

**Tamalynn Kennedy:** Good afternoon or morning depending on where you're joining us from and welcome to the webinar "Using Decision Support Tools for Transit Asset Management" presented by the Federal Transit Administration. My name is Tamalynn Kennedy, the TAM Program Manager. Next slide.

**Tamalynn Kennedy:** Today's presentation is available now on the TAM website and you can access linked resources from the PDF. A recording of the webinar will also be posted as soon as it becomes available. This is the first webinar we have hosted in Zoom, so I would like to mention that closed captioning is available by clicking live transcript and then selecting "show subtitle." There will also be a question and answer portion after the panelists' presentations, so please type any questions that you have for the panelists in the Q&A box available at the bottom of your screen. Next slide, please.

**Tamalynn Kennedy:** Before I introduce today's speakers I would like to give you a brief update on the TAM program. As I hope you are aware, the first required TAM Plan update is due October 1, 2022. The TAM Final Rule requires a provider to update its entire TAM Plan at least once every 4 years. To clarify, if a TAM Plan is formally updated, the update establishes a new 4-year horizon timeline and update cycle, meaning, for example, if your agency formally updated your TAM Plan on May 1, 2021, and update would not be required until May 1, 2025. Recipients are encouraged to document their internal decision making process regarding what triggers an update for the agency prior to the end of the 4-year update cycle and provide that documentation during oversight reviews. Secondly, we have scheduled our 2022 TAM Roundtable. It will be a virtual event similar to last year's Roundtable. It will take place on Tuesday, July 19th. We have developed a web page for the event on the TAM website. Please save the date and check the website for more details and registration information in the coming months. Next slide, please.

**Tamalynn Kennedy:** I would like to highlight some recently published resources available on APTA's TAM Resource Page. APTA has recently published two recommended practices, "Using Performance Targets to Drive a TAM Program" and "Using Asset Criticality to Make More Informed Decisions." The site also hosts TAM plans that agencies have voluntarily submitted for review. Next slide, please.

**Tamalynn Kennedy:** And finally, space is still available in the course "Enhancing Your Transit Asset Management Program with Lifecycle Management." This course is designed to help transit agency staff mature their TAM programs by going beyond the minimum TAM rule and incorporating lifecycle analysis to manage risk, minimize costs and maximize the performance of assets. Listed on their slide are the two upcoming sessions and you can sign up for these on NTI's websites. Next slide, please.

**Tamalynn Kennedy:** We are about to hear from presenters from two different agencies speaking about the decision support tools each agency uses and how the information supports decision making. After the presentations there will be a question and answer opportunity. David Juba is a Planning Manager for the Susquehanna Regional Transportation Authority. He has been with the authority for the past 7 years. The Authority operates a variety of transit services across 11 counties in South Central Pennsylvania including fixed route, commuter, demand response services. David leads development and implementation of the Authority's Tier 1 Transit Asset Management plan. Darin Stavish is the Principal Planner for Pierce Transit. Pierce Transit was formed in 1980. It serves the second largest county in Washington State

including the City of Takoma. Darin joined the Agency in 2013 and was responsible for creating the inaugural TAM plan in 2018 as well as the 2022 update. He is also the lead author for discretionary grant applications and Project Manager for the Stream BRT System Expansion Study. I will now turn the webinar over to David.

**David Juba:** Hello and thank you for joining us. My name is David Juba, Planning Manager from SRTA and I'm going to be talking about engaging the utility of decision support tools and how we've done that at our organization. Next slide, please.

**David Juba:** So just a quick overview of our organization. Its SRTA is a recent merger of two systems, Capital Area Transit in Harrisburg, PA and Central Pennsylvania Transportation Authority in York. The star is a little bit of a mislabel and York Dauphin is actually the headquarters, but again, our service area includes those multiple counties highlighted in that darker gray shade and yellowish-gold. In terms of our service, we operate 59 fixed route across 4 counties. Demand response is probably our more expansive where we operate various services under different funding categories and models across 11 counties. In terms of our capital side of things, we have, you know, 442 rolling stock, 37 non-revenue vehicles, 12 facilities across this geographic area. And what I say is sort of unique to us is that we ended up in the Tier 1 classification based on our vehicle count in the non-fixed mode, which is our demand response. Being an 11 county system, we operate somewhere in the VMS [ph?] of 167 I believe was the last number that comes to front of mind, and that's where we met that criteria. So a little unique from the traditional mindset because most organizations that fall into that to my knowledge are larger fixed systems or rail. But anyway, next slide, please.

