FY 18 Capital Project Applications
Scoring and Prioritization

presented to
Transit Service Delivery Advisory Committee (TSDAC)

presented by
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Presentation Outline

- Review of Prioritization Process Framework
- FY18 Capital Program Summary
- Scoring Methodology (SGR and Minor Expansion)
- Prioritization Process Issues
- Next Steps
Prioritization Process Framework

Project Submittal

Project Type

SGR

SGR Needs Screening

Technical Score: Asset Condition + Service Impact

SGR Ranking

Minor Enhanc.

Technical Score: Service Impact

Minor Enhanc. Ranking

Expansion Ranking

Major Expansion

6 Criteria

Technical Score

Cost Effectiveness Score

State Share of Cost

Weighting

State Match / Funding Tiers

Funding Allocation
Current Focus - SGR and Minor Expansion Scoring

Project Submittal

Project Type

SGR

SGR Needs Screening

Technical Score: Asset Condition + Service Impact

SGR Ranking

Minor Expansion

Technical Score: Service Impact

Minor Expansion Ranking

State Match / Funding Tiers

Funding Allocation

Major Expansion

6 Criteria

Weighting

Technical Score

Cost Effectiveness Score

State Share of Cost

Expansion Ranking
Project Types

- **State-of-Good Repair (SGR):** Projects/programs to replace or rehabilitate an existing asset
  - Includes acquiring assets/technology to serve current functions

- **Minor Enhancement:** Projects/programs to add capacity, new technology, or a customer enhancement meeting the following:
  - Project costs less than $2 million, OR
  - Expansion vehicles: less than 5 vehicles or less than 5% of fleet

- **Major Expansion:** New projects/programs that add, expand, or improve service (greater than $2M)
Capital Program Items Classified as “Other” – Will Not Be Scored

- Projects with no state transit funding contribution – ex. 5310 Capital (with federal and local funding only)
- VRE track lease payments
- WMATA

Note: Projects described as debt service, vehicle lease payments, or project management will be rated based on the underlying asset or project type.
Summary of FY 18 Capital Application Requests

FY 18 Applications (Not including WMATA/Other projects)
Summary of FY 18 Capital Application Requests

Note: Does not include WMATA/Other projects
FY18 SYIP - State-of-Good Repair Projects

Vehicle Replacement
- Replacement buses (< 30-ft, 35-ft, 40-ft)
- Support Vehicle Replacement

Admin/Maintenance Facilities
- Rehab/renovation/engineering and design of admin/bus maintenance facility
- Construction and rehabilitation of rail-related facilities, rail cars, or locomotives

Bus Shelters/Customer Facilities
- Bus shelters and components
- Bus stop accessibility (ADA)
- Bus route signage

Maintenance Equipment & Parts
- Mid-life and end-of-life overhaul/rebuilding
- Spare Parts, Hybrid Bus Batteries
- Shop Equipment

Technology/Systems/Communications
- Fare payments systems and hardware
- Safety/surveillance/security equipment and systems
- Software and hardware to support AVL, payroll and administration, planning and scheduling, real-time passenger information and reporting
FY18 SYIP - Minor Enhancement Projects

- Vehicles - minor fleet expansion
- New bus shelters
- Route signage (Bus Stop Signs)
- New fare collection equipment (fareboxes)
- New software, hardware, systems
- Minor facilities (fueling station, parking)
- Capital project development (engineering and design, construction management)
FY18 SYIP - Major Expansion Projects

- Transit Center Facilities Construction (Blacksburg MMTF)
- Purchase Expansion Bus 40-ft (ART)
- Facility Construction – Infrastructure (CCPY)
- Bus Bays / Shelter Installation (East Falls Church Station)
- Facility Construction – Parking (Silver Line - Innovation Station)
- Facility Construction – Parking (Silver Line - Herndon Station)
- Project Management Support (Route 1 BRT)
Scoring Methodology
State of Good Repair Projects

Asset Condition Rating
(Up to 60 points)
- Age (Useful Life)
- Mileage (Vehicles Only)
- Asset condition

