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# Communicating TAM Compliance and Programs

2019 APTA/FTA Webinar Series: Part 1

Thursday, April 25, 2019  
2:00 – 3:15 PM ET

# Today's Moderator and Speakers

## Laura Zale

Manager of Asset Management  
Southeastern Pennsylvania  
Transportation Authority  
Philadelphia, PA



## Mshadoni Smith

TAM Program Manager  
Federal Transit  
Administration  
Washington, DC



## Luke Westlund

Manager-Business Analysis  
Regional Transportation  
District  
Denver, CO



# Webinar Agenda

- Introduction
- Industry presentations
- Mshadoni Smith, FTA
- Luke Westlund, RTD Denver
- Audience Q&A
- Wrap up



# Asking Questions

To submit a question or comment to the panel during the webinar, please type it into the **Question** box on your screen and click on the send arrow located at the bottom of the box.

## Be a Part of the Dialogue.



# Transit Asset Management...

## Are We There Yet?

- Transit Asset Management Plan
  - Process Deliverable – October 1, 2018
- NTD Reporting
  - Data Deliverable - FY 2018
- How are you Implementing Sustainable TAM Practices at Your Agency?
  - Data Quality
  - Communication



# 2019 APTA/ FTA TAM Webinar Series

## Part 1: Communicating TAM Compliance and Programs

- April 25, 2019 (**You are here**)

## Part 2: Engaging TAM Stakeholders

- **Summer 2019**

## Part 3: TAM Data Quality and Governance

- **Fall 2019**



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# APTA TAM SGR Standards Working Group

## Completed Documents

### *Communicating Your Transit Asset Management Plan*

<https://www.apta.com/resources/standards/Documents/APTA%20SUDS-TAM-RP-004-19.pdf>

### *Improving Asset Management Through Better Asset Information*

<https://www.apta.com/resources/standards/Documents/APTA%20SUDS-TAM-RP-005-19.pdf>



# APTA TAM SGR Standards Working Group

## Upcoming Documents

*Building Internal Stakeholder Support for Your Asset Management Program*

Out for Public Comment on May 1

*Communication and Coordination with External Stakeholders for Transit Asset Management*

Out for Public Comment on May 1

*Procuring Software to Support Transit Asset Management*

Target Public Comment June 1

## We Welcome Your Feedback.



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[APTA Standards Program Website](#)



# Presenter

**Mshadoni Smith**

TAM Program Manager

Federal Transit Administration

Washington, DC



Federal Transit  
Administration



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# Transit Executive Communication Slides

*How to use the tool*

April 25, 2019

Mshadoni Smith  
Federal Transit Administration – TAM Program Manager

# Introduction

- July 2018, Focus group TRB 12<sup>th</sup> National Asset Management Conference
- Available at FTA TAM website  
[www.transit.dot.gov/TAM/resources/executiveslides](http://www.transit.dot.gov/TAM/resources/executiveslides)
- Purpose is to provide customizable slides for agencies to communicate with Executives about TAM
- “Choose your own adventure” format
- Today’s presentation will provide overview of structure and content but not the actual tool.
- Focusing on timelines and implementation

# Presentation Details

- FULLY Customizable—add, modify, or delete slides/slide information based on agency needs
- Theme-based—select one of four main themes, a) safety, b) operations, c) customer service, or d) time/money/resources to organize the presentation
- Specialized slides for Tier I, Tier II, Group Plan Sponsor and Group plan Participants
- Maximum presentation is **24 slides**

## Content Outline

- User Guide (5 slides)
- Intro & TAM Business Model (3 slides)
- TAM Can Help Us To(4 slides)
- Vision for a Mature TAM Program( 5 slides)
- Federal Requirements (4 slides)
- **TAM Timelines, and Implementation Status (6 slides)**

# USER GUIDE [delete this slide after using]

This presentation is intended to support you in providing information to your agency executives to help them understand TAM and how to take strategic next steps on TAM implementation. It can be used with executives who are familiar with TAM to provide a refresher or new updates, as well as with those who need to know the background of the TAM regulations and requirements. It can also be used as part of a new Board orientation. We have identified four main purposes for which this presentation might be used: 1) getting started, for kicking off TAM efforts, 2) educational, for executives that do not yet have background on TAM, 3) inspirational, to build enthusiasm and support for TAM among executives, 4) update-focused, to provide information on progress achieved and next steps, or a combination of the above. Ultimately, it is designed for *you* to use in the way that will be most helpful for you in gaining the support and resources you need from your executives to implement and integrate TAM across your agency.

**Presentation Topics:** This presentation provides a series of slides that cover the following topics:

- opportunities and benefits of implementing TAM;
- a vision for a mature TAM program;
- background on asset management and federal requirements;
- your agency's current implementation status and next steps; and
- what you need from your executives to achieve your vision.

Feel encouraged to edit, rearrange, add, or delete slides and notes based on your agency needs.



# USER GUIDE [delete this slide after using]

**Instructions:** Throughout this presentation, instructions for how to use these slides are listed in comment bubbles. Click the comment bubble on the slide to see the comment on the right navigation pane. Note that comment bubbles will not appear on the slide when printed or in presentation mode. These comment bubbles include instructions for how you should edit, modify, or delete slides based on your agency's needs. Some of the ways you may be instructed to modify the slides or slide notes are as follows:

- On the slides, red and underlined text indicates where you need to change or insert additional text. Please change the text per the instructions, and reformat.
- In the slide notes, ***[bold and italicized bracketed items]*** are meant to be edited to incorporate information specific to your agency. In some cases, information in these brackets may not be relevant to your agency, in which case you can delete it.
- On the slides and in the slide notes, **bold** text is just meant for emphasis, and does not require editing. Feel free to edit or remove.
- There are two sets of slides, the TAM Plan status slides for Tier I and Tier II (slides 21 and 22), and the group plan responsibilities slides for Tier I and Tier II (slides 23 and 24), for which you will be prompted to keep the slide that pertains to your organization, and delete the other, or both slides if you are not sponsoring or participating in a group plan.



## What Can Transit Asset Management (TAM) Do to

**[insert agency name]**  
ave Results?

**[bold and italicized bracketed items]** are meant to be edited to incorporate information specific to your agency. In some cases, information in these brackets may not be relevant to your agency, in which case you can delete it.

red and underlined text indicates where you need to change or insert additional text. Please change the text per the instructions, and reformat.

You've all heard of it, and know that there are Federal requirements we have to meet. But to best understand how our agency can get the most return on investment of implementing the Federal requirement, let's use TAM to think about our agency's challenges and goals, tell our story, and align priorities with our organization. **[insert a scenario here about your own agency, or a generalized scenario based on a failure, risk, or success]** [How can we avoid repeating/prevent further issues/repeat this success/improve our practices....?]

