



# Washington Metropolitan Area Transit Authority

## Target Setting in Transit: Using Data to Involve Staff Across an Agency

11<sup>th</sup> Annual National Conference on Transportation Asset Management

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# Overview of Today's Presentation

*Performance management at WMATA*

How it all fits together

*Defining success*

Annual target-setting for Key Performance Indicators

*Getting ready*

Targets for new Asset Management measures



# Establishing Performance Management

## Five Components



**Board  
Goals, GM  
Priorities**

*Where we  
want to go*

**KPIs &  
Measures**

*Track progress  
toward goals*

**Targets**

*Sets end point/  
defines success*

**Business  
Plans &  
Actions**

*Plan the work and  
identify resources*

**Report  
Results**

*Assess and  
report results*



Demonstrate accountability to customers and the Board by facilitating data-driven decision making, collaboration, and regular reporting on performance



# Performance Management

Goals and  
Priorities

KPIs &  
Measures

## Key Performance Indicators

Bus On-Time Performance

**NEW** Rail Customer OTP

Bus Fleet Reliability

Rail Fleet Reliability

Escalator Availability

Elevator Availability

Customer Injury Rate

Employee Injury Rate

Crime Rate

Customer Satisfaction

## Other Measures

Rail Crowding

**NEW** Bus Crowding



## Business Performance Measures

### *Finance*

Capital Funds Invested

Operating Budget Variance

Disadvantaged Business Enterprise

### *Human Resources*

Vacancy Rate

### *Environment*

Energy and Water Usage

### *Board Measures*

Bus Stop Accessibility

Household & Population Growth  
Near Transit

Rail Station Walkshed Coverage

Future:

