project delivery process, these modification requests will be submitted to the Materials and Geotechnical Program Engineer before April 30th, and a minimum of five years prior to the fiscal year to be modified. (i.e., for modifications impacting FY 2024, the requests shall be submitted by the end of April of calendar year 2019).

The established Regional planning budgets shall be used to create four year Regional project STP project plans. The Regional plans shall consist of projects that satisfy the requirements for system match and essential construction items as described in the Pavement Design Manual, Chief Engineer Policy Memo 10 (PM10)- PMP Definition of Resurfacing Project Match, and DPSM 2017-01 - Surface Treatment Program Essential Items. STP design pools shall be created and administered in each Region to facilitate four year project planning, design, and delivery. Regional design pools shall receive funding



equal to the <u>Table 1</u> percentage of total annual planning budget amount assigned to each Region, unless formally approved for an alternative amount.

All STP construction funds will be administered Regionally from Regions' STP pools. Annually, all projects in the 4-year Regional plans shall be compiled to develop the annual Statewide Surface Treatment Program project portfolio. Construction budget actions will be executed for each project in the Surface Treatment project portfolio.

Safety Surface Treatment funds are administered from the same central funding pool as the Surface Treatment funds. These funds have historically been approximately 3.3% of the total STP funds. Region staff will estimate and report the total safety treatment project costs on each project and will be allowed up to 3.3% of their total assigned Regional planning budget to be utilized for safety treatment work on Surface Treatment Projects. See DPSM 2017-01 for guidance on appropriate use of Surface Treatment funds for project related safety work.

I concur

Joshva Laipply, P.E., Chief Engineer

24/22 Date

I concur

Jeffrey Sugmerer, Chief Financial Officer

10/24/201

cc:

Craig Wieden

RMEs FHWA RTDs

