

## City of Alexandria, Virginia

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### Traffic and Parking Board

**DATE:** June 24, 2019

**DOCKET ITEM:** #9

**ISSUE:** Consideration of a request to implement the following operational changes to Seminary Road between North Howard Street and North Quaker Lane:

- Eliminate a travel lane in the eastbound direction on Seminary Road between St. Stephens Road and Zabriskie Drive
- Install a HAWK signal at two locations:
  - On Seminary Road at Chapel Hill Drive
  - On Seminary Road between St. Stephens Road and Fort Williams Parkway

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**REQUESTED BY:** City of Alexandria

**LOCATION:** Seminary Road between North Howard Street and North Quaker Lane

**STAFF RECOMMENDATION:** That the Board makes a recommendation to City Council to eliminate a travel lane in the eastbound direction on Seminary Road between St. Stephens Road and Zabriskie Drive and install two HAWK signals on Seminary Road.

**BACKGROUND:**

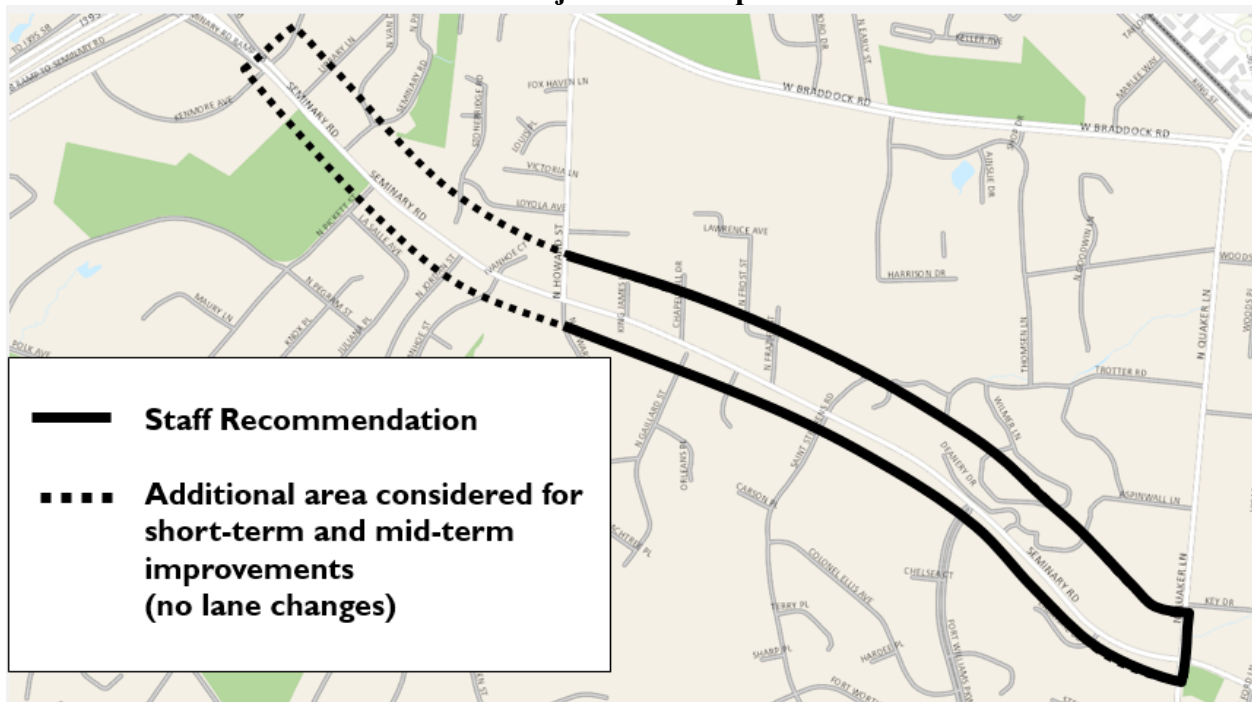
Seminary Road between Kenmore Avenue and North Quaker Lane is scheduled to be repaved in September 2019. The City's [Complete Streets Policy](#) directs staff to use routine maintenance as an opportunity to consider changes that improve safety and convenience for all roadway users. Seminary Road is a key corridor in the City of Alexandria's transportation network. Safety and mobility improvements are recommended in the City's Vision Zero Action Plan and Transportation Master Plan. Because of these recommendations and policies, staff initiated a process to get a better understanding of the community's concerns with this roadway and discuss design options for improved safety.

In 2018, City staff initiated the Seminary Road Complete Streets Project. The project study area encompasses Seminary Road between Kenmore Avenue and North Quaker Lane, which are the limits of the roadway resurfacing project. In Fall 2018, staff was informed of a project by Transurban, the company constructing and operating the I-395 Express Lanes, that could impact traffic along this segment of roadway. Staff put the project on hold while Transurban collected data and provided more details regarding their evaluation of allowing High Occupancy Toll (HOT) lanes to exit at Seminary Road. In light of the potential changes to traffic along the

corridor and existing traffic counts that showed higher traffic volumes between Kenmore Avenue and North Howard Street, staff reduced the project scope to focus on the roadway between North Howard Street and Quaker Lane. The project resumed in Spring 2019 when three design alternatives were presented to and discussed with the community.

**DISCUSSION:** Staff separated the project into two segments: Seminary Road west of North Howard Street, and Seminary Road east of North Howard Street, due to the natural break in traffic volumes at North Howard Street. Traffic volume was a key factor in considering improvements that would be feasible and appropriate. In light of the scope of the project, traffic volumes, and unknown impacts from the I-395/VDOT project, staff decided to continue with the project in a reduced segment that had more predictable traffic patterns and where lane reconfiguration would be more appropriate according to FHWA guidance.

### Project Area Map



All design alternatives maintained the same recommendations between Kenmore Avenue and North Howard Street where staff is recommending pedestrian crossing improvements in conjunction with resurfacing that include high visibility crosswalks across Seminary, standard crosswalks across side streets, Leading Pedestrian Intervals (LPIs) and No Turn on Red restrictions. Staff is considering additional mid-term improvements including Transit Signal Priority for buses, sidewalk widening and additional signal improvements.

Between North Howard Street and North Quaker Lane, staff originally considered three design alternatives, two of which involved removing at least one travel lane to dedicate space for other roadway users. Additional details on each of the three alternatives staff considered are provided below. The final staff recommendation is a hybrid approach between two of the alternatives previously considered.

## **Project Purpose and Objectives**

The purpose of this project is to examine the roadway for potential improvements to mobility, safety, and access where feasible in conjunction with routine maintenance and in accordance with the City's Complete Streets Policy.

The project objectives are to:

- Reduce crashes on the corridor
- Improve mobility, safety, and access for all roadway users
- Provide continuous, safe, and comfortable places for people to walk
- Provide more frequent and safer crossing opportunities along the corridor
- Minimize delay at intersections and encourage speed limit compliance
- Where excess roadway capacity exists, explore opportunities to reconfigure the corridor to better serve all modes of transportation

## **Staff Recommendation**

Staff originally considered three design alternatives for Seminary Road between North Howard Street and North Quaker Lane. After considering public input, data, and the City's adopted plans and policies, staff recommends a hybrid approach between Alternative 1 and Alternative 2 for the Traffic and Parking Board's consideration. These specific changes are listed below:

### *Seminary Road between Kenmore Avenue and North Howard Street*

- Install high-visibility crosswalks at:
  - Seminary Road and Kenmore Avenue (long-term recommendation contingent on Transurban findings and feasibility of a traffic signal)
  - Seminary Road and Library Lane
  - Seminary Road and North Pickett Street
  - Seminary Road and North Jordan Street
- Widen sidewalk, where possible
- Install LPIs and No Turn on Red restrictions to increase pedestrian safety at:
  - Seminary Road and North Pickett Street
  - Seminary Road and North Jordan Street

### *Seminary Road between North Howard Street and North Quaker Lane*

- Eliminate a travel lane in the eastbound direction on Seminary Road between St. Stephens Road and Zabriskie Drive (a distance of less than ½ mile) to allow space for construction of a sidewalk on the north side of Seminary Road where one is currently missing and a buffer on the south side
  - Convert the eastbound curbside lane on Seminary Road to a right-turn only at the intersection of St. Stephens Road
- Install a HAWK signal, as well as pedestrian refuge islands at two crossing locations to improve safety and access to bus stops<sup>1</sup>:

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<sup>1</sup> HAWK guidance from the MUTCD/FHWA states that these kinds of signals should meet a warrant analysis for pedestrian crossings. However, according to the MUTCD guidance, a "should" condition is a recommendation, not a requirement. These locations are not likely to meet a HAWK warrant, however RRFBs are not appropriate for most