**[Themes: A) safety, B) operations, C) customer services, D) time/money/resources]**

### Example opening scenarios:

#### Failure

- Rail systems having to abruptly close due to system failure, sometimes related to extreme weather events **[customer services, safety, operations]**
- Rail systems having to close for an extended period **[customer services, operations]**
- Systems in a state of emergency/needing major upgrades/repairs **[customer services, safety, operations, time/money/resources]**
- Bus failures, having to significantly reduce or eliminate service, use older vehicles that really should be retired, or defer some routine maintenance because of having to put off repairs **[operations, customer services, time/money/resources]**

**bold text is just meant for emphasis, and does not require editing. Feel free to edit or remove.**

#### Risk

- Arriving as a new executive, the agency is 40 years old, can't fit all the buses, and one fuel pump is serving 160 buses.
- Outdated computer system "infrastructure might seem less important, but a failure in one of these systems could disrupt the entire system **[operations, customer services]**
- High maintenance costs due to deferred maintenance **[operations, time/money/resources]**

## Comments

New

Galton, Rachel (Volpe) April 03, 2018

Presenter: Select one of the following four themes: safety, operations, customer services, or time/money/resources. Based on this theme, select an opening scenario from the options below, or provide an anecdote from your own organization.

Consider what scenarios and themes will best reflect the challenges and needs of your organization, and note that you will have an opportunity to discuss the other themes as well. When selecting an opening scenario, consider what approach will most resonate with your executives. For example, for some agencies, mentioning a failure may put executives on the defensive, so it may be more effective to mention a failure from another agency or industry, or choose an example of risk the agency is currently facing, or a success it has achieved.

Reply...

Galton, Rachel (Volpe) June 20, 2018

Presenter: Please feel encouraged to adjust the title as it best fits your agency/presentation approach.

Reply...

# USER GUIDE [delete this slide after using]

**Themes:** The presentation is designed for you to customize it to best address the issues facing your agency. The slide notes provide four potential themes to emphasize throughout the presentation: **a) safety, b) operations, c) customer service, and d) time/money/resources.** Choose the content that best fits the needs of your organization and emphasize it accordingly. To begin your presentation, use one of the example scenarios we have provided, or an anecdote from your own organization of a failure, risk, or success related to the selected theme. Choosing the appropriate framing will help you best organize the rest of your presentation and make a strong sell for executives to support TAM.

## **Additional Recommendations:**

- Do your homework and make sure you understand what may interest or concern your audience, particular sensitivities or “pain points”, etc. This will help you to tailor the message and themes appropriately.
- Be clear about what you are hoping to accomplish with this presentation. What are your desired outcomes when you leave the room? Communicate that clearly.
- Be prepared for questions and have additional data or details about your program ready in case you are asked. This may include additional detail beyond the content on the slides noting your agency’s current status with various requirements.
- Reference your agency strategic plan, TAM policy, and other relevant materials where applicable.

# USER GUIDE

[delete this slide after using]

**Slide notes:** The slide notes are a script that you can customize and use, or you can develop your own script. To develop this presentation and make it most effective, bring your own agency statistics and information-- noteworthy stats on fleet size and age/condition; concerns about risks/vulnerabilities; data limitations; successes with process changes, data sharing, and coordination across groups; status of coordinating with capital strategic plan, etc. Discuss the lessons you have learned so far and ongoing challenges.

Again, these slides are a framework for you to use to develop a presentation that reflects your agency's needs and priorities, and best fits your executive audience. Like TAM efforts, the more effort you make to adapt this presentation to your agency needs, the more you will get out of it!

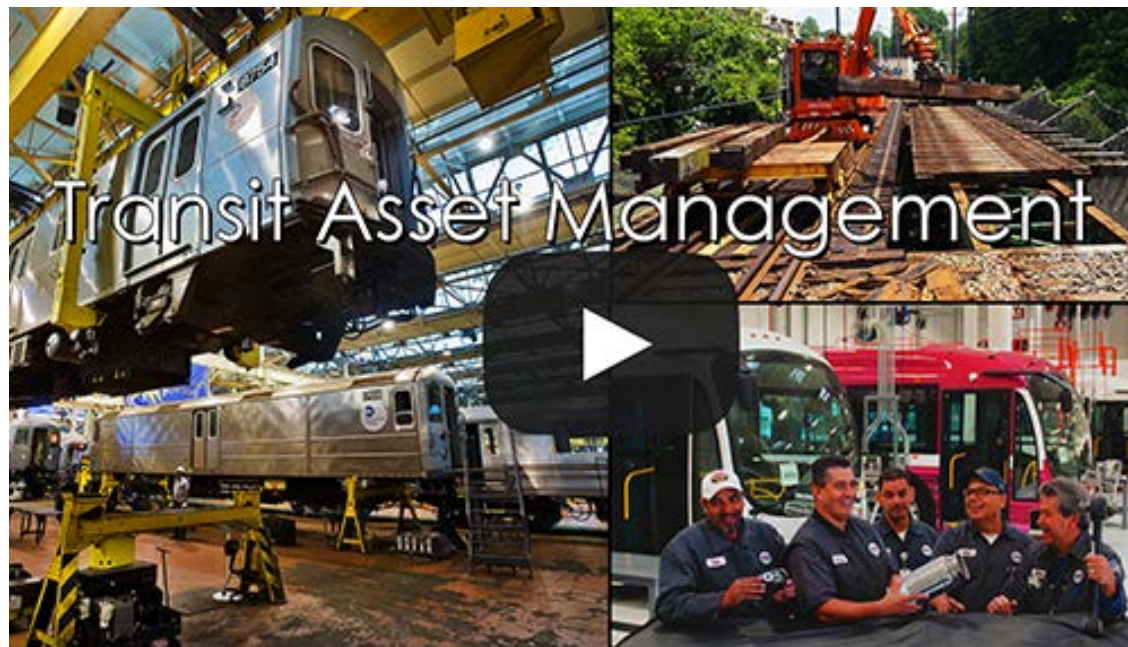


# [Transit Asset Management (TAM) Status Update]



# Purpose of Presentation

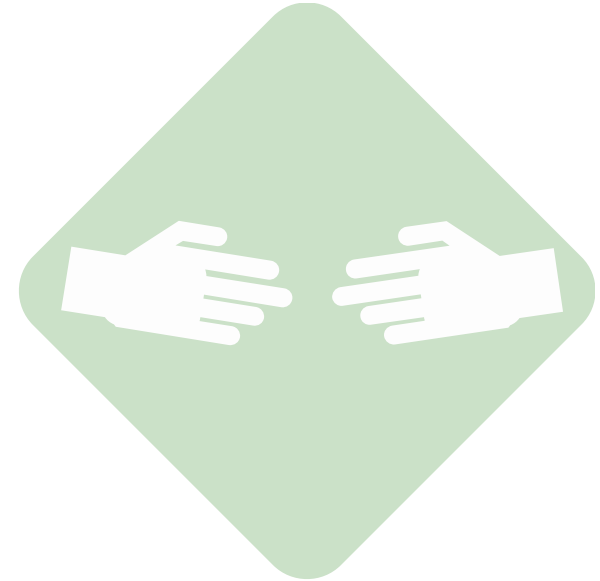
- [Getting started
- Educate
- Inspire
- Update
- Other]





