

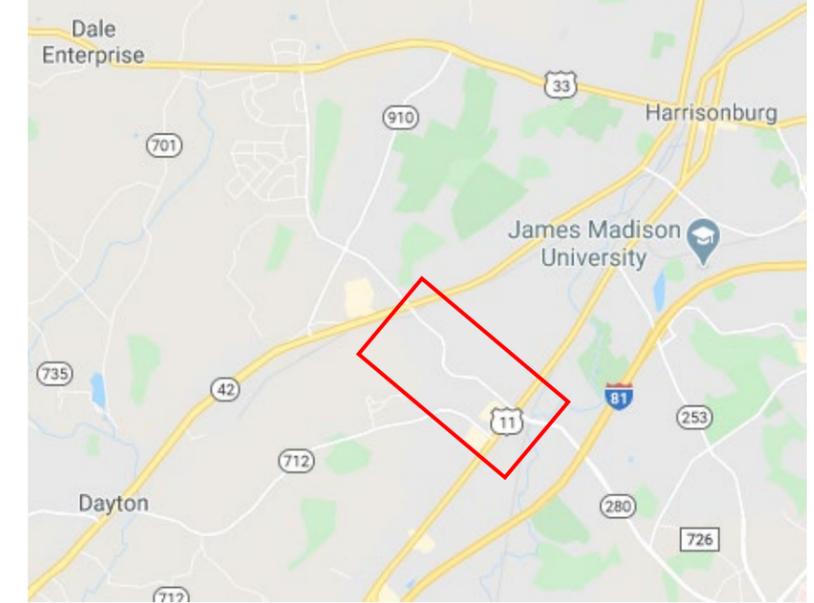
Mid-Term Recommendation

Access Management – US 11/South Main Street

Conceptual Design



Project Location



Operations and Safety Improvements

The following recommendations are projected to improve operations and/or safety along S Main Street.

- Construct concrete median along S Main Street between Mosby Drive and Erickson Avenue to convert the existing business entrances to right-in and right-out only
- Maintain existing 11' lane widths along S Main Street (requires eliminating existing bike lanes)
- Modify existing entrances on the eastern side of S Main Street to accommodate the proposed sidewalk

Pedestrian and Transit Improvements

The following improvements are recommended to improve access for pedestrians and transit users:

- Construct sidewalk along the eastern side of S Main Street to connect businesses and the existing bus stops
- Upgrade 3 bus stops (2 south of Mosby Drive and 1 between Mosby Drive and Erickson Ave) to include a new shelter, concrete pad, and a bench

Traffic Operations Results

- Installation of raised median will not negatively impact operations on the corridor. Proposed corridor improvements are expected to provide drivers with reduced, reliable travel times.

Safety Results

- Removal of left turns into and out of minor business access driveways on US 11 will reduce turning vehicle conflicts that lead to the prominent number of angle crashes on the corridor.

Preliminary Cost

Phase	Cost Estimate (2020)
Preliminary Engineering	\$347,200
ROW and Utility Relocation	\$208,550
Construction	\$1,215,750
TOTAL COST	\$1,771,500

Mid-Term Recommendation

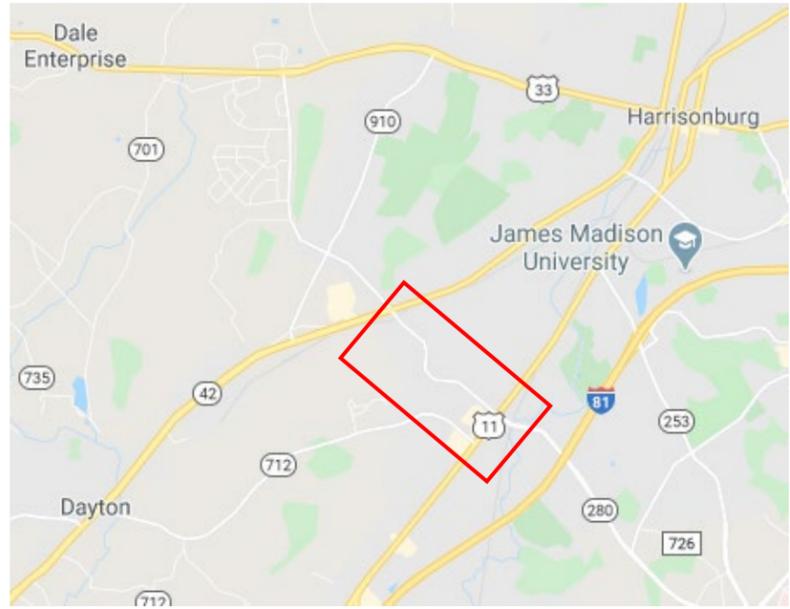
Erickson/Pear Reduced Conflict Intersection