**David Juba:** So Introduction to the TAM plan or the TAM. So we viewed the introduction or our initial implementation of TAM as an opportunity to improve performance-based planning. It's one of the big initiatives our organization has been pushing over the last several years to focus more on statistical approaches comparative to the gut reaction of the past. So as noted here, we have a lot of individual procedures and SOPs but historically from a capital planning perspective and an asset management model, there wasn't one cohesive model or plan associated to it. So we took this opportunity to focus on a couple of key elements. Obviously, the first and foremost item being a compliant functional and "living" document. So compliant with 49 CFR 625 and when we say functional, we mean, you know, actually applies to the day to day operation, it isn't just a document to meet a compliance requirement. And then living in the sense that it has the capability to be revised and adjusted over time as we become more familiar with the needs of our program. Also the ability to connect it to our mission objectives made it a more functional living document in the sense of safety, stewardship and service are sort of our three key criteria or our three key values that we focused on from our mission perspective and enhancing ability. And of course recognizing and improving weakness in the current system as noted, it was very decentralized. There's a lot of separation of pieces to it. We lacked and internal champion who was a guiding principal, a guiding light over that whole process. We had the inconsistency of practice both internally and among peers. There were siloes of information that often created disconnects and it didn't provide a lot of opportunity for coordination and enhancement, so we saw this as an opportunity there. And then lack of decision support tools, it wasn't as though we didn't have tools. I'm sure we were like most agencies and most agencies still are in that boat or a pool of agencies are probably still in that boat

with you used a lot of manual and intensive processes using, like, Word or Excel or a database and Microsoft Office formats. So we wanted to see where we could improve and get beyond that. And of course, coordination and implementation and monitoring, finding a way to keep this a living document and consistently see improvement and opportunities there. So, next slide, please.

**David Juba:** So in comes the Capital Planning Tool. So this is the primary decision support tool that SRTA utilizes. And this is based on a product from a vendor and across the country certain individuals are probably more familiar with the TransAM product or database, but basically it's an open-source asset management platform and that's the framework with which the CPT is built off of. This product was built in coordination with PA's BPT or Bureau of Public Transportation in conjunction and coordination with Transit Authority's or CPTA being an example of one of the agencies that tried to work very closely with them in the development of this, which is actually still in ongoing development as well. The CPT was a major improvement for SRTA as a specific example because it covered a lot of key areas where we had concerns or needs. So weakness resolution, and I'll get in the specifics of this going forward. Transparency and reduction of those silos that I addressed in the previous slide. It improved our capital planning process in terms of, like, ironing out the dates, the milestones, the timelines associated with that. Then of course, improvement to data analytics and reporting sort of as a one stop shop. In terms of the visuals there, I'd like to throw in something. That's the log in portal for it. It's an online cloud-based sort of environment where you can log into the database. And then that visual below is just sort of like a snapshot of the system in terms of our revenue vehicles highlighting, again, an overview of our system, the value of the system across our multiple counties. Next slide, please.

**David Juba:** So in terms of the resolution of the weaknesses and removal of silos. So as I noted, one of the big weaknesses was we didn't have a TAM champion so the CPT manager, the person that handled the updates in monitoring that system and sort of had the hand in the pot in terms of keeping that system clean became that TAM Manager or that TAM Champion which ultimately became me. Significantly improved comparability of assets and record keeping, so by this I mean having a one-stop shop meant we didn't have variability between an outlying county's method of keeping up with information or how you might label this vehicle is a Ford E350 versus this is a CMC Champion. Like recognizing the chassis versus making models. It became a little cleaner and easier for consistency across the fleet. And of course as I've noted previously, this is a one-stop shop so you had a methodology for being consistent but it also provided us the opportunity to work with some of our peers across the state because they also were invested in the use of this tool. So now you had a capability to improve among your peers. Transparency and Silos, so I've alluded to this a couple of times, but everyone in the agency with a role in this process now had access to that information. So it wasn't a situation where Accounting had the capital and grant information and the Maintenance Department knew the vehicle records and Planning knew sort of the upcoming cycle of things. Whatever your organizational structure was, everybody was privy to the stages and steps of that process which greatly expedited and improved upon, well, that's the bullet point 3 there, but improved upon our capital meeting process, because we were all on a level playing field of information. And of course, it also gave the opportunity to again, everybody had access to the information but we still had a consolidated or central individual who maintains the process of updating and editing those records. So it was all very streamlined. Next slide, please.



