

MBTA

State of the System:

Blue Line Heavy Rail

August 8, 2016

Key Facts: Blue Line



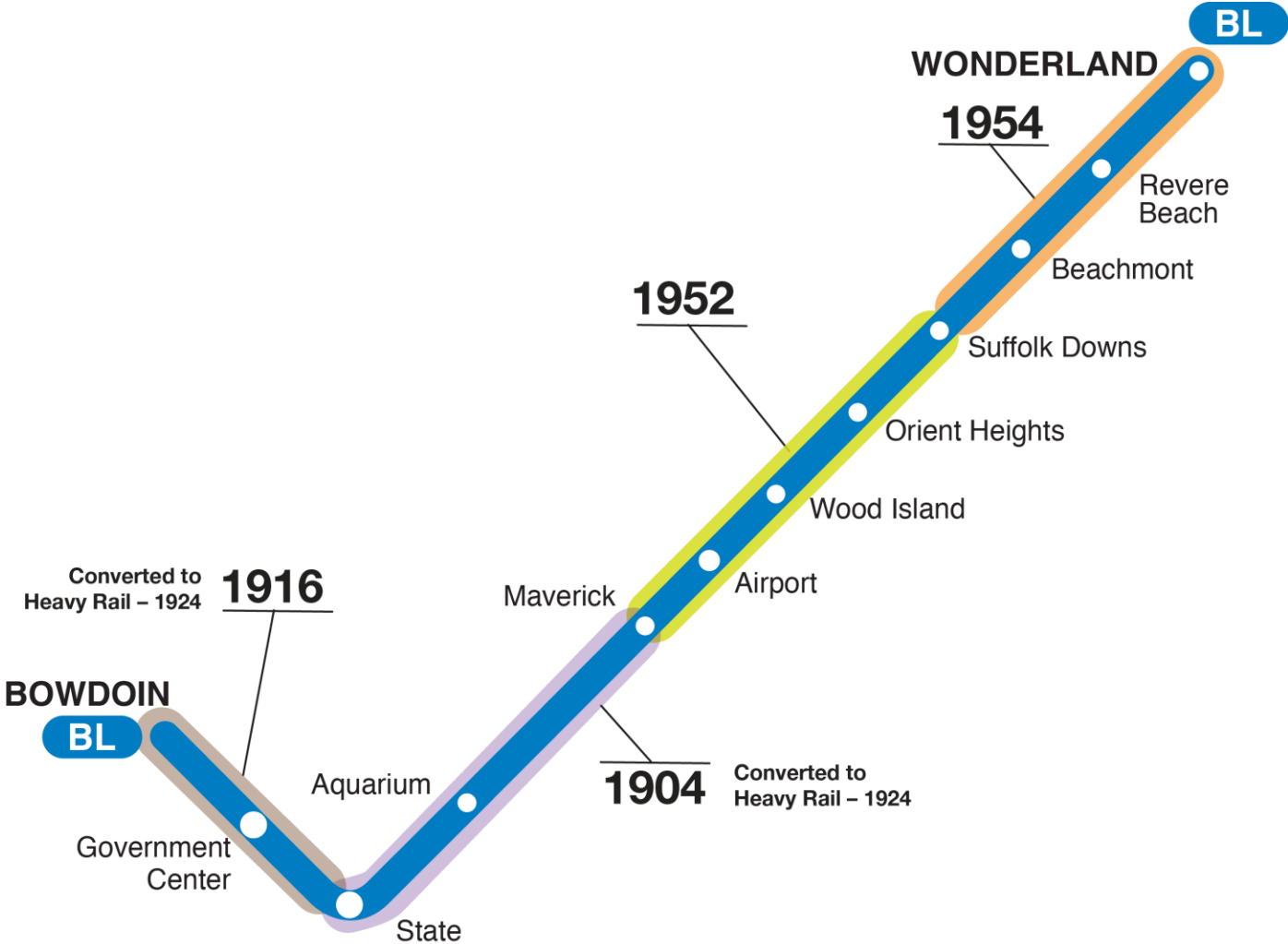
- 5% of total system ridership with over 67,500 (FY16) average weekday trips
- Direct connections to
 - 30 bus routes
 - Orange & Green Lines
- Over 3,040 vehicle and 919 bike parking spaces
- Fleet
 - 94 vehicles
 - 72 for peak service

