Transportation Asset Management Plan (TAMP)

Asset Management

Definition from 23 U.S.C. 101(a)(2), MAP-21:

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 life cycle of the assets at minimum practicable cost.

Requirements

- Each state is required to develop a risk-based TAMP for the National Highway System (NHS) and must address the assets of NHS pavements and bridges covering a 10-year period.
- The TAMP should include strategies that lead to a program of projects that would make progress toward achievement of the state targets for asset condition and performance.

Plan must include:

Inventory and condition of the NHS pavements and bridges

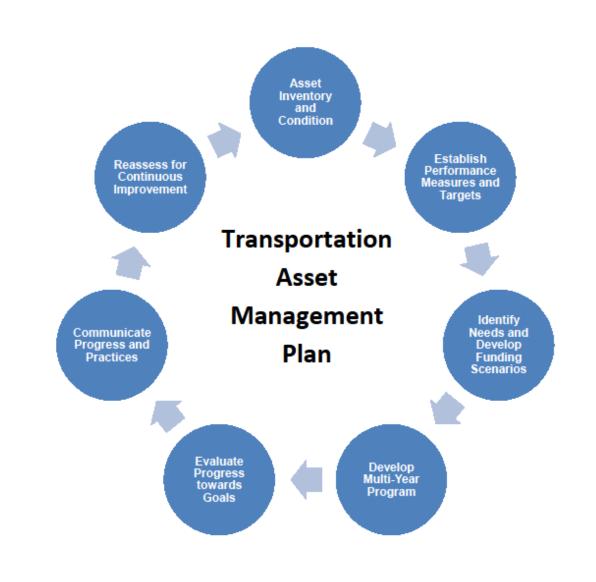
Objectives and measures

Performance gap analysis

Life cycle cost and risk management analysis

Financial plan

Investment strategies



TAMP Deadlines

Draft TAMP – 4/30/18

Final TAMP – 6/30/19

FHWA will certify plan and check annually for consistency

States must update their plan every 4 years

IDOT – Current Situation

Large system inventory/declining condition

Roads

- ► 15,919 state miles out of 146,958 miles
 - 2,185 Interstate miles 3rd largest

Bridges

- >7,835 state bridges out of 26,770 bridges
 - 84M of 141M total square feet
 - 3rd largest inventory

IDOT – Current Situation

- Limited resources
- oFocusing on existing system/limited expansion
- Major Bridges service life ending/need replaced
- Priority NHS and NHS SD bridges
- OPerformance-based initiatives
 - Project Prioritization Model
 - Expedited Project Delivery

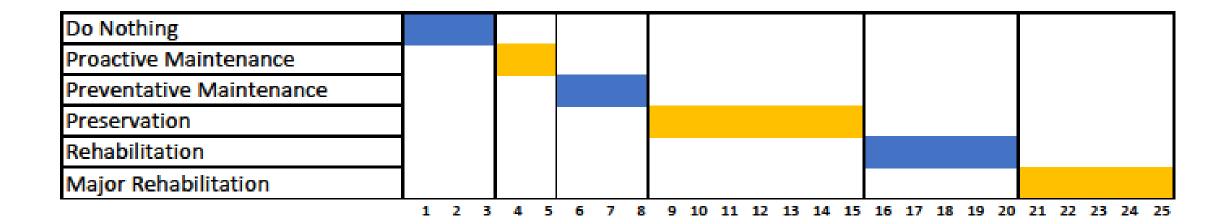
TAMP - Life Cycle Planning

- Managing assets over their life cycle
 - ✓ Similar to taking care of your car or home



- ✓ Picking the right treatment at the right time
 - Key to managing assets is knowing the condition and tracking the rate of deterioration so the right treatment is identified timely