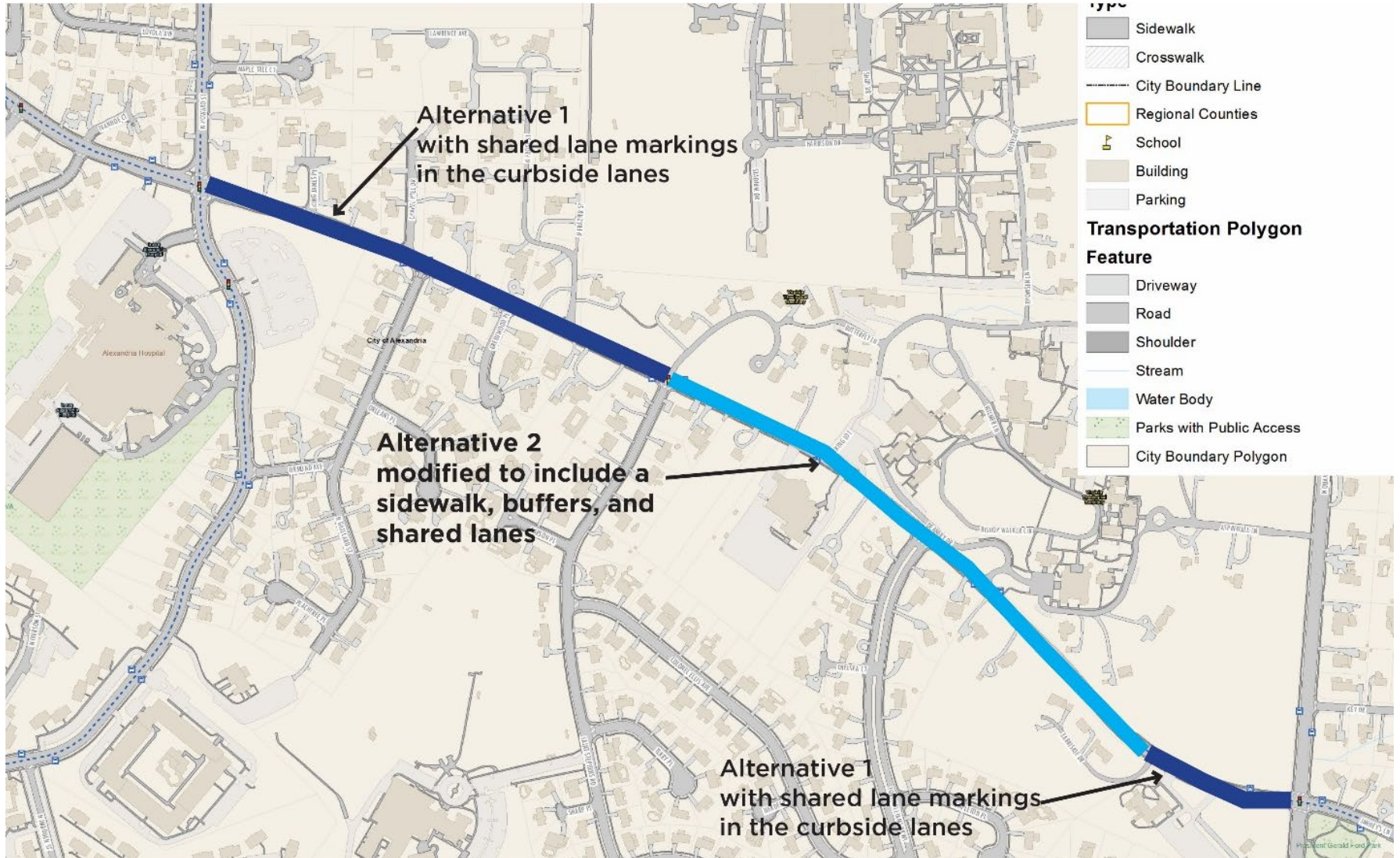
- On Seminary Road at Chapel Hill Drive
  - On Seminary Road between St. Stephens Road and Fort Williams Parkway
- Install a Rectangular Rapid Flash Beacon (RRFB) and pedestrian refuge island on Seminary Road between Fort Williams Parkway and Zabriskie Drive
- Remove the right-turn slip lane on the southbound Howard Street approach to westbound Seminary Road
- At the intersection of Seminary Road and North Quaker Lane:
  - Remove the pedestrian-only signal phase and install a Leading Pedestrian Interval (LPI) with No Turn on Red restrictions
  - Convert the existing lane configuration (left-turn only lane and through/right-turn lane) to a left-turn/through lane and right-turn only lane
- Install shared-lane markings, or sharrows, in the curb lanes to enhance awareness that bicyclists may ride in the travel lane

The graphics below illustrate the changes recommended by staff:

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of these crossings, especially in the four-lane cross section area given the FHWA guidance because of the actual speeds, number of lanes, and traffic volumes. See the FHWA Fact Sheets attached to this item for more information.

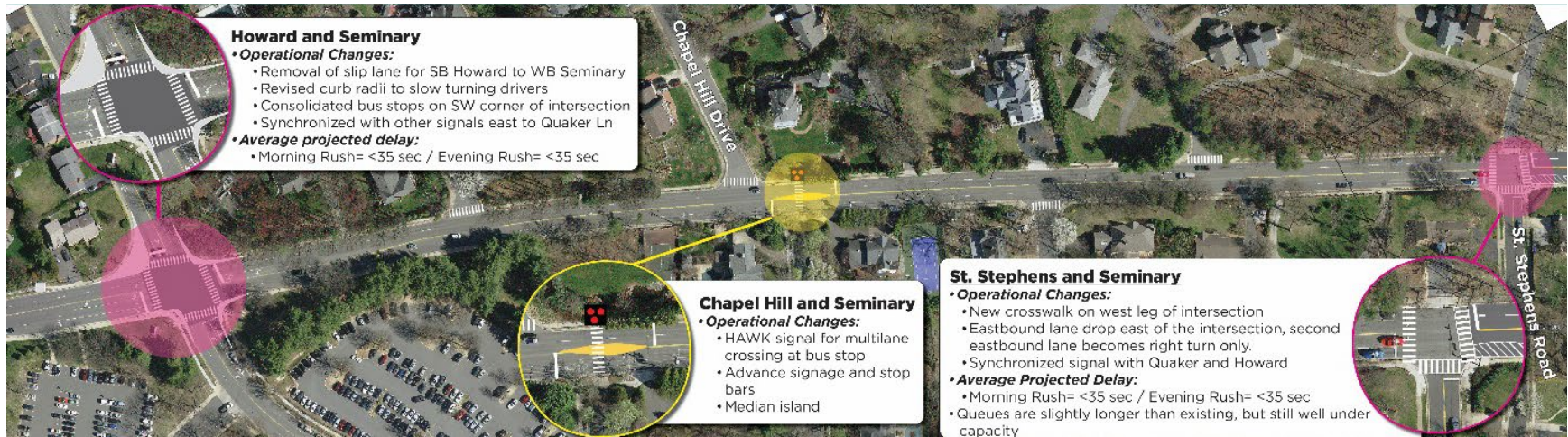
# Staff Recommendation: Overview



## Staff Recommendation: Kenmore Avenue to North Howard Street



## Staff Recommendation: North Howard Street to St. Stephens Road



## Staff Recommendation: St. Stephens Road to North Quaker Lane



The benefits of this recommendation include:

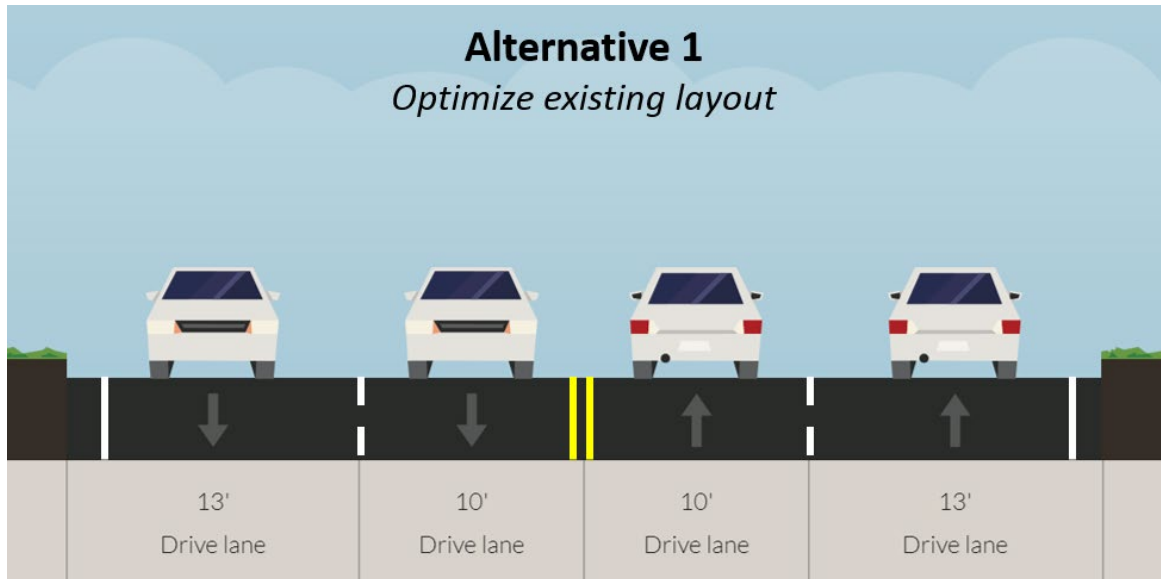
- Improved safety at pedestrian crossings
  - Leading Pedestrian Intervals, No Turn on Red restrictions, and high-visibility crosswalks on Seminary Road west of North Howard Street enhance visibility of people crossing the street
  - HAWK signals, Rectangular Rapid Flash Beacon (RRFB), and pedestrian refuge islands enhance driver yielding behavior and allow people walking to cross one direction of traffic at a time
  - Lane reduction reduces the crossing distance for people who walk
- Improved access to transit
  - New pedestrian crossings make it easier and safer for people to access bus stops along the corridor
- Enhanced pedestrian mobility, access, and comfort
  - Lane reduction allows space to fill a sidewalk gap on the north side of Seminary Road that was identified as a priority in the Transportation Master Plan and to provide a buffer between motor vehicles and people walking on the south side
  - Narrower travel lanes along the corridor allows for a buffer between motor vehicles and people walking
- Potential traffic calming effect
  - Narrower lanes, lane reduction, and median islands visually narrow the roadway and may calm traffic
- Modified signal timing improves operations and reduces vehicle delay
- Vehicle volumes are easily accommodated during the heaviest travel periods and traffic signals are coordinated and optimized (morning peak period) by maintaining two westbound lanes. The changes to delay fall into the scoring category that improves conditions for car traffic.

