

TRANSIT FT ASSET Se MANAGEMENT

FTA Creating the Foundation for Quality Asset Data Webinar Transcript September 28, 2023

Tamalynn: Welcome to the webinar, creating the foundation for quality asset data presented by the Federal Transit Administration. My name is Tamlyn Kennedy, the TAM Program Manager. Next slide. Let me begin today's webinar with a few logistics. Today's presentation is available now on the TAM website and you can access the linked resources from the PDF. Closed captioning is available by clicking show captions, then selecting view full transcript. There will also be a question and answer period after the presentations, so please type any questions you may have into the Q&A box at the bottom of your screen. Next slide. Before we hear how two agencies established frameworks to produce and maintain guality asset data, I want to share with you all a quick look at the state of good repair backlog as reported in the NTD TAM data summary or the NTD snapshot. Next slide. The annual TAM data summary is a snapshot of data that transit agencies reported to the National Transit Database or NTD, providing an inventory and assessment of the condition of assets used to provide transit service nationally. The latest report covers data submitted for report year 2021 with some references and comparisons to data submitted in previous report years. The percentage of assets in a state of good repair, or SGR, is determined from the pool of assets with capital responsibility. Generally, the percentage of assets in SGR shows small fluctuations from year to year. In the most recent report year, about 80% of revenue vehicles were in SGR, as well as 63% of service vehicles, 90% of facilities, and over 95% of track miles. Next slide. Preliminary estimates indicate that about 79% of revenue vehicles will be in SGR in report year 2022, down from 80% in report year 2021, meaning the SGR backlog is increasing or trending in the wrong direction. There are two factors influencing this increase. One, we're seeing an increase in the number of assets that are exceeding their ULB and two, we are seeing a decrease in the number of assets overall. The analysis division is currently researching this change to determine if we can isolate particular asset classes of vehicles that are contributing to the backlog more than others. Next slide. You can see here, looking at just the difference between report year 2021 and report year 2022, cutaways and minivans are the two asset classes causing the largest increase in the revenue vehicle backlog. So we have a polling question for you. Next slide. The number of cutaway vehicles in the SGR backlog significantly increased between 2021 and 2022, an increase of about 95 vehicles. We're asking you, what factors contribute to the increasing number of cutaway vehicles in backlog for your agency? Starting to get some answers filtering in. 30 responses, just waiting to see what other people have, if there's other answers filtering in. All right, let's end the poll and see if we can look at some of the responses. Unfortunately, the way the Zoom process for this particular poll is designed. I can't share the responses with you, but we're seeing responses that say COVID delays, delays in the delivery of replacement vehicles, lack of available chassis, manufacturing delays, lack of frequent use of cutaway vehicles, availability of new vehicles, supply chain, worker shortages, funding, mechanic shortage. So it sounds like there's guite a number of factors that are contributing to cutaways being in the revenue vehicle backlog. If we look at the next slide, this is another view of the increase that we see dramatically in report year 2021 to 2022, where between those two years, cutaways not in SGR increased by about 11%, and minivans not in SGR increased by about 20%. But what we're always wanting to know too is, has the FTA set the

ULB for these assets correctly? So that's our second poll guestion for you. Currently, the FTA sets the default useful life benchmark or ULB for cutaways at 10 years. When you consider your operating environment, is the default ULB too high, too low, or about right? And in this case, we're all able to see, hopefully, the responses as they come in. Okay, we can go ahead and close the poll. Looks like we had about 88 responses and it's not a surprise to me that only 14% indicated that the ULB is too low. But about right and too high is kind of what we see in the TAM data snapshot as well, that about half the agencies that report cutaways report a customized ULB for their cutaways. So thank you all for participating in that poll and now we will go on to today's presentations. Next slide. We're about to hear from presenters from two different agencies speaking about the data collection tools and how that information supports decision making. After the presentations, there will be a question and answer opportunity. So again, if you'd like to ask a question, please type your question into the Q&A box available at the bottom of your screen. Mariyana Tozeva is an asset management coordinator at the Maryland Transit Administration, providing support for ongoing asset management projects and implementation of MTA's asset management strategy agency-wide. She supports inventory update, internal stakeholder engagement, lifecycle management planning, and capital planning efforts, among various other initiatives within the agency. Justin Barclay provides asset management program support to Maryland Transit Administration as well, where he has been leading the effort since 2017. He is responsible for managing all asset management tasks, providing strategic direction, and QAQC on all deliverables and I'll turn the webinar over to Mariyana.

