

CRYSTAL CITY  
*Multimodal Transportation Study*



CRYSTAL CITY TASK FORCE  
TRANSPORTATION UPDATE



JANUARY 15, 2008

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This study was prepared under contract with Arlington County, Virginia, with financial support from the Office of Economic Adjustment, Department of Defense. The content reflects the views of Arlington County and does not necessarily reflect the views of the Office of Economic Adjustment.



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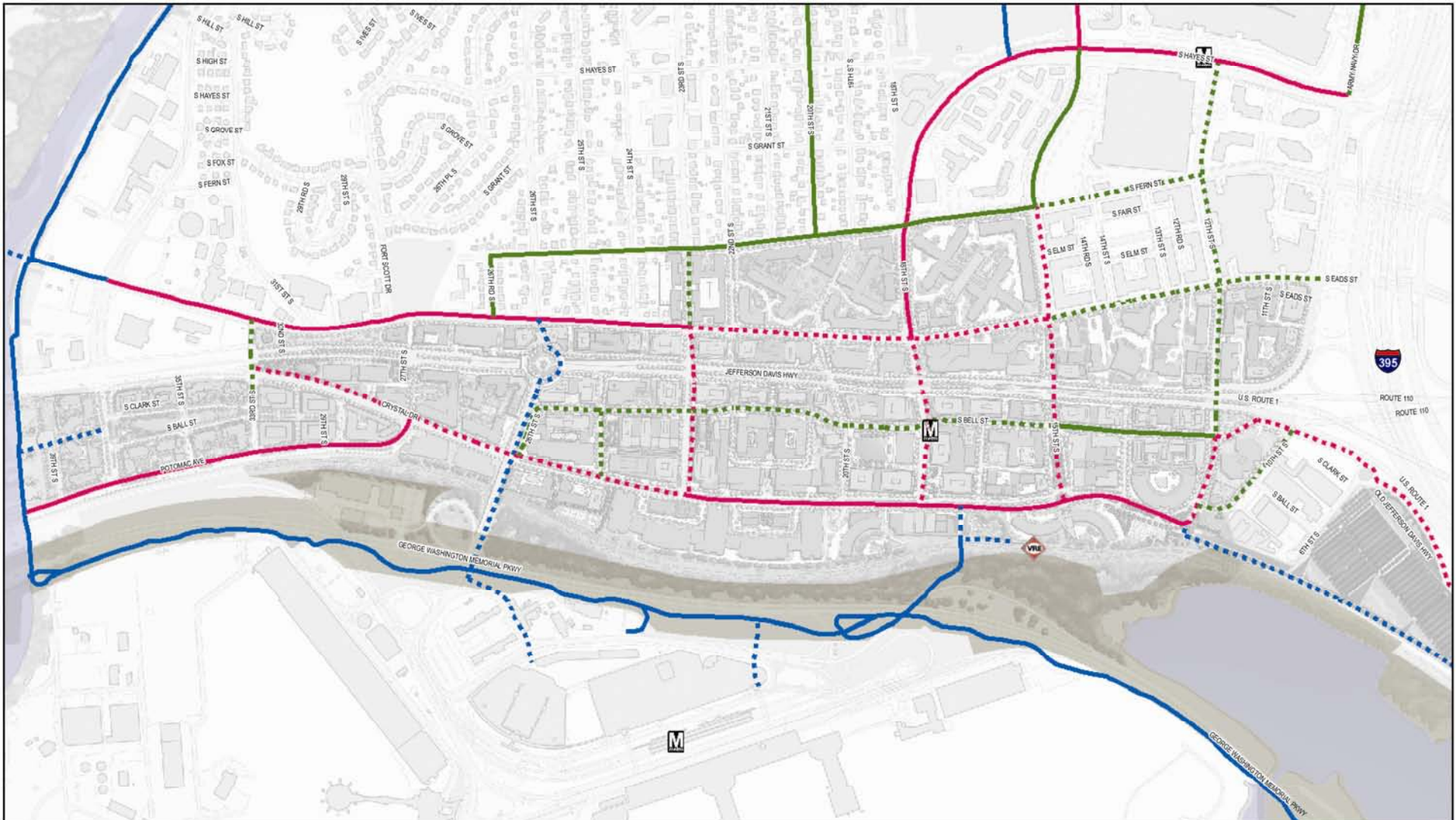
## OVERVIEW

