

# FTA

FEDERAL TRANSIT ADMINISTRATION



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

**Transportation Asset Management  
Webinar Building an Asset Inventory**

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*Presented by*

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Office of Budget and Policy  
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U.S. Department of Transportation

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## Introduction

**Mshadoni Smith:** Good afternoon, everyone. Welcome to Building an Asset Inventory. I just want to remind you that this is a listen through your speaker's voice over IP presentation. It's an Internet only webinar.

Many of you are familiar with FTA's webinar platform, but for those of you that maybe haven't participated before, I just want to go over a few brief pieces of information.

On the upper left-hand side, you will find a file share box, which has both of the presentations from today, as well as an audio help presentation. That audio help presentation will walk you through a couple of troubleshooting items in case you cannot hear over your speakers.

Again, I note the webinar is voice over IP only. Most of you have found the chat pod and have posted where you're from, which is great. Thank you very much. If you haven't, that's fine also.

I believe your registration will have your agency name on it. But as you are typing in the chat pod throughout the presentation, you can post questions and if you have any technical difficulties, you can also post that in there too.

I'm assuming that everyone can hear me at this point. I haven't seen a lot of questions saying, "When are we going to get started", so I'm going to make that assumption. So without further ado, I'm going to get started with the webinar and introduce our two speakers for today.

My name is Mshadoni Smith and I am the TAM program manager for the Office of Budget and Policy at FTA. I'm only providing an introduction for our main event speakers, who are Athena Ullah from Metrolink and Doug Holcomb from Greater Bridgeport Transit.

## Agenda

I'll provide a brief introduction to their presentations in advance, then we'll go through their presentations. And at the end I'll do a quick wrap-up and then we'll open it for questions.

We will answer as many questions from the chat pod as we can, and those that we cannot address in the time allowed, I will take back and we can review and provide responses to those at a later date.

## Background

So Athena will be providing insights into how Metrolink has approached managing asset data and the potential migration to enterprise system that integrates TAM principles, sharing lessons on achievements and challenges their agency faces in changing processes that support safe,

reliable and efficient usage of assets across 288 miles of track while making greater return on their rehabilitation and capital investments.

Doug Holcomb is going to share an overview of their work at Greater Bridgeport Transit, GBT, to develop a new transit asset management plan which includes the elements of their tier II TAM plan, efforts to improve their inventory process, influence of the asset inventory on capital programming and the expected outcomes when the program is complete.

This is a peer-based presentation, which means it's a real-world experience. It's focused on asset inventories, but gives context for the agency's decisions that they made.

Keep in mind this is not a tutorial or a requirement, but an exchange of ideas amongst peers, where you can learn from agencies that have -- that are in the same position as you or have started building their asset inventory. So I'm going to turn it over now to Athena and she's going to walk through her presentation from Metrolink's perspective.

## Metrolink

**Athena Ullah:** Hi, everyone. My name is Athena. Thank you for joining the call today. My presentation is largely in three parts. A quick introduction of who we are and where we've come by way of TAM building. I know it's not easy for those on the call, just getting started.

The second part will be an agenda, what we're doing currently on building an asset inventory, and the last part of the presentation we dedicated toward explaining lessons learned and what we've been given by way of guidance from the consulting team who helped along the way.

So with that, the first slide here. The snapshot of the Metrolink field. We are a commuter rail agency, seven routes, along 534 miles.

We operate about 40,000 riders every day, during the weekdays, 59 stations in service, operating budget and revenues are listed on this chart, and we're quite proud that our revenue recovery ratio is about 47%.

## Preparing for the TAM Final Rule

So in 2014 our agency was preparing for the final rule of TAM. We hired on a consulting team to review our existing EAM data structures and data sets that aligned across our operating environment.

We then confirmed the percentage of assets captured. We really just wanted to get a sense of what do we own, what do we have, how much does it cost, what were the acquisition costs, what were the age of our assets, and how do we go about fully understanding the need and condition.

So our consultant, CH2MHill, interviewed a variety of all of our asset owners across the entire agency to see how data is collected, to assess the completeness of the data against TERM-Lite asset classifications and useful life.

