





US 58 ARTERIAL PRESERVATION PLAN

Public Information Meetings

Purpose of Tonight's Meeting

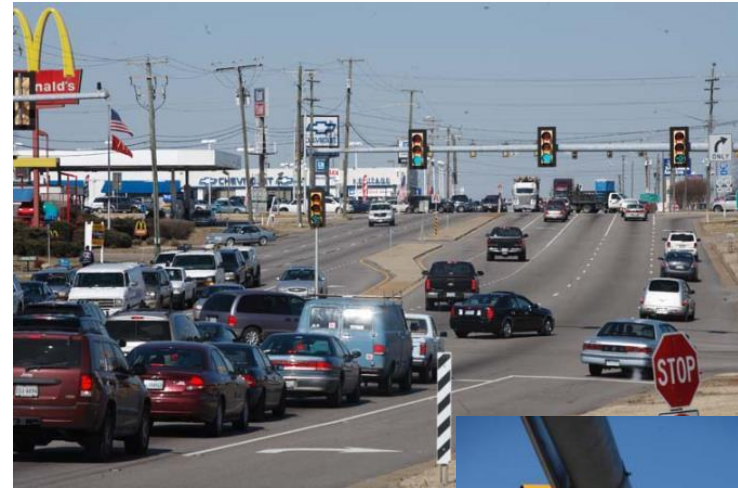
- **Introduce Arterial Preservation Concept**
- **Overview of Study Corridor and Existing Conditions**
- **Intersection Toolbox**
- **Citizen Input**

ARTERIAL PRESERVATION PROGRAM

Background, Goals, and Deliverables

Purpose of Study

- To preserve and enhance the capacity and safety of the Commonwealth's Arterial Preservation Network, while accommodating economic development and avoiding wide-scale road widenings
- Evaluate the projected traffic volumes to determine when major improvements will be needed and potential costs
- Maintain US 58's ability to serve local traffic and provide access to the Port of Virginia
- Identify capacity preservation techniques to be implemented while the US 58 corridor is still relatively undeveloped, preserving the capacity that is there today