- Updated recommendations
  - Pedestrians – no changes
  - Bicycles – no changes
  - Streets – no changes
  - Transit (Transitway, improved bus accommodations, and intermodal center)
  - TDM and parking – policies to be consistent with the Master Transportation Plan



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- Legend**
- Bike Lane (existing)
  - Bike Route (existing)
  - Trail (existing)
  - - - Bike Lane (recommended)
  - - - Bike Route (recommended)
  - - - Trail (recommended)

CRYSTAL CITY MULTIMODAL TRANSPORTATION STUDY

**Recommended Bikeway and Trail Network**

Figure 4.1

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## TRANSITWAY

- Embrace the interim alignment as currently adopted by the county
- Conduct additional study to develop a proposed recommended alignment through Crystal City



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## BUS AND OTHER TRANSIT RECOMMENDATIONS

- Increase the number of available amenities: focus on the area around the Metro station
  - Enhanced streetscape and accommodations on Clark Street (north of 18<sup>th</sup> Street) and on 18<sup>th</sup> Street (between Clark Street and Eads Street)
  - Bus bays on 18<sup>th</sup> Street
- Work with VRE to reduce the fare for travel between Crystal City and the District via VRE

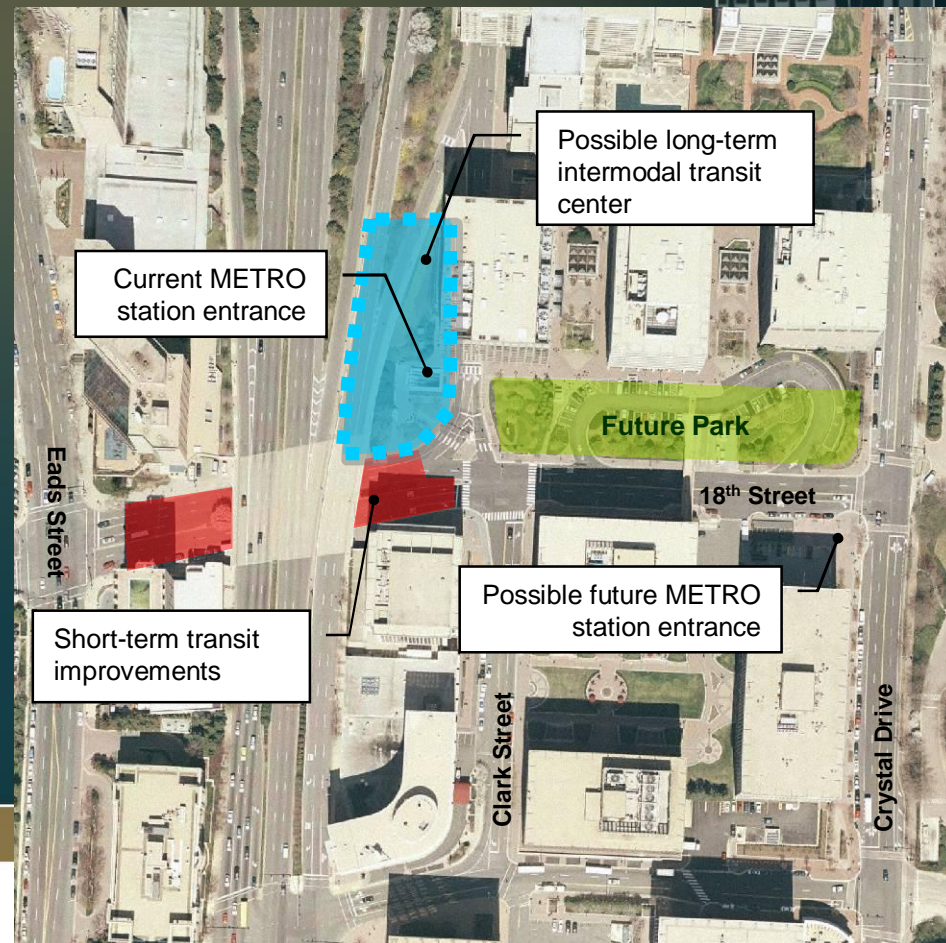
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# INTERMODAL ACCOMMODATION

- Short-term: Provide additional amenities along 18<sup>th</sup> Street and Clark Street for bus transit
- Long-term: Create an intermodal center between Jefferson Davis Highway and Clark Street at 18<sup>th</sup> Street



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# OVERALL TRANSPORTATION NETWORK

