STAFF RECOMMENDATION - St. Stephens Road to Quaker Lane- Hybrid

**Description**
- Preserve two westbound travel lanes, where traffic volumes are higher during morning rush hour and one eastbound travel lane from St. Stephens to Zabriskie
- Zabriskie to Quaker maintains four travel lanes
- Sidewalk is installed as a short-term, temporary treatment until funding secured
- Pedestrian refuge islands possible
- Install new crosswalks at bus stops

**Performance Assessment**

- **Ped Safety/Comfort**: Reduces the number of through-lanes to be crossed on a portion of the roadway, with median islands at uncontrolled crosswalks along with flashing pedestrian signals.
- **Filling the sidewalk gap**: Fills sidewalk gap when space from lane reconfiguration is reappropriated to a temporary sidewalk treatment and sidewalk buffer.
- **Controlling Speed**: Provides minimal improvements in controlling speed with a single through-lane for the eastbound direction, for a little less than half of the segment, which would control speed slightly, but two westbound lanes would still allow passing
- **Preventing car crashes**: Reduced lanes eastbound for a portion of the corridor, may provide some crash reduction benefits, but are unlikely to reduce angle, sideswipe, or rear-end crashes, especially in the westbound direction.
- **Minimizing vehicle delay**: This alternative optimizes signal operations over the existing conditions. Queue lengths stay the same, slightly improve over exiting conditions in most intersections, except for St. Stephens Road, where average delay is projected to increase by 7.6 seconds.
- **Accommodating Vehicle Volumes**: This alternative employs signal synchronization to better accommodate vehicle volumes
- **Adjacent resident livability**: Maintains similar travel times to existing, buffer space in part of the corridor assists cars to pull out of driveways and for residents to feel safer walking along the road.
- **Bicycling Safety/Comfort**: Provides shared lane markings, which provides minimal improvements over existing ability of cyclists to take the lane.

**Intersection Delay**

<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>
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</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>

**Corridor Map and Traffic Performance**

- New recommended crossing at bus stop with HAWK signal
- New crossing at bus stop with RRRFB and median island

**St. Stephens and Seminary**

- **Operational Changes**
  - New crosswalk on west leg of intersection
  - Eastbound lane drop east of the intersection, second eastbound lane becomes right turn only.
  - Synchronized signal with Quaker and Howard
- **Average Projected Delay**
  - Morning Rush= <35 sec / Evening Rush= <35 sec
  - Queues are slightly longer than existing, but still well under capacity

- **Operational Changes**
  - Removes exclusive eastbound and westbound left
  - Remove ped-only phase and convert to LPI and No Turn on Red
  - Left only lane becomes left and through
  - Right turn and through lane becomes right turn only
- **Average Projected Delay**
  - Morning Rush= >55 sec / Evening Rush= 35-55 sec
  - Queues improve slightly, delay in morning peak gets better