

WEST END TRANSITWAY

Policy Advisory Group



December 18, 2014

ALEXANDRIA ACCELERATED

MEETING AGENDA

- 1 Project Schedule
- 2 Project Progress
- 3 Build Alternative Refinement and Concept Design
- 4 Update on Preliminary Evaluation of Alternatives
- 5 Discussion and Next Steps



1

PROJECT SCHEDULE

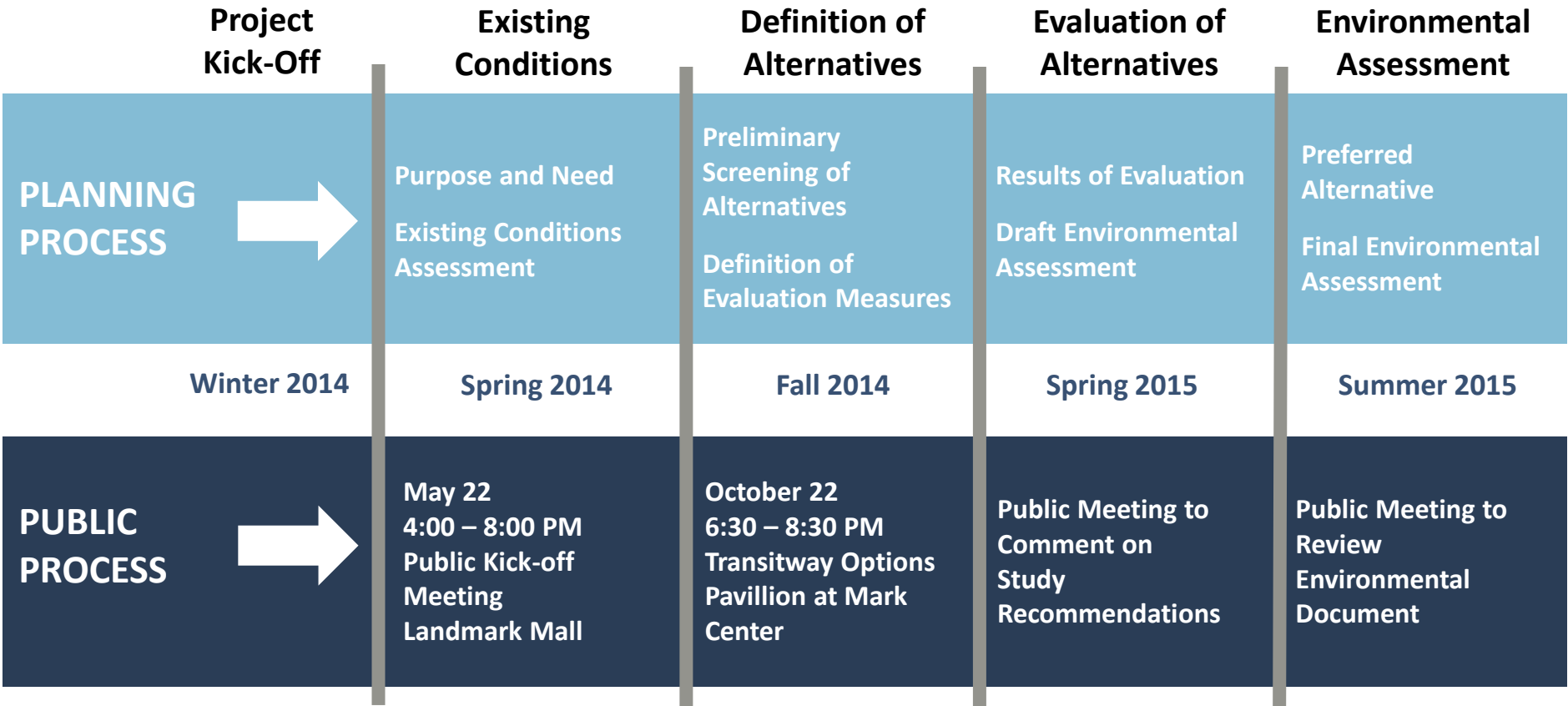


Technical Schedule

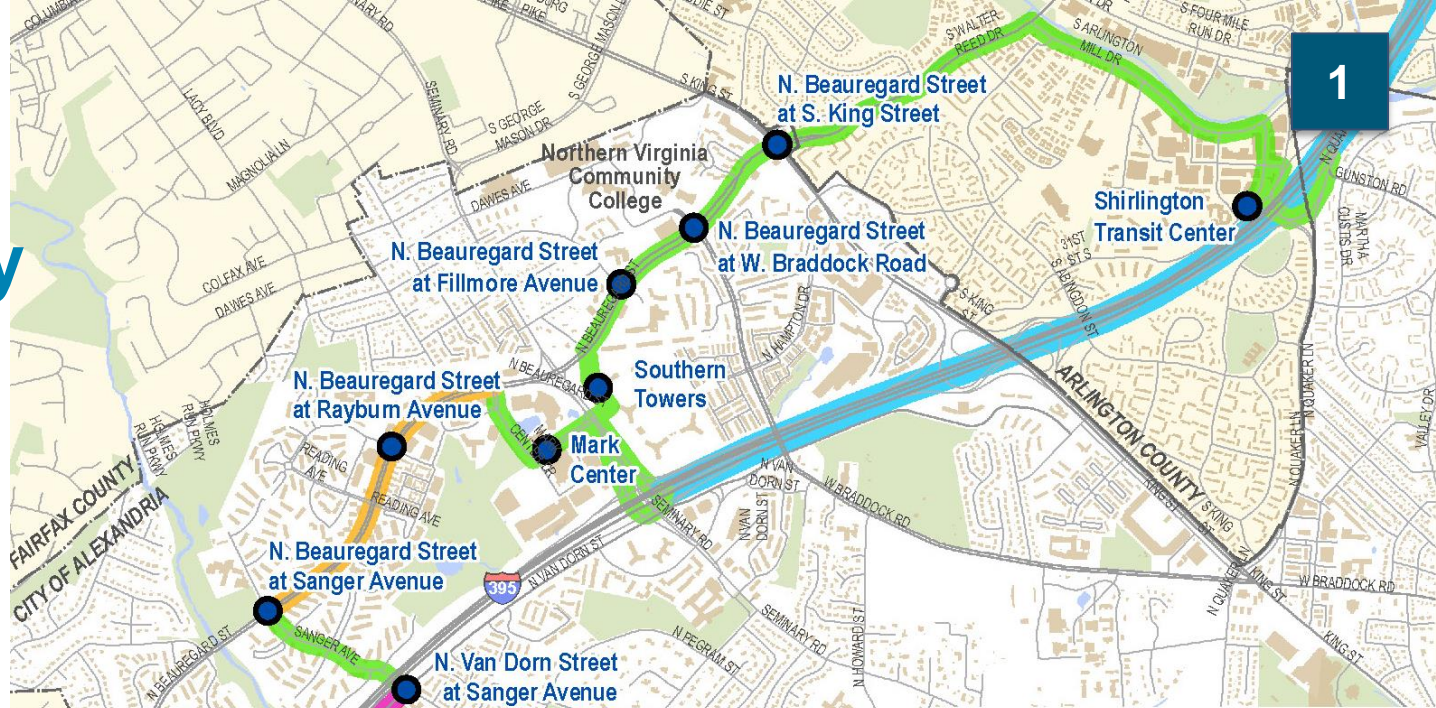
	2014										2015										
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep		
ALTERNATIVES DEVELOPMENT	★ Purpose and Need			★ Design Options (Screen 1)		★ Detailed Alternatives (Screen 2)					★ AA Report									★ Locally Preferred Alternative	
ENVIRONMENTAL DOCUMENTATION				★ Existing Conditions				★ Environmental Screening					★ Administrative Draft EA		★ Circulation Draft EA					★ ✓ FTA Approved EA ✓ Draft FONSI ✓ FONSI	
CONCEPTUAL ENGINEERING						★ Surveying and Mapping		★ Conceptual Engineering 1					★ Conceptual Engineering FINAL								
FTA COORDINATION											★ Request to Enter Project Development										
SECTION 106 PROCESS							★ Site Visit					★ Evaluation of Effects – 1 Meeting		Optional Letter of Commitment/MOA/PA							
MEETINGS																					
● Public Meetings			1					2							3					4	
● Project Advisory Group					1		2	3		4					5						
● ITAC			1				2								3						
● Transportation Commission			1		2			3				4							5		
● Planning Commission																			1		
● Environmental Policy Commission																			1		
● City Council															1				2 on 2 Meetings		3
● Budget and Fiscal Affairs													1								



