

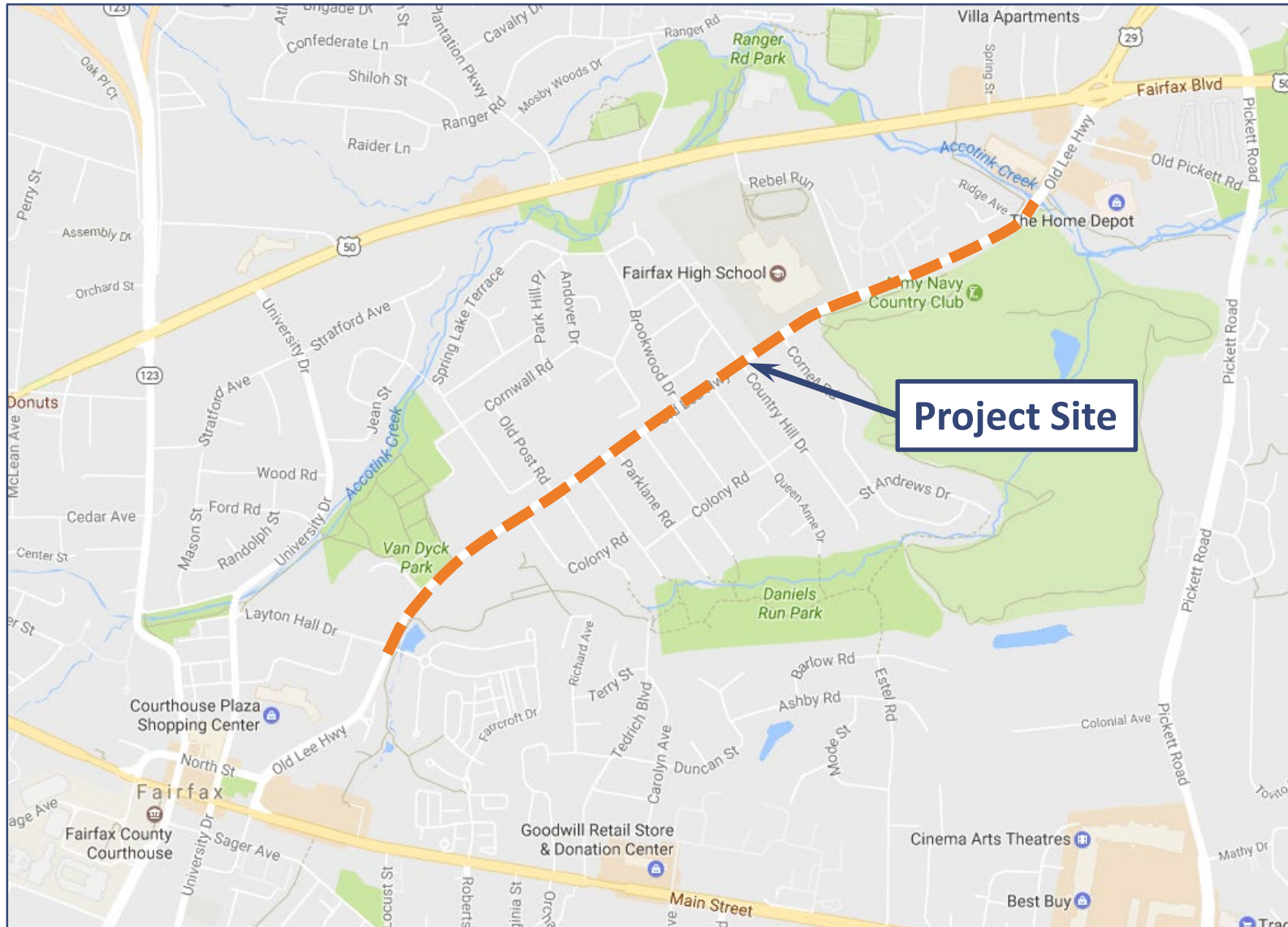


Old Lee Highway Multimodal Improvements

City Council Work Session

November 6, 2018

Project Location



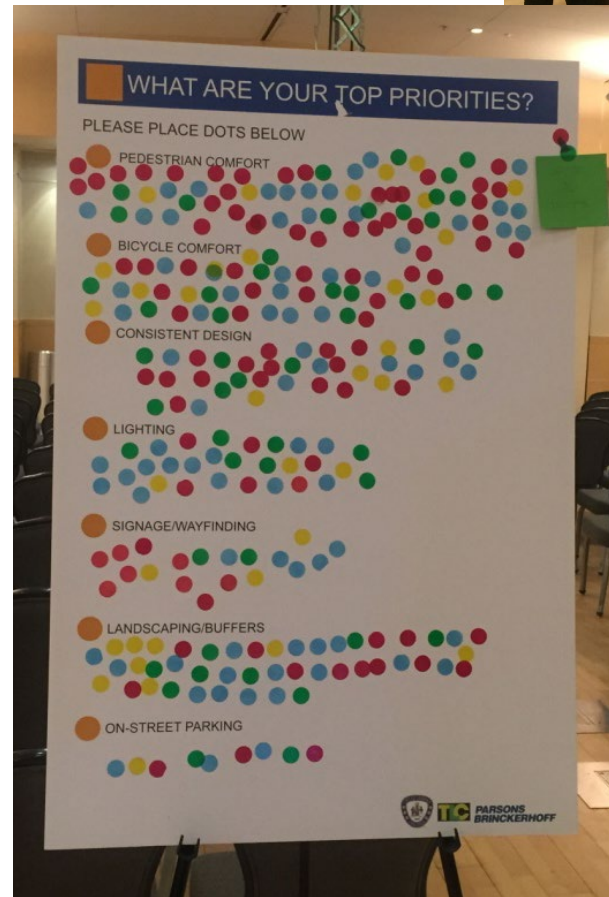
Project Background

- Old Lee Highway Transportation Study was completed in 2005
- Conceptual planning occurred in 2015 and included extensive public involvement
 - Online survey
 - Two community meetings
- Feedback provided by the public helped inform the development of the conceptual plan



Project Background

- Public comments emphasized desire for better pedestrian and bicycle amenities and landscaping/buffers
- Recommended concept included these components
- Strongest preference was for protected bicycle lanes



Project Background

- In Spring 2016 City Council approved award of contract to Rinker Design Associates (RDA) to initiate preliminary design based on conceptual plan
- Phase 1 of design to include survey and development of typical sections taking into account:
 - Available right of way
 - Traffic needs
 - Environmental impacts



