

Pavement Management System

El Dorado County Department of
Transportation

Program Mission

- Inspect and evaluate all County maintained roads that are surfaced.
- Utilize newly purchased software to provide clear, concise roadway condition data to decision makers.
- Utilize newly purchased software to build inventory of all roadway appurtenances.

Why Perform Pavement Management?

- To maintain an inventory of County infrastructure assets and possibly open new funding streams for roadway maintenance work.
- To allow the BOS to make informed decisions about which roads should receive work
 - Pavement Condition Index (PCI) – from pavement management inspections
 - Average Daily Trips (ADT) – from traffic counts

What Do We Have?

- Inventory breakdown of the 1,079 miles of County maintained roads:
 - 433 miles of asphalt concrete
 - 586 miles of surface treatment (chip seal)
 - 60 miles of unsurfaced/gravel/dirt roads (not inspected as part of pavement management)
 - Total surfaced road mileage: 1,019 miles

Types of Surfaced Roads

- Local Roads ("twigs")
 - 1,717 roads, 576 miles
 - Examples: Sandridge Road, Toronto Road, Oak Hill Road, Coon Hollow Road
- Collector Roads ("branches")
 - 27 roads, 122 miles
 - Examples: Malcom Dixon Road, South Shingle Road, Deer Valley Road
- Arterial Roads ("trunks")
 - 72 roads, 321 miles
 - Examples: Green Valley Road, Pleasant Valley Road, Lotus Road

Frequency of Inspections

- The Caltrans Local Assistance Procedures Guide states that County eligibility for Federal preventative maintenance funding requires roads to be inspected as follows:
 - Arterials and Collectors: Every two years
 - Local Roads: Every two years
- Cost per year (labor, equipment, etc.): \$170,000
- Average yearly pavement management budget over last 10 years: \$98,620.45

Funding for Pavement Management

- DOT's Construction Division performs PCI inspections
 - Good winter work when construction projects slow down
 - Most work performed by Senior Engineering Technicians
- Due to budget constraints and the use of old, inefficient software, DOT has been unable to maintain either of the biennial inspection frequencies cited above.
- Funding for DOT's Pavement Management Program comes from DOT's Road Fund.
- In order to provide funding for Pavement Management without decreasing funds available for other activities supported by the Road Fund (e.g., chip seal, ditching, brushing, etc.), an increased contribution (~\$100K per year) to the Road Fund from the General Fund or other funding sources would be required.

Streetsaver

- DOT has recently upgraded its pavement management software (~\$10,000)
- We are currently in the process of transferring our data from the old system to the new system
- We will soon have the ability to provide several graphical presentations of our roadways.

Streetsaver Demonstration

Future Possibilities

- As funding allows, DOT will be working to expand the inventory entered in the new software to include the following:
 - Traffic Signals
 - Culverts
 - Drainage inlets
 - Sidewalk
 - Curb/gutter
 - Lighting
 - Signs