# TAM Can Help Us To

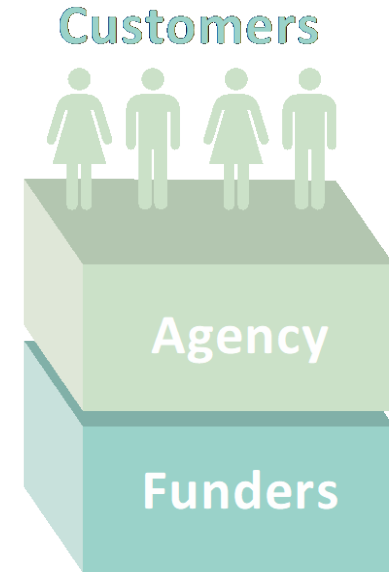
- Improve reliability and customer service
  - Reducing unexpected delays in service or lost trips by identifying and preventing systemic failures
  - Improving condition of stations and vehicles for cleanliness, customer experience
  - Enhancing relationship and reputation with customer, stakeholders, and the media





# A Vision for Our Mature TAM Program

- We make funding decisions that **balance agency needs** in order to deliver reliable, high quality service to our customers at a price they are willing to pay
- We **evaluate and manage potential risks** using high quality information on the state of our assets
- **Everyone in the organization** aligns their job functions to support TAM and understands how it supports the agency mission
- We can **clearly communicate** our agency SGR status and funding needs to customers and funders





# Where we are with FTA TAM requirements



Activity	Due Date	Update Cycle	Our Status (as of XX/XXXX)	Additional Level of Effort Anticipated
TAM Plan	Oct. 2018	Minimum Every 4 years		
Asset Inventory	<u>Oct 2018</u>	Annually submit as part of NTD report.		
Condition Assessment	<u>Oct 2018</u>		% of facility condition assessments complete*	
SGR Targets	<u>Oct 2018</u>			
Narrative Report	<u>Oct 2019</u>			

**Fill in with your agency's information**

\*At least 25% of total number of facilities' condition assessments are due in NTD report year 2018; must have 100% completion by 2022



# Where we are with FTA TAM requirements

## USING APTA TAM Plan Communication Templates



APTA SUDS-TAM-RP-004-19  
Communicating Your Transit Asset Management Plan

### Appendix B: Templates

#### Tier 1

TABLE 7  
Tier 1 Template

1. INVENTORY	
Revenue vehicles	
Infrastructure	
Facilities	
Equipment	
2. CONDITION ASSESSMENT	
Revenue vehicles	
Infrastructure	
Facilities	
Equipment	
3. DECISION SUPPORT TOOLS	
What tools and processes do we use to prioritize funding around those assets described in our inventory?	
4. PRIORITIZED LIST OF INVESTMENTS	
What is the result or output of those decision support tools and processes?	
5. TAM AND SGR POLICY	
What are the guiding principles for asset management efforts at our agency?	
6. IMPLEMENTATION STRATEGY	
How are we going to execute the TAM plan at our agency?	
7. LIST OF KEY ANNUAL ACTIVITIES	
What activities do we perform to maintain our TAM system?	
8. IDENTIFICATION OF RESOURCES	
What resources do we need to execute TAM plan activities at our agency?	
9. EVALUATION PLAN	
What is the agency doing to ensure that the TAM plan delivers the intended results?	

#### Tier 2 with links

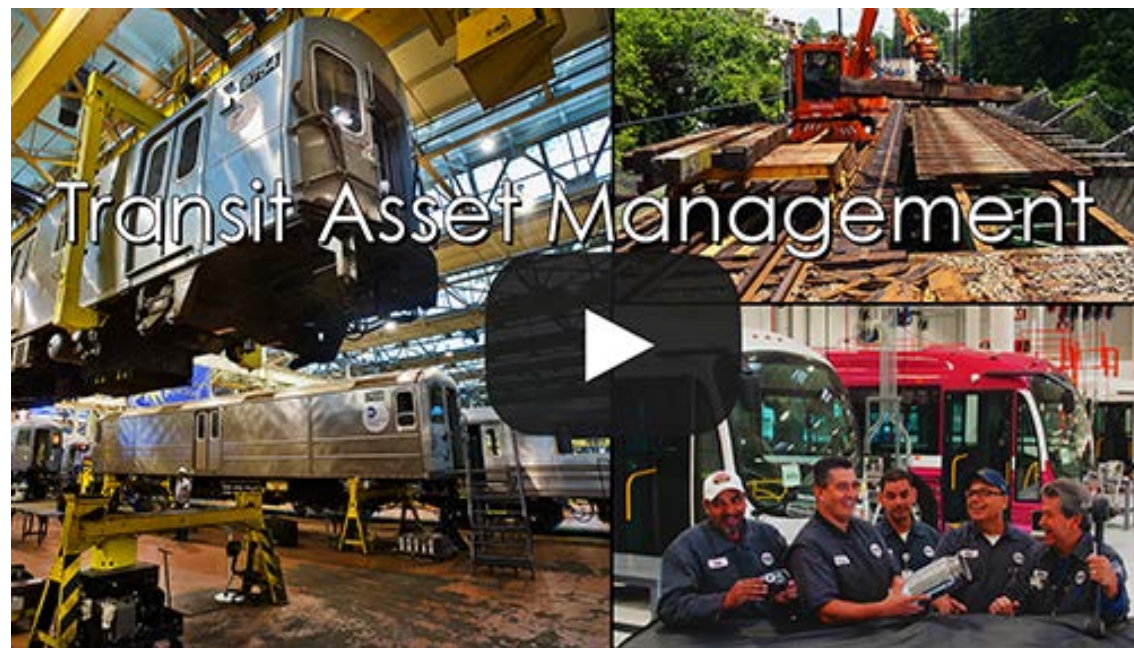
TABLE 10  
Tier 2 Template with Links

1. INVENTORY		Corresponding Documents
Revenue vehicles		
Facilities		
Equipment		
2. CONDITION ASSESSMENT		Corresponding Documents
Revenue vehicles		
Infrastructure		
Equipment		
3. DECISION SUPPORT TOOLS		Corresponding Documents
What tools and processes do we use to prioritize funding around those assets described in our inventory?		
4. PRIORITIZED LIST OF INVESTMENTS		Corresponding Documents
What is the result or output of those decision support tools and processes?		

