



TRANSIT ASSET MANAGEMENT

2023 FTA Transit Asset Management Roundtable Summary Report

Introduction

On July 9, 2023, the Federal Transit Administration (FTA) hosted its fourteenth Transit Asset Management (TAM) Roundtable in Boston, MA, which coincided with the Transportation Research Board's (TRB) National Conference on Transportation Asset Management. It marked the first in-person TAM Roundtable since 2019 and brought together nearly 60 participants from transit providers of varying sizes and service types, State Departments of Transportation (DOTs), and US DOT. The one-day event included a session for attendee introductions, a presentation session from FTA including updates on TAM Program accomplishments and future plans, a peer learning panel session on considerations for the transition to zero emission fleets, and a peer learning presentation session on effectively implementing TAM plan elements.

During the round robin style introduction session, participants shared their organization, their role, and the top request on their "TAM wish list". Given that this was the first in-person TAM Roundtable in four years, attendees were eager to hear from their peers about current areas of focus related to asset management. Responses regarding the "TAM wish list" covered a variety of topics but some of the more common themes were data (collection/tracking/analysis, etc.), TAM resources and culture within grantee organizations, and planning for zero emission bus (ZEB) fleet transition. More detail on those topics and others will be covered in the following section.

The session on TAM Program updates included a presentation from Tamalynn Kennedy, FTA TAM Program Manager, as well as dedicated time for questions from the audience. [The presentation](#) consisted of a summary of the recently completed multi-year TAM Program evaluation, an overview of peer program opportunities, the announcement of the planned update and relaunch of the National Transit Institute's (NTI) TAM 101 course, and anticipated enhancements to [TAMPLATE](#) (a web-based tool for TAM plan development).

In the afternoon, participants heard from a panel of their peers from Madison Metro Transit (WI), Jacksonville Transportation Authority (JTA in FL), and Antelope Valley Transit Authority (AVTA in CA). Panelists shared background information on their agency, the status of the transition to ZEB fleets at their organization, and lessons learned from their experience so far. Participants then had time to ask the panelists questions and have small group discussions at their tables after the presentations and Q&A portion. Themes from the discussion will be highlighted later in this document.

The final session of the event featured presentations from Fresno Area Express (FAX in CA) and Mass Transportation Authority Flint (MTA in MI) on TAM plan elements and examples of how to put them into action. FAX discussed the decision support tool element and how they prepared for and implemented a

new enterprise asset management (EAM) system, which involved substantial coordination across the agency. MTA shared their success with the continuous improvement element and changes they have made to improve business practices and processes related to TAM. Similar to the other peer learning session, participants had time to ask presenters questions and then have more in depth conversations with the peers at their tables. Themes from the discussion will be highlighted in the following section.

Key themes

Data

The topic of data is a recurring area of interest for the TAM community. Participants touched on various aspects like data collection, data quality, data analysis, linking TAM condition data to capital planning, and data inputs and outputs for enterprise asset management (EAM) systems. Identifying relevant data to track and then employing appropriate processes to generate quality data for those relevant areas is still a challenge for many agencies. Some agencies shared that they are confident in the quality of their data but still struggle to translate that information to advocate for state of good repair (SGR) needs effectively.

Multiple agencies in attendance shared that they are planning for or have recently implemented a new EAM system. Some participants from medium and larger agencies said they intend to upgrade their EAM systems but recognize the preparation and lead time needed to do it properly and are currently in the planning phase. Those that have recently started using a new EAM expressed some concern over the breadth of data to be added to the system, both in determining how much data to include for assets and also determining the collection method that would work best for the organization as a whole. Attendees that have already gone through the effort of implementing their EAM stressed the importance of understanding from the outset that this tool may be utilized by many different individuals or departments (TAM staff, asset owners, maintenance and engineering groups, finance departments, planning departments, etc.) with many distinct purposes and objectives. They advised those that are moving towards EAM implementation to meet with all stakeholders early and start by explaining how the tool could streamline their work and how documenting current workflows ensures their needs are incorporated appropriately. Other participants said they are working to consolidate numerous tools or spreadsheets into a single EAM system to serve various departments, which has led to standardization of processes across the organization, but that differing objectives and priorities continue to be a challenge when moving towards a single tool. Most agencies discussed a common goal of using their EAM to make more informed decisions regarding their assets but noted that it can take longer than expected to identify and upload relevant data points, and that multiple iterations may be needed before an EAM can function as intended.

