KYTC TAMP Development

Annual Section Engineer Conference
February 8, 2018
Presentation Topics

- Motivation for Developing the TAMP
- Federal TAMP Requirements
- Other Federal Requirements Related to Asset Management
- The TAMP Development Process
- Potential Impacts
- Questions
What Is A TAMP?

**A TAMP is:**
- A document outlining your 10-year investment strategies for preserving existing assets
- It enables you to “tell your story”
- It is data-driven and performance-based
- It focuses on smart, long-term investments
Why Prepare a TAMP?

• FHWA requires a TAMP under legislation
  – Initial TAMP due April 30, 2018
  – Fully-compliant TAMP due November 20, 2018
  – Must be updated at least every 4 years

• But there are other reasons to develop a TAMP:
  – Demand on the system is increasing
  – Assets are aging
  – Funding doesn’t match needs
What Is Required?

• At a minimum, the TAMP must include:
  – Asset management objectives
  – Performance measures & targets
  – A summary description of asset conditions
  – Gaps between actual & desired performance
  – A life cycle plan
  – A risk management analysis
  – A financial plan
  – 10-year investment strategies
Additional Requirements

- Minimum standards for pavement and bridge management systems to support the analysis
- Minimum condition requirements for Interstate pavements and NHS bridge decks
Who Is Developing the TAMP?

- Applied Pavement Technology, Inc. (APTech) is leading the effort, with support from:
  - CDMSmith
  - StarIsis
  - Albright Engineering
When Will It Be Done?

- Draft submitted for review by March 1
- Submitted to FHWA by April 30
KYTC Team

Core Team

• Jason Siwula, Project Manager
• Jon Wilcoxson
• Tracy Nowaczyk
• Erin Van Zee
• Evan Dick
• Josh Rogers
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Status</th>
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<tbody>
<tr>
<td>1. Introduction</td>
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<td>2. Objectives</td>
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<td>3. Inventory and Condition</td>
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<td>4. Life Cycle Plan</td>
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<td>5. Risk Analysis</td>
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<td>6. Financial Plan and 10 Year Investment Strategy</td>
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<td>7. Planned Enhancements</td>
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- Drafts Submitted
- Under Development
Introduction

- Public facing document
- Accompanying guidance document that will include more detailed information.
Objectives

- Describes how KYTC manages pavements and bridges.
- Meets Federal requirements (23 CFR 515 and 23 CFR 667)
- Connects pavement and bridge management to 6 year plan, long range plan, and the new SHIFT process
Inventory and Condition

Mileage by System

MP System Condition Trends
Life Cycle Plan

- Considers strategies that reduce the annual cost of preserving the system
Risk Analysis

- What uncertainties may prevent us from achieving our goals?

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<tr>
<th>Impact</th>
<th>Catastrophic</th>
<th>Major</th>
<th>Moderate</th>
<th>Minor</th>
<th>Insignificant</th>
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<tr>
<td>Likelihood</td>
<td>Rare</td>
<td>Unlikely</td>
<td>Likely</td>
<td>Very Likely</td>
<td>Almost Certain</td>
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<td>Less than once every 10 years</td>
<td>Once in more than 3 but less than 10 years</td>
<td>Once between 1-3 years</td>
<td>Once a year</td>
<td>Several times a year</td>
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<td>Risk Matrix with Impact and Likelihood Definitions</td>
<td>Medium</td>
<td>Medium</td>
<td>High</td>
<td>Very High</td>
<td>Unacceptable</td>
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The chart above categorizes risks based on their impact and likelihood, allowing for effective risk management and decision-making.
Types of Risks

• The current budget process – Other risks include:
  – Funding uncertainty
  – Personnel changes
  – Natural disasters

• SMEs include: Core Team, Pavement and Bridge Management Team, John Moore, Megan McLain
Financial Plan & 10-Year Investment Strategy

• The TAMP will address investment needs for pavements and bridges through 2028
• Funding scenarios will be realistic but will also be tied to condition targets
• SMEs in this area included:
  – Core Team
  – Robin Brewer
  – Bob Drakeford
  – Jessica Scott
Planned Enhancements

• Pavement and bridge management systems will be updated
• The TAMP will be resubmitted before June 30, 2019, and updated at least every 4 years afterward
• Future TAMPs may address
  – Additional assets
  – Additional data on pavements and bridges
  – More accessible data
What Could This Mean For You?

• Doing our jobs better – stronger/ faster/ smarter
• Safer crews – less time in work zones reacting to pavement conditions
• Better pavement and bridge conditions can lead to time and funding to address assets that traditionally receive less attention
• Better investment decisions and funding will allow us to keep more pavements in better condition longer
• Increase in numbers and types of preventive maintenance projects
What Could This Mean For You?

• Pavement deterioration models will enable us to scope preventive maintenance, scheduling and planning for them with funding
• Pavement preventive maintenance responsibilities will include making sure the projections are on track
• FHWA will require a review to determine if we’re hitting 2 and 4-year pavement condition targets
• Systematic preservation activities for bridges
Are Other States Doing This?

The Ohio DOT released this video to promote their new way of doing business

https://www.dot.state.oh.us/AssetManagement/preservation/Pages/Preservation-Video.aspx
Questions?