

Conventional Intersection

The North Carolina Department of Transportation (NCDOT) is challenged to try non-traditional approaches to relieving congestion and improving safety in heavily developing areas. The superstreet is a non-traditional option the NCDOT has found beneficial. Congestion on urban and suburban arterials is an imminent consequence of developing regions of the state. Conventional intersections can create added congestion and long queues resulting in increasing delays in travel time due to the increased traffic flow.



Superstreet

A superstreet is a type of intersection in which side-street traffic is redirected from going straight through or left at a divided highway intersection. All side-street traffic must turn right, but can then access a U-turn to proceed in the desired direction. Other configurations of superstreets are possible based on site specific conditions.

The Superstreet concept provides an effective alternative along heavily traveled regional arterials in areas with anticipated commercial and residential growth. The design concept is contingent upon a series of features that reduce potential conflict points while maintaining traffic flow, resulting in:

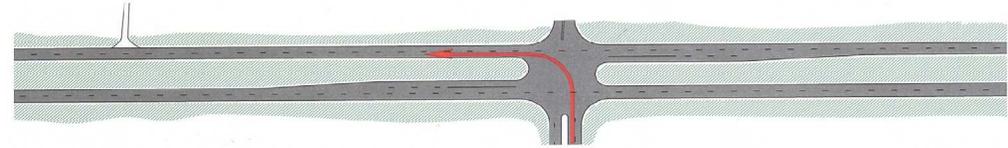
- Increased safety by reducing conflict points at major crossovers
- Time savings from simplified signal phasing
- Enhanced signal coordination
- Dedicated U-turn lanes for efficiency



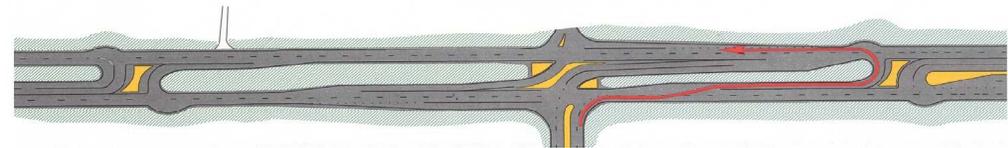
Left turn movement

The conventional intersection allows left turn movements from side streets creating numerous conflict points. The superstreet reduces conflict points therefore increasing safety.

CONVENTIONAL INTERSECTION



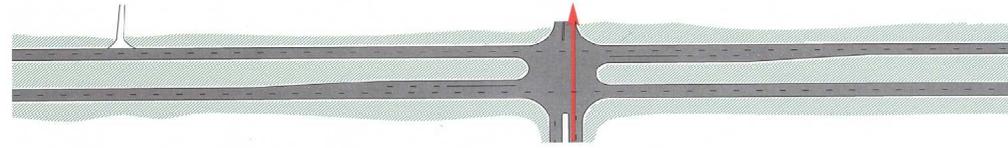
SUPERSTREET



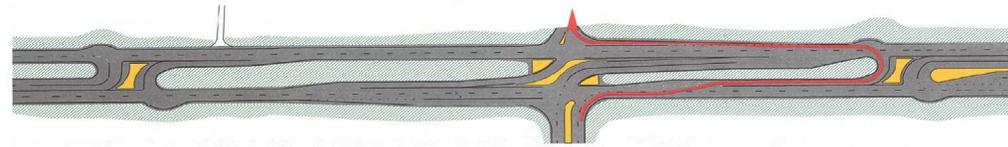
Through movement

The conventional intersection allows through movements onto side streets, creating numerous conflict points. The superstreet intersection prohibits through movements onto side streets forcing a right turn movement onto the arterial, then a U-turn back onto the arterial to safely

CONVENTIONAL INTERSECTION



SUPERSTREET



Benefits of Superstreets

- Safety
- Time savings
- Increased capacity
- Access Management
- Improved traffic flow
- Land use and corridor protection
- Alternative to interchange (Less cost)
- Smaller “footprint” than an interchange

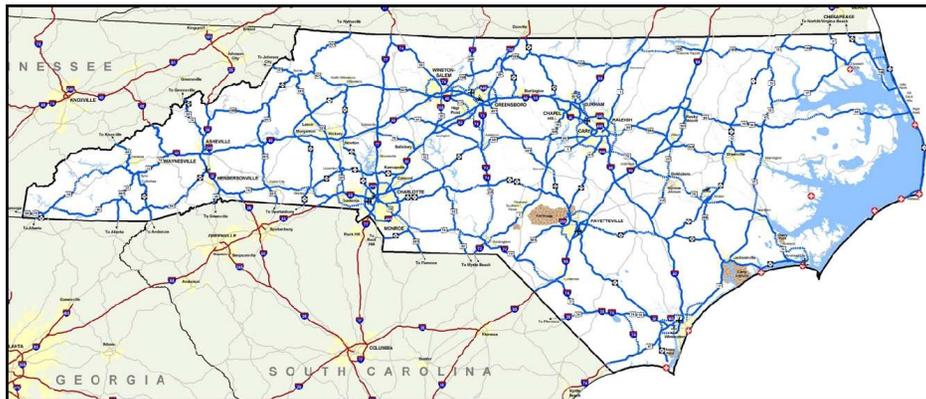
Strategic Highway Corridors

The superstreet alternative improves mobility as a step-by-step process by bringing us one step closer to a freeway/expressway.

The North Carolina Department of Transportation (NCDOT) in collaboration with the Department of Commerce and Department of Environment and Natural Resources has established a “vision” for 5,400 miles of highway along 55 corridors throughout the state. Its primary purpose is “to provide a network of high-speed, safe, reliable highways throughout North Carolina.”

<http://www.ncdot.gov/~shc>

<http://www.ncdot.gov/~superstreet>



For more information, please contact:

North Carolina Department of Transportation
1-800-DOT-4YOU

www.ncdot.gov

North Carolina Department of Transportation



“Connecting people and places in North Carolina - safely and efficiently, with accountability and environmental sensitivity.”



SUPERSTREETS

A tool for safely and efficiently managing congestion