Justin: So I'll go ahead and kick things off before we actually hand things over to Mariyana. Thank you, Tamalynn. So Mariyana and I have been working at MTA on helping to develop an asset management system agency-wide, and we're taking this on a mode-by-mode effort. So we're going to kind of walk you through that. If you can go to the next slide. We're going to start by giving a brief background on MTA, and take a look at some of the challenges that led us to begin focusing on our approach to developing an asset management system, and then we're going to delve into the specific conversation for today, which is the SOPs for inventory data maintenance, and the implementation of those across the agency, and then we will close out with a summary and the opportunity for questions. So with that being said, I'm going to hand things over to Mariyana. Next slide.

Mariyana: Hi, I'd like to start off with a brief overview of the Maryland Transit Administration. MTA serves an area of 2,560 square miles with an asset base of \$12.6 billion in 2022. It's also the sole recipient of federal funding that's distributed over 23 locally operated systems, 20 of which are Tier 2 agencies. It's also comprised of six modes, which include local bus, heavy rail, light rail, commuter rail, commuter bus, and mobility. Next slide. When reaching out to our stakeholders, we want to simplify what our ultimate goal is, and that's to use our data. So knowing what we own, what condition the assets are in, and how they perform to ultimately make better business decisions. Next slide. And like most agencies, MTA has had a number of challenges with their asset data. There's been inconsistent records on the assets owned, unknown data attributes, incompatible asset hierarchies, and not up-to-date data. That's mainly because we rely on an annual snapshot of the inventory, so our data is only as good as the amount of time that's passed since the last update. We also have multiple sources, so from FEMAS to Maximo to data being stored in the asset owner's heads or files and not in a system of record. Now I'll hand it over to Justin, who will talk about the asset management system in the next slide.

Justin: Thank you. So yes, I would like to first start out by talking about, well, what is the scope of an asset management system? First, you need to know what you own, right? And then once you know what you own, you need to know what type of condition those assets are in and how they're performing, and once you understand those top two areas, you can then begin looking at, well, how do we do better planning, design, procurement, O&M strategies, and disposal strategies and processes better? And then following that, well, how can we automate it through our supporting technology? But this is an awful lot to take on at one time, and the industry recognizes this. So if we go to the next slide. The agreed upon approach is to go after improving your O&M strategies and processes first, and automating that through your supporting technology, and then you can begin looking at, how do we do everything else better? So go to the next slide, please. So for over 10 years now, MTA has been trying to tackle this as the entire agency at one time. So to date, we do know what we own, what type of condition those assets are in, and how they're performing. But as an agency-wide effort, we have not begun looking at, how do we make changes or improvements to our existing strategies and processes for O&M, let alone how we automate it? So a few years ago, back in 2018, a mode-by-mode effort, starting with our bus mode, which we just completed this past January. Next slide, please. Where we started out with a pilot for bus, and then we spread that across the entire mode, and basically doing this across each mode over the coming years until we have the entire agency down, and the essential approach for this is starting by building your foundation, your inventory, your asset registry. Through a field inventory verification of those assets, you can verify the attributes that you have listed on those assets are accurate, and at the same time, doing a condition and performance analysis of those assets and then taking a look at your existing strategies and figuring out, how can we make those work to actually achieve our asset condition and performance targets? And then most importantly to this conversation, SOPs related to inventory data maintenance and then from there, at the same time, once this is done, configuring Maximo to handle all the various assets that we collected and verified during this process. Now, keep in mind, up until 2018, Maximo at MTA really only held our fleet data, specifically our bus fleet. So since 2018, we have worked on configuring Maximo to handle all of our facility asset data as well, and all the various attributes that we need for asset management, and so as we move across each mode, we are actually vetting all of the data first through this effort, and then getting it into Maximo so that we know that the records that we're putting in Maximo is quality data, and then speaking of that quality data, how do we keep this quality data moving forward across the agency at any point in time of the asset lifecycle? And that's something that Mariyana is actually going to speak to you about in the coming slides. So I'm going to hand things over to Mariyana to walk you through that process.

