



Washington Metropolitan Area Transit Authority

Advancing Performance Management: Establishing Measures and Targets

Fifth State of Good Repair Roundtable
June 3, 2015

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Why Targets Matter

Federal Rulemaking



MAP21 PERFORMANCE PROVISIONS FOR TRANSIT

MPO & STATEWIDE PLANNING RULE

- ✓ Establish performance based planning process
- ✓ **SET TARGETS** to measure results TIP/STIP



STATE OF GOOD REPAIR RULE

- ✓ FTA will define SOGR and establish performance measures
- ✓ **SET TARGETS** and report on progress



Language of Performance

Words Matter

Goal



Performance
Measure



Target



Language of Performance

Words Matter

Goal **Achieve a State of Good Repair**



Performance
Measure

**Average
Fleet Age**



Target

7 Years



Performance-Based Management: 5 Components



"WMATA has established many of the performance-based planning and programming elements necessary..."
– *Federal Highway Administration*



Strategic Goals:

Where Do You Want to Go?

Goals -----



WMATA Strategic Plan,
Published 2013





Key Performance Indicators

Track Progress Toward Goals

Bus On-Time Performance

Rail On-Time Performance

Bus Fleet Reliability

Rail Fleet Reliability

Escalator Availability

Elevator Availability

Customer Injury Rate

Employee Injury Rate

Crime Rate

Customer Satisfaction

Rail Customer Travel Time





Business Plans

Plan the Work and Identify Resources

Departmental Business Plan

Office of Bus Maintenance (BMNT)

Calendar Year: 2015-2016-2017

Phil Wallace, Director

Strategic Goal 2: Meet or exceed customer expectations by consistently delivering quality service

Performance Measure	Target	Action	Action Owner	Dependency
Mean Distance Between Failure (MDBF)	8,000 Miles	Inspect all buses coming out of midlife overhaul/engine overhaul programs.	BENG	
		Continue with centralized management and reporting of fleetwatch and Automatic Vehicle Monitoring systems for all service lanes.	BMNT	Fleetwatch, Clever
		Routinely review division out of service reports, road call data, repair actions, and Automatic Vehicle Monitoring reporting; verify engine failures; assist in diagnosis and repair as needed.	BENG	
		Provide engineering support for reliability based maintenance program (mid-life) to improve responsiveness, product output and passenger appeal.	BENG	

“This TAMP has identified a series of key actions that when combined form the Business Plan for Metrobus.”

Bus Transit Asset Management Plan (TAMP) , August 2014



Vital Signs Report

Evaluate and Report Results

Washington Metropolitan Area Transit Authority

Published: May 2015
January – March 2015
Quarter 1

Vital Signs

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Highlights

Move Over Snow

The first quarter of 2015 was fraught with worse than normal cold and multiple snow events which challenged customers' patience.

Bus Detours and Delays

Bus detours and delays combined with reduced rail service levels are memories that remain fresh in customers' minds as we ease into summer. Overall bus on-time performance was driven by multiple factors. Reliability of the bus fleet emerged as a serious problem due to defective parts and weather.

Rail on-time performance

Rail on-time performance was down to its lowest level in recent memory and never reached target this quarter. Between weather-related problems and the pressure placed on the rail fleet to service the Silver Line, there were often insufficient trains, leading to less service delivery.

Escalators and elevators

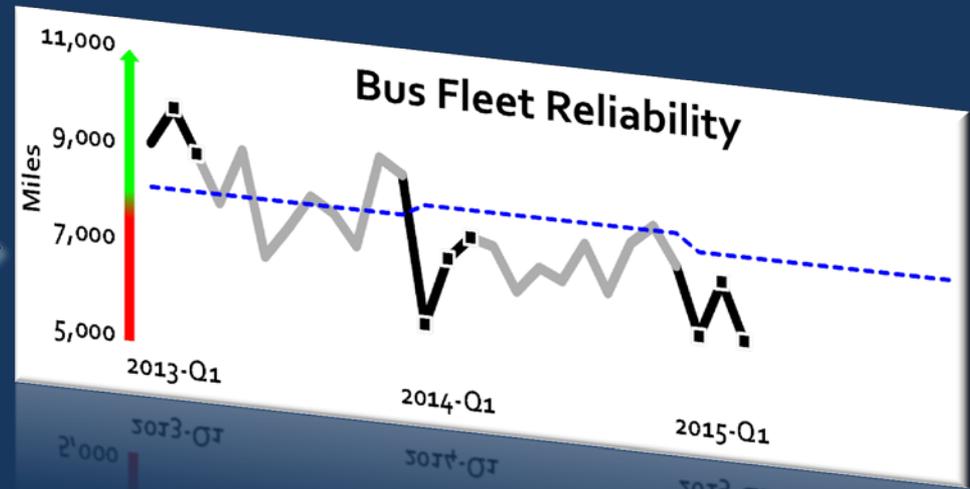
Escalators and elevators, however, had positive news as each consistently surpassed target this quarter. The length of unplanned outages decreased and repairs happened quickly.