The disadvantages to this recommendation include:

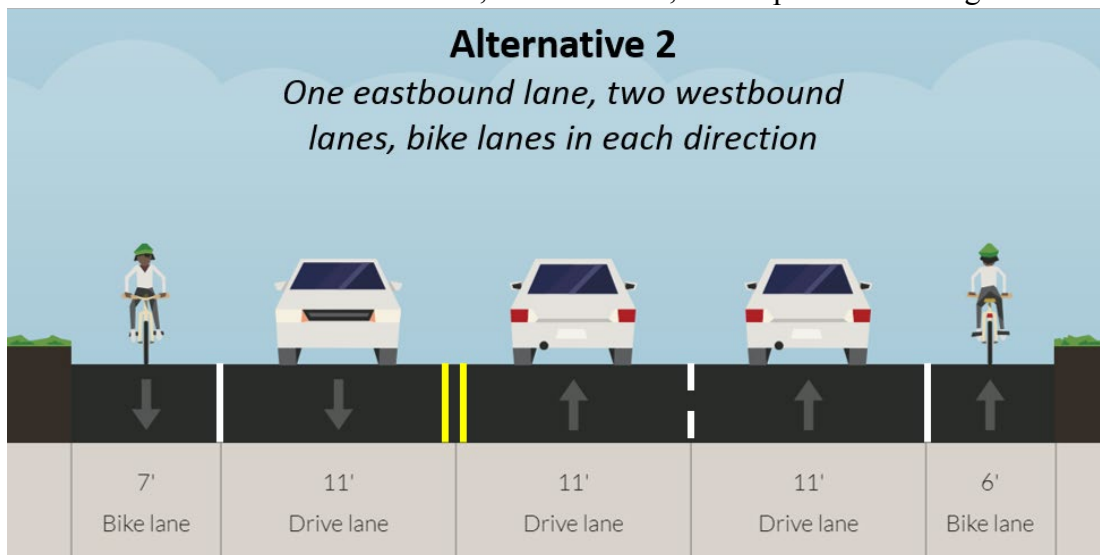
- Lack of dedicated bicycle infrastructure as recommended in the Transportation Master Plan
- Angle, rear-end, and left-turn crashes are unlikely to reduce due to lack of dedicated left-turn lanes and maintenance of the 4-lane cross section for most of the corridor.
- Pedestrian crossings are improved, but people walking still must cross at least three lanes of traffic
- Does not provide the same traffic calming effect as Alternatives 2 and 3 west of St. Stephens Road



In March, City staff presented three design alternatives to the community for consideration. These alternatives are summarized below:



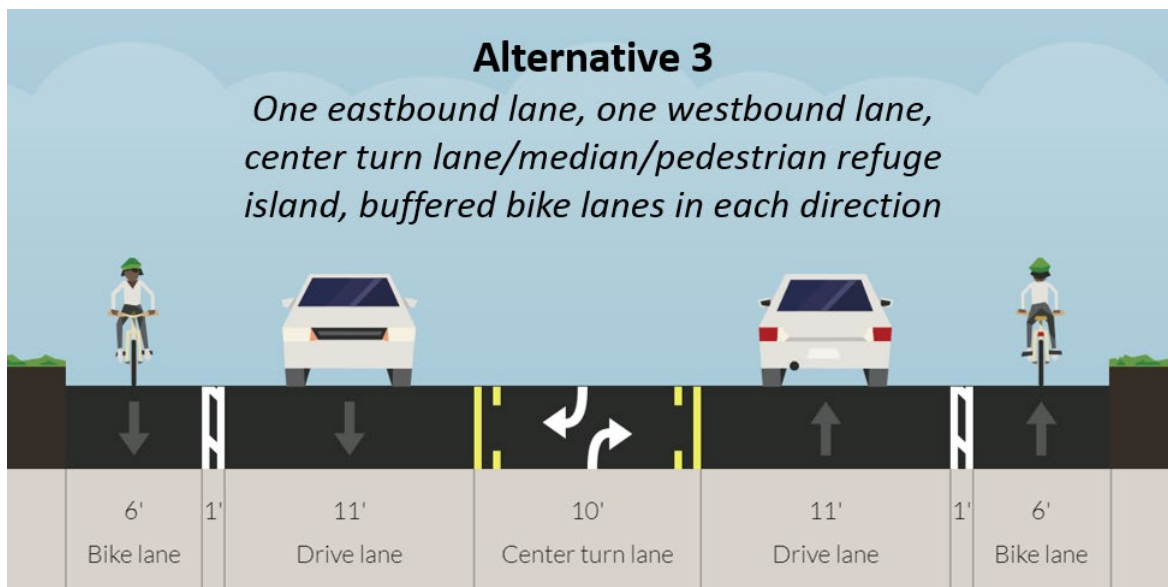
Alternative 1 represents modified existing conditions. The number of travel lanes would remain unchanged (two in each direction). The travel lanes would be narrowed from the current width of 11.5-12' to 10-11', which are the dimensions recommended in the City's Complete Streets Design Guidelines. Narrowing the travel lanes could have a slight traffic calming effect and create some buffer space between motor vehicles and people walking. However, this alternative would not allow for center turn lanes, bike facilities, and or pedestrian refuge islands.



Alternative 2 is a road diet that would remove one travel lane in the eastbound direction and reallocate that space for bike lanes in each direction. Removing a travel lane in the eastbound direction as opposed to the westbound direction was considered because AM peak traffic volumes in the westbound direction are higher than PM peak traffic volumes in the eastbound direction. Peak hour volumes are below:

Peak Period	Vehicles traveling WB	Vehicles traveling EB
<b>AM</b> 7:30- 8:30am	Quaker to Ft. Williams: <b>947</b>	N Howard to St. Stephens: <b>599</b>
	Ft. Williams to St. Stephens: <b>1019</b>	St. Stephens to Ft. Williams: <b>523</b>
	St. Stephens to N Howard: <b>1104</b>	Ft. Williams to Quaker: <b>517</b>
<b>PM</b> 4:15- 6:00pm	Quaker to Ft. Williams: <b>699</b>	N Howard to St. Stephens: <b>776</b>
	Ft. Williams to St. Stephens: <b>630</b>	St. Stephens to Ft. Williams: <b>746</b>
	St. Stephens to N Howard: <b>684</b>	Ft. Williams to Quaker: <b>684</b>

The bicycle facilities also act as a buffer space between motor vehicles and people walking. However, this cross-section does not allow for center turn lanes or pedestrian refuge islands.



Alternative 3 is a road diet that would remove one travel lane in both the westbound and eastbound direction. This space would be reallocated to provide a center left turn lane, which also allows space for pedestrian refuge islands at some locations. It would allow for buffered bike lanes in each direction. The bike lanes would also provide a buffer between motor vehicles and people walking. The center left turn lanes would improve safety and comfort for people turning left from Seminary Road and improve predictability for through traffic along the corridor.

