**St. John’s Lane**

**Option 0**  
Signal Timing Optimization (detection)

- Minor or No improvement expected to LOS or queuing.

**Option 1**  
Signal Phasing Revisions and Turn Restrictions

- Passive – restrict NB and SB through movements except school buses.
- Improves from LOS F to D, reduces EB max queue from ½ mile to a ¼ mile.

**Option 2**  
Add turn lanes (150’ NB Left and 250’ EB Right Turn Lane)

- Active – channelize school entrance as right-in and right-out only.
- Improves from LOS F to D, reduces EB max queue from ½ mile to a ¼ mile.

**Option 3**  
Hybrid – add NB turn lane, remove split phasing and close slip lane from drop-off lot to staff/bus loop.
Signal & Geometric Improvement Recommendations

**Rogers Ave. / Old Frederick Rd.**

**Option 1**
Construct slip ramp to channelize and remove SB to WB traffic from roundabout. Improves LOS from F to C(AM) and E(PM).

**Option 2**
Remove roundabout and construct traffic signal. Improves LOS from F to D(AM) and C(PM).

**MD 99 / US 29**

**Option 1**
Improve Shoulder along SB US 29 to provide a continuous.

**Option 2**
Reduced cycle length and add a right turn arrow for northbound US 29.
Signal & Geometric Improvement Recommendations

Other Improvements

- New Left Turn Arrow
  - Northbound Bethany Ln
  - Eastbound on MD 99

- Signal Phasing Improvements
- Signal Detection Improvements
- Multi Alternative Access Improvements
  (see alternatives board)

- Signal Timing Improvements
- Lane Assignment Improvements

- New Left Turn Arrow
- MD 99 at Woodstock Rd

Legend

- MD 99
- Potential Congestion Management Strategies
- Multi Alternative Access Modifications
- Install New Left Turn Arrow
- Signal Improvements

Proposed sidewalk retrofits to expand school walkshed

- Crosswalk
- Pathway
- New Sidewalk
- Sidewalk Reconstruction
- Sidewalk, Curb Construction Required