



Crystal City Potomac Yard Transitway Project

Stakeholder Meeting
July 2010

Agenda

- Project Purpose and Background
- Environmental Update
 - Transportation Analysis
 - Staff Recommendations
- Next Steps



Project Purpose

- Provide high-capacity and high-quality bus transit service
- Support new transit oriented development in Potomac Yard in Arlington and Alexandria
- Extend the reach of the Metrorail system
- Support redevelopment in Crystal City
- Set the stage for streetcar



Project Background

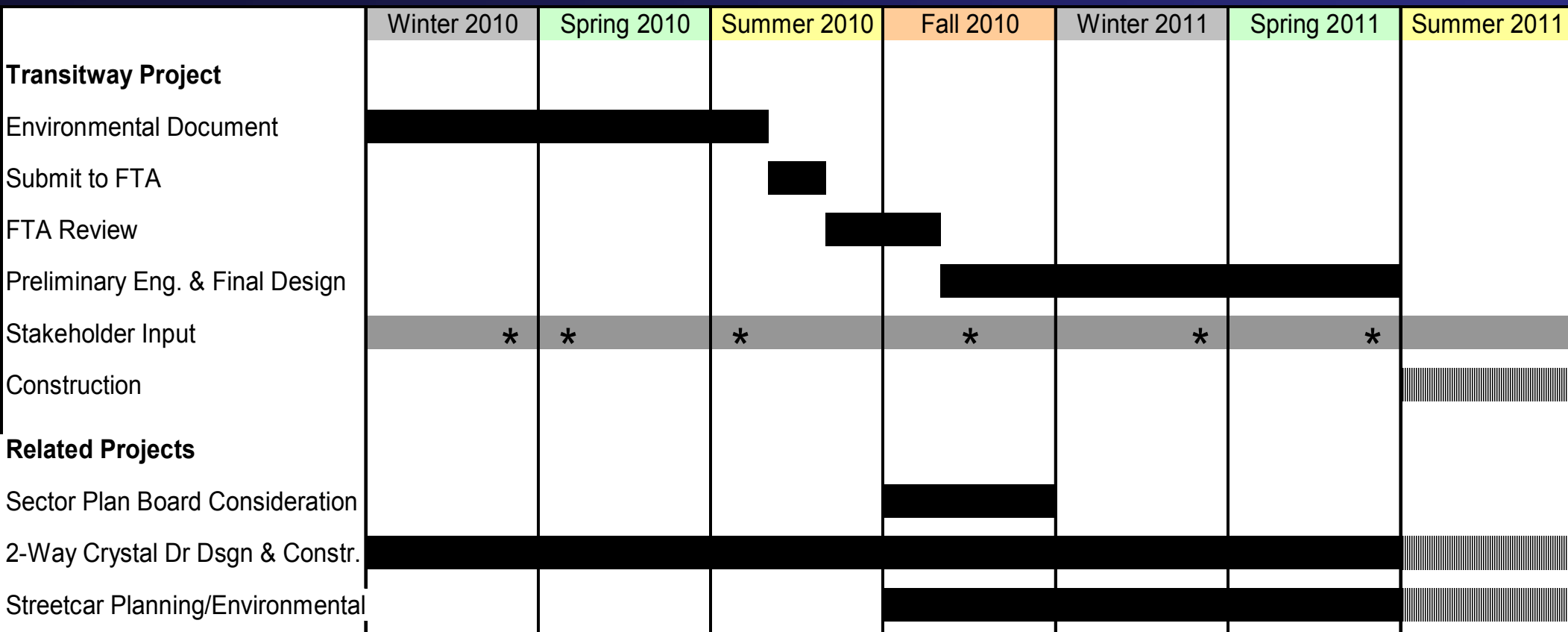
- Transit alternatives analysis (2003)
- Interim improvements strategy (2005)
- Environmental document (2007)
- Crystal City Sector Plan (2010)
- Environmental document update (2010)



Project Context

- Crystal City Sector Plan
- Transitway
- Two-way of Crystal Drive
- Planned two-way of Clark/Bell
- Crystal City Streetcar
- Coordination with City of Alexandria

