



Customer Service, Operations and Security Committee

Information Item IV-A

July 13, 2017

Railcar Program Update

Washington Metropolitan Area Transit Authority
Board Action/Information Summary

Action Information

MEAD Number:
201884

Resolution:
 Yes No

TITLE:

Railcar Program Update

PRESENTATION SUMMARY:

The Board's Customer Service, Operations and Security Committee will receive a briefing on Metro's program to improve train reliability for customers.

PURPOSE:

The presentation will provide the Board an update on Metro's Railcar Get Well program, which is part of the Back2Good plan. The railcar initiative includes changes to the overall composition of the fleet by introducing 7000-Series railcars and retiring the oldest and least-reliable railcars; and conducting maintenance campaigns to catch up on needed repairs and improvements on the remainder of the fleet to sustain railcar reliability.

DESCRIPTION:

Key Highlights:

- Railcar reliability has improved by 50% compared to 2016, with cars travelling on average 90,500 miles before causing a customer delay
- Offloads are down by over 40%
- 7000 series railcars are the strongest performers, travelling on average 155,000 miles between delays

Background and History:

In November 2016, General Manager and Chief Executive Officer (GM/CEO) Paul J. Wiedefeld introduced the his "Back2Good" plan to improve the safety and reliability of Metro's train and bus service in 2017. Back2Good features a Railcar Get Well Plan designed to reduce passenger offloads and cut delays due to train car issues by 25 percent in 2017. Train car issues have historically accounted for the majority—60 percent—of all service disruptions.

In January 2017, the Board's Customer Service, Operations and Security Committee received a detailed briefing on the Railcar Get Well Plan.

Discussion:

Through May 2017, Metro is exceeding the targets set out in Back2Good to reduce offloads and train delays. Railcars traveled on average 90,500 miles before causing a customer delay, an improvement of over 50 percent compared to 2016 and well above the target of 75,000 miles. The 7000 Series are the strongest performers, traveling on average over 155,000 miles between delay. While performance typically dips in summer months as the extreme heat taxes railcar systems (HVAC, propulsion, pneumatic), Metro staff are taking steps to sustain the trend of improvements relative to 2016.

Reliability improvements are a direct result of Back2Good actions to change the composition of the fleet and repair defective components. Two 7000-Series trains were added per month, bringing the total to 42 trains at the end of May—well on track to meet the Back2Good pledge of 50 total trains by the end of 2017. All 1000- and 4000-Series trains — the oldest and least-reliable — were removed from service by July 1, 2017. Engineers and technicians completed modifications to the 2000/3000-Series brakes that have doubled reliability.

Through the end of 2017 and into 2018, Metro will continue to implement the Railcar Get Well plan. As of July 2017, most trains will be made up of the same series cars, which will improve performance. Maintenance staff will also be assigned to work on the same railcars, improving accountability. Staff are revising maintenance procedures to better address common failure points and will be conducting major inspections more frequently, moving from a 90-day to a 60-day schedule. While the 7000 Series remain the strongest performers in the fleet, Metro staff continue to work with Kawasaki to address items that arise as the railcars are broken in, such as seats becoming delaminated and debonded.

FUNDING IMPACT:

The actions to improve are included in the approved budget.	
Project Manager:	Joseph Leader
Project Department/Office:	Office of Chief Operating Officer

TIMELINE:

Previous Actions	January 2017 – Railcar Get Well Plan
Anticipated actions after presentation	2018 – Rail Fleet Management Plan



Railcar Program Update

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Train Reliability Improved

Back2Good pledges are being met

- ✓ Reduce passenger offloads
- ✓ Reduce railcar-related delays by 25%





Back2Good Actions Showing Results

Back2Good Actions Underway

- Put 50 new 7000-Series trains into service by Dec. 2017
- Retire all 1000- and 4000-Series trains by December 2017
- Repair defective components on legacy fleet

Results

- ✓ 44 trains in service as of June 2017, 3 more in commissioning
- ✓ All cars retired by end of June 2017
- ✓ 2000/3000-Series brake modifications complete, door modifications 75% complete

Actions Moving Forward

- Same series trains
- Improve maintenance practices
 - Revise procedures
 - Revise preventive maintenance/inspection intervals
 - Dedicated fleet/dedicated shop
- Continue to accept 7000 series railcars
- Develop plan to start retiring 5000 Series in CY 2018