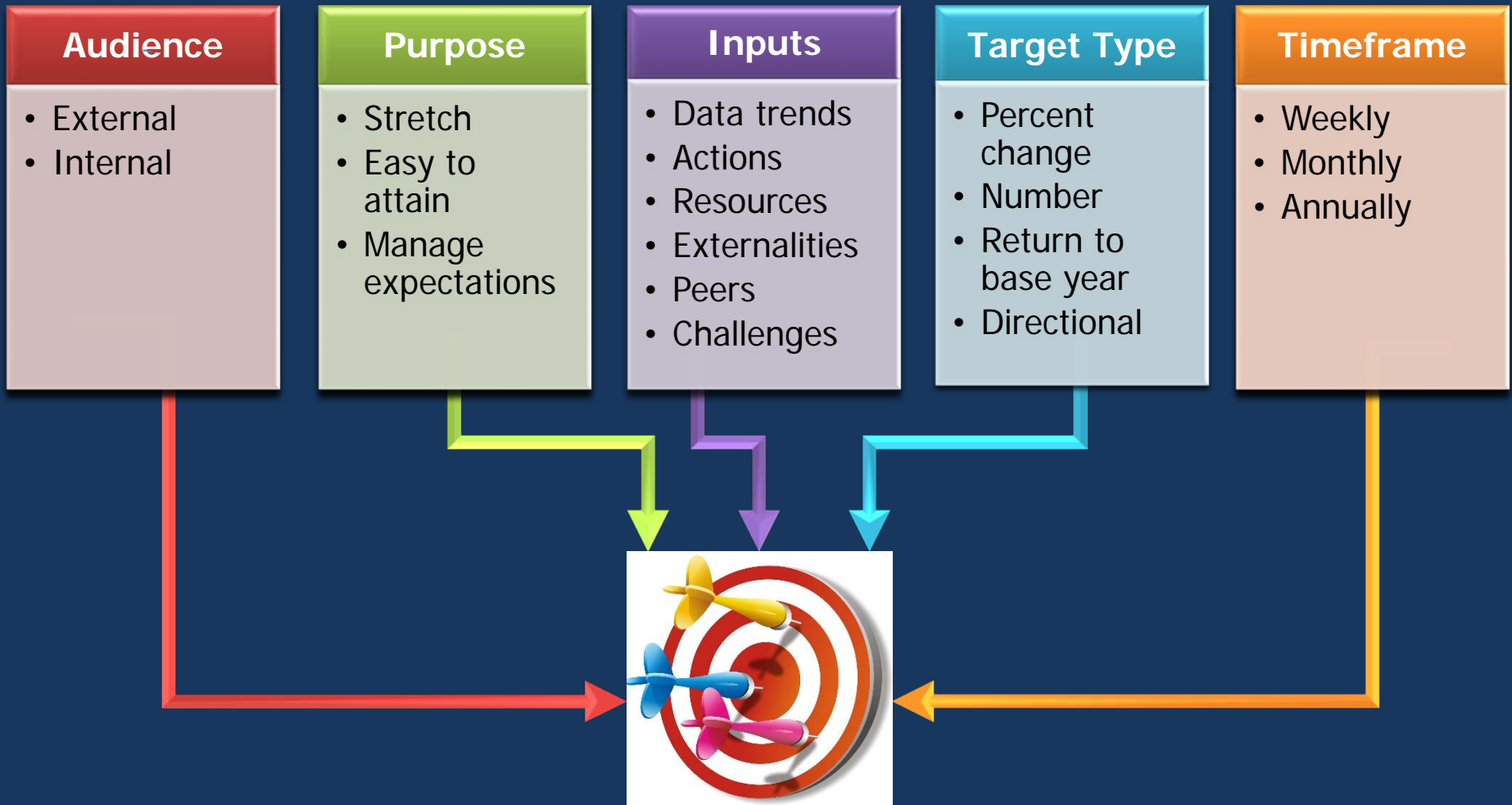
Transit Asset Mgmt. Measures

# Performance Management



## Targets

Executives define success by setting targets annually, considering:



# Defining Success

Goal: Meet or exceed customer expectations by delivering quality service

## KPI: Rail Fleet Reliability

Current CY15 Target: 65,000

Recommended CY16 Target: 61,000

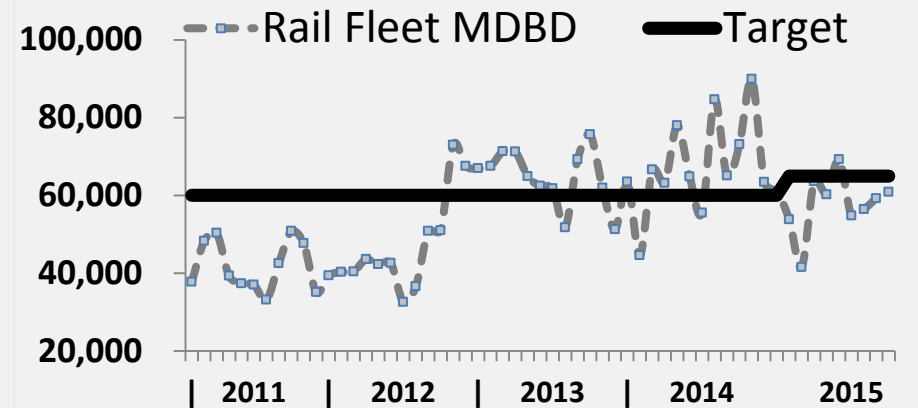
**Why?** Low spare ratio means limited flexibility to keep cars out of service for repair, inadequate parts inventories, and cars not hardened for winter