AA and EA | Timeline



Build Alternative Runningway



1

LEGEND

West End Transitway

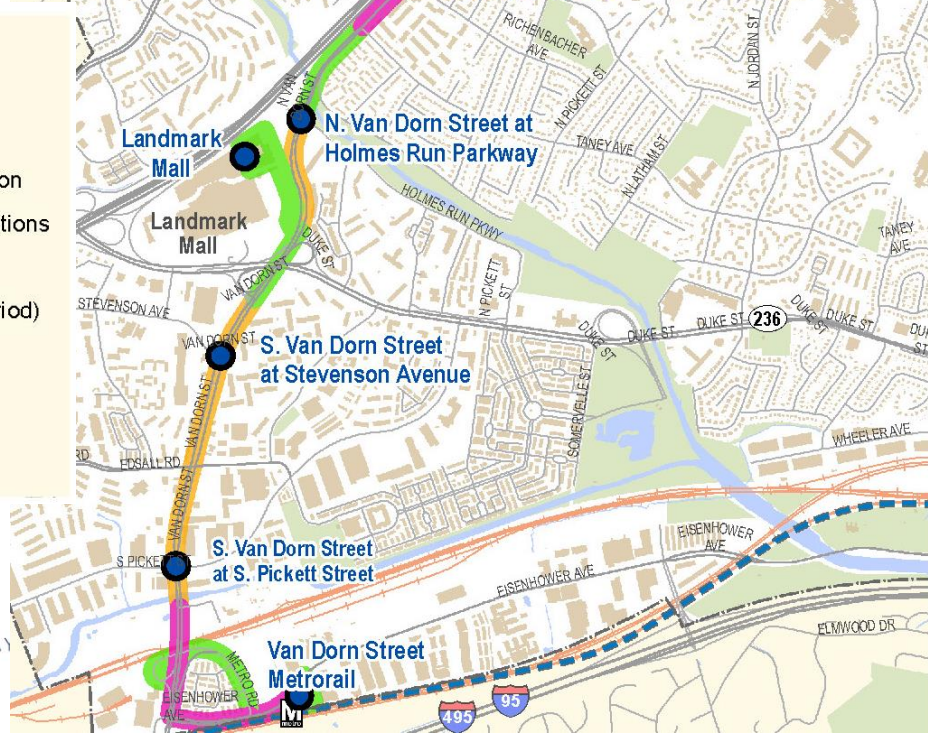
- Planned Station
- Dedicated Transit Lane in One Direction
- Dedicated Transit Lanes in Both Directions
- Transit in Mixed Traffic
- Transit in I-395 HOV Lanes (Peak Period)
- Metrorail Station
- Metrorail Blue Line
- Metrorail Yellow Line



LEGEND

West End Transitway

- Planned Station
- Dedicated Transit Lane in One Direction
- Dedicated Transit Lanes in Both Directions
- Transit in Mixed Traffic

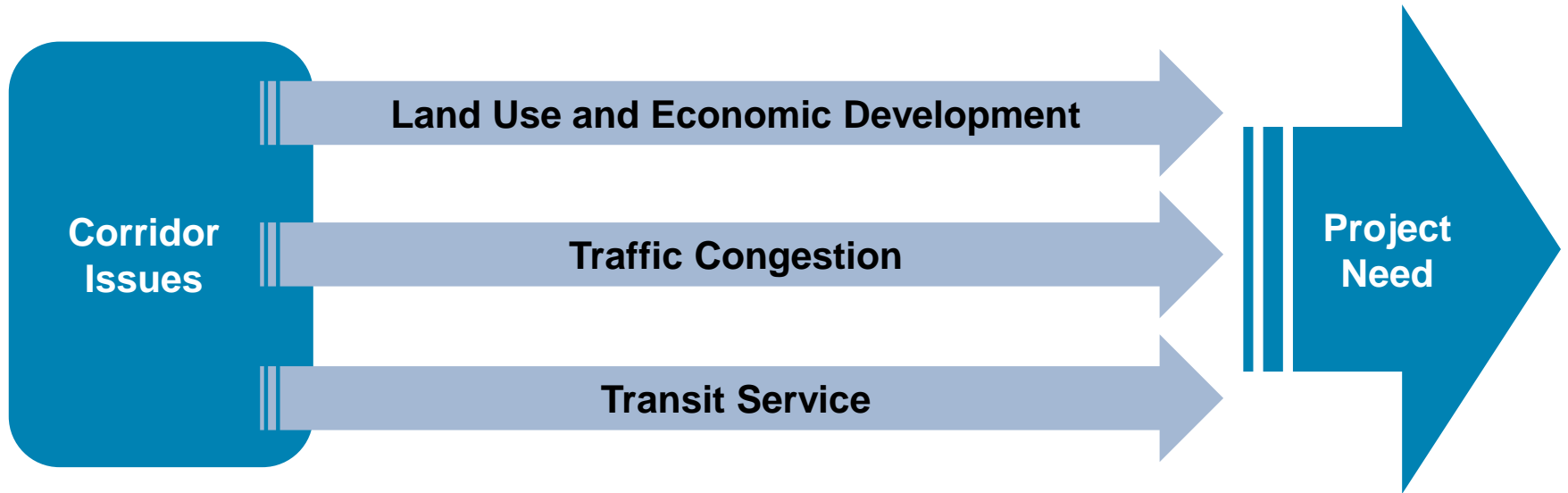


2

PROJECT PROGRESS



PROJECT NEED



AA and EA | PROJECT OUTCOMES

- Policy Decision
 - Locally Preferred Alternative selected by City Council
 - Transit Technology
 - Alignment
 - Configuration
 - Project Cost Estimate
- Project Finance Strategy
- Approved Environmental Document
 - Finding by FTA after review by federal and state agencies



FTA Comments on Environmental Scan

- Noise and Vibration: Conduct typical analysis per FTA 2006 Noise and Vibration Guidance
- Air Quality: The Build Alternative would not rise to the level of a “project of air quality concern”
- Topics for EA focus:
 - Threatened and endangered species: consultation with USFWS for the two ESA species near the Pentagon
 - Section 106 (Cultural Resources): coordination with VDHR
 - Section 4(f): no designated properties in the area
 - Environmental Justice: document benefits to corridor residents