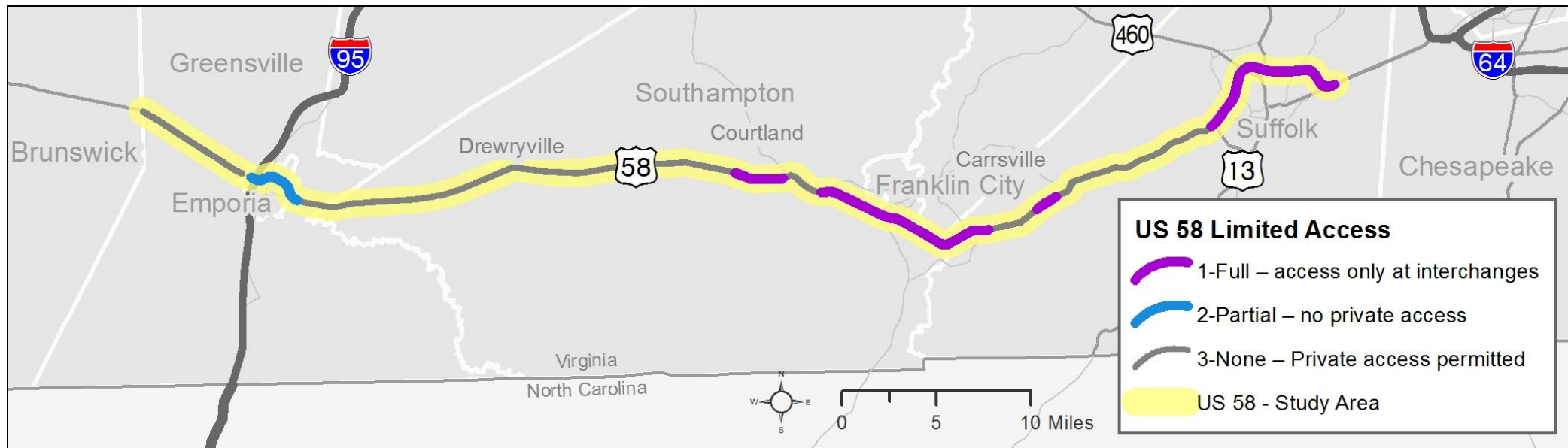
Study Goals

- **Develop a Corridor Transportation Plan to:**
 - Result in a safer arterial highway system
 - Preserve and enhance corridor capacity and efficiency
 - Maintain Commonwealth's mobility and economic competitiveness
 - Lower long-term infrastructure capital and maintenance costs
- **US 58 Specific Goals:**
 - Improved operations at intersections
 - Corridor specific access management standards
 - Evaluation of conducting a future study for upgrading to interstate standards



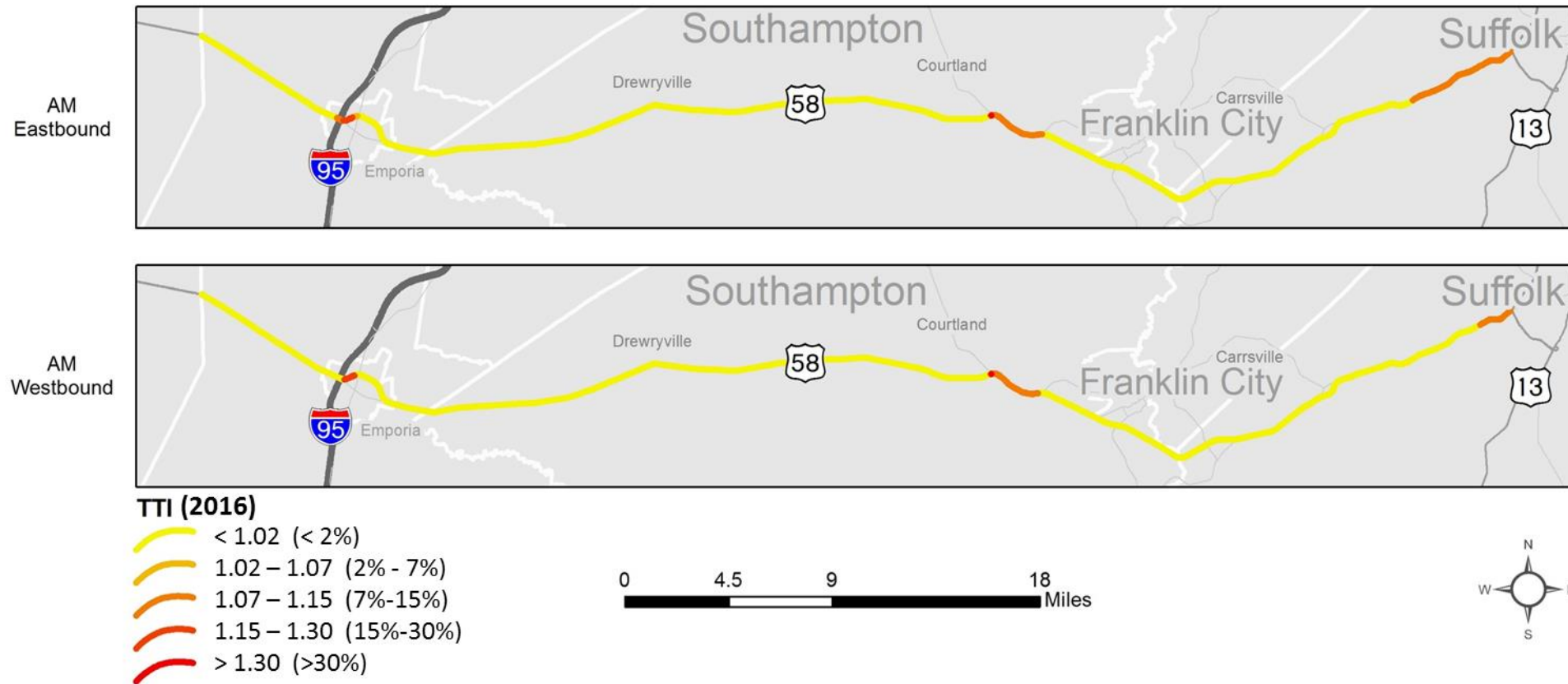
Study Corridor

US 58 from Suffolk BYP to Brunswick – Greenville County Line (~71 miles)



