

VIRGINIA RAILWAY EXPRESS CRYSTAL CITY STATION EXPANSION *CONTRIBUTES TO ECONOMIC DEVELOPMENT*



APTA Rail Conference

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VRE Planning Program Administrator

June 25, 2019

VRE OVERVIEW

PURPOSE & NEED

SITE SELECTION

STATION DESIGN

COLLABORATION

DISCUSSION

VRE OVERVIEW

A commuter rail system *running on existing railroad tracks*

Serving Washington, D.C. and Northern Virginia *carrying long-distance commuters to DC, Arlington and Alexandria*

Two lines, 96 miles *adding peak capacity to I-95/I-395 and I-66 corridors**

20,000 daily passenger trips *that commuters otherwise would have taken alone in cars**



* Source: Texas Transportation Institute, Virginia Railway Express Congestion Relief Contribution; 2014

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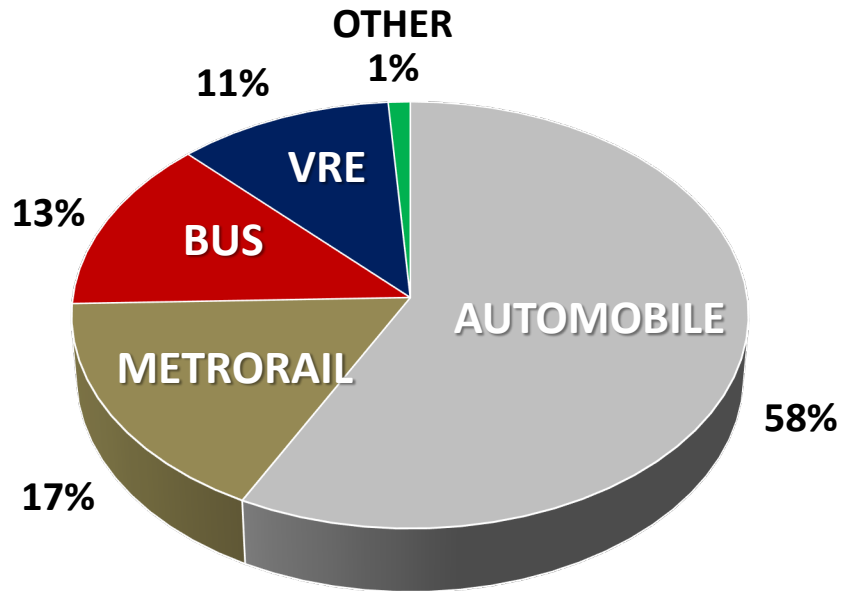
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PEAK HOUR TRIPS

(6:30 to 7:30 AM)