Timeline



CONTEXT MAP



A Alexandria Route 1 South
 B Alexandria Route 1
 C Alexandria Potomac Yard
 D Arlington Potomac Yard
 E Arlington Crystal City
 F Arlington Pentagon

SEGMENTS D & E



SEGMENTS D & E (Modified)



March 17 Stakeholder Meeting

- Introduction to environmental update
- General Comments and Discussion
 - Columbia Pike Transit Initiative
 - Alexandria portion of CCPY corridor
 - Dedicated vs. shared lanes for transit
- Station Stop Locations and Amenities
 - Focus on Segment E locations
 - Temporary vs. permanent stops
 - Investment in station amenities enhances experience

Environmental Update

- Expanded study area
- No expected adverse effect to:
 - Cultural resources
 - Water resources
 - Hazardous materials
 - Air quality
 - Noise and vibration



Environmental Update

Transportation Analysis:

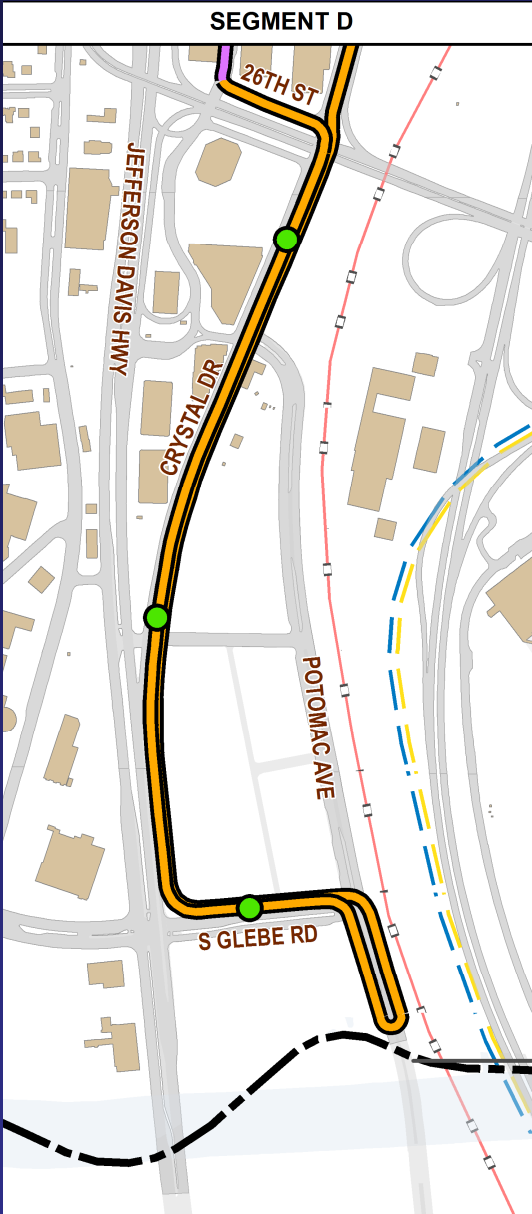
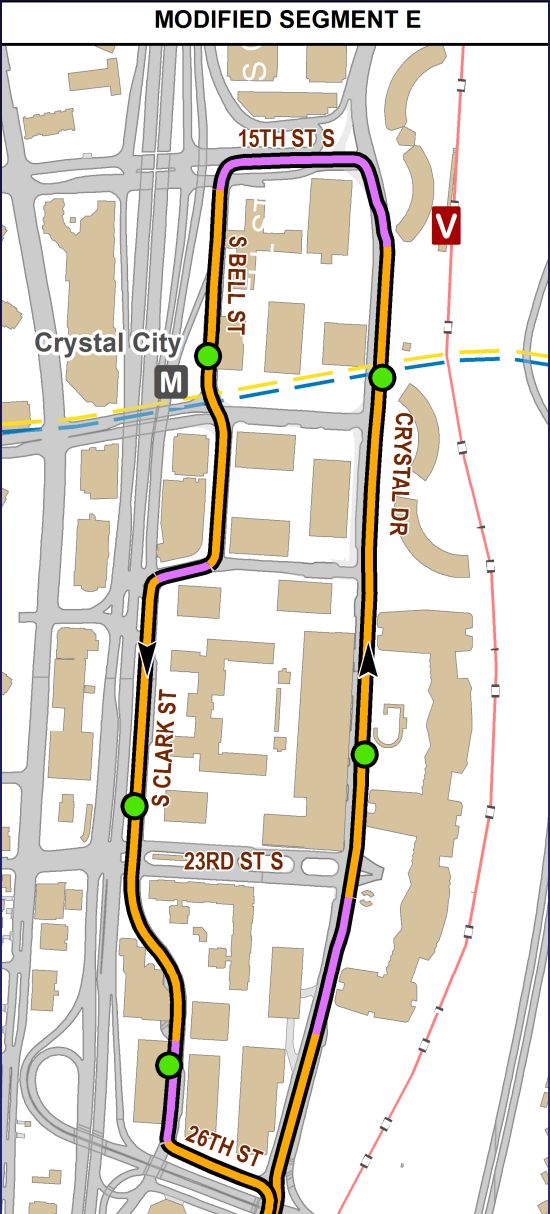
- Updated traffic forecasts
 - Sector Plan land use
 - Two-way conversion of Crystal Drive
- Transit system performance
- Study of dedicated bus lanes
- Station location study