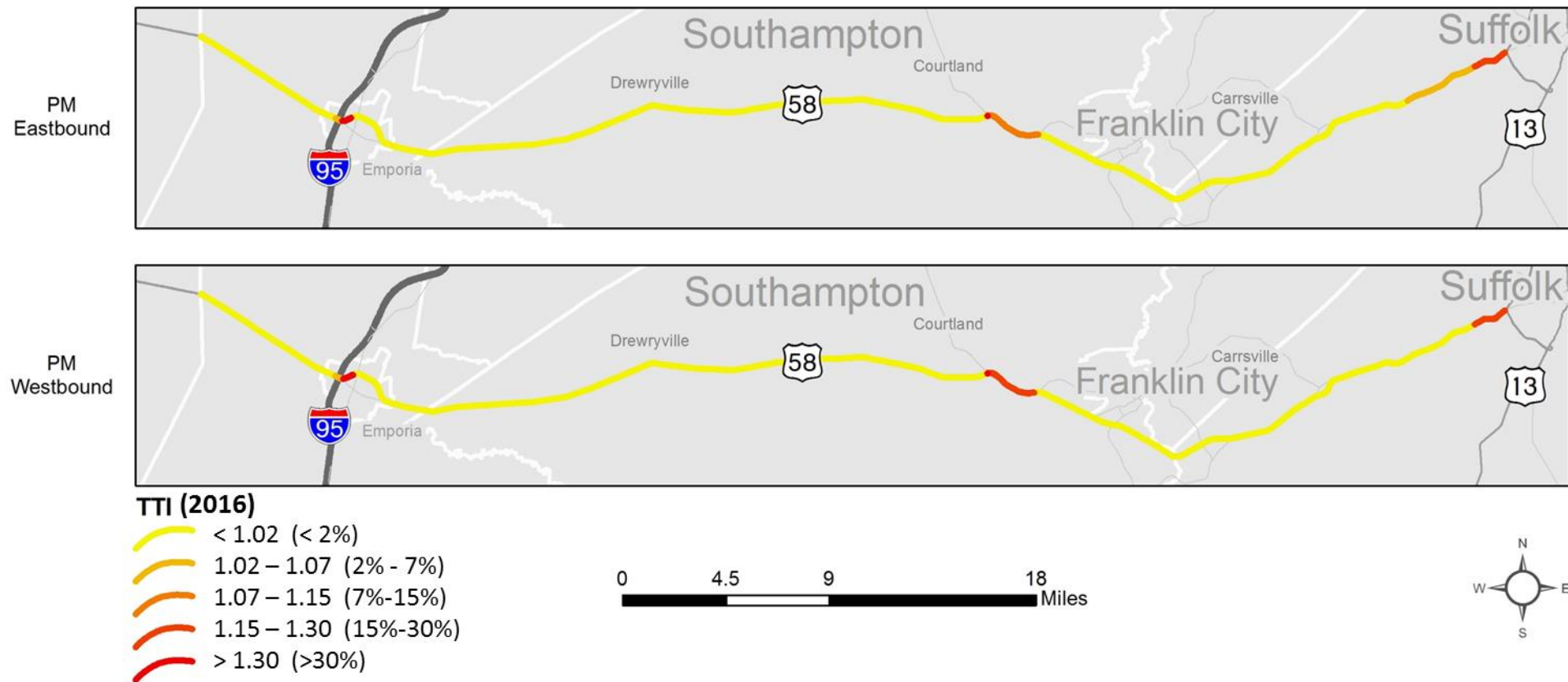
Corridor Operations

Reliability - Travel Time Index 2016



Corridor Operations

Reliability - Travel Time Index 2016