*across the Potomac River
from Virginia to DC*

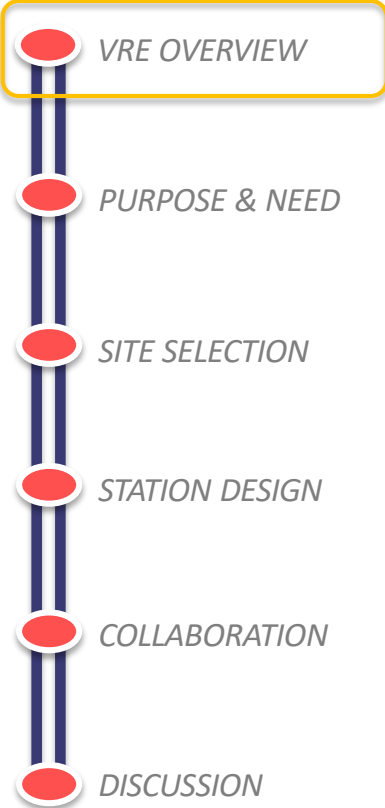
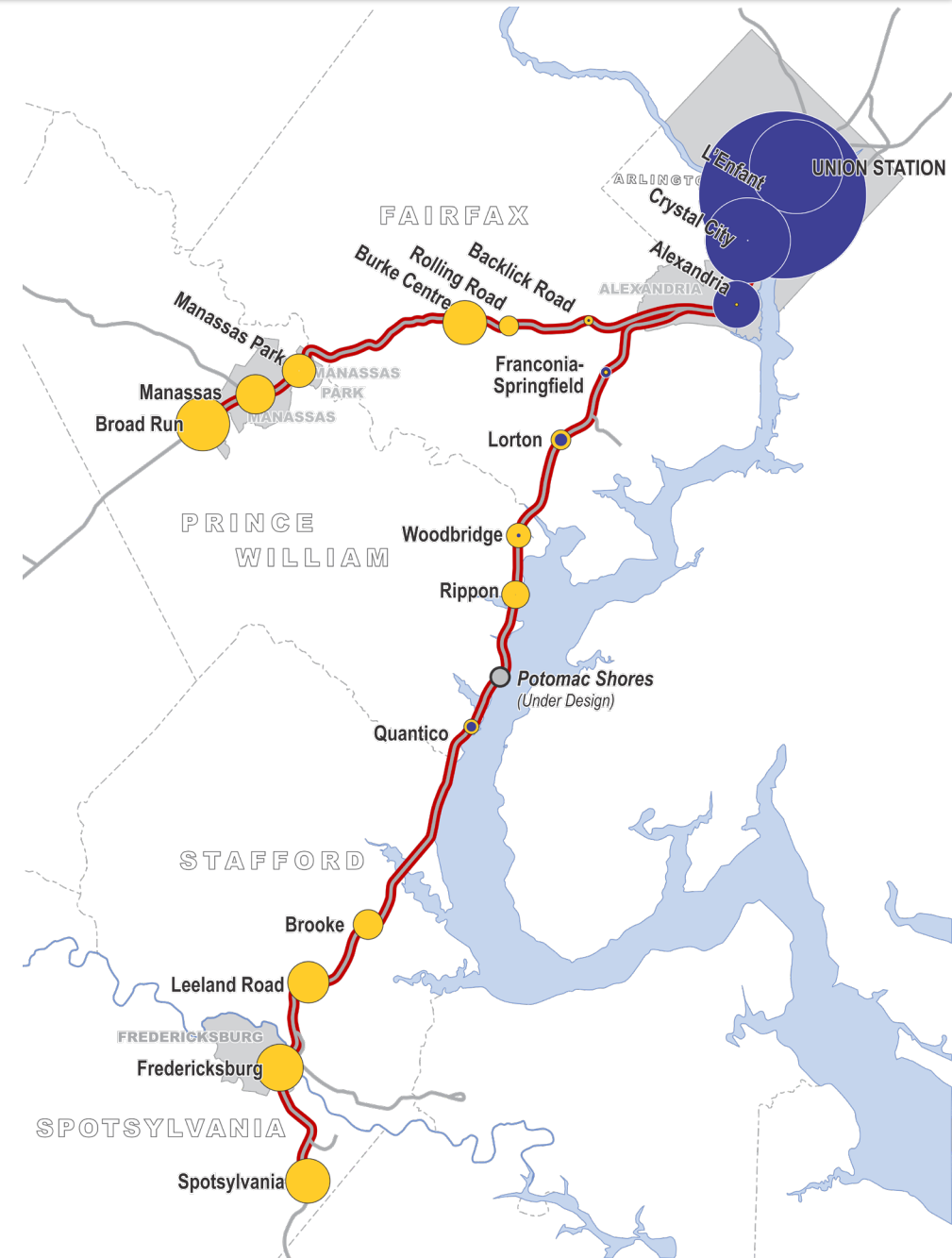


