



## Pavement Preventive Maintenance

### I. BACKGROUND

Throughout the nation, State and Local Agency transportation departments are faced with the daunting task of maintaining an aging surface transportation infrastructure while facing challenges of limited resources, increased congestion, budget cuts and increased customer expectations.

Vehicle fuel taxes have been the primary source of transportation revenues in the United States since the 1960's. The last federal gas tax increase was in 1993 and since then has lost much of its purchasing power. The reduction in lane miles traveled, improved vehicle fuel economy, use of alternative modes of transportation all have contributed to the decrease in transportation revenues. Both State and Local transportation departments must continue to look for more efficient and effective means of conducting business.

The Federal Highway Administration (FHWA) encourages the use of "preventive maintenance" activities to extend and ensure proper performance of the transportation infrastructure. Title 23 of the United States Code (USC), Section 116(d) established the legal basis for Federal-Aid eligibility for pavement preventive maintenance activities. It states that a "preventive maintenance activity shall be eligible for Federal assistance under this title if the State demonstrates to the satisfaction of the Secretary that the activity is a cost-effective means of extending the useful life of a Federal-aid highway."

An effective pavement preservation program will address pavements while they are still in good condition, before the onset of serious damage. The program will preserve the investment in Federal-aid roadways and enhance pavement performance, thereby ensuring cost-effectiveness by extending pavement life, reducing user delays and providing improved mobility and safety.

Preventive maintenance activities eligible for federal participation include those that address aging, oxidation, surface deterioration, and normal wear due to traffic and the environment. Examples of preventive treatments include, are not limited to, crack sealing, chip seals, slurry seals, micro-surfacing, thin and ultra-thin hot mix asphalt overlays, surface recycling (hot-in-place and cold-in-place), concrete joint sealing, diamond grinding, dowel-bar retrofit, isolated and /or full-depth concrete repairs to restore functionality of concrete slabs where edge spalls or corner breaks have occurred, as well as, shoulder repair and restoration of drainage facilities.

Previous direction restricted preventive maintenance to strategies that are cost effective and have a service life of five years or more. Current FHWA policy removes the requirement of five years or more. This enables lower costing preservation methods to be used for improving system conditions, minimizing road construction impacts on the traveling public, and better managing resources for long-term improvements such as reconstruction or expansion.



## II. POLICY

Preventive maintenance measures addressed in this Office Bulletin are for “pavement-focused” projects with the primary goal of extending the service life of the identified pavement. This Office Bulletin rescinds the requirement that preventive maintenance strategies must extend the pavement life by five years or more. Instead the local agency’s Pavement Management System (PMS) must demonstrate that the preventative maintenance strategy is a cost effective method of extending the service life of the pavement.

All preventive maintenance projects should consider appropriate ways to maintain or enhance the current level of safety and accessibility. Isolated or obvious deficiencies should be addressed. In no way shall preventive maintenance type projects adversely impact the safety of the traveled way or its users. Safety enhancements should be encouraged and included in projects where determined to be a cost effective way to improve safety.

To maintain preservation program flexibility, and in accordance with 23 USC 109(q), safety enhancements can be deferred but with the understanding that appropriate safety and geometric enhancements will be an integral part of future reconstruction, rehabilitation, resurfacing, or restoration projects.

## III. PROCEDURE

Preventive maintenance activities are eligible for federal-aid participation provided:

- The local agency certifies that it has a Pavement Management System (PMS). This certification is to be completed biennially, with a copy attached to the Field Review Form for all Preventive Maintenance Projects (see *Local Assistance Program Guidelines* (LAPG), Exhibit 4-A, “Pavement Management System Certification”).
- The decision process used by the city or county to determine project strategies was based on the established PMS. Items to be covered and noted in the Roadway Data Remarks of the Field Review. See Chapter 7, “Field Review” in the *Local Assistance Procedures Manual* (LAPM).
- The PMS determined the project strategy to be cost effective. Items to be covered and noted in the Roadway Data Remarks of the Field Review. See Chapter 7, “Field Review” in the LAPM.
- The project is not for spot application. Spot application projects are considered to be normal maintenance and therefore not eligible.
- The preventive maintenance project does not degrade any existing safety or geometric aspects of the facility.
- All federal-aid requirements shall apply.
- Funding for each project shall be required to be in an approved Federal Statewide Transportation Improvement Program (FSTIP). (It is recommended that preventive maintenance projects be programmed on a lump sum basis for the program and not as individual projects.) Items to be covered and noted in the Field Review. See Chapter 7, “Field Review” in the LAPM.



#### IV. APPLICABILITY/IMPACTS

This policy, effective immediately, is applicable to all federally funded preventive maintenance projects. This policy change will be reflected in future update of Chapter 11 of the LAPM and Chapter 4 of the LAPG

Recommended:	<u>Original Signed By</u>	<u>2/1/2012</u>
	Peter B. Anderson, Area Engineer Office of Implementation – North	Date
Approved:	<u>Original Signed By</u>	<u>2/1/2012</u>
	Bill Sandoval, Chief Office of Implementation – North	Date

#### Attachments:

Attachment 1 – Pavement Management System Certification

Superseded BY LPP 16-04