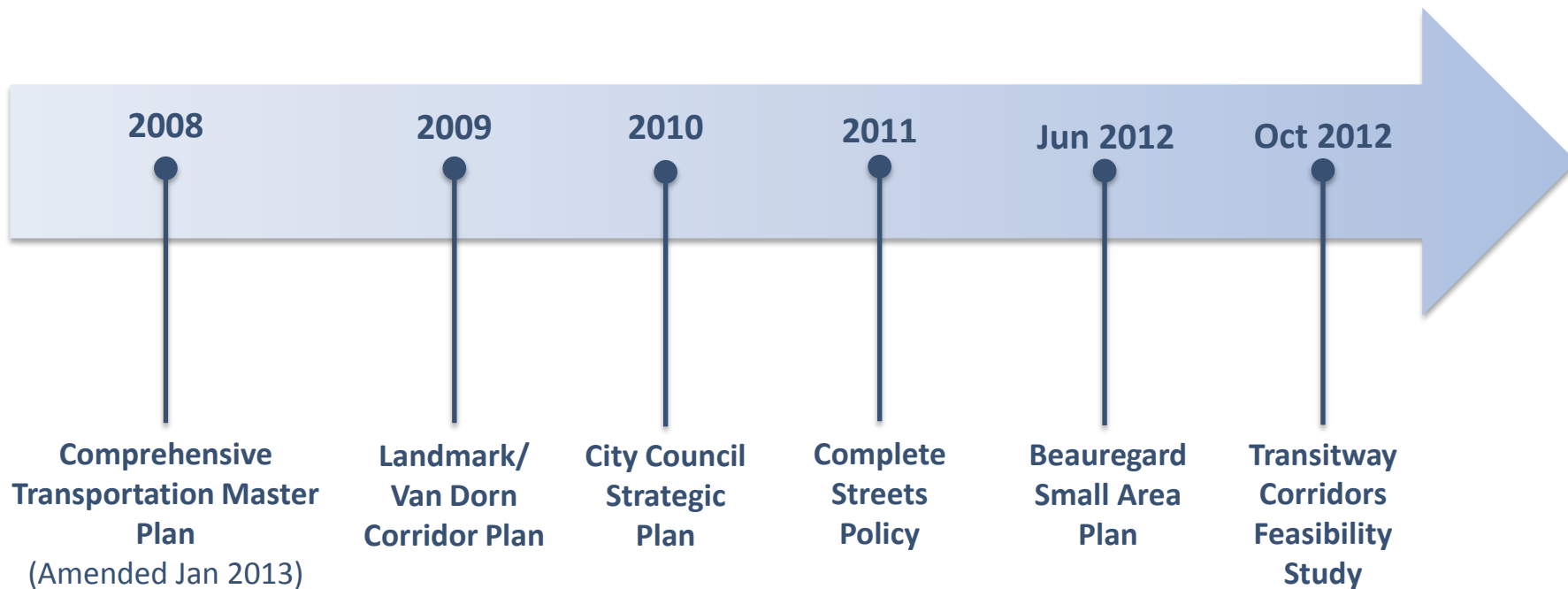


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BUILD ALTERNATIVE REFINEMENT AND CONCEPT DESIGN



Policy Precedent



Feedback Received

- Improve transit travel time with all-day, frequent service
- Provide bike accommodation that serves people of all ages and abilities
- Minimize ROW impacts to homes and businesses
- Minimize parking impacts
- Concerns about impacts to car traffic
- Concerns about City's ability to spend on this transit project



Refinements to Build | Key Considerations

- Short-term phased implementation
- Reasonable cost and property impacts
- Support the long-term vision

NO BUILD

- Transit services in shared lanes
- Includes already planned and programmed improvements

TSM

- Frequent, continuous transit service along Van Dorn and Beauregard Streets
- No major capital investment in new infrastructure for dedicated transit lanes

BUILD

- Frequent, continuous transit service along Van Dorn and Beauregard Streets
- Dedicated transit lanes along **significant** portions of corridor
- **Efficiencies to minimize R-O-W impacts and impacts to environmental features**

MATURE CORRIDOR

- Frequent, continuous transit service along Van Dorn and Beauregard Streets
- Dedicated transit lanes along **entire** corridor
- **Landmark Van Dorn Plan recommends a 140'-150' Van Dorn Street Transit Boulevard**

AA STUDY ALTERNATIVES

LONG TERM VISION

CAPITAL INVESTMENT



PRIORITIES DRIVING DESIGN DECISIONS

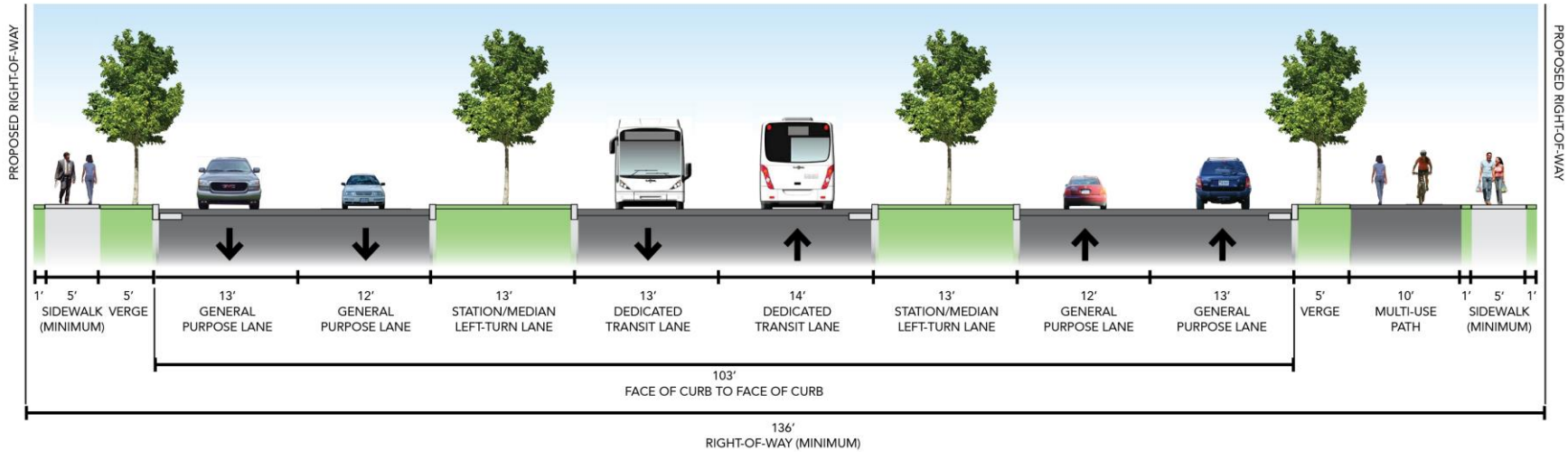
South Van Dorn Street

1. Establish the permanent transit runningway
2. Maintain general purpose traffic lanes
3. Maintain continuous sidewalk
4. Minimize property and parking impacts
5. Where roadway reconstruction occurs:
 - a. Construct a multi-use path
 - b. Provide at least one landscape median
 - c. Construct streetscape improvements where right-of-way is available