21,900 TOTAL TRIPS



VRE OVERVIEW

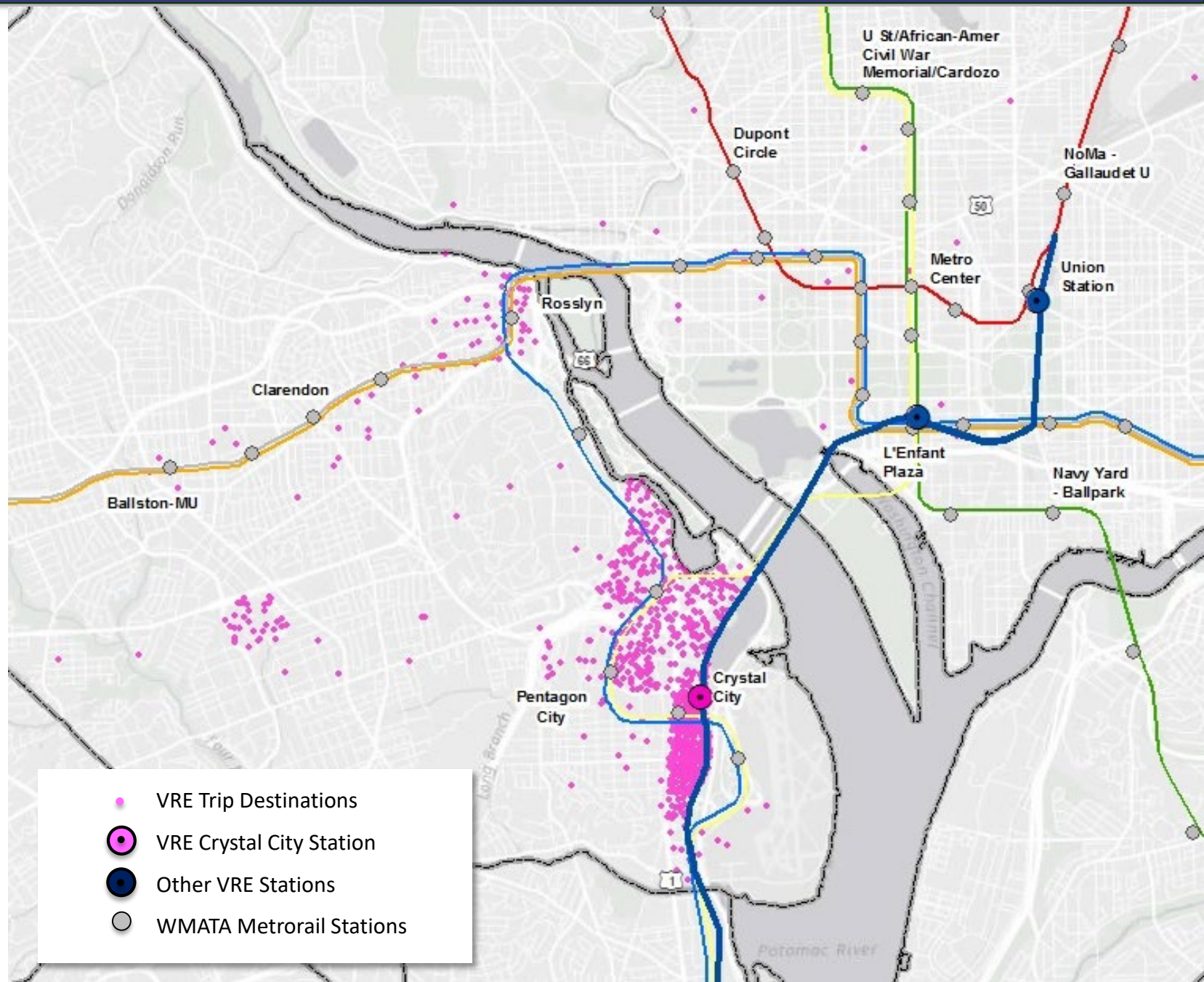
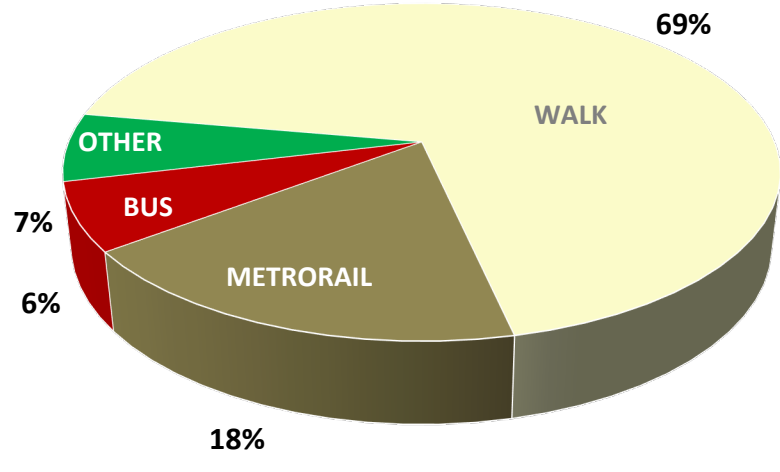
- Busiest origin stations are at the end of the lines
- L'Enfant Station is our busiest destination station
- Crystal City and Union Station are next busiest destination stations
- Most VRE riders:
 - Work for the government
 - Ride five days per week



