

County of Fairfax, Virginia

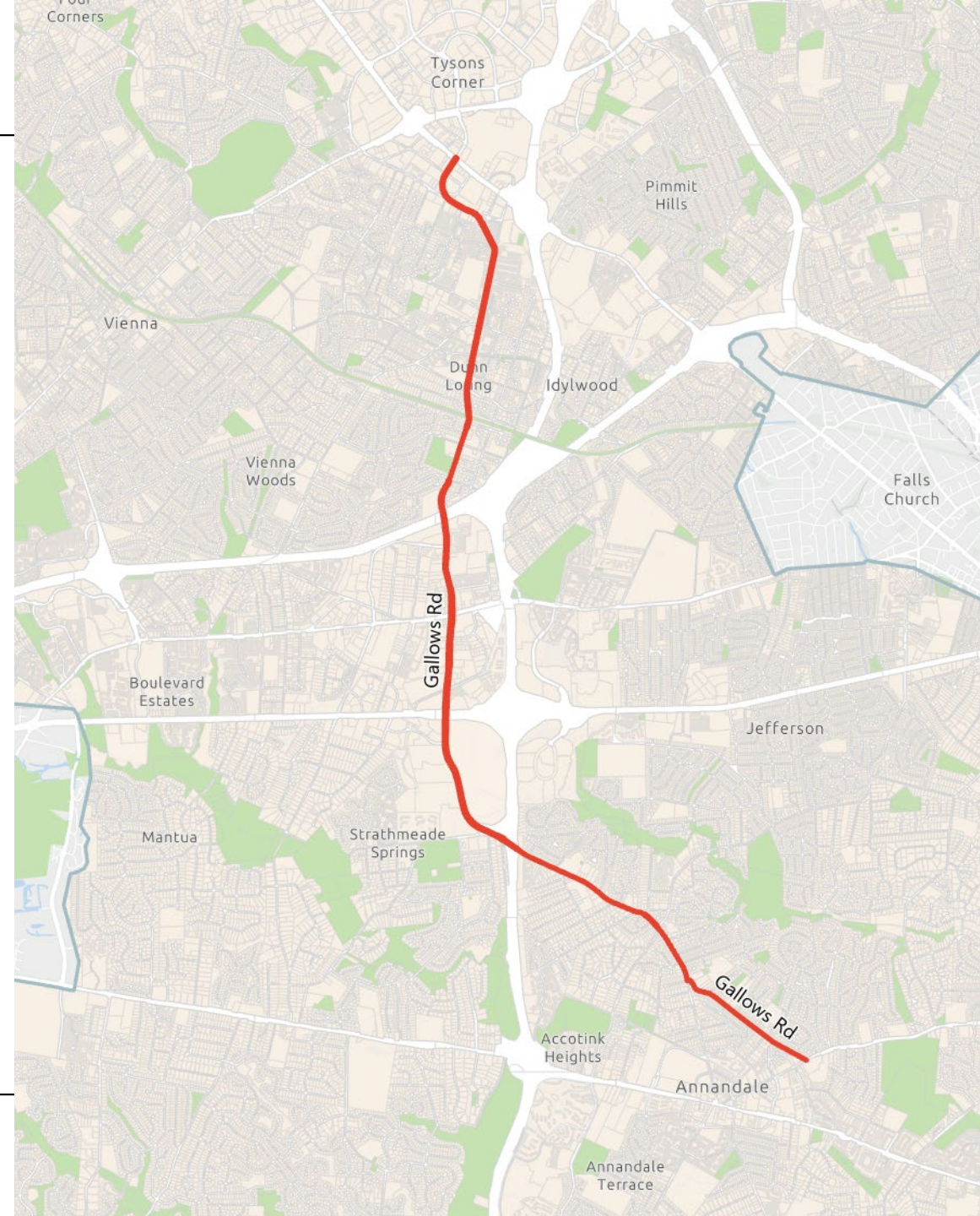
Gallows Road Multimodal Transportation Study

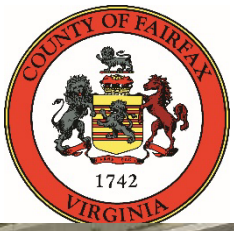
Public Meeting Round – 1

September 19, 2023 - Virtual
September 20, 2023 – Luther Jackson Middle School

Nanditha Paradkar, P.E.
Transportation Planner
Department of Transportation

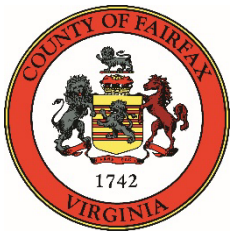
Tim Kutz
Transportation Planner
Department of Transportation





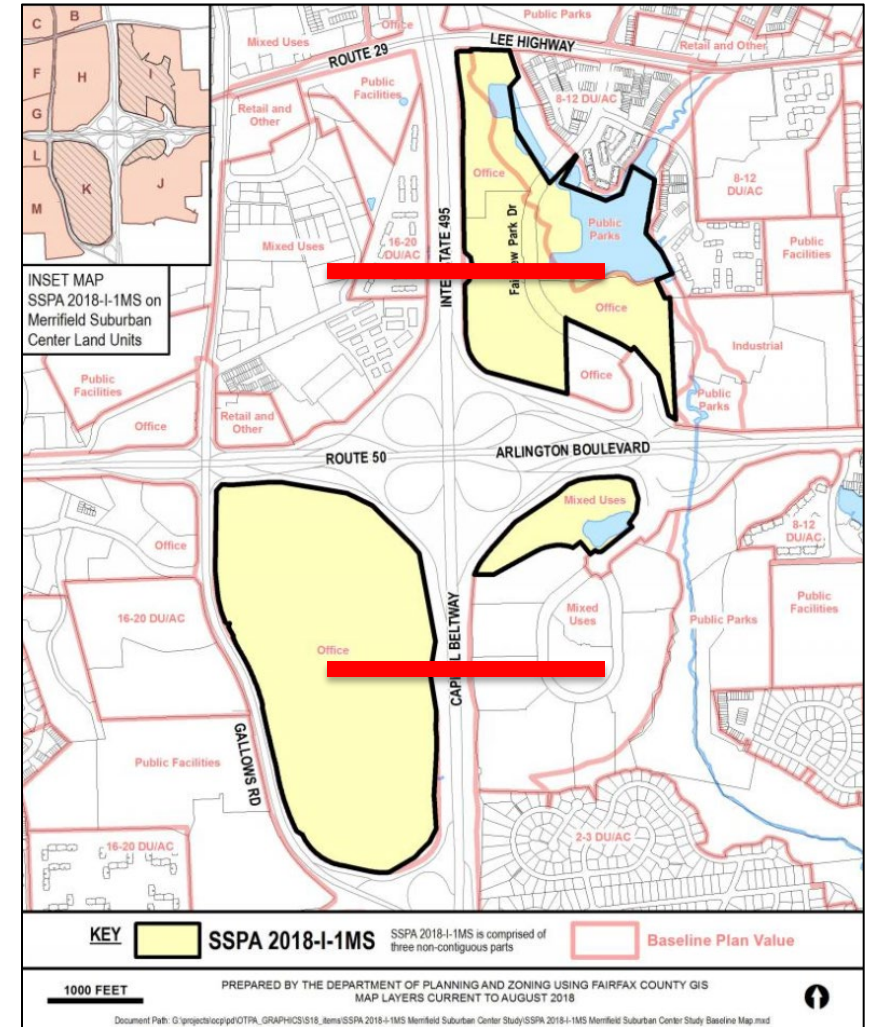
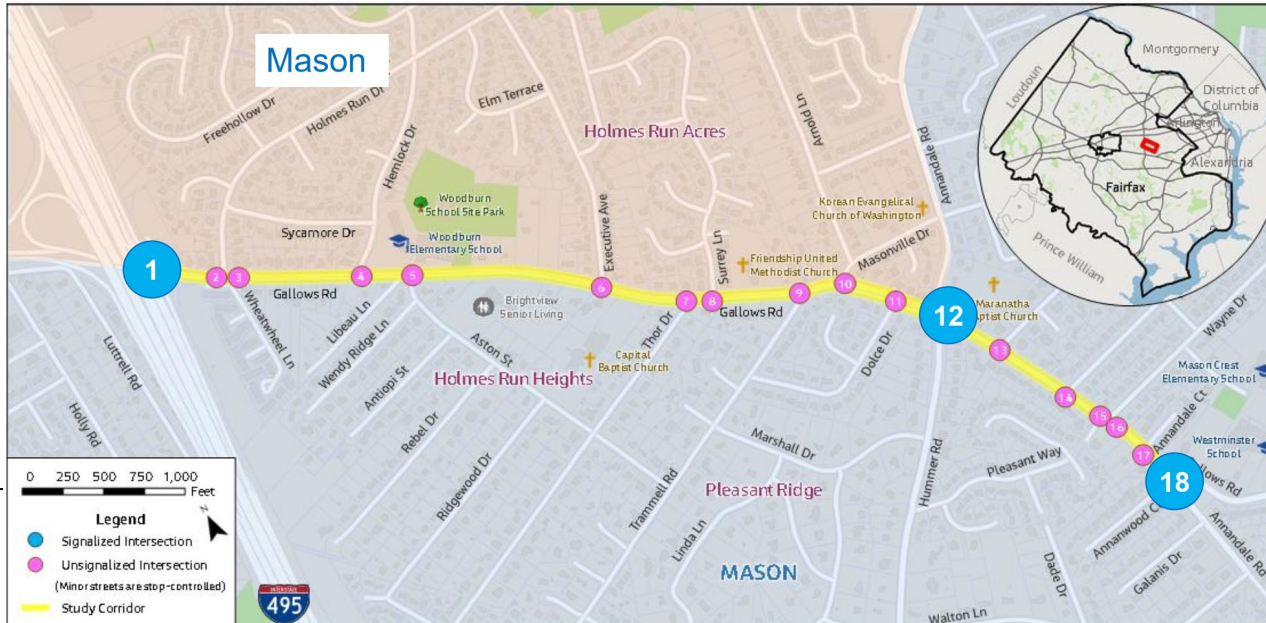
- Introductions
- Background and Purpose
- Vision Statement
- Existing Conditions Analysis
- Future Conditions Analysis
- Next Steps and Schedule





