Seminary Road
Complete Streets Project
Staff Recommendation

Additional area considered for short-term and mid-term improvements (no lane changes)
PROJECT PURPOSE

- Street on 2019 resurfacing schedule
- As streets are resurfaced, the City’s Complete Streets Policy dictates that we use this opportunity to evaluate roadway design changes in coordination with repaving
- Opportunity to consider improvements at minimal cost (striping and posts)
- Potential pedestrian and bicycle facilities identified in Pedestrian & Bicycle Master Plan
- Neighborhood requests for improvements to conditions for people walking
Information gathering and data analysis
Community walkabout
Community meeting
Repaving survey on roadway issues
Design alternatives developed

Community meeting to reintroduce project and collect input on design alternatives
Online survey opens

Mar. 2019

Online survey closes April 10
Community feedback summary shared on website

Apr. 2019

Traffic & Parking Board meeting
The staff recommended alternative will be presented to the Traffic and Parking Board at the June meeting with an automatic appeal to Council.

May 2019

Staff recommend preferred alternative

June 2019

City Council meeting and Seminary Road is repaved

Sep. 2019
STAFF RECOMMENDATION

Alternative 1 (four lanes)
Alternative 2, modified (3 lanes, sidewalk added)

Additional area considered for short-term and mid-term improvements (no lane changes)
WHY THIS RECOMMENDATION?

• We listened to your input and considered the data

• This would close a major sidewalk gap and provide more ways for people to safely cross Seminary Road

• Some change advances City policies, plans and commitments to improve safety and mobility for other road users

• Staff recommendation will go to both Traffic & Parking Board and City Council for public hearings and consideration
HOWARD TO ST. STEPHENS RD

- Maintain two through-lanes in the areas of heavier traffic (ADT is 18,600)
- Install one crossing at Chapel Hill/Galliard for the bus stops to serve ridership with a HAWK signal
- Shared curbside lanes - people biking can take the lane

<table>
<thead>
<tr>
<th>2’</th>
<th>11’</th>
<th>10’</th>
<th>10’</th>
<th>11’</th>
<th>2’</th>
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<tbody>
<tr>
<td>Sharrow</td>
<td>Drive lane</td>
<td>Drive lane</td>
<td>Sharrow</td>
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</table>
## HOWARD TO ST. STEPHENS DATA

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Time of Day</th>
<th>Existing</th>
<th>Recommend</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Howard St &amp; Seminary Rd</td>
<td>AM</td>
<td>28.6</td>
<td>30</td>
<td>+1.4</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>28.8</td>
<td>29.5</td>
<td>+0.7</td>
</tr>
<tr>
<td>St. Stephens Rd &amp; Seminary Rd</td>
<td>AM</td>
<td>8.2</td>
<td>8.6</td>
<td>+0.4</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>6.3</td>
<td>5.3</td>
<td>-1</td>
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</tbody>
</table>
ST. STEPHENS TO ZABRISKIE

- Two westbound lanes to accommodate peak direction, peak period traffic volumes. (ADT 16,800 and below)
- Install new crosswalks with median islands at bus stops
- Shared curbside lanes – people biking can take the lane
ST. STEPHENS TO ZABRISKIE

- Two westbound lanes to accommodate peak direction, peak period traffic volumes. (ADT 16,800 and below)
- Install new crosswalks with median islands at bus stops
- Shared curbside lanes - people biking can take the lane
**ST. STEPHENS TO ZABRISKIE DATA**

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Time of Day</th>
<th>Existing Delay (sec)</th>
<th>Staff Recommendation Delay (sec)</th>
<th>Change (sec)</th>
</tr>
</thead>
<tbody>
<tr>
<td>St. Stephens Rd &amp; Seminary Rd</td>
<td>AM</td>
<td>8.2</td>
<td>8.6</td>
<td>+0.4</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>6.3</td>
<td>5.3</td>
<td>-1</td>
</tr>
<tr>
<td>N Quaker Ln &amp; Seminary Rd</td>
<td>AM</td>
<td>76.5</td>
<td>62.3</td>
<td>-14.2</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>57.6</td>
<td>43.2</td>
<td>-14.4</td>
</tr>
</tbody>
</table>
Maintain four travel lanes
Convert eastbound configuration
- Left-only and right/through lane change to left/through and right only
### Staff Recommendation Comparison

The numbers below are the traffic model’s results showing the average seconds of delay and changes under each alternative for the average day in worst 15 minutes in the peak periods (morning and evening rush).

<table>
<thead>
<tr>
<th>Intersection</th>
<th>Peak Time</th>
<th>EXISTING</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Staff Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Howard St &amp; Seminary Rd</td>
<td>AM</td>
<td>28.6</td>
<td>0.0</td>
<td>+3.9</td>
<td>+6</td>
<td>+1.4</td>
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<tr>
<td></td>
<td>PM</td>
<td>28.8</td>
<td>0.0</td>
<td>-2</td>
<td>-3.4</td>
<td>+0.7</td>
</tr>
<tr>
<td>St. Stephens Rd &amp; Seminary Rd</td>
<td>AM</td>
<td>8.2</td>
<td>0.0</td>
<td>+4.6</td>
<td>+7.6</td>
<td>+0.4</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>6.3</td>
<td>0.0</td>
<td>-0.5</td>
<td>-0.3</td>
<td>-1</td>
</tr>
<tr>
<td>N Quaker Ln &amp; Seminary Rd</td>
<td>AM</td>
<td>76.5</td>
<td>0.0</td>
<td>-11.4</td>
<td>-14.5</td>
<td>-14.2</td>
</tr>
<tr>
<td></td>
<td>PM</td>
<td>57.6</td>
<td>0.0</td>
<td>-19.5</td>
<td>-13.4</td>
<td>-14.4</td>
</tr>
</tbody>
</table>

