

**Federal Highway Administration
Federal Transit Administration**

Integration of Asset Management into Planning and Programming

Webinar (Internal FHWA / FTA)

Disclaimer

- Except for any statutes or regulations cited, the contents of this presentation do not have the force and effect of law and are not meant to bind the public in any way. This presentation is intended only to provide information to the public regarding existing requirements under the law or agency policies.

Housekeeping

- Click the “Show Captions” button to enable closed captioning [.
- You may also use the chat and "raise hand" feature to ask questions
 - The "raise hand" button [.
 - can be found under "Reactions" [.
 - Remember to lower your hand once you've asked your question!
- Utilize the chat for any additional comments/reactions
- Webinar will be recorded

Welcome

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Agenda

- Welcome
- Project Overview
- Literature Review and Case Studies
- Peer Exchanges
- Notable Practices
- Challenges and Opportunities

Project Team

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Participant Polls

1: What organization do you work for?

- FHWA Division Office
- FTA Regional Office
- FHWA Headquarters
- FTA Headquarters
- Other (please type in the chat)

2: How knowledgeable are you in the topic of asset management and its integration into planning and programming?

- Very knowledgeable
- Somewhat knowledgeable
- Learning
- Very little knowledge

Overview

Asset Management Integration into Planning and Programming

- State DOTs and MPOs integrate goals, objectives, performance measures and targets of Transportation Asset Management Plans (TAMP) and Transit Asset Management Plans (TAM) into their statewide and metropolitan planning processes
- State DOTs, MPOs, and public transportation providers cooperatively develop and share information on transportation performance data, selection and reporting of targets, and tracking progress
- ***What does this mean in practice?***

Project Purpose

- Identify and share notable practices among transportation agencies on the integration of asset management activities into statewide and metropolitan planning processes
 - 5 case studies on agencies with notable practices
 - 2 virtual peer exchanges, one with a focus on transit assets and one with a focus on highway assets
 - 2 webinars, one for FHWA/FTA and one national

Case Studies & Literature Review

Literature Review – Purpose and Approach

- Purpose to identify potential agencies for case study development
 - Review of selected reports related to asset management practices, performance-based planning, target setting
 - Scan of websites, LRTPs, TAMPs, and TAMs of selected State DOTs, MPOs, and transit agencies

Literature Review Findings

- Most long-range plans reviewed reference both highway and transit asset condition targets and several have aligned goals and/or strategies.
- Few agencies show a strong influence of TAMP or TAM plans on their long-range plans and programs.
- Asset management is increasingly including assets such as buildings or technology systems, in addition to pavement and bridge assets, which requires additional coordination among departments.
- Many states have adopted a focus on preservation and have shifted funds from other categories to system preservation or have worked with their state legislature to procure additional funding for system preservation.
- Agencies are beginning to include resilience analysis into asset management planning.

Case Studies – State DOTs



- **Washington State DOT**

- Asset Management Guide for Transit Agencies to ensure that WSDOT and public transportation agencies use an effective, aligned approach to asset management by outlining a common set of principles and resources.
- Use of scenario planning to analyze and address equity impacts from highway investments and identify strategies to “avoid, minimize, or mitigate disparities and improve equity for overburdened communities.”
- Direct relationship between the TAMP and the WSDOT Project Delivery Plan



- **West Virginia DOT**

- Trade-off analyses of asset investments in the LRTP, and use of data and analyses from the TAMP in the LRTP.
- TAMP is consistently referenced as a key source of data and analysis to support strategy development and investment planning in the LRTP.
- Scenario planning and expert input guide investment decisions

Case Studies - MPOs



- **Southeast Michigan Council of Governments**

- Technical assistance to support asset management data collection and analysis for local partner agencies.
- Education for municipalities on best practices for asset management, and Federal requirements.
- Capital Improvement Project Coordination Tool allows coordination of water, transportation, broadband and private utility companies to coordinate capital improvement projects in the region through an interactive map.