Fill in with your agency's information

[www.apta.com/resources/standards/state-of-good-repair/Pages/default.aspx](http://www.apta.com/resources/standards/state-of-good-repair/Pages/default.aspx)

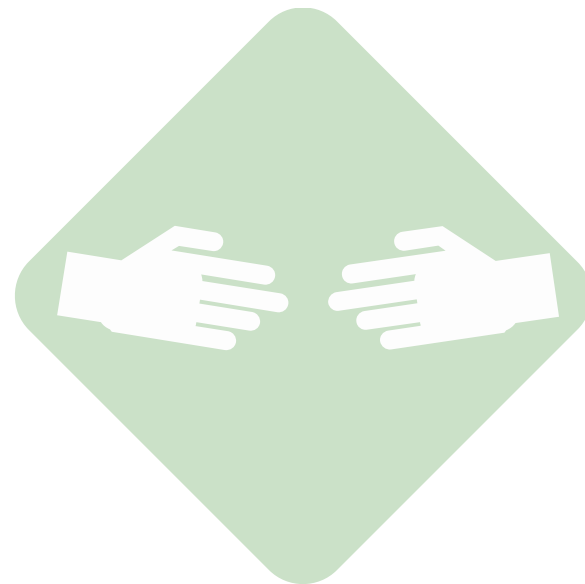
[Getting started  
Educate  
Inspire  
Update  
Other]





## Improve reliability and customer service

- Reducing unexpected delays in service or lost trips by identifying and preventing systemic failures
- Improving condition of stations and vehicles for cleanliness, customer experience
- Enhancing relationship and reputation with customer, stakeholders, and the media



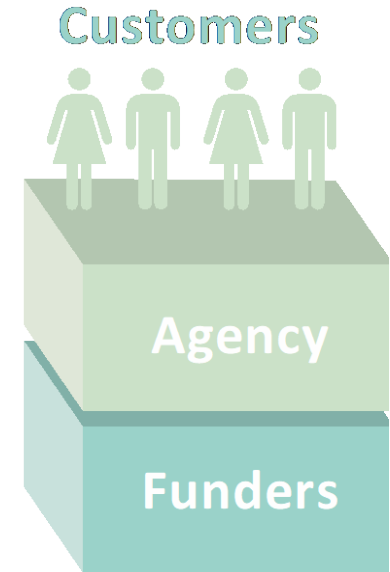


We make funding decisions that **balance agency needs** in order to deliver reliable, high quality service to our customers at a price they are willing to pay

We **evaluate and manage potential risks** using high quality information on the state of our assets

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**Fill in with your agency's information**

\*At least 25% of total number of facilities' condition assessments are due in NTD report year 2018; must have 100% completion by 2022



# USING APTA TAM Plan Communication Templates

APTA SUDS-TAM-RP-004-19  
Communicating Your Transit Asset Management Plan

APTA SUDS-TAM-RP-004-19  
Communicating Your Transit Asset Management Plan

## Appendix B: Templates

### Tier 1

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### Tier 2 with links

TABLE 10  
Tier 2 Template with Links

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What is the result or output of those decision support tools and processes?		

Fill in with your agency's information

[www.apta.com/resources/standards/state-of-good-repair/Pages/default.aspx](http://www.apta.com/resources/standards/state-of-good-repair/Pages/default.aspx)

# Moderator and Presenter Conversations

**Laura Zale**

Manager of Asset Management

SEPTA

Philadelphia, PA



**Mshadoni Smith**

TAM Program Manager

Federal Transit Administration

Washington, DC





# Presenter

**Luke Westlund**

Manager - Business Analysis

Regional Transportation District

Denver, CO



# Communicating Your Transit Asset Management Plan

*APTA SUDS-TAM-RP-004-19*

**Luke Westlund**

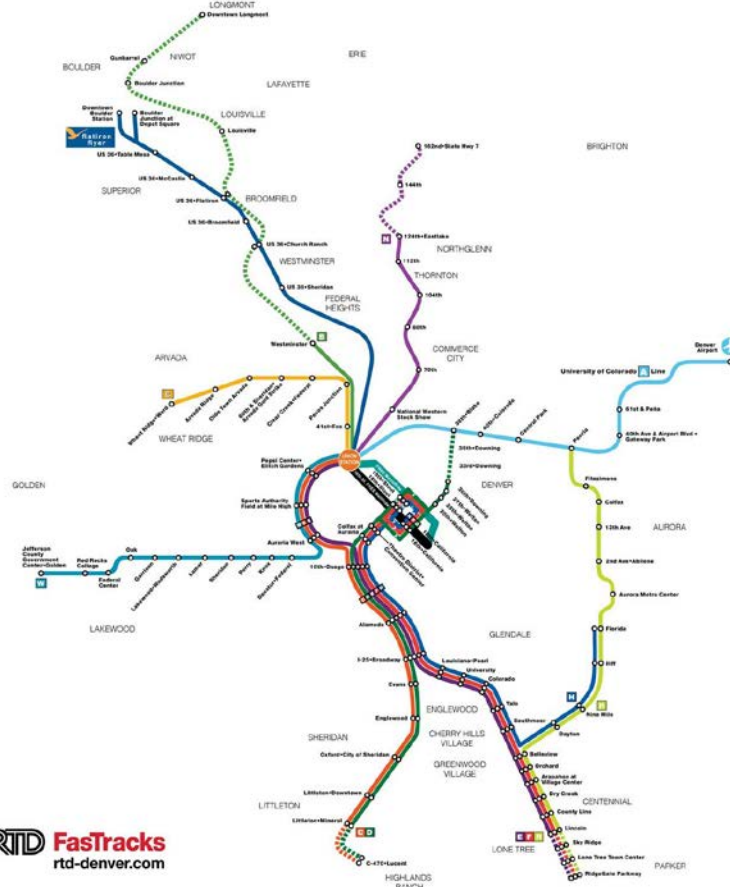
Regional Transportation District – Denver