Project Background - Funding

- City received \$2M in FY 16 Revenue Sharing
 - Matched by \$2M in City C&I funds
- City applied for and received \$5M FY 20 Revenue Sharing funds
- City applied for and received \$5M NVTA 70% funds to match RS
- Project now has a total of \$14M in funding
- Reasonable to anticipate the City could apply for and receive an additional \$6M in funding for total funding of \$20M
 - Revenue Sharing has a project lifetime limit of \$10M (project has received \$3M thus far)

City Council Work Session Goals

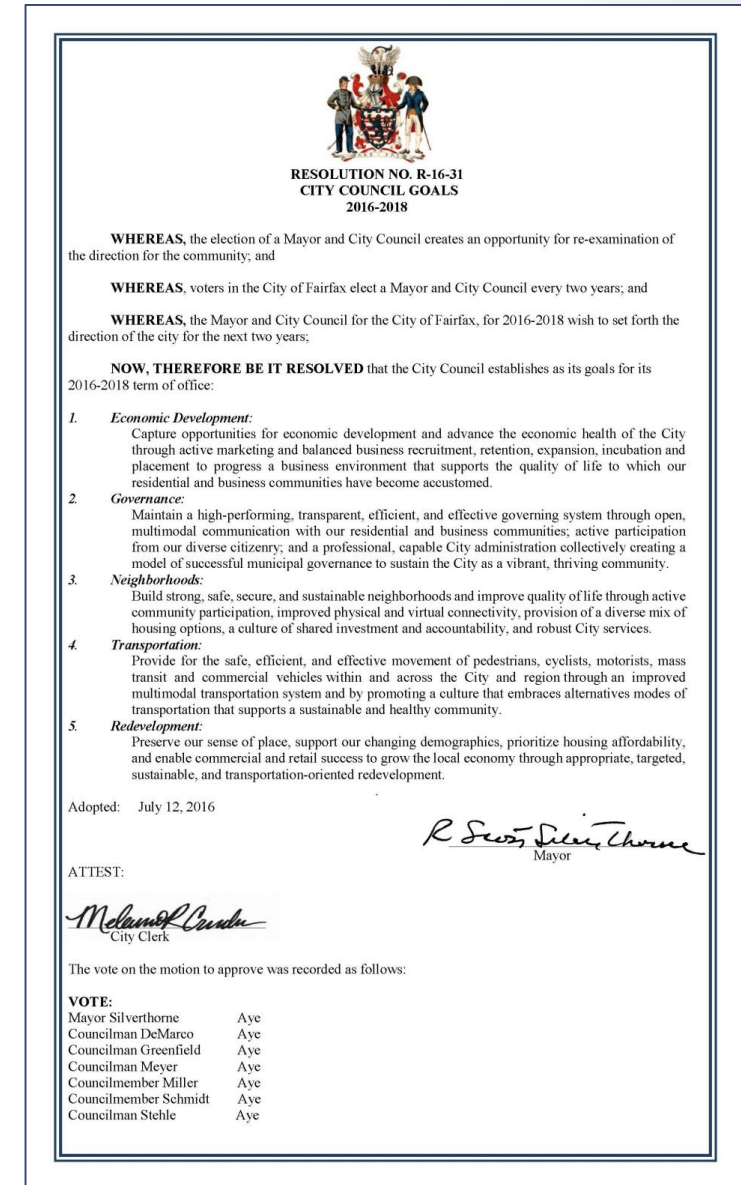
- Provide City Council with an update on project development that has been completed to date
- Review project goals and benefits
- Present a Conceptual Plan and potential impacts
- Provide preliminary cost estimate and phasing options for construction
- Obtain Council input on next steps

Project Goals

- Provide continuous multimodal facility connections along Old Lee Highway from Old Town Fairfax to Fairfax Circle
 - Pedestrian facilities (concrete sidewalk)
 - Dedicated bicycle facilities (a two-way asphalt cycle track where possible)
 - Concrete pads and ADA-accessibility for 14 existing CUE bus stops
- Improve safety for all roadway users
- Promote alternative modes of transportation for accessing the library, the community center, the three schools, and commercial properties along the corridor

Meeting City Council Goals

- **Neighborhoods:** Improve quality of life through improved physical connectivity.
- **Transportation:** Provide for the safe, efficient, and effective movement of pedestrians, cyclists, motorists, mass transit and commercial vehicles within and across the City through an improved multimodal transportation system and by promoting a culture that embraces alternative modes of transportation that support a sustainable and healthy community.



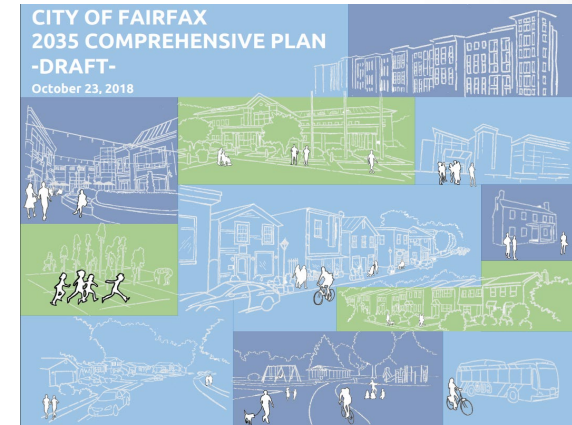
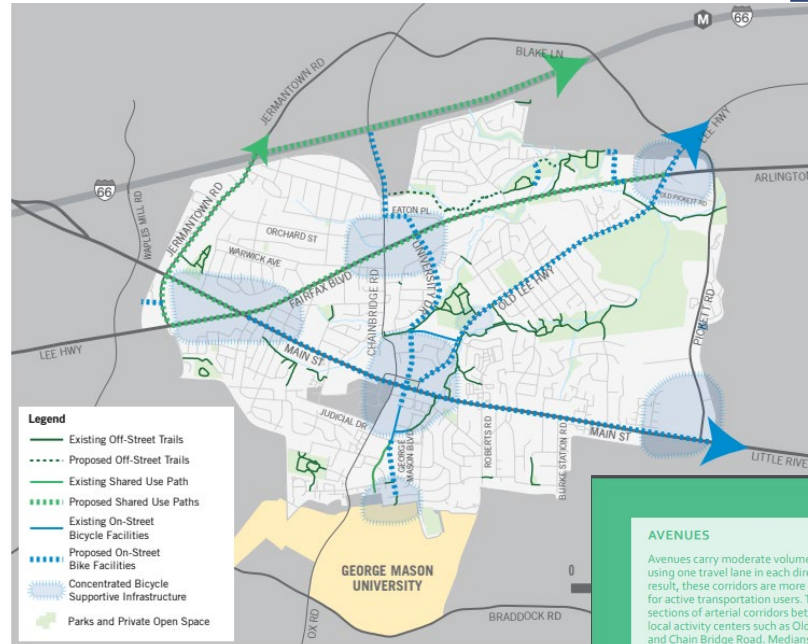
Meeting Current Comp Plan Goals

Goal: Facilitate safe and convenient vehicular, pedestrian and bicycle circulation within the City while minimizing the adverse impacts of through-traffic and automobile pollution.

