Integrating Transit Asset Management into Planning and Programming

Overview

The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) hosted a two-day virtual peer exchange on integrating asset management into transit planning and programming. The peer exchange was held on Monday, October 23, from 1:00 PM to 4:00 PM ET, and Tuesday, October 24, from 1:00 PM to 3:00 PM ET in a private Zoom meeting. The intent of the peer exchange was to provide an opportunity to share notable practices and identify remaining challenges for integrating asset management into transit planning and programming. The peer exchange was part of a larger initiative, which included the development of case studies of agencies with exemplary asset management practices and the delivery of two national webinars.

The peer exchange included 50 total participants, including hosts and speakers. Speakers included professionals specializing in transportation asset management planning and programming from State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) around the United States. Participants included individuals from regional FTA offices, State DOTs, MPOs, and municipal governments from around the United States.

Opening Remarks

Fleming El-Amin, Director of Planning, FTA

Colby McFarland, Procurement Officer and Project Manager, FTA

Transit Asset Management (TAM) plays an important role in ensuring safe and reliable transportation for daily transit riders. Asset management is a systematic approach to maintain and improve physical assets through engineering and economic analysis, with a focus on achieving a sustained state of good repair at the lowest practical cost. TAM goes beyond just maintaining assets; it helps assess the current state of transit systems and plan for future needs to meet rider demand. TAM Plans result from enhanced planning and decision-making processes that address safety, asset condition, and other elements of risk. TAM Plans can help demonstrate effective stewardship of an organization's resources and are required for organizations that are direct recipients of FTA funding. The intent of the peer exchange is to provide insights into new approaches for performance data sharing, setting performance targets, coordinating with stakeholders, aligning investment priorities with TAM, and managing the process effectively. The goal was for attendees to leave with practical knowledge tailored to their agency's needs.

U.S. Department of Transportation
Federal Highway Administration
Federal Transit Administration

POLL QUESTION

What is your primary job function at your organization?
Responses:

- 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.

Topic 1: Integrating Asset Management into the Planning Process

Question: What challenges do you face integrating asset condition/performance or TAMPs into long-range transportation plans or other planning processes?

Response: Participants identified challenges with siloing by State DOTs and local agencies, target-setting in an MPO with multiple transit providers, incorporating forecasting and scenario guidance in long-range planning, and asset management team coordination.

PRESENTATION SUMMARY

Washington State DOT

Jonathan Fok from Washington State DOT gave the first presentation. Jonathan is an asset management specialist in the Washington State DOT Capital Program Development and Management program. Washington State DOT has performed asset management planning since 1980 with pavement management. In 2017, the Statewide Transportation Asset Management Plan (STAMP) extended asset management to all asset classes. In 2019, Washington State DOT completed initial asset management plans for all asset classes and, in 2021, performed a technical update. There are 20 asset classes organized into four categories that encompass the entire Washington State DOT system. The Washington State DOT system includes 18,677 highway lane miles, 4,102 state-owned bridges, 21 ferry vessels and 20 terminals, 32 local transit systems, and 15 Washington State DOT-operated airports.

In 2017, the State Secretary of Transportation signed the Statewide Transportation Asset Management Executive Order (1098.00), which established the leadership group responsible for developing policy guidance, common asset management definitions, and an asset management organization framework. These actions directed the development of a risk-based asset management process for Washington State DOT.

Washington State DOT efforts to integrate asset management into the planning process are best demonstrated by three long-range plans: The Washington State DOT Highways System Plan (HSP), Washington State DOT Public Transportation Plan, and the Washington State Ferries (WSF) Long Range Plan. The HSP includes goals, strategies, and performance analyses for program investment levels into the state highway system. The HSP uses scenario planning to evaluate investment equity

impacts. The Washington State DOT Public Transportation Division works with transit agencies on policy development and funding. The WSF Long Range Plan provides recommendations for near--, medium--, and long-term investments and service enhancements.

Internal STAMP coordination for each asset category begins with separate technical advisory groups that work with executive steering committees. The executive steering committees report to the deputy secretary. The asset management program acts as a liaison to facilitate STAMP discussion and long-range planning coordination. External coordination is driven by the Washington State DOT Public Transportation Division. The division published guidance for Tier I and Tier II transit agencies to develop TAM plans.

Washington State DOT is currently facing challenges with balancing preservation versus improvement projects. Limited resources and staffing capabilities also impede partner coordination and integration. Staff have expressed that such activities are another responsibility added to already full job descriptions.