# RTD Overview\*

- Serves a 2,348 square-mile region
- 1,070 heavy buses running 150 fixed-routes
- 352 ADA Access-a-Ride cutaways
- 32 Flex Ride on-demand service cutaways
- 18 miles of Bus Rapid Transit
- 195 light rail trains
- 66 commuter rail trains (PP3)
- 11 rail lines (incl. soon-to-open G Line)
- 122 miles of rail infrastructure
- 112 Park-n-Rides/Stations
- 7 Bus/Rail Maintenance Facilities

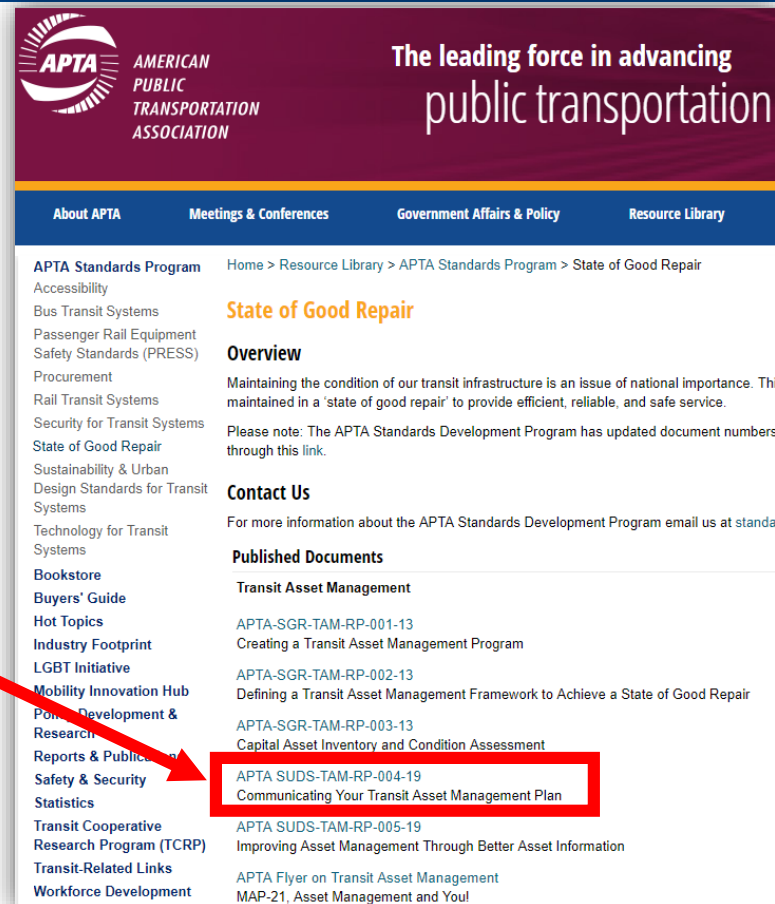
## RTD System Map\*



<http://www.rtd-denver.com/Fastracks.shtml>

# Presentation Goal

Introduce you to the ***Communicating Your Transit Asset Management Plan*** document.



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APTA Standards Program Home > Resource Library > APTA Standards Program > State of Good Repair

Accessibility  
Bus Transit Systems  
Passenger Rail Equipment  
Safety Standards (PRESS)  
Procurement  
Rail Transit Systems  
Security for Transit Systems  
State of Good Repair  
Sustainability & Urban  
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Industry Footprint  
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Policy Development & Research  
Reports & Publications  
Safety & Security  
Statistics  
Transit Cooperative Research Program (TCRP)  
Transit-Related Links  
Workforce Development

**State of Good Repair**

**Overview**

Maintaining the condition of our transit infrastructure is an issue of national importance. This maintained in a 'state of good repair' to provide efficient, reliable, and safe service.

Please note: The APTA Standards Development Program has updated document numbers through this link.

**Contact Us**

For more information about the APTA Standards Development Program email us at [standards@apta.com](mailto:standards@apta.com)

**Published Documents**

**Transit Asset Management**

[APTA-SGR-TAM-RP-001-13](#)  
Creating a Transit Asset Management Program

[APTA-SGR-TAM-RP-002-13](#)  
Defining a Transit Asset Management Framework to Achieve a State of Good Repair

[APTA-SGR-TAM-RP-003-13](#)  
Capital Asset Inventory and Condition Assessment

[APTA SUDS-TAM-RP-004-19](#)  
**Communicating Your Transit Asset Management Plan**

[APTA SUDS-TAM-RP-005-19](#)  
Improving Asset Management Through Better Asset Information

[APTA Flyer on Transit Asset Management](#)  
MAP-21, Asset Management and You!



For most, the TAM Plan is:

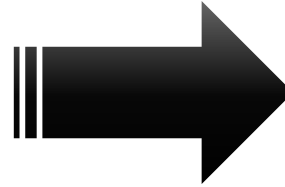
- It's a long document.
- It's a technical document.
- It's a compliance activity.
  - *What, no TAM Plan book club? Weird.*

For us, the TAM Plan is:

- Considered “edge of your seat” reading\*
- A printed copy is carried at all times\*\*

\*Asset Management Staff Only

\*\*Only Enthusiastic Asset Management Staff



Can we communicate our  
TAM Plans in a **Single Page**  
(front & back) in less than  
**5 Minutes?**

The answer is **YES**.

# Why Communicate our TAM Plans?

“MAP-21 fundamentally shifted the focus of Federal investment in transit to emphasize the need to maintain, rehabilitate, and replace existing transit investments.” FTA 49 CFR Parts 625 and 630 (48912)

**It's our responsibility to create the TAM culture to assist in shifting the focus and communication is a critical first step.**