Legend

RL RED LINE	SL SILVER LINE and branches	CB COMMUTER RAIL	+ Accessible station	+ Free Logan Airport shuttle bus	+ Customer Communications & Travel Info
M MATTAPAN LINE	GL GREEN LINE and branches	KB KEY BUS ROUTE	+ Accessible station (all MBTA and Massport bus and ferry services are accessible)	+ Amtrak service	+ 617-222-3300, 800-368-6100, www.mbta.com
OL ORANGE LINE	GL GREEN LINE and branches	+ Rapid Transit transfer station	+ Rapid Transit transfer station	+ Commuter Rail transfer station	+ 617-222-5146, www.mbta.com
BL BLUE LINE	F FERRY	+ Commuter Rail transfer station	+ Commuter Rail transfer station	+ Commuter Rail transfer station	+ 617-222-5100

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Build Dates: Blue Line



Topics: Blue Line

- Fleet maintenance management
- Modernization and capacity expansion
- High off-peak utilization
- Moving Forward



Fleet: Blue Line

- In service from 2007 – 09
- Quantity: 94 cars
- Make: Siemens
- Reliability Centered Maintenance (RCM) Program
 - **Action:** Continuous investment, predictive component replacement
 - **Outcome:** Increased reliability
 - **Potential:** No out of service time for mid-life overhaul





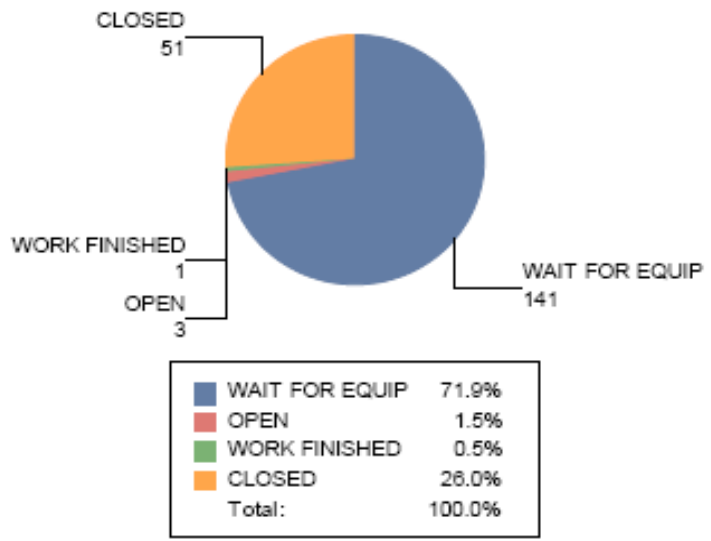
Multi-Unit Project Summary *Campaign: MOTOR R/R*

REMOVE AND REPLACE BOTH TRACTION MOTORS USING THE TRUCK REBUILD SIGN OFF SHEET

Originator:		Labor Hours:	501.10
Warranty Status:	NO	Labor Costs:	\$18,034.26
Planned Start Date:	09/25/2014	Parts Costs:	\$44,197.43
Planned Completion Dat	09/25/2020	Total Costs:	\$62,231.69
Comments:		WO Count:	196

