

NC 59 / CAMDEN ROAD

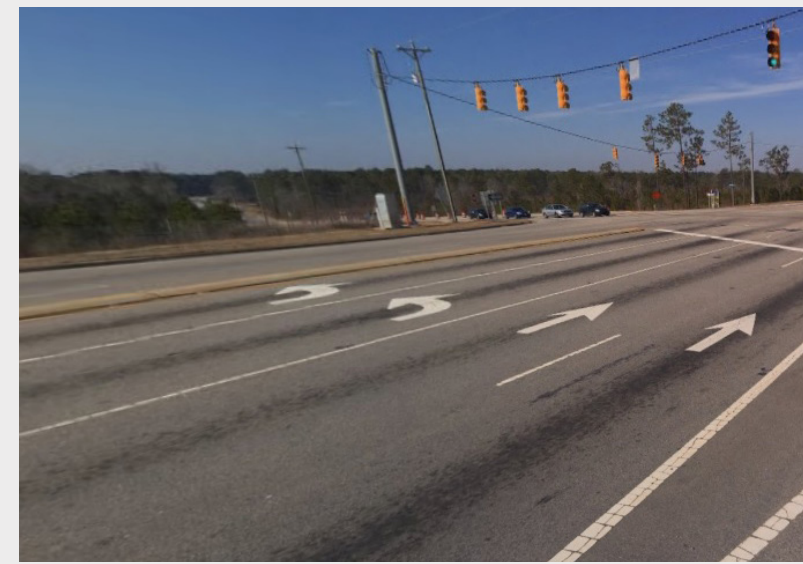


Image Source: Google Street View

OPTION 1 - ADD NORTHBOUND LEFT TURN LANE

This option would add a second northbound left turn lane, similar to the configuration at NC 59/NC 162.

Advantages:

- Sufficient right-of-way is available

Disadvantages:

- Level of Service D not achievable without widening one or more approaches to 3 lanes

OPTION 2 - MEDIAN U-TURN

The Median U-turn configuration is an innovative intersection design that would reroute all left turns through U-turns on Camden Road located 500-800 feet east and west of the main intersection. Through traffic and right turns on NC 59 and Camden Road would proceed normally. A similar configuration, the Superstreet Intersection, has been applied at 29 locations in North Carolina.

Advantages:

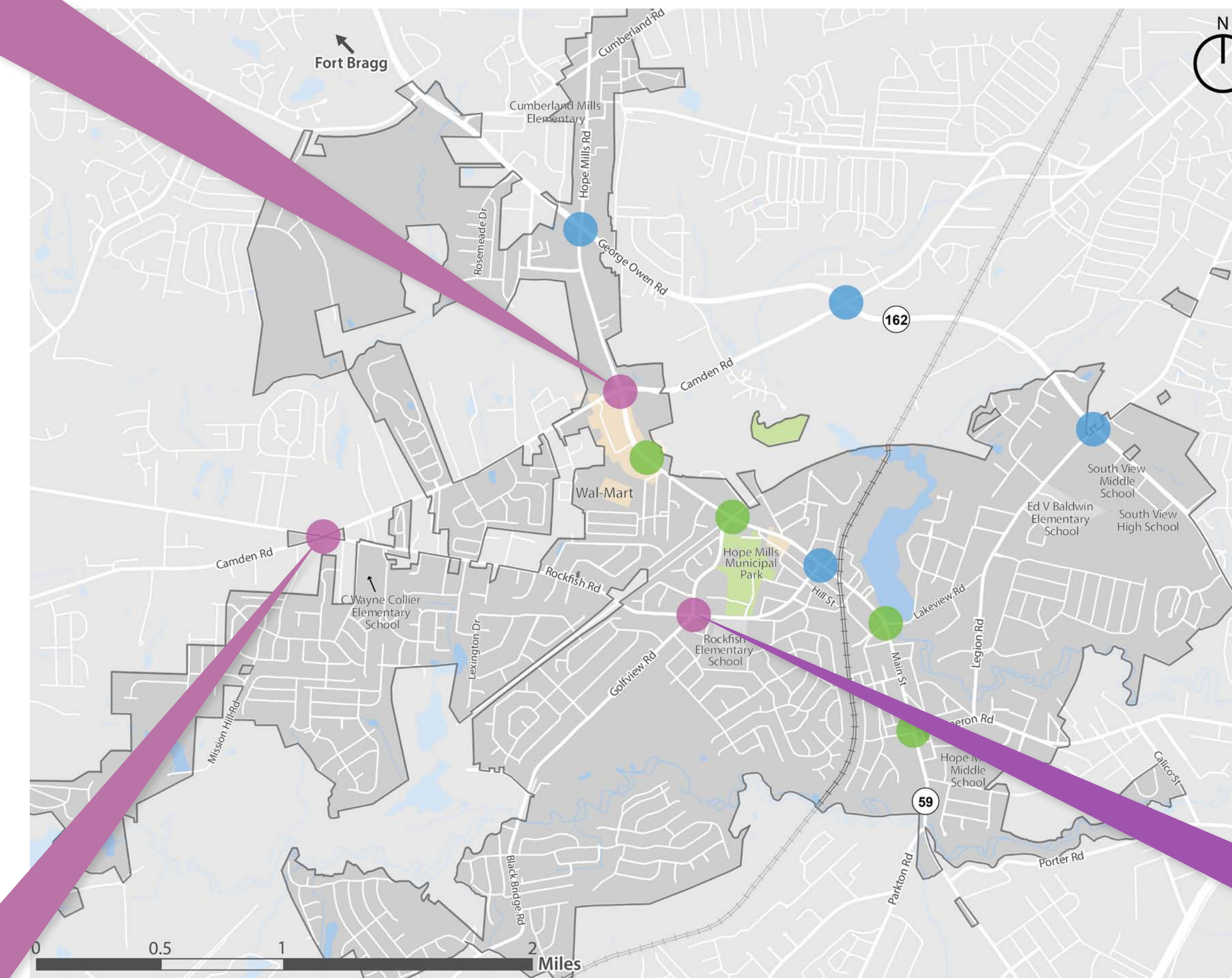
- Would bring intersection to Level of Service D
- Would reduce back-ups and improve signal progression along NC 59
- Would provide a median pedestrian refuge on Camden Road at the intersection