Service Impact Score
(Up to 40 points – 10 for each criteria)
- Operating Efficiency
- Frequency, Travel Time and/or Reliability
- Accessibility and/or Customer Experience
- Safety and Security

Capital Project Funding Application
Technical Score
(Total: Up to 100 points possible)
Scoring Methodology
Minor Expansion Projects

Service Impact Score
(Up to 40 points – 10 for each criteria)

- Operating Efficiency
- Frequency, Travel Time and/or Reliability
- Accessibility and/or Customer Experience
- Safety and Security

Capital Project Funding Application Technical Score
(Total: Up to 40 points possible)
SGR – Asset Condition Methodology

- Data Source for Vehicle and Non-Vehicle Assets - TransAM

- Vehicle SGR applications submitted together for multiple vehicles disaggregated into individual vehicle line items

- Purpose of disaggregation was to assign age & condition

- 38 percent of vehicle assets seeking replacement are 4 years beyond ULB or 40,000 miles beyond useful life mileage
Asset Condition Rating – Age and Mileage

Asset condition score is the maximum score between the age and mileage-based scoring systems.

Age and mileage beyond useful life considered.

Assets well past ESL have higher scores than those which have either just exceeded their useful life. Intended to score very old or obsolete vehicles higher.

Project justification statements used to confirm scores for non-vehicle assets.

Age Score System

<table>
<thead>
<tr>
<th>Age Score System</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; ULB</td>
</tr>
<tr>
<td>=0 years beyond ULB</td>
</tr>
<tr>
<td>&lt;=1</td>
</tr>
<tr>
<td>&lt;=2</td>
</tr>
<tr>
<td>&lt;=3</td>
</tr>
<tr>
<td>&lt;=4</td>
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Mileage Score System

<table>
<thead>
<tr>
<th>Mileage Score System</th>
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<tbody>
<tr>
<td>&lt; Max Mileage</td>
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<tr>
<td>=0 miles beyond max</td>
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<tr>
<td>&lt;=10,000</td>
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<tr>
<td>&lt;=20,000</td>
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<tr>
<td>&lt;=30,000</td>
</tr>
<tr>
<td>&lt;=40,000</td>
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</table>
## Service Impact Rating

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Definition</th>
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</thead>
<tbody>
<tr>
<td>Service Frequency, Travel Time and/or Reliability</td>
<td>Speeds up transit routes or allows for increased frequency. Significant impact on reliability either through preventing breakdowns or removing vehicles from mixed traffic</td>
</tr>
<tr>
<td>Service Operating Efficiency</td>
<td>Provides for significantly more cost-effective provision of service</td>
</tr>
<tr>
<td>Service Accessibility and/or Customer Experience</td>
<td>Significant improvement in a customer’s ability to access the system or a significant improvement in the ease of use of the system.</td>
</tr>
<tr>
<td>Safety and Security</td>
<td>Provides a significant improvement in safety or security</td>
</tr>
</tbody>
</table>
## Service Impact - Proposed Ratings by Project Type