- **Objective T-7.2** Promote and accommodate bicycling and walking as alternative modes of transportation.
 - **Strategy:** Providing continuous pedestrian facilities and protected bike lanes.
- **Objective T-7.3** Encourage and accommodate safe vehicular traffic throughout the City.
 - **Strategy:** Incorporating traffic calming measures.
- **Objective T-7.5** Encourage the use of public transportation and other modes of travel as alternatives to the private automobile.
 - **Strategy:** Enhancing CUE bus service with better access to bus stops and accessible concrete pads.
- **Objective T-7.6** Obtain funding for transportation improvements from sources other than the City General Fund.
 - **Strategy:** Utilizing revenue sharing.
- **Objective T-7.10** Improve the Old Town Fairfax area traffic flow so that it is a safer environment for vehicles and a pedestrian-friendly environment for shoppers and tourists.
 - **Strategy:** Connecting Old Town to nearby residential areas via sidewalks and bicycle facilities.

Meeting Multimodal Transportation Plan Goals

“Old Lee Highway will emphasize pedestrian, bicycle, and transit use providing enhanced bicycle facilities and operational advantages to transit. It will be a lush, green corridor that accommodates all modes.”

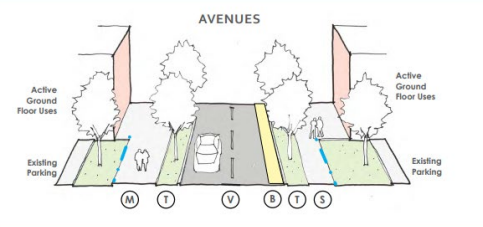


AVENUES

Avenues carry moderate volumes of traffic using one travel lane in each direction. As a result, these corridors are more comfortable for active transportation users. They include sections of arterial corridors between certain local activity centers such as Old Lee Highway and Chain Bridge Road. Medians or planted median islands are less common while curb cuts and access drives are more numerous. Vehicle throughput can be controlled through these areas due to high volume, naturally lowering traffic speeds to a level consistent with the non-commercial context.

Typical Transportation Uses

- Can be significant volumes of traffic. Most vehicles are passing through to other local or area destinations
- Transit service is likely
- Moderate concentrations of pedestrians traveling
- Bicycles accommodated in protected or off street facilities such as shared use paths
- Traffic speeds lower, limited by volume



TYPICAL ELEMENTS MAY INCLUDE:

- LOWER CAPACITY THAN BOULEVARDS (TYPICALLY TWO LANES)
- COMMERCIAL USES / ACTIVE GROUND FLOORS THAT ADDRESS THE STREET
- LIMITED OR NO ON-STREET PARKING
- SIDEWALKS OR SHARED USE PATHS
- BICYCLE LANES AND/OR SHARED USE PATHS
- VEGETATED BUFFERS

DIAGRAM KEY

- ⊙ Travel Lanes - 11' to 12' Each
- ⊙ Street Tree Zone - Min. 5'
- ⊙ Sidewalks - Varies 6' to 12'
- ⊙ Multi-Use Paths - Min. 10'
- ⊙ Bicycle Lanes - Min. 5'
- ⊙ City Right-of-Way

Regional Corridors




Continue to participate in regional planning efforts to improve vehicle and freight operations and pedestrian, bicyclist and vehicle safety in regional corridors, such as Blake Lane-Jermantown Road, Braddock Road, Government Center Parkway, and Pickett Road.

City Major Corridors

Implement complete streets improvements to safely accommodate all roadway users in the city on all roads, and in particular on arterials including Fairfax Boulevard, Chain Bridge Road, Old Lee Highway, and Main Street.

Local Activity Centers

Within Local Activity Centers:

-  Break up large blocks to a more walkable scale. Pursue expanded secondary, tertiary, and non-motorized network opportunities.
-  Consolidate vehicular access points
-  Provide new pedestrian-only connections