### Key Actions

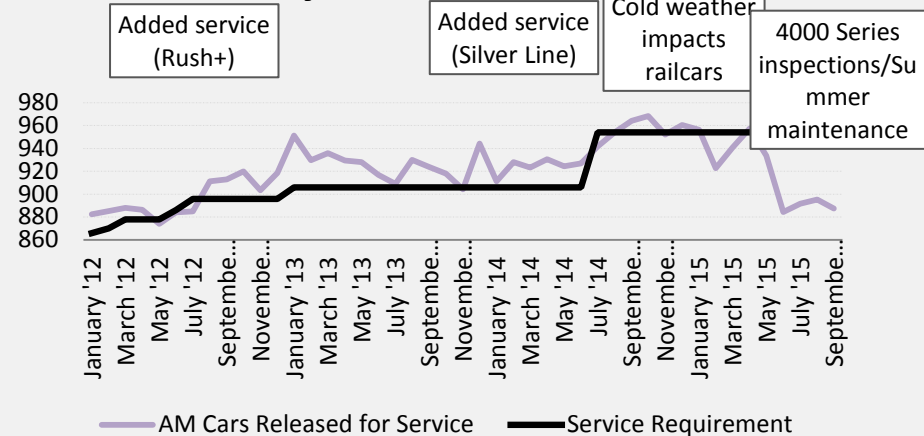
- Board resolution to adopt revised procurement policy
- Long-term improvement in spare ratio with 7Ks
- Develop solutions for reliability challenges on existing fleet (CMNT) and implement campaigns (CMNT), ex:
  - Expand propulsion overhauls in maintenance program to include high failure parts (CMNT) and identify software solution (CENV)

### Barriers

- Inadequate inventory of railcar parts (70+ parked)
- 7K presently at 30,000 Miles Between Delays (contractually by design at this stage, expected to improve in future years)
- 7K field modifications require long-term dedicated maintenance shop space, which may impact the # of railcars undergoing maintenance on existing older fleets

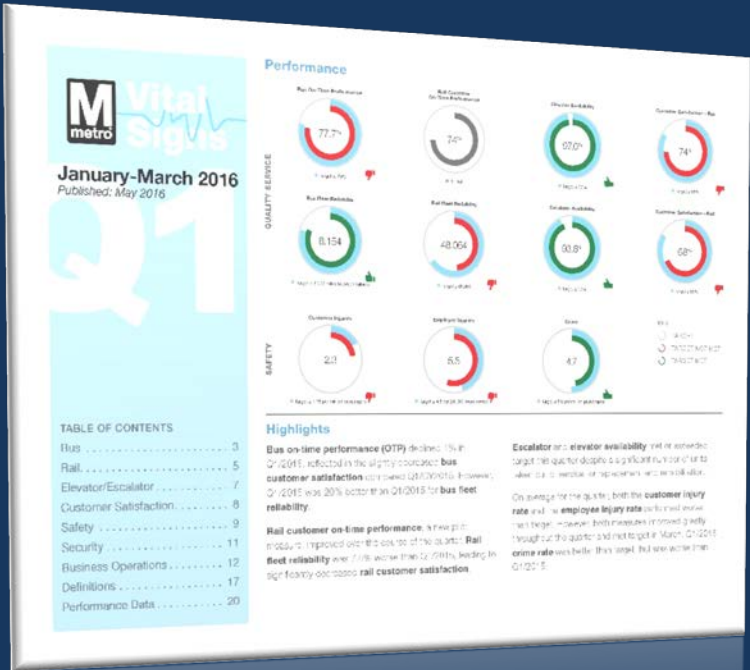


## Car Availability



## 7K Delivery Schedule

	Base 64 Cars	Option 4 300 Cars 1k Repl	Option 1 64 Cars Dulles	Option 3 100 Cars 4k Repl	Option 2 130 Cars 5k Repl	Option 5 90 Cars 5k Repl
<b>Contract Award</b>	Aug 2010	Aug 2010	Sept 2012	Apr 2013	Jul 2015	Jul 2015
<b>End Delivery</b>	Sept 2015	Feb 2017	Oct 2017	Aug 2018	Aug 2019	Apr 2020
<b>Total Cars @ WMATA</b>	64	364	428	528	658	748



## Vital Signs Report Key Questions:

- Why did performance change?
- What actions is Metro taking?