1. INVENTORY		
Revenue vehicles	770 – Transit Buses 116 – Articulated Bus 170 – Intercity Bus	349 – Cutaway Bus 172 – Light Rail Vehicles 66 – Commuter Rail Vehicles
Infrastructure	39 – Grade Crossings 141 – Catenary Wire Segments 73 – Track Segments 298 – Signal Segments	214 – Relay Cases 240 – Switches 61 – Substations 64 – Light Rail Vehicle Bridges
Facilities	7 – Maintenance Facilities 3 – Administrative Facilities	384 – Public Facilities assets 85 – Conveyances
Equipment	82 – Sedans 4 – Steel Wheeled	281 – Truck & Other Rubber Tire Vehicles
2. CONDITION ASSESSMENT		
Revenue vehicles	Age-Based Analysis	
Infrastructure	Guideway Under Performance Restriction	
Facilities	Physical Condition Assessment	
Equipment	Age-Based Analysis	
3. DECISION SUPPORT TOOLS		
What tools and processes do we use to prioritize funding around those assets described in our inventory?	On an annual basis, RTD executes a process which prepares and updates a six-year Mid Term Financial Plan (MTFP) including projected capital construction and improvements, service levels and operating costs, and revenues to fund the capital and operating programs. Part of process includes prioritizing the projects into three funding categories: Compliance, Renewal, and Enhancement.	
4. PRIORITIZED LIST OF INVESTMENTS		
What is the result or output of those decision support tools and processes?	The output of the annual Mid Term Financial Plan process is two primary lists of projects; Capital Projects & Capital Maintenance Projects. Each of lists is subdivided into three funding categories: Compliance, Renewal, and Enhancement.	
5. TAM AND SGR POLICY		
What are the guiding principles for asset management efforts at our agency?	<p>RTD originally adopted an Asset Management Policy in June 2014 and most recently updated November 2017.</p> <p>The intent of the policy is to improve how RTD manages assets from now on - it is therefore forward-looking in nature, and represents our vision and shared commitment for good Asset Management at RTD. The Asset Management system applies to the entire organization and directs the short, medium, and long-term plans for assets to achieve our agency purpose of moving people.</p>	

6. IMPLEMENTATION STRATEGY	
<i>How are we going to execute the TAM plan at our agency?</i>	RTD has chosen ISO 55000 as the framework to build its Asset Management system. As part of that choice, RTD underwent a gap assessment to determine the necessary tasks needed to achieve ISO 55000 certification.
7. LIST OF KEY ANNUAL ACTIVITIES	
<i>What activities do we perform to maintain our TAM system?</i>	RTD identifies two types of asset management activities: those ongoing asset management activities that RTD performs as part of 'business as usual', and those activities specific to achieving ISO 55000 certification. TAM activities are the subset of these targeting the specific TAM elements.
8. IDENTIFICATION OF RESOURCES	
<i>What resources do we need to execute TAM plan activities at our agency?</i>	<p>Resources from across the agency are involved in RTD's Asset Management activities, including the CEO/GM, the Senior Leadership Team, the Asset Management Division (AMD), Bus Operations, Rail operations, Capital Programs, Finance and Administration, Communications, Planning, and General Counsel.</p> <p>The AMD acts as the experts that serve as an enabling function to the agency. From the passage of MAP-21 in 2012 through 2016 when the final rule came out, the AMD added additional staff in two key areas: physical asset and business analysts, and data sciences.</p>
9. EVALUATION PLAN	
<i>What is the agency doing to ensure that the TAM plan delivers the intended results?</i>	<p>There are two primary areas of the Evaluation Plan; the TAM Plan itself and ISO 55000. The current TAM Plan provides the baseline for evaluating future TAM Plans produced by the Agency. RTD intends to regularly review its asset management maturity, setting maturity targets in its Strategic Asset Management Plan.</p> <p>RTD intends to evaluate the degree to which it is meeting the requirements for ISO 55000, and therefore its readiness for an ISO 55001 certification audit, through the following measures:</p> <ol style="list-style-type: none"> <li>1. ISO spot checks</li> <li>2. ISO health check</li> <li>3. ISO mock audit</li> <li>4. ISO audit</li> <li>5. ISO surveillance audits</li> </ol>

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Examples

Templates

**TABLE 2**  
Tier 1 Example with Links

1. INVENTORY		Corresponding Documents
<i>Revenue vehicles</i>	1655 revenue vehicles: <ul style="list-style-type: none"> <li>794 buses</li> <li>477 vans</li> <li>338 rail cars</li> <li>46 locomotives</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Inventory—Revenue Vehicles</a></li> </ul>
<i>Infrastructure</i>	1,510,396 linear feet of track: <ul style="list-style-type: none"> <li>Light rail: 348,480 linear feet</li> <li>Metro: 158,400 linear feet</li> <li>Commuter rail: 15,840 linear feet of owned track</li> <li>Freight rail: 987,676 linear feet</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Inventory—Infrastructure</a></li> </ul>
<i>Facilities</i>	204 facilities: <ul style="list-style-type: none"> <li>Administrative: 17</li> <li>General maintenance: 26</li> <li>Heavy maintenance: 1</li> <li>Bus loop: 4</li> <li>Parking lot: 24</li> <li>Parking site: 54</li> <li>Parking site (garage): 3</li> <li>Parking passenger station: 1</li> <li>Passenger station: 74</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Inventory—Facilities</a></li> </ul>
<i>Equipment</i>	315 nonrevenue vehicles: <ul style="list-style-type: none"> <li>99 cars</li> <li>190 trucks</li> <li>3 vans</li> <li>23 equipment vehicles</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Inventory—Equipment</a></li> </ul>
2. CONDITION ASSESSMENT		Corresponding Documents
<i>Revenue vehicles</i>	Age-based analysis	<ul style="list-style-type: none"> <li><a href="#">Useful Life Benchmarks (ULB)</a></li> </ul>
<i>Infrastructure</i>	Guideway under performance restriction	<ul style="list-style-type: none"> <li><a href="#">Guideway Under Performance Restriction Procedure</a></li> </ul>
<i>Facilities</i>	The agency is currently utilizing age-based condition assessment. In CY 2018 assessing (physical condition) 25 percent of facilities over the course of a four-year period per NTD requirements.	<ul style="list-style-type: none"> <li><a href="#">Facilities Condition Assessment</a></li> </ul>
<i>Equipment</i>	Age-based analysis	<ul style="list-style-type: none"> <li><a href="#">Useful Life Benchmarks (ULB)</a></li> </ul>
3. DECISION SUPPORT TOOLS		Corresponding Documents
<i>What tools and processes do we use to prioritize funding around those assets described in our inventory?</i>	The agency utilizes TERM Lite as a decision support tool to estimate capital investment needs over a four-year period, as well as 20- to 30-year projections for long range planning, and estimate SGR backlog.	<ul style="list-style-type: none"> <li><a href="#">TERM Lite—Long Range Planning</a></li> <li><a href="#">Asset Information Strategy</a></li> <li><a href="#">Investment Prioritization Policy</a></li> </ul>