Staff considered Alternative 3 (a road diet) due to proven benefits such as crash reductions, reduced crossing distances for pedestrians, traffic calming effects, and multimodal improvements. According to the Federal Highway Administration, streets with traffic volumes between 15,000 and 20,000 Average Daily Traffic, like Seminary Road between North Howard Street and North Quaker Lane, are “good candidates for road diets in some instances”. Average travel lanes on highways can carry approximately 6,000 vehicles per hour at capacity. The maximum capacity for a four-lane roadway is estimated at greater than 30,000 vehicles per day. For perspective, Van Dorn Street between Duke and Seminary Road carries approximately 28,000 vehicles on an average weekday with a similar cross section to the existing conditions on Seminary Road with two lanes in either direction.

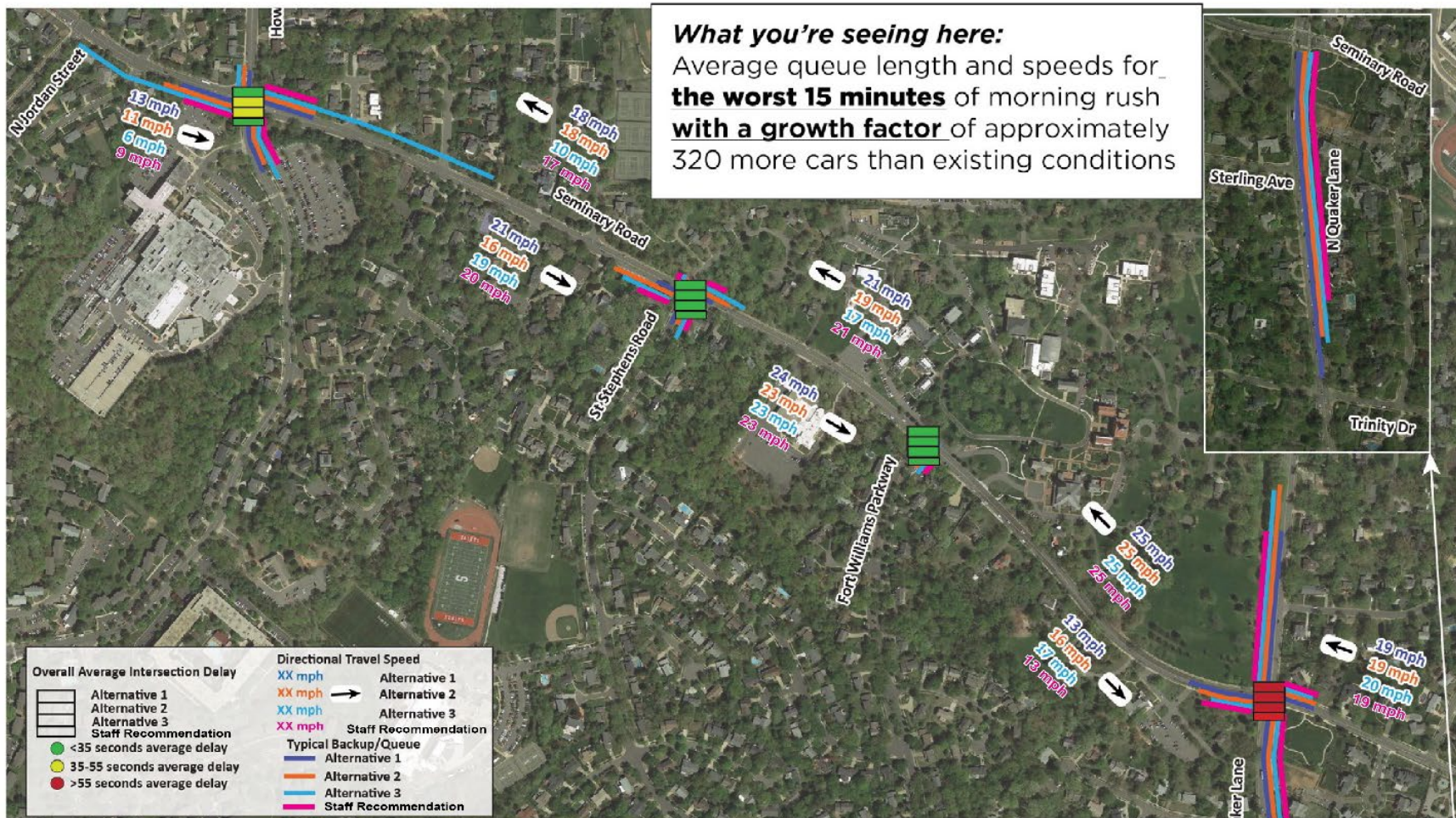
The chart below illustrates the predicted average delay at each signalized intersection for an average day during the *worst 15 minutes* of morning and evening peak travel periods. For reference, the results of the staff recommendation have been compared to the three design alternatives previously considered.

#### Average Vehicle Delay for the Peak 15 Minutes

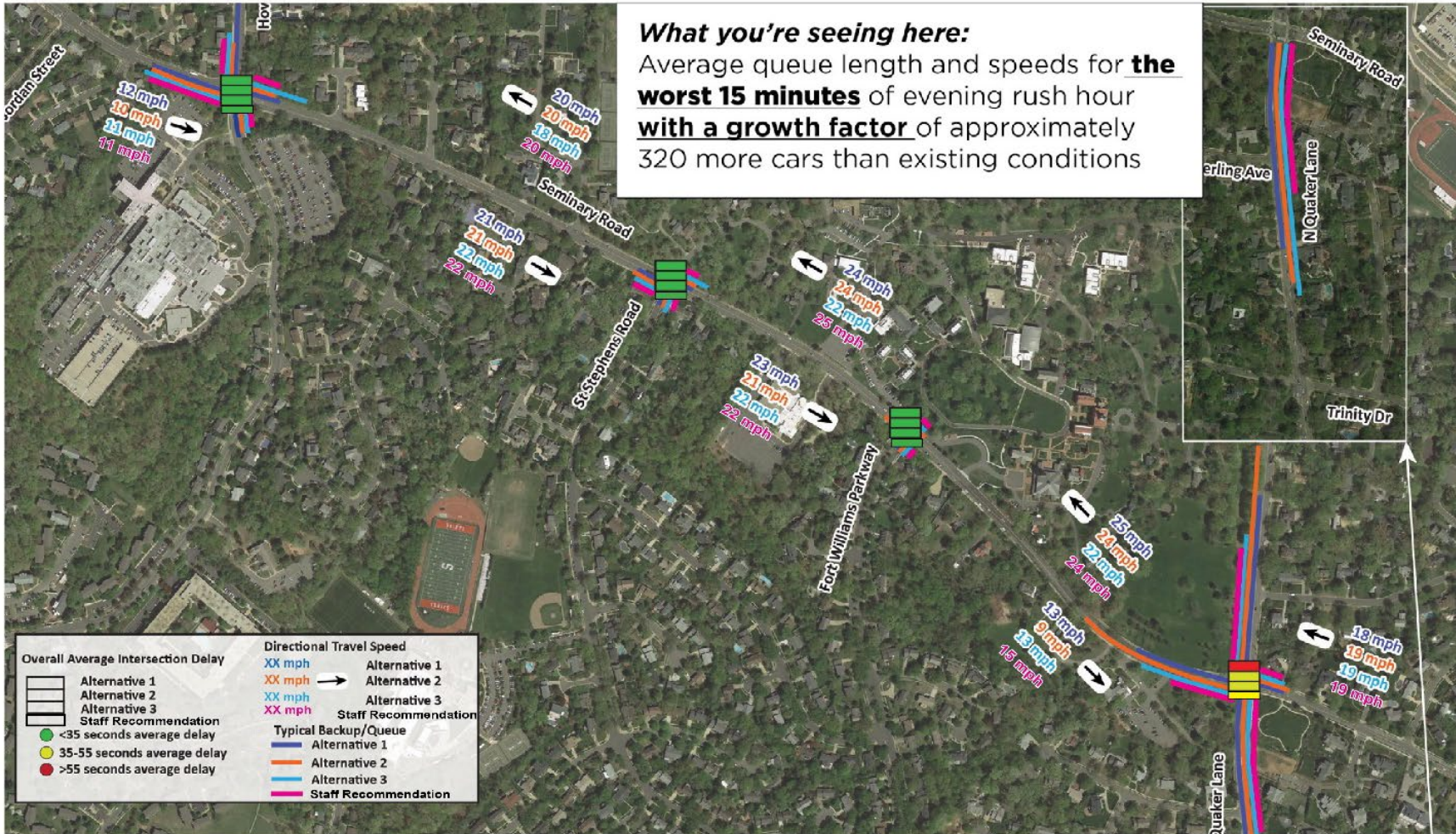
Intersection	Peak Time	Existing	Alt 1	Alt 2	Alt 3	Staff Rec.
		Delay (sec)	Change (sec)	Change (sec)	Change (sec)	Change (sec)
N Howard St & Seminary Rd	AM	28.6	0.0	+3.9	+6	<b>+1.4</b>
	PM	28.8	0.0	-2	-3.4	<b>+0.7</b>
St. Stephens Rd & Seminary Rd	AM	8.2	0.0	+4.6	+7.6	<b>+0.4</b>
	PM	6.3	0.0	-0.5	-0.3	<b>-1</b>
N Quaker Ln & Seminary Rd	AM	76.5	0.0	-11.4	-14.5	<b>-14.2</b>
	PM	57.6	0.0	-19.5	-13.4	<b>-14.4</b>