Environmental Update

- Transportation analysis conclusions:
 - Dedicated transit lanes during peak periods
 - Traffic effects within acceptable LOS
 - Transit travel time is improved
 - No adverse effect on pedestrians

Transit Lanes

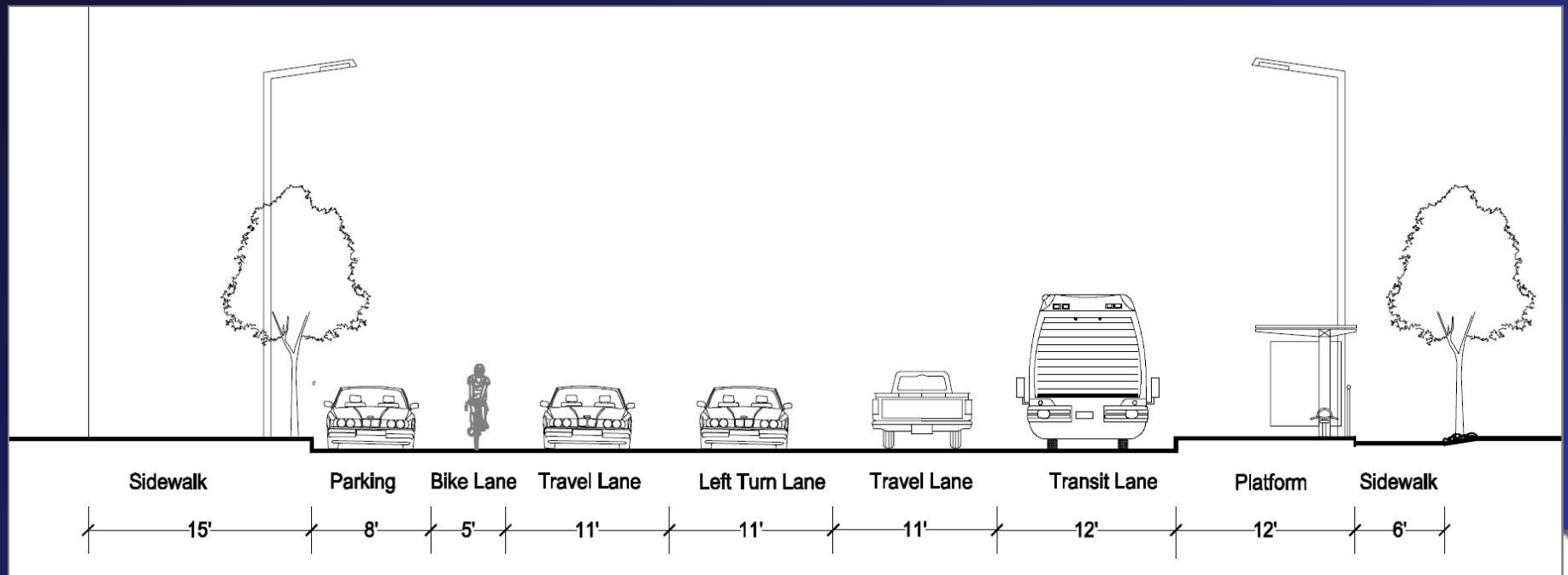


Legend

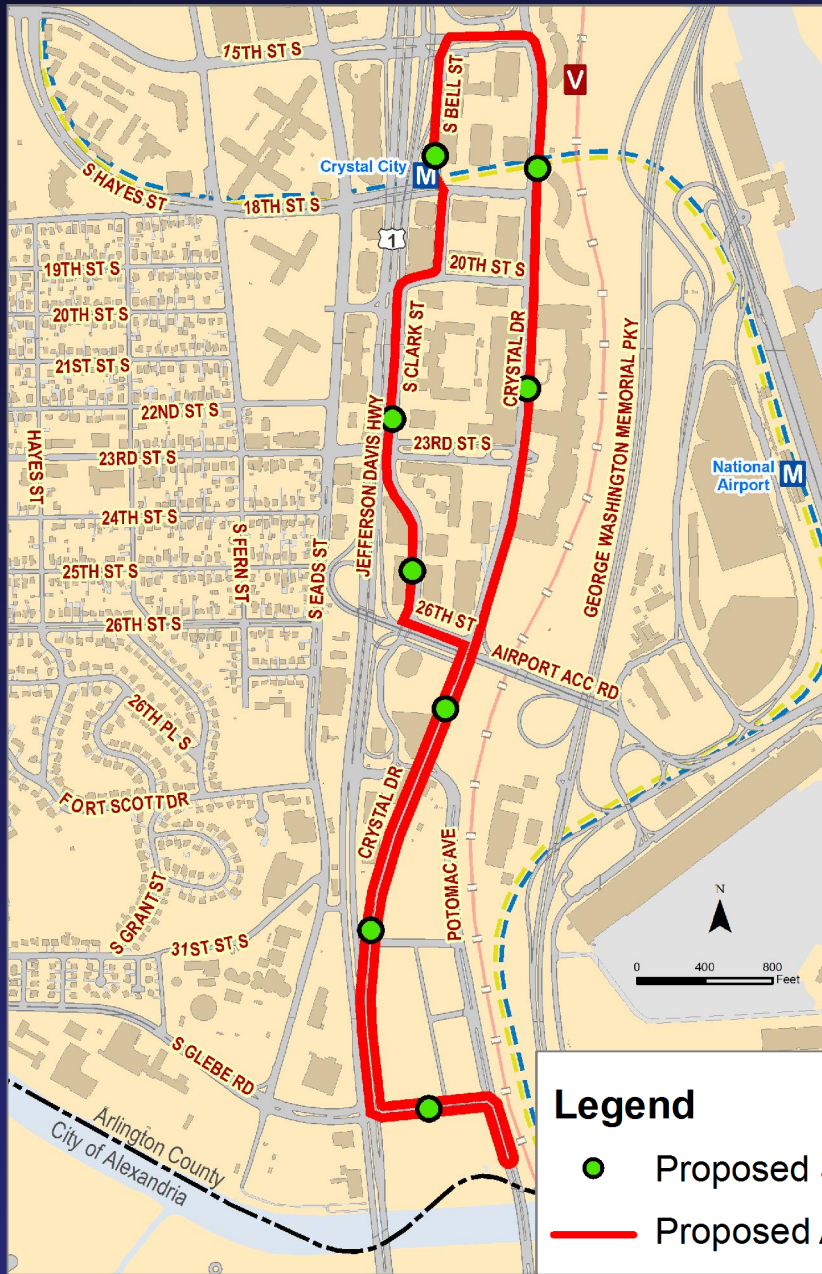
- Proposed Station Stop
- Proposed Alignment**
- Transit Vehicles in Mixed Traffic
- Dedicated Lanes for Transit