We had a goal of having or building a single inventory of assets along the TERM modeling criteria so we could start modeling investment need and following industry standard. By 2016, over that two-armed effort we had to compile the complete asset inventory that lives now as an Access database in a TERM-Lite set-up.

## Developing a TAM Plan

We compared and valued our assets and started to build a plan around the needs and the TAM plan was adopted in December 2016. We weighed out current capabilities of our agency, condition assessment, capital rehabilitation and placement investment program that were on a multi-year horizon, and we adopted a policy.

We looked at the operation groups within our agency and thought carefully what kind of TAM responsibilities to take ownership of and where we wanted to go in terms of predicting investment need long a multi-year horizon.

We also analyzed gaps that we wanted to get to and took forward a plan available online communication strategy. So with that in our policy, we are now in the midst of trying to understand all of the granular data that we have at hand.

And so we take a step back from our analysis of our assets in our database. We have a firm understanding roughly according to real-time effort and modeled results how much -- what is the value of our assets? What is the categorization by way of asset base, and you see here we have roughly \$5.8 billion worth of assets where most of the assets fall on track, infrastructure, tunnels.

We determined a backlog, 544 million, about 40% track structures, and the ride that aligned on the grass, average. A wake-up call in what have we been funding and what do we need? It's been helpful taking a step back of funding reactor or real-time projects and thinking along the multi-year horizon what we need.

This slide is kind of a deeper look at year-over-year, what asset categories are needed most investment. And finally, where we are now, how do we understand our data? Our data is so critical a finding towards really putting and implementing a TAM plan into place.

I think all of us across the industry are collecting a whole source of data, but understanding and refining it so we're speaking a TAM language has been quite difficult.

So the question before us right now is how do we sustain a unified asset inventory and create an assessment scale that encapsulates risk and is useful for operational staff and long-term planning?

It's a big effort, but we're finding the starting point is what is really useful and happening by way of data collection.

Moving forward, the next couple slides I'm going to focus on how we're navigating a solution towards creating a unified scale so we can effectively communicate to board members or funding agencies, how much we really need and validate that by way of the condition of the asset itself. So understanding data inventory.

Then I'm going to go into defining EAM-TAM system criteria and as I mentioned earlier, lessons learned.

## Understanding the Data Inventory

So navigating a solution. We realize that it's -- it was a great exercise to plan and understand what we need by way of investment, but working with every single operational group in the agency to see how they're collecting data, what level of granularity are they collecting data at, what are the pros and cons to data inventory, and what we're currently doing.

We're sitting down with every single group and asking them what are they collecting, how are they using the data. And I would suggest for the people on the call to start to compile a roadmap of the processes of how data is collected and what is it used for along with collection frequencies so we can start our -- our goal internally is we want to make it as easy and helpful to our centers as possible without making it cumbersome and outside of the job responsibilities.

So we have two essential big needs right now. It's to understand asset data. So we can understand the asset conditions. Right now we have multiple sources of data collected for a track and fixed guide ways.

We have track geometry data, ground penetrating radar, maintenance records, GASB34 assessments and you can imagine we're finding all these data are structured in various ways with different purposes along different rating scales.

And they're useful for the people collecting them, but how are they useful for understanding and rehabilitation programming? It's quite difficult.

So the task we have right now working with CH2M Hill is to normalize so the output and rigor are analogous what we're trying to go for, which is a five point scale.

Secondly, the understanding, the data, what we have currently, what I just alluded to is quite difficult. So here is a high level snapshot, which is also in our TAM plan of all the different condition assessment methods for asset categories and the types of systems that they're housed in.

So we have facilities, we have rail-asset management systems and asset that works for mechanical and work order systems, and TERM-Lite, which is a modeling tool, and using that to understand meaning, how we have investments.

We have multiple data sources to multiple systems housing that data, and we are trying to figure out an intelligent way to consolidate all of them. We don't think bringing on another software is important and part of a solution but it's not necessary.

