

MEMORANDUM

DEPARTMENT OF TRANSPORTATION
Staff Branches
4201 East Arkansas Ave.
Denver, CO 80222
(303) 757-9799 Fax (303) 757-9868



Date: June 7, 2013

To: Colorado Transportation Commission

From: Scott McDaniel, Director of Staff Services

Subject: Pavement Asset Management Next Generation and Drivability Life Analysis

Purpose:

This workshop PowerPoint presentation on the next generation of the Pavement Asset Management System (PAMS) will detail the ongoing development of the Drivability Life (DL) analysis method and the pavement category structure used to implement Commission direction for the Surface Treatment Program.

Action Required:

This presentation is primarily a progress update intended to inform and seek comments from the Commission.

PAMS Development Objectives:

The current pavement management system is not fiscally constrained, creating a theoretical \$8 billion maintenance liability to rebuild Remaining Service Life-Zero (RSL-0) roads, now 33% of the system and growing. By not recognizing financial constraints, the existing pavement management approach does not optimize treatment for the entire system. In fact, 33% of Colorado's roads are largely ignored because the only cost effective treatment for zero service life roads is complete reconstruction - which, of course, in the real world there will never be money to do. By recognizing pavement management fiscal constraints of \$240 million per year, the new Drivability Life approach will ensure that pavement condition will be optimized across the state system within available financial resources, driving surfaces will remain safe, and all of Colorado's highways will receive periodic resurfacing. Development objectives include improved condition metrics that better reflect driver experience, new pavement condition goals and treatment practices for traffic-based highway pavement categories, and a statewide project portfolio to meet or exceed Commission pavement condition goals under established fiscal constraints.

Traffic-Based Pavement Categories:

Proposed pavement categories based on car and truck traffic will be presented. Pavement category structure will facilitate the Commission's direction to optimize CDOT's use of effective thin surface treatments on our low volume highways in order to maintain their driving condition while allowing CDOT to manage pavement condition across our entire statewide network.

MEMORANDUM

DEPARTMENT OF TRANSPORTATION
Staff Branches
4201 East Arkansas Ave.
Denver, CO 80222
(303) 757-9799 Fax (303) 757-9868



Category-specific acceptable pavement surface conditions will be used to calculate pavement DL. Proposed category-specific construction treatments will be presented.

DL Analysis Concepts:

DL analysis' increased consideration of pavement surface distress data (cracking, rutting and smoothness) and the resulting impact on reported network condition will be presented. CDOT's Pavement Asset Management System and DL analysis are being coordinated with the implementation of MAP-21 Legislation Pg 141, Section 150, Title 23, U.S.C. The reference states that

under the NHPP, States will establish minimum standards to use in developing and operating a pavement management system. The DL method hinges on targeted improvements to the metric for determining and reporting pavement condition across the highway pavement network. Future pavement condition projection resulting from varying funding scenarios can be conducted with the DL method.

Development Schedule:

The schedule to complete development of the pavement asset management system will be presented.

These are exciting times with great opportunities for improved management of CDOT's critical pavement assets. We look forward to presenting our progress and receiving your direction on this important effort.