## ■ Phases

- Prior to draft Master Plan Redevelopment
- Phase I (2011 to 2015)
- Phase II (2016 to 2020)
- Phase III (2021 to 2030)
- Phases IV and V (2031 to 2050)

## ■ Vehicular

- Evaluated 2030 a.m. and p.m. turning movement volumes (LOS for peaks) at intersections
- Identified street cross sections and intersection lanes

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# Primary Recommendations: Not Dependent on Redevelopment

- Two-way Crystal Drive and 12<sup>th</sup> Street
- Improved pedestrian and bicycle connectivity to airport
- Interim transitway

## Transit

1. Implement the interim transitway as currently proposed.
2. Install additional passenger amenities in the vicinity of the 18<sup>th</sup> Street/Clark/Bell Street intersection.
3. Construct a new segment of street to connect Clark Street to 15<sup>th</sup> Street.
4. Extend 12<sup>th</sup> Street from Fern Street to Eads Street.
5. Install a covered walkway between the Virginia Railway Express station and Crystal Drive.

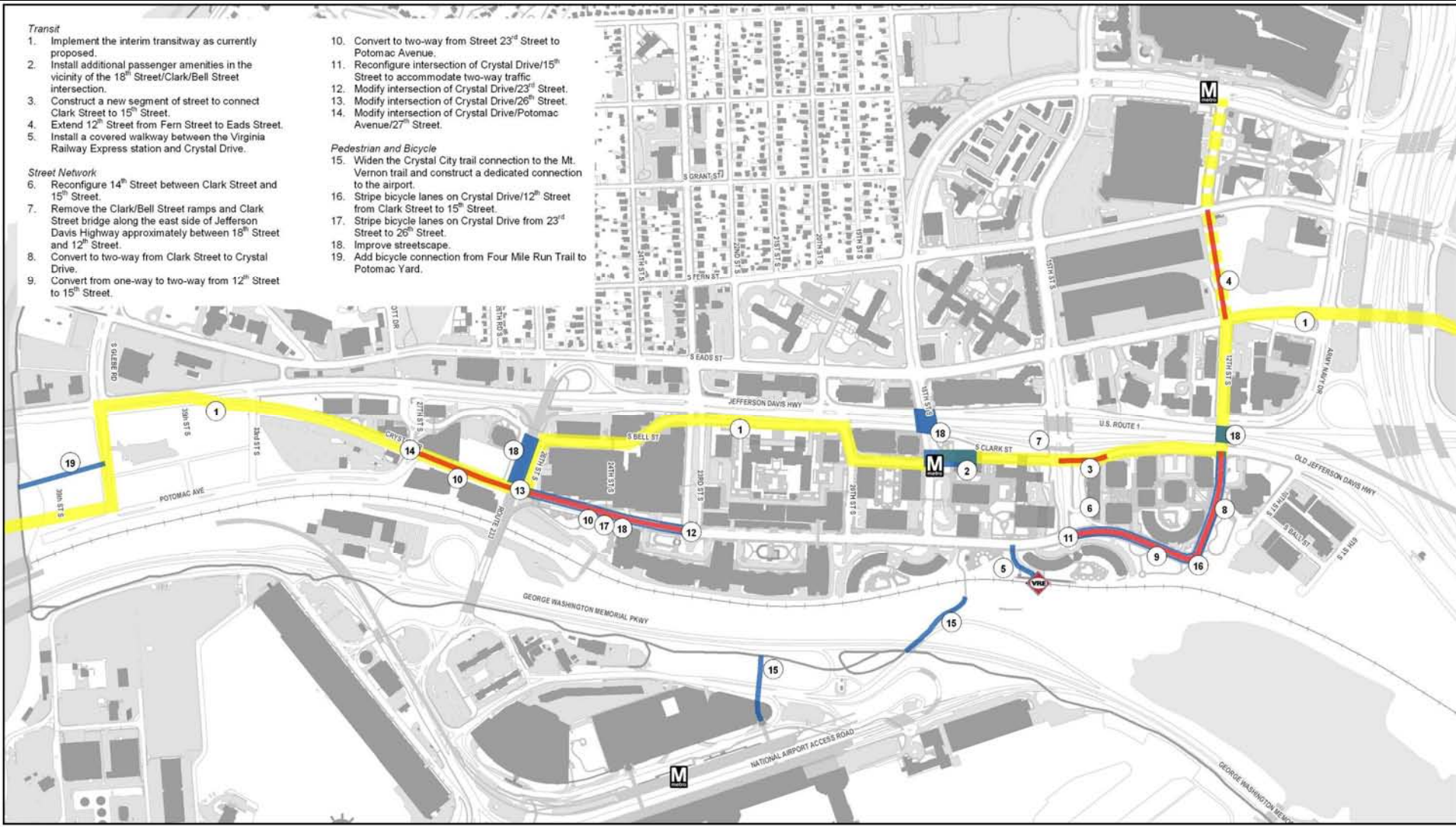
## Street Network

6. Reconfigure 14<sup>th</sup> Street between Clark Street and 15<sup>th</sup> Street.
7. Remove the Clark/Bell Street ramps and Clark Street bridge along the east side of Jefferson Davis Highway approximately between 18<sup>th</sup> Street and 12<sup>th</sup> Street.
8. Convert to two-way from Clark Street to Crystal Drive.