A lot of times having a unified EAM-TAM system is a goal in itself. The greater value is understanding the processes that we have for these data collection methods, and how and why they are being used, and to really question them.

So to get to some of these questions for determining interrelationships and inventories, inferring relationships of cost and cost factors, we're trying to understand the rigor of how the data is collected and how they interrelate with one another.

Connectivity inventory and condition data. We're also working on trying to understand the risk or likelihood of failure with some of these assets. What thresholds does an asset, once it reaches a certain condition, the portion of useful life, what impact will it have?

Will it have -- will it end in a delay? Will it cause a safety threat? Will it mean an FAA violation? So understanding kind of the multiple trigger points, if we do go into a marginal commercial, what does that mean?

### Asset Software Systems

And lastly, trying to upgrade, we have assets online right now and we're not utilizing to full capacity. So we're querying current processes to see, well, why aren't we using our -- or current asset systems or data systems in full capacity and what will it take to get us there? So defining in TAM-EAM systems, it's quite difficult.

We have base data set, which is all of our assets stored in TERM-Lite access database and we do have a need for consistent coding, because working at the end of day, a good EAM is a good work order system and if we have a good work order system we can build on top of that a good transit asset management system that helps prioritize projects.

So in the circle, this is kind of what we're thinking of when brainstorming. How do we get to a point where our system as a whole has data that has mapping capability, connected to contracting and purchasing supplies, accounting system, work order request, order management system, and all of these possibilities go back to understanding the data and how things are coded throughout the multiple systems.

And so while understanding data rigor is important and trying to unify a database, having a good coding system that allows together, if you have a work order complete you know what materials are against that and what components are failing at certain intervals, it's quite important.

So lastly, some lessons we've learned. Software isn't the solution but it is a part of the bigger whole. But before you buy software, I really suggest, and a lot of colleagues at Metrolink have

been on board with the creating process maps, all the different business processes that surround you in the asset inventory.

That means looking at every single operational unit and trying to get an understanding how projects are queued up, how are they validated and then once a project is approved kind of working and following if a requisition is cut or PO, what happens over the full lifecycle of the project that you can start to understand?

Getting the right incentives. TAM is an aspirational legislation, I think. It's just very useful as a benchmark, but making sure that we are communicating for the right incentives for the operational units to move towards unified TAM vision has been quite difficult but it's also a very important lesson learned.

Normalizing data sets and coding is very important as well, that you understand the data relationships in the effort to streamline the process, and making sure that your inventory fields need to be driven by the user of the data.

That gets back to understanding the purpose of the data that is being collected and finding the right incentives to make it more rigorous or tooling the data collection method down to make it more purposeful for that operation unit or agency as a whole.

And lastly I wanted to pass on a really useful three-step process that was given to us, which is largely how we got started. So one is being a data gap analysis. We are taking a step back here, but I wanted to leave this with you guys.

Asking of your data or operational units, what assets are we missing? What's being collected? Is process repeatable? After that going into a gap assessment, can our EAM support inventory needs? Looking at the current condition and configuration of the system itself.

And lastly thinking about data strategy, which is where we are now, trying to figure out how are we going to have a data set that allows for comparisons of a unified understanding and condition across different asset categories that also communicates with disinvestment or investment.

And I just wanted to acknowledge my coworkers back at the agency, all the operation divisions have been helpful in providing some of these lessons that I've been learning. I'm the planning manager who's been helping with the TAM effort. Roderick Diaz, who is the planning director. MARTA, who's been very helpful in giving us a lot of guidance on what they did and how they were successful, and our consultants CH2MHill who has been very closely involved in building our inventory.

And resources were very useful, *Physical Asset Management* by Nicholas Anthony, very helpful. The book, by Terry Wireman, *Developing Performance Indicators for Maintenance*, is a great overview of how do you start to build a good work order system that leads into an asset inventory by way of performance indicators. As MARTA suggest, this book was helpful to them and I found it fun to read. With that I'm done. I'm open for questions but I will allow Doug



Holcomb to take over now.

