

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

TAMP Chapters

1. Introduction
 2. Objectives
 3. Inventory and Condition
 4. Life Cycle Plan
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5. Risk Analysis
 6. Financial Plan and 10 Year Investment Strategy
-

7. Planned Enhancements



Drafts
Submitted

Under
Development

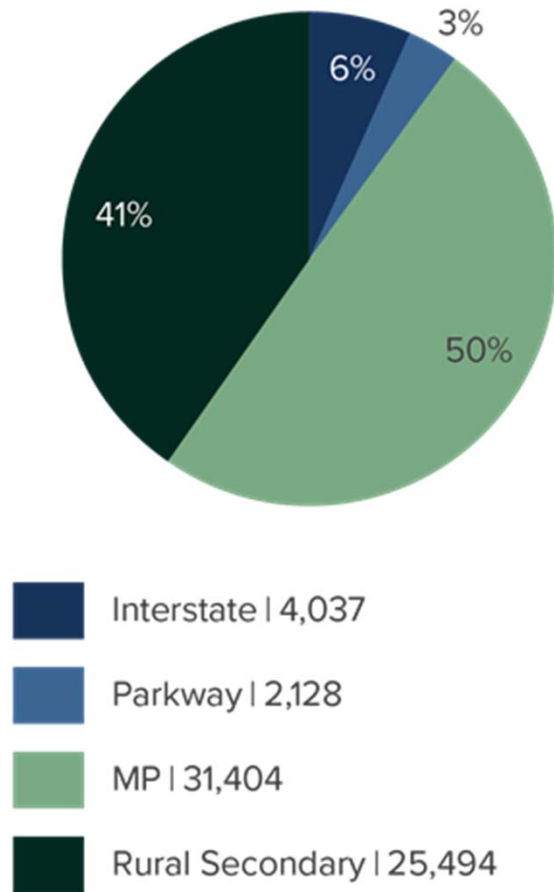
Introduction

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

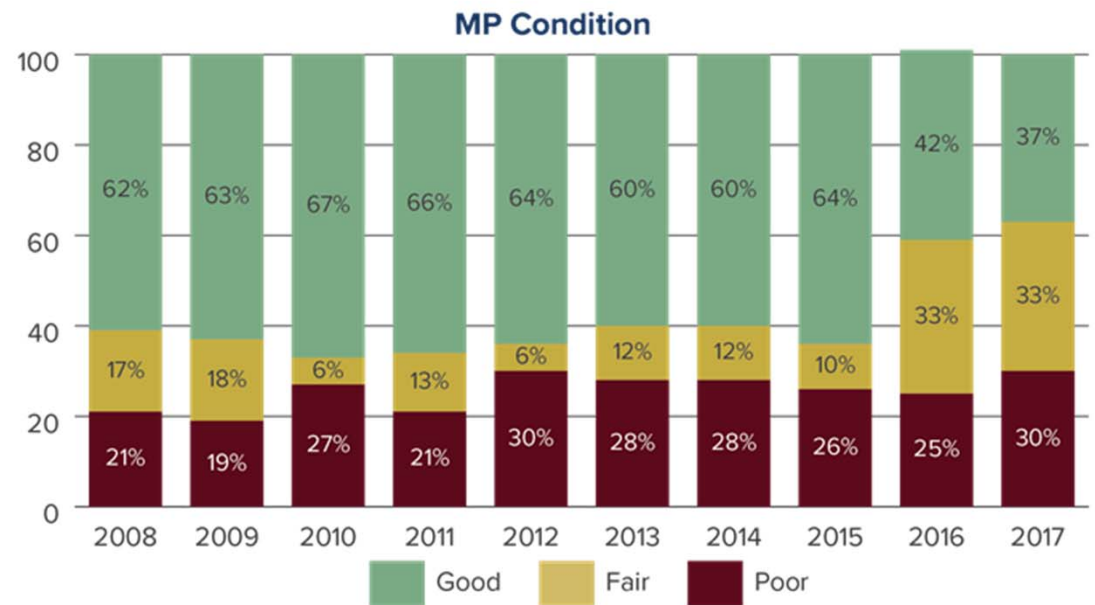
Objectives

- 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



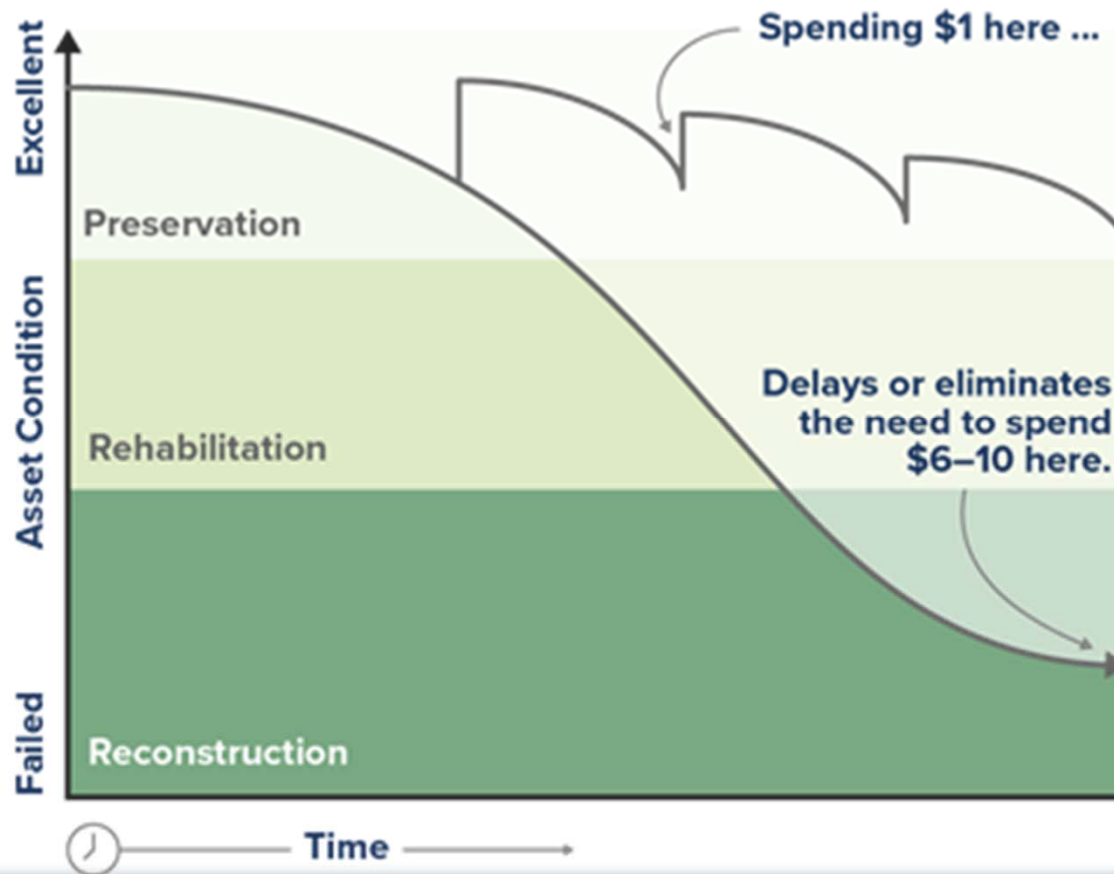
Mileage by System



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?

RISK MATRIX							
Risk Matrix with Impact and Likelihood Definitions			Likelihood				
			Rare	Unlikely	Likely	Very Likely	Almost Certain
			Less than once every 10 years	Once in more than 3 but less than 10 years	Once between 1-3 years	Once a year	Several times a year
Impact	Catastrophic	Potential for multiple deaths & injuries, substantial public & private cost.	Medium	Medium	High	Very High	Unacceptable
	Major	Potential for multiple injuries, substantial public or private cost and/or foils agency objectives.	Low	Medium	Medium	High	Very High
	Moderate	Potential for injury, property damage, increased agency cost and/or impedes agency objectives.	Low	Medium	Medium	Medium	High
	Minor	Potential for moderate agency cost and impact to agency objectives.	Low	Low	Low	Medium	Medium
	Insignificant	Potential impact low and manageable with normal agency practices.	Low	Low	Low	Low	Medium

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?