The graphics below illustrate average queue lengths and vehicle speeds for the staff-recommended alternative for the worst 15 minutes of peak travel periods with a 2% (320 cars) growth factor:

## Morning Rush Hour- Worst 15 Minutes



# Evening Rush Hour- Worst 15 Minutes



The chart below shows the performance evaluation of the staff recommendation compared to each of the three alternatives previously considered:



Scores were determined both with qualitative and quantitative considerations dependent on the project objective category. For example, scoring for vehicular delay broke down as follows:

- “Existing conditions” was within + or – 5 seconds overall alternative delay
- “Minor improvement” was an overall reduction in intersection delay on the corridor between 5-15 seconds
- “More improvement” were considered as greater than an overall reduction in delay on the corridor over 15 seconds
- “Minor impacts” was considered as 5-15 seconds more of overall intersection delay
- “More impacts” was considered as over 15 seconds of overall intersection delay across the corridor

For quantitative scores like pedestrian safety and comfort, staff determined the level of protection over or under existing conditions that each alternative presented with alternatives featuring more protection or buffer from vehicles scoring better than those without. Other scores are described below in detail.

	ALTERNATIVE 1 (4 lanes with minor changes)	ALTERNATIVE 2 (1 eastbound, 2 westbound lanes)	ALTERNATIVE 3 (1 eastbound, 1 westbound, 1 turn lane)	STAFF RECOMMENDED ALTERNATIVE
PEDESTRIAN SAFETY & COMFORT	<p><b>0</b></p> <p>Provides minimal additional help to crossing pedestrians, other than upgraded crosswalks and some possible other signage/markings</p>	<p><b>+1</b></p> <p>Reduces the number of travel lanes to cross, but median islands at uncontrolled crossings are unlikely</p>	<p><b>+2</b></p> <p>Provides the most comfort and safety for people walking. Upgraded crosswalks, signage/markings, and median islands make for safe access and mobility for people walking</p>	<p><b>+1</b></p> <p>Provides more comfort and safety for people walking. Upgraded crosswalks, signage/markings, and median islands make for safer access and mobility for people walking and accessing transit for part of the corridor.</p>

	ALTERNATIVE 1 (4 lanes with minor changes)	ALTERNATIVE 2 (1 eastbound, 2 westbound lanes)	ALTERNATIVE 3 (1 eastbound, 1 westbound, 1 turn lane)	STAFF RECOMMENDED ALTERNATIVE
FILLING THE SIDEWALK GAP	<p><b>0</b></p> <p>Lane configuration does not allow for more off-street space for a sidewalk</p>	<p><b>+1</b></p> <p>Space provided to a bike lane could be reapportioned to a sidewalk long-term, and protected and marked for pedestrian use in the short term</p>	<p><b>+1</b></p> <p>Allows space to fill in the sidewalk gap in partnership with VTS</p>	<p><b>+2</b></p> <p>Allows space to fill the sidewalk gap in the short-term with a temporary treatment as well as long-term through partnership with VTS.</p>
CONTROLLING SPEED	<p><b>0</b></p> <p>Narrowed lanes may calm traffic slightly, but a wide roadway will still allow passing and speeding</p>	<p><b>+1</b></p> <p>Provides a single through-lane for the eastbound direction, which would control speed, but two westbound lanes would still allow passing and speeding</p>	<p><b>+2</b></p> <p>Reduced lanes calm traffic, do not allow passing, and reduce speeding</p>	<p><b>0</b></p> <p>Narrowed lanes and a single eastbound lane for one segment may calm traffic slightly in one direction, but on the whole, still allows passing and speeding for the majority of the corridor.</p>
PREVENTING CRASHES	<p><b>0</b></p> <p>Narrowed lanes may provide some crash reduction benefits, but are unlikely to reduce angle, sideswipe, or rear-end crashes</p>	<p><b>+1</b></p> <p>Reduced lanes, especially eastbound, may provide some crash reduction benefits, but are unlikely to reduce angle, sideswipe, or rear-end crashes, especially in the westbound direction</p>	<p><b>+2</b></p> <p>Reduced and narrowed lanes and a left-turn lane provide the best crash reduction benefits, likely to reduce angle, sideswipe, or rear-end crashes</p>	<p><b>+1</b></p> <p>Eastbound lane reduction may provide crash reduction benefits in this portion but is unlikely to reduce crashes in the westbound direction or in the eastbound direction with two lanes</p>
MINIMIZING VEHICLE DELAY	<p><b>+2</b></p> <p>Provides the same lane distribution as existing conditions. Queue lengths remain</p>	<p><b>+1</b></p> <p>Provides the same lane distribution as existing conditions westbound. Delay is generally reduced</p>	<p><b>+1</b></p> <p>Intersection delay is generally improved overall. The worst average delay is seen at St. Stephens with a projected 7.6</p>	<p><b>+2</b></p> <p>Provides similar lane distribution as existing. Signal operations are improved. Queue lengths are unchanged. Delay is improved at</p>

	ALTERNATIVE 1 (4 lanes with minor changes)	ALTERNATIVE 2 (1 eastbound, 2 westbound lanes)	ALTERNATIVE 3 (1 eastbound, 1 westbound, 1 turn lane)	STAFF RECOMMENDED ALTERNATIVE
	unchanged, though signal optimization will help current conditions	across the corridor, but increases at most 4.6 seconds at St. Stephens in the AM rush	second increase in wait time during the morning peak period. Left turns are eased with a dedicated left turn lane.	most intersections.
ACCOMMODATING VEHICLE VOLUMES	<b>+2</b> Easily accommodates existing traffic with slight improvement to travel times. Signal synchronization assists vehicular traffic flow	<b>0</b> Accommodates existing traffic with minor impacts to travel times or delays	<b>0</b> Accommodates existing traffic with minimal effects on travel times. Left-turn lane prevents occasional and unexpected delay for through traffic	<b>+2</b> Easily accommodates existing traffic with signal optimization and synchronization to move vehicle traffic efficiently.
ADJACENT RESIDENT LIVABILITY	<b>0</b> Maintains travel times, but does not provide turn lanes or space for cars to pull out of driveways. No buffers are provided for residents pulling out of driveways or people walking on sidewalks.	<b>+1</b> Bike lanes provide more space than existing conditions for residents to pull in and out of driveways, but lack of turn lanes makes access to connecting streets difficult. Bike lanes provide buffer space for people walking.	<b>+1</b> Provides dedicated left turn lane for left-turning vehicles. Ample space for cars to pull out of driveways or side streets with increased sight distances. Bike lanes provide buffer space for people walking.	<b>+1</b> Maintains similar travel times to existing. Buffer space in part of the corridor assists drivers in pulling out of driveways, and provides buffer for people walking.
BICYCLIST SAFETY & COMFORT	<b>0</b> Does not provide any dedicated bicycle facilities. People biking must take the lane or use the sidewalk	<b>+1</b> Provides an unbuffered bicycle lane, but it is not a low-stress connection	<b>+2</b> Provides the best bicycle facility – a buffered bicycle lane on each side of the roadway	<b>0</b> Shared lane markings make it known that bicyclists can take the lane, but this is suited for only confident bicyclists.



	ALTERNATIVE 1 (4 lanes with minor changes)	ALTERNATIVE 2 (1 eastbound, 2 westbound lanes)	ALTERNATIVE 3 (1 eastbound, 1 westbound, 1 turn lane)	STAFF RECOMMENDED ALTERNATIVE
Totals (max score +16, min score -16)	<b>+4</b>	<b>+7</b>	<b>+11</b>	<b>+9</b>

Based on the scores above, the staff-recommended changes fulfill some of the City's established goals and policies, such as improving pedestrian safety and completing sidewalk gaps, while maintaining current levels of delay or queue and even improving overall operational performance at most signalized intersections.

### **Project Monitoring and Evaluation**

Staff will perform additional data collection in spring 2020 and monitor any changes in vehicle volumes, speeds, travel times, and crash rates. This will provide an opportunity to evaluate the impacts of the project and recommend any additional changes to optimize conditions along the corridor.