**David Juba:** So in terms of the Capital Planning Process itself, as I noted here, it's a significant improvement in terms of that overall process and to get down to more specifics of that, it provided a means of tracking the annual project needs, lifecycles, funding sources and availability and shadow vehicles. And to get into some of the specifics of that, life cycles became a central component because now we're trying to be cognizant of three different levels of life cycles. We have state funded vehicles, which are used in estimated service life criteria. We have the federally funded and invested vehicles which use estimated useful life. And then we have the incorporated element from the TAM which is the useful life benchmark. So we primarily have focused on the idea of using the ESL and the UL, the state and federal sort of thresholds, and the ULV as a window with which we would replace things. So for instance, say a vehicle that has a 12-year estimated useful life, has a 14-year ULV by the default benchmark there and we view that as essentially the desirable window to replace that vehicle before it went into the State review [ph?] repair backlog. In terms of other things in here that were sort of convenient and nice was understanding buckets of funding and giving everybody broader pictures to the available resources in the planning process, which again was sort of siloed in the past. And then shadow vehicle planning which was sort of unique and what this meant is that we had the capability to show vehicles that were anticipated to be replaced multiple times in a life cycle, like in a 12-year period. So for instance, a 5-year vehicle would be replaced 2 times in a 12-year life cycle. We would know about the first initial one, but oftentimes you didn't prioritize or recognize that second replacement was going to occur within that timeline. So it would give us an opportunity to have a better sense of the overall need not just necessarily what we're replacing over the 12-year lifespan without its replacement down the line. Another nice thing was the assets were tracked as part of the unconstrained plan and this carried through in our capital process to the state. So by that I mean sort of like we have to manually input things into the EAM system. You have, our state has what's called the Doc Grant system which basically is how we get, we request funding and capital grants. So what this did is the Capital Planning Tool actually feeds directly into the State's Doc Grants system which reduced the redundancy of putting information in but it also meant that the information was consistently carried from the original source into that system, so a very nice improvement to the flow of that capital process. Unfortunately, it does not incorporate the federal side of things yet, but I'd be curious to see if that might be a piece in the future. But anyway, I digress. Assets and the last bullet point here is asset replacement or disposal, it created a much better or simplified system for us to monitor the replacement cycles and disposals. And by that I mean, when you disposed of a vehicle you now had a breadcrumb trail tracking the history of vehicle replacement. So vehicle A was replaced by vehicle B. You can note that in the asset replacement cycle rather than having this hodgepodge of different documents keeping up with that externally. So it was a nice piece by piece process. Next slide, please.

**David Juba:** In terms of the Data and Reporting, again, we had external methods to this but it really simplified it in the sense of access to quick visualization charts and reports that everyone in the organization that was involved in that process had access to. So I sort of threw a hodgepodge of visuals in here just for the sake of giving you a sense of what that entailed. So for instance in the bottom left, we have sort of a chart over time indicating our anticipated dollars needed in an unconstrained plan over time. As you can see, there's sort of peaks and valleys in that part of this prioritization process for us internally is to spread those peaks and valleys to make it a little more consistent over time. But that's one of those pieces that you become more aware of if you have more visualization opportunity. It's just one of