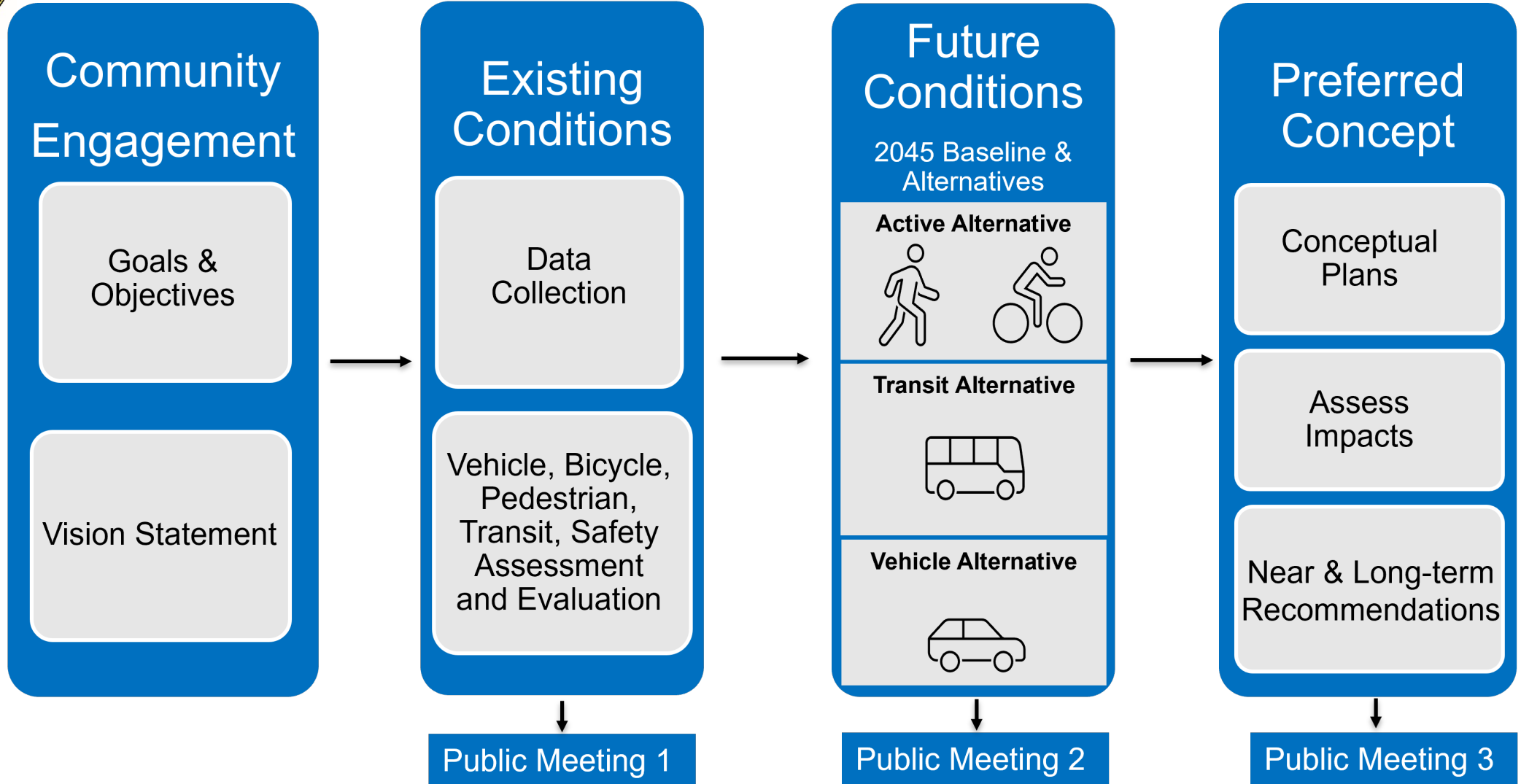
Study Background

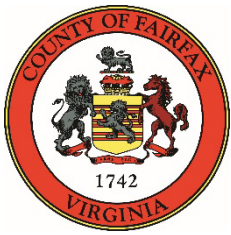
- Site Specific Plan Amendments for Inova Center Personalized Health and Fairview Park – SSPA 2018-I-1MS
 - Evaluate Gallows Road
 - Better connect two sites
 - Parallel facilities review
- Gallows Road – short & medium-term improvements study
- Long-term needs of the corridor → Follow-on Motions





Study Process





Community Outreach

Agencies

- Fairfax County Department of Transportation
- Department of Planning & Development
- Virginia Department of Transportation
- Town of Vienna

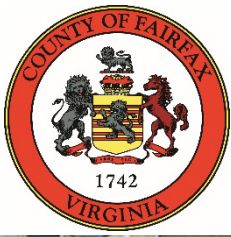
Community Groups

- Advocacy groups
- HOAs and citizen associations
- Houses of Worship
- Parks
- Schools
- Businesses

Public Outreach

- Public meetings
 - Three rounds of outreach
 - In-person and virtual
- Small community briefings as requested
- Community engagement
 - Project website
 - Social media posts
 - County agencies
 - Community developers

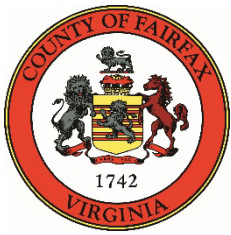




Vision Statement

Vision Statement

Gallows Road will continue to evolve as an important transportation corridor by connecting and promoting healthy, environmentally sustainable communities, serving all users through improved active transportation (e.g. walking and biking) facilities, reliable and safe transit options, and a balanced road network.



Goals & Objectives



Active Transportation Networks

Safety improvements, comfortable and accessible facilities



Equitable Mobility Options

Possible circulator and bus-rapid transit routes



Balance Regional vs. Local Needs

Adequate access for local trips and connectivity to the regional transportation network



Access to Transit

Pedestrian access, potential locations for transit centers, better amenities, reliability and convenience of transit service