Washington State DOT is working to incorporate climate change and resiliency analysis into asset management risk workshops scheduled for 2024. The workshops are developed with the Washington State DOT Enterprise Risk Management Office and will focus on ferry vessels and terminals.

In his closing remarks, Fok expressed that each agency is in a different spot, and it is important to manage expectations. The journey, not just the destination, provides successes and lessons. Successful asset management requires partner coordination to integrate activities.

DISCUSSION
Moderated by Brian ten Siethoff of AMCL

Question from the moderator: How do you improve inter-departmental coordination regarding asset management?

Response: Fok responded that having conversations with other departments and external groups is key. Washington State DOT is still working on alignment.

Response: A participant expressed their asset management group is stuck in a cycle of push and pull with long-range transit planning groups. Federal guidance is used to increase buy-in to the asset management program.

Response: Fok responded that setting expectations with internal groups helps. Successful coordination takes multiple attempts. Buy-in can be increased with qualitative perspectives, not just data.

Question from the moderator: How do you reconcile long-range goals in major plans with goals in smaller plans?

Response: Fok said Washington State DOT has agency-wide goals that shift based on federal and state policy changes. Washington State DOT is better at top-down goal setting than bottom-up, as

they are currently working to incorporate local government plans and perspectives. There is some siloing between Washington State DOT and MPOs/RPTOs.

Response: A participant noted similar siloing. The MPO is struggling with siloing within DOT departments and finding the right person to communicate with. Bridging the communication gap puts additional stress on the MPO due to limited staffing capabilities.

Response: Fok expressed understanding that many groups are facing that staffing conundrum. But despite challenges, having cross-silo discussions is helpful internally and externally.

Question from the moderator: Called on a participant to elaborate on expressed issues with incorporating forecasting and scenario guidance into long-range planning.

Response: The participant represents a large MPO that is working to better incorporate plans and targets into the regional transportation plan. The participant has found there is very little guidance on how to focus investments to help achieve targets within planning horizons.

Response: Fok added that the capabilities of urban and rural transit agencies can be very different. Washington State DOT has some competitive grant programs only for rural agencies to help achieve targets.

Question from the moderator: How do you reconcile different planning horizons from different agencies and plans?

Response: A participant said their TAM and TIP have a four-year planning horizon, while the Long-Range Transportation Plan has a 25-year planning horizon.

Response: Fok noted that Washington State DOT is attempting to align ten-year asset management plans with shorter S/TIP and longer state long-range plans. One challenge is the needs extending beyond the asset management plan.

Response: A participant looked at three different asset management scenarios with a planning horizon of 25 years and chose the scenario based on the amount of available funding. The MPO often selects the "maintain" scenario. They also develop questions in the TIP database to track investments toward the TAM. When developing regional targets, the MPO models the baseline scenario and includes asset replacement needs. Through this process, they were able to align TIP investments with replacement schedules.

Response: Fok shared that Washington State DOT reports on needs and investment capabilities to state legislatures, allowing for a greater unfunded needs discussion.

Topic 2: Data Analysis / Scenario Analysis
Question: What challenges do you face with data analysis or scenario planning for asset condition and performance?

Response: Participant responses identified challenges with staff resources, getting quality data, finding the correct people to collect data and score assets, leveraging asset data to inform decisions, finding tools to help MPOs deal with multiple transit agencies, and scenario planning.

PRESENTATION SUMMARY

Regional Transportation Commission of Washoe County

James Gee, the Director of Public Transit at the Regional Transportation Commission of Washoe County (RTC), gave the first presentation in Panel 2. RTC functions as an MPO, transit authority, and performs engineering and construction for the city of Reno, Nevada. RTC provides fixed-route service, bus rapid transit, paratransit, micro-transit, and vanpool. RTC is the agency responsible for highway and transit asset management.

RTC uses StreetSaver for highway asset management. StreetSaver publicizes regional highway asset condition information. RTC ensures transparent asset management by sharing asset condition information with all levels and departments of the organization as well as with external stakeholders. External stakeholders include regional partners such as cities, counties, and the Nevada Department of Transportation. Data on asset condition directly informs the long-range planning process. Gee expressed that RTC's small size encourages communication and collaboration. Those responsible for long-range planning work directly with those responsible for monitoring asset condition.