those simplicity in visualization. The chart in the top right indicates our breakdown of assets across our entire fleet, sort of highlighting the volume of vehicles in that bus less than 30 foot category, which primarily are body and chassis used for that demand response service. But again, useful sort of as a quick reference. And then a nice little dashboard below that, the bus profile, which basically highlights the high level various components of the vehicle. You can have comments tied to the vehicle, a status history update as you update mileage status and condition, characteristics of the vehicle, funding streams, replacement cycles, capital plans it's tied to. Like I said, a just sort of a great general dashboard of information. We saw advanced query and filtering capabilities, so this kind of goes to the point of what I was talking about with as you progress through the replacement cycles we have a means of following, you know, what was this vehicle tied to in terms of contract. This was disposed and replaced by what vehicle? It also ties a little bit into that historic record, the cookie crumb trail, note below, but it definitely streamlined and improved that communication element of that process. The ability to update and modify the vehicle records, like I said, it just simplified that in terms of everybody having sort of a similar baseline. And then annual auditing by external partners, I know a lot of agencies are maybe hesitant to have that sort of extended review, but we found it to be incredibly enlightening and especially in the sense of comparability of our fleet across the multiple counties. As I noted, different people had different justifications or classifications of vehicles based on their understanding of them. This offered an opportunity to right size and have a better sense of our fleet demographic and our needs going forward. So that was a nice additional piece of the puzzle. Next slide, please.

**David Juba:** So at a high level, what are the impacts that the CPT has on the TAM? So as I'd noted before, it improved incorporation of the DUL and ULB windows. It sort of gave us a better buffer mindset in terms of how to plan and gave us a little more flexibility to replacement and I'll explain that a little more I think when I get to the condition assessment bullet below. More holistic vision of the capital planning process, historically all of your energy and time is dedicated to the vehicles and facilities. They're just the big ticket items. The CPT actually gave us an opportunity to be a little more encompassing in the sense of being mindful of equipment beyond those big ticket items like hardware or software, computer replacement cycles, HVAC systems, air compressors, things like that that sometimes they were focuses when they were needed but they weren't always planned well ahead for, at least from our system's perspective, so that that was another great addition of the CPT. Increased specificity of asset groups and fleet configuration needs, I highlighted this previously so I won't sort of repeat that item, but help to identify fleet group costs, comparability and red-flats. A great example of this is we had a fleet of vehicles or a group of vehicles that we ordered in a short time span, say 8 vehicles in our 30 foot category that had considerable CNG-related issues with oil burning and oil use. But again, this tool gave us an opportunity to have a little better sense of the impact of that in terms of the cost and are there alternative methods into the future that we could avoid those kind of issues again. It expanded our condition assessment model, so we again, like most agencies, we probably started at the baseline of age, then we expanded to age and mileage. And then we've gone to an age, mileage, plus model, where basically vehicles with a lifespan of greater than 5 years, we do sort of a more conditional based assessment of those from the sense of a breakdown of each component of the vehicle, lighting, external condition, internal condition. But, yeah, at a high level it just gave us an opportunity to focus on those vehicles with longer lifespan and this goes back to that EUL and ULB where we were finding vehicles with 12-year life, they still had an opportunity to be run for a few more years-- or sorry, let me rephrase that. A vehicle that was 15-years-old



might not be in a position where it needed to be replaced as soon as a 12-year vehicle with more known or systemic issues that we've documented in the past. So it gave us a little more flexibility in that window and an opportunity to adjust according to recognizing those needs to go to the condition side rather just it's met age, it's met mileage, let's get rid of that when we have another vehicle that might have the more pressing need. It promoted understanding of the agency needs in terms of a maintenance software upgrade, so we're actually in the process of implementing a new maintenance software fully implemented or plan to be fully implemented in this July. And that was, large parts of that were fed by the TAM and the CPT process and understanding where some of those reporting gaps or what are some of the documentation and processes that we need to have incorporated in that software piece of it. And of course, as I highlighted, we are one organization under SRTA but we recently were two, CPTA and CAT. This was a great opportunity to the data comparability between the two organizations was greatly streamlined and our ability to understand the needs and status of both sides of that equation both were improved upon by the fact that the CPT was a tool that simplified and had the data sets in a very similar structure. So again, just sort of highlighting at a high level with that. And the visuals to the side here again, just that's sort of a breakdown of how the CPT breaks apart the four key categories or criteria for the TAM program revenue equipment, facilities and infrastructure. And below that you'll see how we do the vehicle conditional assessments, and it's just a snapshot. There's more to this going beyond the engine, but, you know, space aside for the page, I just wanted to highlight what are we looking at when we're doing this? And we're doing it on sort of a 5 point term scale using key definitions for each of those groupings to try to get a clear depiction. And of course also having the same parties that made this department supervision through those assessments so it's consistent across those vehicles. And I should also highlight that we do those conditional assessments in conjunction with our state inspection, so it's not even-- it's not a particularly heavy burden nor an extended lift to get that extra information. It's incorporated into a process that already existed, so making efficiencies there. Next slide, please.