Mariyana: So we developed the SOPs for inventory data maintenance by asset type, so that the specific data requirements can be included in the documentation and an Excel tool that I'll discuss in a little bit. So the three asset types are vehicles, both the revenue and non-revenue, vertical assets like buildings, stations, and shelters, and horizontal assets like rail, right-of-way, and parking lots. We also split the SOPs by the phase of their lifecycle. So we have SOPs for procurement and onboarding, and for lifecycle maintenance and disposal. Next slide. So to facilitate the use of the new SOPs, we also developed a process flow chart where we first documented the current process, and then we identified this process that ties in all the steps that are taken by the asset owners, engineers, Maximo team, and so on, and then we do have a chart like this for each asset type and for the different phases. Next slide. Along with the process flow chart, we also developed an Excel tool that the asset owners or vendors fill out. They send it

to the Maximo team, who then configures the data into Maximo. So we have on the tool, we have an instructions tab, a definitions tab, and other tabs depending on the asset type. In this example here, we can see how we use this tool for vertical assets. So we have buildings, site, pavement, and equipment as the four asset categories. Next slide. This is the slide that has the different descriptions of the data attributes listed in the tool and this is as defined in the National Transit Database Policy Manual. Some of these attributes are asset type, purchase price, facility type, and so on. Next slide. So to summarize, MTA has had a number of challenges. There's been inconsistent records, unknown data attributes, not up-to-date data, because we do rely on that annual snapshot and multiple sources for records. But our work over the past few years has resulted in the development of the SOPs for inventory data maintenance, improved processes for facility maintenance, Maximo configuration for facility assets, and improved performance monitoring. Next slide. I think that's it. Thank you.

Tamalynn: Thank you, Justin and Mariyana. I know we had a little bit of technical difficulty with Justin's audio there. So if there was anything that you missed or that you'd like to ask him to cover again, please feel free to put that in the Q&A pod at the bottom of your screen, and we'll move on to our second presentation. Next slide, please. With Dan Hofer, who has been with the Utah Transit Authority for almost 15 years. During that time, he has been involved in the capital construction groups and the state of good repair efforts at UTA. He started working in SGRTAM back in 2011. I'll now turn the webinar over to Dan.

Dan: Thank you. Hello, everybody. Pleasure to be with you today to talk a little bit about our process as it relates to our facility inspections. Next slide, please. So just to give a little bit of an overview of the Utah Transit Authority. We developed this mission statement called We Move You. It's something that our executive team really believes in and we find it really sweet, right to the point. This shows some of our things that we do in terms of our service. So some high level things. We started around 1970. We serve about 80% of Utah's population, which lives primarily along this area highlighted here. Our service area is not nearly as big as MTA's, but it's about 730 square miles. We have about 2,800 full time employees and our main rail services are commuter rail and light rail. We also have a pretty large bus service as well, which includes bus, fixed route, paratransit, and then we also have a pretty large vanpool service as well. Next slide, please. So I'll cut kind of right to the point in how we address our facilities, particularly as it relates to our state of good repair evaluations on them. We definitely strive for data driven decisions. So I'll skip over the inventory and that kind of stuff, but just focusing on the data. So the data that is collected is very important. We'll address that, how we collect that through this presentation. How do we analyze it? And then based on the analysis, how does that drive the decisions that are made or how does that back up the decisions that are made? So we dove into this. Those were the three big questions that we had to answer, and so we spent some time kind of planning out how we wanted to do that, and I'll get into that now. So next slide, please. So the three basic questions that we started off, like I said, what data do we collect? How do we collect it? And how do we use it? And I will say it's been an evolution over time. To give a little bit of a preview, it started as literally paper inspections, moving it to Excel, and then doing analysis. So we've since evolved to use some more technology assets that we have. We're able to leverage some things that we had in house, which have greatly improved this process. But as I mentioned, those are the three questions that we're trying to answer and we really looked a lot around trying to figure out how we could answer these. So next slide, please. So before we get into that, just a little bit of a pro tip for lack of A better term. If you're new to this process and new to the state of good