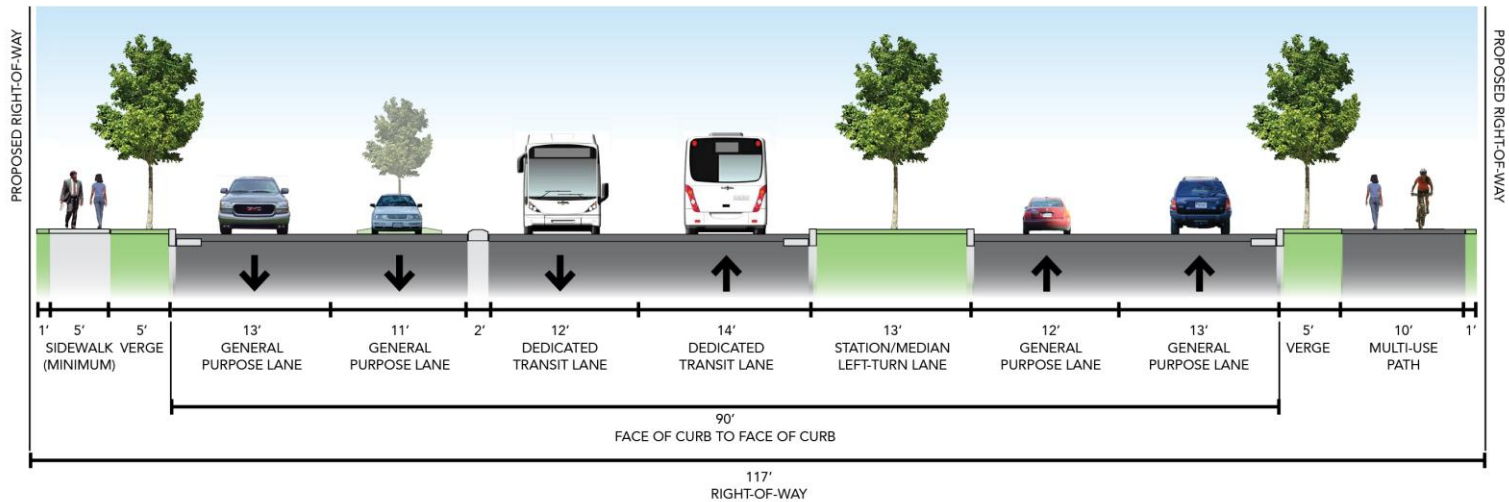


South Van Dorn Street – Cross Section

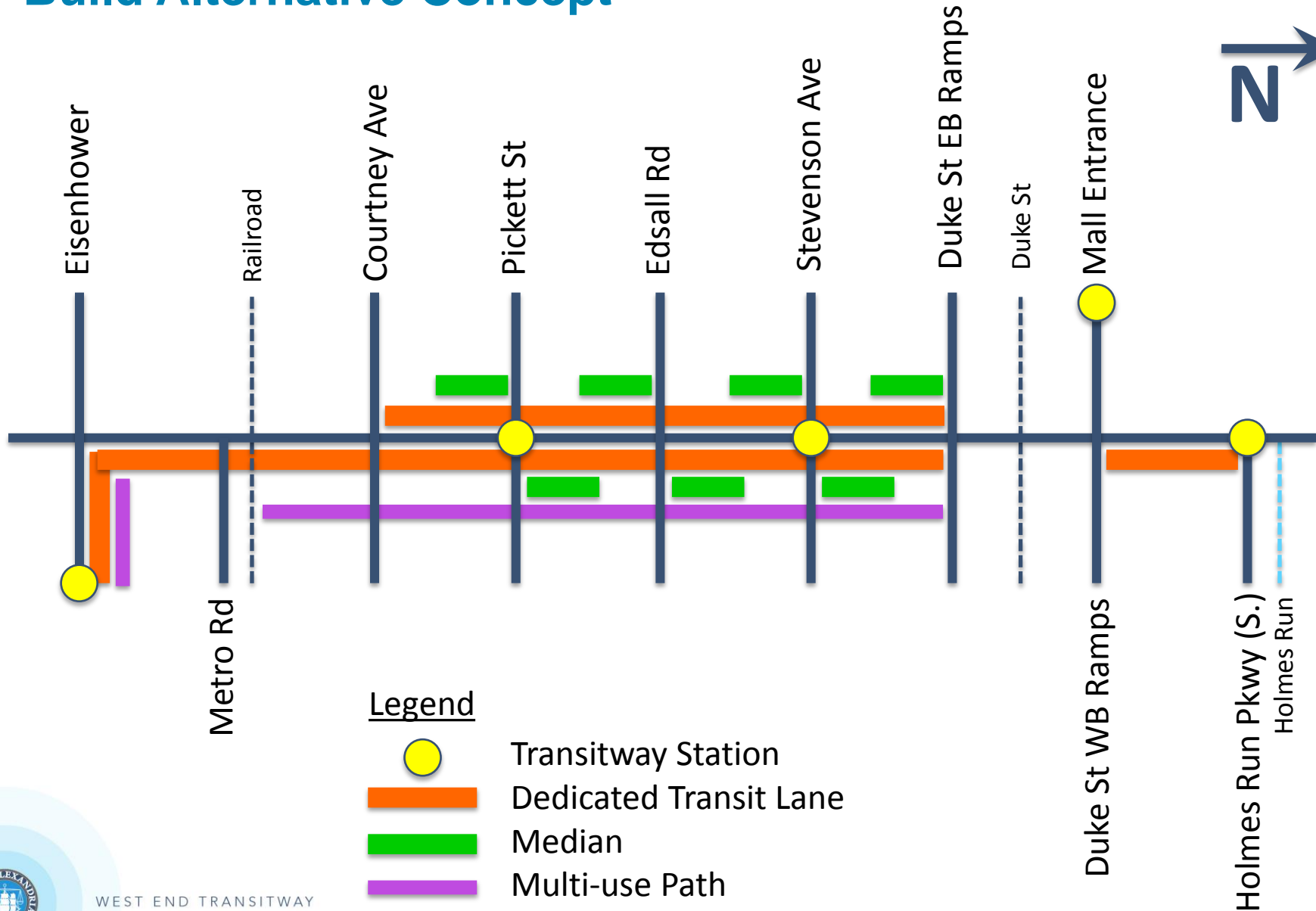
Long Term Vision



Build Alternative



South Van Dorn Street Build Alternative Concept



South Van Dorn Street Preliminary Property Impacts: Build Alternative Concept

Courtney Ave

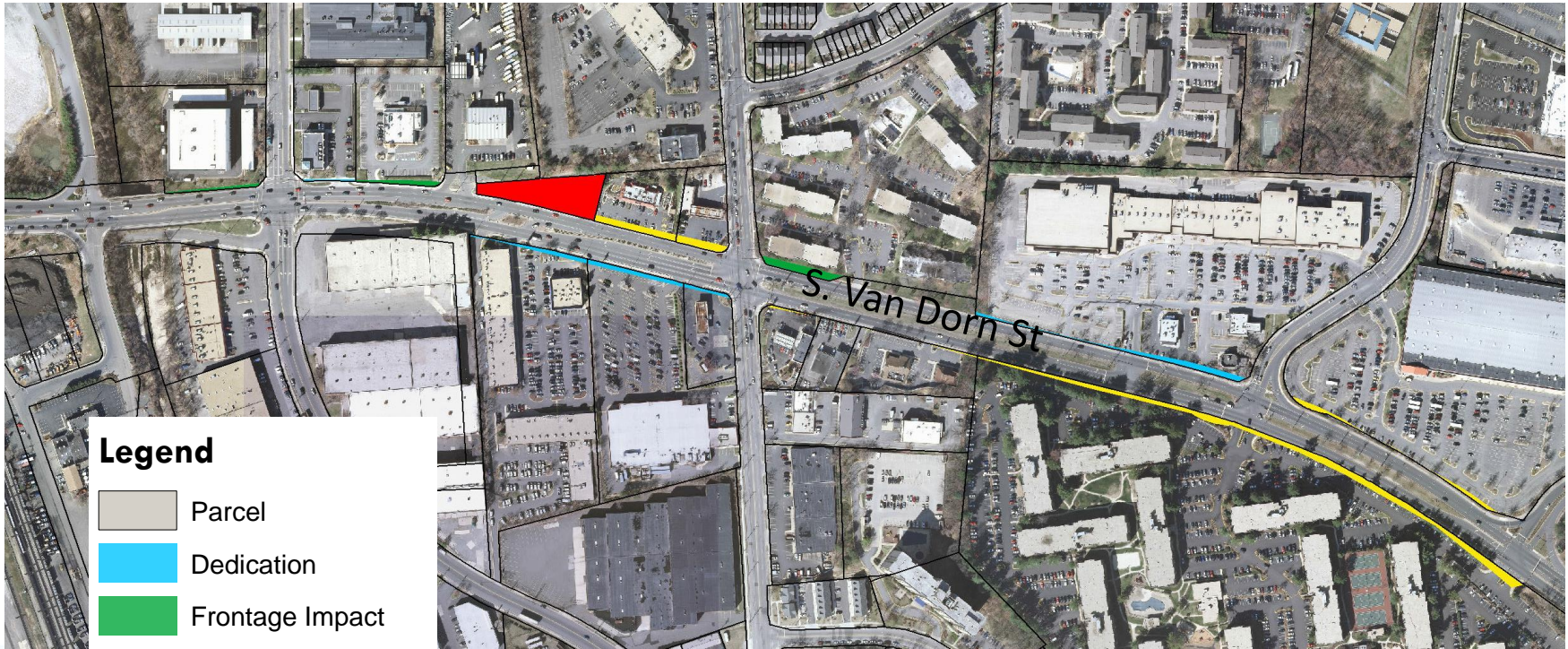
