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U.S. Department of Transportation
Federal Transit Administration

**Transit Asset Management
Baseline TAM Data in the NTD Webinar Transcript**

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Introduction

Mshadoni Smith: Welcome to the Baseline Transit Asset Management Data in the National Transit Database recording.

We're providing this information to you directly online so that you have faster access to it. At the end of this presentation I will talk about how you can ask questions and the potential for other outreach opportunities.

In this session we're going to do some introductions, talk a little bit about both the transit asset management and the national transit database background, provide some highlights from the baseline fact sheets, paying particular attention to the revenue vehicles and performance targets, then my colleague Murtaza Naqvi is going to walk through accessing the public NTD data and the UZA asset summary tool, and then I'll talk a little bit about what this means, how it can be used, and what's next.

So without further ado, today we're going to have two speakers, myself Mshadoni Smith, the TAM program manager, and Murtaza Naqvi, the NTD program analyst.

Mshadoni Smith

Mshadoni Smith: A little bit of background, you're probably familiar with most of this but it's always good to kind of have a baseline of understanding.

The FTA published the TAM rule in 2016 to establish a system to monitor and manage transit assets. The purpose of that rule is to help achieve and maintain a state of good repair for the nation's public transportation system.

In the rule we defined what state of good repair was by these three objective standards. It's able to perform its design function, does not pose a known unacceptable safety risk, and its lifecycle investments have been met or recovered.

A little background about the NTD is that it has recorded the financial, operating, and asset condition of transit systems since 1974, so a little bit more mature than the TAM data collection.

NTD also serves as the nation's primary source for information, reporting, and data on transit assets, approximately 3,000 reporters to NTD every year, and data is published annually and available to the public.

So the asset inventory module or the AIM is kind of like the linkage between TAM and NTD. Most recipients of FTA funding submit data about their assets to the NTD through the asset inventory module.

The AIM itself collects inventory information on the four TAM asset categories plus information on group plan sponsors and the state of good repair targets.

The asset information was reported for the first time this past fiscal year to the NTD and will be collected annually thereafter. AIM is the largest expansion of the NTD data collected since 2007.

So with any data collection there's sometimes missing data, and this is also true for the AIM.

Some of the reasons why are that there were data waivers to the NTD. Every year NTD has waivers that they provide for the annual reporters.

In addition the TAM plan extensions allowed some agencies that could not get their TAM plan completed in time to not report some information.

And then lastly the four year cycle of the facility condition assessment reporting means that there are some facilities that don't have their condition assessment information reported to the NTD in the first year, but as the reporting matures the information will flesh out.

So some of the objectives of this TAM data collection were for the inventory to understand the scope of the nation's asset portfolio, so beyond just revenue vehicles, to more accurately estimate system needs and inform agencies' prioritizations of their resources to address the backlog.

With regard to the targets it supported the performance based approach that MAP-21 instituted for all of DOTs, and also allows to more effectively measure intended outcomes of investment decisions.

So now we're going to talk a little bit about those fact sheets. Those fact sheets can be found at the URL at the bottom of your screen, and they kind of look like what you see there.

So this was our first year collecting data in the NTD, and it's our first year providing these fact sheets. These fact sheets are at a national aggregate level, and it is the baseline information. It's an overview and more detailed information across multiple NTD data products.

So there's two types of fact sheet.

There is the overview fact sheet which is a mere 13 pages long and while that seems very long if you think about how many data points that are collected in the NTD, how many assets are collected in the NTD, 13 pages as a summary doesn't seem that long.

There's also the more detailed, what we call the extended overview, which is 30 plus pages and gets into more details about the individual asset categories.

But the fact sheets as a whole provide a snapshot of the overall condition of the nation's public transportation system and gives you some details in those specific areas of the vehicles, equipment, facilities, infrastructure, performance targets, and group plans.

So a little preview of some of the first year data. For the four asset categories you can see I'm going to highlight the rolling stack that 72 percent were found to be in a state of good repair, and a total of 183,686 or almost 184,000 assets were reported.

Of those reported almost 51,000 were not in a state of good repair. So I provide this statistic just to give you a sense of the scale of the number of assets on a national scale that are not in a state of good repair.

So even though you see the percentages that are in the state of good repair and it seems like we're doing great, if you look at the actual number of assets any one of those assets could be a weak link in your system.