### **Guiding Plans and Policies**

Several Council-adopted City plans and policies were considered throughout the project process and when building the alternatives and Staff Recommendation. The Staff Recommendation meets some portions of these plans and policies with prioritizing the missing sidewalk gap and making crossings safer, enhancing access to transit, and providing a more comfortable pedestrian environment over existing conditions. These relevant plans are listed below in chronological order with relevant details presented as excerpts:

- Transportation Master Plan (2008)
  - “The City of Alexandria envisions a transportation system that encourages the use of alternative modes of transportation, reducing dependence on the private automobile ... The City will promote a balance between travel efficiency and quality of life, providing Alexandrians with transportation choices, continued economic growth, and a healthy environment.”
- Environmental Action Plan (2009)
  - Develop a holistic transportation system that puts the health, mobility, and accessibility of “people first” by implementing development and transportation programs and projects consistent with the following level of precedence: pedestrians, bicyclists, public transportation, shared motor vehicles, and private motor vehicles
  - By 2020: Beginning in 2012, reduce the number of daily Vehicle Miles Traveled (VMT) on a per capita basis by 5% every five years. Increase the number of commuters who use public transportation by 25%.
- Complete Streets Policy (2011, reenacted in 2014)
  - “Every street project shall incorporate to the extent possible Complete Streets infrastructure sufficient to enable reasonable safe travel along and across the right-of-way for each categories of users”
  - “If the safety and convenience of users can be improved within the scope of resurfacing, restriping, or signalization operations, such projects shall implement Complete Streets infrastructure to increase safety for users.”
- Pedestrian and Bicycle Master Plan (2016)
  - Recommends Seminary Road as one of the City's top 10 priority on-street enhanced bicycle facilities
  - Recommends Seminary Road as one of the City's top 10 sidewalk projects
- Vision Zero Action Plan (2017)

- Eliminate all traffic deaths and severe injuries by 2028
- Build safe streets for everyone by prioritizing safety treatments that reduce fatal and severe injury crashes

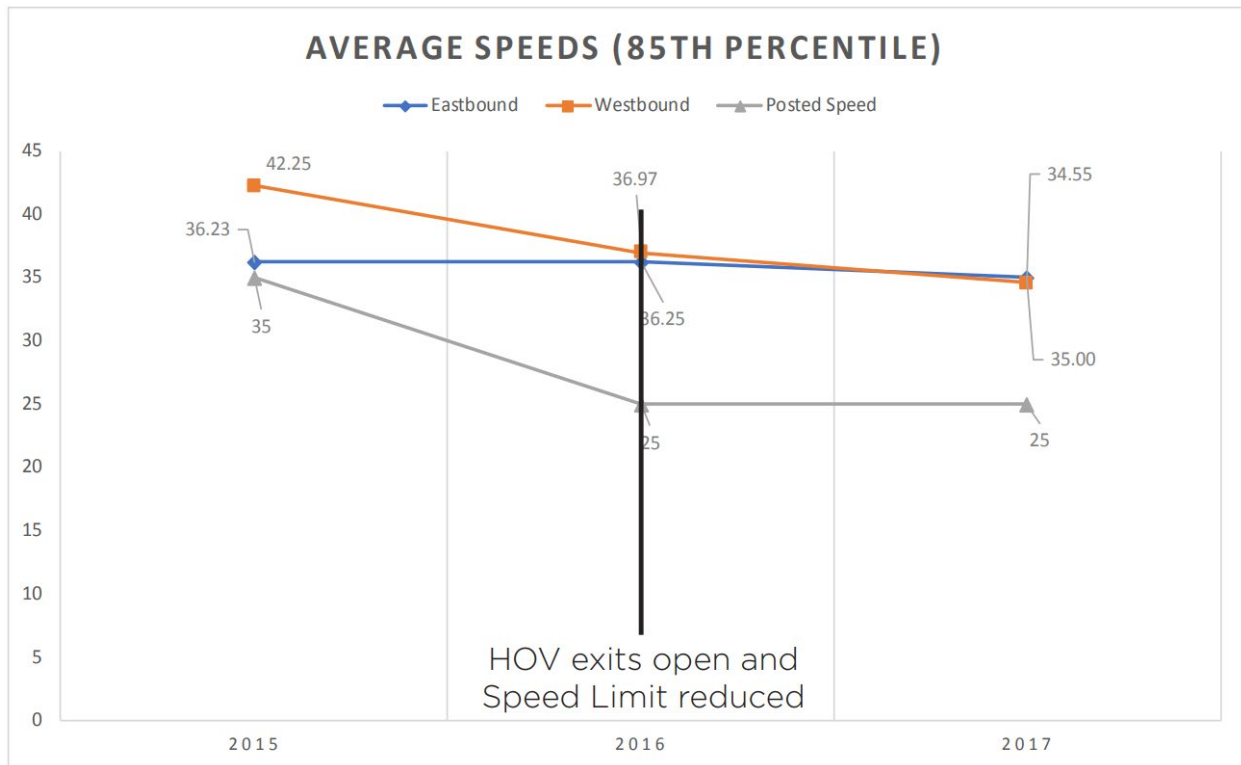
**Project Background Information**

In order to better understand the existing conditions and consider appropriate solutions for the corridor, staff looked closely at travel speeds, traffic volumes, and historical crash data.

*Speed Data*

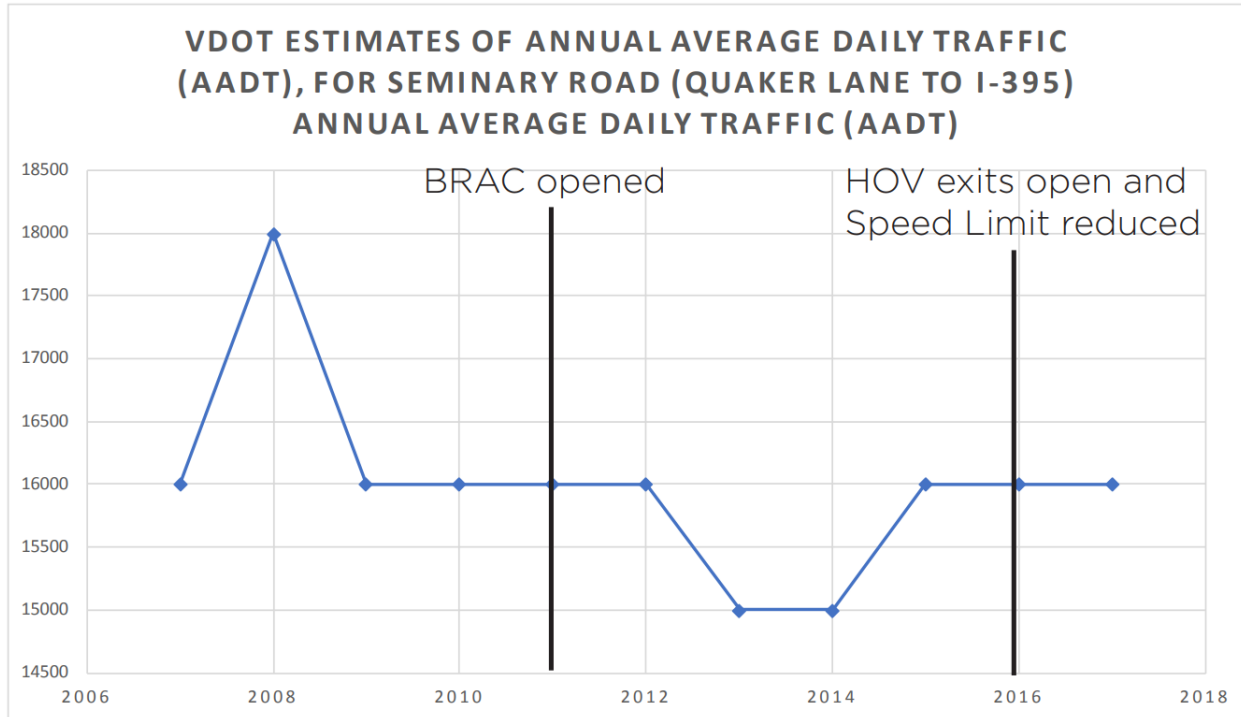
Speeding was cited by many residents as a key concern on Seminary Road. In 2015, the posted speed was 35 miles per hour; 85 percent of people were traveling at or below 36 miles per hour in the eastbound direction and at or below 42 miles per hour in the westbound direction.

In 2016, to reduce the risk of fatal and severe injury crashes on the corridor, the posted speed limit was reduced from 35 to 25 miles per hour. 85<sup>th</sup> percentile speeds in the eastbound direction did not change significantly. However, in the westbound direction, 85<sup>th</sup> percentile speeds decreased from 42 to 37 miles per hour. The chart below shows the change in 85<sup>th</sup> percentile speeds on Seminary Road over time.