**Note:** Adjustments were made to the traffic model to optimize the signals and coordinate them across the corridor segment for all Alternatives. This allows traffic to flow better and to reduce delays at intersections with north-south streets.
SCORING

-2  More Impacts over Existing Conditions

-1  Minor Impacts over Existing Conditions

0   Existing Conditions

+1  Minor Improvement over Existing Conditions

+2  More Improvement over Existing Conditions
# Design Alternatives

<table>
<thead>
<tr>
<th>Performance Indicators</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Staff Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pedestrian Safety/Comfort</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>Filling the Sidewalk Gap</td>
<td>0</td>
<td>+1</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>Controlling Speed</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
<td>0</td>
</tr>
<tr>
<td>Preventing Crashes</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
<td>+1</td>
</tr>
<tr>
<td>Minimizing Vehicle Delay</td>
<td>+2</td>
<td>+1</td>
<td>+1</td>
<td>+2</td>
</tr>
<tr>
<td>Accommodating Vehicle Volumes</td>
<td>+2</td>
<td>0</td>
<td>0</td>
<td>+2</td>
</tr>
<tr>
<td>Adjacent Resident Livability</td>
<td>0</td>
<td>+1</td>
<td>+1</td>
<td>+1</td>
</tr>
<tr>
<td>Bicyclist Safety/Comfort</td>
<td>0</td>
<td>+1</td>
<td>+2</td>
<td>0</td>
</tr>
<tr>
<td>Totals (max score +16, min score -16)</td>
<td>+4</td>
<td>+7</td>
<td>+11</td>
<td>+9</td>
</tr>
</tbody>
</table>
What you're seeing here:
- Average queue length and speeds for the worst 15 minutes of morning rush hour with a 2% growth factor

Staff Recommendation
What you’re seeing here:
- Average queue length and speeds for the **worst 15 minutes** of evening rush hour with a **2% growth factor**

### PM Operations

<table>
<thead>
<tr>
<th>Overall Average Intersection Delay</th>
<th>Staff Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX mph</td>
<td></td>
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</tbody>
</table>

- <35 seconds average delay
- 35-55 seconds average delay
- >55 seconds average delay

### Directional Travel Speed

- Typical Backup/Queue
- Staff Recommendation

- XX mph

### Staff Recommendation

- XX mph
SIDEWALK INFORMATION

- **Short term- 1-3 years**
  - Painted sidewalk with separation would be installed in the short term
  - Opportunity to watch change over time

- **Long Term- 3-5 years**
  - Seek grant funding to build sidewalk
  - Approximate cost of construction is up to $1.5 Million

* Dependent on funding
WHY THIS RECOMMENDATION?

• We listened to your input and considered the data

• This would close a major sidewalk gap and provide more ways for people to safely cross Seminary Road

• Some change advances City policies, plans and commitments to improve safety and mobility for all
Vehicle Issues
- It is difficult for residents to turn into side streets and driveways as well as back out of driveways onto Seminary Road
- Speeding is common along the entire corridor
- Mixed opinions on function and character of Seminary Road

Pedestrian Issues
- Sidewalks should be wider, continuous, and buffered from moving traffic
- The distance between safe crossings is too great

Alternatives
- Mixed opinions on reducing travel lanes
Survey Respondents' Most Preferred Design

Alternative 1: 56%
Alternative 2: 4%
Alternative 3: 38%

71% of respondents chose Alternative 2 as their second choice.
WHY THIS RECOMMENDATION?

These are all valid, but somewhat conflicting, goals. Maximizing vehicle efficiency often comes at the expense of other goals. Staff must find balance between these competing objectives.
TRAFFIC VOLUMES MAP – 2018 ADT
WHY THIS RECOMMENDATION?

Safety and Best Practice

- Installing crosswalks over four undivided lanes of traffic without other safety improvements does not align with City plans and policies and is strongly discouraged in national guidance.
WHY THIS RECOMMENDATION?

City Plans and Policies

• Seminary Rd sidewalk gap is one of the City’s top 10 priority sidewalk projects

• Recommendation would advance City Council adopted policies, plans and commitment to improve safety & mobility for all roadway users
PROJECT OBJECTIVES

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
OUR COMMITMENTS

City of Alexandria
Comprehensive Transportation Master Plan

City Strategic Plan
Alexandria FY2017 to FY2022

City of Alexandria
ENVIRONMENTAL ACTION PLAN 2040
OUR COMMITMENTS

- Environmental Action Plan (2009)
  - Eliminate all deaths and serious injuries on Alexandria’s Streets by 2028
  - Build Safe Streets for All
- Complete Streets Policy (2013)
• Traffic and Parking Board on June 24
  • Board will consider staff recommendation and public input
  • Could uphold staff recommendation or opt for one of other three alternatives (or ask for other modifications)
  • Board recommendation will be automatically forwarded to City Council for consideration

• City Council (September)
  • Public input
  • Review Board recommendation, consider public input
  • Could uphold Board recommendation, opt for one of other three alternatives or instruct staff to make other modifications
Tonight’s Open House

Visit each board & ask questions

Provide comments at activity boards

Complete paper survey and turn in to staff

Next Steps

June: Traffic & Parking Board hearing
- Public comments will be heard by the board
- Recommendation will be made to Council

September: City Council
- Public may speak on this item before Council
- Council will make a decision

September: Seminary is repaved
QUESTION & ANSWER
GROUND RULES

• **Start with your question**
• **Be respectful, not disruptive**
  • Everyone’s viewpoint is valid
• **Remain on topic**
• **Do not talk while others are talking**
• **Speak from your own experience**
• **Stay to your 2 minutes** of speaking time
  • You will get a 1 minute warning to begin wrapping up