For transit asset management, RTC uses a vehicle replacement plan and documents the conditions of vehicles and facilities. RTC's bus fleet is one-third battery-electric and includes eight hydrogen buses. Fleet and investment schedule scenarios are based on fleet composition. Fleet composition drives asset management and the fleet purchasing program. Scenario analysis helps determine the most efficient use and system placement of electric buses to avoid a higher replacement ratio.

Equity is a priority for the RTC Board. There is an equity chapter in the long-range plan and annual report. RTC tracks the age and fuel type of buses by route to consider impacts across a diversity of neighborhoods. This data feeds directly into FTA Title VI requirements. RTC has a robust bus stop improvement program to ensure all stops are ADA-compliant and locations consider equitable service. All equity efforts and asset management information are transparent.

RTC externally reports asset management to the city, county, and board, including equity-focused impacts. Internal asset management staff meetings occur quarterly with the MPO, Transit, Engineering, Finance, and Executive team representatives. Staff meetings discuss long-term asset management and short-term project prioritization.

The biggest current challenge is to ensure that asset management remains a priority for RTC and its leadership. External asset management transparency to elected leadership and to the public improved RTC's credibility.

Southeast Pennsylvania Transportation Authority

Laura Zale, the Senior Director of Southeast Pennsylvania Transportation Authority's (SEPTA) Capital Program Support, gave the second presentation of Panel 2. SEPTA was created between 1964 and 1983 and is the sixth-largest public transportation agency in the county. It serves five counties in

three states. SEPTA's transit system includes heavy rail, commuter rail, light rail, bus, trackless trolly, and paratransit.

During the development of SEPTA's second TAM in 2022, SEPTA was working on an FTA Capital Investment Grants Program funding grant application. SEPTA also directed efforts into increasing asset management transparency and balancing system modernization with the state of good repair program. Goals for the second TAM included improving data quality, alignment to agency goals, and breaking down the TAM group silo, going beyond required compliance.

SEPTA sought to improve the quality, in addition to the quantity of data. Concurrently with the second TAM, SEPTA began to implement a quality management system. The new auditable system created a proactive approach that integrated data quality management into business processes. Internal project managers, third-party consultants, and contractors are all involved in ensuring data quality. The quality management system enhances the TAM program by promoting asset stewardship throughout the project life cycle, increasing stakeholder engagement with the TAM team, and integrating TAM processes with other SEPTA activities.

Aligning TAM with agency goals and planning is challenged by the granular focus of asset management compared to other planning activities. Capital budget proposals are on a project level, and long-range planning is on a programmatic level. Common TAM goals revolve around improving asset performance and conditions. SEPTA also focuses on achieving a state of good repair and linking such goals to overall agency efforts to create a safe and reliable public transportation system. SEPTA has created an agency strategic goal score in the state of good repair tool to evaluate projects more consistently. Risk, including environmental and sustainability risks, is particularly difficult to quantify and rate. The development of the agency's strategic goal score brought up conversations about equity, connected systems, and regionally significant projects.

SEPTA's updated capital planning process makes asset management the foundation of the process. This three-tier process for scenario planning begins with the Executive Team. The Executive Team sets budgets and priorities. The second level is the Capital Planning Committee, which is comprised of subject matter experts who develop a project sequence and establish scenarios. The third level is comprised of the Prioritization Subcommittee, the official voice of TAM, and the Implementation Subcommittee.

Breaking down the TAM silo requires increasing the flow of information between the TAM program and internal and external stakeholders. The goal is to bring everyone to the same page regarding the asset portfolio. The SEPTA TAM team works to market asset management to executive staff and to create tools to further involve Front Line Staff. The TAM team and the planning team work together to improve the bus, trolley, and commuter rail network. This involves analysis of the condition and replacement of assets. Having asset management directly tied to program delivery helps build better funding needs predictions and project prioritization.

DISCUSSION
Moderated by Michael Grant of ICF

Question from the moderator: Do the panelists have any advice for ensuring good data collection?

Response: Gee stated the most important thing is making sure decision-makers can understand the data so that the agency is making good use of tax dollars.

Response: Zale recommended starting small when moving into something new. It is important for transit agencies to articulate what they need to keep their current service running and how new projects can redirect funding from that goal.

Question from the moderator: Does anyone have some good practices for finding the right person to collect data and score assets? Or to coordinate among multiple transit agencies?

Response: A participant expressed that a third party manages assets, and the agency is wary of having the same party score those same assets.

Response: Gee stated that RTC hires third parties to operate, manage, and score assets out of necessity. Staff review ratings when possible.