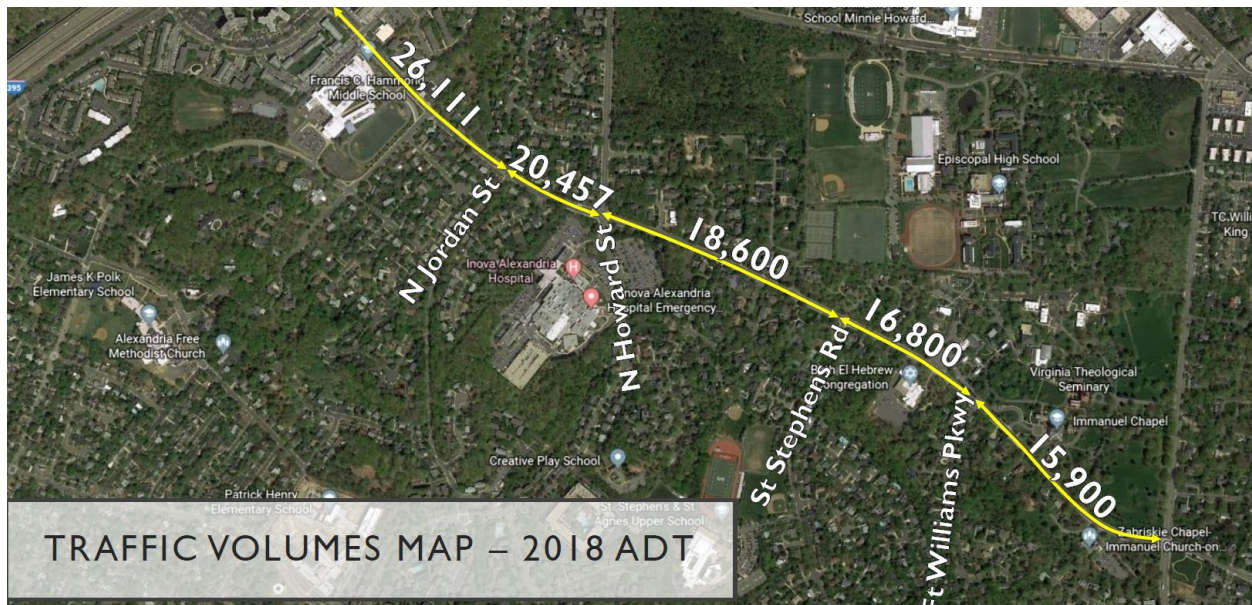


### Vehicle Volumes

Staff also analyzed vehicle volumes on the corridor. The chart below shows that, historically, average traffic volumes between North Quaker Lane and I-395 have hovered around 16,000 vehicles per day, with a spike in 2008 and a drop in 2013 and 2014.

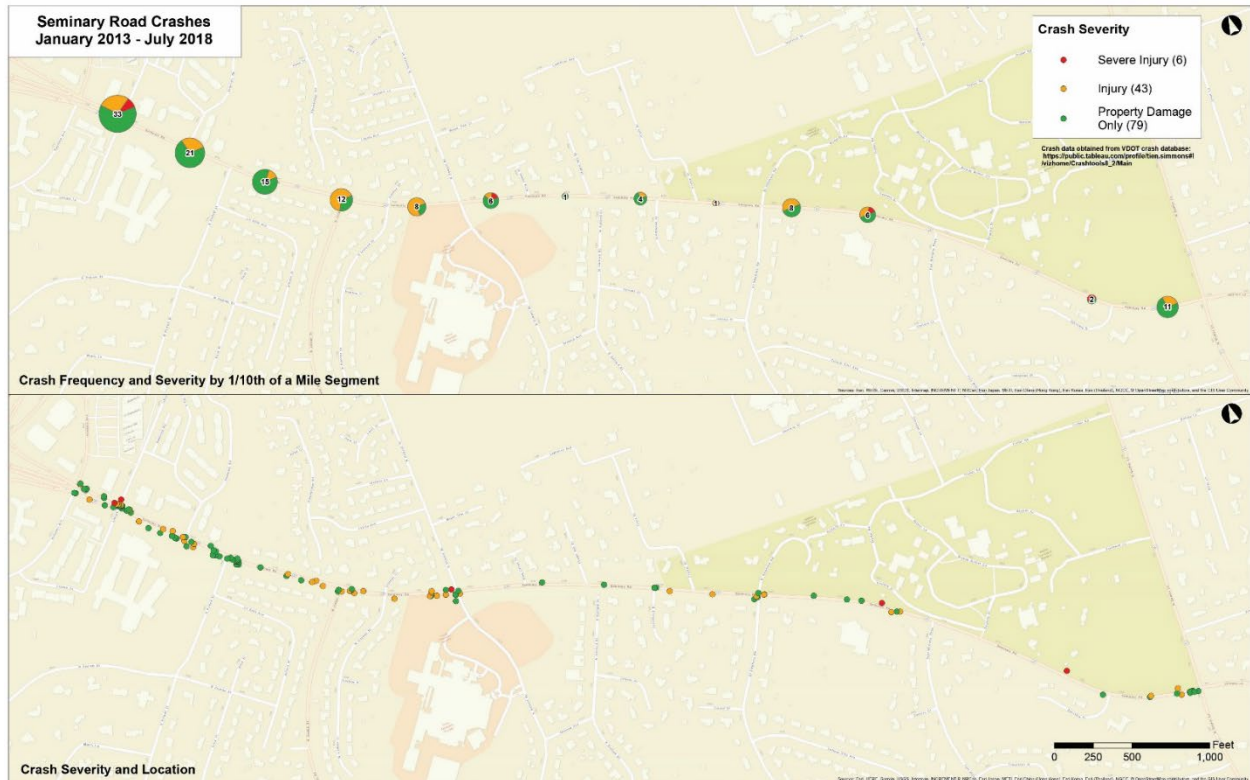


The map below shows the approximate daily traffic volumes in 2018 along Seminary Road:



## Crash Data

Staff reviewed historical crash data along the corridor. Between January 2013 and July 2018, 128 crashes occurred in the project area, including 43 crashes that involved an injury, and 6 that involved a severe injury. A map depicting this crash data is shown below:

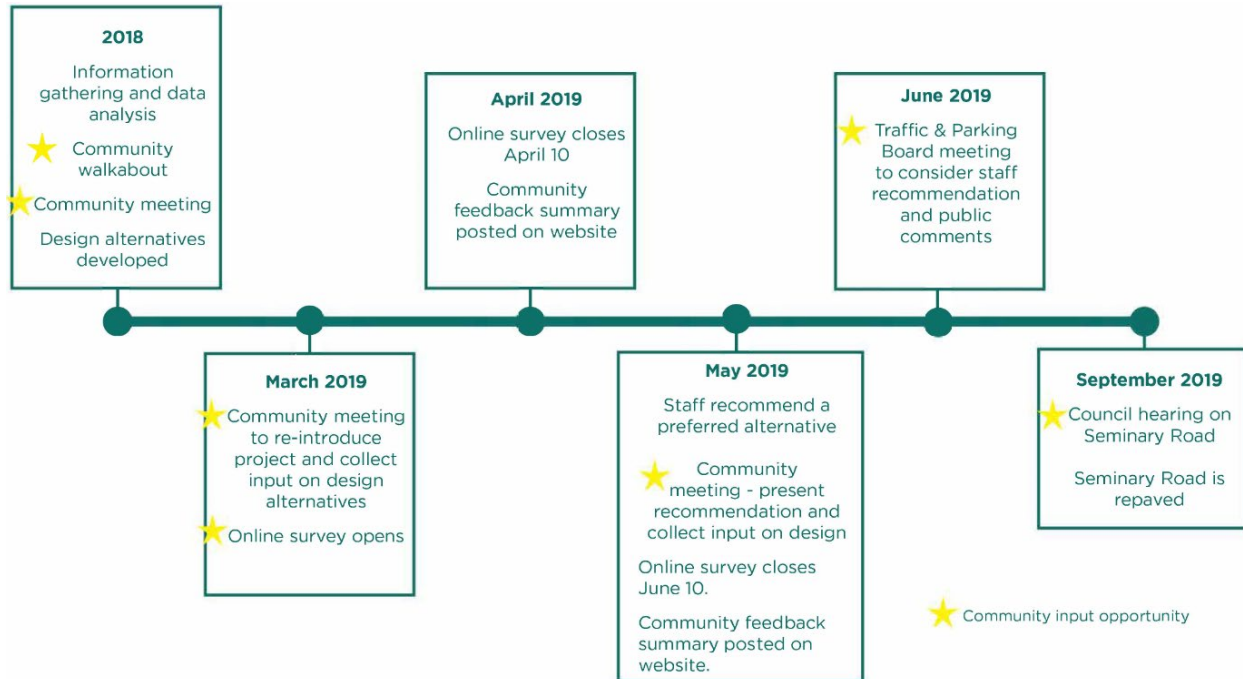


From January 2013 to July 2018, there were 31 crashes on Seminary Road between St. Stephens Road and North Quaker Lane. Of those 31 crashes, 11 involved an injury, and 2 involved a severe injury. The following is a breakdown of the crash types:

Crash Type	Number
Rear End	10
Angle	10
Fixed Object – Off Road	6
Fixed Object – In Road	2
Head On	1
Deer	1
Other (Bicycle)	1

## Project Process

The Seminary Road Complete Streets project was initiated in summer 2018. The project process is shown below. There have been numerous opportunities for public input, both in person and online. Due to the amount of community interest in this project, staff has ensured an automatic appeal process of the Traffic & Parking Board recommendation to City Council for review in September, instead of to the Director of T&ES as is standard.