TAM Resources and Culture

Staff turnover and lack of resources are complications that can lead to TAM becoming a collateral duty at many, especially smaller and medium sized, agencies. Several attendees indicated that they are the only employee with TAM responsibilities. For some, the organization does not have funding for more TAM staff but for others, the issue is recruitment and lack of quality candidates. Participants said that without adequate staffing, they risk returning to or maintaining a reactionary approach to TAM, rather than a proactive strategy. Attendees also noted significant organizational change and the loss of institutional knowledge as colleagues retire or leave for other opportunities. The high rate of attrition

has caused some providers to create standard operating procedures or playbooks for specific tasks to aid knowledge transfer, and some noted the necessity of leadership support to be successful.

Several participants discussed their desire for a stronger TAM culture at their agency. Messaging the value of TAM as a sound business model to senior management, as well as across the organization, is an ongoing theme and connects to the previous section on data. Agencies that have secured or expanded executive buy-in for TAM suggested that their peers learn what drives leadership decisions and use that insight to choose the most relevant data points to highlight and determine the most effective way to visualize that information for specific audiences. Organizations that have improved TAM culture shared efforts like making a stronger connection between TAM and safety as well as moving to a uniform, agency-wide investment prioritization process as examples of ways they were able to make other parts of the organization see the appeal of a wider application of TAM. One attendee said that agency mindsets, including TAM staff, could benefit from shifting from narrowly focusing on assets themselves to focusing more on coordinated activities and finding connections to other departments to drive value from assets.

Transition to ZEB Fleets

The future of transit involves ZEB fleets, but the timeline and type of fleet depend very much on the size, service type, geographic location, and state or local mandate for transit providers. Many attendees said that they have started the transition to ZEBs, but others have not. The group identified current supply chain issues and related delays as well as the significantly higher cost per vehicle for ZEBs and related facility upgrades as some of the broad challenges for fleet transitions.

Many rural agencies, agencies that have longer routes, or agencies without transition mandates are in a “wait and see” mode. They are monitoring their peers to better understand performance and range before beginning their planning phase. Some larger agencies said that remaining uncertainty around effectiveness of ZEBs makes it especially difficult to balance between critical SGR needs and ZEB transition, with at least one agency prioritizing SGR needs until they learn enough about ZEBs through adoption by their peers. Other agencies said that there are simply too many high priority SGR needs across all asset types to begin considering a transition to ZEBs. Staggering procurements for ZEBs could be one way to reduce some level of uncertainty. One agency recommended beginning by procuring enough ZEBs to capture data needed to understand range and impacts to riders and the broader transit system. Proper pacing for obtaining ZEBs can also avoid the need to replace or perform significant maintenance on an entire fleet or large portion of a fleet at the same time.

Other lessons learned for those that have not begun or are in the early stages of a transition include developing a robust transition plan to determine the type, or types, of ZEBs that will be utilized, understanding charging or fueling needs and implications for utility grids, and treating plans for facilities as equally important as plans for vehicles. Maintenance of these new assets should also be considered. Some agencies suggested including training by the manufacturer in contracts, which could include both traditional training as well as troubleshooting support from the manufacturer as vehicles are put into service. Thinking through warranty agreements and how to ensure proper maintenance for new assets should be built into the transition planning process. Several attendees emphasized the need to plan appropriately for maintenance funding, staffing, and support internally and externally. Lastly, many agencies recommended partnering with a local utility provider in the early planning stage. In some cases, utility providers were instrumental in helping agencies decide on the type or types of ZEBs that

would work most effectively for the system and in at least one example, a local utility assisted by sending engineers to help install the on-route and facility charging infrastructure.

Conclusion

Overall, the 2023 TAM Roundtable was a highly successful event. Many attendees said they found the peer learning sessions to be relevant and helpful, but the most resounding takeaway was how pleased the group was to have the opportunity to have discussions in person and connect with colleagues from other agencies.