Crash History

2014 - 2017



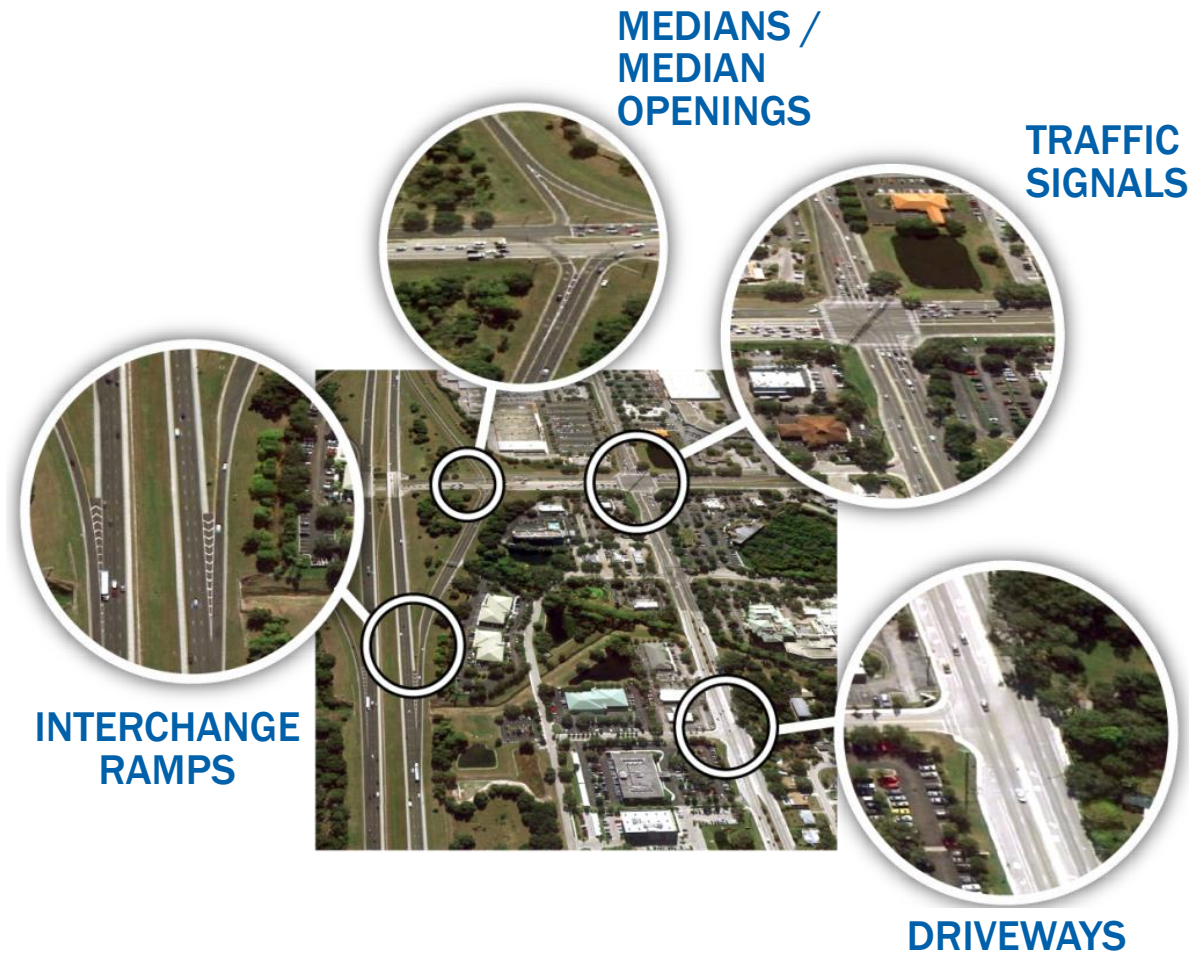
ARTERIAL PRESERVATION PROGRAM

| Intersection Toolbox

