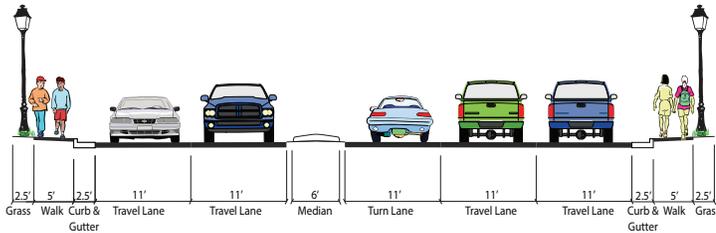




# East John Street Widening in Matthews Things You Should Know

## How will this project balance the small town character of Matthews and the interests of the residents/visitors with traffic flow improvement?

Recognizing this challenge, NCDOT met with the Town staff and elected officials on over a dozen occasions throughout the planning process. NCDOT continues to collaborate with the Town and will work with them and their consultant to consider aesthetic treatments to maintain the downtown character in Matthews, soften the look of the project's infrastructure, identify bicycle/pedestrian mobility and connectivity amenities, and enhance traffic calming and speed control through the corridor.



**4-Lane Section of East John Street from Fremont Street to Charles Buckley Way**

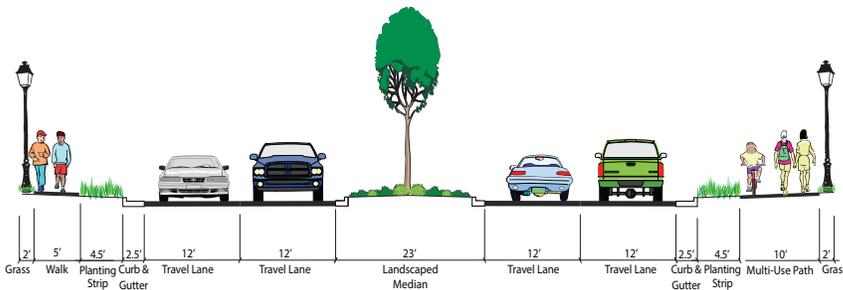
*East John Street will have four lanes just like West John Street has now. East John Street will have a six-foot-wide concrete median separating travel directions. West John Street will continue to have only a double yellow line separating travel lanes.*

The 2013 project design charrette and the 2014 public meeting yielded many requests. In response to Town requests, NCDOT designed a smaller footprint in the downtown area to minimize impacts to adjacent properties and to preserve important parking and traffic movement features. Parking will be retained on Trade Street and the signal at Trade and John Streets will remain full-movement. The reduced footprint includes:

- 11-foot lanes instead of 12-foot lanes
- 5-foot sidewalks at back of curb instead of separated by grass buffer
- No multi-use path until east of Charles Buckley Way
- No additional turning lanes at the intersection of Trade and John Streets

## How many homes and businesses will be displaced in the Matthews section of the project? Will a large number of trees be removed to make room for truck turnarounds?

The current preliminary design shows "worst case" impacts. For the Matthews section, there would be an estimated 25 residential relocations and 1 business relocation. The widening results in impacts to residences and businesses on one side or the other. Most of the U-turn bulbs must be designed to accommodate school buses. The additional lanes, not the turnarounds, will account for the vast majority of the impacts to buildings and trees. NCDOT will seek to further avoid or minimize impacts to adjacent properties through final design.



**4-Lane Section w/23' Median Beginning East of Charles Buckley Way**

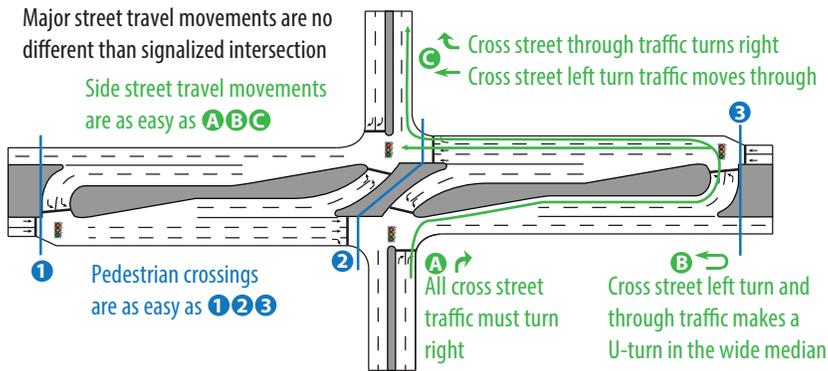
## Why is a new experimental design in this state being considered in an historic downtown area?