<table>
<thead>
<tr>
<th>Primary</th>
<th>Secondary</th>
<th>Operating Efficiency</th>
<th>Frequency, Travel Time and/or Reliability</th>
<th>Accessibility and/or Customer Experience</th>
<th>Safety and Security</th>
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</thead>
<tbody>
<tr>
<td>Admin/Maintenance Facilities</td>
<td>Admin/Main Facilities - Construction</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
<td>Low Impact</td>
<td>Medium Impact</td>
</tr>
<tr>
<td>Admin/Maintenance Facilities</td>
<td>Admin/Main Facilities - Maintenance</td>
<td>High Impact</td>
<td>Low Impact</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Admin/Maintenance Facilities</td>
<td>Maintenance Materials</td>
<td>Medium Impact</td>
<td>Low Impact</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Bus Shelters/Customer Facilities</td>
<td>Bus Shelter - New Installation</td>
<td>No Impact</td>
<td>No Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Bus Shelters/Customer Facilities</td>
<td>Bus Shelter Installation - Maintenance/Parts</td>
<td>No Impact</td>
<td>No Impact</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
</tr>
<tr>
<td>Bus Shelters/Customer Facilities</td>
<td>Transit Centers/Stations</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Bus Shelters/Customer Facilities</td>
<td>Wayfinding Aids - Signage</td>
<td>No Impact</td>
<td>No Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Maintenance equipment &amp; parts</td>
<td>Fueling Station</td>
<td>High Impact</td>
<td>Medium Impact</td>
<td>No Impact</td>
<td>Low Impact</td>
</tr>
<tr>
<td>Maintenance equipment &amp; parts</td>
<td>Maintenance Inspection</td>
<td>No Impact</td>
<td>No Impact</td>
<td>No Impact</td>
<td>High Impact</td>
</tr>
<tr>
<td>Maintenance equipment &amp; parts</td>
<td>Purchase Bus Replacement Batteries</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
<td>No Impact</td>
<td>High Impact</td>
</tr>
<tr>
<td>Maintenance equipment &amp; parts</td>
<td>Vehicle Maintenance - Overhaul</td>
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<td>High Impact</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Rail Infrastructure</td>
<td>Facility Maintenance - Infrastructure - Rail</td>
<td>High Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Technology - Administrative</td>
<td>Admin Computer Hardware Purchase (Computers/Laptops/Tablets, etc)</td>
<td>Medium Impact</td>
<td>Low Impact</td>
<td>Low Impact</td>
<td>Low Impact</td>
</tr>
<tr>
<td>Technology - Administrative</td>
<td>Software Purchase - Administrative</td>
<td>Medium Impact</td>
<td>Low Impact</td>
<td>Low Impact</td>
<td>Low Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Admin and Operations Software Renewal</td>
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<td>Low Impact</td>
<td>No Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Operations Software - Complaint Tracking</td>
<td>Medium Impact</td>
<td>Low Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Operations Software - Ridership Information</td>
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<td>No Impact</td>
<td>No Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Rider Support Hardware - Fare Collection</td>
<td>High Impact</td>
<td>Low Impact</td>
<td>Medium Impact</td>
<td>Low Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Rider Support Hardware - ITS</td>
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<td>Medium Impact</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Rider Support Hardware - Safety</td>
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<td>No Impact</td>
<td>Medium Impact</td>
<td>High Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Software Purchase - Scheduling</td>
<td>High Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
<td>Low Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Software Purchase - Vehicle Maintenance</td>
<td>High Impact</td>
<td>Medium Impact</td>
<td>Low Impact</td>
<td>High Impact</td>
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<tr>
<td>Technology - Operations</td>
<td>Graphics Package for Vehicles</td>
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<td>No Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Vehicle - Revenue vehicles</td>
<td>Engine Replacement</td>
<td>High Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
<td>High Impact</td>
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<td>Vehicle - Revenue vehicles</td>
<td>Paratransit Vehicle Purchase</td>
<td>High Impact</td>
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<td>Low Impact</td>
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<td>Vehicle - Revenue vehicles</td>
<td>Purchase Expansion Bus</td>
<td>Medium Impact</td>
<td>High Impact</td>
<td>High Impact</td>
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<td>Vehicle - Revenue vehicles</td>
<td>Purchase Replacement Bus</td>
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<td>High Impact</td>
<td>High Impact</td>
<td>Medium Impact</td>
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<tr>
<td>Vehicle - Revenue vehicles</td>
<td>Purchase Support Vehicles</td>
<td>Medium Impact</td>
<td>Medium Impact</td>
<td>Low Impact</td>
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</tbody>
</table>
Prioritization Process Issues

- Data availability and consistency in applications
- Updating and validating asset data from TransAM
- Grant application changes to support prioritization
Next Steps

- Confirm methodology and identify areas for further development and refinement during implementation.
- Apply prioritization process to FY18 SYIP (SGR and ME) projects to score and rank projects, and show what would have been funded in FY18 with prioritization.