**Mshadoni Smith:** Thank you, Athena. I just want to, while you guys transition presenters to remind all of the participants that the chat pod is open throughout the presentation. If you have any questions that come up, please feel free to type them into the chat pod and we will get to them at the end of both presentations as time allows. And now I will turn it over to Doug Holcomb from GBT.

**Doug Holcomb:** All right. Thank you. Do I have control of the slides now?

**Mshadoni Smith:** Yes, you do.

**Doug Holcomb:** Great. Thanks for the introduction and thanks for holding the webinar.

## Greater Bridgeport Transit

**Doug Holcomb:** My name is Doug Holcomb, I'm general manager at Greater Bridgeport Transit on the east coast and we're transitioning now from the first presentation, Tier I property to what the regulations would consider a Tier II property.

In this presentation, which is very brief I'll give an overview of our agency from a transit asset management perspective and talk a little about the key elements of what will be our transit asset management plan and how we're getting there.

Some modifications we're making to our asset management software to meet the new requirements and I think most importantly for us is taking the regulation and adding to it and turning it into something that will really help with our capital programming. That's really what the presentation is about.

And just from a transit asset management perspective, this slide will give an overview where we are. By any standards we are considered a small property, peak pull of 44 buses and 170 employees.

I'm sure many of the properties logged on today, the same kind of staffing, you know, spreading your staffing out on multiple projects and in multiple areas of compliance. I think the important things here, though, are the operating budget, about 20 million, the capital budget that ranges anywhere from less than 5 million to more than 25 million depending on project needs.

And the fact our assets are across three facilities, 100,000 square foot maintenance building and station in downtown Bridgeport here.

At the core of the new requirements is this first quote that I took from the Federal Register, which indicates a combination of financial constraints, which I think we all can agree on and then inadequate Transit Asset Management practices, which I'm sure there are different opinions what that might mean.

In our agency, while we have a good capital program and good facilities, that we did not -- and we still don't -- have a fully adequate asset management practices and to some extent that hobbles the capital programming and our planning.

We're a Tier II property, which would be defined by regulations less than 100. There's more details in the regulations, but for our purposes today, less than 100 vehicles in peak pull-out.

I have to mention we're lucky to be working with the Connecticut Department of Transportation. There's a great statewide programs in Connecticut and statewide capital planning program, great statewide drug and alcohol testing consortium, and also a superb statewide insurance program and the state has taken the lead as the sponsor on preparation of Tier I and Tier II Transit Asset Management plans.

So a lot of work we're doing is coordinated with them and led by them and it's been helpful. In terms of the asset inventory, that will be work that we do predominantly on our own. So the key elements for a Tier II property, there are 9 if Tier I, but out of that there are four elements we'll talk more about today.

One is the number and type of capital assets, whether rolling stock, facilities and equipment or inventory. And I added some language into the slide that is from the Federal Register about making commensurate with the level of detail that the agencies have for capital programs.

We read that as latitude in this regulation. Clearly a lot of work went into differentiating between Tier I and Tier II, an understanding of the needs and capabilities of the smaller properties.

And so there's not real one way of doing this work defined in the regulation. Just certain parameters that you have to meet.

Next is a condition assessment, which we don't really do right now. We do a little bit of it, but a mechanism to help predict how the assets are going to perform.

And for this I'm talking mainly about rolling stock and equipment. Facility is kind of a different animal for us and we still need to do work there, and I don't think we have anything here which would fall under the category of infrastructure in a property our size.

And the third thing, an important element is the process for prioritization of investments. So that you can do thorough capital programming over time. And the requirement for ranking the projects considering mission critical, safety and accessibility features of it. So those are really the keys for the Tier II plan as it pertains to the inventory.

### **GBT's Asset Inventory**

A little about GBT's background on inventory. It's really an excellent inventory already. It doesn't have all the elements that the transit regulations require but we have an asset inventory

of everything greater to or equal to \$300 and all is tagged and inventoried annually and that inventory is tested by our auditors. So that really is an order.