The Superstreet design is not new, is not experimental, and will not be implemented in the historic downtown area. The design is smarter and newer compared to conventional intersections, but just like things evolve in other aspects of our life (i.e. technology) roadway planners and engineers are always looking for better ways to improve safety and quality of life. For example, think about other things that work well in many settings that weren't around decades ago: roundabouts, innovative interchange designs, and even flashing yellow arrows in traffic signals. In fact, Superstreet elements are already in use on Trade Street between Weddington Road and Fullwood Lane, at NC 51 and Matthews-Mint Hill Rd, and at over 300 locations throughout the

state. In addition, there are about 60 projects pending with Superstreet elements in them.

In the Matthews section of the project, the proposed Superstreet intersections are at Charles Buckley Way, Greylock Ridge Road, and McKee Road. While such alternative designs at Trade Street would provide better operations, they would also affect historic properties. Under federal law, NCDOT must avoid adverse impacts to historic properties and districts. This is why the proposed design completely avoids the historic Reid House located just west of Trade Street and will not adversely affect this property or any other historic property in the downtown district. In fact, at Trade Street, the project only adds one eastbound lane.





Superstreet intersections and U-turn bulbs will have signals as needed. The need for signals is based on traffic volumes and other factors.

### Notable benefits of the Superstreet include:

- Substantially less congestion and delay on the major roadway due to redirecting side street left and through movements so the main intersection and U-turns can operate in a simpler fashion.
- "Super-coordinated" because with each direction on the major roadway operating independently, traffic signals can progress both directions at any speed limit and signal spacing.
- Enhanced safety by reducing crossing conflict points, which result in fewer and less severe crashes. Redirecting side street left and through movements means that no movement crosses both directions of the roadway.

Safety is also increased for pedestrians and bicyclists because: 1) there are fewer threats due to reduced conflict points compared to a conventional intersection; 2) the islands provide refuge for pedestrians as they cross the roadway; and 3) there is added opportunity for pedestrians to cross the mainline at U-turn locations as well.

### Would you rather walk across... This?



All lanes across NC 73 / Birkdale Commons Place Intersection in Huntersville, NC

### Or this with a Pedestrian Refuge?



Two-stage crossing at NC 73 / Holly Point Drive Intersection in Huntersville, NC

### Matthews hosts several events that attract pedestrians. Wouldn't the Superstreet encourage higher speeds that could hinder walkability and connectivity between neighborhoods and the downtown district?

The proposed Superstreet design enhances pedestrian safety and provides many crossing opportunities as well as shorter crossing distances. To cross East John Street, pedestrians will cross one direction at a time with the median providing refuge while waiting for the signal to change to finish crossing.

The proposed design accommodates pedestrians via a sidewalk on both sides of East John Street, adding a sidewalk (and a multi-use path beginning east of downtown) where they do not exist today.

NCDOT will work with the Town to maintain the existing posted speed limits.

The designs shown at the public hearing are preliminary, and therefore do not show all design features that will be included with the project (e.g. exact crosswalk locations). These final design details will be coordinated with the Town through its study, and will consider destinations and land uses.

The Town of Matthews' plans include widening East John Street to 4 lanes...

2012 Land Use Plan



2013 Downtown Plan



2013 Comprehensive Transportation Plan



...although the project will have impacts in the corridor...

"Future roadway widening of John St in Matthews is physically not feasible without major demolition and condemnation."

Comprehensive Transportation Plan



...but doing nothing could have a negative impact on downtown.

"Visitors and residents may choose to avoid downtown altogether due to congestion."

MATTHEWS DOWNTOWN PLAN

Only one design met Matthews' plans and provided intersections that can accommodate future growth

Matches Matthews' plans for 4-lane median divided roadway

Intersections accommodate future growth

4-lane with traditional intersections

YES



6-lane with traditional intersections

NO



4-lane with alternative intersections

YES