- **Regional Transportation Commission of Washoe County**

- Pavement preservation program for the county's regional roads funded by a percentage of the fuel tax dedicated to pavement preservation.
- Equity analysis of transit vehicle condition on routes serving areas with high racial minority populations compared to the regional average.
- Transit Preventative Maintenance Performance Contracts hold maintenance organizations accountable for vehicle condition.

Case Studies – Transit Agency



- **Atlanta Regional Commission, Atlanta-Region Transit Link Authority, Metropolitan Atlanta Rapid Transit Authority**
 - Scenario planning to help set reasonable transit state of good repair targets.
 - Alignment of Group Transit Plan project screening criteria with ARC's TIP project screening criteria
 - MARTA was the first public transportation agency in the United States to receive the ISO 55000 Certification for Asset Management

What value have you seen in your district or region with integrating asset management into planning or programming?

Please raise your hand to share or type your responses into the chat.



Image source: b farias

Peer Exchanges

Peer Exchanges

- Two virtual peer exchanges with six agencies each
- Shared successful practices
- Held moderated discussions on integrating asset management into planning, programming, and data analysis methods
- Additionally held small group breakouts to discuss targeted topics, including engaging partners into asset management, incorporating resilience, and project scoring

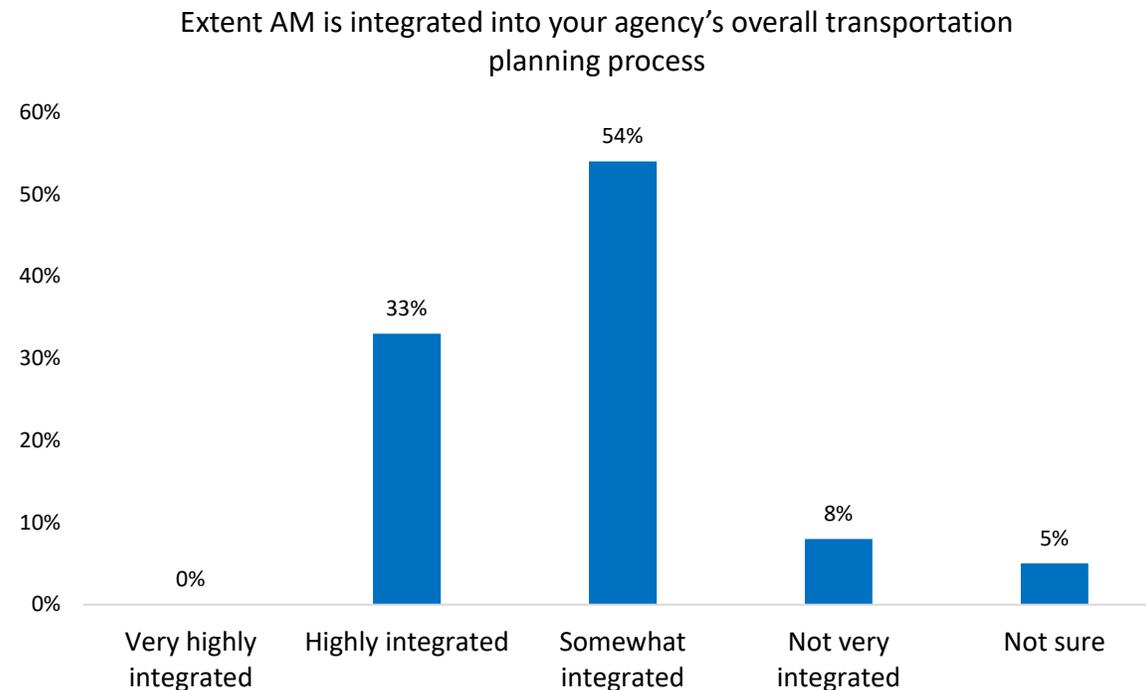
Highway Focused Peer Exchange	Transit Focused Peer Exchange
West Virginia DOT	Washington State DOT
Iowa DOT	Regional Transportation Commission of Washoe County
Southeast Michigan Council of Governments	Southeastern Pennsylvania Transportation Authority
Colorado DOT	North Central Texas Council of Governments
Delaware DOT	Atlanta Regional Commission
Delaware Valley Regional Planning Commission	