**David Juba:** But of course, you know, considering the pros there's also the cons to be considered and things we need to be considering as we approach this October update cycle. So one of the big things we need to be cognizant of is updating our SOP. So we need to incorporate the CAT and CPTA pieces of the puzzle and make sure they're consistent going forward. And of course, migrating those functions and processes so that it incorporates ideas from both elements. And also, investment prioritization is a big piece of the puzzle that we're trying to get a focus on. Historically, we've prioritized things that kept us in service which obviously is vehicles and facilities as necessary. But again, being that we're getting to an expertise in the sense of our needs and facilities and our needs of asset breakdown, having a much clearer delineation of maybe a risk-based assessment in terms of investment prioritization we're finding a standard methodology to that beyond the-- but like I said, a traditional gut reaction is to get a big piece of what we've been working towards, so. Next slide, please.

**David Juba:** So otherwise, I'd like to say thank you very much for the opportunity to discuss with peers and I look forward to any contact others may have. Have a great day. And back to you, Tamalynn.

**Tamalynn Kennedy:** Thank you very much, David. And now we'll turn to Darin's presentation. Darin.

**Darin Stavish:** Good morning from Tacoma, Washington and thank you for your interest in this webinar. As Tamalynn Kennedy mentioned in her introduction, PierceTransit serves the urbanized area of Pierce County, Washington's second largest, with 917,000 residents, which is part of the Seattle-Tacoma-Bellevue SMSA. Next slide, please.

**Darin Stavish:** With a population of just over 4 million, it is the 15th largest MSA in the nation. Our service area population is 597,000 and encompasses nearly 300 square miles including Tacoma, the third largest city in the state; 12 additional cities; and a portion of the urban unincorporated area of Pierce County to the east and south. I should highlight that JBLM stands for Joint Base Lewis-McChord which at 52,000 employees is the largest employer in Pierce County and the fourth largest in the state after Amazon, Boeing and Microsoft. We currently operate 31 local fixed routes and provide regional express bus service under contract to Sound Transit, the Seattle-based bus and rail transit provider. We also operate in contract for complimentary paratransit services using 88 compliant shuttle vehicles. Our extensive van pool or commute trip reduction program operates throughout the Metro area. And finally, we began operating Runner [ph?] Micro transit Services in 2020 within 4 areas of the County that were not well served previously or previously inaccessible by fixed route. We are considered a Tier 1 agency in TAM Plan reporting. Next slide.

**Darin Stavish:** We currently offer 4 rubber tired modes along with a fleet of service and support vehicles. Our vehicles are not only monitored in our TAM Plans but through an annual inventory with model years and odometer readings that all agencies are required to submit to the Washington State Department of Transportation every February. All our capital facilities are included in the Wash.Report 2, [ph?] along with term scale ratings and replacement values. Next slide.

**Darin Stavish:** Pierce Transit is responsible for operating and maintaining passenger focus assets throughout the service area as shown here. And while we didn't count our bus stops and related infrastructure in the 2018 TAM Plan, we will be going forward as recommended by peer agencies such as King County Metro up in Seattle. Next slide.

**Darin Stavish:** Much has changed at Pierce Transit since or 2018 TAM Plan was finalized. When she first joined the agency in 2015, our former CEO, Sue Dryer, directed us to upgrade or refresh every one of our passenger-facing facilities after years of neglect due to downturns in the local economy and a large reduction in sales tax revenues. At the dawn of 2017, our agency was in a much better financial position and was fortunate to begin focusing on three massive undertakings as shown here. The first was the Maintenance and Operations-Based Improvements or MOBI project; the second was analyzing our most utilized fixed route quarter for converting to high capacity transit; and the third, taking a serious look at introducing battery electric buses or BEBs to our fixed-route fleet. Next slide, please.