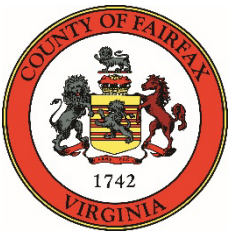
Travel Efficiency and Reliability

Balance operations by shifting motor vehicle trips to other modes



Environment and Heritage Resources

Avoid and mitigate impacts

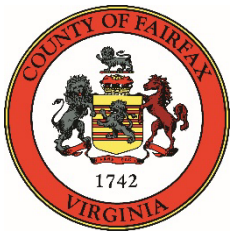


County of Fairfax, Virginia

Study Area

Gallows Road Tysons to Annandale

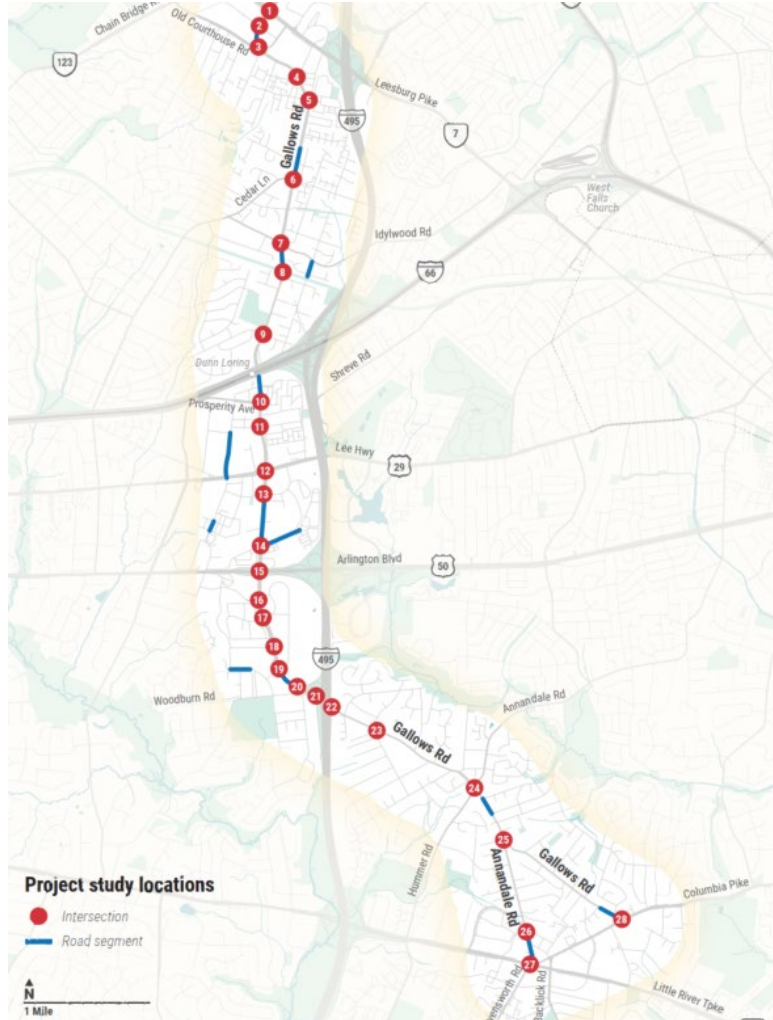


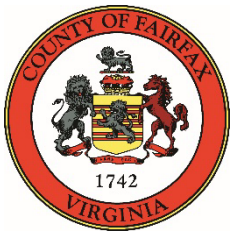


Existing Conditions Analysis

Data Collection

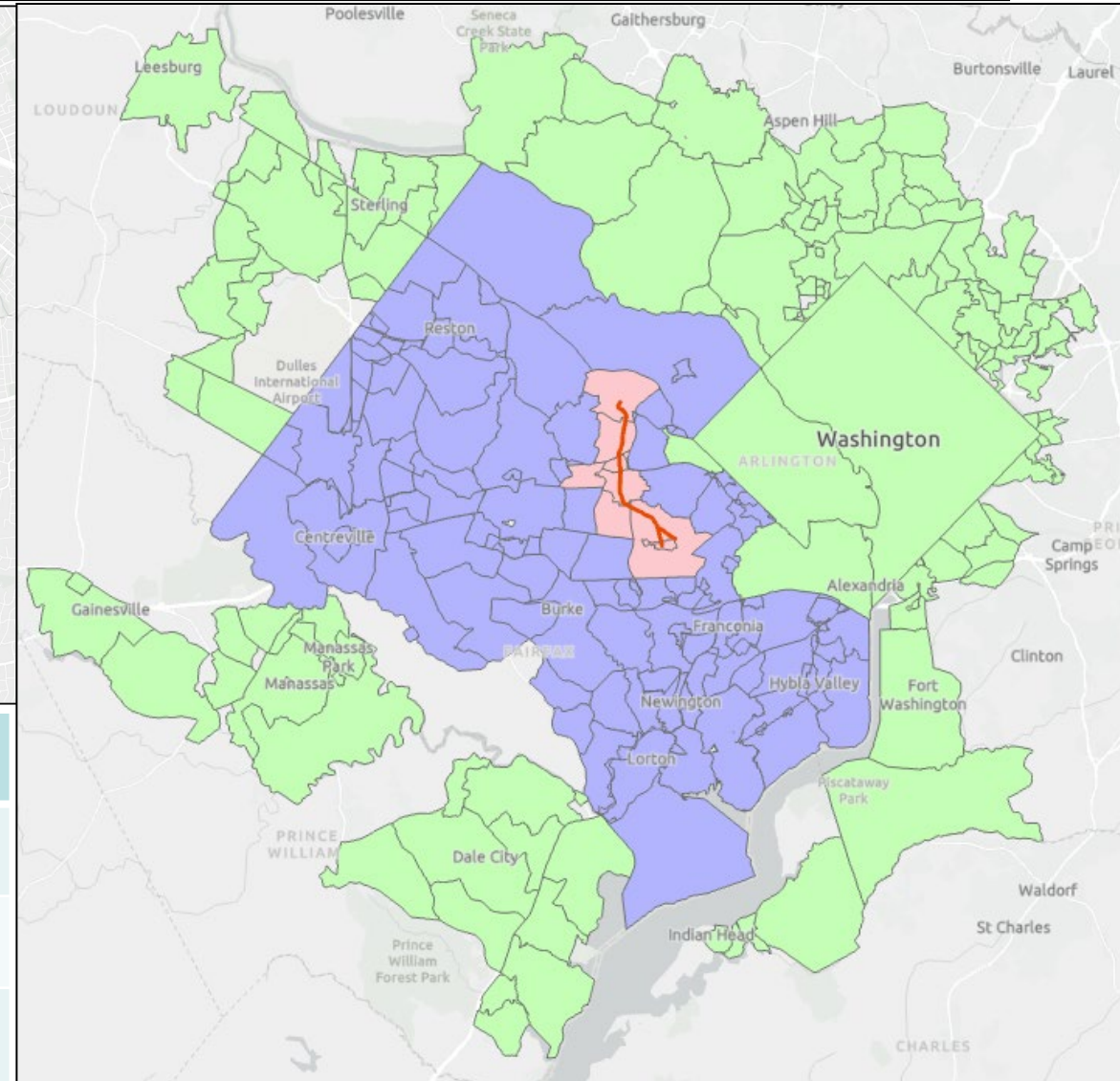
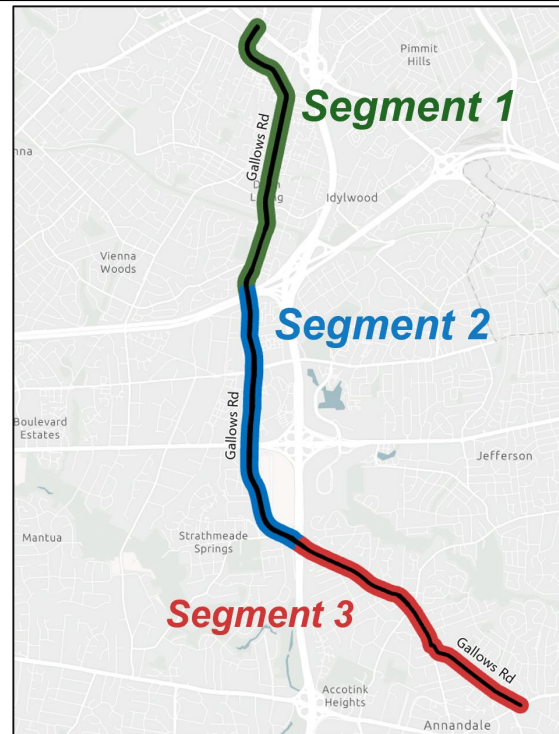
- Inform and calibrate/validate the travel demand and traffic operations models
- Confirm with field observations and document current trends.
- Types of data collected:
 - Traffic counts
 - Travel time, queues, signal timing
 - Pedestrian, bicycle, transit and bus stop infrastructure



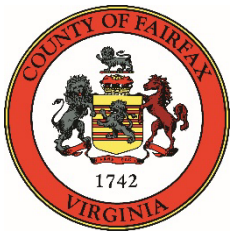


Corridor Travel Patterns

Analyzed travel patterns to discern types of vehicle trips served by Gallows Road: local, county, or regional



Segment	Local	County	Regional
1 - North	59%	27%	14%
2 - Central	62%	27%	11%
3 - South	46-53%	34-42%	10-12%

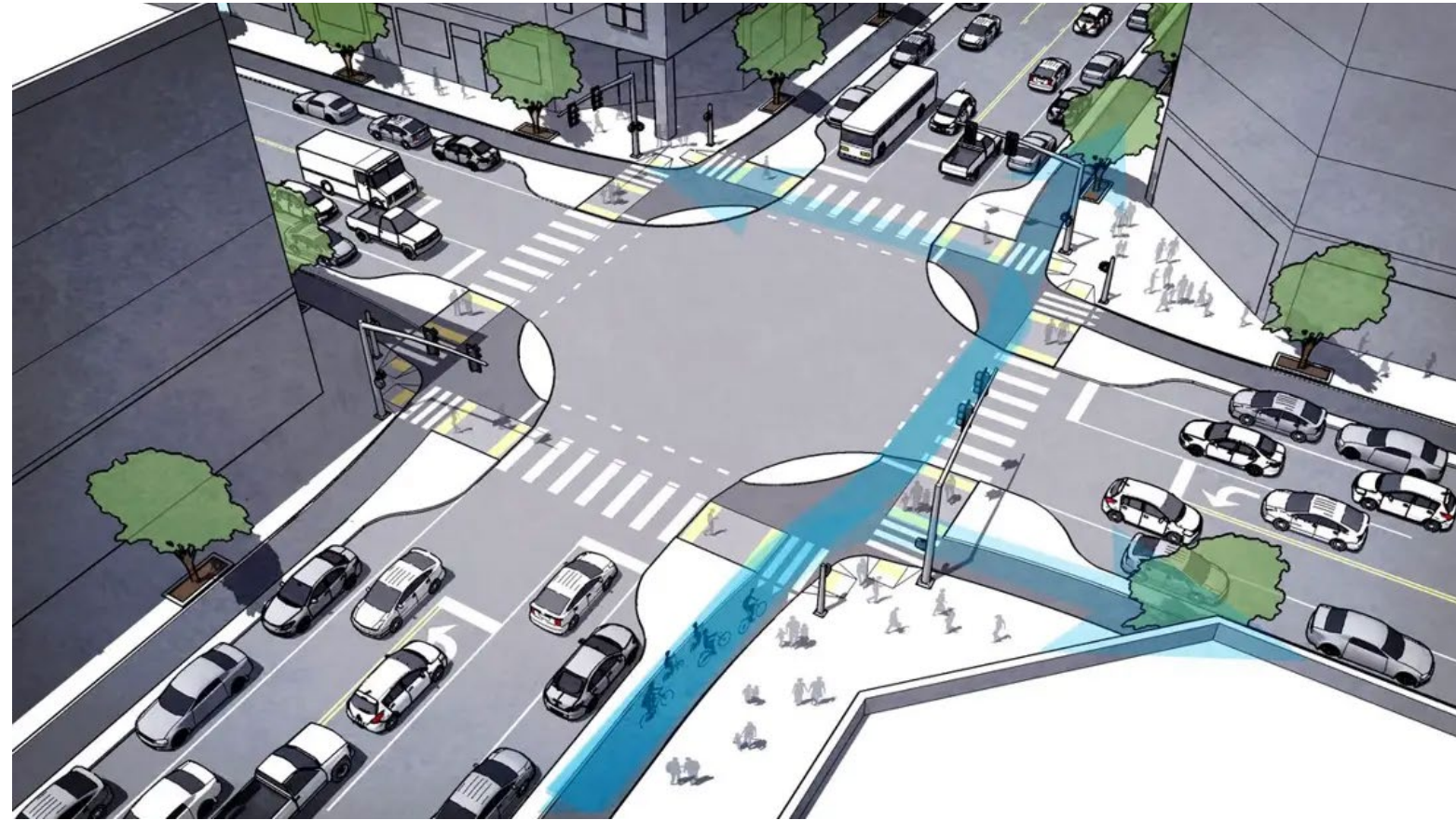


Vehicle Network

Analyzed existing traffic data, including an assessment of how well the roadway network is accommodating current demand

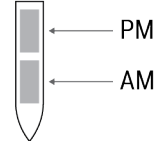
Key elements of the analysis include:

- Vehicle delay
- Vehicle queuing
- Travel times along the corridor

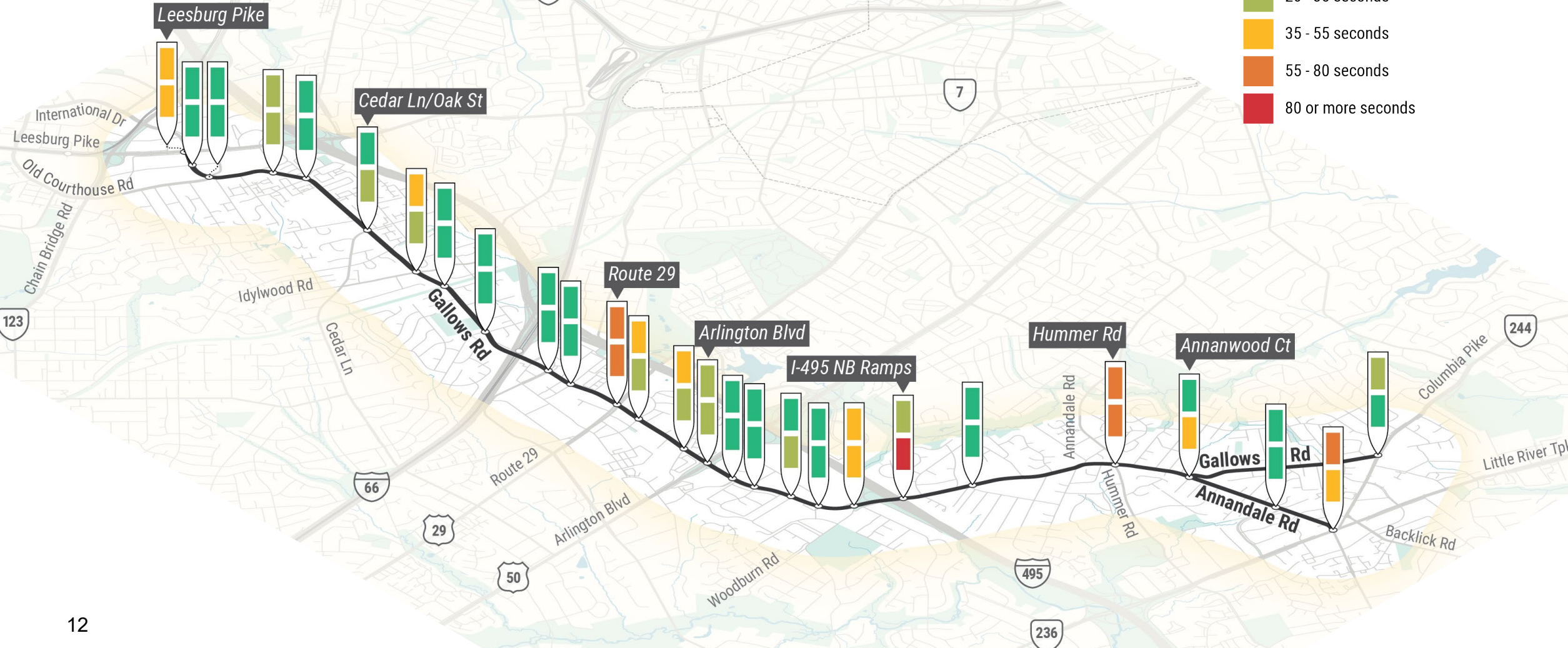


Existing Conditions: Seconds of Delay

Seconds of delay at intersection

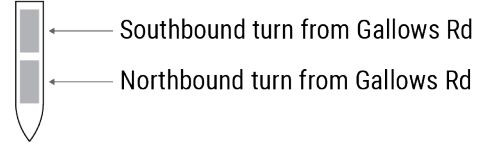


- 0 - 20 seconds
- 20 - 35 seconds
- 35 - 55 seconds
- 55 - 80 seconds
- 80 or more seconds

