



Virginia Department of Rail and Public Transportation

# Revised Structure/Approach for Capital Program Prioritization

TSDAC

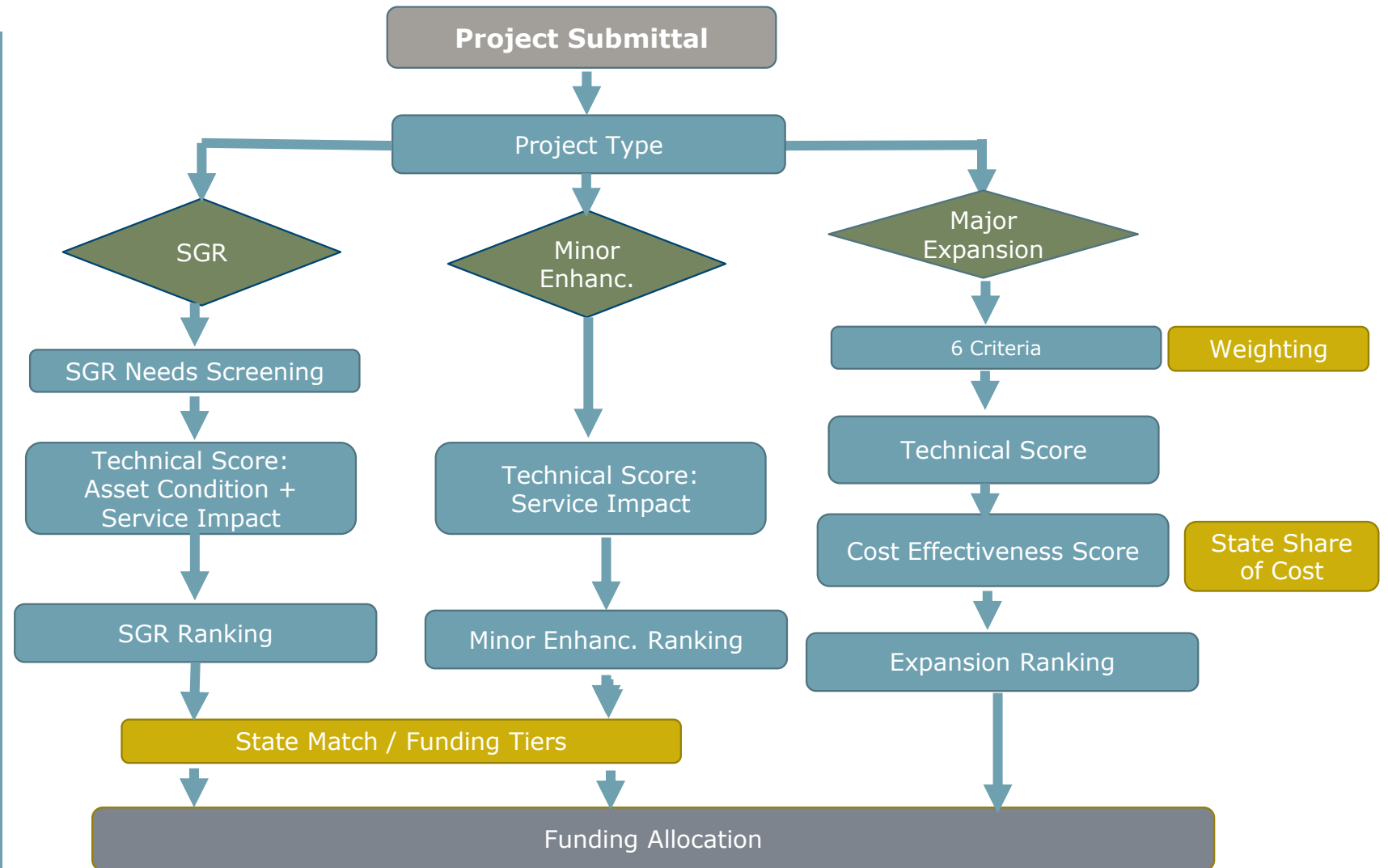
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# Items for discussion

- Revised Structure/Approach to Capital Program
- Categorization of Projects
- Illustrative Funding Methodology
- Application of prioritization and measures
- Illustrative Allocation Process
- Scenarios for evaluation