## Tier 1 - Example

**TABLE 2**  
Tier 1 Example with Links

4. PRIORITIZED LIST OF INVESTMENTS		Corresponding Documents
<i>What is the result or output of those decision support tools and processes?</i>	The agency prioritizes its assets based on weighting criteria established in TERM Lite with emphasis on SGR and Safety (resulting from input by asset managers across all modes). TERM Lite weighting criteria are being utilized to organize capital project requests based on SGR needs.	<ul style="list-style-type: none"> <li><a href="#">Approved Capital Projects 2018-2022</a></li> </ul>
5. TAM AND SGR POLICY		Corresponding Documents
<i>What are the guiding principles for asset management efforts at our agency?</i>	The agency established a directive, aligning with the state DOT TAM policy, as well as a TAM plan, satisfying all federal requirements. Initiation of improvement projects aimed at accelerating the maturation of the agency's asset management program.	<ul style="list-style-type: none"> <li><a href="#">Asset Management Policy</a></li> </ul>
6. IMPLEMENTATION STRATEGY		Corresponding Documents
<i>How are we going to execute the TAM plan at our agency?</i>	The TAM plan includes an implementation strategy, as well as the detailed list of 48 improvement projects (activities) that will be completed over the four- to six-year TAM horizon.	<ul style="list-style-type: none"> <li><a href="#">Asset Management Roadmap</a></li> </ul>
7. LIST OF KEY ANNUAL ACTIVITIES		Corresponding Documents
<i>What activities do we perform to maintain our TAM system?</i>	The agency performs the following annual activities: updates inventory, performs facility assessments at a rate of 25 percent per year, updates the asset performance measurement analysis, revises the TAM plan, lifecycle management plans (LMPs) for all modes to reflect new data analysis, updates performance targets, and fulfills NTD reporting requirements.	<ul style="list-style-type: none"> <li><a href="#">Annual Review Procedure</a></li> <li><a href="#">Annual Review Checklist</a></li> </ul>
8. IDENTIFICATION OF RESOURCES		Corresponding Documents
<i>What resources do we need to execute TAM plan activities at our agency?</i>	The agency includes a detailed list of funding sources, a list of asset management personnel and key support staff with total expense cost, and costs of maintaining assets in a state of good repair in the TAM plan document.	<ul style="list-style-type: none"> <li><a href="#">Organizational Chart</a></li> <li><a href="#">Annual Budget</a></li> </ul>
9. EVALUATION PLAN		Corresponding Documents
<i>What is the agency doing to ensure that the TAM plan delivers the intended results?</i>	<p>The asset management program manager/coordinator leads all efforts in achieving asset management tasks and requirements for the agency, coordinating with internal and consultant support. Among those efforts:</p> <ul style="list-style-type: none"> <li>Leading the reporting of NTD requirements</li> <li>Updating of TAM plan and LMPs for all operating modes</li> <li>Completing improvement projects in the TAM plan</li> <li>Leading facility assessments</li> <li>Coordinating with capital programming for the call for projects to secure an SGR prioritized list of projects through the investment prioritization tool</li> <li>Supporting Tier 2 asset management efforts</li> <li>Completing inventory update and TERM Lite Analysis</li> </ul>	<ul style="list-style-type: none"> <li><a href="#">Annual Review Procedure</a></li> <li><a href="#">Annual Review Checklist</a></li> </ul>

**TABLE 7**  
Tier 1 Template

1. INVENTORY	
Revenue vehicles	
Infrastructure	
Facilities	
Equipment	
2. CONDITION ASSESSMENT	
Revenue vehicles	
Infrastructure	
Facilities	
Equipment	
3. DECISION SUPPORT TOOLS	
What tools and processes do we use to prioritize funding around those assets described in our inventory?	
4. PRIORITIZED LIST OF INVESTMENTS	
What is the result or output of those decision support tools and processes?	
5. TAM AND SGR POLICY	
What are the guiding principles for asset management efforts at our agency?	
6. IMPLEMENTATION STRATEGY	
How are we going to execute the TAM plan at our agency?	
7. LIST OF KEY ANNUAL ACTIVITIES	
What activities do we perform to maintain our TAM system?	
8. IDENTIFICATION OF RESOURCES	
What resources do we need to execute TAM plan activities at our agency?	
9. EVALUATION PLAN	
What is the agency doing to ensure that the TAM plan delivers the intended results?	

w/o Document Links

## Tier 1 – TEMPLATES

**TABLE 8**  
Tier 1 Template with Links

1. INVENTORY		Corresponding Documents
Revenue vehicles		
Infrastructure		
Facilities		
Equipment		
2. CONDITION ASSESSMENT		Corresponding Documents
Revenue vehicles		
Infrastructure		
Facilities		
Equipment		
3. DECISION SUPPORT TOOLS		Corresponding Documents
What tools and processes do we use to prioritize funding around those assets described in our inventory?		
4. PRIORITIZED LIST OF INVESTMENTS		Corresponding Documents
What is the result or output of those decision support tools and processes?		
5. TAM AND SGR POLICY		Corresponding Documents
What are the guiding principles for asset management efforts at our agency?		
6. IMPLEMENTATION STRATEGY		Corresponding Documents
How are we going to execute the TAM plan at our agency?		
7. LIST OF KEY ANNUAL ACTIVITIES		Corresponding Documents
What activities do we perform to maintain our TAM system?		
8. IDENTIFICATION OF RESOURCES		Corresponding Documents
What resources do we need to execute TAM plan activities at our agency?		
9. EVALUATION PLAN		Corresponding Documents
What is the agency doing to ensure that the TAM plan delivers the intended results?		

w/ Document Links

# Audience

## Who Creates?

- An individual that's familiar with your agency, its assets, & the TAM Plan requirements.

## Who Consumes?

- Board Members
- General Manager or CEO
- Senior Staff
- Triennial Auditor
- New Employee
- Or, anyone that will listen.

# Simple Instructions

1. Review the examples in the Appendix.
2. Decide on document links (**Yes or No?**).
3. Choose the correct template (**Tier 1, Tier 2, or Group?**).
4. Fill out the Template (**Brevity is the goal!**).

## Tell Your Story

1. INVENTORY	
Revenue vehicles	
Infrastructure	
Facilities	
Equipment	
2. CONDITION ASSESSMENT	
Revenue vehicles	
Infrastructure	
Facilities	
Equipment	
3. DECISION SUPPORT TOOLS	
What tools and processes do we use to prioritize funding around those assets described in our inventory?	
4. PRIORITIZED LIST OF INVESTMENTS	
What is the result or output of those decision support tools and processes?	

5. TAM AND SGR POLICY	
What are the guiding principles for asset management efforts at our agency?	
6. IMPLEMENTATION STRATEGY	
How are we going to execute the TAM plan at our agency?	
7. LIST OF KEY ANNUAL ACTIVITIES	
What activities do we perform to maintain our TAM system?	
8. IDENTIFICATION OF RESOURCES	
What resources do we need to execute TAM plan activities at our agency?	
9. EVALUATION PLAN	
What is the agency doing to ensure that the TAM plan delivers the intended results?	