0 0.05 0.1 Miles

Crystal Drive: Typical Section



Station Locations



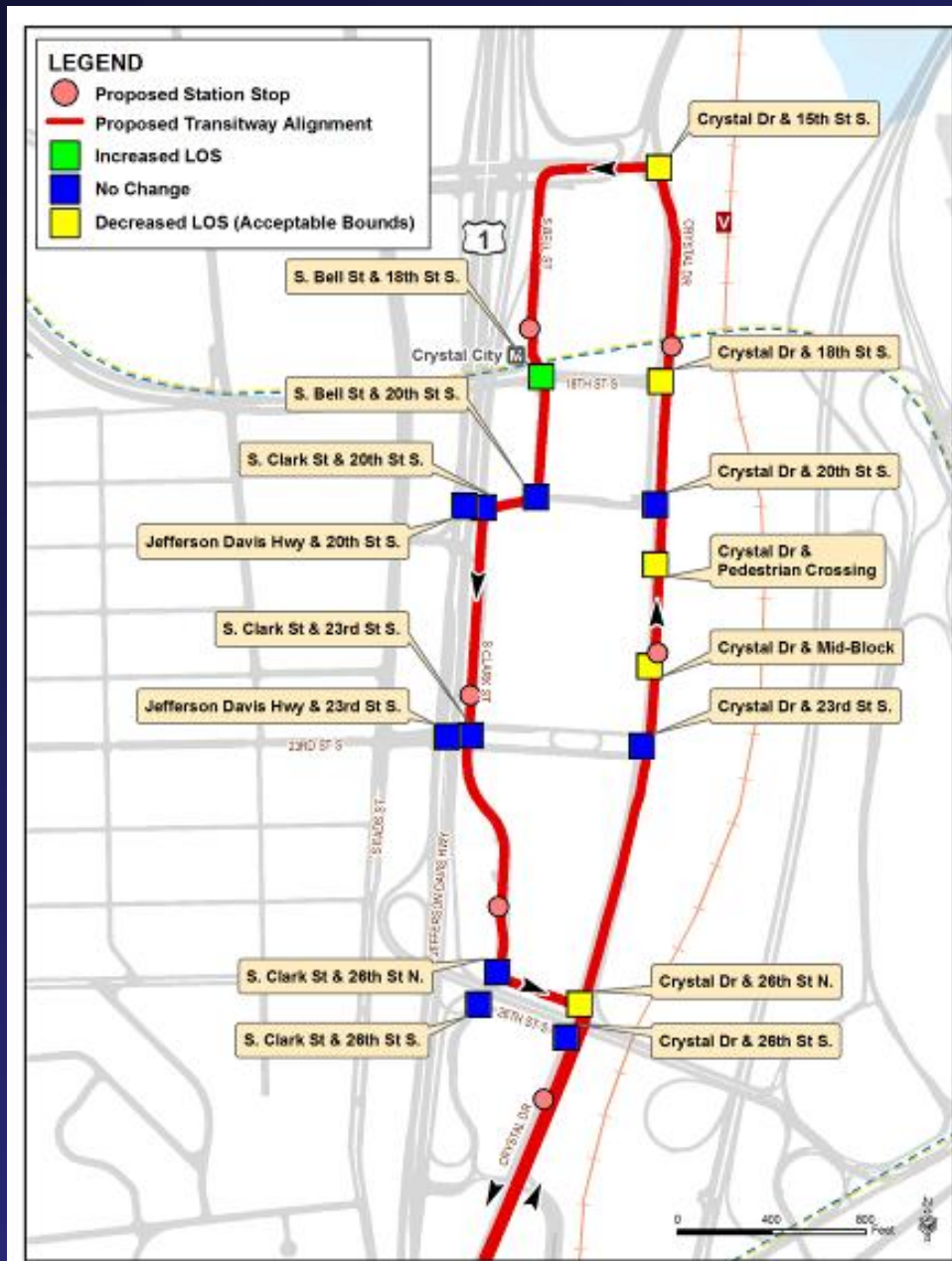
Legend

- Proposed Station Stop Location
- Proposed Alignment



Context Rendering (Crystal Drive near 23rd Street South)