Safety & Security

There was a spike in both the key injury rate measures due to the January Yellow Line incident and weather. The overall crime rate increased slightly compared to this time last year. Police are focused on reducing overall crime, with campaigns targeting crime at bus stops and assaults on bus operators.

Business Operations

New to the Vital Signs report is inclusion of a number of performance measures relating to the business of running Metro. Taking on a "Balanced Scorecard" approach to performance permits a broader measuring of Metro. These additional measures each hold some insight into an aspect of performance that ultimately affects customer service.

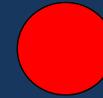


Key Questions:

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



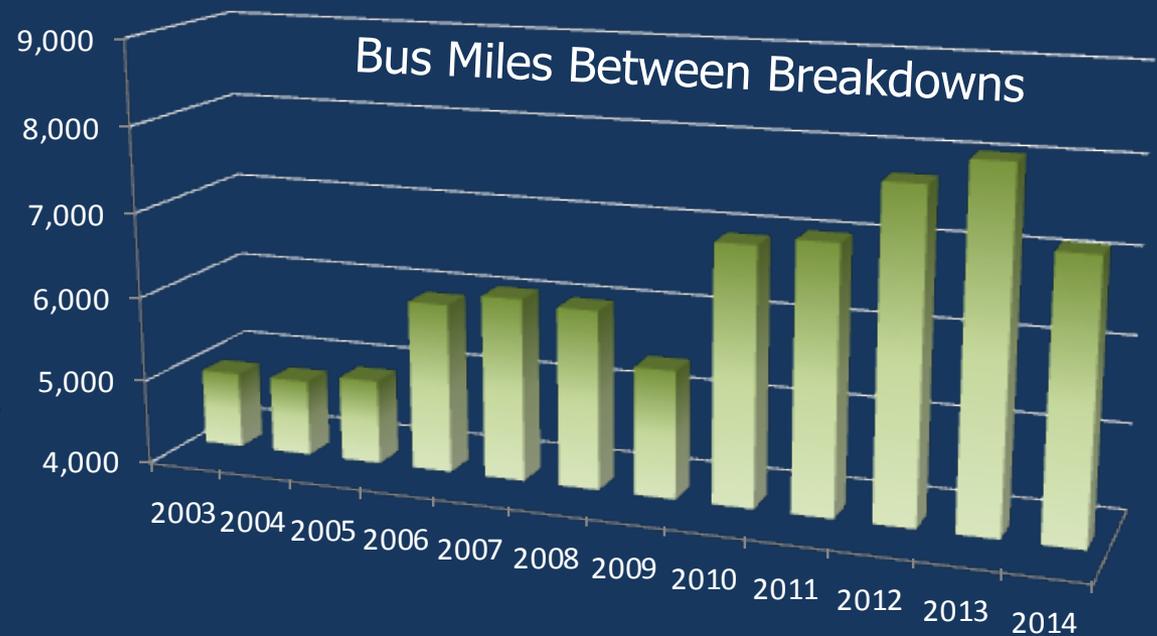
Bus Reliability Slipped



Ten years of improvement

2014 challenges:

- Engines & Transmission
- Electrical Systems
- Weather





Targets

Sets End Point/Defines Success

Executives set targets considering:

