





TRANSIT ASSET MANAGEMENT

Improving Your Asset Information and Embracing Continual Improvement

APTA/FTA Webinar Series: Part 3

January 21, 2020 2:00 - 3:15 PM ET

American Public Transportation Association

APTA leads public transportation in a new mobility era, advocating to connect and build thriving communities.

- 1. APTA Leads As the voice for public transportation, proactively and assertively shaping and responding to actions that impact public transportation
- 2. **Public Transportation** Supporting the needs of public transportation agencies acting in the public good
- 3. New Mobility Era Helping members anticipate, prepare for and understand the changes that are shaping our industry
- 4. Advocating Fervently promoting the interests of the public transportation industry in all venues
- 5. Thriving Communities Using transportation to enable individuals to access opportunities that improve their lives



Transit Asset Management Activities

- 1. Transit Performance Management Subcommittee
- Of the Planning, Policy, & Program Development Committee
- 2. Standards and Recommended Practices
- State of Good Repair/Transit Asset Management Working Group
- 3. APTA/FTA TAM Webinar Series
- 4. Research and Reports
- Economic Cost of Failing to Modernize Public Transportation
- 5. APTA Conferences and Sessions



Federal Transit Administration Welcome

- NTD data published for Report Year 2018 1st year that contains new TAM asset data
- Fact Sheets summarize new TAM asset data
- FTA webinar Feb. 12th "Workforce Planning and Development"
- FTA TAM Roundtable is July 12th in Boston, MA

www.transit.dot.gov/TAM





State of Good Repair/Transit Asset Management Working Group

Mission:

To develop guidance for transit agencies as they implement asset management programs in compliance with FTA regulations and in alignment with industry best practice. This guidance, which may consist of white papers, training materials, presentations, and webinars, will complement the resources that have been published by the FTA with examples developed by industry peers.



Guidance Published

- 1. Communicating Your Transit Asset Management Plan
- 2. Improving Asset Management Through Better Asset Information
- 3. Building Internal Stakeholder Support for Your Asset Management Program
- 4. Communication and Coordination with External Stakeholders for Transit Asset Management
- 5. Procuring Software to Support Transit Asset Management

All are available on the APTA Standards website.



Guidance in Development

- 1. Using Performance Targets to Drive a Transit Asset Management Program
- 2. Using Asset Criticality to Make Investment Decisions
- 3. How to Build an Asset Management Team

Target publish date: Spring 2020



What's Next?

Theme of Documents: Continuous Improvement

- TAM Policy Creation and Implementation
- Identifying and Incorporation of Risk into TAMPs
- Incorporating Climate Vulnerability into TAMPs
- Best practices in using condition assessments and predicative maintenance into improved performance
- Best practices in linking TAMPs and Safety Plans



APTA/FTA Webinar Series

Held on April 25, 2019: Communicating TAM Compliance and Programs

Tools and resources for communicating the value of TAM agency executives and staff.
 Presentation slides and recording available on APTA website.

Held on October 8, 2019: Engaging Your TAM Stakeholders

 Communicating and involving both internal and external stakeholders in transit asset management involves coordinated but different approaches.

Today, January 21, 2020: Improving Your Asset Information and Embracing Continual Improvement

 This webinar will discuss two critical elements of any TAM program: improving your asset information and embracing continual improvement.



Today's Moderator and Speakers









Luke Westlund Laura Zale Manager of Asset Management, Manager – Business Analysis, Southeastern Pennsylvania **Regional Transportation** District (RTD), Denver, CO Transportation Authority (SEPTA), Philadelphia, PA









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.





Presenter





Luke Westlund

Manager – Business Analysis, Regional Transportation District, Denver, CO Luke.Westlund@RTD-Denver.com





Continual Improvement

Pursuing Value



Basic Assumptions

It's assumed that you:

- Know your TAM Plan requirements (Tier 1, 2, or Group).
- Have participated in the creation of a TAM Plan.
- Want your TAM Plan to be actionable.

It's assumed that your TAM Plan:

- Is the starting line not the finish.
- Is probably missing a few pieces.
- Still needs improvement.