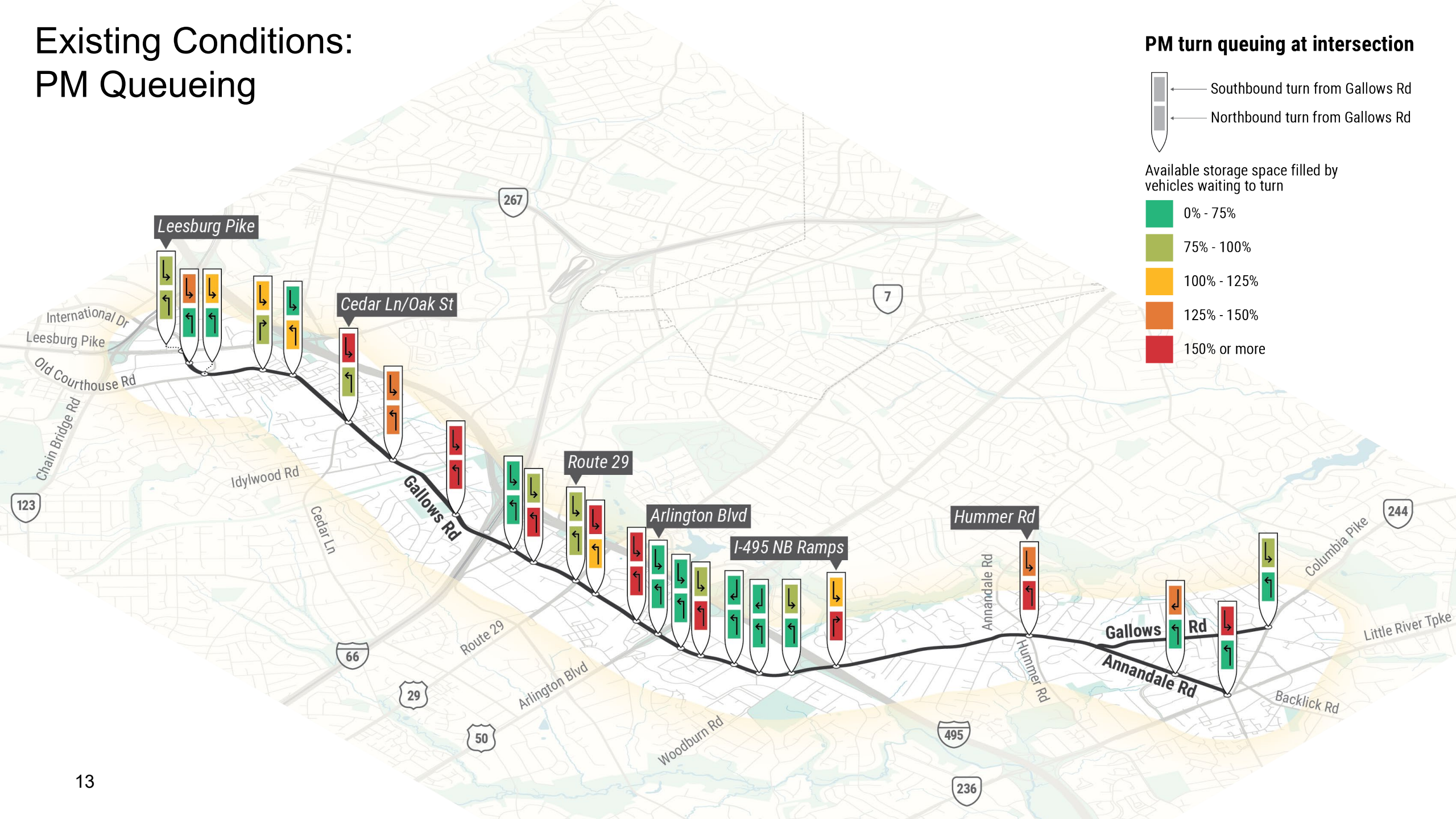
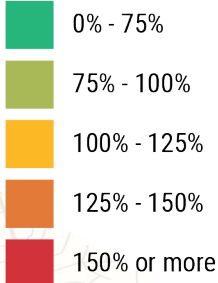


Existing Conditions: PM Queueing

PM turn queuing at intersection



Available storage space filled by vehicles waiting to turn



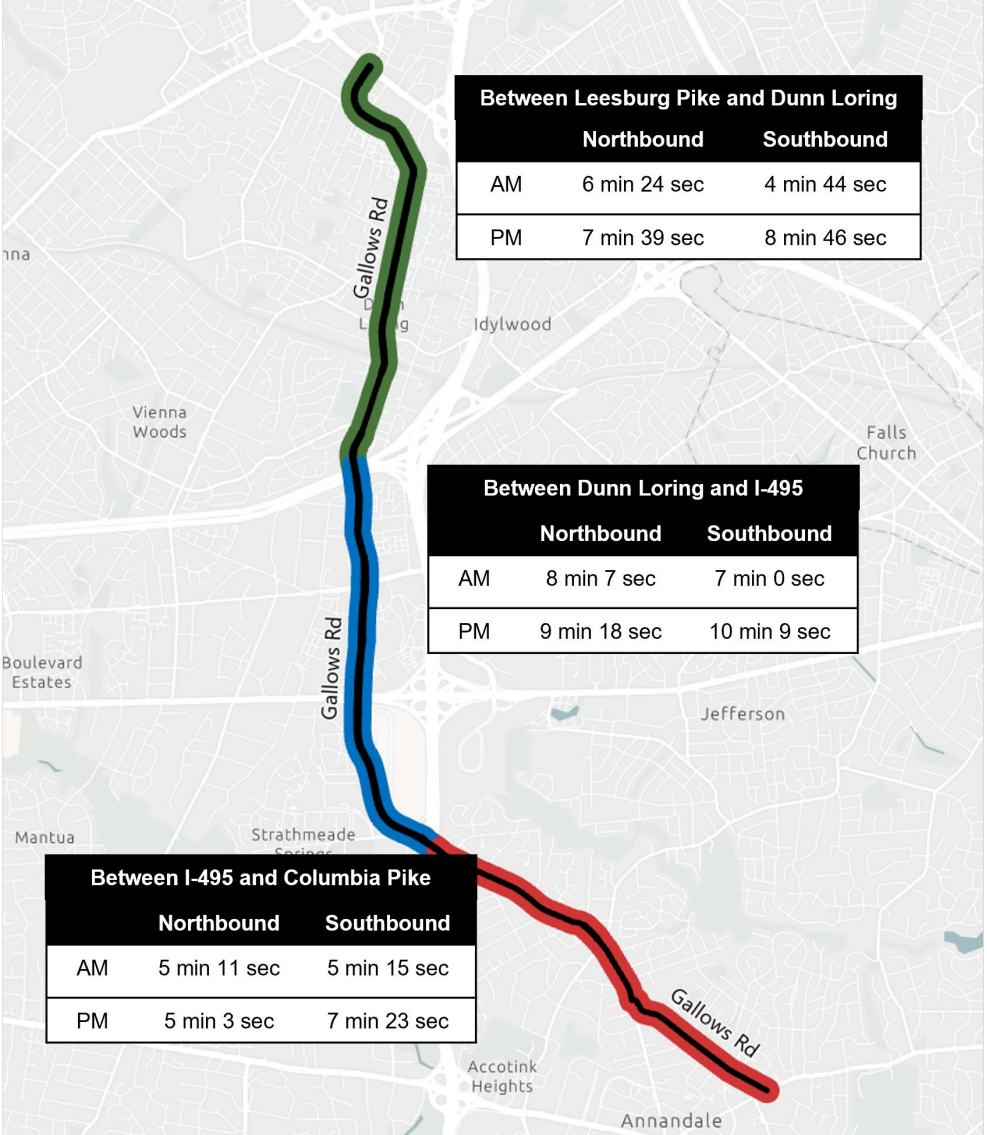
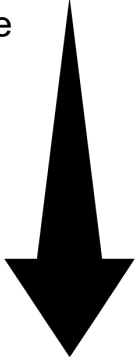
Existing Conditions: Observed Peak Period Travel Time

Southbound

Leesburg Pike to Little River Turnpike

AM **16**min **58**sec

PM **26**min **18**sec

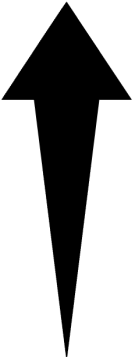


Northbound

Little River Turnpike to Leesburg Pike

AM **19**min **43**sec

PM **22**min **0**sec





Walk Audits



East side, approaching Justine Drive



West side, crossing at Avenir Place/Bellforest Drive



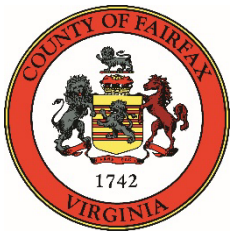
West side, approaching Prosperity Avenue



Asphalt trail behind INOVA Center for Personalized Health (ICPH)

East side, approaching I-495 interchange

West side, approaching Hummer Road



Pedestrian Level of Comfort:

Qualitative metric of pedestrians' perceived comfort when travelling along or crossing a roadway

Each pathway segment and crossing scored 1-

- PLOC 1 is most comfortable
- PLOC 4 is least comfortable

Pedestrian Level of Comfort

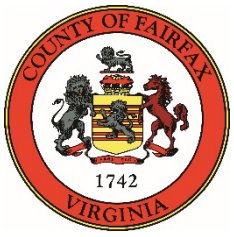


Pathway factors include

- Pathway and buffer widths
- Posted speed limit
- Presence of parking lane, bike lane, street trees

Crossing factors include

- Number of lanes
- Posted speed limit
- Presence of median, pedestrian refuge
- Type of crosswalk markings