Conceptual Design



LEGEND	
	PROPOSED PAVEMENT
	PROPOSED MEDIAN
	EXISTING STREAM
	EXISTING PARCEL BOUNDARY

Project Location



Operations and Safety Improvements

The following recommendations are projected to improve operations and/or safety along Erickson Avenue.

- Construct a median along Erickson Avenue to restrict turning movements at the intersection with Pear Street
- Construct a Reduced Conflict Intersection along Erickson Avenue to accommodate the left turns to and from Pear Street

Pedestrian and Transit Improvements

The following improvements are recommended to improve access for pedestrians and transit users:

- Provide a pedestrian crossing across Erickson Avenue with a pedestrian island in the median
- Maintain the existing pedestrian crossing across Pear Street

Safety Results

- Removal of side street left turn movements from the intersection at Erickson Avenue and Pear Street will improve driver safety by eliminating the need to find a gap in the steady through traffic on Erickson Avenue.

Traffic Operations Results

- Installation of Reduced Conflict Intersection will improve Level of Service from LOS F to LOS A at the intersection of Erickson Avenue and Pear Street.
- Newly installed turnaround intersection is also expected to operate at LOS A.

Preliminary Cost

Phase	Cost Estimate (2020)
Preliminary Engineering	\$220,000
ROW and Utility Relocation	\$170,000
Construction	\$690,000
TOTAL COST	\$1,080,000

Mid-Term Recommendation

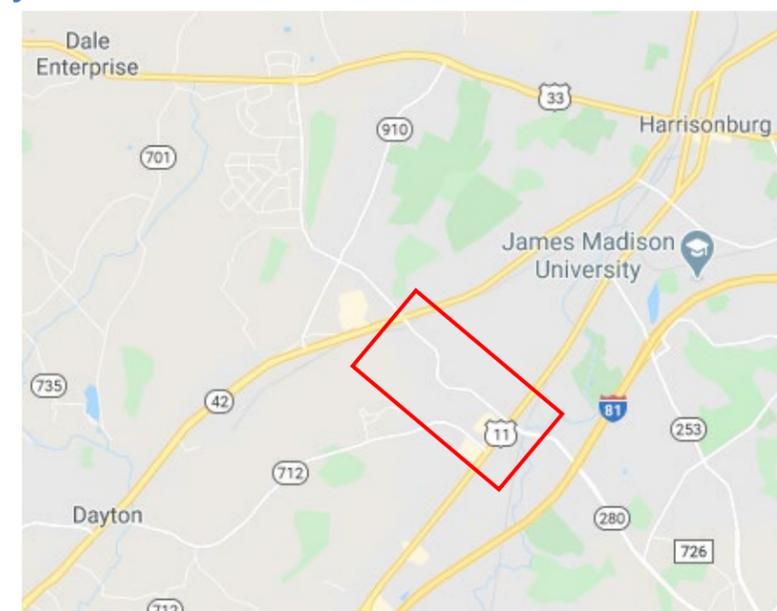
Mosby Widening

Conceptual Design



LEGEND	
	PROPOSED PAVEMENT
	PROPOSED MEDIAN
	EXISTING STREAM
	EXISTING PARCEL BOUNDARY

Project Location



Operations and Safety Improvements

The following recommendations are projected to improve operations and/or safety along S Main Street.

- Widen the northern side of W Mosby Drive to accommodate eastbound double left turn lanes onto S Main Street while minimizing impacts to adjacent businesses
- Maintain the existing eastbound through-right lane

Pedestrian and Transit Improvements

The following improvements are recommended to improve access for pedestrians and transit users:

- Relocate the existing pedestrian crossing across S Main Street from the northern leg of the intersection to the southern leg to avoid conflicts with the higher turning movement

Traffic Operations Results

- Widening to accommodate a second left turn lane will improve overall intersection Level of Service from LOS E to LOS D.
- Eastbound left turn movement is expected to improve from LOS F to LOS E, with a reduction in delay of approximately 100 seconds and a reduction in 95th percentile queue length from 797 feet to 224 feet.
- 95th percentile queues for mainline through traffic

Safety Results

- Geometric improvements and reduced queuing on Mosby Road will reduce conflicts with business driveways.
- Signal improvements are expected to reduce congestion on US 15, which will lead to fewer rear end crashes on the corridor.