repair and the TAM industry and how things are done, at the beginning of the day, you start with an inventory and at the end of the day, you end up with project recommendations, and so one thing that we have found really helpful is storing these projects that these assets would be assigned to when it comes time for the rehabilitation or the renewal, in with the inventory record, preferably upon the asset record creation, but if not coming back in later and adding those in. We found this to be very effective in not only keeping track and making sure things are accounted for in our capital plan, but also in our long term programming. Next slide, please. So the slide talks to the systems that we use currently as it relates to our facility inspection process specifically, but a lot of you may already have these types of either systems or hardware components in house and might be able to leverage them to do what we did, but we use the ArcGIS system. We use a couple applications from them, ArcGIS Survey 123. We use to do our mobile application part. The ArcGIS Enterprise is the back end part where we do a lot of the analysis in there and export out from there. We also use iPads or iPhones to allow for the mobile inspections to occur. So our facilities group, they do a lot of the inspections to start with, and then we'll supplement as needed with third party inspections, and then our state of good repair group also goes out and does an audit every year, about 10% of the inspections, just to see if we're sinking on our condition assessments. Once those assessments are done, analyzed, we export them to Excel to do a little bit more analysis. It's a little bit easier done in Excel rather than in the ArcGIS system and then from there, it ultimately will end up in our term line system to help with our capital programming. So next slide, please. So what data to collect? This was the first question that we struggled with, and what we found is that this guidebook on the FTA TAM site is a great place to start if you're starting from scratch. It was very helpful in helping us to identify the level of detail that we needed in the inspections, and it was a very good start to finish type guidebook. It's not extremely long, easy to understand, provides pictures in there which help to provide a baseline for visual inspections of certain facility components. So that was very helpful. There's process in there that talks to how you're going to aggregate your condition rating scores, talks to different approaches that can be used for that. It also talks to calculating the performance measures and also the reporting requirements. So if you haven't seen this book before, again, highly recommend it to establish a good baseline on where you want to take your program. But we found out, in addition to not only that, it had some really good supplemental information there, such as pictures and just tips and tricks to be aware of while you're doing this. So I highly recommend this as a place to start when determining what data do we need to collect. Next slide, please. So I'm going to dive a little bit into our technology solution right now, kind of walk you through a dashboard and then a couple examples of what the user interface looks like, but this is a screenshot of our inspection dashboard. So our facilities managers and our SGR manager, they can keep track of how the inspections are going. They can kind of keep an overall pulse of overall how things are going in terms of conditions. This dashboard does more than just this as well, but it allows them to see areas where the inspectors may be working and just provides a good real-time way to keep a pulse on how the inspections are doing and if they wanted to, they could click on any of these dots or other access points and be able to see what the inspection data is that was recently submitted, or the latest that was submitted from the latest condition assessment. Next slide, please. So I'm going to show you a couple slides that show the user interface. So this is the opening screen or the first screen that an inspector would see when they're starting a new condition assessment. So this part is looking at one of our stations in one of our, it's our West Valley hub, which is part of the bus rapid transit system that we have, and this talks to, we wanted to provide some definitions up front. So it talks to the term scale and gives the ratings or their definitions and some high level guidelines on what is a five, what's a four, three,