## OUTREACH:

Through multiple outreach efforts, including a community walk, two public meetings, and community surveys, members of the community raised several key issues and concerns on Seminary Road, which were used to develop the final recommendation:

- Traffic congestion
- Speeding traffic
- Cut-through traffic
- Difficulty turning left to and from Seminary Road
- Missing sidewalk
- Uncomfortable sidewalks
- Feels unsafe
- Long distance between safe crossings
- Long distances to cross (street width)
- Lack of bicycle infrastructure
- Disagreement over the function and character of the roadway (major thoroughfare versus residential street)

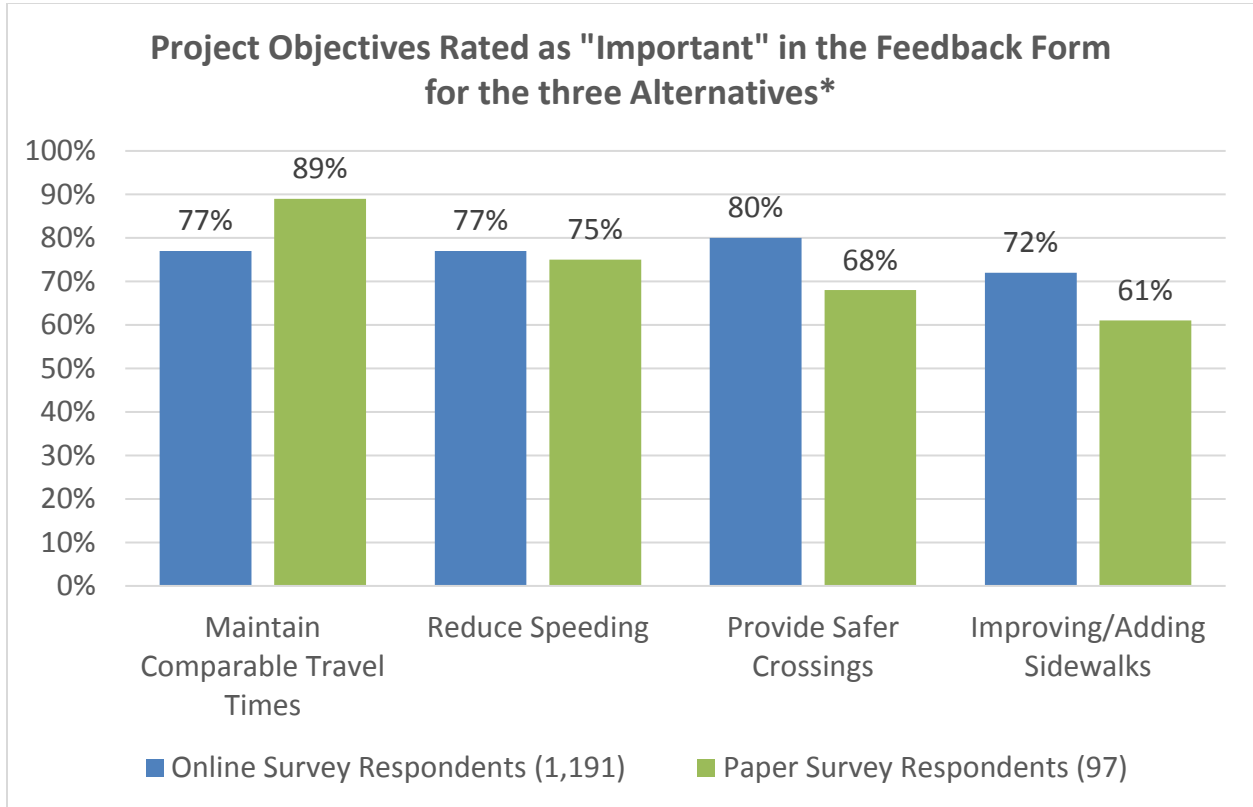
- Dangerous weaving maneuvers near I-395
- Some residents cited no issues with Seminary Road

Specifically, the robust public outreach effort that staff led to gather community input are listed below in chronological order:

- April 2018 – Seminary Hill Civic Association meeting
- May 2018 – Community walkabout with residents
- May 2018 – Community Meeting #1
- May 2018 – Online repaving survey
- March 2019 – Community Meeting #2
- March 2019 – Online survey for design alternatives (1,100+ responses)
- April – May 2019: Meetings with community groups
  - Seminary Hill Civic Association
  - Seminary Ridge Civic Association
  - Virginia Theological Seminary
  - Clover-College Park Civic Association
  - Beth El Hebrew Congregation
  - Inova Alexandria Hospital
  - Interested residents
- May 2019: Community Meeting #3
- June 2019: Online survey on staff recommendation

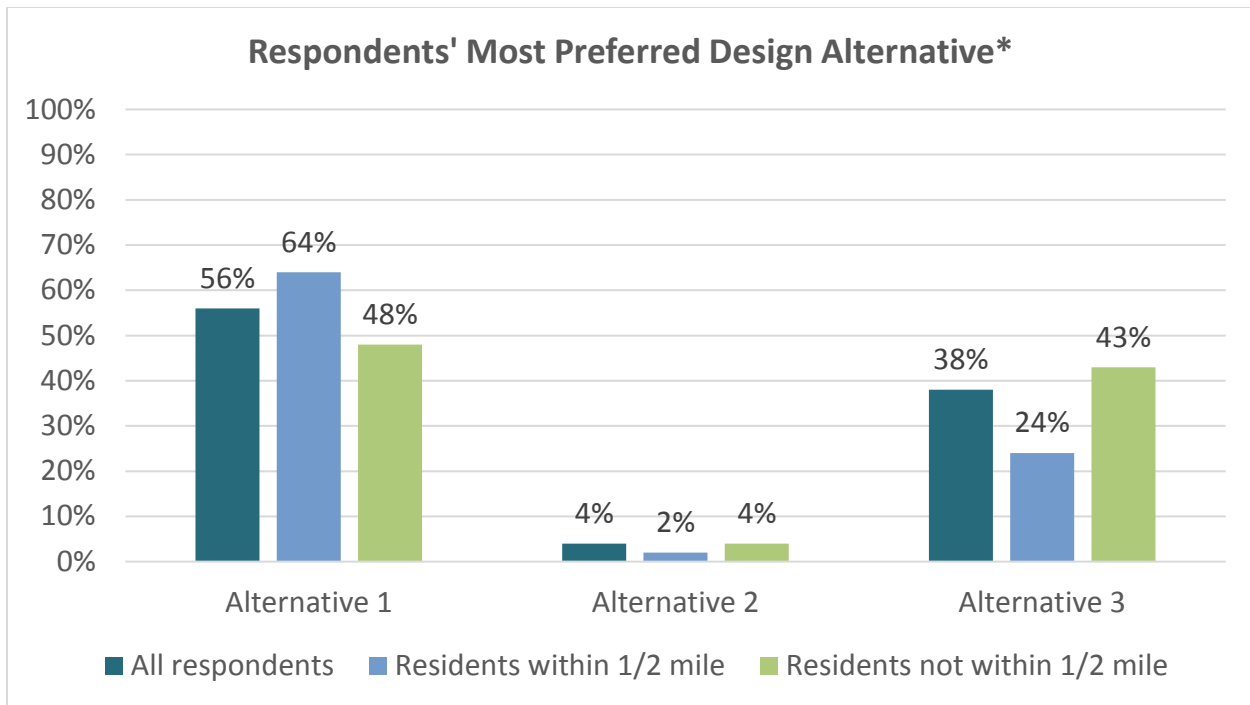
Key takeaways from the community feedback on the three design alternatives are illustrated in the graphics below.

Top project objectives that people rated to be most important:



\*Survey question asked: "Please indicate how important you feel the following are for the Seminary Road project (1=Not at all important; 3=Important; 5=Extremely important).





*\*Note: Chart does not represent input collected via the paper survey, as residents were not asked to provide their address in the paper survey. Residents who took the paper survey were also able to take the online survey.*

Staff considered all community feedback in developing its final recommendation. A key finding from the City’s outreach efforts is that while many residents are divided on what they want the final design of Seminary Road to look like, a strong majority of residents who staff heard from indicated that maintaining travel times, reducing speeding, providing safer crossings, and improving/adding sidewalks are all important objectives. However, some of these objectives conflict with one another. For example, providing safer crossings for people walking could translate to real or perceived traffic delay. The staff recommendation represents an attempt to meet multiple project objectives and reconcile some of the key themes and feedback from public input with City plans and policies as well as national best practices. A comprehensive compilation of feedback from the community can be viewed in Attachment 1.

**Attachments:**

Attachment 1: Seminary Road Complete Streets Project Public Input Report

Attachment 2: FHWA guidance for safety countermeasures