And you'll see some of the structure that we have. We will apply first the regulation to the items that are -- that meet the FTA thresholds, meaning rolling stock and I hope I get this right, but non-rolling stock equipment with an acquisition value greater than \$50,000.

So that's where we'll apply it first. But I do think, and our staff here does think, we'll go deeper than that because we see a value in how we can prepare packages for capital programming for department heads in the agency.

The finance staff verifies all the information, but if there's a need for other staff to be involved in this now. People making determinations about the condition of certain assets needed a certain level of expertise in that asset.

And we're adding fields -- we have had fields in our old records for lifetime, estimated lifetime, and condition assessments but historically they haven't been used because the asset inventory is used for the inventory annually and predominantly for depreciation.

So in many cases, assets have tended to be used until they fail or almost fail. And this is particularly true with certain assets that are part of the facility, and our facility is 30 years old.

And that failure interrupts the capital programming and budgeting process. I can't speak for anyone else but I suspect there are others that have done their capital programming and found their local match, got it in the TIP and STIP and opened the grant and it was clean and well-done to have someone walk in office and say, well, the air conditioning unit on building two is gone and that doesn't appear anywhere in the capital plan and it's 22 years old. So that's been a problem for us.

In the blue box I mentioned a few additional fields for the records, asset classes, rolling stock, facility and equipment, or infrastructure, condition assessment we've added and estimated replacement date. And I believe that useful life benchmarks and useful life information targets are the subjects of an upcoming webinar.

And then we are also giving consideration to adding additional fields which we think will help staff. One is safety critical determination. Another is mission critical determination. And also an accessibility feature.

We see in our facility management plans that -- and our vehicle maintenance plans that accessibility features are important and we think fields with simple yes or no designations can help staff make a determination from the database, can inform and influence the prioritization of projects.

## Asset Management Databases

We moved from a very old-fashioned card-based inventory system to a manual one for the same reasons that any other agency would do that, to have more flexibility in managing

database to do what-ifs, more analysis than you can do manually, but the transition wasn't for the new Transit Asset Management effort.

It was in advance of that, but we did find -- Athena spoke about different software systems. We did find that the Legacy system we had contained everything we needed including the flexibility to add asset classes, useful life, and other fields that we talked about.

It happens to be -- this is not a promotion, but it's called SAGE fixed asset solution and developed predominantly for depreciation, and one of the important ideas here that are chief financial officer wants to make sure that the asset inventory and the same system that does depreciation is the same as the asset inventory so we're not maintaining two different databases here.

This is an example what it used to look like. This is a jack stand card from 1980. Again, for depreciation. It had a lot of features the database has now and estimated life and condition but we didn't use that.

I apologize for the quality of this slide, but I think you can make out on it that it is a database, it is the Sage fixed asset database. These records stretch way out to the right with a lot more information.

One of the best ways to drill down into it, I have on the next slide, I can show you drilling down to it, but it has the description, the acquisition date, the location for inventory purposes, and just about anything else you can imagine, and you can manipulate and change the fields and add fields to the different records.

If you drill down you see more detail in the cards associated with it and the blue arrows are indications we've done additional work where you added the asset class which will populate with information from the regulation and then the condition assessment, and if I drill down just to that gray area, you see a close-up of the condition of the asset.

Now, this is a very simple version of making a determination of the asset condition and they're not prescriptive really in the regulation at least as far as I can tell, but we're thinking it needs to be more complex than this, more detailed than this, a little more nuanced and it has to have a tighter connection to what the definition of state of good repair is or will be in the plan.

In capital planning and programming we would like to use the outcome as a decision support tool, but in our agency, the capital planning is not based on the inventory or the formal condition assessment.

It really consists what internally we call the capital call here where we ask department leaders - - we share with the department leaders where the -- where we are with current grants and current projects, what funding is available, and then ask them for their input on what capital program should be for the next one in more detail and two or three years less detail on that.

So it's a general way of doing it. It's worked well for us but there are some holes in it. And some departments provide more detail than others. If you ask the IT department -- and by "department" I mean one guy, he'll give you something right down to the nearest router and cable, but other departments aren't quite as detailed as that.