CRYSTAL CITY RIDER DESTINATIONS

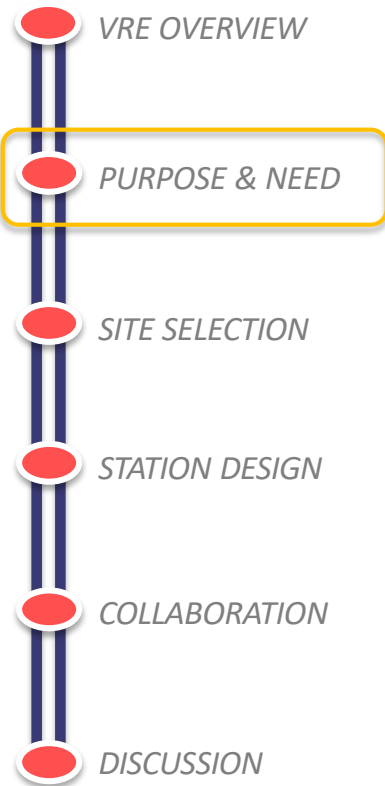
- *Crystal City*
- *Pentagon City & Pentagon*
- *Arlington & DC*

STATION EGRESS MODE



- VRE Trip Destinations
- VRE Crystal City Station
- Other VRE Stations
- WMATA Metrorail Stations





PURPOSE AND NEED

One of our **busiest** stations with the **shortest** platform and **one** entrance

- *Reduce platform crowding and train dwell time*
- *Improve passenger safety & convenience*

Side platform served by **one** track

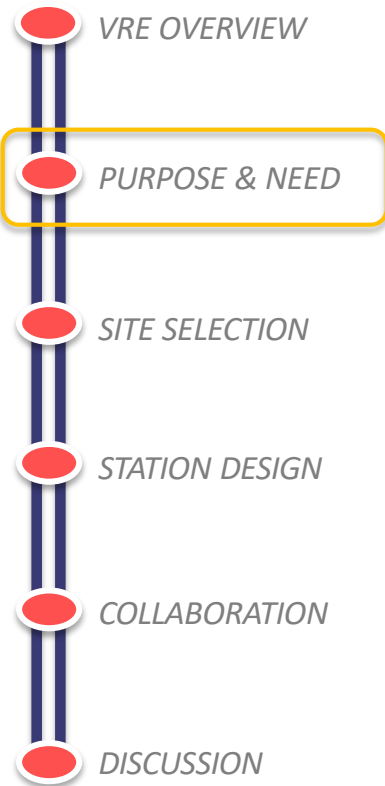
- *Improve operational flexibility*
- *Support future bidirectional service*

Declining **ridership** and hidden **location**

- *Improve visibility & multimodal connectivity*
- *Support Crystal City sector plan*
- *Potential walkway to airport*



DESIGN OBJECTIVES



- New island platform between Tracks 2 & 3
 - Serve 8-10 cars
 - Two grade-separated access points
- Not preclude a new 4th mainline track
- Stay within existing railroad right-of-way
- Enhance local & regional connectivity
 - Metrorail, Metroway, Buses, Shuttles
 - Bicycle and walk access
- Support Crystal City's vision for growth
- Build a sustaining relationship with the community









EVALUATION FACTORS

FACTOR	DEFINITION	MEASURES
Local Transportation Connections	Proximity to jobs, residences, and bicycle network	<ul style="list-style-type: none"> • Jobs within 1/2 mile from center of platform • VRE rider destinations within 1/2 mile from center of platform • Residents within 1/2 mile from center of platform • Distance to bicycle network from closest point on station platform
Regional Transportation Connections	Proximity to Metrorail and Metroway	<ul style="list-style-type: none"> • Distance to existing Metrorail station entry from closest point on platform • Distance to expected new Metrorail station entry from closest point on platform • Number of street crossings to existing Metrorail station • Distance to Metroway station from closest point on station platform
Community and Environmental Impacts	Changes to Existing Conditions (Built and Natural environment)	<ul style="list-style-type: none"> • Noise and Vibration impacts to sensitive receptors • Property acquisition impacts to residential property • Impacts to Historic, Cultural, and/or Recreational resources • Impacts to environmental justice (EJ) populations • Impacts to Visual Resources • Impacts to water resources and floodplains
Major Cost Elements	Anticipated cost relative to other options	<ul style="list-style-type: none"> • Length of track relocation • Grade-separated Access to the local roadway network • Construction Sequencing • Impacts to Railroad Infrastructure • No. of Culverts