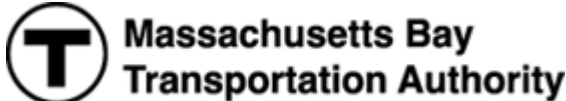
REMOVE AND REPLACE BOTH TRACTION MOTORS USING THE TRUCK REBUILD SIGN OFF SHEET

Overall WO Status Counts

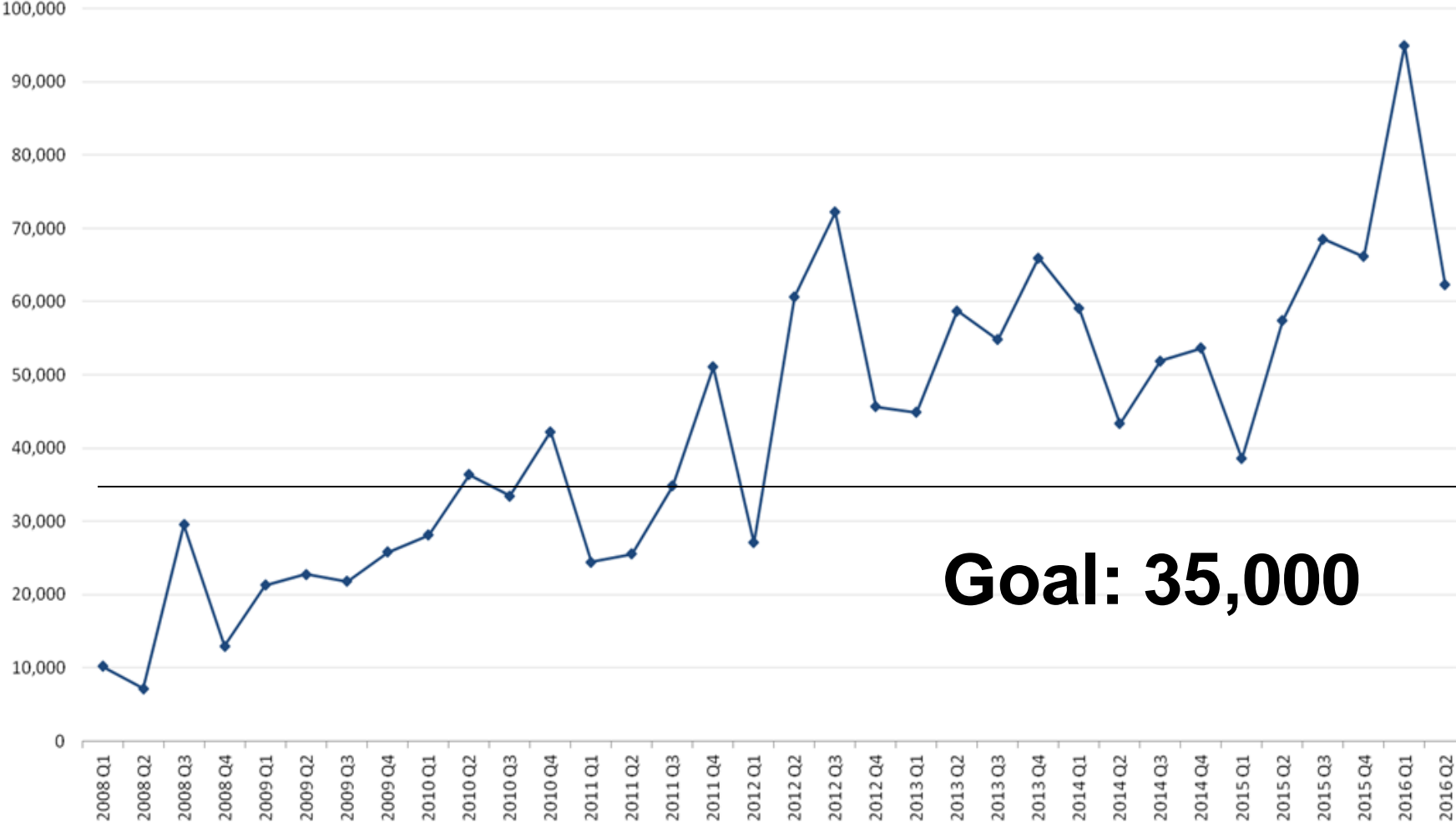


MOTOR R/R PROJECT TASK LIST

Fleet Performance: Exceeding Goal



Blue Line Mean Miles Between Failures



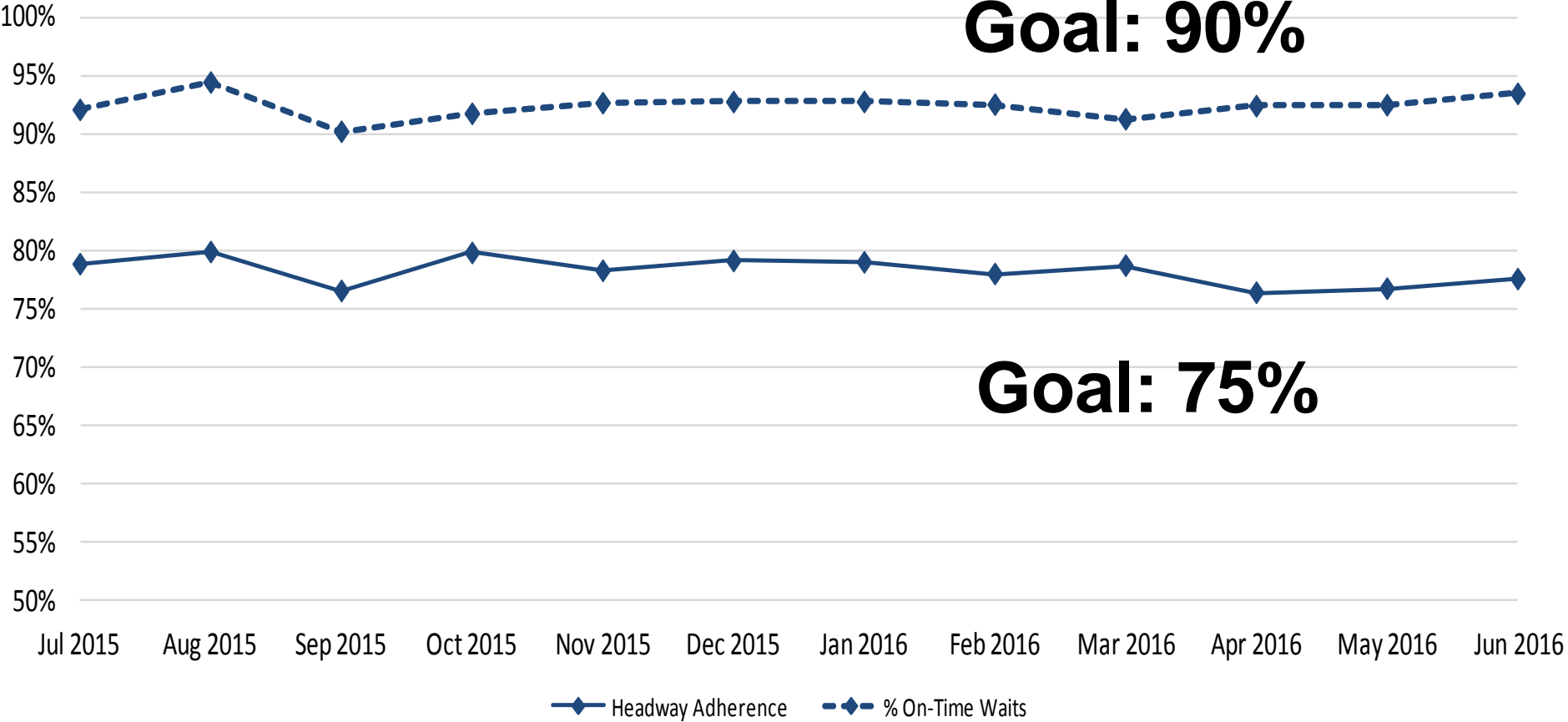
Goal: 35,000

Performance: Exceeding Goals

Blue Line: On-Time Performance

Goal: 90%

Goal: 75%



Capacity Expansion: Blue Line



Modernization Program: Blue Line

Span: 1993 - 2016

Facility: New car house at Orient Heights

Fleet: 94 vehicles to move from 4 to 6-car sets

Infrastructure:

- System-wide power upgrades to third rail and Catenary systems
- Signal upgrades
- 2.5 mile track upgrade

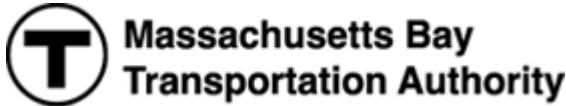
Stations: 11 lengthened and / or upgraded