Response: A participant found data collection to be the biggest part of conducting asset management. The MPO hires a consultant to manage a data portal. Transit agencies upload the same data that they submit to the National Transit Database (NTD). They face delays with agencies with limited capabilities and challenges with differences between agencies' data collection systems.

Question from the moderator: How does the NTD simplify the process?

Response: A participant stated the NTD is a reliable source. However, the NTD does not allow the MPO to track information in real-time.

Response: Zale found targets directed to transit agencies can start a conversation about data collection. The relationship between MPOs and agencies is key in data sharing.

Response: A participant recommended conducting as much coordination with transit providers as possible and referencing their plans and challenges in planning documents. The MPO set separate regional targets to address differences between provider capabilities. The specific targets allow for a more aspirational policy body.

Response: Another participant is considering setting individual targets for separate agencies.

Question from the moderator: How are panelists performing different types of scenarios, such as climate change?

Response: Zale stated SEPTA's asset management practice was born out of scenario planning in the resiliency sphere. Good data is important for resiliency and environmental scenario analysis. There are always tradeoffs with directing funding to resiliency. The planning department provides criteria for scenario planning to the asset management team. For example, the planning department shares development initiatives that will increase density in specific planning areas.

Response: Gee stated that RTC has also done service scenarios based on staffing limitations and the number of electric vehicles in the fleet.

Topic 3: Integrating Asset Management into the Programming Process

QUESTION: What challenges do you face integrating asset condition/performance or TAMPs into S/TIP of other programming processes?

Responses: One participant noted that the state's Statewide Transportation Improvement Program (STIP) only goes out every four years. An agency hasn't performed scenario planning or integrated the TAM with long-range planning. Another participant responded that rolling up condition assessments of rail components to an overall condition of rail infrastructure is a challenge.

PRESENTATION SUMMARY

North Central Texas Council of Governments

Ezra Pratt from North Central Texas Council of Governments (NCTCOG) gave the first presentation of the second day of the peer exchange. Pratt is a Senior Transportation Planner at NCTCOG working on Transit Management and Planning. NCTCOG is an association of local governments, including 238 member governments. NCTCOG provides multi-jurisdictional coordination and planning and is the designated Metropolitan Planning Organization (MPO) for the Dallas–Fort Worth region. As the designated recipient of FTA urbanized area funding, NCTCOG primarily serves as a pass-through for transit agencies. NCTCOG produces the Transportation Improvement Plan (TIP) on a two-year cycle, with a new version slated for 2025.

The TIP includes a "Performance Measures" chapter, which captures TAM efforts and aligns with performance measures outlined by FHWA and FTA. It relies on data pulled annually from the National Transit Database (NTD) to measure performance.

Equity considerations are key to NCTCOG's asset management efforts. They use data analysis tools such as the Environmental Justice Index, Transit Accessibility Improvement Tool, and the USDOT Area of Persistent Poverty and Historically Disadvantaged Communities maps to understand environmental/transportation justice conditions and implications.

NCTCOG's internal coordination extends to other program areas on overall department performance management efforts, including discussing roadway and air quality measures. NCTCOG also integrates TAM efforts into the Mobility 2045 Metropolitan Transportation Plan, ensuring a holistic approach to transportation planning.

Externally, NCTCOG collaborates with both large and small transit providers, seeking input on TAM, performance targets, and lessons learned. However, external coordination has faced challenges due to supply chain distributions caused by the pandemic. Efforts to overcome these challenges are ongoing, particularly in light of different transit asset needs and operating environments between urban and rural areas. To better consider the diversity of needs, NCTCOG set new regionally specific performance targets.

Pratt noted that NCTCOG faces external supply chain disruptions and funding instability, but TAM plays a significant role in mitigating these inconsistencies. NCTCOG will continue to collaborate regionally, monitor FTA and USDOT requirements, and utilize TAM practices in agency planning, funding, and procurement efforts.

Atlanta Regional Council

Jean Hee Barrett from the Atlanta Regional Council (ARC) gave the second presentation of the day. Barrett is a Planning Administrator and ARC's Program Implementation and Partner Services Section Manager. ARC encompasses 11 counties and a 20-county MPO. ARC serves a population of 6.2 million and partners with agencies such as the Georgia Department of Transportation (GDOT), Georgia Regional Transportation Authority (GRTA), and Atlanta-Region Transit Link Authority (ATL Authority). Barrett noted that for many years, the region experienced non-attainment and is now in a maintenance area status for air quality.