NOTE: Economic Development and Land Use Benefits were not Ranked



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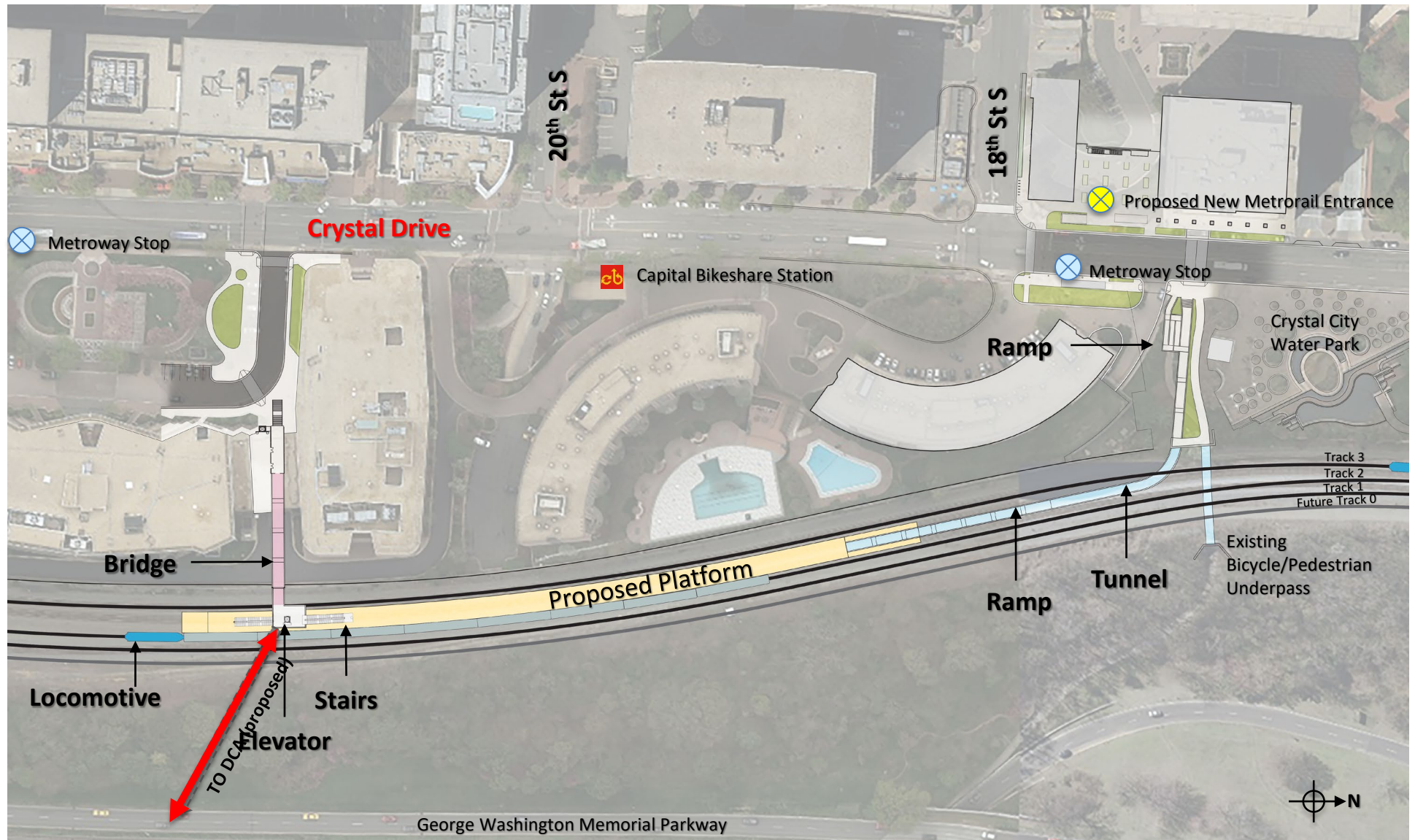
SUMMARY OF RANKINGS

EVALUATION FACTOR	OPTION 1	OPTION 2	OPTION 3
Local Transportation Connections	Low	High	Medium
Regional Transportation Connections	High	High	Low
Community and Environmental Impacts	Medium	Medium	Medium
Major Cost Elements	High	Medium	Low
OVERALL RATING	Medium	High	Low