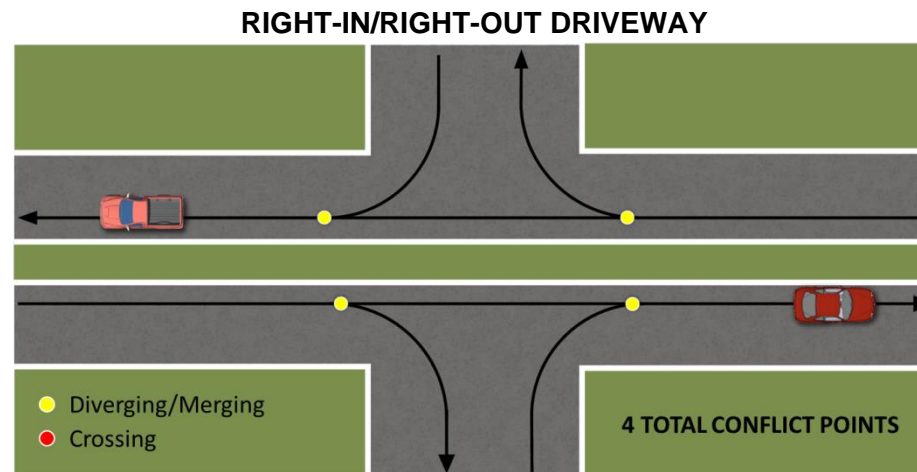
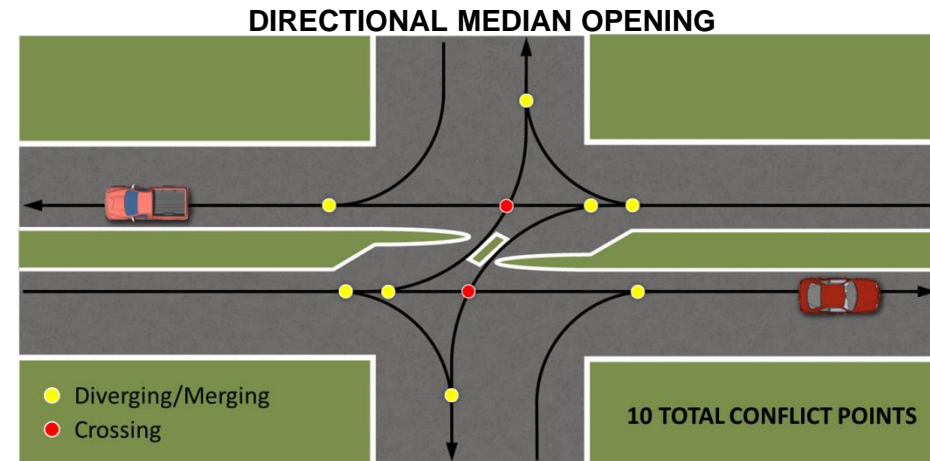
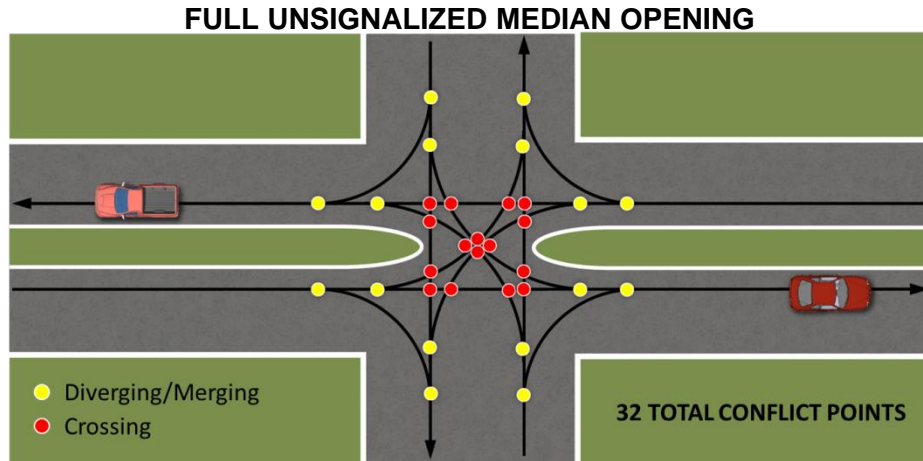
Access Management

What is Access Management?