et cetera. What's nice about the technology is that it allows you to capture easily what the data is, when they started, those are auto-captured as part of the inspection, and then you can identify the type of inspection that you're doing. We found that we've needed two where our admin and maintenance buildings can be completed out of one type of inspection, and then our stations and park and ride structures can be completed out of another type. The technology allows for the attachment of inspection photos, which is really helpful for those on the back end to kind of see what the inspectors was seeing. So next slide, please. So this one is talking to a certain specific element in the facility inspection, we chose a condition rating aggregation approach where we graded the element of the asset, and when you're looking at ours, the way this works is this type of aggregation approach allows you to say how much percentage of a type of asset you migrate as a three, you know, four, five, et cetera, one or two, and then what you do is you put in the percentage of that asset that's being viewed in the applicable rating. So in this one, the inspectors found that when they were looking at it for this canopy foundation, they felt that 40% of this canopy foundation would be rated a three, and then 60% would have been a five, and so some controls that we have in this is that the total percentage there at the bottom has to equal 100%. It will provide a weighted score based on an internal calculation that we built into the system, that translates to that average condition rating for the asset. So as you can see on this one, overall, it came in at a 4.2. So that will be an important number to remember as we go on. But at the end of the day, that average condition rating is what we end up exporting to Excel to kind of complete the review of the data and the recommendations from it. So next slide, please. So after the inspectors have gone out and done the inspections, obviously, how do you get all that out and how do you look at it? Our GIS team and our CIP repair team, they worked together to develop this spreadsheet. This is just a very small sampling of it, but we hope to be able to make the point with it. But basically, every system and subsystem that was evaluated as part of the inspection is able to be exported into here, and it's tied to the system and subsystem that it was scored against, and that's shown across the top, and then on the left hand side, you can see what asset was being evaluated. So in this case, these are some of our commuter rail stations, and we can see the latest results of those as they're shown here. So what we love about this is it allows you to do horizontal or vertical programming. That's just a kind of a clever terminology where we will take these values after the condition inspections have been done, look at them manually and then you can look across them horizontally, or at a single asset and say okay, this asset's really not doing well, sort of visual. So the closer to red it is the worst condition it is. But this also allows you to look at it vertically, where you may look at a system and subsystem across several assets, and pick up a pattern where rather than maybe doing your capital programming against a single asset, it makes sense to leverage multiple locations suffering similar degradation, and develop a campaign of sorts across all of those assets and maybe get some buying power. So next slide, please. So at the end of the day, our state of good repair team takes the analysis from that spreadsheet, and they develop recommendations that we work with our facilities group on. At the beginning of every year and kind of at the end of every year, just so everyone's on the same page and for what they're going to do in terms of their capital plans and capital maintenance efforts through the year. So we take the information, consolidate it into a document for them and provide it to them with the recommendations of what we would suggest addressing during the coming year, and we'll provide the condition assessment data with that to sort of justify the recommendation or back up the recommendation, and we really found this approach effective because it takes the data that they've provided and summarizes it in a way that is actionable, and it's easy to understand. Next slide, please. So that's been our approach. I'll turn it back to Tamalynn.

Tamalynn: Thank you, Dan and thank you, Mariyana and Justin. I'm having some bandwidth issues. So I'm going to keep my camera off just to kind of preserve that. We now have some time for questions and answers from the audience. Again, if you'd like to ask a question, you can type it into the Q&A box that is available at the bottom of your screen. The first question we have is for Maryland. For your flowchart, how do you leverage that flowchart? Do you have it integrated in Maximo or how do you make sure it is adhered to?

Mariyana: So the flowchart was developed, you know, along with the stakeholders that were the ones that were part of those initial conversations. So it was established by them. They've adopted it along with the SOPs, along with the SOP tool we discussed. So really the stakeholder buy-in was the key to this being implemented. So far, feedback has been that this is the best process for getting the data into Maximo. So it's really knowing that it is actually useful and the stakeholders are the ones that came up with it. So I think that's really been key in this.