# Revised Structure for Capital Program Prioritization



# Illustrative Funding Methodology



2/10/2017

	State of Good Repair and Minor Enhancement (70% - illustrative)		Expansion (30% - illustrative)
	SGR (70% - illustrative)	Minor Enhancement (30% illustrative)	
Funding Level	Minimum funding level (floor) for SGR Funding can be moved from expansion to SGR based on need		Funding level to be determined based on review of needs, funding can be moved to SGR but not from SGR to expansion
Prioritization Criteria	Asset Condition and Service Quality	Service Quality	6 Factor Areas (similar to Smart Scale)
Eligibility	<u>Asset Replacement</u> Vehicles Facilities/Equipment Technology	Fleet Increase < x% Facility expansion < x% Technology < x%	<u>Capacity Expansion</u> Capital for major service expansion > x% Major fleet expansion > x% Major facility expansion > x%
Sample Project Types	Replacement vehicles	Increasing spare vehicle ratio  Technology to improve efficiency/operation	Capital for new routes New facilities w/increased capacity New fixed guideway
Illustrative State Match Rates	up to 80%	up to 80%	up to 50%

# Project Types



- **State-of-Good Repair (SGR):** Projects/programs to replace or rehabilitate an existing asset
- **Minor Enhancement (ME):** 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)

# State-of-Good Repair Projects



- Vehicle Replacement
  - Replacement buses (< 30-ft, 35-ft, 40-ft)
  - Replacement vans
- Admin/Maintenance Facilities
  - Rehab/renovation of bus maintenance facility
- Customer Facilities
  - Bus shelters
  - Bus stop accessibility (ADA)
  - Bus route signage
- Other
  - Capital Cost of Contracting
  - Debt service
- Maintenance equipment & parts
  - Focus on extending the life of assets
  - 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

# Minor Enhancement Projects

- Vehicles - minor fleet expansion
- New bus shelters
- Route Signage (Bus Stop Signs)
- Purchase digital bus stop signage
- New fare Collection Equipment (fareboxes)
- New software, hardware, systems
- Minor real estate acquisition



# Major Expansion Projects

- Admin/Maint Facility
- Transit/Transfer Center
- Vehicles – major fleet expansion
- New station entrance
- BRT/LRT Corridor





# Illustrative Funding Level



- Process assumes a split of funding between State of Good Repair and Expansion
- Minimum funding level would be established for SGR
  - Would need additional trend analysis to establish for implementation
- Minor enhancements would be prioritized separately, but included within the funding for SGR
- Funds could be diverted from expansion to SGR to address peaks in SGR demand (not for ME)
- SGR funds would not move to increase funding for expansion

# State-of-Good Repair - Criteria

Asset Condition  
*60 points*



Service Quality Impact  
*40 points*

- Asset age and/or mileage
- Asset condition rating
- **Local priority**

- Service frequency & reliability
- Operating efficiency
- Customer experience
- Safety and security

- For SGR replacement-type projects, potential benefit score of up to 100 points



# Minor Enhancement - Criteria

Service Quality  
Impact

*40 points*

- Service frequency & reliability
- Operating efficiency
- Customer experience
- Safety and security

- For Minor Enhancement projects, potential benefit score of up to 40 points



# Service Quality Ratings (40 pts)



Criteria	High (10)	Medium (5)	Low (1)	No Impact (0)
Service Frequency, Travel Time and/or Reliability (10 pts)	Speeds up transit routes or allows for increased frequency. Significant impact on reliability either through preventing breakdowns or removing vehicles from mixed traffic	Moderate positive improvement	Marginal or low improvement	No (or negative) impact
Service Operating Efficiency (10 pts)	Provides for significantly more cost-effective provision of service	Moderate positive improvement	Marginal or low improvement	No (or negative) impact
Service Accessibility and/or Customer Experience (10 pts)	Significant improvement in a customer's ability to access the system or a significant improvement in the ease of use of the system.	Moderate positive improvement	Marginal or low improvement	No (or negative) impact
Safety and Security (10 pts)	Provides a significant improvement in safety or security	Moderate positive improvement	Marginal or low improvement	No (or negative) impact

# Service Quality- Example Project Types

Criteria	High	Medium	Low/No Impact
Service Frequency, Travel Time and/or Reliability	Replacement buses, Minor Expansion - Buses	Bus Garage Facility Repairs, Purchase shop equipment	Capital cost of contracting, Bike racks
Service Operating Efficiency	Maintenance Facilities, fare collection equipment	Fuel-efficient vehicles, Transfer center	Bus shelters, bus cameras
Service Accessibility and/or Customer Experience	Bus stop accessibility improvements, bike racks, parking garage, transfer center, elevator/escalator rehab	Bus stop amenities, parking garage rehab	Purchase shop equipment, admin building construction
Safety and Security	Surveillance/Security Equipment, Police Emergency Management Equipment, Bus Camera Installation, Bus stop lighting	Elevator/escalator replacement	New fare payment system, digital bus stop signage