9. Convert from one-way to two-way from 12<sup>th</sup> Street to 15<sup>th</sup> Street.

10. Convert to two-way from Street 23<sup>rd</sup> Street to Potomac Avenue.
11. Reconfigure intersection of Crystal Drive/15<sup>th</sup> Street to accommodate two-way traffic.
12. Modify intersection of Crystal Drive/23<sup>rd</sup> Street.
13. Modify intersection of Crystal Drive/26<sup>th</sup> Street.
14. Modify intersection of Crystal Drive/Potomac Avenue/27<sup>th</sup> Street.

## Pedestrian and Bicycle

15. Widen the Crystal City trail connection to the Mt. Vernon trail and construct a dedicated connection to the airport.
16. Stripe bicycle lanes on Crystal Drive/12<sup>th</sup> Street from Clark Street to 15<sup>th</sup> Street.
17. Stripe bicycle lanes on Crystal Drive from 23<sup>rd</sup> Street to 26<sup>th</sup> Street.
18. Improve streetscape.
19. Add bicycle connection from Four Mile Run Trail to Potomac Yard.







# Primary Recommendations: Phase III (2021 to 2030)

- Modification of Jefferson Davis Highway and Airport interchange
- Extension of 24<sup>th</sup> Street to Jefferson Davis Highway Ramp
- Pedestrian/bicycle connection on alignment of airport viaduct

## Transit

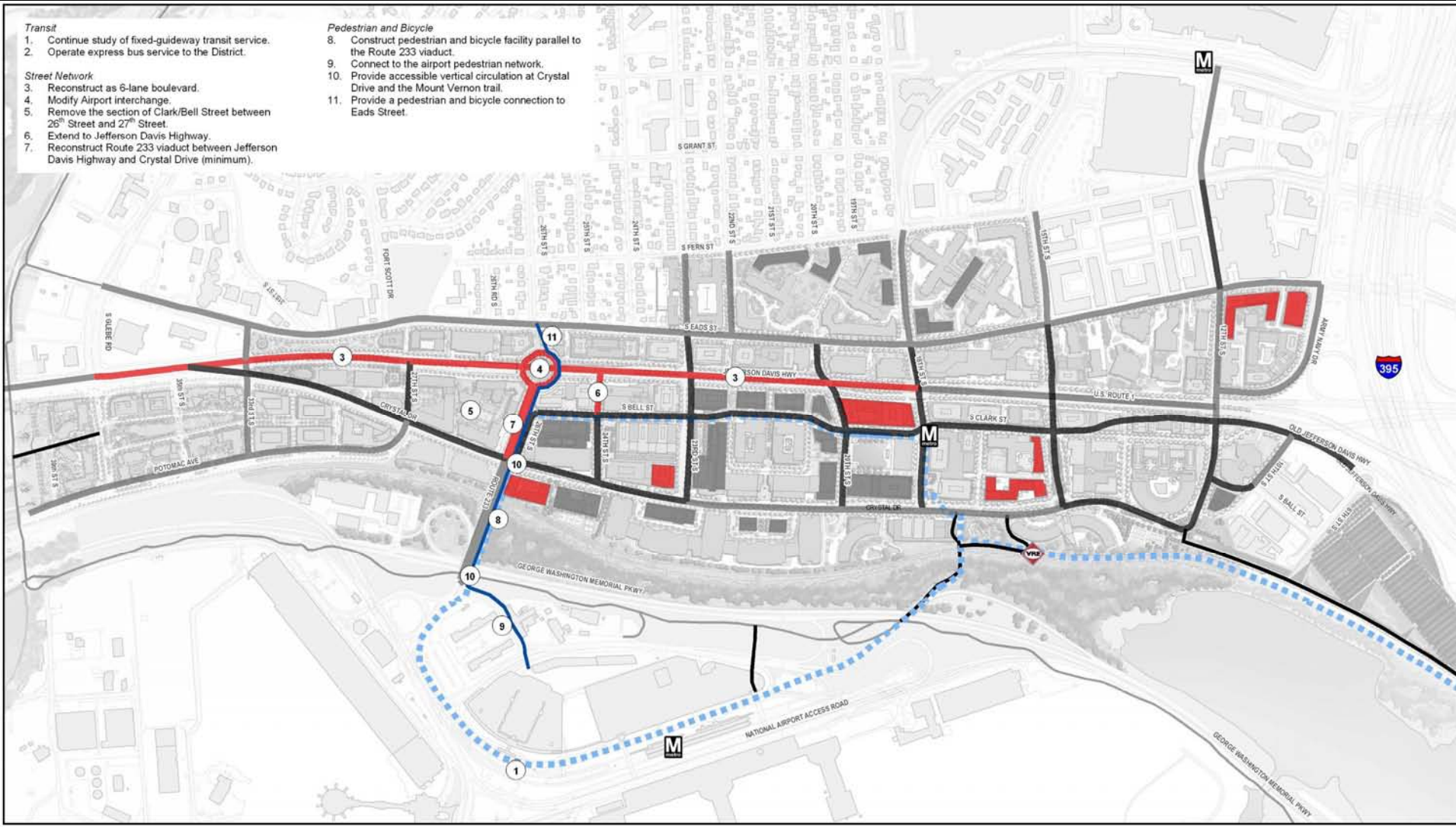
1. Continue study of fixed-guideway transit service.
2. Operate express bus service to the District.

