# FTA SGR Update

Aaron C. James, Sr.

Federal Transit Administration
Director-Office of Engineering
Washington, DC





## **Presentation Outline**

- The SGR Problem
- Actions Taken by FTA Pre Map-21
- Timeline for Deliverables
- Questions

### **SGR Initiative**

Step 1: Define the Problem

Step 2: Develop Strategy

Step 3: Implement Work Plan

Step 4: Evaluate Results



## **Defining the SGR Problem**

- Two reports were key in FTA defining the SGR problem:
  - □ 2010 SGR Assessment

□ Transit Asset Management Systems Scan

## **Defining the SGR Problem**

- Present funding levels insufficient to maintain system in SGR
- Inadequate Asset Management Plans
- Insufficient Inventory Systems
- No Collection of Best Practices
- Lack of Technical Assistance & Training

## **SGR Strategy**

- Conduct Additional Research
- Provide Technical Assistance
- Explore Funding Possibilities
- Lead Industry Outreach

## **Additional Research Projects**

## Asset Management Framework

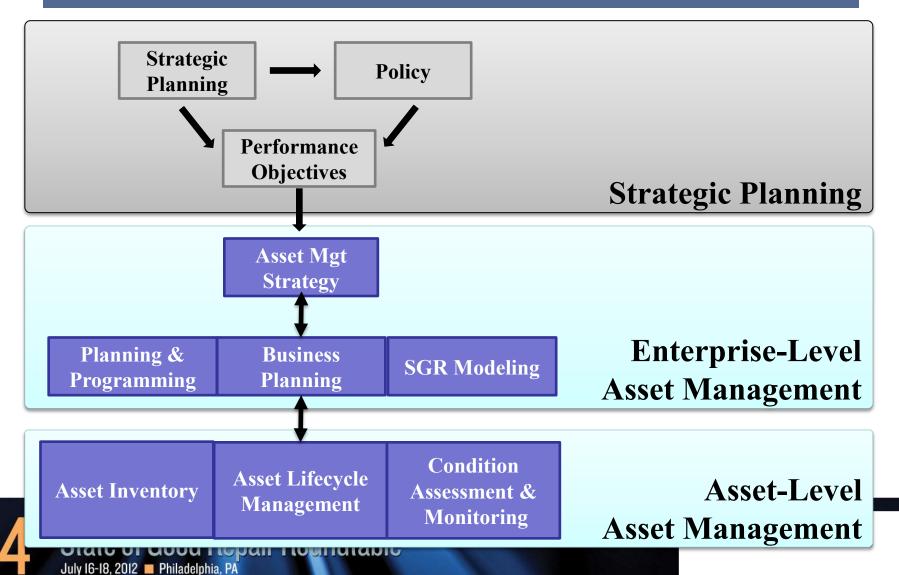
✓ Research and develop TAM framework including a guidance document that will describe essential elements of transit asset management and how they could be implemented.

## Inventory Development & Integration

✓ Research how hierarchical structures can be designed to combine detailed asset data and how maintenance and life-cycle information can be used to infer the conditions of these assets.



# Research & Pilot Projects... Asset Management Framework



# Research & Pilot Projects... Asset Management Framework

### **Vehicles**

Rail Vehicles & Fixed Non-Revenue Vehicles

Buses & Non-Revenue Vehicles

# Facilities & Stations

Rail Maintenance Facilities

Bus Maintenance Facilities

Private-Use Administrative Facilities

Public-Use Administrative Facilities

# Trainway & Track Elements

Trainway (mainline)

Trainway (yard)

Trainway Support Structures/Facilities

Trainway Ancillary
Structures

**Trackwork** 

### Systems

Elevators, Escalators, and Moving Sidewalks

Early Warning Response and Rapid Response Systems

> Traction Electrification Systems

Signals & Communications

Building & Facility Services (MEP)