Justin: And if I can add to that, whenever we were developing all of this, we had a series of probably five or six different workshops with the stakeholders from across the agency, from all of the various departments and it was really their input that shaped the flowchart. It was not us developing it for them. It was really an active approach through conversations with them. So really they took ownership of it because they all mutually agreed that the process we were outlining is what they wanted for the future. So again, buy-in was key.

Tamalynn: Thank you. Maybe you guys could, Mariyana, if you would talk a little bit about what got you started on this whole process.

Justin: I can take that because Mariyana has only been involved since March of this year. So whenever we started this, essentially, you know, we were talking about across the agency of, oh, you know, we should really get an enterprise asset management system, et cetera. But it was a conversation with Holly Arnold [ph?] at the time, you can have the fanciest system you want. But if your data is not 100%, and that includes all of the various attributes, then the tool that you use is only going to be as good as the data you're putting into it. So essentially, MTA is a very large agency. So we decided that the best approach, because there were a number of methodologies that we wanted to figure out, right? We wanted to figure out, what is the best methodology to do our facility assessments, for example, while also adhering to the FTA requirements for the facility assessments? Same with our vehicles. How do we want to actually assess the condition of our vehicles? Like actually have a methodology documented and similarly with criticality frameworks, risk prioritization, the list goes on. There's a number of things that we wanted to accomplish, but doing it as an agency-wide effort was very challenging. So we decided to start one mode at a time, and that was doing that field inventory verification. Now, in terms of line items, the assets that we thought we owned, we owned, right? But the reality is there were discrepancies in data attributes. So as part of that field inventory process, we were able to clean up those attributes, and at the same time establish those methodologies that we were talking about, and then also the process to avoid this from happening in the future, which are these SOPs for inventory data maintenance. So first, of course, you have to clean up your data, and then you can start fully implementing these SOPs for inventory data maintenance and then once we do the entire agency, that is the point when we will then start looking at,

all right, now we can start talking about an enterprise asset management system. So that's essentially the history of why we are doing this effort. Does that answer your question?

Tamalynn: Yes, thank you very much. I'll turn it over to Dan. This is from Hannah. "I may have missed this, but what is your AMS platform, and how is that integrated with your GIS workflows?"

Dan: Our AMS platform is kind of a cross link between a few different systems. So our base information where everything is stored is stored in our ERP system, which is JD Edwards. GIS, our GIS system and JD Edwards have a link between the two where condition data can flow from our GIS system back to our ERP system. So that's one way we can get our condition data back in there. So there's that link. The other link that we have, it's not necessarily a link, but the way we run our termite system, which does our future year projections, is we've been able to build an export out of our JD Edwards system that contains all of the termite data needed to create those long-term projections, including condition data, the projects that we assign those assets to, etc., and at the end of those, when we run those projections, we're able to roll it up to those projects to do our capital planning. So it's a little bit of an integration between two systems for sure that you're going to import into a third.

Tamalynn: Thank you and just to clarify, what software are you using for the facility inspections, Dan?

Dan: Facility inspections, so it's the ArcGIS Survey 123 application, and that should be part of the ESRI suite.

Tamalynn: Thank you. I think this question is from Maryland. It's from Jamie. Is Maximo integrated with your ERP system that holds fixed asset records for financial reporting purposes?

Justin: No, currently nothing is connected to each other. Everything is a manual effort, so we are looking at how to do that down the road, but we're going to wait until we're finished with the asset management system work to focus on that. The only thing that we have semi-connected is our FEMAS system, which is our state-mandated financial system, and that is only partially automated. A lot of it is still a manual effort.

Tamalynn: Is that a system that MTA administers, or who administers that?

Justin: So, FEMAS is managed. We have a department that maintains our financial system, but that is a state-mandated system that MDOT uses across the state.

Tamalynn: This is a question, I think, for both agencies. Do you use consultants or contractors for condition assessments, or is it done in-house? I'll let Dan answer first.

Dan: We use a combination of both. So we will generally do these initial inspections with in-house forces, and then if anything's uncovered that's concerning, or if we want to do a specific type of evaluation, like a seismic study on the facilities, we would bring in a third party for that.