In all the capital call works already but it's not good at predicting system failures and informing the capital programming process.

So when we're done making the innovations to the database, we hope to have something where we can generate various reports of assets that are approaching useful life or have condition issues and also the safety mission and accessibility critical elements that we were talking about earlier.

## Outcomes

So expected outcomes of that is to have a detailed asset inventory, hearty asset inventory probably going beyond financial thresholds that regulation require as decision support tool to inform and improve capital programming and essentially, you know, stop having system failures for things that, you know, are long past their useful life and ensure the state of good repair.

There are various definitions floating around but this one I think is useful, the state an asset can be operated at a full level of performance. So that's really what we're shooting for with this. And, you know, interestingly enough we don't expect any new major expenses and no additional staff to meet the requirements, just more of a focus in this area.

There may be some expenses with some customized reports as we get going with the program. And those all help get to the larger Transit Asset Management goals FTA envisions in the new regulation, which is reduce safety risks, increased reliability of systems, reduce maintenance costs as we replace things as they reach their useful life, and overall improvement in safety and performance of the systems.

That really is a summary of where we're going. We have more work to do with the Department of Transportation. Right now they're sharing the performance targets with metropolitan planning organizations in the state.

And then we'll get to work on some of these other details. And some of the references that are helpful, a lot is drawn from the Federal Register, but the FTA has a Transit Asset Management Newsletter, which is worth signing up for if you haven't already.

There is an asset management guide, which is a little dated, but worth having as a reference. October 2012. And then we attended an NTI class, introduction to asset management in late 2015 when there was a Notice of Proposed Rulemaking but I'm sure now the rulemaking is final and the regulations are out, more detail on that. That was an excellent class. If in the future you would like to speak with myself or our chief financial officer who could have done the same presentation, that's the contact information. So that's all I have.

**Mshadoni Smith:** Thank you, Doug. So I'm just going to close out with a couple of key takeaways from both presenters and then we'll open it up for questions.

What I have learned from today is that there's no one right way to build an inventory. There's only what works at your agency.

And software is not a de facto solution. You don't have to use a certain software package. There's not a one size fits all that meets every need for every agency, and as we heard from the two presenters today, they took two different approaches to using software that they already had to meet requirements and beyond.

Also, don't wait. Start now. Get started identifying your plan of action and then put your plan in place.

Lastly, the asset management solutions can benefit your agency beyond just complying to the FTA regulations.

## Technical Assistance Available from FTA

I also want to give a little information about what FTA is providing in terms of technical assistance. We are starting up our webinar series again, and unfortunately our next webinar has already been fully registered and the registration is closed.

It will talk about the final TAM performance measurement guide books. And we will have future webinars, potential topics including coordination with planning, target setting, and building organizational support.

I do want to mention there are a couple of training courses that Doug just kind of segued into. One is NTI Tier II course, and you can find out information on our web page, and a TSI course that is not yet available but will be coming soon that goes through the performance measures for facilities and infrastructure as well as talking about determining useful life benchmarks and how to set targets in a more general way.

So stay tuned for your gov delivery notices about those training courses coming up. As always, I want to make sure you guys are aware of our web page.

We always have new information up there. It is refreshed often. And if you did not get your latest TAM News, there is now a TAM tutorial on our YouTube page which tells you exactly where all of the information on the web page can be found.

So with that, I'm going to start going through the questions. I've been keeping track of them so I'm going to go through them in order. I've been keeping track of them as you've been putting them forth, so I'm going to go in order. The first one, I invite Doug and Athena to go ahead and unmute your phones. The first one is for Metrolink. It's from Mike Hubble.

## Questions

Did Metrolink use depreciate value or replacement value for determining your 2015 dollars?

I just answered Mike Hubble and we used replacement value, not depreciated value.

Okay. You totally stole my thunder, but okay. [ Laughter ]

Looks like you answered a couple of questions, but just for those listening and haven't been reading along, Steve asks,

What software does Metrolink use and is there a separate module for this in the new software? And what by "this," is there a separate module for "this" in the software?