Audience

- External
- Internal

Purpose

- Stretch
- Easy to attain
- Manage expectations

Inputs

- Data trends
- Actions
- Resources
- Externalities
- Peers
- Challenges

Type of Target

- Percent change
- Number
- Return to base year
- Directional

Time Frame

- Weekly
- Monthly
- Annually

Challenge:

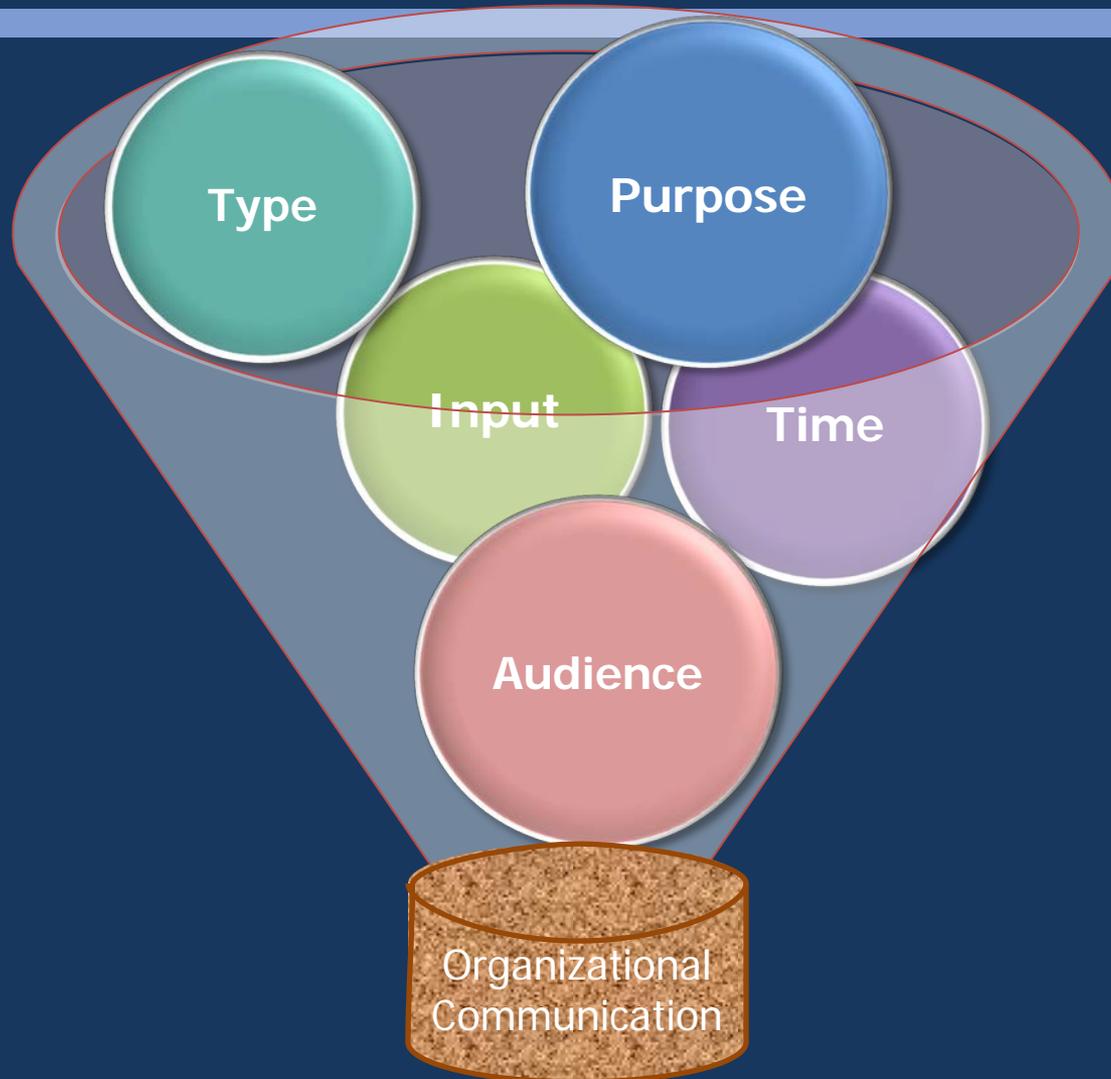


Organizational communication



Targets

Sets End Point/Defines Success



Goal: Meet or exceed customer expectations by delivering quality service

KPI: Escalator Availability

Current Target: 90%

Proposed Target: 91%

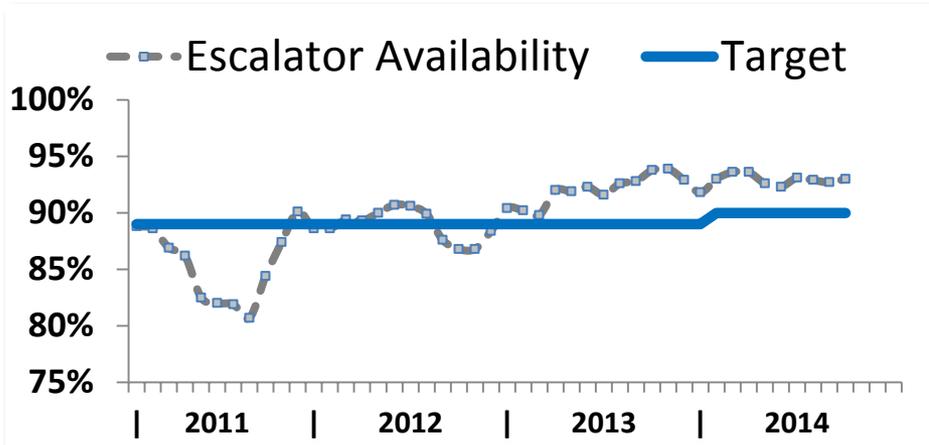
Why? Reflect sustained improvements in performance

Key Actions

- Staff augmented and reconfigured into 5 regions to lower response times (mean time to repair is 5 hours compared to 16 in CY11)