Legend: ● High ◐ Medium ○ Low

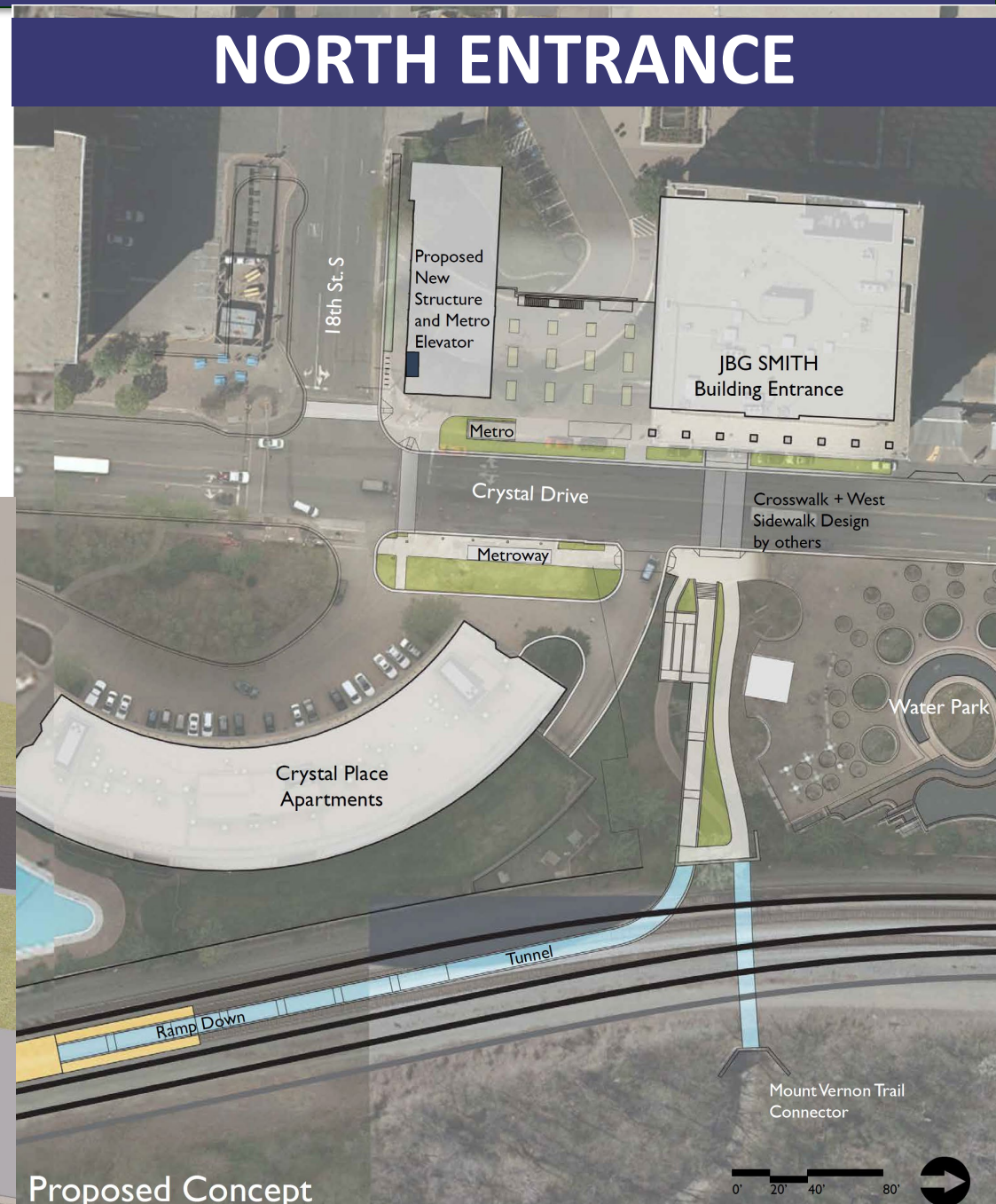
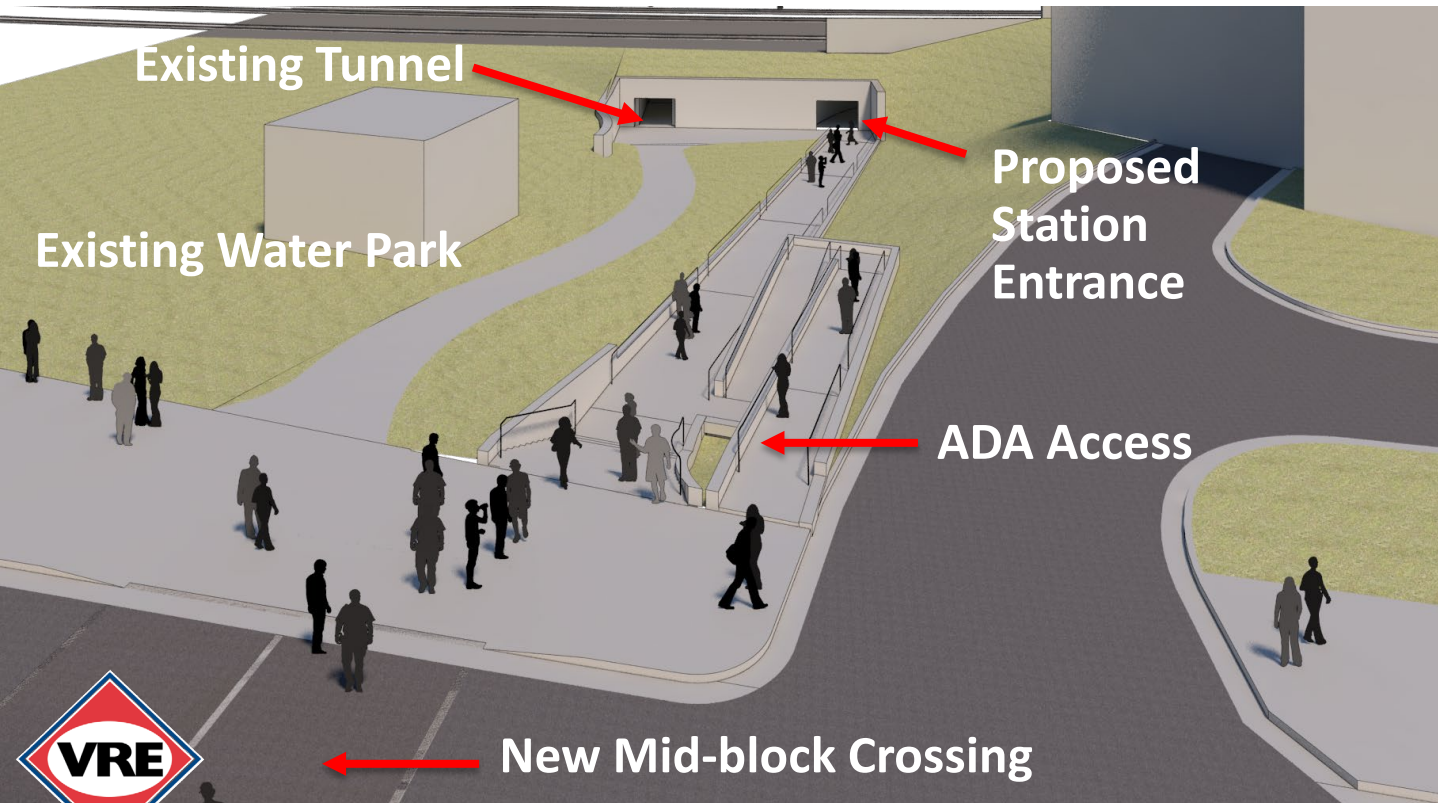