# FTA Transit Asset Management Performance Measures



% of vehicles met or exceeded Useful Life Benchmark (ULB)



% of facilities rated below 3 on FTA's 1-5 condition scale



% of track segments, signal, and systems with performance restrictions – i.e., Slow Zones





# Ex: Gathering Data to Prepare Slow Zones Target



## Track Inventory

## Planned Slow Zones



## Other Speed Restrictions

- Seasonal
- Temporary
- Initiated due to delay

# Surge Schedule



1	June 4 - 16	13 days	OR SV	Continuous Single Tracking	Ballston to East Falls Church
2	June 18 - July 3	16 days	OR SV BL	Line Segment Shutdown	Eastern Market to Minnesota Ave/Benning Road
3	July 5 - 11 <small>STARTS 8PM JULY 5</small>	7 days	YL BL	Line Segment Shutdown	Reagan National Airport to Braddock Road
4	July 12 - 18	7 days	YL BL	Line Segment Shutdown	Reagan National Airport to Pentagon City
5	July 20 - 31	12 days	OR SV	Continuous Single Tracking	Ballston to East Falls Church
6	August 1 - 7	7 days	RD	Continuous Single Tracking	Takoma to Silver Spring
7	August 9 - 18	10 days	RD	Continuous Single Tracking	Shady Grove to Twinbrook
8	August 20 - September 5	17 days	BL YL	Continuous Single Tracking	Franconia-Springfield to Van Dorn Street
9	September 9 - October 20	42 days	OR	Continuous Single Tracking	Vienna to West Falls Church
10	October 10 - November 1	23 days	RD	Line Segment Shutdown	Fort Totten to NoMa-Gallaudet
11	November 3 - 11 <small>STARTS 10PM NOV. 2</small>	9 days	OR SV	Continuous Single Tracking	East Falls Church to West Falls Church
12	November 12 - December 6	25 days	GR YL	Continuous Single Tracking	Greenbelt to College Park
13	December 7 - 24 <small>EXCEPT AM DEC. 17</small>	18 days	BL	Line Segment Shutdown	Rosslyn to Pentagon
14	January 2 - 13 & January 23 - February 3 * <small>STARTS 10PM JAN. 22</small>	24 days	YL BL	Continuous Single Tracking	Braddock Road to Huntington/Van Dorn Street
15	March 6 - 19	14 days	OR SV	Continuous Single Tracking	East Falls Church to West Falls Church

\* Note: No track work during Inauguration Week (Jan 15-21)

NOTE: INFORMATION SUBJECT TO CHANGE. VISIT [WMATA.COM/SAFETRACK](http://WMATA.COM/SAFETRACK) FOR UPDATES.



# Considerations for Slow Zone Target Setting

## Audience

External  
(FTA)

## Purpose

Manage expectations,  
Compliance

## Inputs

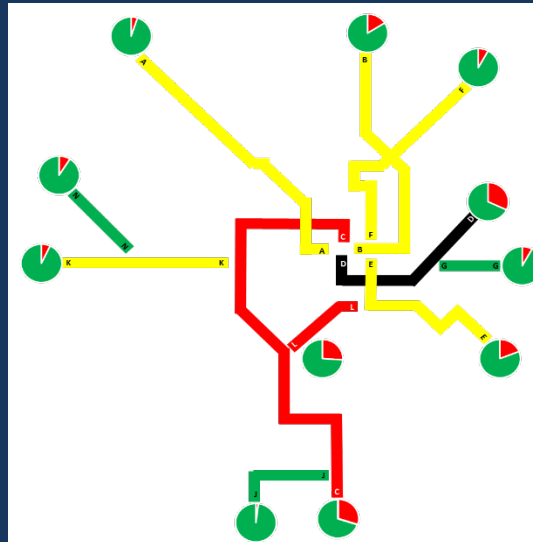
Data in  
multiple  
sources, data  
quality  
uncertain