That's a tricky question, at Metrolink we have IBM Net Facilities and we have Asset Works for rolling stock and mechanical shops. Our inventory and equipment are housed in there as well. However, we have different systems. The condition of our linear assets are recorded through automatic data systems, such as Holland Rail Scans but are not currently consolidated into one primary database. Our bridges, crossings and culverts condition data are kept in a cloud based platform built by RSE called Rail Asset Management System (RAMS). I think we're finding here there's no clear market leader that serves all of the asset condition tracking needs. There are some that are doing better than others. We've assessed the Trapeze repair module, but still trying to figure out if we're ready to procure that additional module that allows for project prioritization and condition rating at a unified scale. So I think that's what he's referring to, a module that sits on top of additional TAM purposes.

Steven, if you're still on the call and that's not what you're referring to, please enter that in the chat pod and we'll revisit the question.

Moving on to the next question, Bruce wanted to know, going back to the three steps, Athena, data gap analysis, EAM analysis, and final steps, did you bring in a consultant to do the analysis for you?

Yes, we did, we hired CH2MHill, out of Lost Angeles, to do the initial scoping what we have and what we needed and they're currently helping us devise a data strategy to consolidate and to query our data sets for rigor and consistency.

Okay, great. Here's a question for GBT. Randy wants to know,

What is the name of Greater Bridgeport Transit's EAM system? Did you develop it in-house or is it supplied by a software company?

No, it's not developed in-house. It's Sage Software. And it's on the last page of the presentation.

And you had that software already before the TAM regulation or before you identified its TAM uses, is that correct?

We did, for depreciation purposes we had the software. It's been maintained for more than a decade in the finance department. So it's a pretty thorough inventory. It simply doesn't have some of the fields and condition assessment and other areas that the new regulation requires, and that's what we're adding back into it. The important thing about that is to take a look, if you're not sure, to take a look and see if you have a system already that is capable of doing this kind of work. And if you don't, then it's available from, third party.

Okay, thank you. The next question is also for you, Doug. John wants to know,

You mentioned a \$300 threshold for asset inventory, does that include bill of materials and parts inventory? If so, where do you draw the line for monitoring asset conditions at the bus or vehicle level?

Right. You got me with that, but fortunately for me the chief financial officer is here. This is a -- this is fixed asset inventory only that we're talking about today. There is a separate one for parts.

All right. The next question is back to Athena. Ulysses wants to know,

If business processes change due to new assets, new means of data collection, or new inspection requirements or technology, how flexible is the software to accommodate these changes?

That's a tricky question. I can't speak to that now, but our expectation when we get to the point of designing software that it will be nimble enough to encapsulate changes. Hopefully the processes of collecting and the roles and responsibilities of putting the data into that software will be very supported and held accountable for agencies.

Thank you. Doug, this one is for you. Greg wants to know,

Is GBT falling under your state plan or if you're doing your own plan?

You know, we did commit to doing the plan with the state. We've done a lot of work internally and we know what we would like to have as part of the plan, but I think the state is doing a fine job leading the project and we made progress, so we signed on to be a part of the statewide Tier II plan.

Wonderful . It seems like there are a couple of formatting questions. So I'm going to take those as questions for me. Some people want to know about downloading transcripts and the June 6th webinar. I'm also doing a little tap dancing here in case folks have some burning questions they want to type in the chat pod. You can do so while I am answering these more formatting type questions. The transcript -- there will be a recording of this presentation posted to our



TAM web page within a week or so. It must be edited for time. The presentations themselves will be posted to our TAM web page this week. And transcripts and Q&As will be posted probably a few weeks out because we have to go through and clean those up and make sure that they are accurate. As far as the June 6th webinar, that follows the same format. The presentations themselves will be downloadable at the time of the webinar. The recording within a week to ten days, and then any transcripts or Q&As will be further down the line in terms of availability on our web page. All right. Seems like I have done enough time here. Got a couple new questions in there. Oh, this is for me again. Bonnie wants to know:

Will there be a webinar on creation of a TAM plan? She is a small urban RTA but because of her paratransit programs they deploy more than 100 vehicles at peak service, although they have a good inventory system already, it's the plan and the whole Tier I requirements that concern her.