- Increase compliance with PM schedules and improve the quality of work, resulting in less complex unscheduled repairs
- Implement remote monitoring of outages for real-time information and faster response times

Barriers

- Replacement program lowers short term results
- Uncovered units (19%) susceptible to water intrusion leading to more frequent breakdowns



KPI: Escalator Availability				
	Target	Actual	CY2014 Low	CY 2014 High
CY 2011	89%	85.5%		
CY 2012	89%	89.3%		
CY 2013	89%	92.1%		
CY 2014 YTD	90%	93.0%	92.3%	93.6%



Targets

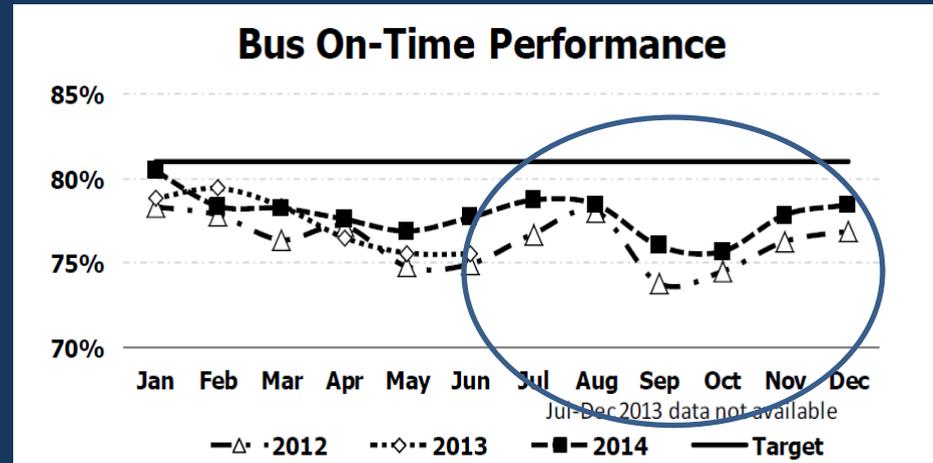
Lessons Learned

Metro lowers targets!



“Metro is lowering its performance targets in several key areas, including on-time rates for trains and buses as well as availability for escalators.....”

Data not available!