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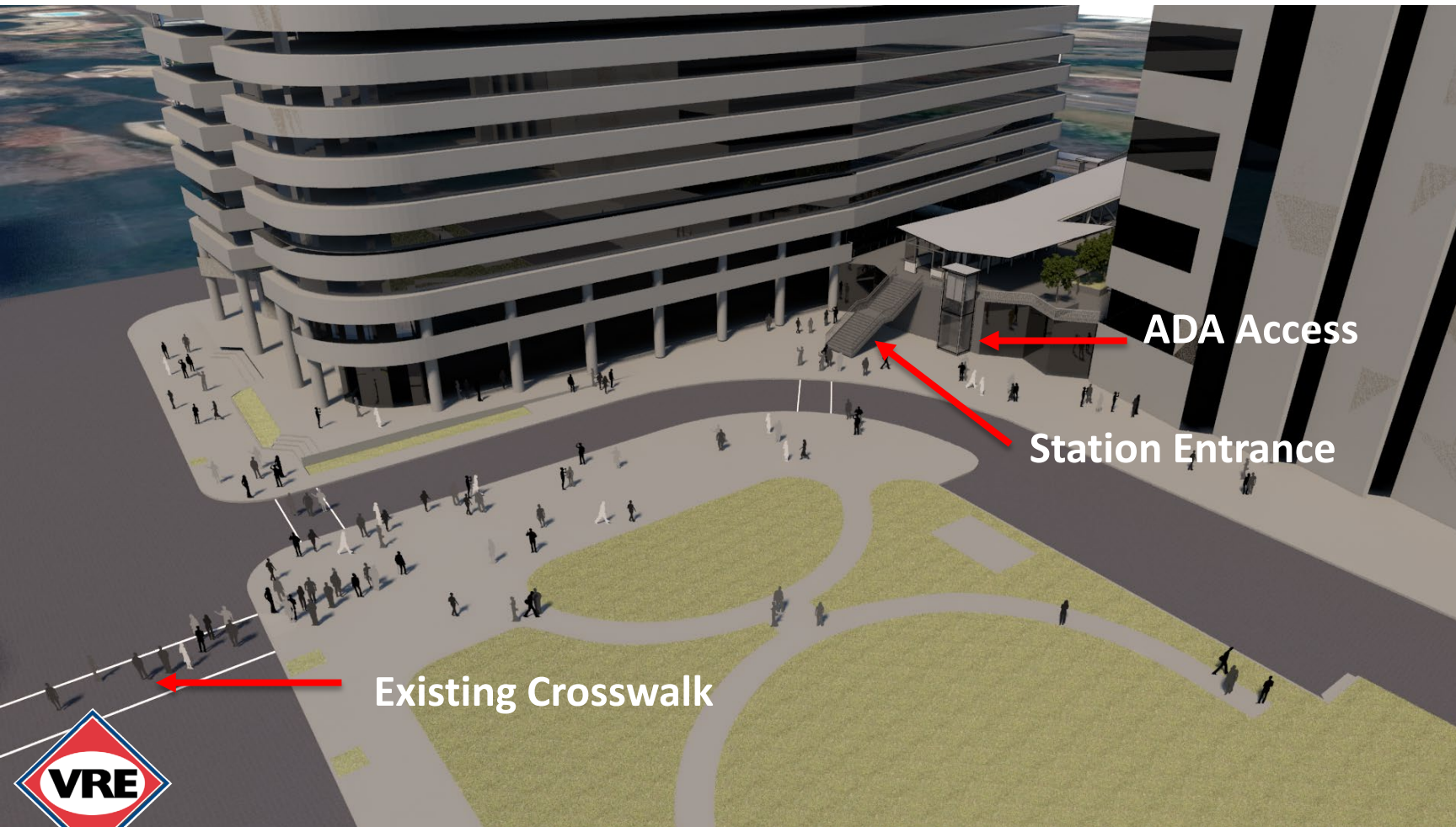