**Darin Stavish:** Our Lakewood Headquarters base first opened at the end of 1986, but back then we weren't operating BEBs, 60 foot articulated coaches, double-decker regional express buses or using any of the new maintenance and diagnostic technologies that exist in our industry today. We therefore embarked on a comprehensive base master plan study that would not only bring us up to current operational and safety standards, but reconfigure the base with the 2040 planning horizon for growth in all



modes, especially BRT. This was the first decision support tool we used, which was highlighted in our 2018 TAM Plan within section 7. As the Base Master Plan was developed, we immediately started funding the implementation. The first amount was budgeted in 2017 and 2018 at \$5.9 million dollars and as the scope and design were further developed, we've added budget accordingly in the six-year plan which is updated every year. Next slide.

**Darin Stavish:** I mentioned in our inaugural BRT quarters, coincidentally, our current route 1, which averages about 20 percent of total ridership year after year, the new BRT segment will run from Downtown Tacoma to the Southern End of the service area, a 14.4 mile corridor. We also are currently undertaking a study to look at the next four fixed routes that have the operating future land uses and demographic or socioeconomic characteristics to upgrade the BRT over time. Our vision is that five interconnected street BRT routes are in revenue eservice by 2042. Next slide.

**Darin Stavish:** Much like our peers nationwide, we realize that zero emissions revenue vehicles are what our customers have come to expect. We are therefore beginning a ZEV-BEV or Zero Emissions Vehicles, Battery Electric Bus, Transmission and Implementation Plan, as soon as we can hire a consultant. It will include a plan for gradually replacing all carbon emitting non-revenue or service and support vehicles as soon as financially possible too. Next slide.

**Darin Stavish:** Here's Transit's Project Selection Process, opens every March. The next is for Fiscal Years 2023-2028. The Project Management Office or PMO is responsible for oversight of the portfolio of capital projects and capital purchases along with select operating projects. The Project Oversight Group or POG consists of a mix of manager and executive level department representatives with all the visions included. The POG acts as a steering committee for the agency's capital project portfolio. Next slide.

**Darin Stavish:** Our project selection process starts with a formal business case as shown here. I'm including an example of a case for refurbishing and upgrading the South Hill Mall Transit Center in Puyallup, which is currently underway. The image to the bottom right highlighted in yellow shows how it ranked in a Moscow Exercise Matrix. Next slide.

**Darin Stavish:** The next step is filling out a capital project request or CPR form, an E-Builder, and from their website, E-Builder is an enterprise-- is a cloud-based construction project management information solution for Capital Projects that delivers trusted insight into performance across the entire project life cycle including risk and improving performance. I'm including example of-- I mentioned that already. This CPR form includes estimated capital costs, contingency and local sales taxes. The probability of being funded through a discretionary grant including source is noted here too. A cost-benefit analysis is needed for every CPR which helps quantify the project. I should mention that soft costs should be listed too; qualitative or community benefits or best business practices can also be mentioned, which may help support the request. Examples include employee retention and improved customer satisfaction. Once approved, the PMO and POG agree to move the CPR forward for executive team review. Next slide.

**Darin Stavish:** As the first step in our TAM Plan update for this year, we hired a consultant who specializes in capital facilities assessments and recommended short-term repairs. Based on information





in the FTA Guide book, the contract included inspecting 8 buildings at our Lakewood, Washington-based headquarters, plus the 12 transit centers, stations and parking ride lots we operate and maintain. The work was done during the fourth quarter of 2021 and their final reports will be combined to become the main appendix in our TAM Plan update exactly as the 2017 inspections and recommendations were to our inaugural TAM Plan of 2018. On key deliverable is a 20-year look ahead based on the consultant's inspections and recommendations including useful life benchmarks by individual component and cost estimates. Ideally, this time sensitive information on our assets current conditions will directly feed into a new EAM system, before it ages out and is no longer current. Next slide.