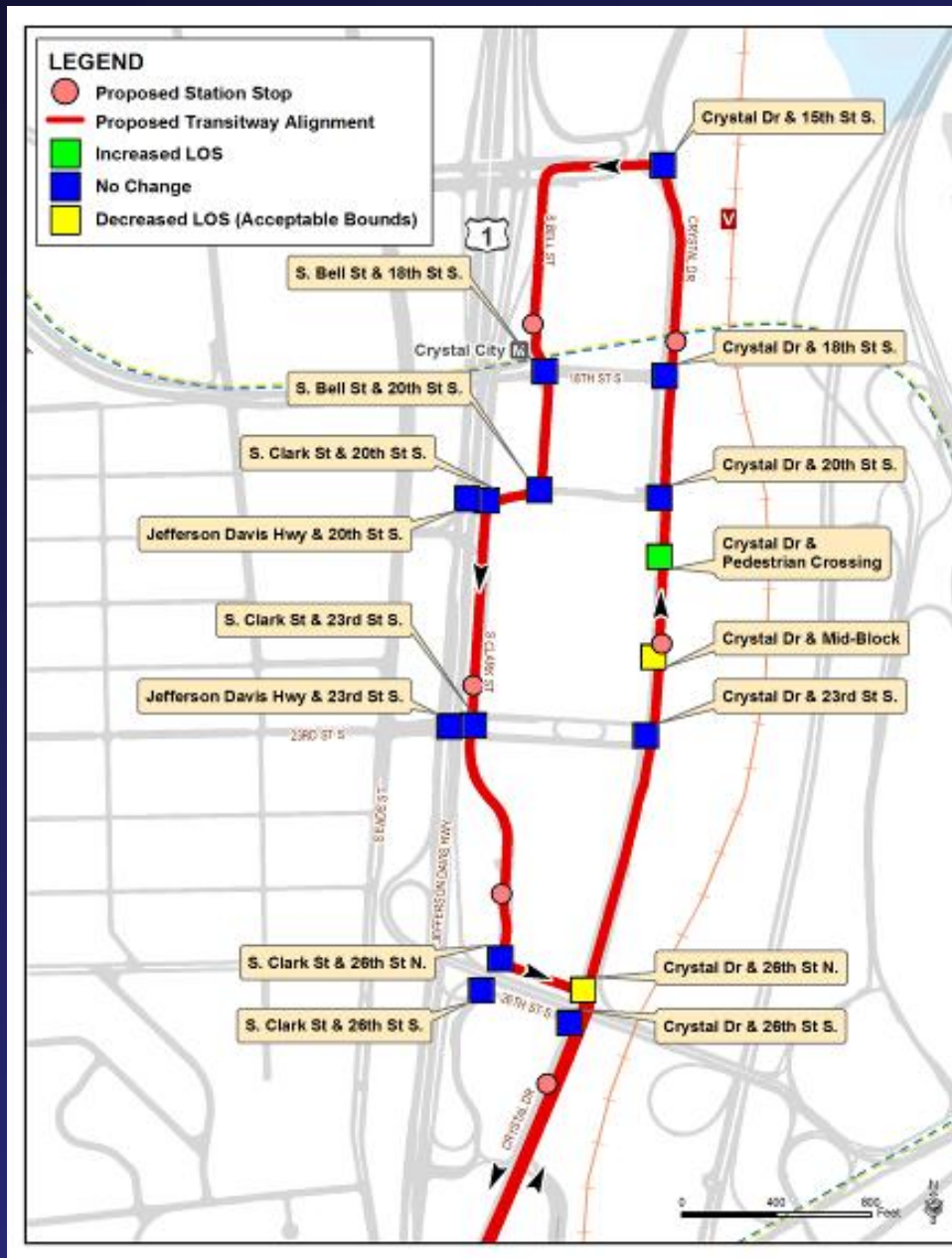
Traffic Assessment (2015)



2015 Change in Level of Service No Build vs. Build

Intersection	AM	PM
15 th St/Crystal Dr	C	B to C
18 th St/ Bell St	C	C to B
18 th St/ Crystal Dr	B	A to B
Pedestrian Crossing Crystal Dr-South of 20 th St	A to B	B
Midblock Crossing Crystal Dr-North of 23 rd St	A to B	A
23 rd St/Crystal Dr	C to D	C to D
26 th St NL/Crystal DR	B to C	B to C