Preliminary Cost

Phase	Cost Estimate (2020)
Preliminary Engineering	\$310,000
ROW and Utility Relocation	\$380,000
Construction	\$840,000
TOTAL COST	\$1,530,000

Long-Term Recommendation

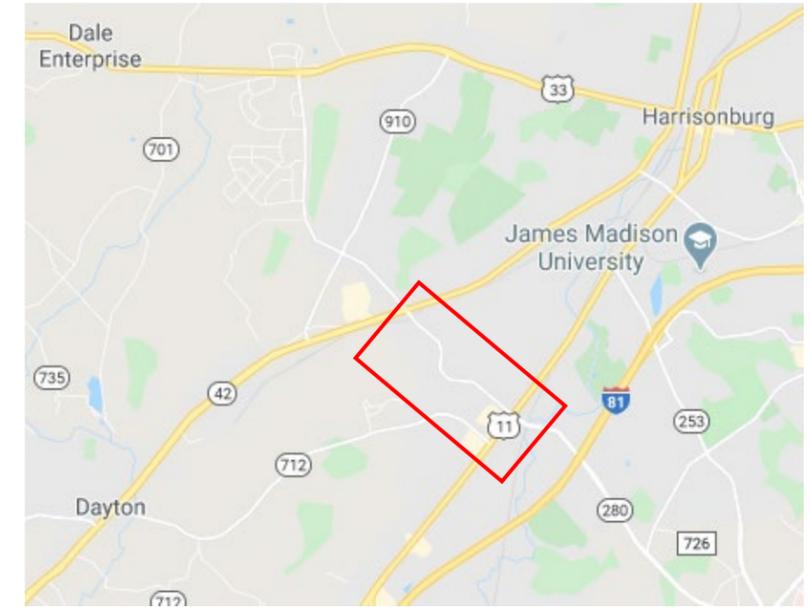
Quadrant Roadway

Conceptual Design

LEGEND	
	PROPOSED PAVEMENT
	PROPOSED MEDIAN
	EXISTING STREAM
	EXISTING PARCEL BOUNDARY



Project Location



Operations and Safety Improvements

The following recommendations are projected to improve operations and/or safety along S Main Street.

- Construct concrete median along S Main Street between Mosby Drive and Erickson Avenue to convert the existing business entrances to right-in and right-out only
- Maintain existing 11' lane widths along S Main Street (requires eliminating existing bike lanes)
- Modify existing entrances on the eastern side of S Main Street to accommodate the proposed sidewalk
- Construct a Quadrant Roadway to improve operations at the S Main Street/Erickson Avenue intersection

Pedestrian and Transit Improvements

The following improvements are recommended to improve access for pedestrians and transit users:

- Construct sidewalk along the eastern side of S Main Street to connect businesses and the existing bus stops
- Upgrade the bus stop south of Mosby Drive to include a new shelter, concrete pad, and a bench

Traffic Operations Results

- Installation of Quadrant Roadway will improve Level of Service at US 11 and Stone Spring Road/Erickson Avenue from LOS E to LOS C.
- Newly installed quadrant roadway intersections are also expected to operate at LOS C.
- 95th percentile queues for the mainline through movements at US 11 and Stone Spring Road/Erickson Avenue will reduce from 644 feet to 93 feet for northbound traffic and from 572 to 210 feet for southbound traffic.

Safety Results

- Shifting the left turns from US 11 and Stone Spring Road/Erickson Avenue to quadrant roadway intersections will reduce angle crashes.
- Signal improvements are expected to reduce congestion on US 15, which will lead to fewer rear end crashes on the corridor.

Preliminary Cost

Phase	Cost Estimate (2020)
Preliminary Engineering	\$1,080,000
ROW and Utility Relocation	\$1,500,000
Construction	\$3,860,000
TOTAL COST	\$6,440,000