Specific Projects

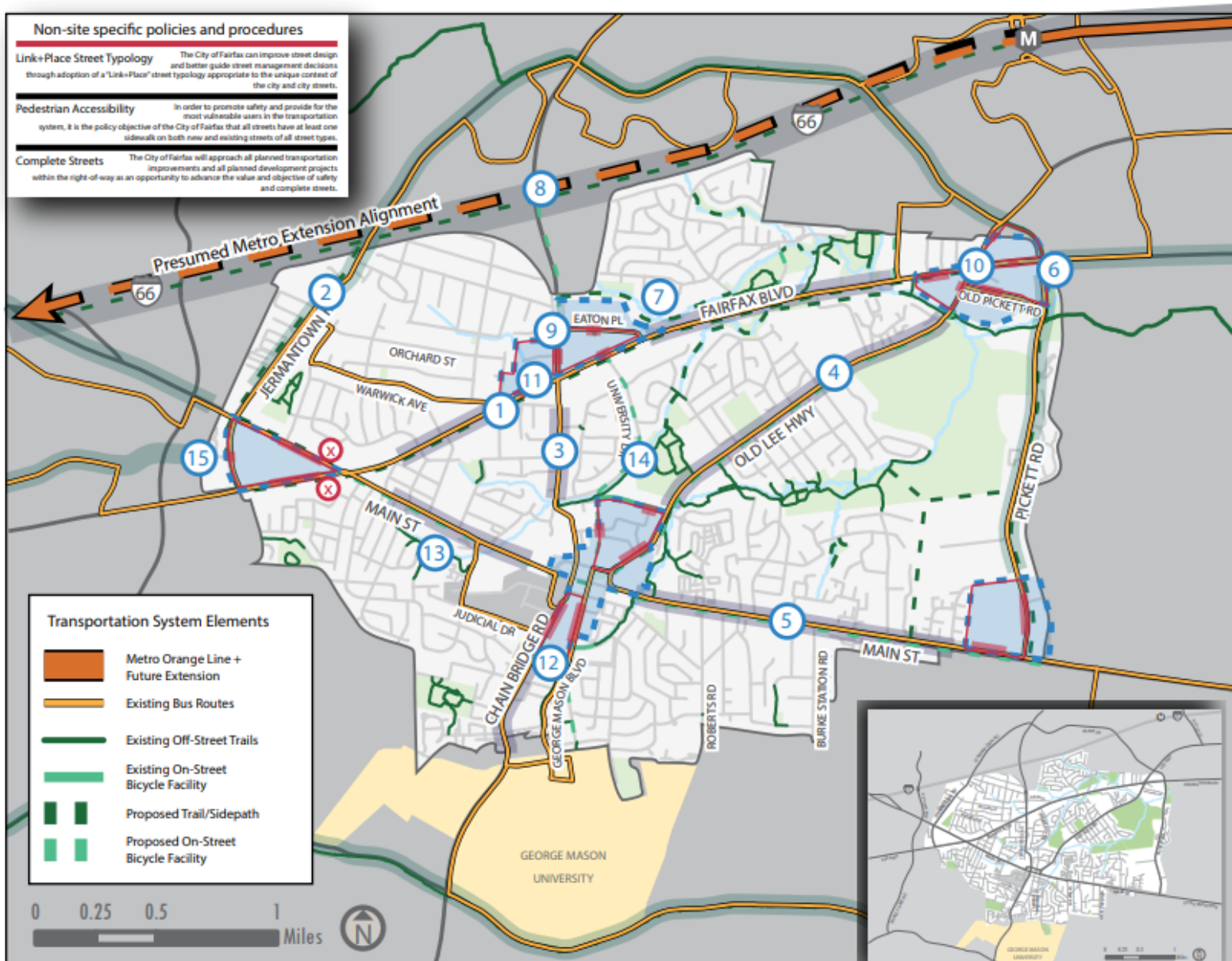
1. Improve Warwick Ave and Fairfax Blvd
2. Improve Jermantown Rd corridor
3. Add sidewalk on Chain Bridge Rd
4. Add Old Lee Hwy multimodal improvements
5. Study Main St bicycle facility feasibility
6. Add Pickett Road trail connection
7. Complete the George T. Snyder Trail
8. Support the study of a Metrorail extension
9. Improve intersection at Eaton Place and Chain Bridge Road
10. Improve safety for all users at Fairfax Circle
11. Expand the roadway network in Northfax West
12. Expand the roadway network at South Street
13. Complete the Judicial Drive Trail
14. Implement University Drive traffic calming measures
15. Connect Government Center Parkway

Citywide Projects (Locations TBD)

- Implement pedestrian spot improvements
- Conduct a bikeshare feasibility study
- Improve transit facilities
- Implement roadbed improvements
- Develop a Transportation Demand Management Program
- Maintain pavement condition of primary extension roadways

Non-site specific policies and procedures

- Link+Place Street Typology** The City of Fairfax can improve street design and better guide street management decisions through adoption of a "Link+Place" street typology appropriate to the unique context of the city and city streets.
- Pedestrian Accessibility** In order to promote safety and provide for the most vulnerable users in the transportation system, it is the policy objective of the City of Fairfax that all streets have at least one sidewalk on both new and existing streets of all street types.
- Complete Streets** The City of Fairfax will approach all planned transportation improvements and all planned development projects within the right-of-way as an opportunity to advance the value and objectives of safety and complete streets.



Existing Conditions

At Van Dyck Park looking
towards Fairfax Circle



Existing Conditions

At Queen Anne Drive looking
towards Fairfax Circle



Existing Conditions

At Great Oaks Drive looking
towards Fairfax Circle



Design Overview

- Roadway
 - Continuous curb & gutter will provide a uniform condition along corridor
 - Excess width roadway pavement to be removed where possible
- Bicycle Facilities
 - Protected bike lanes are proposed where possible
 - Variable width buffer will separate protected bike lanes from curb
- Pedestrian Facilities
 - ADA-compliant sidewalk, curb ramps, and entrance crossings on both sides of the roadway
 - A two-foot buffer will separate sidewalk from protected bike lanes on north side

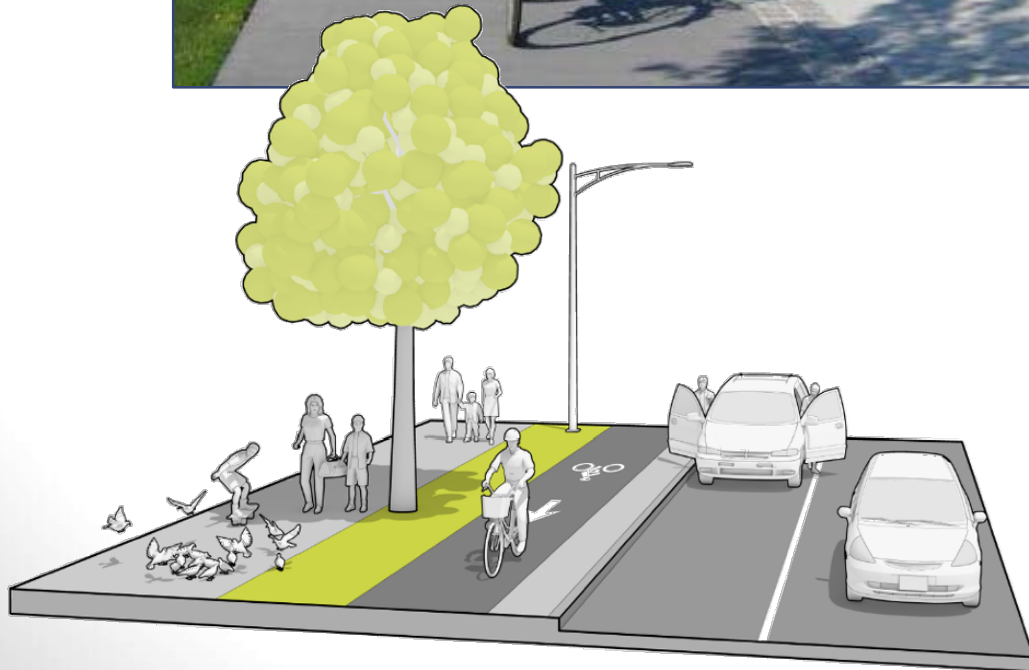
Design Overview

- Bus Stops
 - Provide ADA-compliant access and concrete pads for 14 CUE bus stops along corridor
- Intersection Safety Enhancements
 - High visibility crosswalks for pedestrians and bicycles
 - Narrowed crossing distances in areas of excess pavement removal
 - Tighter curb return radii to promote lower speeds for turning vehicles
- Retaining Wall Construction
 - May be required in some locations to reduce property impacts
 - Aesthetic treatment will be utilized to enhance visual appearance (similar to existing retaining wall east of Layton Hall Road)