So some more highlights from the baseline data, overall and across all asset categories 73 percent of the reported assets were estimated to be in a state of good repair. 3 percent of facilities, about 400 in use today were built at the turn of the last century, we're talking 1800s.

There were 67 group plans developed by 18 direct recipients and 49 DOTs with almost 2,000 rural, tribal, and small urban agencies participating which is great because it's reducing the burden on those smaller operators, and about half of the agencies-- so about 1,500-- set customized useful life benchmarks for the revenue and service vehicles.

So this is encouraging. It's showing that most of the reporters took advantage of the flexibility that was provided within the rule.

So let's talk a little bit more detail about the first year data for revenue vehicles.

So this first graphic which is taken directly from the fact sheets is just about how many vehicles are reported. So we've got about 120,000 tier one vehicles, and 63,000 tier two vehicles.

You could see that the largest piece of the pie for tier one vehicles is buses, whereas the largest piece of the pie for tier two vehicles are the vans and cutaways. This sort of makes sense when you think about it because they don't have as many asset types.

This next slide I'm going to say is a little bit pessimistic as it's looking at those assets not in a state of good repair, but it's really useful in terms of long-term planning.

The darker color shows you the current percentage of assets that are not in a state of good repair whereas the lighter blue color shows you the percentage of assets that will become not in a state of good repair over the next four years which happens to be the TAM plan horizon period.

So if you're just looking at where we are now you can say, "Oh well we look fine," but looking down the road four years you can see that the impact if we do nothing could be quite significant.

So let's look in a little bit more detail at the performance targets. At this point I want to talk about how information is reported to the NTD versus how we're presenting it in this presentation and in the fact sheets.

In the NTD the information is collected as far as the assets that are not in a state of good repair. It's sometimes difficult to think in that way where lower numbers are better, so for the

ease of understanding we've kind of flipped those and we talk primarily about assets that are in a state of good repair because it makes the graphics a little easier to read and it's just more natural to talk about higher numbers being better.

So performance targets the agency set and submit targets to the NTD for the four performance measures. They reported targets for up to 38 asset categories depending on their types of service.

The performance targets reflected the agency's expectations of the percent that the assets would not be in a state of good repair, and remember that there is no penalty for missing a target and no reward for attaining a target, and then the bottom table just shows you again which NTD forms reflect which asset categories and what the performance measure is that you're reporting on.

So agencies enter asset data for their 2018 fiscal year, what we're calling the baseline, and they projected where they think they'll be next year. There were over 4,000 targets reported across the 38 asset classes.

Agency target data shows general expectation that the condition of assets will improve next year. So overall they felt that things would get better, but there were some occasions where there were declining targets.

Let's look at a graphic. In this graphic the lighter blue circle indicates the current performance or the 2018 metric, the measured performance that was reported to the NTD whereas the darker blue diamond is the agency projected target of where there'll be in fiscal year 2019.

This next slide shows you that there were several occasions where agencies projected that they would be in a better state of good repair next year, so that's what we're calling increasing targets.

There were also occasions where agencies felt they'd be kind of about the same place in terms of state of good repair in the next year, and those are indicated here with the yellow squares.

And then there were two occasions where agencies thought that their state of good repair would likely decline in the following year, and that was for both service vehicles, equipment, and for administrative and maintenance facilities.

And now I'm going to turn it over to my colleague Murtaza to talk a little bit about accessing the public data.

Murtaza Naqvi

Murtaza Naqvi: Thank you, Mshadoni.

For all those tuning into today's recording, my name is Murtaza Naqvi, transportation data analyst with the FTA's Office of Budget and Policy.

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From here we'll talk about how to access the NTD data and also walk through some exciting new data products.

The NTD publishes its dataset annually. The data are formatted for use in Microsoft Excel and are delivered in two types of products: database files which are meant to mirror NTD form structures and present exact data as it is reported into the reporting system.

We also publish data tables. These are NTD's value add products, and they're designed with data dictionaries and analytical tools into the workbook.

Users for example would use some of those analytical features to perhaps look at trends in supply side metrics across different transit operation strata for benchmarking efforts.

All data reported into the annual reporting regimen for the NTD can be accessed for free. To access into your ports you can visit transit.dot.gov/NTD. Recording listeners will see that link provided in the navigation menu on the left-hand side.