Pickett St

Edsall Rd

Stevenson Ave

Duke St

EB Ramps



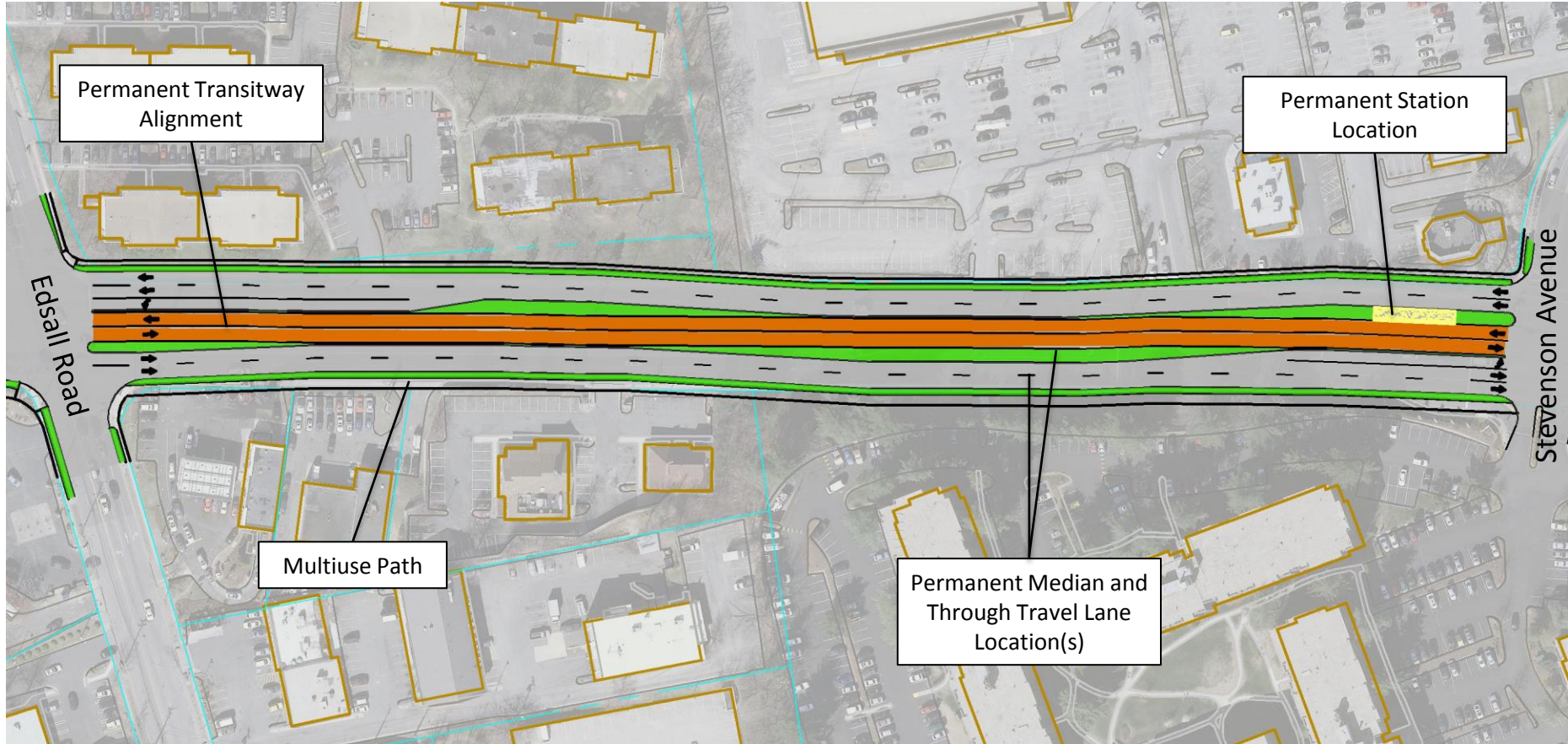
Legend

- Parcel
- Dedication
- Frontage Impact
- Parking Impact
- Potential Acquisition

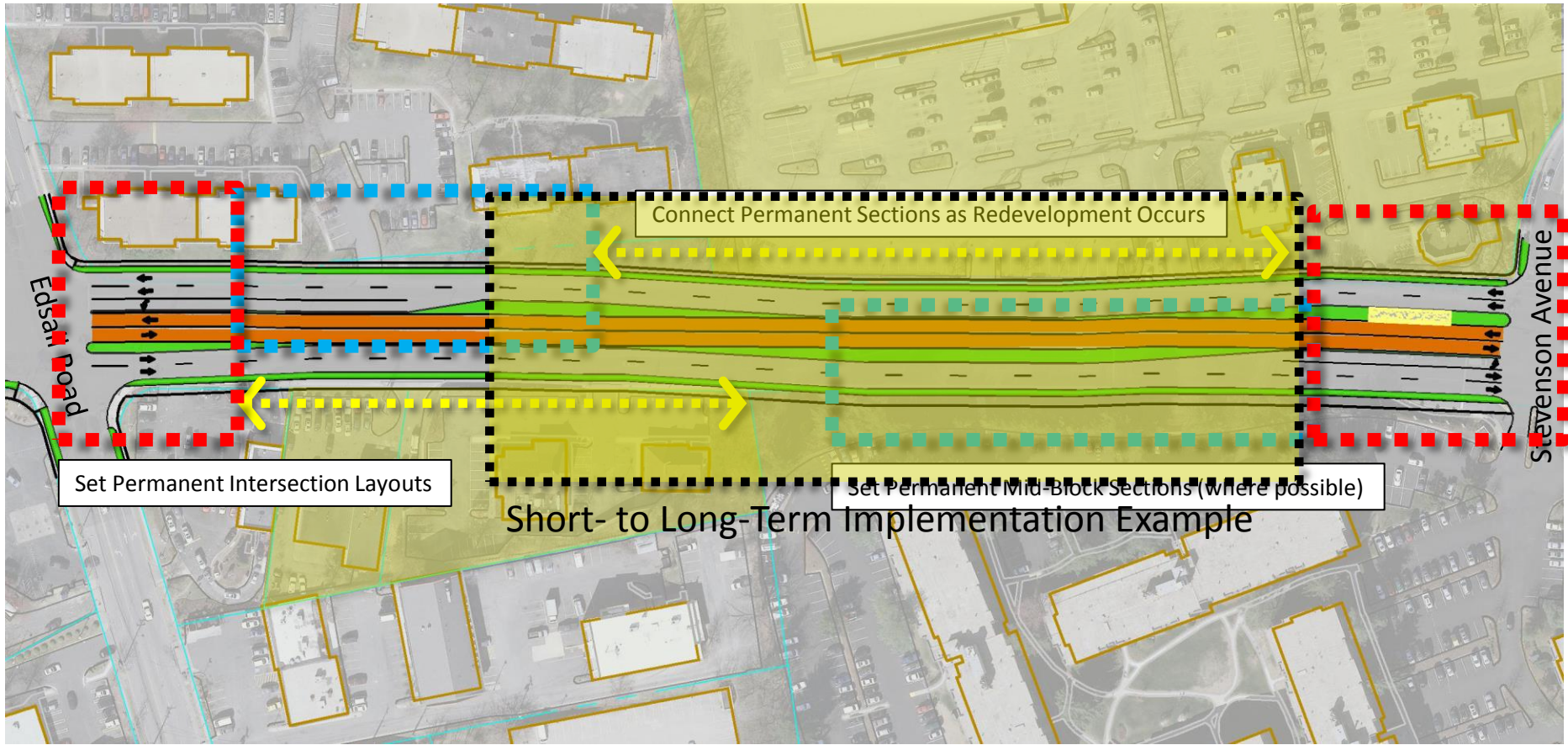
WEST END TRANSITWAY



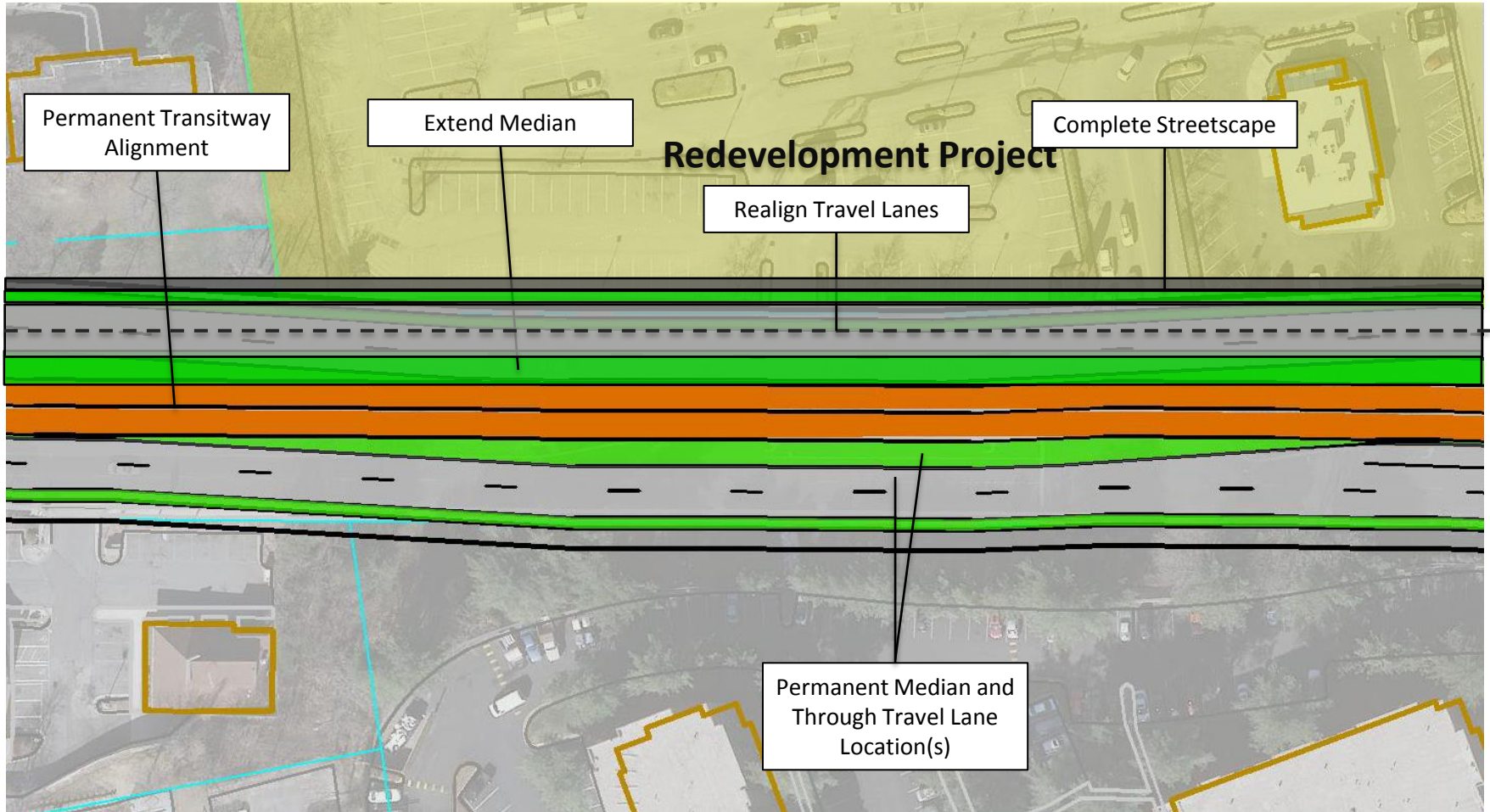
South Van Dorn Build Alternative Implementation