Orient Heights Car House

Outcome: Capacity increased 24%

Station Modernization: Blue Line

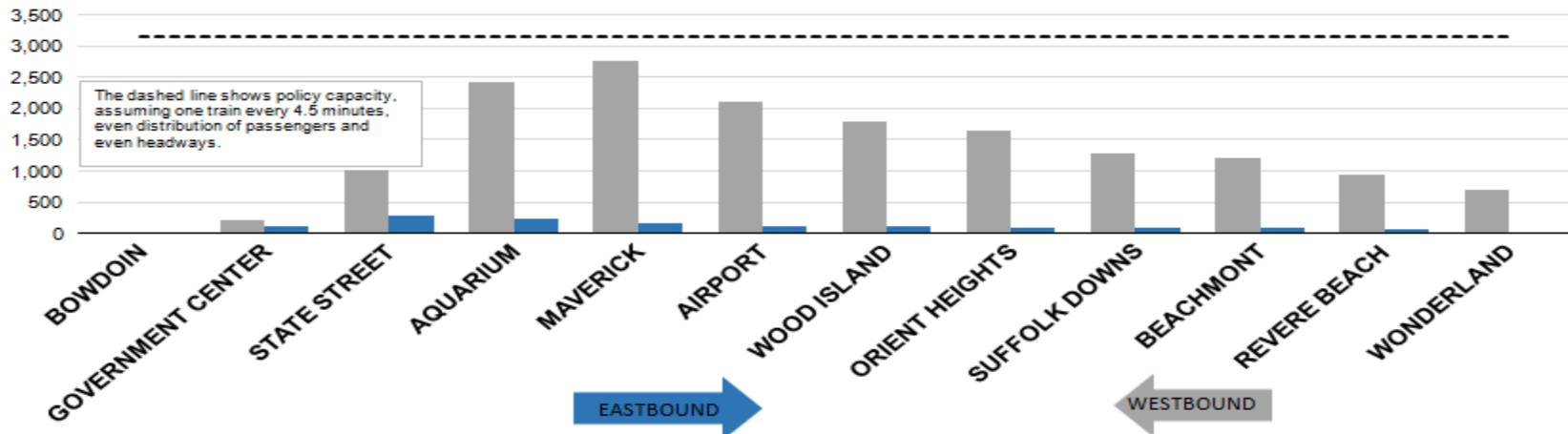


Station	Platform Length Increase	Cost	Completed	Construction Duration
Wonderland	70 ft			
Revere Beach Beachmont Suffolk Downs	100 ft 100 ft	\$30M	6/1995	14 mos
Orient Heights	n/a	\$30M	7/2014	29 mos
Wood Island	n/a	\$13M	10/1995	23 mos
Airport	n/a	\$29M	5/2007	7 yrs
Maverick	40 ft	\$43M	5/2008	30 mos
Aquarium	n/a	\$78M	9/2003	6.5 yrs
State	60 ft	\$66M	4/2011	29 mos
Government Center	70 ft	\$19M	3/2016	33 mos
Bowdoin	n/a			

