# J-TURNS Formerly Known As Superstreets

By Tanya Bankston



### **J-TURNS**

- Eliminates Left-Turn and Through Movements from the Minor Approach ---Forcing all Vehicles to Turn Right
- % of Left and Through Movements on the Minor Street are Low



# **WHY J-TURNS?**



Isolated Directional Median Opening US 61 between E. Cornerview St. and Roddy Rd. in Gonzales, LA

#### **ANSWER**

- Improve Safety
- Less Travel Time
- Economically Beneficial
- Environmentally Responsible



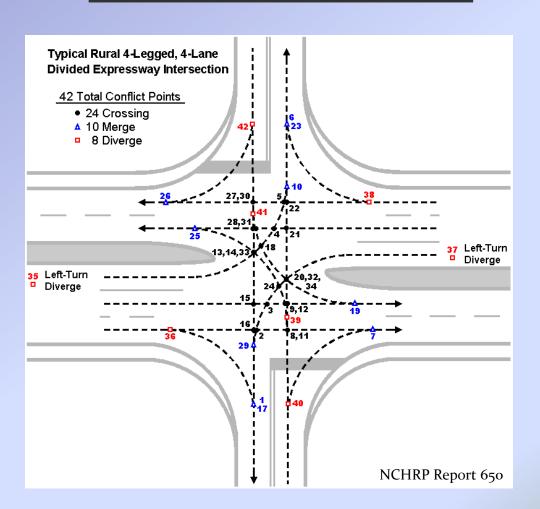
Veterans Memorial Highway in Kenner, LA (Constructed in 2005)

# WHY J-TURNS? IMPROVE SAFETY

- Replaces Right Angle Conflicts with Less Severe Conflicts
- Reduces the Number of Conflict Points



# WHY J-TURNS? IMPROVE SAFETY



# WHY J-TURNS? IMPROVE SAFETY

Overall: Conflicts Points from
 42 to 24



# WHY J-TURNS? LESS TRAVEL TIME

- Reduces "Wait Time" or Delay
- Increases Roadway Capacity
- Divides an 8 phase operation into 4 separate intersections each operating as a 2 phase signal

# **WHY J-TURNS?**

### **Economically Beneficial**

- Preserves the Existing Facility
- Minimal Roadway Construction & Right-of-Way Procurement
- Provides Good Access to Both Sides of the Main Road for Development

### **WHY J-TURNS?**

#### **Environmentally Responsible**

- Less Time Spent Idling at a Red Light
- Reduction in Environmental Pollutants (exhaust fumes / fuel usage)
- Less Property Impacted by Construction and the Permanent Facility

# **OTHER STATES**

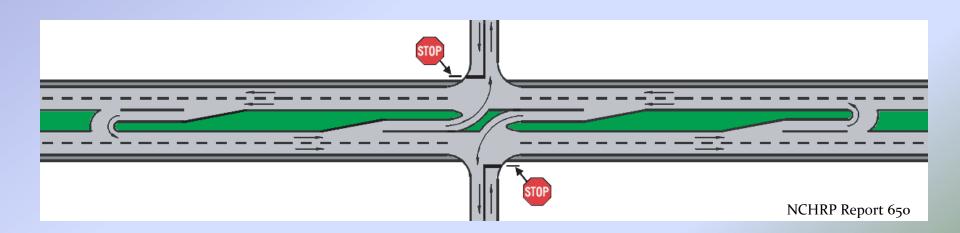
- North Carolina
- Maryland
- Michigan
- Minnesota
- Texas
- Florida
- Iowa
- Missouri



North Carolina State University

### **MISSOURI J-TURN VIDEO**





# J-TURN PROJECTS

#### **In Construction**

• US 90 in Lafayette, LA (District 03)

#### **Proposed**

 Bullion Crossing (US 61 and LA 42) in Prairieville, LA (District 61)

#### **Studies**

- LA 21 in Covington, LA (District 62)
- US 190 in Covington, LA (District 62)
- US 71 in Shreveport, LA (District 04)
- US 165 in Pineville, LA (District 08)

#### **J-TURNS**

 DOTD's Deputy Secretary, Eric Kalivoda Supports J-Turns

IN THE NEWS

#### Experts at the

As the crisis at the Fukushima D devastating earthquake and tsun make sense of the situation.

Faculty from the departments ronmental engineering offered in WRAL, NBC-17, and the Daily Be See many of these stories at the



#### MEMO FROM THE DEPUTY SECRETARY

DATE 5/6/11

TO Peter Allain

SUBJECT Intersection Design

#### **NC State Engin** 15th in WSJ sur

The Wall Street Journal confirmed Is all along: companies love hiring our

NC State ranked 15th among the Journal in September. The paper sur

private companies, nonprofit organizations and government agencies.

Among public schools, NC State engineering ranked 12th nationwide



#### I'm sure you are aware of this,



#### Turning left just isn't right

A new study from NC State civil and transportation engineers shows that so-called "superstreets" -- intersections that reroute left turns from side streets and employ U-turns to keep traffic moving smoothly and safely - are indeed super time savers.

The intersections offer a 20 percent overall reduction in travel time compared to similar intersections that use conventional traffic designs, the engineers found. And there are 46 percent fewer reported automobile collisions.

ABC News and the News & Observer picked up on the study.

#### Memory masters

The BBC reported NC State electrical and computer engineers' development of a new device that represents a significant advance for computer memory, making large-scale "server farms" more energy efficient and allowing computers to start more quickly.

Traditionally, so-called "slow" memory devices are used in persistent data storage technologies such as flash drives and allow us to save information for extended periods of time. "Fast" memory devices allow our computers to operate quickly, but aren't able to save data when the computers are turned off.

But now the NC State engineers have developed a single "unified" device that can perform both types of operations and may be used in a computer's main memory.

# QUESTIONS???