Access management involves the location, spacing, and design of driveways, medians, median openings, traffic signals, and interchanges



Goal is to Reduce Conflict Points



Access Management Benefits

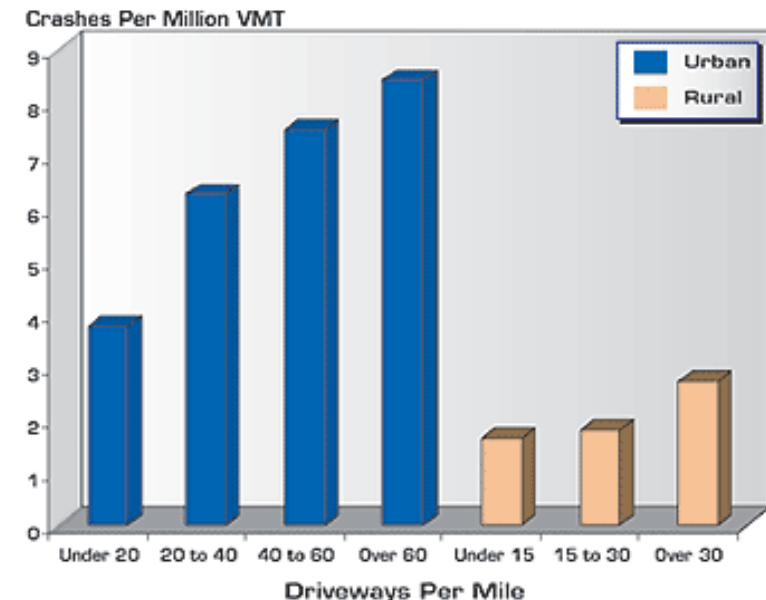
Increased Signal Spacing Benefits

- Improves traffic flow
- Reduces congestion
- Improves air quality

Increased Driveway Spacing Benefits

- Reduces number of potential conflicts
- Increases roadway speeds
- Reduces the rate of car crashes

| Signals per Mile | Increase in Travel Time (%) |
|------------------|-----------------------------|
| 2 | - |
| 3 | 9 |
| 4 | 16 |
| 5 | 23 |
| 6 | 29 |
| 7 | 34 |
| 8 | 39 |

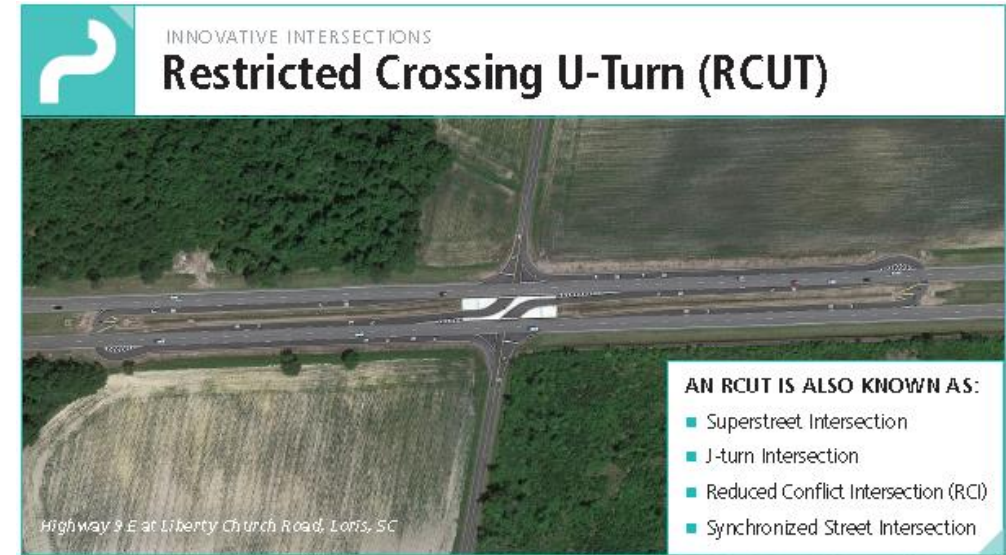


Source: Federal Highway Administration (FHWA)
https://ops.fhwa.dot.gov/access_mgmt/docs/benefits_am_trif_old.htm

Innovative Intersections

What are Innovative Intersections?