South Van Dorn Street – Build to Long-Term Schematic



Transition – Build Alternative to Long Term Vision



VAN DORN STREET AT SANGER AVE

Priorities Driving Design Decisions

1. Provide a northbound dedicated transit lane - Only the northbound direction needs dedicated transit based on observed traffic pattern and analysis
2. Minimize parking impacts
3. Maintain continuous sidewalk
4. Maintain general purpose through lanes
5. Construct a multi-use path



VAN DORN STREET AT SANGER AVE

Design Options

Option 1



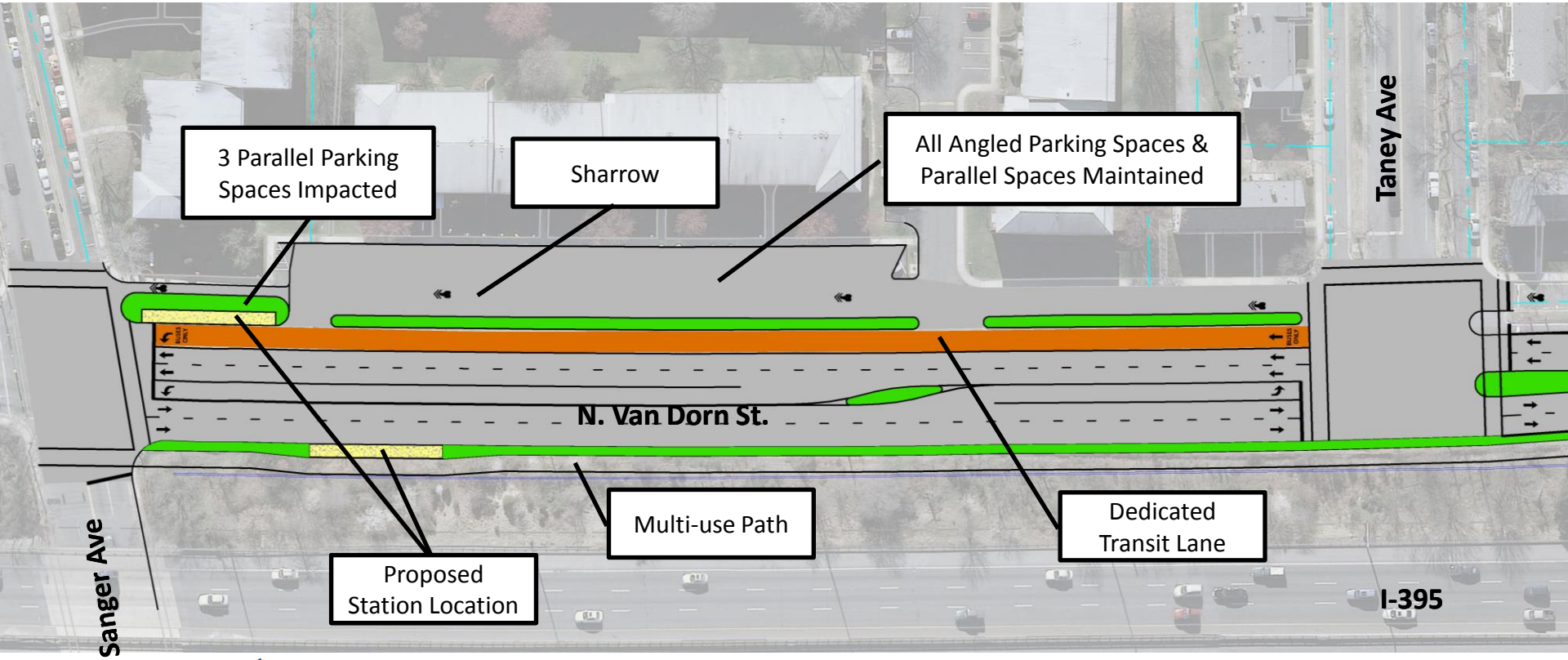
Option 2



Element	Option 1	Option 2
Transit accommodation	<ul style="list-style-type: none"> Northbound dedicated lane Southbound in mixed flow 	
Bicycle accommodation	<ul style="list-style-type: none"> Southbound bike lane Northbound bike lane 	<ul style="list-style-type: none"> Southbound bike lane or multiuse path Northbound sharrow in access road
Pedestrian accommodation	<ul style="list-style-type: none"> Sidewalk on both sides 	<ul style="list-style-type: none"> Sidewalk on one or both sides and multiuse path
Level of roadway reconstruction required	<ul style="list-style-type: none"> Significant, reconstruct access road and parking and road widening 	<ul style="list-style-type: none"> Minimal, widening toward I-395 mostly
Property impacts	<ul style="list-style-type: none"> Considerable effect on parking/circulation on apartment property 	<ul style="list-style-type: none"> Minimal, minor changes required at Sanger Avenue
Parking impacts	<ul style="list-style-type: none"> Major impact, 50% space loss (30 spaces) 	<ul style="list-style-type: none"> Minor impact, 3 to 4 space loss