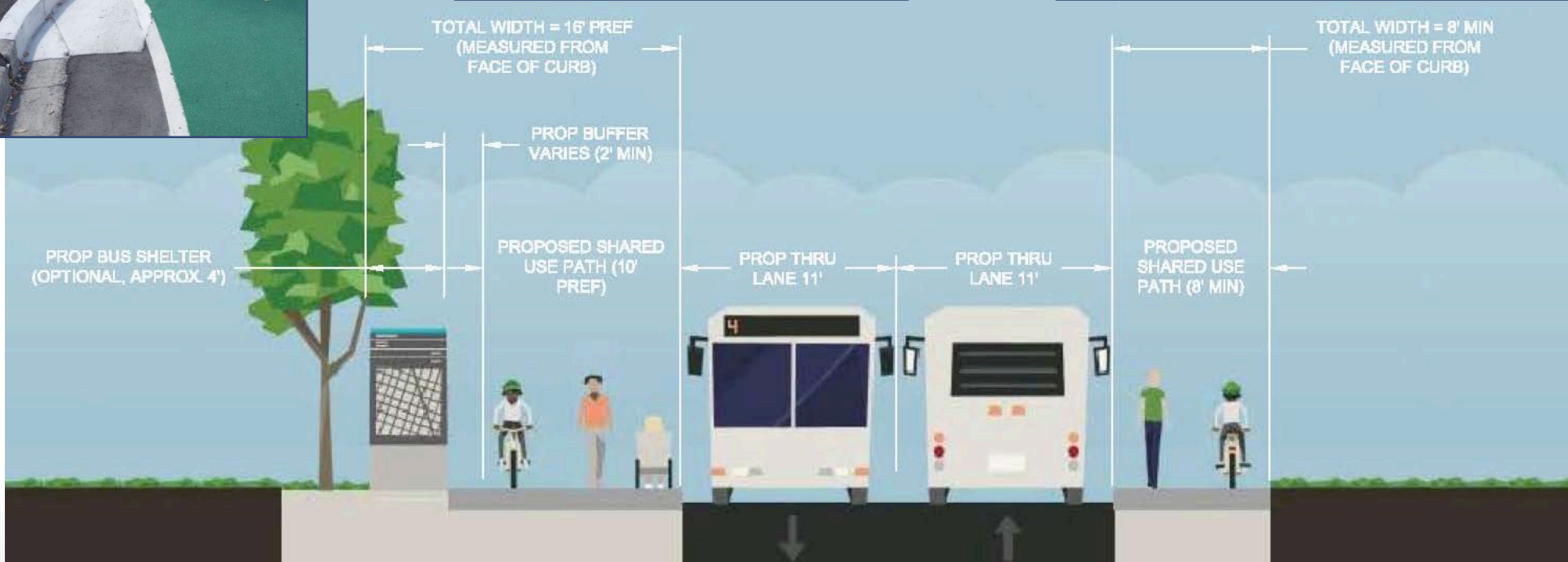
Design Overview

- Utilities
 - Utility pole relocation or utility undergrounding will be necessary
- Project Aesthetics
 - Treatment for retaining walls, replacement of existing fences and walls
 - Lighting
 - Landscaping, replacement of impacted trees and landscaping