The questions listed under each requirement are there to assist you in telling your specific story.

1. INVENTORY		
Revenue vehicles	770 – Transit Buses 116 – Articulated Bus 170 – Intercity Bus	349 – Cutaway Bus 172 – Light Rail Vehicles 66 – Commuter Rail Vehicles
Infrastructure	39 – Grade Crossings 141 – Catenary Wire Segments 73 – Track Segments 298 – Signal Segments	214 – Relay Cases 240 – Switches 61 – Substations 64 – Light Rail Vehicle Bridges
Facilities	7 – Maintenance Facilities 3 – Administrative Facilities	384 – Public Facilities assets 85 – Conveyances
Equipment	82 – Sedans 4 – Steel Wheeled	281 – Truck & Other Rubber Tire Vehicles
2. CONDITION ASSESSMENT		
Revenue vehicles	Age-Based Analysis	
Infrastructure	Guideway Under Performance Restriction	
Facilities	Physical Condition Assessment	
Equipment	Age-Based Analysis	
3. DECISION SUPPORT TOOLS		
What tools and processes do we use to prioritize funding around those assets described in our inventory?	On an annual basis, RTD executes a process which prepares and updates a six-year Mid Term Financial Plan (MTFP) including projected capital construction and improvements, service levels and operating costs, and revenues to fund the capital and operating programs. Part of process includes prioritizing the projects into three funding categories: Compliance, Renewal, and Enhancement.	
4. PRIORITIZED LIST OF INVESTMENTS		
What is the result or output of those decision support tools and processes?	The output of the annual Mid Term Financial Plan process is two primary lists of projects; Capital Projects & Capital Maintenance Projects. Each of lists is subdivided into three funding categories: Compliance, Renewal, and Enhancement.	
5. TAM AND SGR POLICY		
What are the guiding principles for asset management efforts at our agency?	<p>RTD originally adopted an Asset Management Policy in June 2014 and most recently updated November 2017.</p> <p>The intent of the policy is to improve how RTD manages assets from now on - it is therefore forward-looking in nature, and represents our vision and shared commitment for good Asset Management at RTD. The Asset Management system applies to the entire organization and directs the short, medium, and long-term plans for assets to achieve our agency purpose of moving people.</p>	

6. IMPLEMENTATION STRATEGY	
<i>How are we going to execute the TAM plan at our agency?</i>	RTD has chosen ISO 55000 as the framework to build its Asset Management system. As part of that choice, RTD underwent a gap assessment to determine the necessary tasks needed to achieve ISO 55000 certification.
7. LIST OF KEY ANNUAL ACTIVITIES	
<i>What activities do we perform to maintain our TAM system?</i>	RTD identifies two types of asset management activities: those ongoing asset management activities that RTD performs as part of 'business as usual', and those activities specific to achieving ISO 55000 certification. TAM activities are the subset of these targeting the specific TAM elements.
8. IDENTIFICATION OF RESOURCES	
<i>What resources do we need to execute TAM plan activities at our agency?</i>	<p>Resources from across the agency are involved in RTD's Asset Management activities, including the CEO/GM, the Senior Leadership Team, the Asset Management Division (AMD), Bus Operations, Rail operations, Capital Programs, Finance and Administration, Communications, Planning, and General Counsel.</p> <p>The AMD acts as the experts that serve as an enabling function to the agency. From the passage of MAP-21 in 2012 through 2016 when the final rule came out, the AMD added additional staff in two key areas: physical asset and business analysts, and data sciences.</p>
9. EVALUATION PLAN	
<i>What is the agency doing to ensure that the TAM plan delivers the intended results?</i>	<p>There are two primary areas of the Evaluation Plan; the TAM Plan itself and ISO 55000. The current TAM Plan provides the baseline for evaluating future TAM Plans produced by the Agency. RTD intends to regularly review its asset management maturity, setting maturity targets in its Strategic Asset Management Plan.</p> <p>RTD intends to evaluate the degree to which it is meeting the requirements for ISO 55000, and therefore its readiness for an ISO 55001 certification audit, through the following measures:</p> <ol style="list-style-type: none"> <li>1. ISO spot checks</li> <li>2. ISO health check</li> <li>3. ISO mock audit</li> <li>4. ISO audit</li> <li>5. ISO surveillance audits</li> </ol>



# Ongoing RTD Communication

Topic	Audience	Frequency
ISO Certification Roadmap	Asset Mgmt. Accountability Team (AMAT)	Bi-weekly
Asset Class Strategies (ACS)	Asset Stewards	Monthly
Asset Management Update	General Manager	Monthly
Asset Management Plan (AMP)	Asset Management Working Group	Quarterly
Finance (AM connection/support)	Board of Directors (Study Session)	Semi-annual
Asset Management Progress	Board of Directors (Study Session)	Semi-annual
TAM Plan & Performance Targets	MPO (DRCOG)	Annually
Asset Management Update	Board of Directors	Annually



**Questions?**



# Communicating Your Transit Asset Management Plan

*APTA SUDS-TAM-RP-004-19*

**Luke Westlund**

Regional Transportation District – Denver

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# Moderator and Presenter Conversations

**Laura Zale**

Manager of Asset Management

SEPTA

Philadelphia, PA



**Luke Westlund**

Manager-Business Analysis

Regional Transportation District

Denver, CO



# Q&A with Today's Moderator and Speakers

**Laura Zale**

Manager of Asset Management  
Southeastern Pennsylvania  
Transportation Authority  
Philadelphia, PA



**Mshadoni Smith**

TAM Program Manager  
Federal Transit  
Administration  
Washington, DC



**Luke Westlund**

Manager-Business Analysis  
Regional Transportation  
District  
Denver, CO



# Asking Audience Questions

To submit a question or comment to the moderator during the session or during the Q&A, please type it into the **Question** box on your screen and click on the send arrow located at the bottom of the box.

# Q&A with Today's Moderator and Speakers

**Laura Zale**

Manager of Asset Management  
Southeastern Pennsylvania  
Transportation Authority  
Philadelphia, PA



**Mshadoni Smith**

TAM Program Manager  
Federal Transit  
Administration  
Washington, DC



**Luke Westlund**

Manager-Business Analysis  
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District  
Denver, CO





AMERICAN  
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ASSOCIATION



TRANSIT  
ASSET  
MANAGEMENT

# Communicating TAM Compliance and Programs

2019 APTA/FTA Webinar Series: Part 1

APRIL 25, 2019