Justin: At MTA, we use consultants for our assessments.

Tamalynn: For UTA, Dan, can you talk more about how the GIS app was developed? Just what was the process involved in developing that app?

Dan: Yeah, great question. So, we have an internal GIS team. It was lucky enough to be part of our state of good repair team back when we first started doing this, and our administrator for that is phenomenal. So, it helps to have a really skilled person in that role who can administer it, but basically we were able to take the guidebook that was the reference in the presentation and go through it and basically recreate it within the ESRI program to be able to perform those. So, short answer, we developed it in-house with internal resources, which was great, and then we've been able to implement it as well from just within the company. So, we're happy to meet with others about that process as well further if that's of value.

Tamalynn: We have a follow-up question for you, Dan. Jonathan asks, why not use your EAM application for inspection of facilities?

Dan: Good question. UTA technically doesn't really have an EAM system right now, so we're in the process of going out for one. Normally, yeah, if there was a way to do that within an EAM system, that would be a good way to do it. We have found, though, that some EAMs are limited in their ability to do the field types of inspections. The GIS platform does provide a benefit in looking at things linearly in some cases or across a map, which has been helpful. But that's the main reason why we just don't really have an EAM system right now, and our ERP system isn't really user-friendly when we try to develop those inspections to go directly into it.

Tamalynn: Thank you. I think I have a question here for both Maryland and Utah UTA. Dan, you touched a little bit about this, but can you please describe your data quality assessment process, and do you currently track it as a metric?

Dan: The way we do the data quality is our state of good repair group will go out and conduct an audit of the inspections as they come in each year. Basically, how that works is, they'll go out, they'll do their own independent assessment of the facility, and then we'll go back and compare the results. If things are within a certain threshold, we're good. If they're outside of that threshold, then we'll have a meeting with the facilities group to discuss those. We don't really track it as a metric in terms of a graph or something like that, but we do track it as a figure just to see what that variance was.

Tamalynn: Arianna or Justin, did you want to talk a little bit about data quality?

Justin: I think during my presentation, that was kind of like the main thing. Our entire effort, anytime we're doing our facility assessments, is focused on cleaning up all of the various data attributes and embedding those with our engineering department. That's kind of been the entire effort, is trying to ensure that data quality is there. That way, after we are finished the asset management system effort entirely and we're fully using these SOPs, then we won't have the same issues anymore. That's definitely at the top of our priority.

Tamalynn: Is that a metric that you're currently tracking?

Justin: No, not specifically.

Tamalynn: Okay. Dan, this is a clarification question for you. I think on your spreadsheet, you refer to, on your facilities, you have P&R. I just want to clarify that. That's park and ride?

Dan: Correct, yep.

Tamalynn: Okay, that's what I thought. Another question for MTA. Are you feeding mileage data into Maximo?

Justin: We are not incorporating mileage data into Maximo, although I know that our bus team, they do monitor that. But no, we are not putting that into Maximo.

Tamalynn: I think this is a question for me. It says, when do cutaways go from a four-year ULB to a 10year ULB? I think there is a little bit of confusion between, in the grant circular, a minimum useful life for vehicles or equipment and the useful life benchmark used to determine when assets have fallen into backlog. So, of course, agencies can set their own customized ULB, and four years is certainly a standard that some have used. But when I was referring to the 10-year ULB, I was talking about that default useful life benchmark that is used in term, is the term metric for when an asset falls into the backlog, rather than the minimum useful life for an asset, which is in the grant circular. So that may be some confusion there. Let me just check the chat here to see how we're doing on questions. We have a comment and questions. Thank you so much for sharing the journey so far on creating quality data. Is it possible to share if there are any continuous improvement plans for the system process, i.e., hierarchy development, data standards, location hierarchies, updating processes, procedures, etc.? I'll ask Dan that question.