# Research & Pilot Projects... Asset Inspection & Maintenance System

### **Metrolink Structure Directory**

Group		
Mile Post	15.40 to	16.25
Name	Eads Bridge & Piers	
Maps	Google	Bing



#### Structure Files

- 1990 Existing Plans
- 2002 Repair Plans (As-Built)
- · Maintenance/Repair History
- Photographs

#### **Evaluation Reports**

- 2010 Inspection Report/Database
- 2009 Inspection Report
- 2008 Inspection Report/Database
- 2007 Inspection Report/Database
- 2006 Inspection Report/Database
- 2005 Inspection Report/Database
- 1999 Inspection Report

Structure Specific Files

### **Technical Assistance**

### TAM Pilots

- ✓ Demonstrate innovative approaches to transit systems planning that incorporate the longterm costs of maintaining the system in a SGR into the planning process
- ✓ Provide an asset inventory database (register) with sufficient capacity and functionality to track all categories of transportation capital assets

### **Technical Assistance**

### TAM Pilots

- ✓ Demonstrate proven asset management methods taking into account other industry practices that can be effectively applied in the transportation industry
- ✓ Provide methodologies to better prioritize reinvestment needs
- ✓ Approaches to simplify collecting asset condition data (for example, use of dedicated personal digital assistants (PDA's) while walking track or inspecting roadside equipment and furniture)

# Technical Assistance... TAM Pilot Projects

TAM Pilot Project Award Recipient	Allocation
Peninsula Corridor Joint Powers Board (CALTRAIN)	\$750,000
Utah Transit Authority (UTA)	\$500,000
Regional Transportation Authority (Chicago)	\$800,000
Massachusetts Bay Transportation Authority	\$950,000
Virginia Department of Rail and Public Transportation	\$700,000
Valley Regional Transit (Meridian, Idaho)	\$300,000

# Technical Assistance... TAM Pilot Projects

## Major Deliverables

- ✓ Innovative and/or improved asset management methods developed as part of this pilot program
- ✓ Asset management tools that will promote better management of safety-related public transportation capital assets
- ✓ Asset management tools and practices that can be implemented at other agencies of varying sizes and modal composition
- √ 40 hours of technical assistance in the form of information exchange forums such as webinars, meetings, teleconferences, or workshops



# Technical Assistance... TERM Lite

### TERM Lite Pilot

✓ Provide transit agencies with a tool to evaluate long-term reinvestment needs that is compatible with FTA national estimates and uses the same format for asset inventory data.

## Major Deliverables

✓ TERM-Lite Capital Investment Planning tool (available on the FTA website)



# Technical Assistance... NTD Reporting

## NTD Data Collection Module

✓ Collect more reliable asset inventory data from the industry on an annual basis to support needs assessment and performance metrics.

## Major Deliverables

✓ An industry tested and vetted spreadsheet tool for reporting asset inventory data to the NTD

# **Technical Assistance...**SGR Climate Adaptation Pilots

- SGR Climate Adaptation Pilots
  - ✓ FTA is funding 7 pilot projects to assess vulnerabilities of public transportation systems to climate change impacts such as heat waves and flooding.
  - ✓ 2 of the pilot projects have an emphasis on determining how TAM systems can be used to support strategic investment decision-making to respond to climate change impacts.





## **Timeline for Completion**

AM Framework & Inventory Development & Integration	July/August 2012
TERM Lite Pilot	Sept/Oct 2012
TAM Pilots	March/April 2013
<b>Climate Adaptation Pilots</b>	May 2013
NTD Data Collection	October 2014
NTI Introduction to Asset Management Course	Ongoing
SGR Roundtables	Ongoing



## **Questions/FTA Contacts**

Asset Management Research Projects	Terrell.Williams@dot.gov Raj.Wagley@dot.gov
TAM Pilots & SGR Asset Management Systems	Chris.Nutakor@dot.gov Aaron.James@dot.gov
Term Lite & NTD Pilots	Keith.Gates@dot.gov
SGR Climate Adaptation Pilot	Tina.Hodges@dot.gov