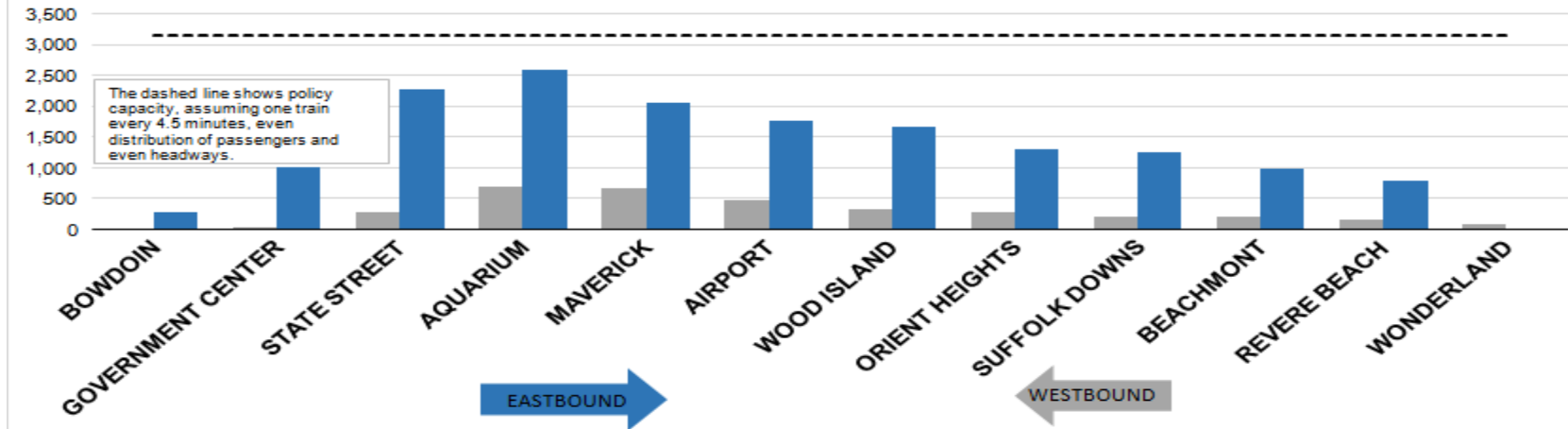
Outcome: Ridership up 9.8% from 2008

Capacity for Growth

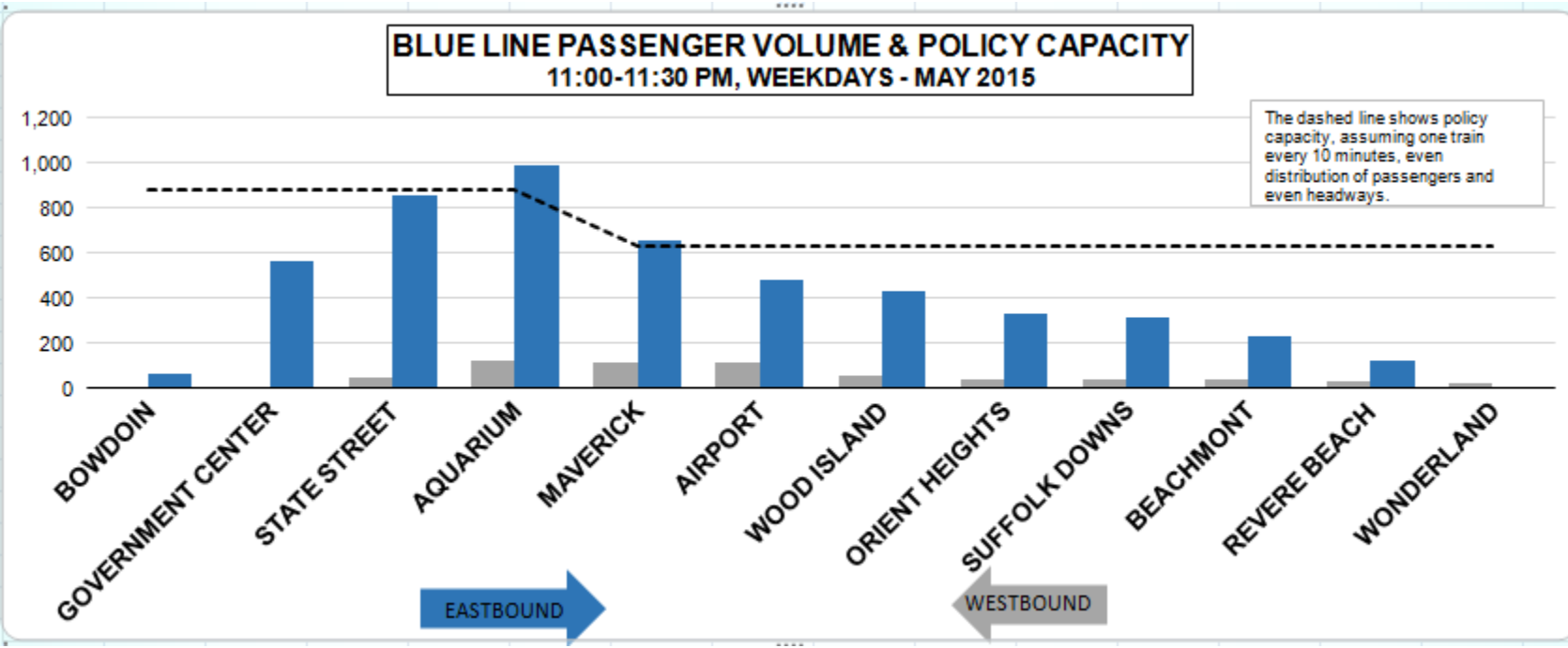
**BLUE LINE PASSENGER VOLUME & POLICY CAPACITY
8:00-8:30 AM, WEEKDAYS - MAY 2015**