Corridor Examples-Pedestrian



PLOC 1: Near INOVA, west side



PLOC 4: Near Electric Avenue, west side

Existing Conditions: Pedestrian Level of Comfort

Pedestrian Level of Comfort

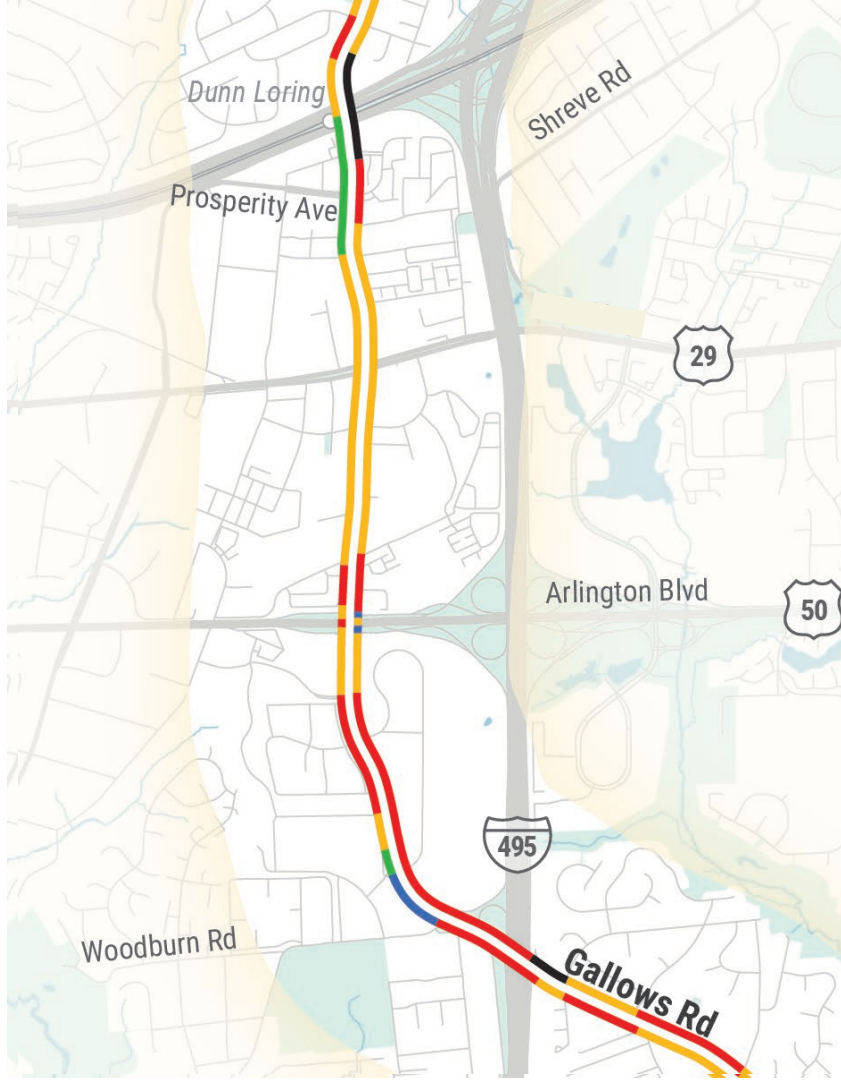


Missing Sidewalks

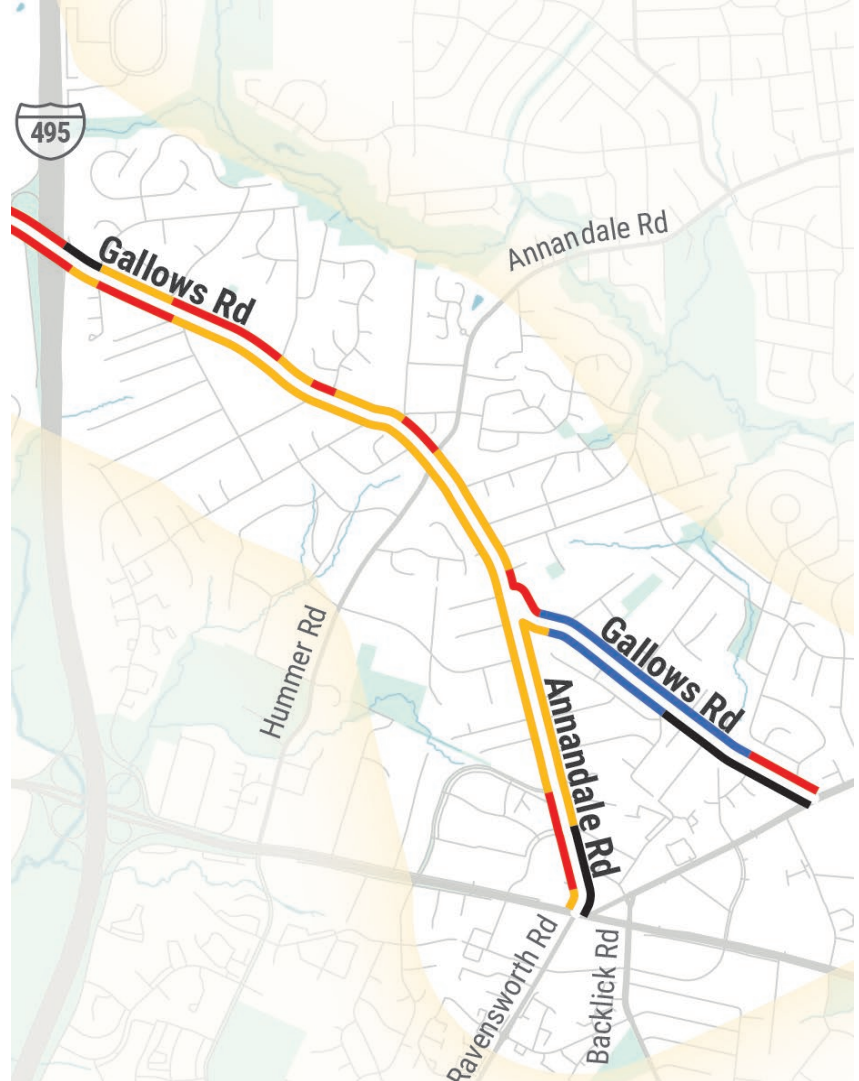
Segment 1



Segment 2



Segment 3



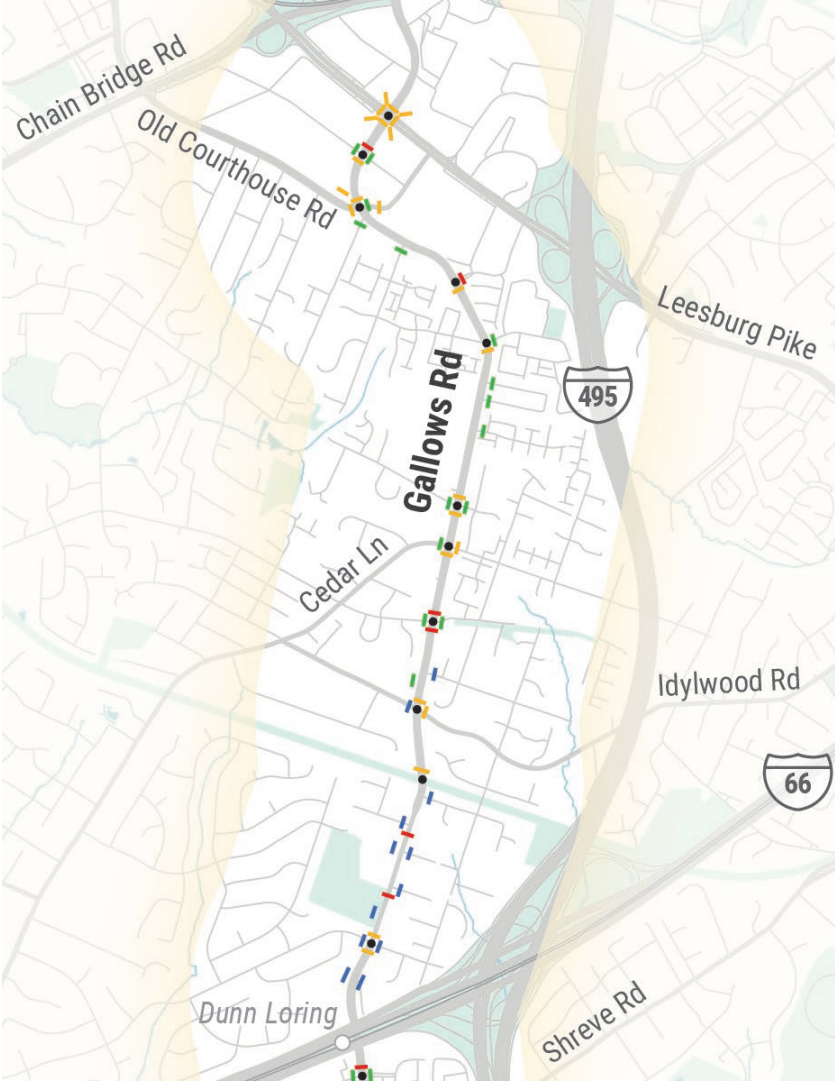
Existing Conditions: Pedestrian Crossing Score

Pedestrian Crossing Score

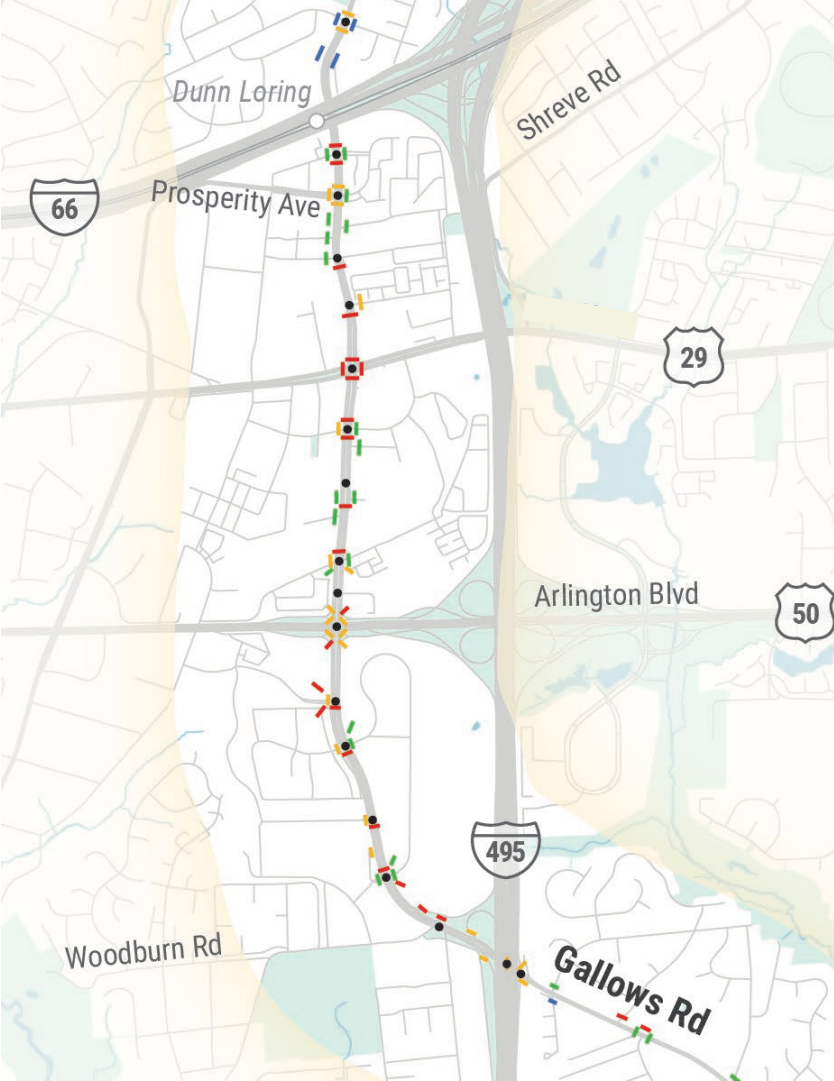
● Signalized location



Segment 1

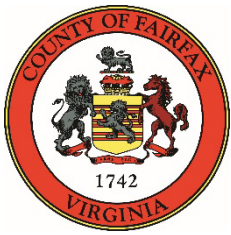


Segment 2



Segment 3





Bicycle Level of Traffic Stress (LTS)