Innovative intersections are intersection designs where conventional intersection traffic routes are modified to improve traffic flow, reduce delay, and improve safety



Innovative Intersection Fundamentals

Re-route Left Turn Movements

- More efficiently serves through traffic



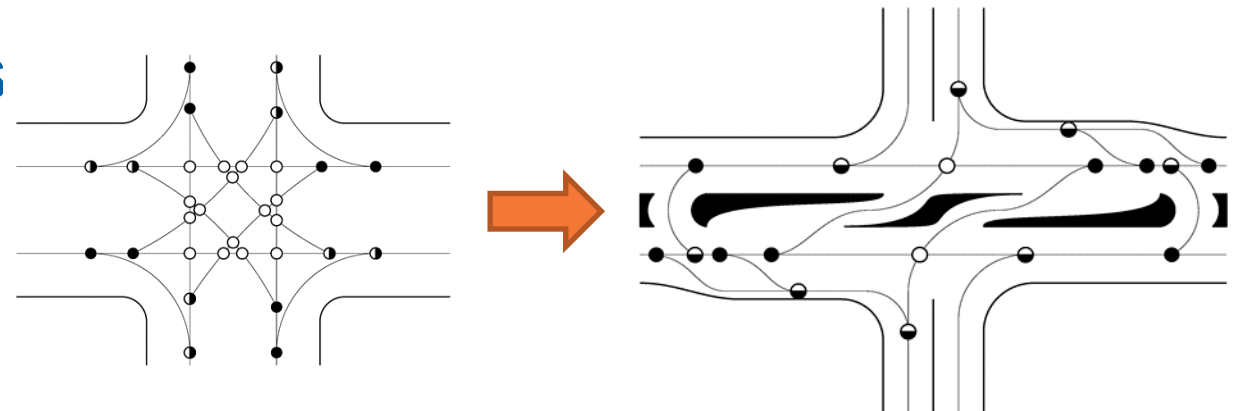
Reduce Signal Phases

- Reduces delay

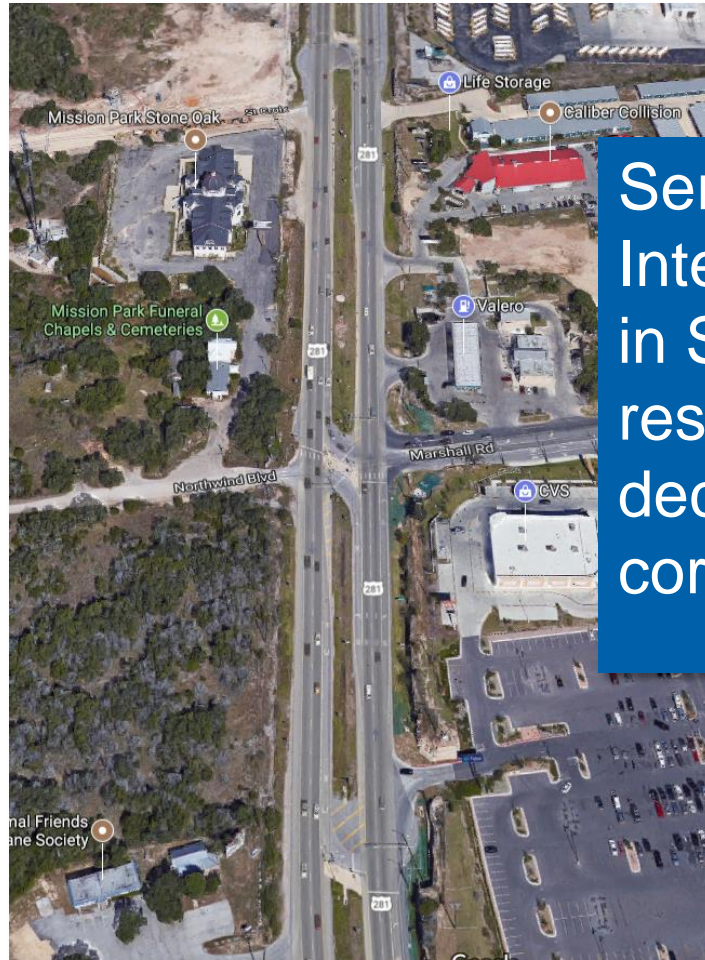


Remove and Separate Conflicts

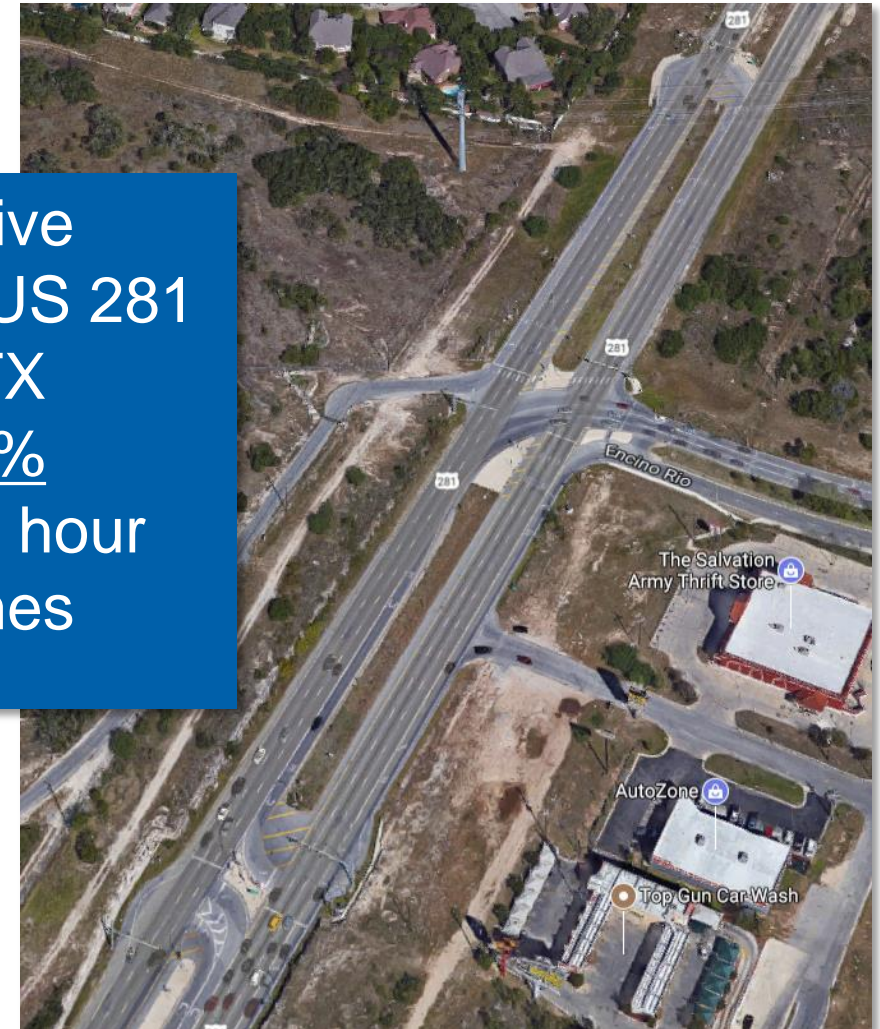
- Improves safety



Innovative Intersection Benefits



Series of Innovative Intersections on US 281 in San Antonio, TX resulted in 34-40% decrease in peak hour corridor travel times



Innovative Intersection Benefits



Safety analysis of RCUT intersections with stop signs in NC found that fatal and injury, angle, and left-turn crashes decreased by more than half following RCUT installation

Provide Your Input

1. **View the boards set up around the room to learn more about the study corridor**
2. **On the large map, place a numbered sticker at the location of concern**
3. **Record your comment on one of the comment sheets**
 - **Be sure to write down the number of your sticker**
4. **Leave us your email on the sign-in sheet to be notified of future meetings**

Contact Information

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Project Website:

http://www.virginiadot.org/projects/hamptonroads/us_58_arterial_management_plan.asp