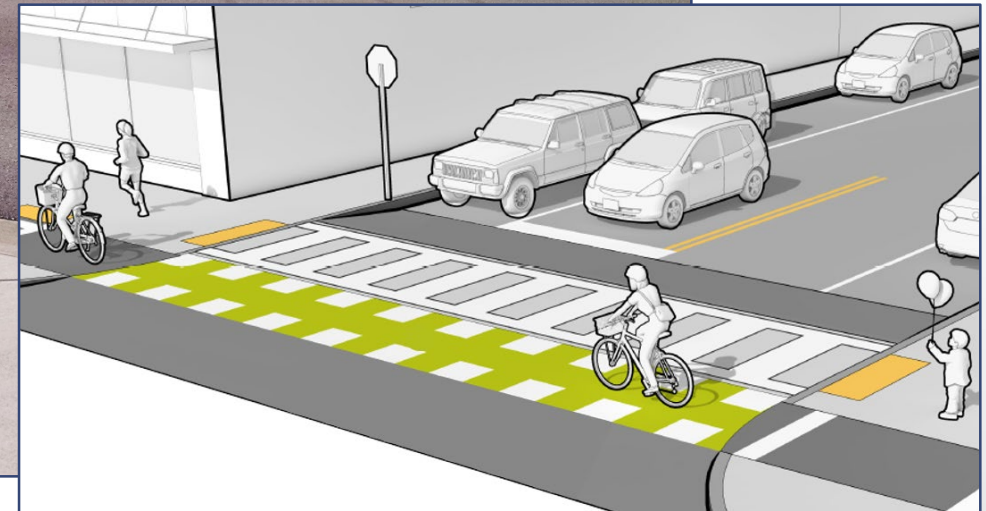
Key Features: Protected Bike Lanes



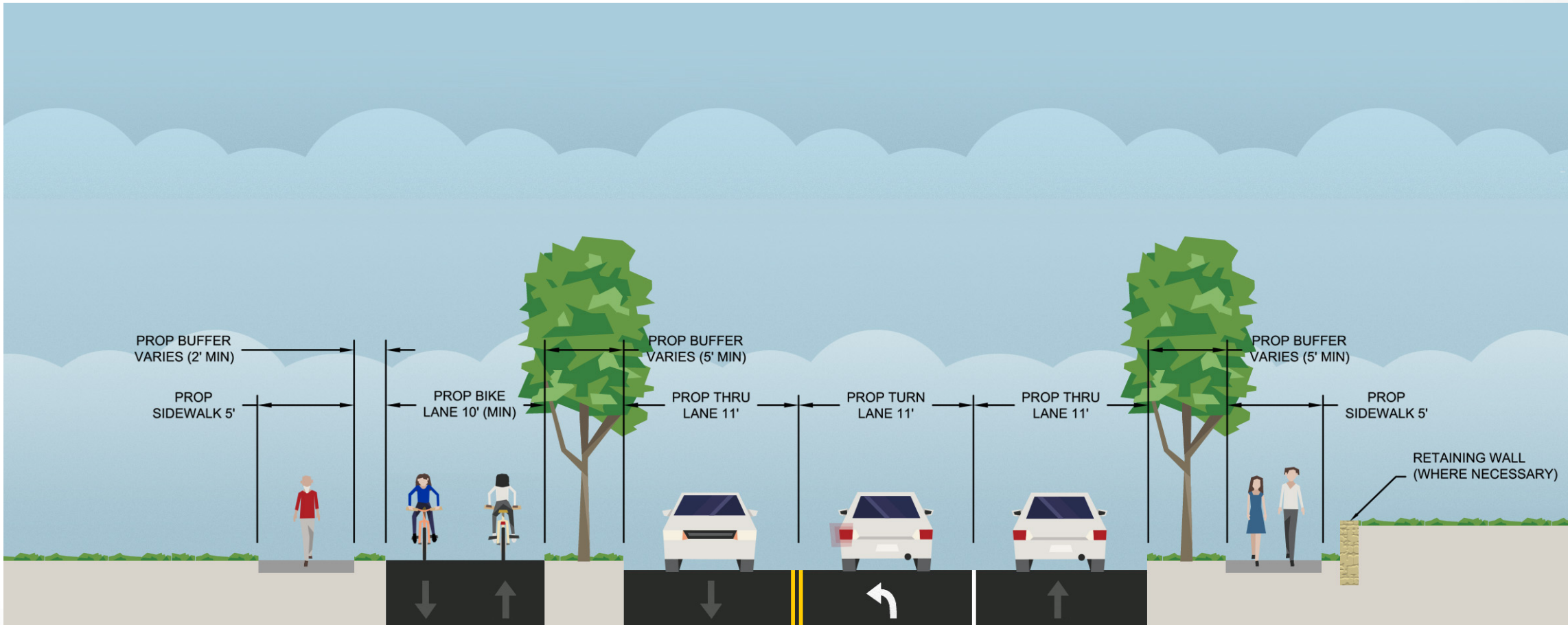
Key Features: Bus Stops



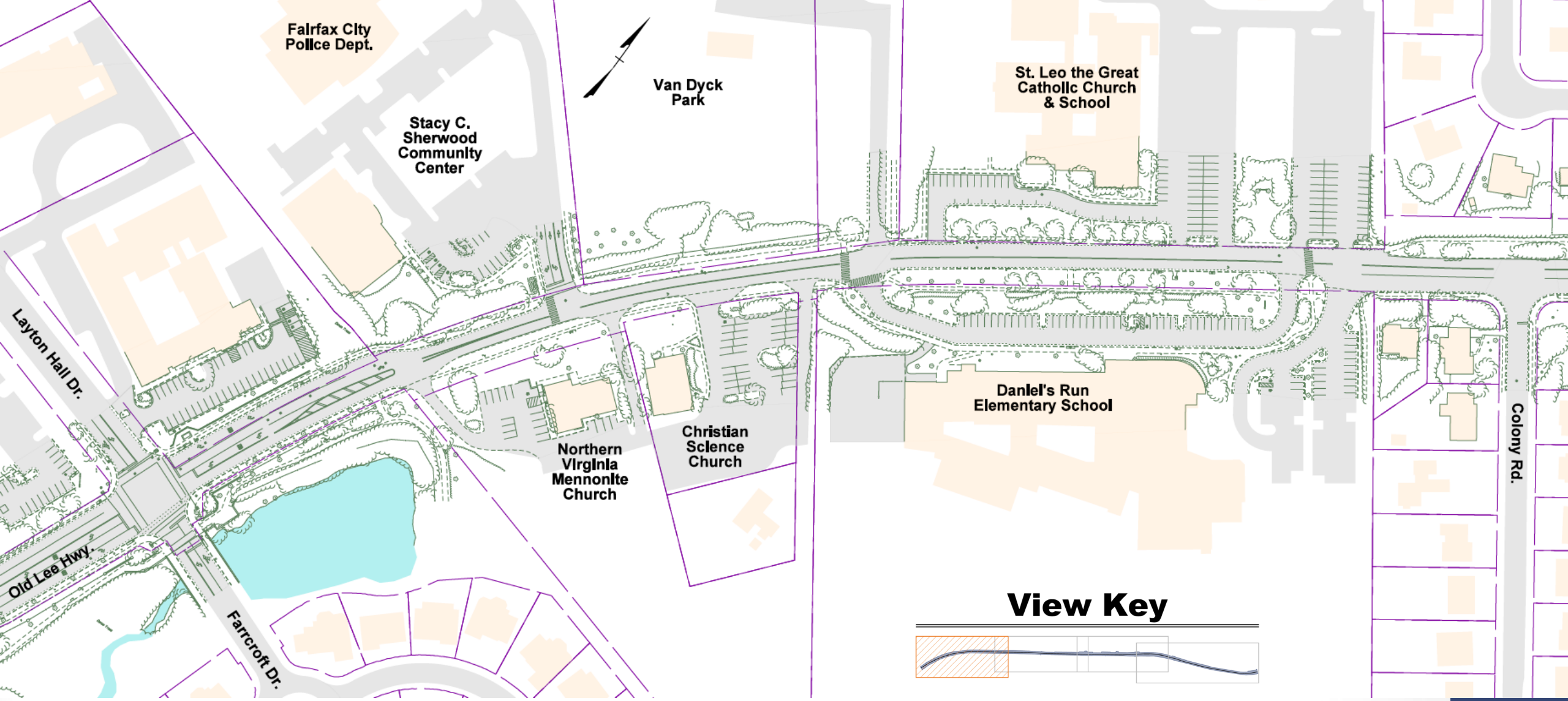
Key Features: Intersections



Segment 1 – Layton Hall Drive to Daniel's Run E.S.