**BLUE LINE PASSENGER VOLUME & POLICY CAPACITY
5:00-5:30 PM, WEEKDAYS - MAY 2015**



Strong Late Evening Utilization

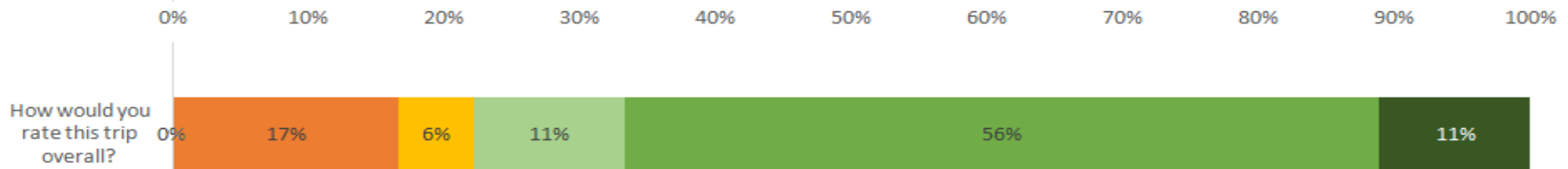
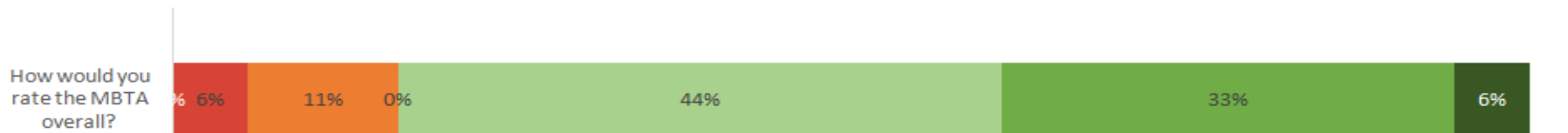


Add to Notes for this slide: Mitigation

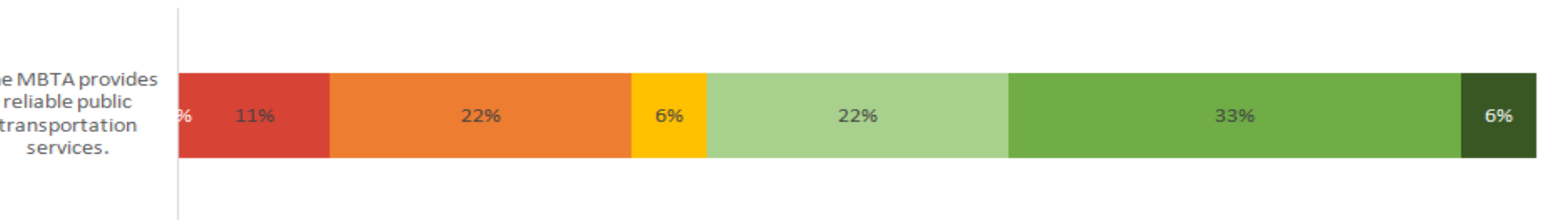
Customer Satisfaction

Blue Line Riders – Customer Satisfaction

■ Extremely Dissatisfied
 ■ Very Dissatisfied
 ■ Somewhat Dissatisfied
 ■ Neutral
 ■ Somewhat Satisfied
 ■ Very Satisfied
 ■ Extremely Satisfied



■ Strongly Disagree
 ■ Disagree
 ■ Slightly Disagree
 ■ Neither Agree nor Disagree
 ■ Slightly Agree
 ■ Agree
 ■ Strongly Agree



Source: April 2016 Customer Opinion Panel

Moving Forward: Blue Line

- Sustaining fleet RCM program
- Off-peak demand
- Managing state of good repair