**Darin Stavish:** We currently list projects and future funding needs at various disparate or disconnected planning documents such as our annual transit development plan, destination 2040 long range plan adopted in 2016 and updated in 2020, and TAM Plans. We see the new CIP as the perfect place to account for the MOBI project's funding, both budgeted and needed, as well as our BEBs or ZEBs transition funding requirements. This is number one of two missing links or decision support tools we plan to add this year. A new component of our TAM Plan update will be to finalize-- to finally decide on a viable EAM vendor, especially one that specializes in transit agency assets. Unfortunately, the one we used from 2013 to 2019 wasn't at all user friendly and that we couldn't segment or separate a partial remodeling and upgrade within a headquarters building, such as the new operators' lobby, lounge and commissary in 2014, a million dollar project. We also were never able to capture very small building component project like re-carpeting our planning and scheduling office in their database either. This is number 2 of 2 missing links for decision support tools we plan to add this year. Next slide?

**Darin Stavish:** I was fortunate to attend the first of two local term light training sessions as hosted by the NTI in Seattle in 2016 and again at my agency in 2018. Both were taught by Rick Laver and Dan Schriever. The database and outputs were really helpful, especially once we discovered that our existing EAM was not meeting our TAM Plan forecasting needs. Once we finish updating the inventories in TERM Lite this spring, we will again utilize it to run the model various times, likely using the same 3 discrete funding scenarios over 20 year planning horizon. They are and will be again unconstrained funding to see how quickly the assets not currently in a state of good repair, that is the current backlog, could be repaired, renewed, replaced; the second ins constrained in maintaining current spending levels for reinvestment based on a flat funding level as identified in our 6-year plan; and the third is constrained in maintaining backlog using the backlog target seek function. This will teach us what level of investment will reduce the size of the backlog by half within 10 years, then maintaining it through 2042. This scenario is also referred to in TERM Lite as Improve and maintain by a target year. With all the capital facilities upgrade projects we have undertaken since 2018 that I mentioned previously, it'll be interesting to see what TERM Lite tells us is our current state of good repair backlog; however, as much as we're counting on TERM Lite again for our TAM Plan update, there are a few areas where I struggled with it a bit in 2018 such as the extensive number of unused columns in the inventory's matrix. My question is it perhaps customizable? The utility or the standardized summary reports and how they're formatted, and now 4 years later, I wonder why the software program still doesn't appear to have been updated since 2015? Next slide.



**Darin Stavish:** I was thrilled to discover and began using the TAMPLATE last November. It seems a great resource for guidance on our TAM Plan updates as well as serving to help with an outline. I also see it to helping to identify missing data and information. I liken it to a cookbook with a step by step easy to follow recipe for comprehensive and robust TAM Plan update. I immediately began by adding our updated performance measures and targets for the new 4-year reporting cycle. I will next use it to update our capital asset inventory tables in chapter 2, at a minimum, align it with the information it pulled from the NTD and adjust where needed. The TAMPLATE can also help as you develop or refine your agency's TAM Vision, Goals and Objectives in Chapter 1. Documenting your agency's Stated Good Repair Policy and Continuous Improvement Approach where I included 2. And finally, you can even use the TAMPLATE to list all employees at your agencies who are assigned to assist in your TAM Plan's development. However, if it were up to me, I'd like to see an example of the fully formatted end product in advance. I'd also ask the developer why a direction connection or link to the TERM Lite inventories weren't used instead of what we reported in the NTD. I also would appreciate the option to save work in progress that can be viewed in the final end product format I mentioned above, similar to print preview for a Microsoft document. Next slide.

**Darin Stavish:** I do hope this information was helpful as you all begin your TAM Plan updates. I'm happy to share our TAM Plan development ideas with any of you and would certainly welcome yours, especially for BUS only agencies like mine that have no fixed guideway assets yet. Thank you.

**Tamalynn Kennedy:** Thank you for attending today's webinar and thank you especially to Darren and David for sharing your presentations and your experiences. Again, the presentation is currently posted on our web page and the recording of this event will be posted on our YouTube channel and accessible through our web page soon after the event. This concludes our webinar on Using Decision Support Tools and we look forward to seeing you at our next webinar and hopefully at our TAM Roundtable this summer. Thank you.

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