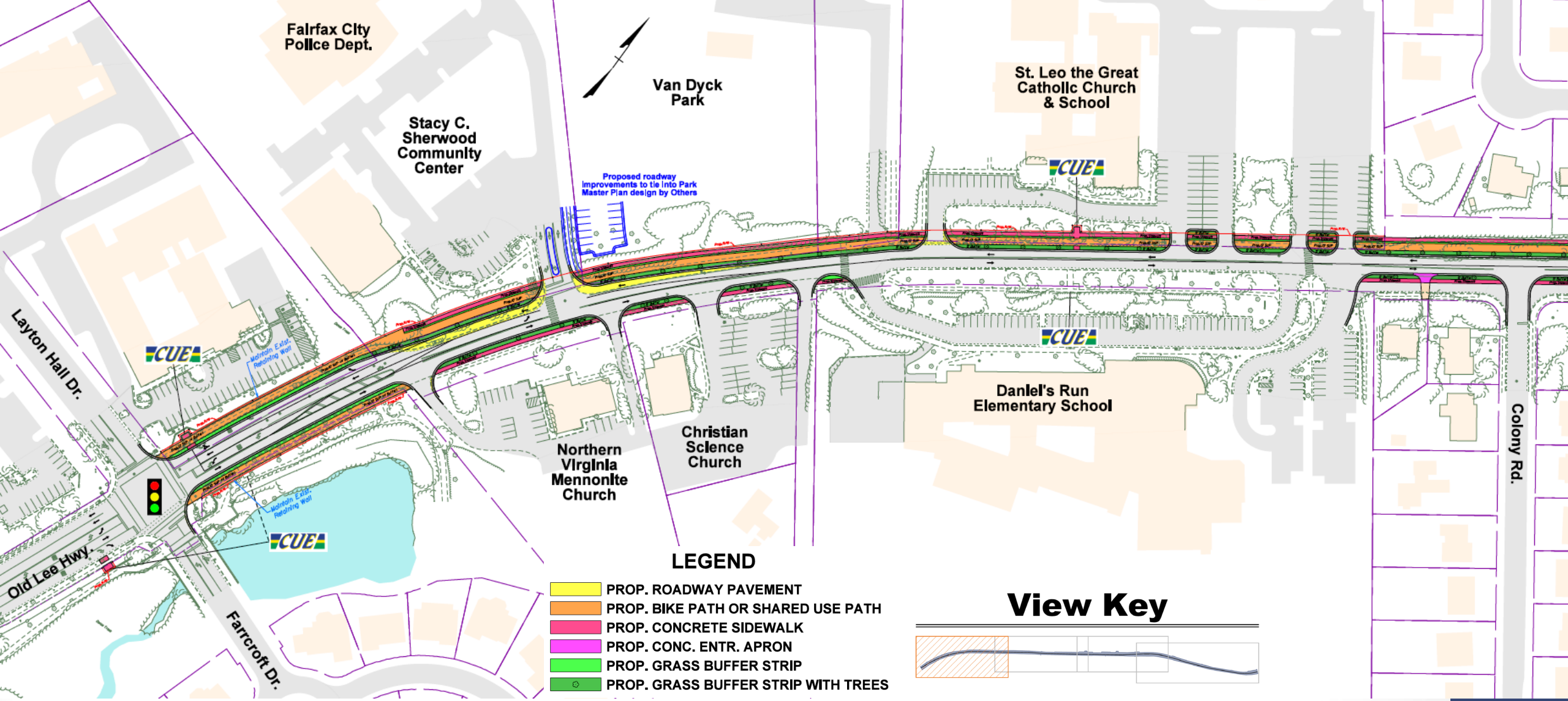


Typical Section



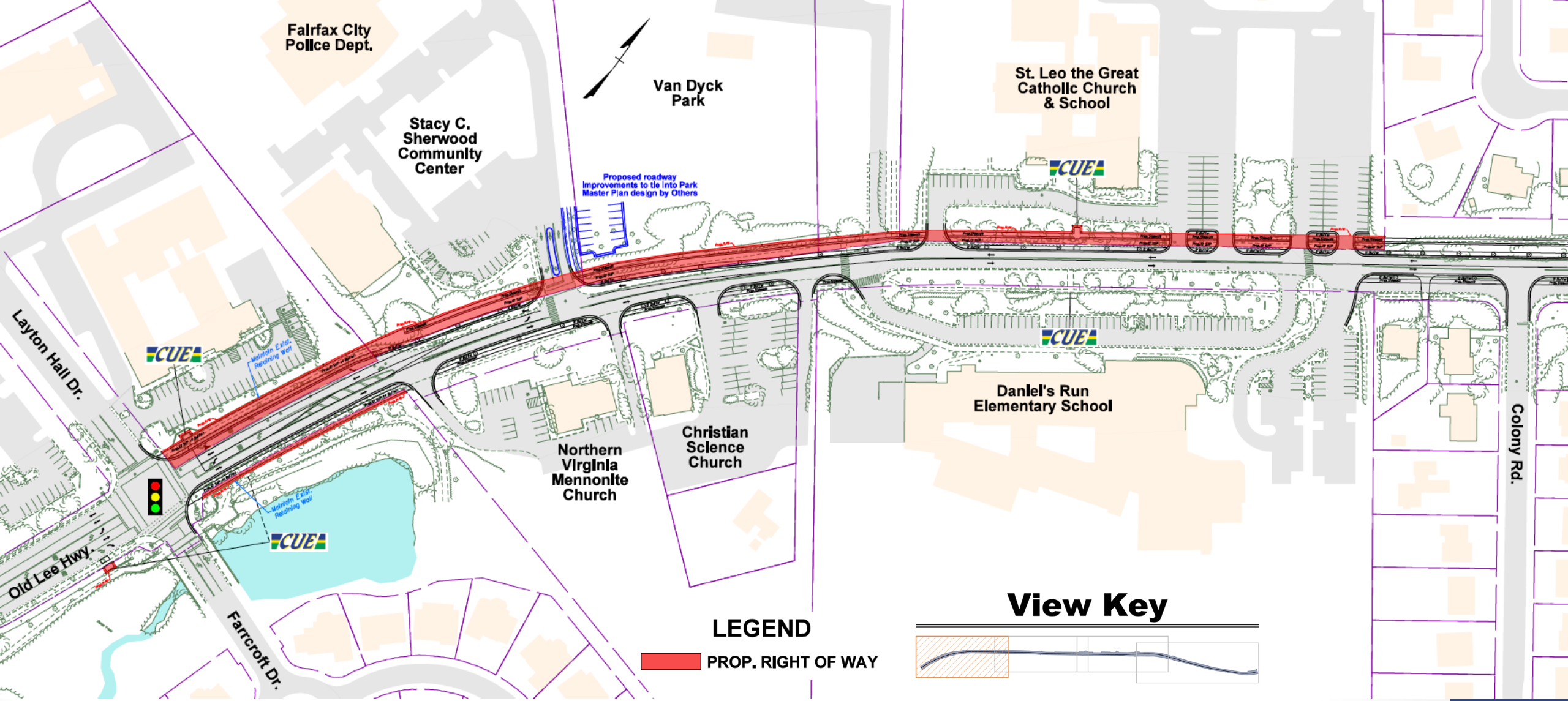
Segment 1 – Layton Hall Drive to Daniel's Run E.S.