Life Cycle Planning Timeline



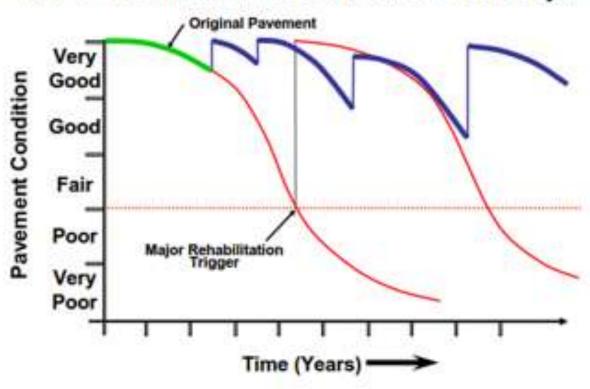
IDOT – Moving Forward

- oTAMP is mandatory but it's the right thing to do
- •Executive Management leading the effort
- Collaborative effort of staff committees
- Concentrate on entire state system (NHS and non-NHS)
- OAssets pavements and bridges

New Philosophy

- •Moving from worst-first approach to achieving a desired state of acceptable condition for all NHS & other state roads
- Optimal mix of projects to improve and preserve the existing system
- New measurements for calculating acceptable condition
 - Backlog 90/93% goals going away
- oRaising the bar evaluate all roads and bridges the same (except for Interstates will be held to a higher standard)

The Pavement Preservation Concept



Standard for Acceptable Condition

- ► Pavements Condition Rating Survey (CRS)
 - Interstates CRS of 5.5 or higher
 - ∘ Other Roads CRS of 5.0 or higher
- ➤ Bridges Bridge element ratings of 5 or higher

TAMP Goals

- □% Goals for pavements
 - Interstates 90%
 - Non-Interstates NHS 90%
 - Non-NHS Marked 75%
 - Non-NHS Unmarked 50%

- □ % Goals for bridges
 - Interstates 93%
 - Non-Interstates NHS 93%
 - Non-NHS Marked 90%
 - Non-NHS Unmarked 90%

Opportunities

Better decision making tools for optimizing the available funding

• Enterprise Asset Management System

Best practices and innovation

Continuous business improvements

- Decision Trees
- Policies and Guidance
- Consistency among districts

Challenges

Public perception

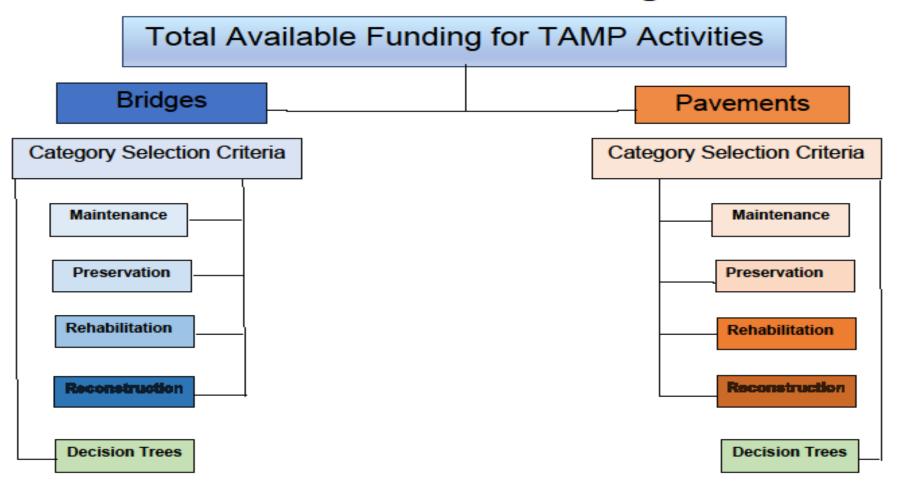
• Explain why the department is working on this road vs another road that is in worse condition

Measurement and data integration

Limited funding

• It will get worse before it gets better

Network Level Planning



Future Program

The department is working towards developing a multiyear program under the TAMP philosophy that includes:

- o 80% rehabilitation/reconstruction projects
- o20% preservation projects
- Limited expansion projects
- Continued focus on NHS pavements and bridges

Thank you!