Highway Asset Management Integration Peer Exchange Polls

- **What type of organization do you work for?**
 - State DOT: 54%
 - MPO: 26%
 - City or County: 2%
 - Federal agency: 19%
 - Other: 0%
- **What is your primary job function at your organization?**
 - Asset Management: 37%
 - Long-range Planning: 37%
 - Programming or S/TIP Development: 15%
 - Modeling: 2%
 - Other: 9% --Other responses included GIS and data programs.
- **How long have you been in your current position?**
 - 1 year or less: 20%
 - Between 2-4 years: 24%
 - Over 4 years: 56%

Highway Asset Management Integration Peer Exchange Polls

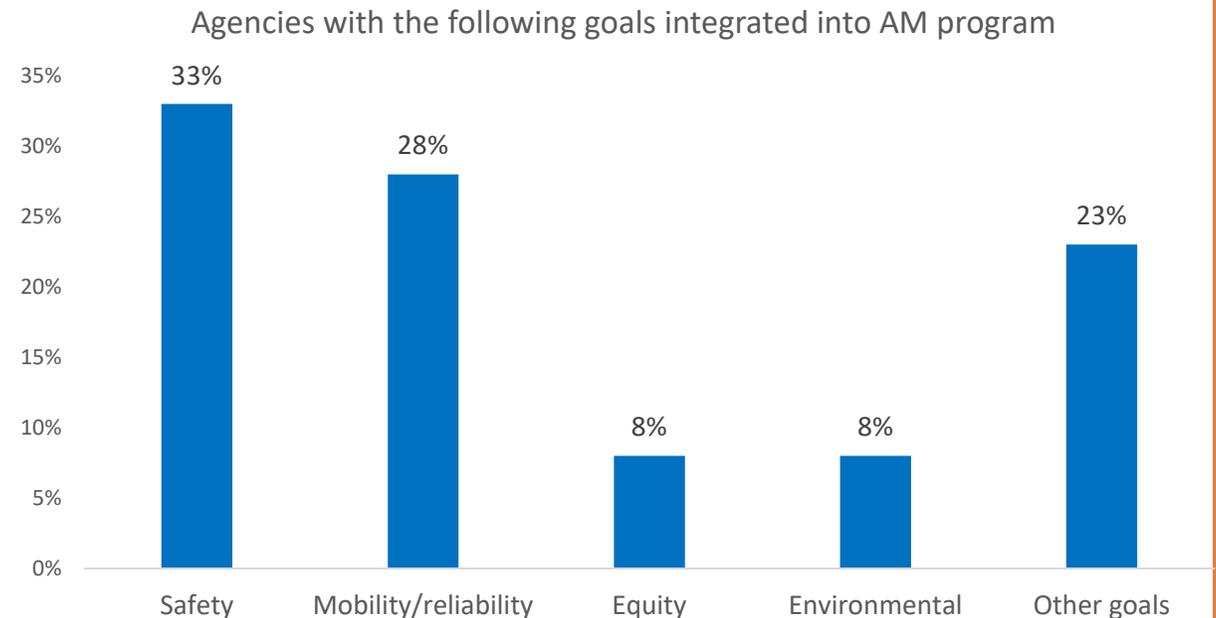
- To what extent is transportation asset management integrated into your agency's overall transportation planning process?
 - Very highly integrated: 0%
 - Highly integrated: 33%
 - Somewhat integrated: 54%
 - Not very integrated: 8%
 - Not sure: 5%



Highway Asset Management Integration Peer Exchange Polls

- **Are any of the following planning goals or factors integrated into your agency's asset management program?**

- Safety goals/considerations: 33%
- Mobility or reliability goals/considerations: 28%
- Equity goals/considerations: 8%
- Environmental goals/considerations: 8%
- Other goals or planning considerations: 23%



Highway Asset Management Integration Peer Exchange Polls

- **Does your organization conduct scenario analysis as part of long-range planning or asset management planning?**
 - Yes – I am involved in this analysis work: 40%
 - Yes – I am not involved in this work: 15%
 - No: 25%
 - Unsure: 20%

Transit Asset Management Integration Peer Exchange Polls

- **What is your primary job function at your organization?**
 - Asset Management: 23%
 - Long-range Planning: 31%
 - Programming or S/TIP Development: 13%
 - Modelling: 0%
 - Other: 33% -Other responses included safety officer, 5310 Program Management, MPO Director of Transit, and grant management.