CONCEPT DESIGN – PREFERRED SITE

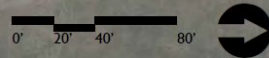
- Proposed **mid-block crossing** across Crystal Drive aligns with paths to VRE station and Mount Vernon trail
- Access to **Underground** and **proposed Metrorail** entrance
- **Separate pedestrian and bicycle** paths reduce conflicts and makes existing trail ADA accessible
- **Minimized impact** on existing Water Park design



- **Elevated covered walkway** to terrace
- **Stairs** to street/platform level; **ADA accessible** by elevators;
- Path **aligns with existing crosswalk** across Crystal Drive
- Parking removed and driveway narrowed for **wider walkway**



Proposed Concept



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PROPOSED WALKWAY TO AIRPORT

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Community Outreach:

- Public Events – 2017 and 2018
- VRE Rider Survey
- VRE Operations Board
- Arlington County Board and Commissions

Technical Advisory Group:

- ✓ Arlington County Staff
- ✓ JBG-Smith / Vornado
- ✓ Equity Residential
- ✓ Crystal City Civic Association
- ✓ Crystal City BID
- ✓ MWAA
- ✓ National Park Service
- ✓ WHS Transportation (Pentagon)
- ✓ CSXT (host railroad)
- ✓ FRA & FTA
- ✓ VA Dept. of Rail & Public Transportation



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PROJECT WEBSITE

www.vre.org/development/crystal-city-station-improvements



VIRGINIA RAILWAY EXPRESS