Low Stress

High Stress



LTS 1

comfortable for all ages and abilities



LTS 2

comfortable for most adults



LTS 3

comfortable for confident bicyclists



LTS 4

uncomfortable for most

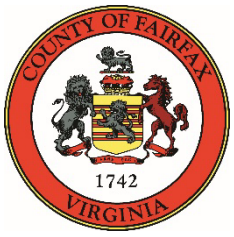
Example:

Physically separated bike lane on low speed, low volume road

Buffered bike lane on a low-speed street

Narrow bike lane or shoulder on a busy street

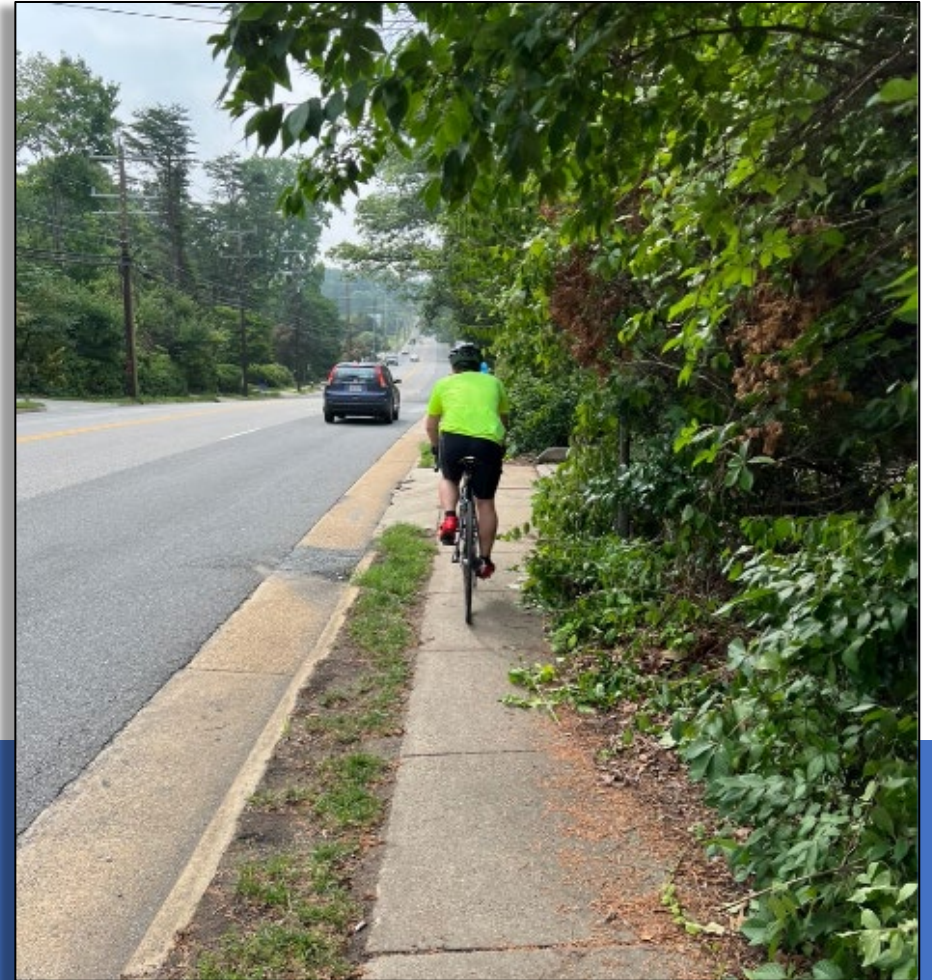
No bike lane on a busy street



Corridor Examples-Bike



**BLTS 2: Near Thornton St,
southbound**



**BLTS 4: Near I-495 interchange,
southbound**

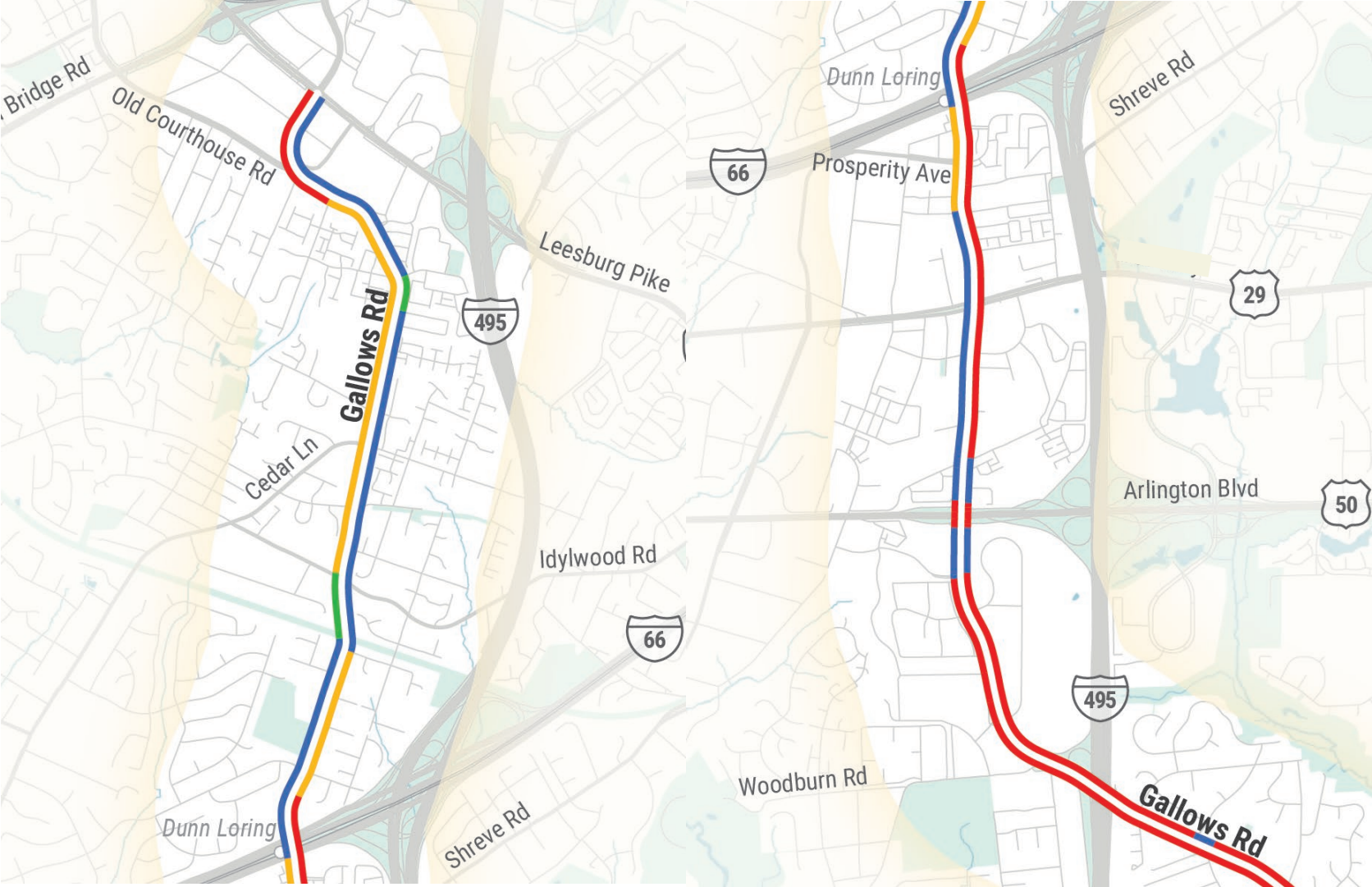
Existing Conditions: Bicyclist Level of Traffic Stress

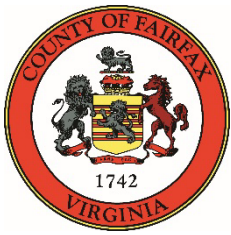


Segment 1

Segment 2

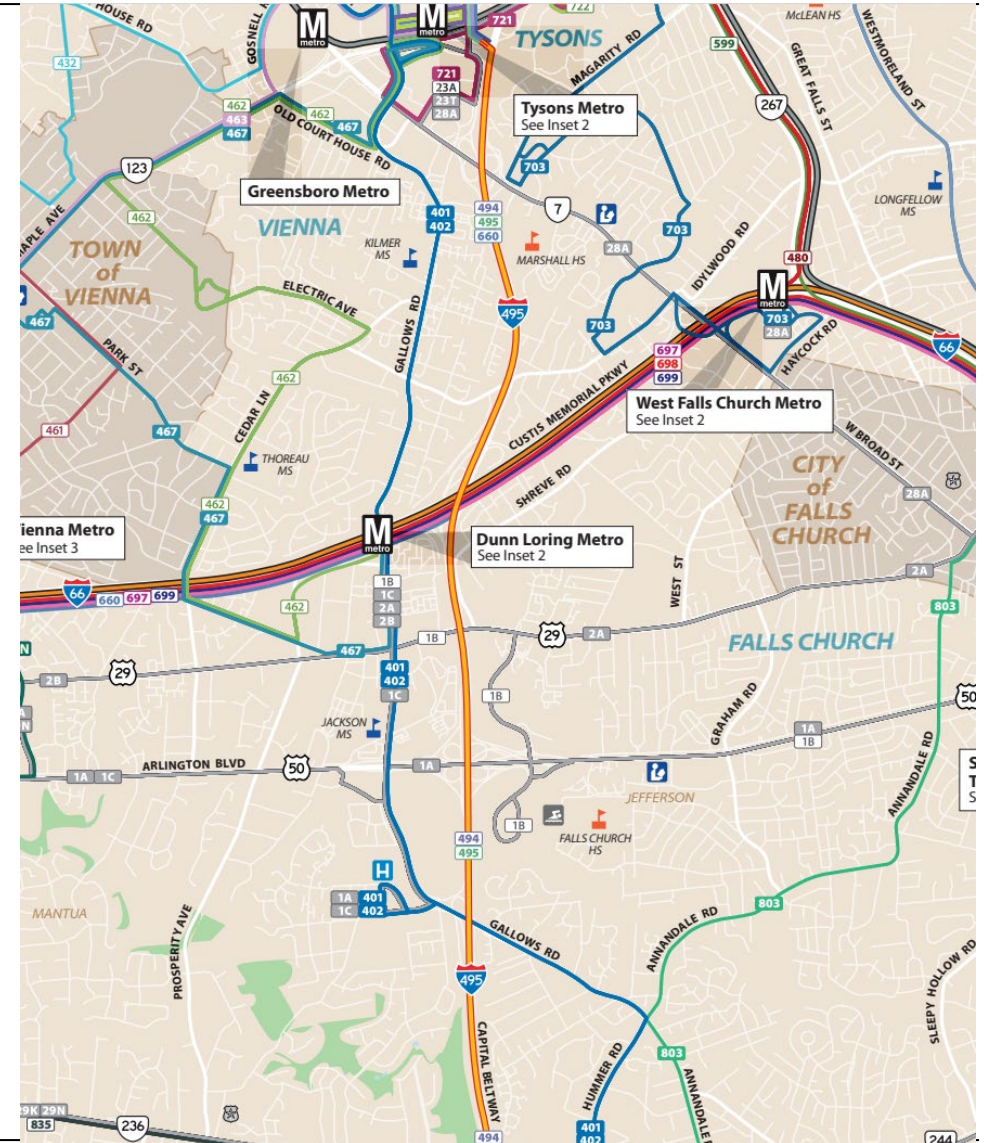
Segment 3





Transit Network

- Local bus service is provided by Fairfax Connector and Metrobus (WMATA)
- Primary route on Gallows Road is 401/402
- Connector Routes:
 - 401/402
 - 462/467
 - 803
- Metrobus Routes
 - 1A/1B
 - 1C
 - 2A
 - 2B