For the TIP, ARC works closely with transit agencies, and while GDOT was previously the designated signatory, GRTA now signs off on TIP updates. While a full TIP update occurs every four years, administrative modifications are conducted quarterly, and amendments are conducted at least twice per year. Regarding transit formula funds, the ATL Authority is the designated recipient and is responsible for making sub-allocations.

ATL Authority plays a key role in integrating TAM projects. ATL Authority coordinates with regional transit operators and other FTA direct recipients in the Atlanta urban area to integrate projects into the Transit Program of Projects (POP). ATL Authority then suballocates FTA formula funds to direct recipients. Barrett explained that many agencies go through a flex-fund process to convert FHWA funds to FTA funds. They see this lengthy process as beneficial as they have six years to use the funds.

TAM projects are either included in the Transit Program of Projects (POP) by the ATL Authority or submitted as an ARC TIP Project Solicitation application. Applications undergo a project evaluation process. TAM criteria incorporated in the project evaluation process include the number of passenger trips per year affected by the proposed transit asset upgrade, the share of annual system trips impacted by the proposed project, the current age of the facility asset that will be replaced or improved by the proposed projects, and more. Questions that consider equity in the project evaluation process include asking if the project serves a minority or low-income community.

ARC coordinated internally with Transit Planning and Performance Analysis and Monitoring staff by sharing regional TAM data from operators and the TIP. Externally, ARC coordinates with ATL Authority staff regarding TAM data and reporting between their MPO Performance Dashboard and the ATL Authority's Annual Transit Report and Audit for regionally consistent reporting. Barrett emphasized that regional data consistency is a constant challenge for the area.

DISCUSSION
Moderated by Catherine Duffy of ICF

Question from the moderator: Flexing the FHWA funds to FTA purposes, transit asset management practices can be supported through the TIP process. Have any participants done something similar?

Response: One participant responded that they flex their funding from Surface Transportation Block Grants to FTA funds all the time.

Question from the moderator: How are you involved in transit asset management at your agency?

Response: A participant responded that they were the finance director before becoming the general director and were involved in creating and scoring plans… Originally, they were not excited about the asset management plan, but it had been really helpful in identifying needs. They are trying to find the right people to score their assets but are having difficulties finding knowledgeable candidates. The participant mentioned that reaching out to vendors who operate assets can be helpful.

Response: A participant noted that some small MPOs don't own any assets, so they're only part of the planning. Aligning for them is more focused on performance measures and targets.

Question from the moderator: How are MPOs and State DOTs working with partners to support strategies?

Response: Pratt noted that all of their Rebuilding American Infrastructure with Sustainability and Equity (RAISE) grants are in partnership with transit agencies and their target and performance measures.

Response: A participant noted that they had a conversation with an MPO that was having trouble hearing back from transit agencies about how to set regional performance targets. The published National Transit Database (NTD) data was too out of date for their needs.

Response: Pratt noted that this is also a problem for NCTCOG. They don't get regular updates from small agencies and don't have the staff capabilities to continuously reach out to them. They are reliant on NTD to fill the gaps.

Response: Barrett noted that it is challenging to find the data to help establish the initial targets, and it seems to be a global issue.

Question from the moderator: How encouraged are MPOs to set their own targets instead or adopting targets set by their transit providers?

Response: Pratt responded that NCTCOG set their own targets as a region. Their policy team has encouraged it heavily and wants regionally distinct targets.

Question from the moderator: Does anyone have any insights on choosing/adopting targets?

Response: A participant responded that from their small MPO's perspective, they take the lead from their partners on how they want the MPO to work on that. Partners are hesitant to go beyond the

federal targets. The MPO works with a primary 5307, and they are trying to stay above board and meet all the targets. They aren't capable of going above and beyond.

Response: A participant responded that they have challenges meeting targets due to limited resources.

Response: A participant said they are involved in the Tier II TAM plan. When it comes to assets that need to be replaced, they aren't looking so much at the plan but rather at the replacement fleet grants that come down through the pipeline. The participant doesn't know how other states work, but there is a disconnect because they simply adhere to the replacement grant, not the TAM plan for guidance. Since the agency has a fleet of under 100, they wait for directions from the DOT for everything to do with the TAM plan.

Response: A participant who oversees transit within their agency also has less than 100 buses. They said that the state didn't adopt a Tier II TAM plan, so the participant's agency had to create its own. They also experience the struggles listed above. They have a three-person labor force, so they struggle to get everything done that they need to, and the targets are extremely difficult given the costs of replacement.