Notable and emerging practices: Scenario analysis

- Incorporation of asset condition in **investment scenario analyses**
 - Using LRTP funding scenarios and analysis in the pavement and bridge management systems for use in the TAMP to evaluate tradeoffs between programs

Notable and emerging practices: Internal coordination

- Establishing **standard processes** to include the TAMP investment strategy in annual project development for capital plans.
- **Alignment of priorities** from the TAMP and TAM in the LRTP to drive strategies in the LRTP and programmed projects in the S/TIP
- Evaluating **consistency** between TAMP planned and actual investment
- **Adjusting timing** of TAMP/TAM or LRTP and S/TIP to ensure information in each is most recent, including adding amendments if needed

Notable and emerging practices: External coordination

- **Technical assistance** to partners to align data collection and analyses, State, regional, and local priorities, and Federal requirements
- **Coordination of data** from external asset owners to include in asset management systems
- **Coordination of transit agency needs for grant applications** or special projects
- **Coordination among infrastructure owners** to find efficiencies in developing projects in similar areas
- **Active outreach** among agencies and departments to help understanding of needs and priorities

Notable and emerging practices: Equity Considerations

- **Equity considerations** in asset performance incorporated into planning and programming
 - Evaluation of **transit vehicle condition** on routes serving areas with high low-income levels or minority populations as compared to the average condition for all areas
 - Evaluation of **pavement condition** in communities with high low-income levels or minority populations as compared to the average condition for all areas

Notable and emerging practices: Transit Coordination

- **Aligning scoring or priorities** between long range transportation plans, transportation improvement programs, and transit asset management plans
- **Technical assistance** to transit agencies to conduct asset condition analysis
- Technical support and coordination between transit agencies and MPOs for **grant applications for transit improvements**

How have transportation agencies in your region or district integrated asset management into planning or programming?

Please raise your hand to share or type your responses into the chat.



Image source: b farias

Challenges and Opportunities

Highway Asset Management Integration Peer Exchange – Challenges Reported

“challenging to get politicians and elected officials on board when asset management is often not as compelling as new projects”

“Integrating rolling stock assets for transit versus other "fixed" assets (like bridges)”

“how to meaningfully contribute to the asset management conversation as a non-asset owning MPO”

“Hard to get the big picture of asset management. Capacity projects do not consider asset management planning. Maintenance cost not considered.”

“challenges identifying how asset conditions may be impacted over the longer term by climate change, heavier vehicles, changing travel demand, emerging technologies, funding sources, and other factors.”

“struggles to estimate project benefits in scenario planning”

Transit Asset Management Integration Peer Exchange – Challenges Reported

“little guidance on how to focus investments to help achieve targets within planning horizons”

“siloing within DOT departments and finding the right person to communicate with”

“differences between agencies’ data collection systems”

“capabilities of urban and rural transit agencies can be very different”

“asset management team coordination”

“target-setting in an MPO with multiple transit providers”

“challenging to find the data to help establish the initial targets”

“incorporating forecasting and scenario guidance in long-range planning”

What challenges have you seen in your district or region with integrating asset management into planning or programming?

Please raise your hand to share or type your responses into the chat.



Image source: b farias

Opportunities to Improve Integration

- Data collection training or technical assistance (especially for municipalities and transit agencies)
- Scenario analysis training
- Staff rotation or increased participation of staff across departments
- Joint efforts on grant applications, target setting, or other coordination where departments and agencies can better understand each other's needs and functions
- Buy-in on coordination activities among agency leadership to create a culture of integration
- Training or information on emerging topics such as equity and resilience integration into asset management
- Setting up standard processes to integrate TAM and TAMP investment strategies into project development
- **Others?**

What roles can State DOTs, MPOs, and transit agencies play in integrating asset management into planning and programming?

Please raise your hand to share or type your responses into the chat.



Image source: b farias

For more information

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Thank You!