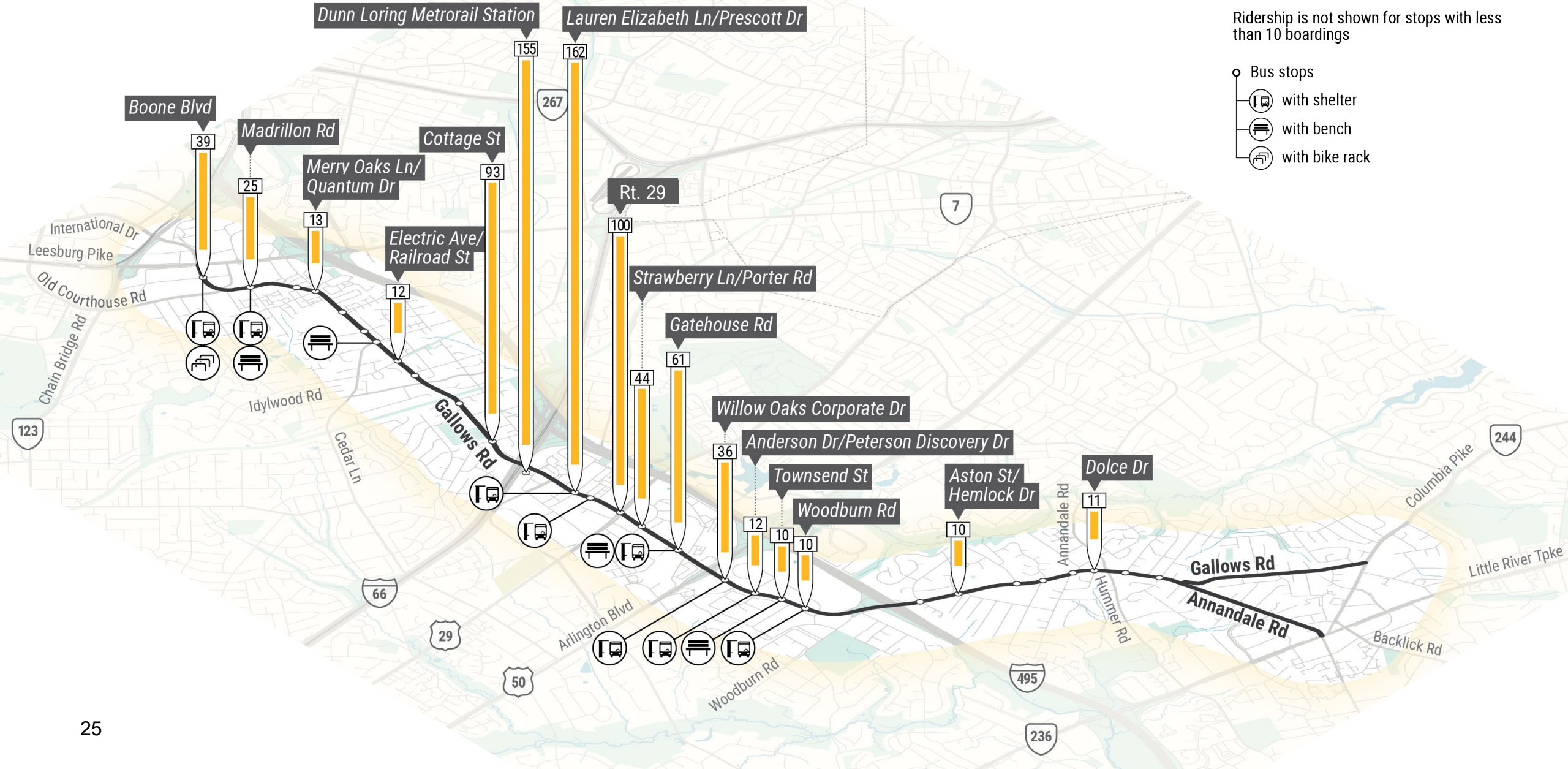
Existing Conditions: Transit Ridership

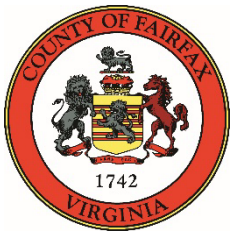
Fairfax Connector bus boardings

The map shows combined northbound and southbound boardings at each location

Ridership is not shown for stops with less than 10 boardings

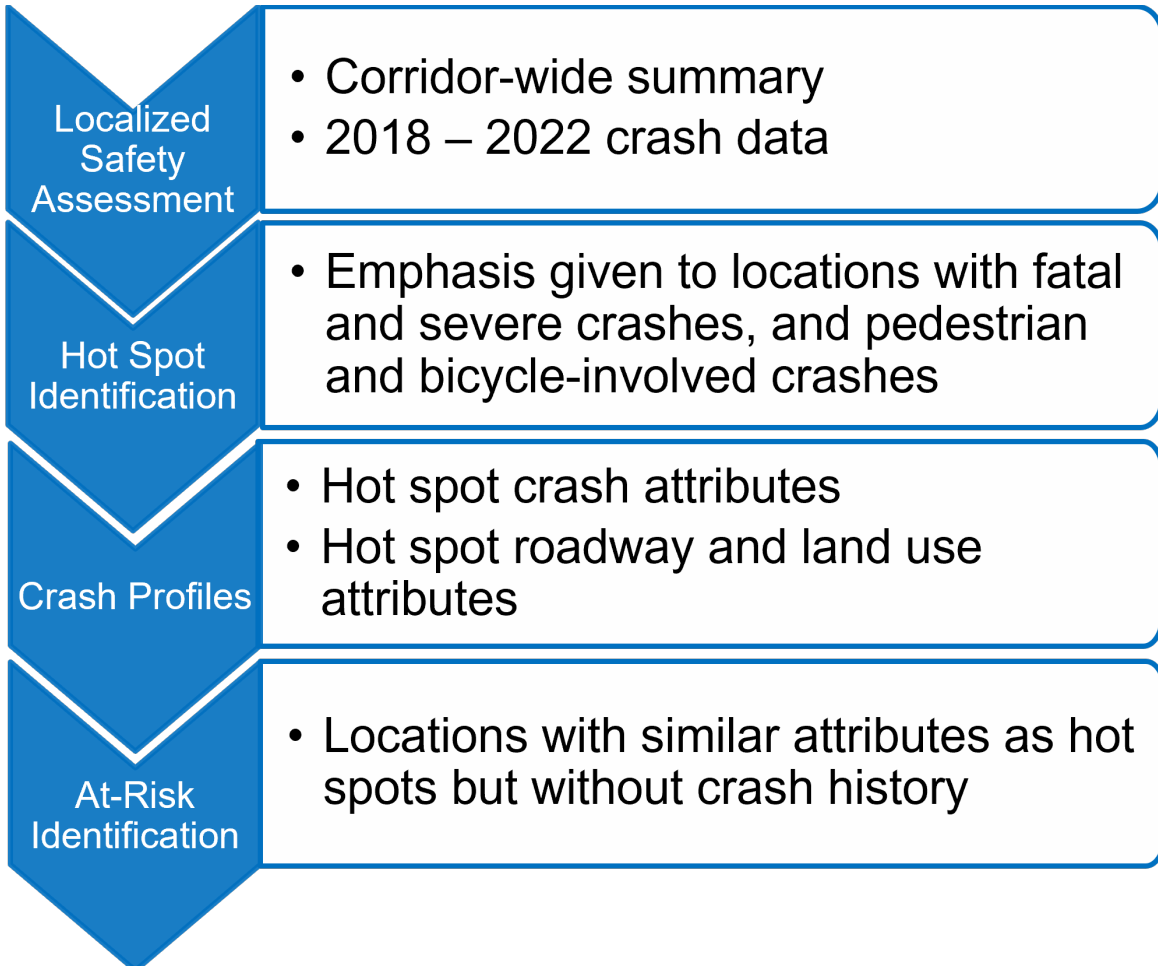
- Bus stops
- ⊞ with shelter
- ⊞ with bench
- ⊞ with bike rack