Continuous Improvement = Requirement

TAM Plan Requirements

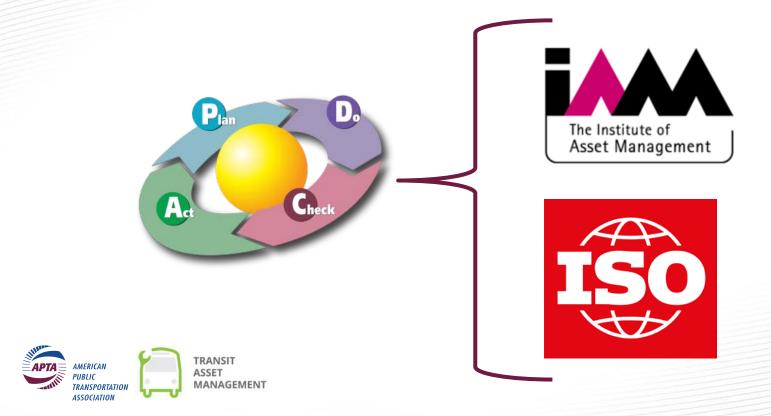
- Asset Inventory
- Condition Assessments
- 3. Decision Support Tools
- 4. Prioritized List of Investments
- 5. TAM & SGR Policy
- 6. Implementation Strategy
- 7. List of Key Annual Activities
- 8. Identification of Resources
- 9. Evaluation Plan*







Continuous Improvement = Best Practice



Continuous Improvement = Culture

... a culture of sustained improvement targeting the elimination of waste in all systems and processes of an organization. It involves

everyone working together to make improvements without

necessarily making huge capital investments.







Continuous Improvement = Limitless

...a gradual never-ending change which is: ... focused on increasing the effectiveness and/or efficiency of an organization to fulfil its policy and objectives. It is not limited to quality initiatives. Improvement in business strategy, business results, customer, employee, and supplier relationships can be subject to continual improvement.

People

Process

Information

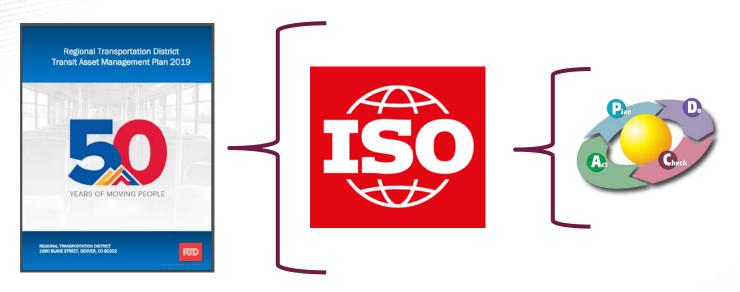
Technology

Put simply, it means "getting better all the time".





Continuous Improvement at RTD



"A commitment to ISO 55000 certification is a commitment to improving our business"





Lessons Learned - You're never done.

- 1. Do the next right thing.
- 2. Don't make it more difficult than it needs to be.
- 3. Improve manageable pieces.
- 4. Stop doing what doesn't work.

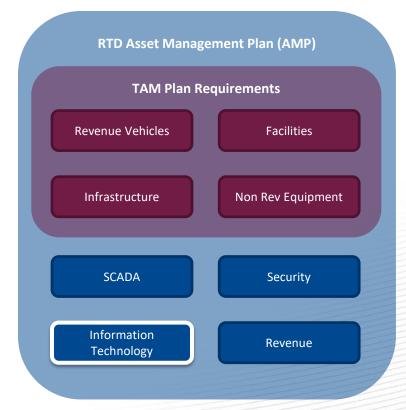




1. Do the next right thing.

What's the next right thing?

- Focusing on existing assets first
- Created one process with two-lanes, assets and non-assets
- Initial needs are generated by asset information not a "call for projects"
- Include all assets.