Dan: Thank you. Yeah, that's a great question. I think, generally speaking, we're always looking to improve. We do that through a lot of coordination with the facilities group, and we'll update our asset information and processes accordingly. I think we're kind of settled, I think, on how deep our asset granularity goes and the things that we are looking to inspect. We felt it's a good manageable point right now that seems to get us the level of detail that we need. But it's not to say down the road that we wouldn't adjust something to be more focused, for example, where Utah is such a high seismic prone area where we would put more emphasis on those as our older buildings start to show their age a little bit more. So I would just say that that's something we look at every year. But we already have a pretty standardized hierarchy, standardized process, things like that that we go off of. But to your point, we do review those every year.

Tamalynn: Thank you, Dan and Justin and Mariyana, did you want to speak any, as you roll this out to other assets, what kind of continuous improvement plans you may have?

Justin: So we're kind of baking that into the lifecycle management plan process. Our original LMPs were developed back in 2016, and they really just collected dust on the shelf, so to speak. So we're trying to make the LMPs an actual living document for the modes. So that's kind of where we're baking everything

in, and the modes have said that they actually do want to utilize these documents as well as identifying improvement actions that they can take over the coming years and again, the process behind that is the same as the SOPs, working heavily with the stakeholders to develop the document with them, not for them, and that's kind of the approach we're taking with everything with asset management, because we've found that that is the best way to actually implement anything across the agency, that historically has silos, is to make sure that everyone is buying in on what you're trying to do.

Tamalynn: Excellent. I'll start with Maryland for this one. Is your data used to help predict equipment reliability or the replacement point for capital replacement?

Justin: Yes, and we utilize TermLight for that. So whenever we're looking at when we need to replace assets, we're running all of our analysis through TermLight and then also for our call for projects every year, we're utilizing the TermLight data as well with the asset to project mapping to assist with funding our various projects that are prioritized by SGR and safety.

Tamalynn: And I see one final question, and maybe I'll ask Dan this initially. How is your data hosted? Is it in an online repository? Do you have some sort of offline area where do you do the quality check before it goes into the reporting system?

Dan: Great question. So when we're using the ESRI system, the way it works is it's hosted on UTA servers and that's the main place where it's captured. The links allow for it to transfer between the integrated asset inventory in real time. So we did a lot of testing on that front end before we implemented it. But it's just another quality check. We'll spot check a few as they've been completed just to make sure that they're logging correctly within our ERP system. But that's the process. Did a lot of testing up front, and then we'll audit a few on the back end after it's been done.

Tamalynn: Excellent. Mariyana or Justin, did you want to answer how your data is hosted?

Justin: So right now our primary system record is still an Excel spreadsheet. We are working with our facility data to get everything into GIS, and we're using FieldMap as of this year, ESRI FieldMap, to actually do our assessments. That way it's being linked to our GIS system. But right now, our most comprehensive asset registry is in an Excel spreadsheet.

Tamalynn: Thank you. I want to thank all of our presenters today. Can we move to the next slide? For your wonderful presentations and your being so forthcoming. During the question and answer period, I did want to mention the FTA's upcoming peer program offerings. We'll be having a planning a discussion forum on setting TAM performance targets, as well as recruiting for the 2024 TAM Peer Working Group. You can find more information about these types of events, but virtual discussion forums are standalone events for about 10 transit agency professionals to present briefly and talk about a predetermined topic. There are 90-minute sessions that provide an opportunity for participants to network and collaborate and the TAM Peer Working Group brings together about 15 participants from different transit agencies to engage virtually on a designated TAM topic, to promote peer learning, share peer-designed resources, and collaborate on best practices. The working group meets monthly for one year, and participants will

give short presentations on a rotating basis on a best practice or current challenge at their agency. The next peer working group is expected to begin in early 2024. So to receive information about how to participate in the upcoming peer events, please subscribe to the GovDelivery TAM or SGR subscriber groups. I want to thank you again for attending today's webinar. I apologize that we were having some technical difficulties, and I appreciate that you were bearing with us. After you log off, an evaluation will launch. As always, we appreciate your feedback. Thank you very much.

Dan: Thank you.