VAN DORN STREET AT SANGER AVENUE

Project Recommended Design Concept



Sanger Ave

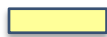


Taney Ave

N. Van Dorn St.

I-395



Legend

-  Transitway Station
-  Dedicated Transit Lane
-  Median/Landscape Strip

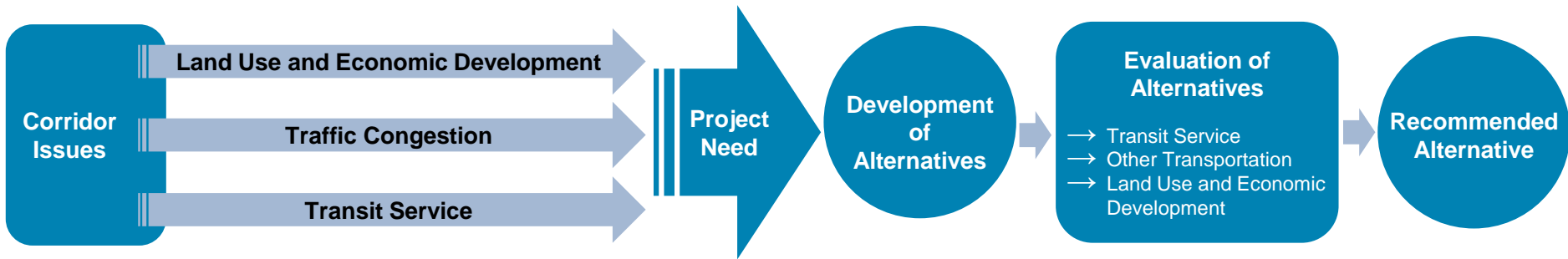


4

**UPDATE ON PRELIMINARY
EVALUATION OF ALTERNATIVES**



Evaluation of Alternatives



PRELIMINARY TRANSIT PERFORMANCE

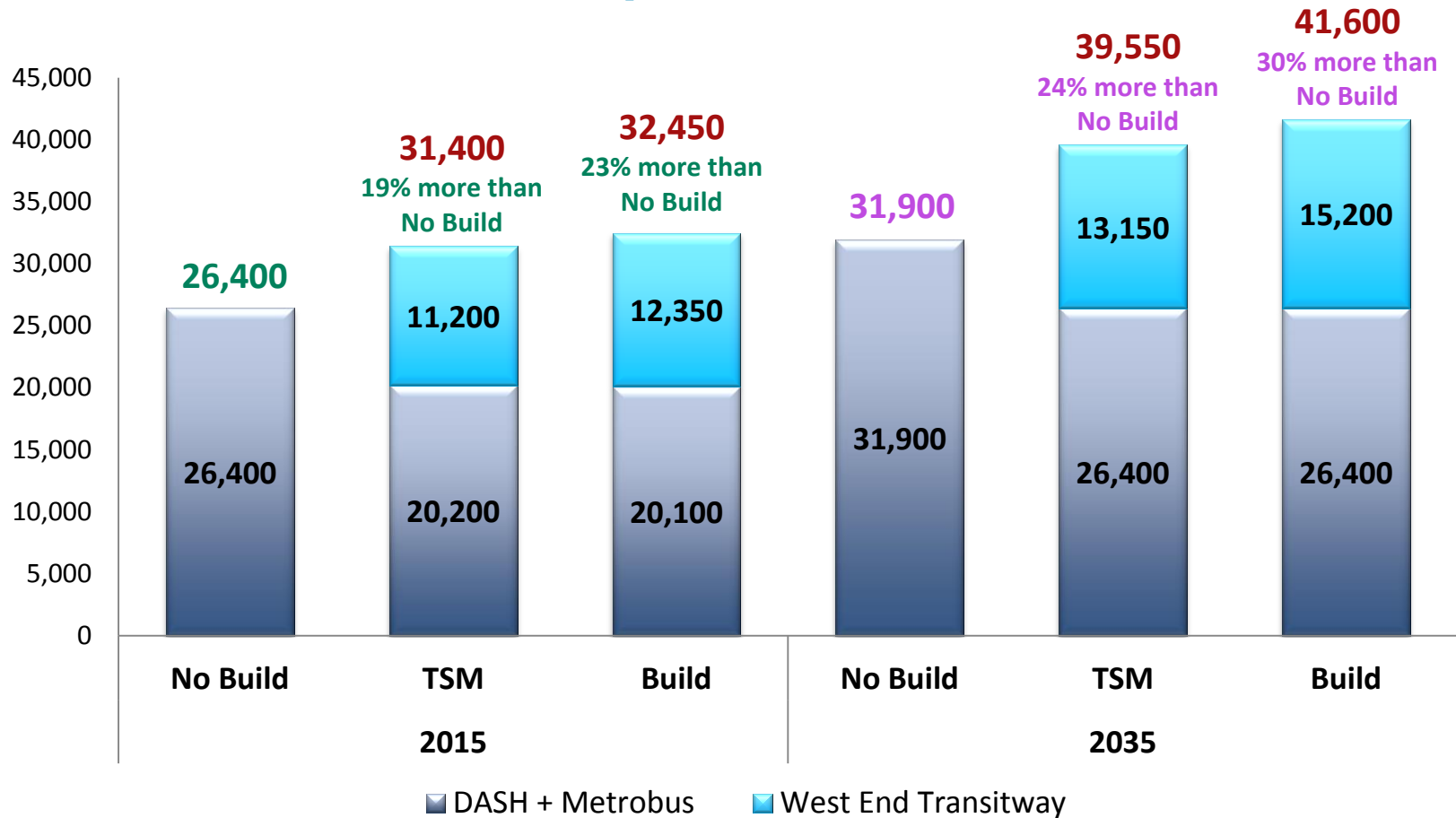
		2015			2035		
Measure		No Build	TSM	Build	No Build	TSM	Build
Ridership	DASH + Metrobus	26,400	20,200	20,100	31,900	26,400	26,400
	West End Transitway	--	9,700	11,600	--	12,600	15,200
	Total Corridor	26,400	29,900	31,700	31,900	39,000	41,600
Transit Operations	Average Weekday Travel Time – Van Dorn to Pentagon*	51 minutes (1 transfer)	22 minutes (no transfers)	19 minutes (no transfers)	54 minutes (1 transfer)	24 minutes (no transfers)	19 minutes (no transfers)
	Reliability	Low	Improved	High	Low	Improved	High

**AM Average of All WET Routes for TSM and Build; 2015 and 2035 No Build times based on bus travel times between Van Dorn Metro Station and Pentagon*









PRELIMINARY TRANSIT PERFORMANCE

2015 and 2035 Ridership



PRELIMINARY TRANSIT PERFORMANCE

2015 and 2035 Transit Travel Time

	2015			2035		
Measure	No Build	TSM	Build	No Build	TSM	Build
Average Weekday Travel Time – Van Dorn to Pentagon*	 <p>51 minutes (1 transfer)</p>	 <p>22 minutes (no transfers)</p>	 <p>19 minutes (no transfers)</p>	 <p>54 minutes (1 transfer)</p>	 <p>24 minutes (no transfers)</p>	 <p>19 minutes (no transfers)</p>

**AM Average of All WET Routes for TSM and Build; 2015 and 2035 No Build times based on bus travel times between Van Dorn Metro Station and Pentagon*



PRELIMINARY TRANSPORTATION PERFORMANCE (OTHER MODES)

		2015			2035		
Measure		No Build	TSM	Build	No Build	TSM	Build
Traffic Operations	Average Vehicular Travel Time*	16 minutes	16 minutes	17 minutes	16 minutes	17 minutes	18 minutes
Bicycle and Pedestrian	New/Improved Sidewalks	None	None	None	None	Enhanced pedestrian crossings at intersections	Shared use bicycle/ pedestrian path, widened sidewalks, and streetscape improvements
	New/Improved Bicycle Facilities					None	
Capacity	Corridor person throughput **	2,350 persons per peak hour	2,610 persons per peak hour	2,840 persons per peak hour	2,610 persons per peak hour	2,720 persons per peak hour	2,940 persons per peak hour

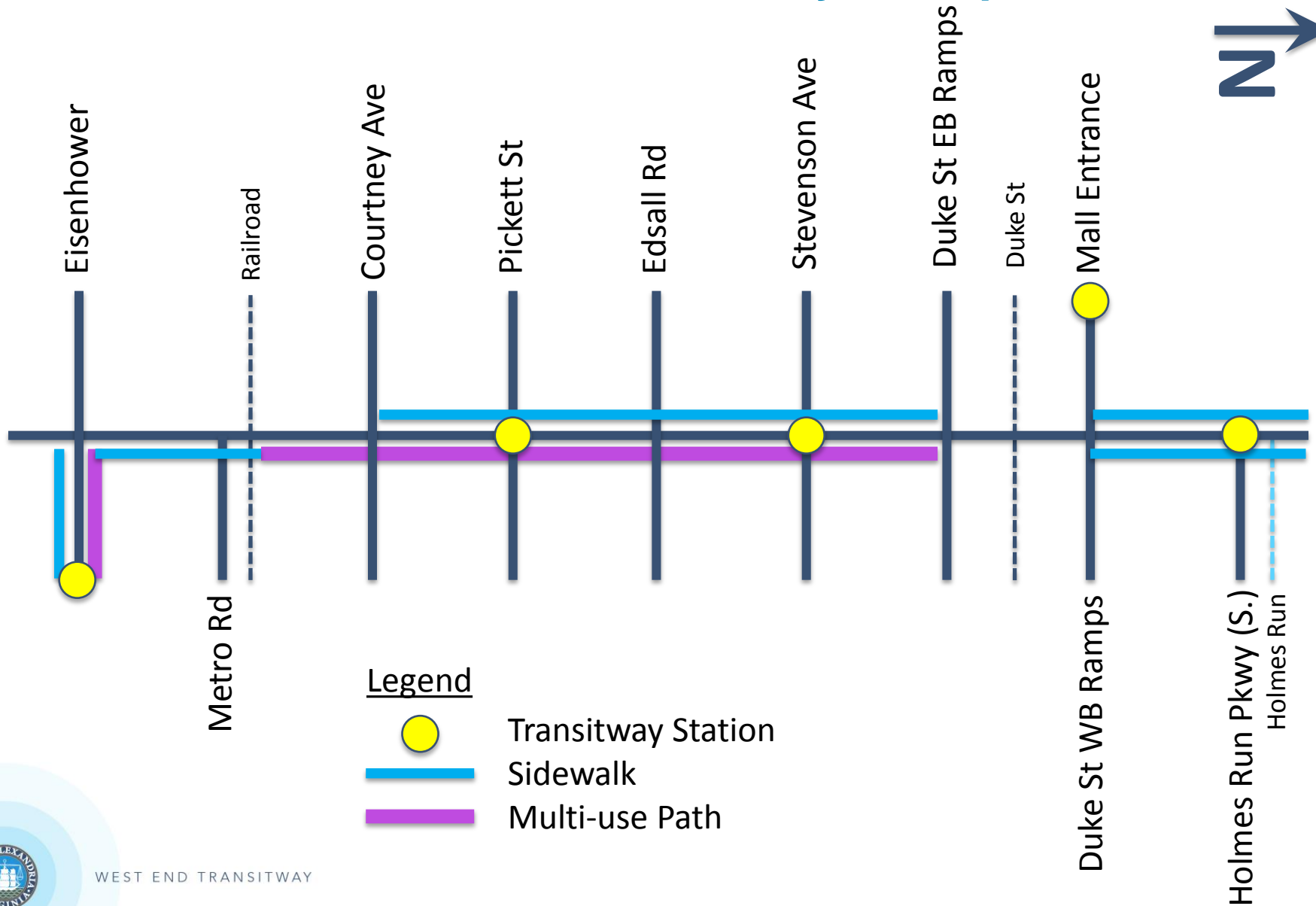
* AM peak hour northbound Van Dorn to Shirlington