## Street Network

3. Reconstruct as 6-lane boulevard.
4. Modify Airport interchange.
5. Remove the section of Clark/Bell Street between 26<sup>th</sup> Street and 27<sup>th</sup> Street.
6. Extend to Jefferson Davis Highway.
7. Reconstruct Route 233 viaduct between Jefferson Davis Highway and Crystal Drive (minimum).

## Pedestrian and Bicycle

8. Construct pedestrian and bicycle facility parallel to the Route 233 viaduct.
9. Connect to the airport pedestrian network.
10. Provide accessible vertical circulation at Crystal Drive and the Mount Vernon trail.
11. Provide a pedestrian and bicycle connection to Eads Street.



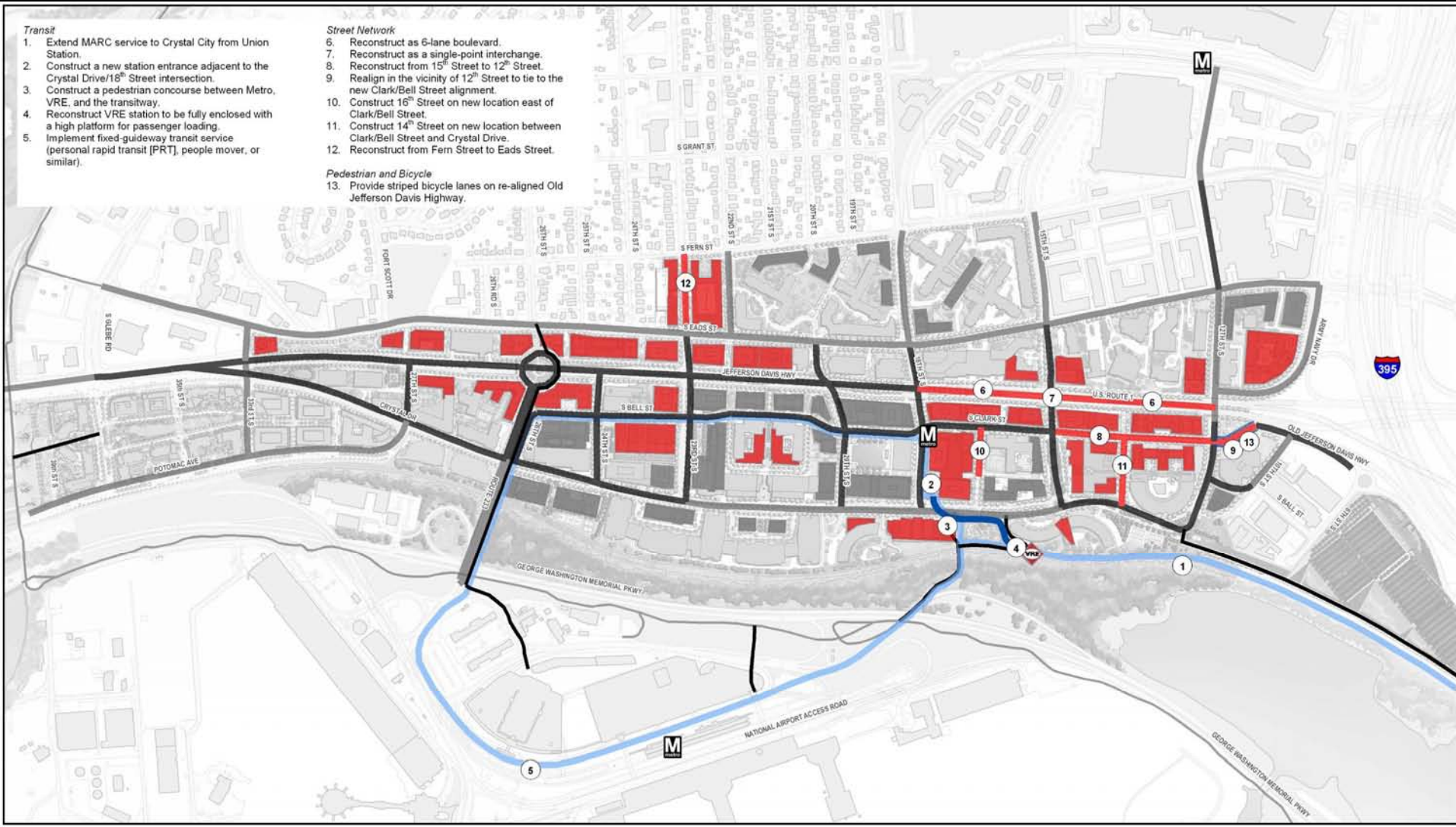
# Primary Recommendations: Phases IV and V (2031 to 2050)

- Modification of Jefferson Davis Highway between 18<sup>th</sup> Street and 12<sup>th</sup> Street (including 15<sup>th</sup> Street interchange)
- Creation of new 14<sup>th</sup> Street and partial 16<sup>th</sup> Street
- Direct transit connection between VRE, transitway, and Metro
- Local transit circulator (guideway) between Crystal City, Metro, VRE, and the Airport

- Transit**
1. Extend MARC service to Crystal City from Union Station.
  2. Construct a new station entrance adjacent to the Crystal Drive/18<sup>th</sup> Street intersection.
  3. Construct a pedestrian concourse between Metro, VRE, and the transitway.
  4. Reconstruct VRE station to be fully enclosed with a high platform for passenger loading.