## Target Type

# Guidebook

## Timeframe

## Performance measure mock-ups



## Example

Metrorail System



■ % operation time with slow zone

■ % operation time without slow zone



# Near Term TAM Target- Setting Next Steps

Submit  
90 days  
from Final  
Rule



Review Final Rule, Guidebooks

Inventory and condition assessment



Gather data to draft targets

Engage asset owners to inform targets

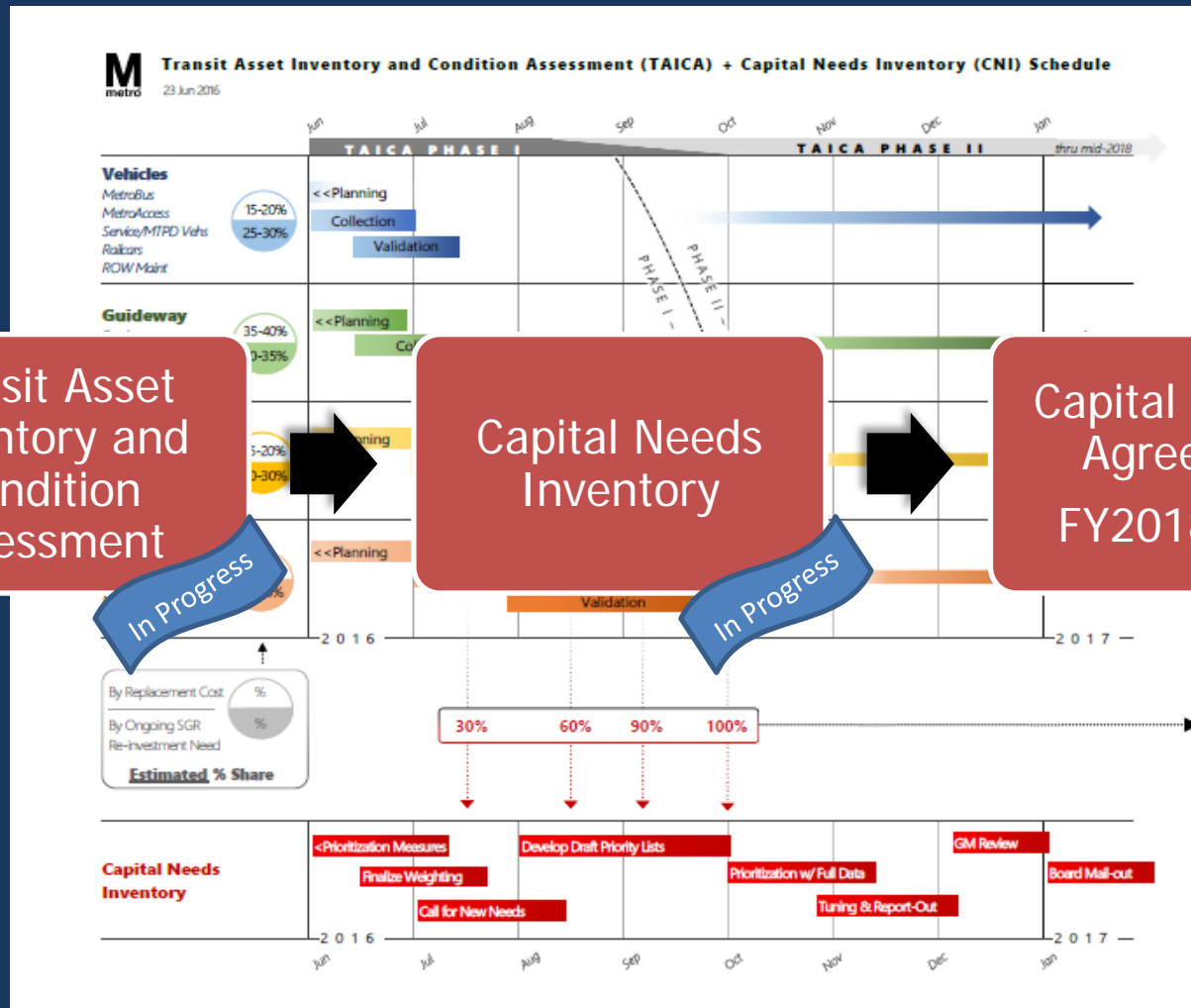


Senior management review





# Moving TAM Forward: Managing Assets, Prioritizing Funding



Transit Asset Inventory and Condition Assessment

In Progress

Capital Needs Inventory

In Progress

Capital Funding Agreement FY2018-2023