Question from the moderator: Has anyone looked into funding or investment scenarios to figure out how that investment into assets would impact the state of good repair? As part of building those scenarios, how have funding scenarios helped you receive funding?

Response: A participant responded that it has been less successful because there are other transit agencies that can show that measurable difference, but they cannot show that difference. We have a ten-bus system and can't compete with other agencies.

Response: A participant responded that their administration helps with funding for vehicles; however, they struggle with driver hiring and retention. Scenarios focus more on service availability rather than funding scenarios and the cost of training.

Hot Topics Breakout Session

In the last 30 minutes of the peer exchange, the hosts opened three breakout rooms to discuss three different topics, including Project Scoring for the TAM and the TIP, Integrating Asset Management into Organizational Culture, and Communicating the Importance of TAM. There were two 15-minute breakout room sessions hosted by the moderators and speakers. Participants selected which breakout room they wanted to join in for each session based on the primary needs of their agency.

GROUP 1: PROJECT SCORING FOR THE TAM AND THE TIP
Session 1

The moderator prompts participants to go around and introduce themselves and their roles.

Response: A participant is interested in scoring.

Response: A participant is involved in conversations related to TAM in TIP scoring

Response: A participant scored their TIP similarly to Capital Inventory based on projected TAM needs.

Response: A participant's organization does the scoring for both TIP and TAM

Response: A participant responded that their organization works with the TIP, and the TAM is incorporated but not well integrated. They are familiar with the FHWA process but not FTA scoring.

Response: A participant updates the TAM but is not familiar with the scoring process

Question from the moderator: Is anyone working with asset criteria associated with agency goals (e.g., resiliency, equity, and climate change)?

Response: A participant mentioned that all of their agency's projects align with strategic goals. Equity tends to be incorporated on the back end of things. Civil Rights looks at equity and ensures projects are in compliance with Title VI. For projects, it is mostly focused on asset needs that are in alignment with strategic goals and plans. Equity is incorporated at the program level rather than in scoring specific projects.

Response: A participant responded that equity is tied into their agency's prioritization process.

The moderator asked a question about qualitative measures for prioritizing asset management, such as public outreach/engagement.

Response: A participant responded that public outreach comes in beforehand and the pre-planning effort. Public participation is the most difficult part.

Question from the moderator: How is the prioritization process connected to the public?

Response: A participant responded that it is not well shared and at the public request.

Session 2

The moderator prompts participants to go around and introduce themselves and their roles.

Response: A participant is working on their agency's TAM and is looking for general info on scoring and gaining insight on other software.

Response: A participant is looking for opportunities to incorporate their TAM into their LRTP.

Response: A participant from the same organization as the previous participant is responsible for TAM scoring.

Response: A participant is responsible for their agency's TIP and was there to learn.

Response: A participant was new to transit and was there to learn.

The moderator asked a question about software.

Response: A participant recommended the FTA-provided software TermLite.

Response: A participant noted that their agency uses TermLite.

Response: A compliance analyst uses TrackIt, but only for the last couple of months.

Response: A participant noted that they use an in-house model for ferry terminals built by consultants about ten years ago. The agency is looking to update the model and go beyond physical aspects by including equity, safety, etc. Qualitative perspectives, such as safety and public involvement, are in the interest of updating the tool.

The moderator asked a question about the role of the maintenance and operations in scoring assets.

Response: A participant said that from the ferry and bus perspective, maintenance and operations are involved in the discussion to account for TAM. They make recommendations.

Response: A participant noted that agencies with fleet replacement needs are elevated as a priority.

The moderator asked a question about unique prioritization goals.

Response: A participant mentioned that "Climate change resiliency" is being considered.

**GROUP 2: INTEGRATING ASSET MANAGEMENT INTO ORGANIZATIONAL CULTURE
Session 1**

Question from the moderator: Why did you choose this session? What about integrating asset management into your organization's culture resonates with you?

Response: A participant has been struggling to get coworkers to use the same data-tracking platform for asset management purposes. The participant was hoping to get insights from peers.

Question from the moderator: How do you communicate to leadership the importance of asset management's role in planning and programming beyond just fulfilling federal requirements?

Response: A participant mentioned that their TAM is used as a way to basically replace parts on buses. Their leadership wants to make the plan more goal-oriented and tie goals into their long-range plan. Their leadership wants to use the plan to make more strategic investment decisions.

Response: A participant described asset management in their organization as a cross-institutional challenge. They have to communicate with multiple transit planning agencies and providers to cut down on duplicate requirements.

