Finance & Administration Committee

Action Item IV-D

October 9, 2014

State of Good Repair Review
Washington Metropolitan Area Transit Authority
Board Action/Information Summary

TITLE:
Capital State of Good Repair

PRESENTATION SUMMARY:
This presentation provides an overview of Metro’s State of Good Repair (SOGR) and highlights several key assets conditions within the capital program.

PURPOSE:
To inform the Board on Metro’s asset conditions and the progress made on the SOGR to continue improving customer’s experience, and safety and reliability of their ride.

DESCRIPTION:

Key Highlights:

- Progress on the capital investment is critical to continued success of providing safe and reliable service to our customers. This can be accomplished by reinvesting into our Metro system and work towards a state of good repair and steady state maintenance. The majority of Metro assets are in a steady state of good repair.
- Metro has made significant progress on reducing backlog of deferred work.

Background and History:

Prior to Fiscal Year (FY) 2012, underinvestment in maintenance resulted in significant backlogs, which in the railroad environment are difficult to make up. A significant amount of track time is required to address backlog and maintain a steady state of repair.

Over the last three years, Metro has been rebuilding inside and out, and achieving significant improvements in safety and reliability of the system for the millions of riders who are dependent on it. The investment has also given the opportunity to provide not just a more reliable ride, but more reliable service. The actions taken have allowed annual work plan for the following assets:

- Fasteners – average annual work plan of 31,000;
- Ties – average annual work plan of 18,000;
• Track welds – average annual work plan of 929;
• Running rail – average annual work plan of 65,000;
• Escalators rehabilitation and replacement – average annual work plan of 35;
• Metro Access Vehicles – average age of 1.86; and
• Metro Buses – average age of 6.53.

Through the FY2012-2020 Capital Improvement Program (CIP), Metro continues to deliver capital projects that will improve safety, enhance reliability, and rebuild Metro's infrastructure and equipment to achieve a state of good repair. Metro's capital projects will address the work backlog and maintain a steady state of good repair and maintenance.

Discussion:

Metro has strengthened various track and structure components and tools, thus improving the overall condition of fasteners, ties, and running rail. The running rail backlog was eliminated in FY2014. Metro will eliminate the fastener backlog in FY2015 and rail ties in FY2017. Track access and funding are essential to the backlog elimination and continuing the steady state of maintenance. Eliminating open track joints with welds is an ongoing effort. Two open joints are created when new track is installed. The new joint welding process is more productive and will reduce the backlog.

Metro has issued its first escalator replacement contract. The escalator replacement contract and the rehabilitation project will reduce the backlog while maintaining the goals of customer availability.

The replacement cycle for MetroAccess vehicles, Metro Railcars, and Metro Buses stabilized the average fleet age. All are within the average age state in the fleet management plan.

FUNDING IMPACT:

This is an information item to present a status of the capital state of good repair. No specific action with a budget impact is requested at this time.

TIMELINE:

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RECOMMENDATION:

No recommendations
Capital Program State of Good Repair

Finance & Administration Committee

October 9, 2014
State of Good Repair (SOGR)

- Steady State of Maintenance
  - Fasteners
  - Ties
  - Track Welds
  - Running Rail

- Steady State of Maintenance and Replacement (s)
  - Escalators
  - Metro Rail Cars
  - MetroAccess Vehicles
  - Metro Buses
Steady State of Maintenance

Ties

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<th>Year</th>
<th>Good Condition</th>
<th>Work Plan</th>
<th>Backlog</th>
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FY12: 150,000.0
FY13: 200,000.0
FY14: 250,000.0
FY15: 300,000.0
FY16: 350,000.0
FY17: 400,000.0
FY18: 450,000.0
FY19: 500,000.0
FY20: 550,000.0

(50,000.0)
Steady State of Maintenance

Track Welds/Joint Elimination

- FY12
- FY13
- FY14
- FY15
- FY16
- FY17
- FY18
- FY19
- FY20
Steady State of Maintenance

Running Rail

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<th>Year</th>
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<th>FY14</th>
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Legend:
- **Green**: Good Condition
- **Red**: Work Plan
- **Blue**: Backlog
Steady State of Maintenance and Replacement

Escalator

Good Condition
Work Plan
Backlog
August 2015 is the deadline to exercise the 220 7000 Series Expansion Cars
Steady State of Maintenance and Replacement

Bus - Average Fleet Age with Current Replacement Forecast

- Line graph showing average fleet age from FY13 to FY20
- Bar chart showing bus replacement from FY13 to FY20