Multimodal Safety

Multimodal Safety Approach









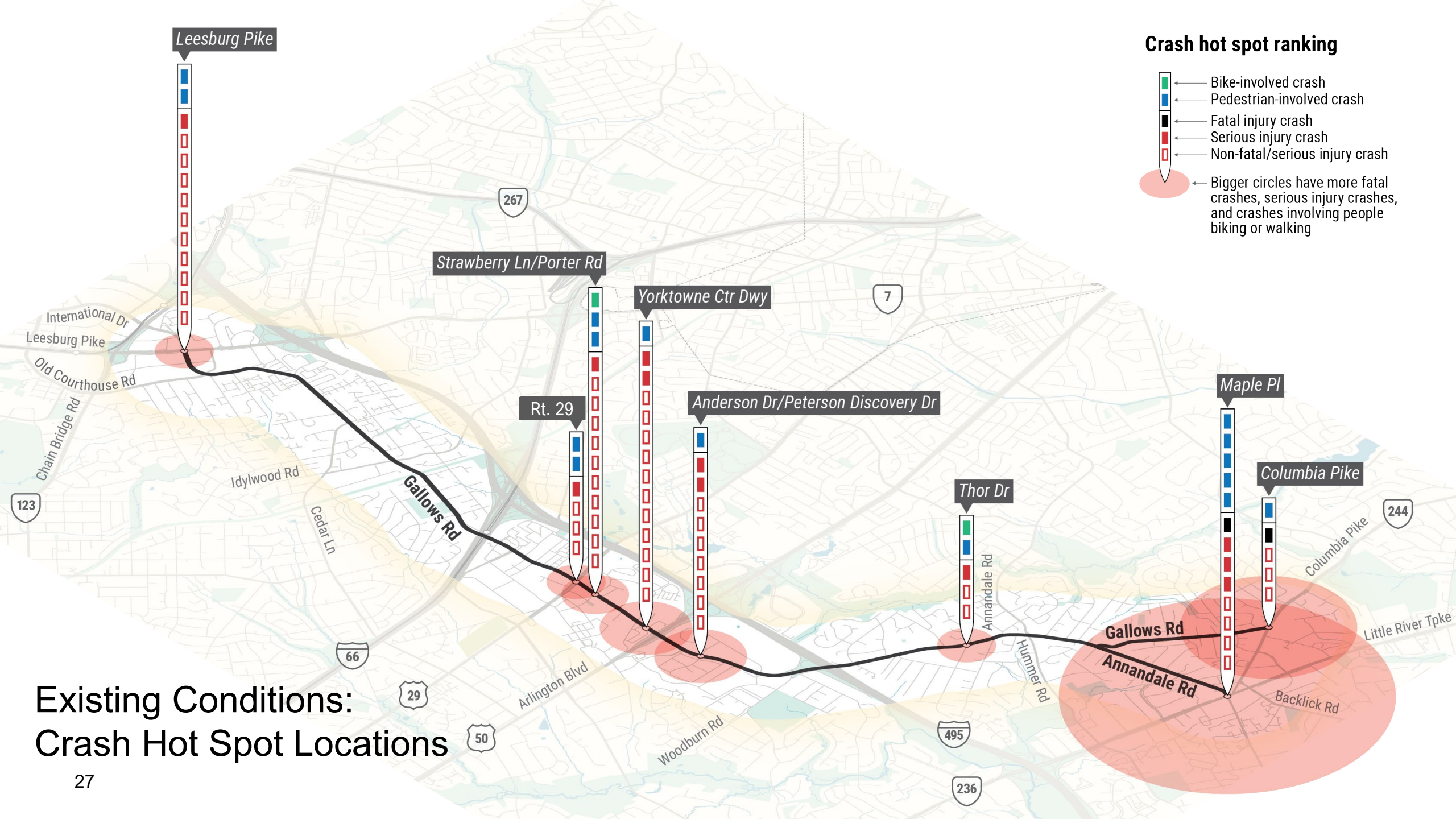
Gallows Road Corridor Safety Summary (2018 – 2022 Crash Data)

Mode	All Injury Crashes	Fatal and Severe Crashes
Automobile Only	214	10
Bicycle - Involved	7	2
Pedestrian - Involved	28	11
Total	249	23



Crash hot spot ranking

-  ← Bike-involved crash
-  ← Pedestrian-involved crash
-  ← Fatal injury crash
-  ← Serious injury crash
-  ← Non-fatal/serious injury crash
-  ← Bigger circles have more fatal crashes, serious injury crashes, and crashes involving people biking or walking

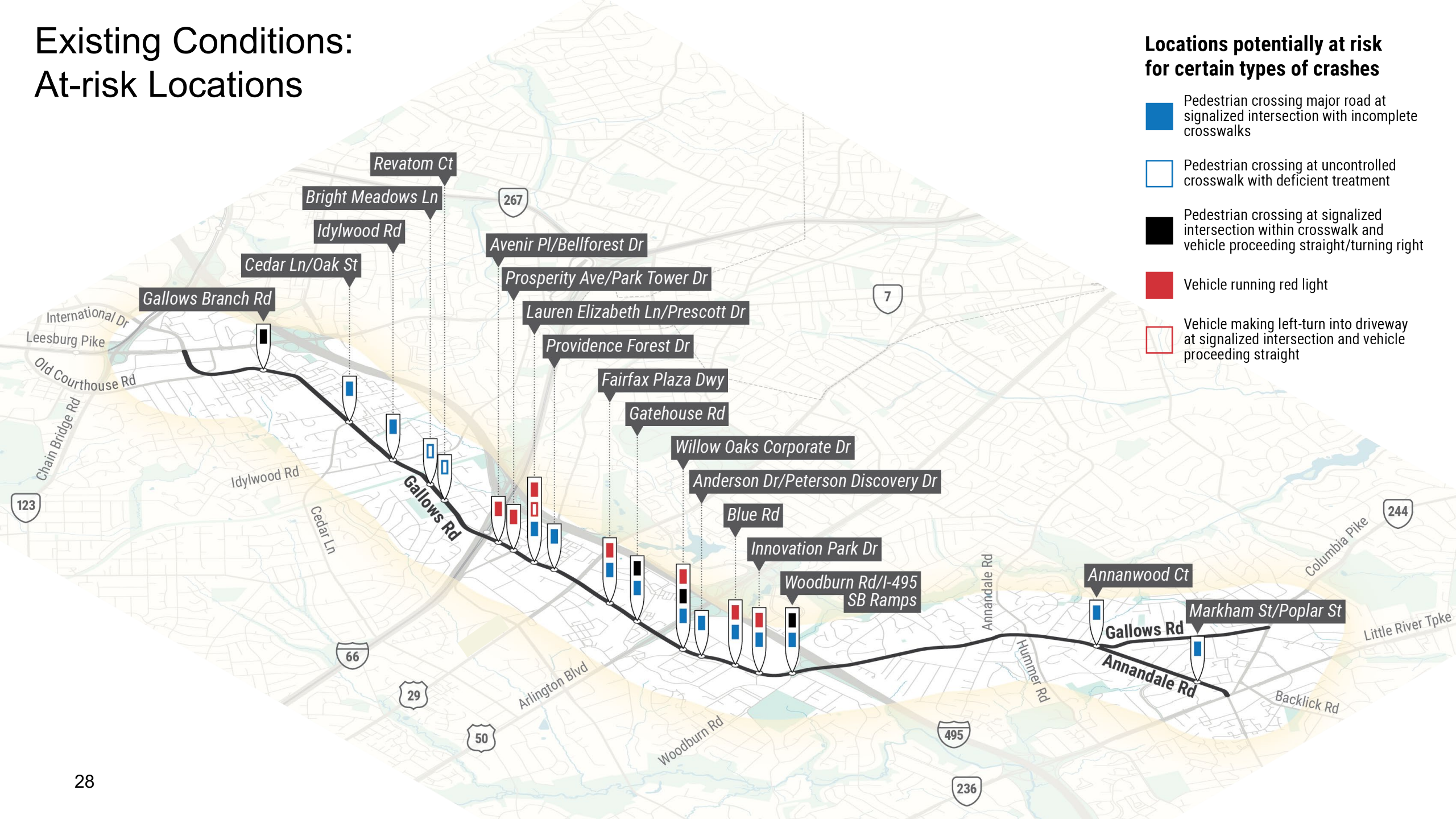


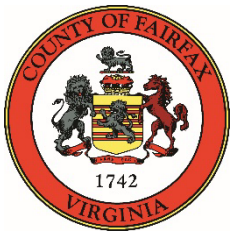
Existing Conditions:
Crash Hot Spot Locations

Existing Conditions: At-risk Locations

Locations potentially at risk for certain types of crashes

- Pedestrian crossing major road at signalized intersection with incomplete crosswalks
- Pedestrian crossing at uncontrolled crosswalk with deficient treatment
- Pedestrian crossing at signalized intersection within crosswalk and vehicle proceeding straight/turning right
- Vehicle running red light
- Vehicle making left-turn into driveway at signalized intersection and vehicle proceeding straight

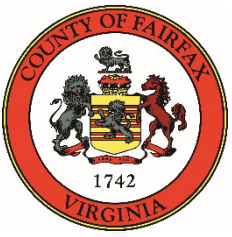




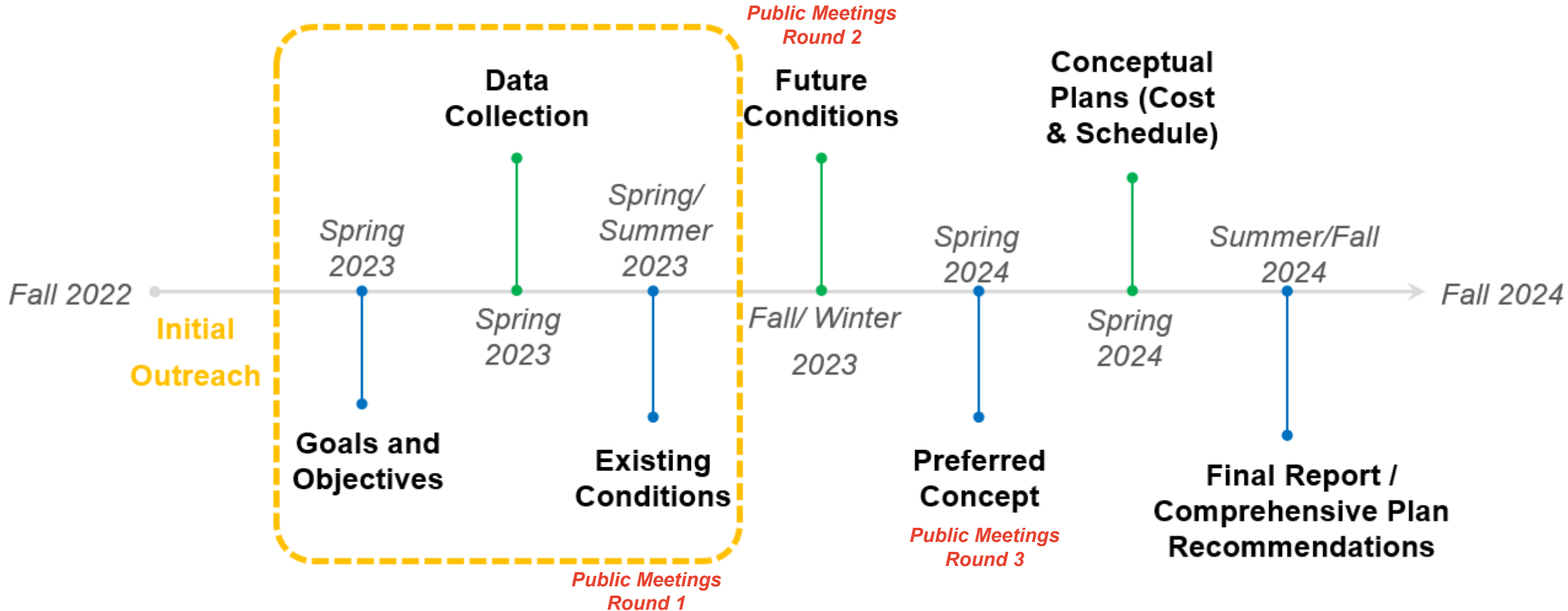
Future Conditions Analysis

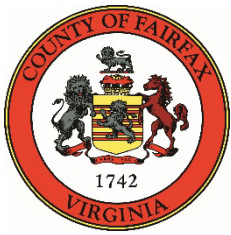
- 2045 Analysis
 - Baseline
 - Alternatives
 - Active Transportation
 - Transit including BRT
 - Vehicle
- Preferred Concept





Next Steps / Schedule





Questions/Comments

Visit Our Webpage – Please Provide Feedback
[Gallows Road Study | Transportation \(fairfaxcounty.gov\)](https://www.fairfaxcounty.gov/transportation/gallows-road-study)



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