Question from the moderator: Following up on the ARC response, ten Siethoff asked how asset management is viewed within ARC.

Response: Most people involved in TAM planning left the organization in the last three years. They are working to reestablish the program.

Response: A participant noted that their agency encourages transit providers to submit projects that need funding. Every time they receive federal funds, they turn to transit operators and ask them where they need funding.

Session 2

Question from the moderator: The themes were "Getting leadership on board," "Communication and education on asset management," and "Using information to justify investing in capital projects." Ten Siethoff asked if any of these themes resonated with the participants.

Response: A participant explained that their agency had a lot of executive leadership that allowed them to engage stakeholders. They would have quarterly meetings to discuss planning and identification of work that needed to be managed. The participant mentioned that the focus was on capital assets, and they would keep the conversation at a higher level. This dynamic changed during the pandemic. Staff turnover and retirements put the agency in "maintenance mode." The agency is currently in search of a new executive sponsor and is rebuilding that top-down support.

Question from the moderator: Ten Siethoff asked the participants if they noticed if their program was either flagging off, coasting, or sustaining without executive support.

Response: A participant noted that the agency is fully staffed now, but they did go through times with multiple vacancies. The program is starting to pick up traction again, but it does take a concentrated effort of labor. They need to make planned communication efforts to make the plan, and that takes a ton of time as they have about 15 different asset management plans that they're working on engaging different groups to update simultaneously.

Question from the moderator: Ten Siethoff asked how many people in the breakout session had three or fewer coworkers on their team.

Response: About 5/15 people raised their hands. Two of those five are the only person responsible for asset management in their agencies.

Response: A participant chimed in, saying that to work in asset management with few staff, you have to be an expert in nothing and involved in everything. Getting people educated on asset management is the real issue. As the industry shows best practices, this gives people in the field more concrete evidence that they can show people why asset management is important.

Response: A participant mentioned that their biggest hurdle is doing all of the labor and getting people to support transit.

GROUP 3: COMMUNICATING THE IMPORTANCE OF TAM
Session 1

Question from the moderator: What are you currently doing at your agencies to communicate the importance of TAM?

Response: In terms of external coordination, this participant's agency works with its multimodal planning division. They generally try to participate in their agenda in the meeting, and they have to provide relevant information. Washington State DOT has created a policy, the Secretary's order, which is posted on the external website (which is not typical). They are not externally circulating asset plans for most asset classes. They do have a few asset plans (like the GeoTechnical group) that are starting to circulate their plans externally. They have an imperfect data management system and are currently going through modernization efforts. They have an asset management webpage and are working on the accounting systems.

Response: A participant responded that at their small agency, internal communications involve the entire agency, so everyone is aware of the condition of assets. They struggle to communicate the status with external stakeholders and need to get better at fostering buy-in from the community and sharing long-term goals and challenges, especially when faced with funding challenges in the current climate.

Response: A participant responded that their transit system is a patchwork quilt of very different, separate agencies. They are the largest county in the state without a regional transit system, and they're developing a series of transit studies. They just finished a bare-bones inventory, but they're not trying to replace assets. They want to improve and standardize their database and make it available for their jurisdiction. They're starting to get the TIP information into their long-range plan.

Session 2

Question from the moderator: What are you currently doing at your agencies to communicate the importance of TAM?

Response: A participant noted that it is challenging talking to internal stakeholders with other priorities. The biggest selling point is FTA requirements.

Response: A participant responded that their agency condemned rail and another agency is requiring action.

Response: Zale explained that SEPTA has always struggled with identifying the "what's in it for me" for different groups. They have been providing long-range scenario planning to their MPO, and a lot of the projected numbers for operating and maintenance are incomprehensible. They tug between asset management and expansion. They have developed many different ways to talk about the situation, especially to those who are actually working on the ground. Building credibility regarding what the information they are giving will be used for.

Response: Pratt noted that his agency is trying to make regional targets relevant to different stakeholders. Grant applications and federal regulations help.

Response: Zale said that there has been so much turnover since 2018, and they are losing some connectivity. FTA maybe should circulate the requirement to give MPO agencies targets. She said that it feels like every time they need to run an analysis, they're in the middle of the data-gathering process. They're trying to increase deadline coordination.

Response: A participant noted that their challenge is integrating zero emissions into TAM, given state requirements.