Existing Condition



Segment 1 – Layton Hall Drive to Daniel’s Run E.S.

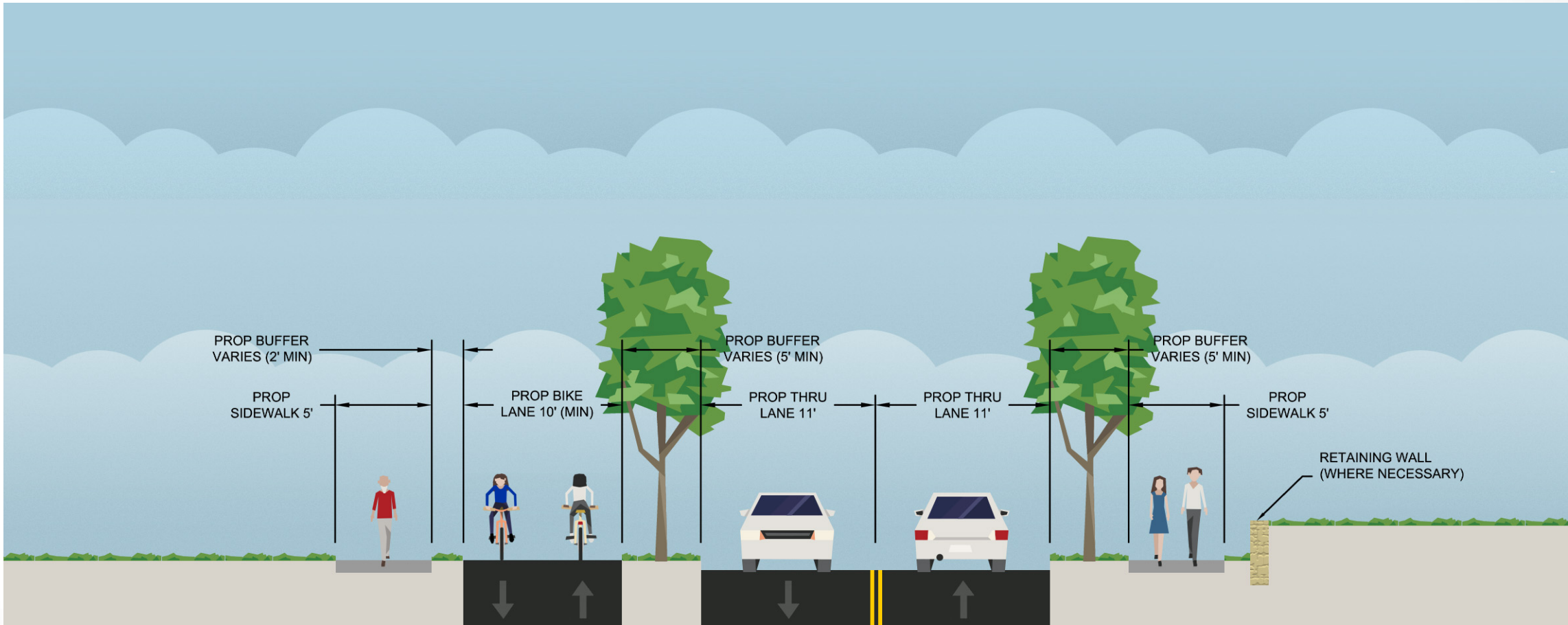
Proposed Condition



Segment 1 – Layton Hall Drive to Daniel’s Run E.S.

Proposed Right of Way

Segment 2 – Daniel’s Run E.S. to Cornell Road



Typical Section

Segment 2 – Daniel’s Run E.S. to Cornell Road

Existing Condition



Segment 2 – Daniel’s Run E.S. to Cornell Road

Conceptual Rendering



Segment 3 – Cornell Road to Ridge Avenue

Existing Condition



Segment 3 – Cornell Road to Ridge Avenue

Conceptual Rendering



Project Estimate

- Segment 1 – Layton Hall to Daniel’s Run E.S. (1,800 LF)
- Segment 2 – Daniel’s Run E.S. to Cornell Road (3,170 LF)
- Segment 3 – Cornell Road to Ridge Avenue (2,565 LF)

		Segment 1	Segment 2	Segment 3	TOTAL
Preliminary Engineering		\$0.5M	\$1M	\$0.8M	\$2.3M
Right of Way*		\$1.3M	\$0.7M	\$0.7M	\$2.7M
Construction (2021)		\$4.5M	\$5.8M	\$3.6M	\$13.9M
Utility Options	Pole Relocation	\$0.3M	\$0.5M	\$0.2M	\$1M
	Undergrounding	\$1.8M	\$3.6M	\$3.6M	\$9M
TOTAL	with Pole Relocation	\$6.6M	\$8M	\$5.3M	\$19.9M
TOTAL	with Undergrounding	\$8.1M	\$11.1M	\$8.7M	\$27.9M

* Existing right of way and boundary lines are based on the City’s GIS data and will be verified with boundary survey and further engineering.

Estimate is preliminary and based on conceptual design.

Right of Way Constraints

- Project costs as shown are approximately \$20M
 - Requires curb relocation primarily on the north side
 - City has more right of way on the north side (e.g. there are large areas in some areas that are “dedicated for public use” on plats)
- Project costs significantly higher to provide bicycle facilities on both sides of the road
 - Would require curb relocation on both sides of the road, which would require a significant amount of right of way on the south side, where City does not own as much right of way

Next Steps

- Perform supplemental topographic survey and boundary survey to determine more precise right of way impacts
- Advance design to 30% completion level
- Assemble a stakeholder advisory committee with representatives from adjacent neighborhoods, schools, and other stakeholders to review project details and provide recommendations to staff
- Pursue the additional funding necessary to complete project budget



Questions/Comments?