NORTHERN VIRGINIA TRANSPORTATION AUTHORITY



Project Description Form — 6B

Basic Project Information

1. Submitting Agency:

Washington Metropolitan Area Transit Authority (WMATA)

- **2. Project Title:** Traction Power Upgrades on the Orange Line in Virginia
- 3. Project Type:

		Roadway		Multimodal	V	Transi
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- 4. Project Description/Scope: WMATA's strategic plan includes a project to expand the Metrorail fleet to enable the operation of 100 percent eight-car trains. The eight-car train project includes not only the purchase of rolling stock and railyard expansion, but also associated traction power upgrades. This project will begin the process of upgrading traction power along the Orange Line in Virginia, a very busy Metrorail corridor.
- **5. Route** (*if applicable*)/Corridor:
 Other Corridor (Closest to Corridor 6, 8)
- 6. Total Project Cost: The TransAction 2040 estimate of the Virginia share for 100% 8-car trains is \$496 million based on 33.0% share of a rough estimate of \$1.5 billion for the region; as a component of WMATA's strategic plan, the cost and schedule are being updated.
- **7. Total Funds Required:** \$5,000,000 for the initial portion of Orange Line power upgrades.



- **8.** Phase/s of Project Covered by Funding: Design, Construction of initial portion of power upgrades.
- 9. Project Milestones (by phase, include all phases):

• Design: FY 2014

• Construction Start: FY 2014

Construction Complete: FY 2014

Future phases of the total project include additional work on the Orange Line, upgrades to traction power on all other lines, purchase of additional railcars, and expansion of railcar storage capacity, with the schedule to be determined.

10. In TransAction 2040 plan?

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\mathbf{M}	Yes	Ш	No

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- **11. In CLRP, TIP or Air Quality Neutral?** Not in CLRP and beneficial for air quality.
- 12. Leverages Sources:

☐ Local	☐ State	☐ Federal
☐ Other	(please ex	xplain)

PROJECT ANALYSIS					
Tier I ☑ Pass ☐ Fail	☐ Fail Tier III Congestion Reduction Relative to Cost:				
Tier II 6 out of 8 points	Plan ☐ CLRP ☑ TA2040 only R	Rating High Med Low			

Stated Benefits

- 1. What regional benefit/s does this project offer? This project represents an initial step toward addressing traction power as part of the eight-car train project. Traction power on the Orange Line in Virginia represents the greatest need at this time. Region-wide, the operation of 100% eight-car trains would enable Metrorail to increase peak-hour capacity into the core by 35,000 persons, with the capacity increases most needed for the Virginia routes merging into the Rosslyn (Blue, Orange and Silver Lines) and L'Enfant Plaza (Yellow Line) stations.
- 2. How does the project reduce congestion? Without the Metrorail fleet expansion, the present congestion that's experienced only on the Orange Line (greater than 100 passengers per car (ppc) on average) will expand to all Virginia lines in the 2020s, with the Orange and Silver lines experiencing severe congestion (average greater than 120 ppc.) This fleet expansion will keep peak loadings on all lines near or below the 100 ppc for the 2025 timeframe.
- **3.** How does the project increase capacity? (Mass transit projects only) The total project will increase overall peak-hour Metrorail capacity into the core by 35,000, including an increase of 10,000 passengers per hour (33 percent) from Virginia into the Foggy Bottom and L'Enfant Plaza stations in D.C.
- **4.** How does the project improve auto and pedestrian safety? Reduced congestion on Metrorail will increase its attractiveness, resulting in a higher transit mode share and reduced vehiclemiles of auto travel (VMT). As a general rule, lower VMT results in fewer auto crashes, thereby improving safety.
- 5. List internet address/link to any additional information or documentation in support of project benefits. (Optional)

WMATA's strategic plan includes a project to expand the Metrorail fleet to enable the operation of 100 percent eight-car trains. See: http://www.wmata.com/momentum/

6. Project Picture/Illustratives N/A