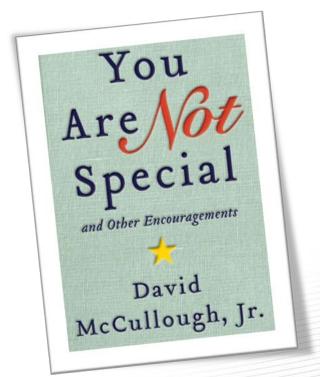




2. Don't make it more difficult...

I have heard the following:

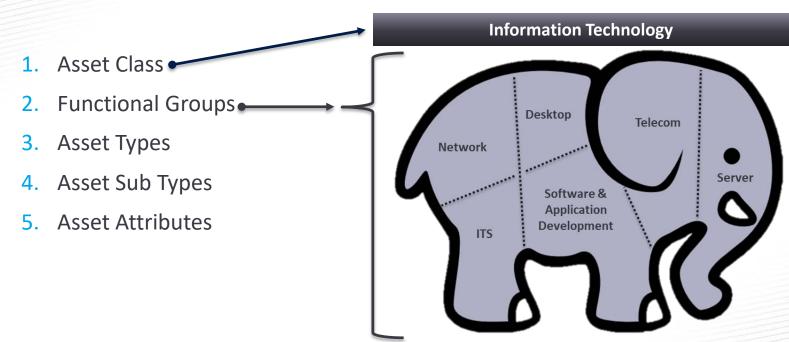
- "So, it's complicated."
- "Well, I'm not sure you understand."
- "Hey, it's different over here."
- "Not to get into the weeds but..."
- "Well, what about that one time..."
- "We already do asset management"







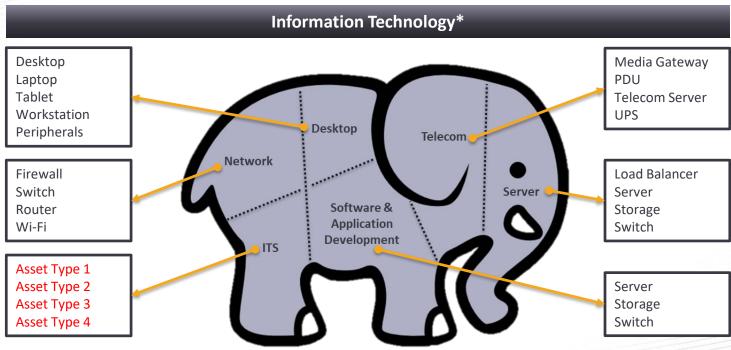
3. Improve manageable pieces.







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^{*}Hardware is our the first step, software is second.

3. Improve manageable pieces

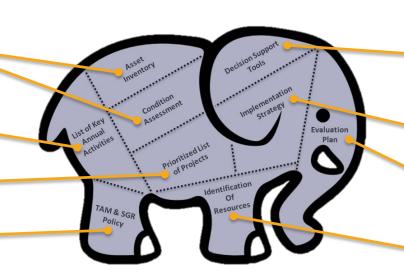
Transit Asset Management Plan

Revenue Vehicles Facilities Infrastructure Non Revenue Equipment Systems

Performance Targets Evaluation Plan NTD Data & Narrative Report

Asset Management Plan (AMP) Non Assets – Business Cases

Aligned to Purpose Policy Document



People

Process

Information

Technology

TAM Plan Compliance ISO55000 Framework

Formal Review Process Audits Findings

Asset Mgmt. Division Consultant Support Ongoing ISO Certification





4. Stop Doing What Doesn't Work

Physical Condition Assessments:

Bus*	X
Light Rail Vehicles*	X
Infrastructure*	X
Passenger Facilities	~
Maint. & Admin. Facilities	~







Takeaways - You're never done.

- 1. Do the next right thing.
- 2. Don't make it more difficult than it needs to be.
- 3. Improve manageable pieces.
- 4. Stop doing what doesn't work.
- 5. Ask for help, you are not alone.



Presenter





Simon Smith
Director of Asset Management
AMCL, New York, NY
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We work in an asset-intensive industry

















Whatever role we play, we need information to make good asset decisions



Asset Managers



Capital Planning



Maintenance



Operations



Executives / elected officials



PM /
Engineering



Performance Management



Finance / procurement

But the information we need is often missing...



...or sometimes even worse



Solving the Asset Information puzzle...

Using Asset Information to make decisions

Common transit Asset Information decisions and challenges

Improving your Asset Information





Solving the Asset Information puzzle...