So, Bonnie, I will suggest that you take a look at some of the tools that we have on our web page now, even though you may meet the requirements of a Tier I provider, you can still use the Tier II template to walk through those requirements, the inventory condition assessment, decision support tool, and prioritization, investment prioritization to identify just kind of the bare bones of what you might need for your TAM plan.

Also you can contact me directly to talk about your service, to make sure that you are indeed a Tier I provider, which I will direct you to our checklist on our web page to determine if you're a Tier I provider.

In addition we have additional technical assistance that is forthcoming. One is for Tier II providers and group plan sponsors, those courses are being offered in conjunction with several conferences this year, CTAA conference, we just offered at the APTA bus conference.

And standalone events, check the web page or go to TAM web page under FTA outreach and look under training to see what is available, and we have a forthcoming Tier 101 course which is being revamped from its previous version to align with the final rule.

That is a three-day course. It's quite a commitment and very comprehensive, whereas the Tier II and Group Plan Sponsor Course is a five-hour course. But both of them are very useful and could potentially provide you insights. Greg asks,

If an agency has decided to do their own plan and not fall under the state, do they need to then perform a Tier II?

So, a Tier II agency is the only type that could be in a group plan. So if they were eligible to participate in a group plan, that means they were a Tier II agency, and independent group plan would still be a Tier II.

So there are three different types of group plans. You can have independent Tier I group plan -- excuse me, independent Tier I plan, an independent Tier II plan or a group Tier II plan.

## Resources

**Mshadoni Smith:** Darin says that it would be nice to invite a Tier I agency that only operates rubber tire vehicles to present at some point in the future. Darin if you have any suggestions of who that might be, please feel free to share that with me.

This is Mshadoni Smith. You can send me an email or a private chat in this format or you can just send it in chat room for someone you would like to hear present.

And Caleb seconds that. So both of you feel free to suggest a potential presenter. Greg is asking a question that I'm not sure what that is about, so I'm going to recommend that you contact me directly. Gregg, I am Mshadoni.smith@dot.gov. All right, we have five minutes left in our meeting. I also want to mention that each of your regions, you have Transit Asset Management point of contact who should be your first line of question asking.

You can find out who your region point of contact is by going to our web page and I believe it's also under outreach -- oh, gosh, I don't know where it is on our web page. Apologize for that.

Each region has a contact who has a better understanding of your agency makeup and can answer a lot of questions directly. So I invite you to contact them and develop a relationship with them because they will be able to have maybe a more -- a faster response time than I can here in headquarters.

All right. So Betsy has also asked a specific question. Betsy, I also invite you to send me an email so that we can discuss your situation specifically. There are a lot of nuances that I would need to ask you several questions to get into more detail to answer that sufficiently. So please give me an email at Mshadoni -- that's not self-explanatory. Mshadoni.Smith@dot.gov or contact your regional point of contact and see if they can answer questions.

There are frequently asked questions on our web page. Many questions that you may have may already have been answered. Please do take a look at the FAQs. They are updated periodically.

There are a lot of materials on the web page and as I mentioned before, there is a YouTube tutorial to let you know where you can find all of the information on the web page. So with that we have three minutes left in our webinar.

I want to ask -- I want to thank both Athena and Doug for presenting today. I appreciate your time and willingness to participate in our webinar. And John Wimmer wants to remind folks that the report has been TAM plan development guideline has been issued to replace another report.

That's just our TAM plan guide has been updated to align with the final rule, since Doug you mentioned that in your presentation. Thank you, John, for pointing that out. And with that, I will offer, if Athena or Doug have any final words, otherwise... Thank you so much, everyone. I appreciate your time. Betsy and Greg, contact me directly so we can discuss those issues you raised.

**Mshadoni Smith:** That concludes our webinar. Thank you very much. Have a great afternoon. I hope to see you again at our next webinar series.