Key Takeaways

Overall, coordination among transit asset management and long-range planning and programming can be beneficial to agencies in aligning priorities, demonstrating funding needs, and coordinating funding requests, such as grant applications. Understanding and communicating transit asset condition needs is critical for planners to describe existing conditions in the planning process and identify strategies and investment opportunities to maintain or improve public transit systems.

Transportation agencies face challenges integrating transit asset management into their planning and programming processes. Limited staff capacity and capabilities, lack of data collection or coordination among partners, and limitations of data and decision-support tools are all challenges faced by participants from this peer exchange.

Communicating the value of integration to agency leadership can be key in ensuring adequate staff time is allocated to integration and coordination activities. Using target-setting meetings can be one strategy to encourage collaboration and communication among transit agencies, MPOs, and State DOTs. Joint efforts among MPOs and transit agencies to apply for grant funding or coordinate procurement are also opportunities for collaboration and integration. While data collection and coordination among partner agencies can be challenging, State DOTs and MPOs can provide technical assistance and support to member agencies to ensure data collection is compatible across agencies and useful for regional or statewide planning.

Peer Exchange Participants

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Participant Agencies

- Anchorage Municipality, Alaska
- Atlanta Regional Commission (ARC), Georgia
- Bay Area Rapid Transit (BART), California
- Blue Water Area Transit (BWATC), Michigan
- Brazos Transit District (BTD), Texas
- Brockton Area Transit (BAT), Massachusetts
- Capital Area District Transportation, New York
- Capital Region Council of Governments (CRCOG), Ohio
- Central Oregon Intergovernmental Council (COIC), Oregon
- Centro, New York
- Chicago Transit Authority (CTA), Illinois
- City of Conroe, Texas
- City of Winston–Salem, North Carolina
- Collier County Public Transit and Neighborhood Enhancement (PTNE), Florida
- Colorado Springs Municipality, Colorado
- Departamento de Transportacion y Obras Publicas (DTOP), Puerto Rico
- Five County Association of Governments, Utah
- Fort Bend County, Texas
- Fort Peck Tribes, Montana
- Genesee County, Michigan
- Harbor Transit, Michigan
- Harris County, Texas
- Idaho Transit District, Idaho
- Indiana Department of Transportation (INDOT), Indiana
- Iowa Department of Transportation, Iowa
- Kokomo Metropolitan Planning Organization, Indiana

- La Crosse County, Wisconsin
- Laredo, Texas
- Long Island Rail Road (LIRR), New York
- Louisianna Department of Transportation (LADOT), Louisianna
- Lower Rio Grande Valley Development Council (LRGVDC), Texas
- Maricopa Association of Governments, Arizona
- Massachusetts Department of Transportation (MassDOT), Massachusetts
- Memphis Municipality, Tennessee
- Metro St. Louis (Metro), Missouri
- Metropolitan Area Planning Agency (MAPA), Nebraska
- Michigan Department of Transportation, Michigan
- Montana Department of Transportation, Montana
- Montana Department of Transportation, Montana
- Nevada Department of Transportation, Nevada
- New York Department of Transportation, New York
- North Central Texas Council of Governments, NCTCOG
- North Dakota Department of Transportation, North Dakota
- Northeastern Ohio Areawide Coordinating Agency, Ohio
- Ohio–Kentucky–Indiana (OKI) Regional Council of Governments, Ohio, Kentucky and Indiana
- Ozark Regional Transit Authority, Arkansas
- Pima Association of Governments (PAG), Arizona
- Port Authority of New York and New Jersey (PANYNJ), New York and New Jersey
- Pueblo Municipality, Colorado
- Regional Transportation District Denver (RTD), Colorado
- Rogue Valley Transportation District, Oregon
- Santa Clara Valley Transportation Authority (VTA), California
- South Carolina Department of Transportation, South Carolina
- South Dakota Department of Transportation, South Dakota
- Southern California Association of Governments (SCAG), California
- Southwestern Pennsylvania Commission (SPC), Pennsylvania
- Springfield Mass Transit District (SMTD), Massachusetts
- Stark Area Regional Transit Authority (SARTA), Ohio
- The Forks Metropolitan Planning Organization, North Dakota
- Twin Cities Area Transportation Authority (TACTA), Michigan
- Ulster County, New York
- Valley Regional Transit (VRT), Utah
- Volpe National Transportation Systems Center, Federal
- Washington State Department of Transportation, Washington
- West Connecticut Council of Governments (WestCOG), Connecticut
- Wisconsin Department of Transportation, Wisconsin
- Yakima Valley Conference of Governments (YVCOG), Washington