** On Beauregard between Sanger and Mark Center



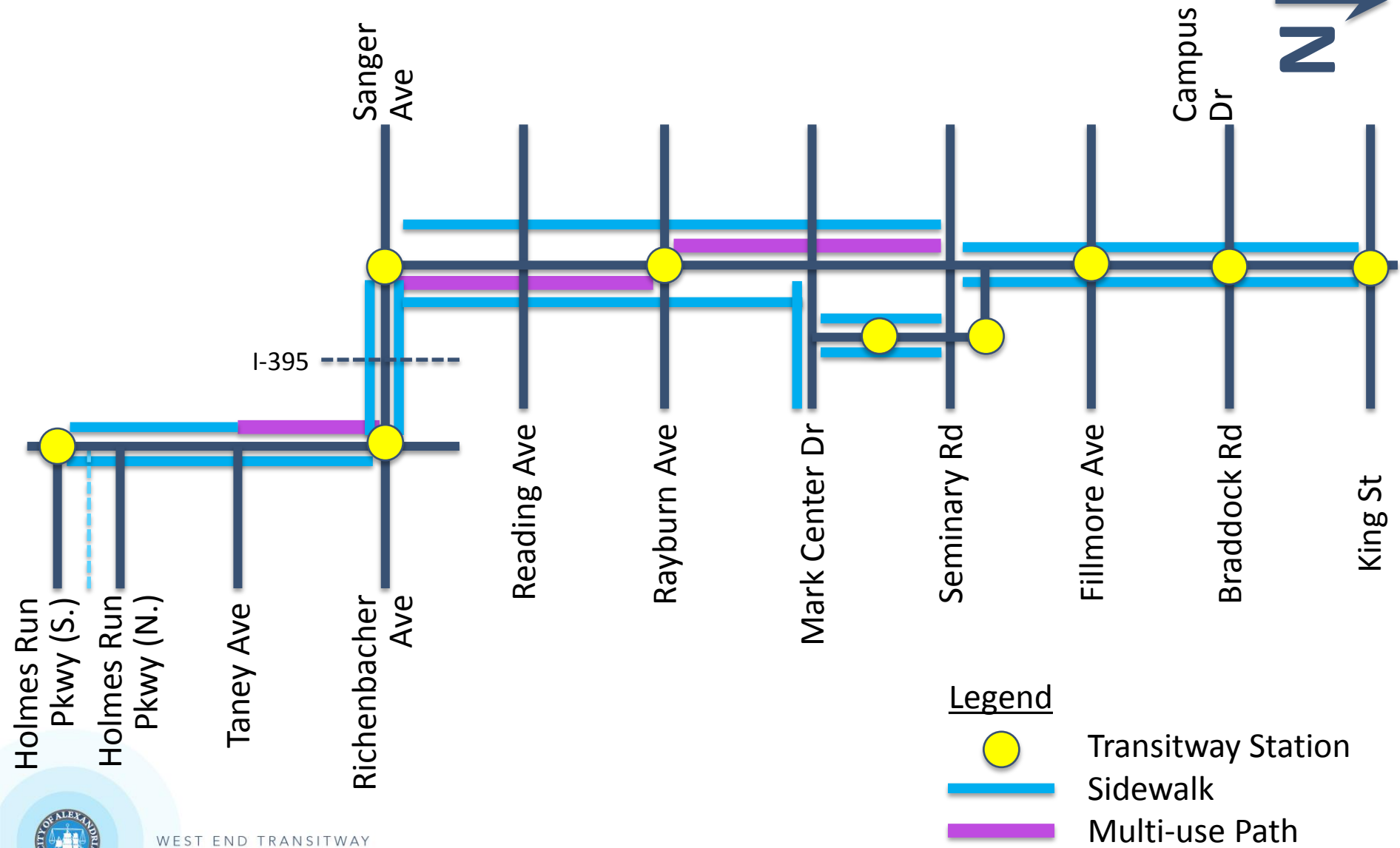
PRELIMINARY TRANSPORTATION PERFORMANCE

Build Alternative Pedestrian and Bicycle Improvements






PRELIMINARY TRANSPORTATION PERFORMANCE

Build Alternative Pedestrian and Bicycle Improvements



Legend

-  Transitway Station
-  Sidewalk
-  Multi-use Path



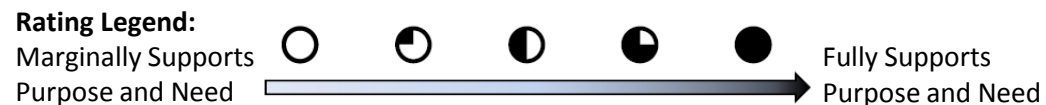
PRELIMINARY LAND USE AND ECONOMIC DEVELOPMENT CONSIDERATIONS

		2015			2035		
Measure		No Build	TSM	Build	No Build	TSM	Build
Land Use	Supports planned development	--	--	--	Marginal	Moderate	Strong
	Ratio of Jobs to Dwelling Units *	0.72	0.72	0.72	0.84	0.84	0.99
Economic Benefit	Level of new development permitted	--	--	--	13.5M Square Feet	13.9M Square Feet	21.1M Square Feet
	Potential to increase pace of retail development**	--	--	--	--	\$2.4M	\$4.9M

Note: Based on assumptions of the Development Potential Memo

* A ratio of 1.0 indicates a balanced development pattern

**Value of additional retail development projected.



PRELIMINARY PHYSICAL ENVIRONMENT EVALUATION

Measure	Description	No Build	TSM	Build
Property Impacts	Additional Right-of-way Required	None	Minimal	2.7 acres
	Potential Property Acquisition	None	None	1 property
Parking Consideration	Commercial Parking Spaces Impacted	None	None	72 spaces
	Residential Parking Spaces Impacted	None	None	3 spaces
	On-street Parking Spaces Impacted	None	None	None



5

DISCUSSION AND NEXT STEPS



DISCUSSION AND NEXT STEPS

- Winter 2014/15
 - Alternatives Analysis Report
 - Request to Enter FTA Project Development
- Spring/Summer 2015
 - Environmental Documentation
 - Conceptual Engineering
 - Refined Cost Estimation
 - Financial Planning

www.alexandriava.gov/WestEndTransitway





Happy Holidays!



WEST END TRANSITWAY

PROJECT IMPLEMENTATION SCHEDULE

	2014	2015	2016	2017	2018	2019	2020
AA and EA Process	[Green Bar]						
Preliminary Engineering and Project Delivery Approach			[Orange Bar]				
Detailed Engineering				[Orange Bar]			
Construction						[Brown Bar]	


Opening