  5. Implement fixed-guideway transit service (personal rapid transit [PRT], people mover, or similar).

- Street Network**
6. Reconstruct as 6-lane boulevard.
  7. Reconstruct as a single-point interchange.
  8. Reconstruct from 15<sup>th</sup> Street to 12<sup>th</sup> Street.
  9. Realign in the vicinity of 12<sup>th</sup> Street to tie to the new Clark/Bell Street alignment.
  10. Construct 16<sup>th</sup> Street on new location east of Clark/Bell Street.
  11. Construct 14<sup>th</sup> Street on new location between Clark/Bell Street and Crystal Drive.
  12. Reconstruct from Fern Street to Eads Street.

- Pedestrian and Bicycle**
13. Provide striped bicycle lanes on re-aligned Old Jefferson Davis Highway.



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## SUMMARY OF FINDINGS

- Intersections operate acceptably
- Jefferson Davis Highway is enhanced as a 6-lane boulevard
- Crystal Drive is reduced to two lanes with a left-turn lane at intersections and two-way traffic flow
- “Airport Circle” operates acceptably as a roundabout

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## PARKING AND TDM

- Countywide TDM policies apply to Crystal City for redevelopment
- Parking
  - Share parking
  - 1 car sharing space per 20 spaces
  - 1 bicycle parking space per 10 auto spaces
  - Preferential ridesharing parking
  - Residential: 1 space per unit
  - Commercial: 1 space per 1,000 square feet



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