# Expansion Projects - Criteria



Criteria	Measures
Congestion Mitigation	Total Ridership
Economic Development	Project Support for Economic Development
Accessibility	Access to Jobs Access to Jobs by Disadvantaged Persons Access to Multimodal Choices
Safety	Direct Safety Benefit (presence of safety features)
Environmental Quality	Air Quality and Environmental Effect (based on new ridership)
Land Use	Transportation-Efficient Land Use

# Illustrative Funding Rules – State Match Rates



## State of Good Repair

- Establish a set state match rate for SGR projects (illustrative – 80%)
- Intended to provide predictability for funding of SGR projects
- Combination of state/local prioritization
- Role of multi-year asset management planning (TAM/TransAM)

# Illustrative Funding Rules – State Match Rates



## Minor Enhancement

- Prioritized separately from SGR, but funded from the same bucket
- Establish a set state match rate for SGR projects (illustrative – 80%)
- Funding need of SGR priorities would inform funding set-aside for minor enhancements (state of good repair first)



# Illustrative Funding Rules – State Match Rates



## Expansion

- Funded separate from SGR, with no guaranteed minimum funding level
- Establish a state match rate for expansion projects (illustrative – 50%), but also need to look at potential for leveraging with other sources (i.e. federal and/or Smart Scale)

# State Match Rate – Discussion Points

- Ability to fully fund projects with higher match rate (such as 80%)
- Ability to fund more projects at lower match rates (tiers)
- Impact on local funding subsidy levels
- Predictability of program funding



# Scenarios for Evaluation

- Propose evaluation of six scenarios
- Three variables for state match rate:
  - 80% illustrative state match rate
  - Application of current tiers as state match rates
  - State match rate needed to fund all SGR projects
- Two variables for funding level:
  - “Base Case”
  - Additional funding – assuming additional funds are provided to fill funding gap, with no program growth



# Scenarios for Evaluation



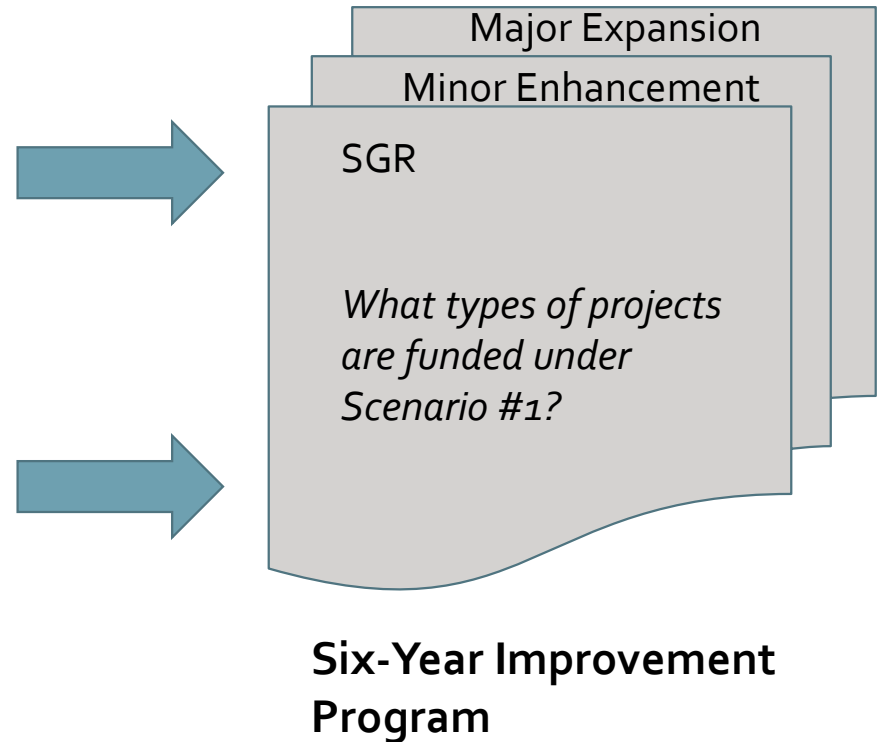
- Prioritization scoring will be tested using example projects
- Ranking of example projects will be used to indicate types of projects likely to be funded under different funding scenarios

SGR – Example projects ranked:

1. Vehicle replacement
2. Facility replacement
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Minor Enhancement – Example projects ranked:

1. Minor vehicle expansion
2. New scheduling software
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## Next Steps

- Trend analysis – program distribution between SGR and Expansion
- Confirmation of project categorization – SGR, minor enhancement, expansion
- Evaluation of scenarios



# Next Steps

- Revenue Advisory Board will meet in March 8
  - Focus on revenue sources
  - Update from TSDAC on prioritization
- TSDAC will meet on March 31
  - Scenarios
  - Economic Analysis
  - Brief on revenue sources