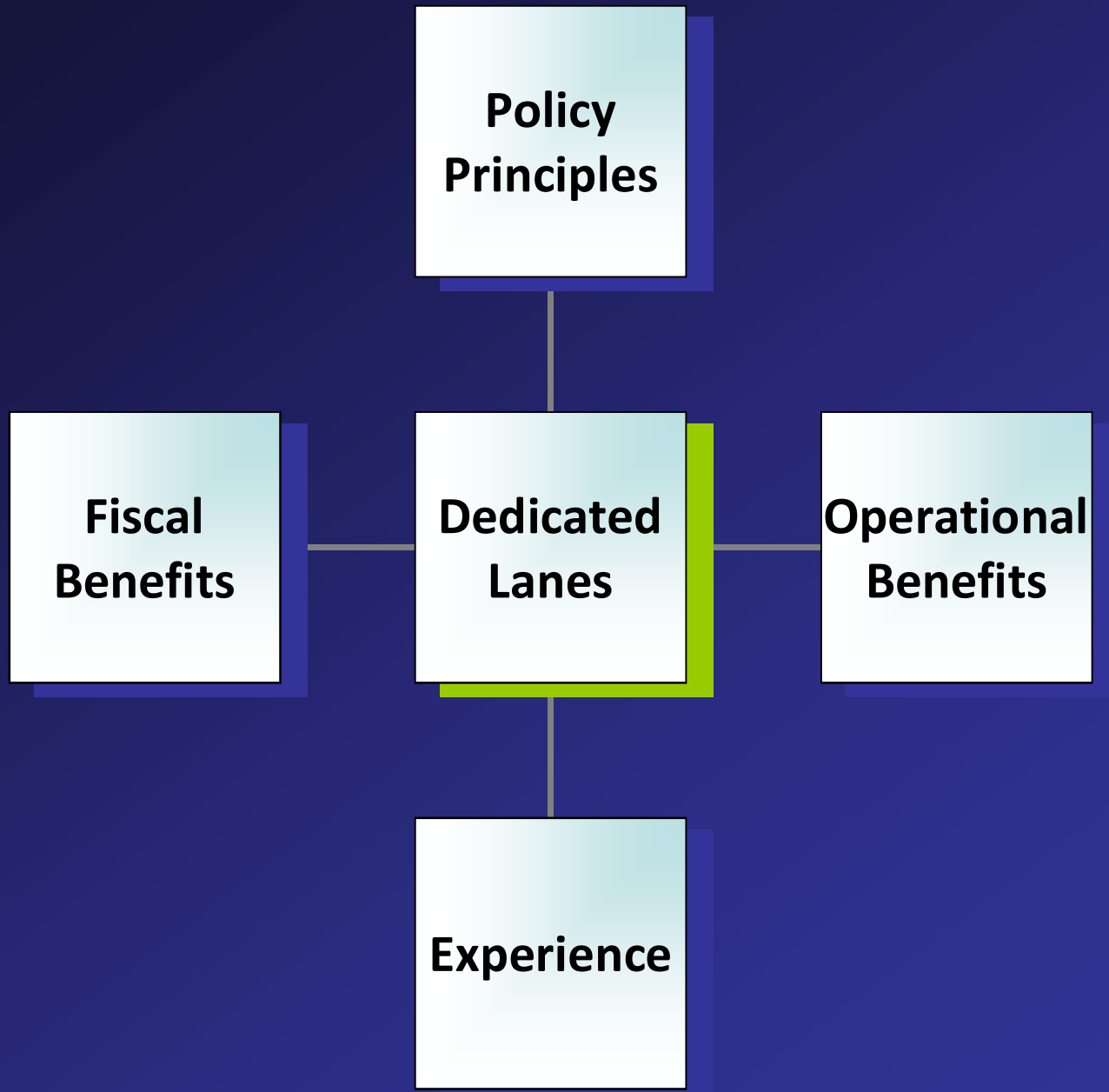
Traffic Assessment (2030)



2030 Change in Level of Service No Build vs. Build

Intersection	AM	PM
Pedestrian Crossing Crystal Dr-South of 20 th St	B to A	C
Midblock Crossing Crystal Dr-North of 23 rd St	A	A to B
26 th St NL/Crystal Dr	B to D	C

Why dedicated lanes?