Using Asset Information to make decisions

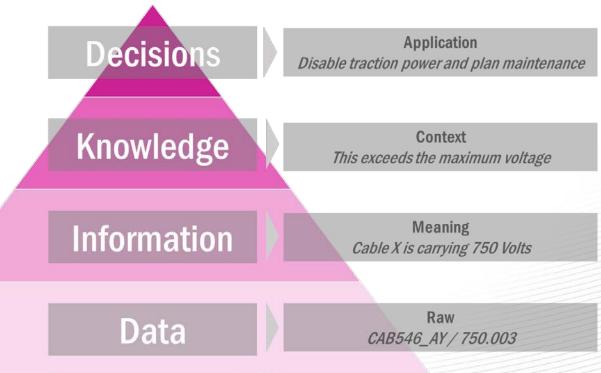
Common transit Asset Information decisions and challenges

Improving your Asset Information





Decisions rely on data







What is Asset Information?

and for long-term strategic planning"



"A combination of data about physical assets used to <u>inform decisions</u> about how they are managed, both for <u>short-term</u> operational purposes

EAM system

Finance system

GIS

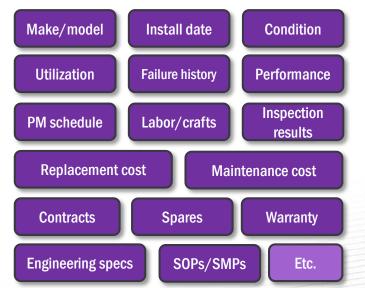
Document

Management System

C drive

Desk drawer

Organizational Information Asset Information TRANSIT ASSET MANAGEMENT



Using Asset Information to make a decision





• How old is it? Install date

What condition is it in? Condition

How much does it get used? Utilization

How often and badly does it fail? Failures

What will it cost to replace? Replacement cost

• What will it cost to continue maintaining?

Maintenance cost





Now imagine you had 100,000s of assets...

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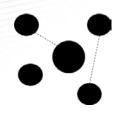




Common transit Asset Management decisions



Common transit challenges with Asset Information



Information spread across multiple, unintegrated systems



Asset Information systems poorly configured, difficult to use



Poor quality or missing information, with information hard to locate and trust



Large volumes of unstructured data, particularly in paper form



Insufficient resources to adequately collect and maintain information



Unclear responsibilities for information management



Missing or inconsistently applied standards for recording information



Poor information handover from asset suppliers



Knowledge drain as people retire and take information with them

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Improving your Asset Information





Improving your Asset Information



Objectives and Strategy

- Asset management decisions
- Information needs
- Asset Information objectives
- Asset Information strategy



Asset Info Standards

- What information
- Format and structure
- Quality
- Processes for managing it

Asset Register

Maintenance







Asset Info Systems

- EAM system requirements
- System enhancements (functional, UI, etc.)
- New technology (mobile, etc.)
- Legacy system integration / consolidation
- Data load templates





Asset Info Management

- Information governance and responsibilities
- Data collection and migration
- Data quality audit program
- Training and coaching
- Resourcing





Example: Improving your TAMP



Objectives and Strategy

- **Objective:** Produce (improved) TAMP
- **Information needs:** Asset inventory, Install date, Condition / performance
- **Information objective:** improve inventory information completeness and accuracy for our most critical assets







Asset Info Standards







Asset Info Management

- What inventory data needs to be collected
- Format, naming, hierarchy conventions
- Completeness and accuracy requirements
- Process for entering into EAM system

- Add new fields to EAM system to reflect standard
- Introduce EAM system field validation
- Create data load templates
- Add data analyst resource
- Assess existing inventory data (completeness, accuracy, etc.) against the standard, identify gaps
- Plan and perform prioritized inventory data collection effort for most critical assets, in line with standard
- Clarify ownership for inventory data going forward 44



Solving the Asset Information puzzle...



Using Asset Information to make decisions



Common transit Asset Information decisions and challenges



Improving your Asset Information





Q&A with Today's Moderator and **Speakers**

- Laura Zale, Manager of Asset Management, Southeastern Pennsylvania Transportation Authority (SEPTA), Philadelphia, PA
- Luke Westlund, Manager Business Analysis, Regional Transportation District, Denver, CO
- Simon Smith, Principal Consultant, AMCL, New York, NY





Asking Audience Questions

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