Disadvantages:

- Requires out-of-direction travel for left turns
- Would require widening at U-turn crossovers
- Would be substantially more expensive than Option 1



Image Source: Google Earth



Hope Mills, NC Multimodal Congestion Management Plan



Intersection Treatments

CAMDEN ROAD / ROCKFISH ROAD



Image Source: Raymond Yu

OPTION 1 - PROTECTED LEFT TURNS

The left turn signals at the intersection would be converted to fully-protected phasing. This would prohibit left turns when oncoming traffic is moving, similar to the existing signal phasing at NC 59/Camden Road.

Advantages:

- Could potentially reduce left turn and angle crashes
- Can combine with traditional widening of Camden Road
- Would result in Level of Service C or D

Disadvantages:

- Would increase delay and queues for left turn movements

OPTION 2 - OFFSET T INTERSECTIONS

The existing 4-leg intersection would be replaced by two 3-leg intersections, most likely by teeing the east leg of Rockfish Road into Camden Road.

Advantages:

- Could potentially reduce crashes by removing intersection skew
- Would result in more efficient signal operation and coordination, in spite of replacing one signal with two
- Would result in Level of Service C or better

Disadvantages:

- Would require additional right-of-way near intersection
- Could impact businesses in corner parcels
- Would be more expensive than Option 1



Image Source: NACTO

GOLFVIEW ROAD / ROCKFISH ROAD



Image Source: Raymond Yu

OPTION 1 - PROTECTED LEFT TURNS

Left turn lanes would be added on Golfview Road, allowing the intersection left turn phasing to be converted from the existing split phase to a more efficient conventional left turn phasing, similar to NC 59/Camden Road.

Advantages:

- More efficient signal phasing could reduce backups and delays at the intersection
- Can combine with additional turn lanes / signal phasing improvements
- Would result in Level of Service C or D

Disadvantages:

- Would require widening and access restrictions near the intersection

OPTION 2 - ROUNDABOUT

The intersection would be converted to a roundabout, similar in size to the roundabouts on Glensford Drive in Fayetteville. Under Alternative 1, the roundabout would require two circulating lanes on Rockfish Road, while the other alternatives would only require one circulating lane.

Advantages:

- Could potentially reduce crashes by 67%
- Would reduce vehicle speeds to 25 mph or less
- Would result in Level of Service C or better

Disadvantages:

- Would require widening and access restrictions near the intersection
- Would be substantially more expensive than Option 1



Image Source: Google Earth