Why dedicated lanes?

- Policy Principles
 - Conforming to draft Crystal City Sector Plan
 - Showing leadership in advancing transit investments
 - Supporting the primacy of transit
 - Enhancing livability and vibrancy of the street
 - Preparing the way for streetcar
 - Building on policies/experience at local, regional, federal level

Why dedicated lanes?

- Operational Benefits
 - Managing expectations of roadway users
 - Leading to smoother operations for both transit and general traffic (e.g. – fewer lane changes)
 - Improving transit reliability and travel time
 - Left turn lane helps to improve access while maintaining through movement
 - Coordinating with Crystal Drive two-way initiative

Why dedicated lanes?

- Fiscal Benefits
 - Offering substantial transit user benefit for modest investment
 - Preserving ability to use federal New Starts funding
 - Reducing transit operating cost through operational efficiency
 - Fiscal benefits to adjacent development through transit investment

Why dedicated lanes?

- Experience of other jurisdictions
 - Ottawa Busway
 - New York Select Bus Service
 - Boston Silver Line
 - Cleveland Euclid Corridor

Next Steps

- Transitway project
 - Submit DCE Update to FTA
 - FTA reviews and approves
 - Preliminary engineering and final design
- Streetcar project
 - Initiate NEPA/PE & New Starts/Small Starts

Keeping Track

- www.ccpytransit.com
- Matthew Huston, P.E.
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Appendix

Ottawa Busway

- Single bus lane each way, 6 a.m. to 6 p.m.
- Congestion on bus lanes is an issue due to volume
- Proposal to replace with light rail in tunnel



New York Select Bus Service

- Dedicated lanes on Fordham Rd/Pelham Pkwy in Bronx
- Signal priority and off-vehicle fare collection
- 19% reduction in travel time due to project



Boston Silver Line

- Dedicated lanes on Washington St
- Signal priority planned but not implemented at time of study
- 13-23% reduction in travel time due to project



Photo by US DOT

Cleveland Euclid Corridor

- Dedicated lanes on Euclid Avenue
- Problems implementing TSP – equipment programming
- 6% travel time savings



Traffic analysis results summary

Intersection	Exist AM Peak Hour	Exist PM Peak Hour	2015 AM Peak Hour		2015 PM Peak Hour		2030 AM Peak Hour		2030 PM Peak Hour	
			No Build	Build	No Build	Build	No Build	Build	No Build	Build
15 th St/ Crystal Dr	C	B	C	C	B	C	D	D	C	C
18 th St/ Bell St	C	C	C	C	C	B	C	C	C	C
18 th St/ Crystal Dr ⁴	A	A	B	B	A	B	C	C	B	B
20 th St/ Jeff Davis Hwy	E	D	F	F	E	E	F	F	F	F
20 th St/ Clark St	C	D	C	C	D	D	C	C	E	E
20 th / Bell ¹	B	C	B	B	C	C	B	B	C	C
20 th St/ Crystal Dr ⁴	A	A	A	A	B	B	B	B	C	C
Pedestrian crossing Crystal Dr- South of 20 th St ^{2,4}	A	B	A	B	B	B	B	A	C	C
Midblock Crossing Crystal Dr- North of 23 rd St ⁴	A	A	A	B	A	A	A	A	A	B
23 rd St/ Jefferson Davis Hwy	E	F	F	F	F	F	F	F	F	F
23 rd St/ Clark St	C	D	C	C	D	D	C	C	D	D
23 rd St/ Crystal Dr ³	D	F	C	D	C	D	D	D	D	D
26 th St NL/ Clark St ¹	E	D	C	C	B	B	C	C	C	C
26 th St SL/ Clark St ¹	B	C	B	B	B	B	B	B	C	C
26 th St NL/ Crystal Dr	B	B	B	C	B	C	B	D	C	C
26 th St SL/ Crystal Dr ¹	C	D	D	D	D	D	E	E	F	F