To find the data on the webpage users should expand the NTD data menu to find the NTD data reports link circled here. This will take you to the data reports landing page.

Once you're here at the landing page, users can use the search tool to look up data reports by data categories, data product type, data product year, or keyword.

For those interested in the complete set of asset inventory data, begin by selecting assets as the data category, choose 2018 from the drop down, this is the most recent annual report year published, and type in TAM as the keyword in the search bar below.

Users can leave the product type as any to get the full set of asset data. Apply your search criteria to the landing page query tool to generate results. So what you see now is the set of asset inventory data.

This year's set of data products includes six database files. These database files include number one, the facility inventory which contains address, facility information, condition assessment for administrative offices, parking facilities, maintenance facilities, and transit stations.

Number two, group plan sponsors. This database file contains group plan participants and their transit asset management sponsors.

Performance measures and targets is the next file, and this contains data on performance targets required in TAM plans or by group plan sponsors.

The revenue vehicle inventory contains information on revenue vehicles by mode and type of service that were on agency property at the end of the fiscal year.

Service vehicles inventory is very similar, and it contains information on service vehicles by mode on agency property at the end of each fiscal year.

Finally transit way mileage contains data on transit right of way mileage for non-rail mode operators as well as construction and asset condition information for track and special track work for rail mode operators.

There are also four data tables available. Three of these four are formatted for ease of use and are designed with some additional analytical tools really under a high level entity perspective.

The fourth which we're going to discuss next is the urbanized area asset summary tool.

So new for this year, the NTD has developed the urbanized area asset summary tool. We'll take a moment to discuss how census data is used in the NTD and what it means for the planning community using NTD data.

The U.S. Census Bureau defines UZAs based on incorporated places and their adjacent areas. FTA bases UZA designations on the most current census. All NTD reporters indicate where they provide transit services by UZA and non-UZA, and the NTD reporting system assigns a unique number to each UZA in the United States.

UZAs though do not conform to congressional districts, city or county lines, political boundaries, or any other planning boundaries. As a result municipal planning organization boundaries and borders are not programmed into the NTD.

So the NTD program partnered with the Office of Planning and Environment to design a summary level tool for planners called, again, the Urbanized Area Asset Summary Tool. This tool is designed to support MPOs, group plan sponsors, and any other transit planning agencies involved in transit asset management.

Now we're going to go through a high level walk through of the UZA tool. In the near future we will be working to develop more resources for this tool.

This is a snapshot of what the tool looks like. For today we're going to focus on the view individual agencies tab.

In this tab transit agencies are selected, and their summary statistics are presented. This tool is designed to allow users to view state of good repair summaries by user selected boundaries, which is what we're going to do here.

So how do we use this tool? First transit agencies need to be selected. Users can look up transit agencies in a defined urbanized area by selecting that urbanized area in the drop down menu in the green workspace.

If you are interested in an NTD ID for a particular agency, you don't know what UZA they operate in, nor do you know their NTD ID, you can use the search field in the blue workspace in the middle there to type an agency's name. Results pop up as you're typing in the agency's name.

Once you know all the agencies you're interested in, enter each NTD ID one at a time in the enter NTD ID field circled here in the red in this red workspace.

After you've selected transit agencies of interest click filter to generate results. Results populate directly below the transit agency selection workspace. Here users will find summarized TAM data.

So thank you for listening to this short demo. We'll hand it back to Msh.

Mshadoni Smith: Thank you, Murtaza.

I'm sure people will be rewinding that section a lot, but also remember he mentioned we may do more demos and walkthroughs of this tool, but there is also information available directly, databases, data tables, on the NTD data reports tab.

So where do we go from here?

So we want to understand the scope of transit assets in inventory and condition. Agencies can complete reporting of facility condition assessments over the next four years. They'll also have an understanding of where they fall within the national context and can use the data to inform policy and decision making.

This information also can help FTA set national baselines and analyze the trends over time. It also will help inform our program evaluation.

As I mentioned earlier, here are some of those links and references that we talked about. They're also on the left side of your screen, and I want to mention that you can send any questions that you have to this email, this mailbox. It is monitored at tam@dot.gov.

Please add the subject line TAM baseline in NTD webinar so that we can filter them and provide them maybe at a later date in quote unquote live webinar.

And with that I thank you for your attention, and I hope you have a wonderful holiday season.