

Managing Pavements – A Call for Preservation – Achieving Long-term Goals

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Overview

- Federal Focus – IHS and NHS
- Managed assets – An asset management plan
- Managing performance – minimum condition

SEC. 1106.119(e)

NATIONAL HIGHWAY PERFORMANCE PROGRAM

- “(1) IN GENERAL.—A State shall develop a risk-based asset management plan for the National Highway System to improve or preserve the condition of the assets and the performance of the system

What is Transportation Asset Management?

- A strategic and systematic process of operating, maintaining, and improving physical assets, with a focus on engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that will achieve and sustain a desired state of good repair over the lifecycle of the assets at minimum practical cost (Sec. 1103 Definitions)

Managing the network:

- Managing for the whole-life
- Have performance measures that guide investment decisions
- Adopt a 'preservation first' strategy for their investment priorities
- Move away from a "worst first" investment strategy, and instead have adopted investment principles that are based on life cycle costing

MAP-21 and preservation

- Preservation included in NHPP and STP as well as planning regulations
- Pavement Preservation defined in 23CFR116

Risk-based Asset Management Plan

PLAN CONTENTS.—A State asset management plan shall, at a minimum, be in a form that the Secretary determines to be appropriate and include—

- “(A) a summary listing of the pavement and bridge assets on the National Highway System in the State, including a description of the condition of those assets;
- “(B) asset management objectives and measures;
- “(C) performance gap identification;
- “(D) lifecycle cost and risk management analysis;
- “(E) a financial plan; and
- “(F) investment strategies.

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Asset Management Plans

- Network strategy
 - Preserve what we have
- Lifecycle cost
 - preservation
- Mix of fixes
 - preservation

LIFECYCLE PHASES OF AN ASSET

As part of the TAMP develop lifecycle plans for each asset group/sub-group (Transport Scotland)

- Describe asset creation and disposal, operation and maintenance (including inspection, testing, routine maintenance, programmed maintenance, preservation and reactive maintenance) and asset renewal and replacement.

LIFECYCLE PHASES OF AN ASSET

The lifecycle plans for each asset group/sub-group will take into consideration:

- Expected deterioration mechanisms
- Rates of deterioration for the material type concerned
- Component service lives
- Required Levels of Service
- Maintenance techniques
- Influence of maintenance on future deterioration rates

Therefore

- Need to know the performance of the mix of fixes to have a long term plan to manage pavement performance and condition (includes deterioration curves)
- Use of the pavement management system is important to manage the pavements

What are we saying Managing Pavements – A Call for Preservation – Achieving Long-term Goals; is this Asset Management?

- Asset Management is a distinct way of doing business.
- We are all managing are assets, but are we doing Asset Management?
- Asset Management is more than a pavement management system, maintenance management system, etc.
- Asset management is about managing your network over the whole life; includes, managing your pavements, bridges, and other physical assets.

Thank You

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