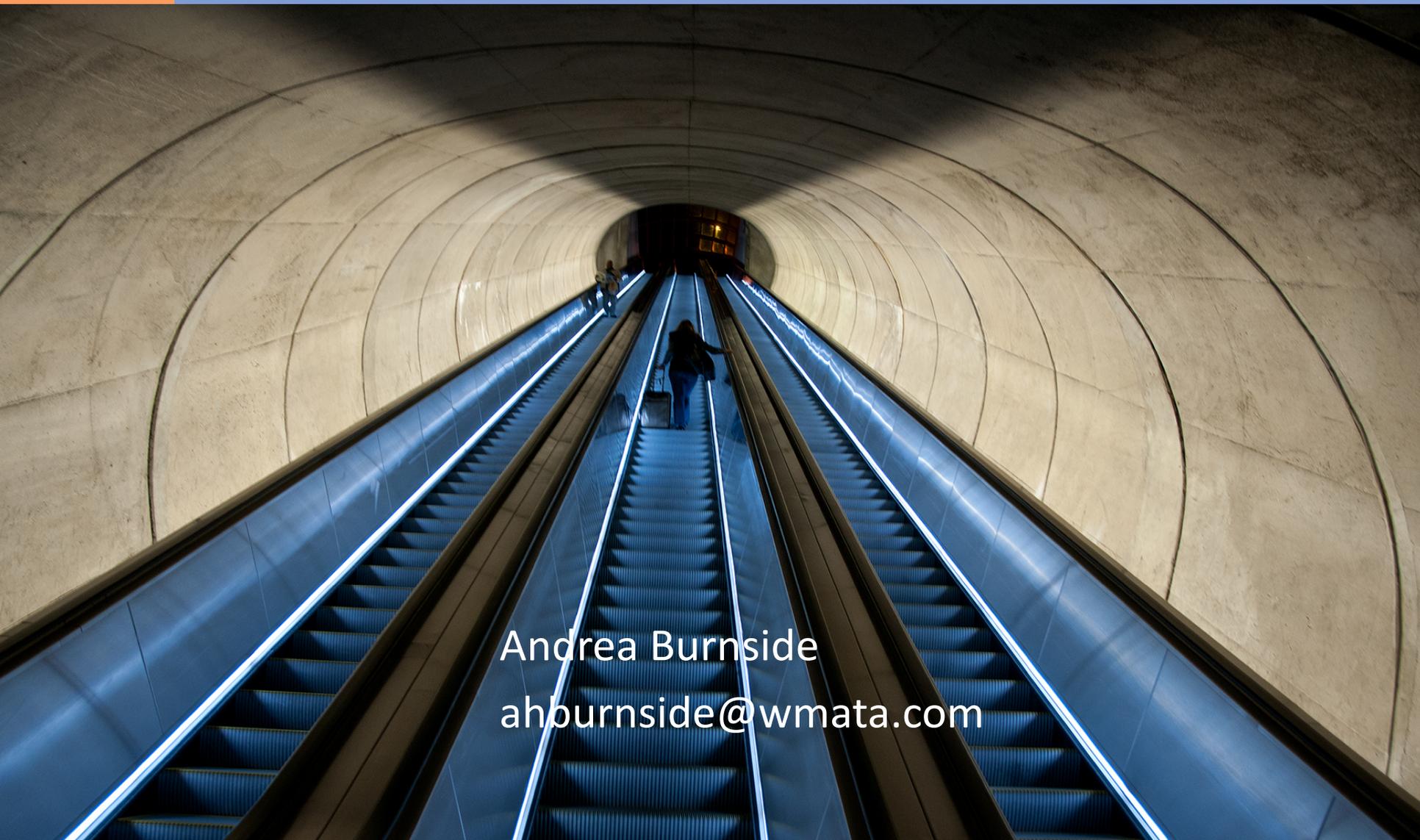


“Unbeknownst to WMATA, the software inadvertently discarded the calculations on trips running early...”

“The 2013 Annual Vital Signs Report...will exclude any questionable bus on-time performance data.”



Questions?

A photograph of a long, curved escalator in a tunnel. The escalator is the central focus, leading from the foreground into the distance. The tunnel walls are made of light-colored stone or concrete, with a series of curved lines that create a sense of depth and perspective. A person is walking on the escalator, and another person is visible further down. The lighting is soft and even, highlighting the texture of the stone and the metallic surfaces of the escalator.

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