Wrong Way Driving in Dallas County:
Seeking a Systemic Solution

2012 TexI TE Fall Meeting
Fort Worth, Texas

Sonya Jackson Landrum
North Central Texas Council of Governments
Presentation Overview

- What is NCTCOG?
- The Problem
- How Did We Get Here?
- Wrong Way Driving (WWD) Pilot Project Highlights
- Intersection Improvement Plans
- Next Steps
What is NCTCOG?
## The Problem: Regional WWD Crash Statistics

### YEAR 2008 2008 2010 2011 2012 (As of April) TOTAL

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How Did We Get Here?

Signing and Striping at Diamond Interchanges: Cross-Street Recommendations Presentation

• Greater Dallas TexITE Section
  – Younger Members Committee Tasked with Evaluating Issues and Solutions

• Dallas Traffic Management Team Committee
  – Local Cities, Counties, TxDOT, NTTA, DART

• Combined TexITE - TMT Taskforce Meeting
  – Local Municipalities
    • Dallas, Richardson, Garland, Plano, Frisco, Carrollton, Farmers Branch, Grand Prairie
  – NTTA
  – TxDOT Dallas District
How Did We Get Here?  
The Dallas County Experience

- County Wide Intersection Improvements for Wrong Way Driving, Traffic Signage and Markings Upgrades Project Idea Submitted during the NCTCOG Regional Toll Revenue (RTR) Call for Projects
- Project Selected for RTR Funding
- Wrong Way Driving Working Group Established
Agencies Represented on the WWD Working Group

- Dallas County
- City of Dallas
- City of Richardson
- North Central Texas Council of Governments (NCTCOG)
- North Texas Tollway Authority (NTTA)
- Texas Department of Transportation (TxDOT)
- Texas Transportation Institute (TTI)
Pilot Project Purpose

- Implement Intersection Improvements that will Assist in Reducing Wrong Way Driving Incidents within the Project Area of Dallas County.

Pilot Project Budget

- $1,000,000 to be Used in Dallas County
- ~$2,200 - $2,900 Per Intersection

Pilot Project Area

- Dallas County – Cities Within Dallas County
  - 354 Intersections
WWD Pilot Project Tasks

- Review Existing Wrong Way Driving Research
- Inventory Potential Locations
- Develop Criteria to Evaluate and Prioritize Locations.
- Develop/Finalize Tailored Design
  - Pavement Marking and Signage
    - Install New Signage / Relocate Sign Positioning
  - Traffic Signal Enhancements
    - Replace Incandescent Bulbs with LED Bulbs
    - Install Vertical Green Arrows
- Implement Improvements
- Conduct Project After-study
Intersection Location Inventory

- Highway and Cross Street
- Signalized or Non-signalized
- Maintenance Responsibility
- Owner
- One Way Signs Present (R6-1 and R6-2)
- Route Markers (M5-1)
- Left Turn Bay
- Left Turn Pavement Arrows
- Green Arrow on Signal Head
- Do Not Enter Signs Present
- Lane Assignment Signs (R3-8VAR)
- Tape on Do Not Enter Sign Posts
- Wrong Way Signs Present
- Under Construction
Intersection Location Inventory
Signalized Intersection Layout

NOTES:
1. IF EXISTING PAVEMENT MARKING IS A LEFT TURN ARROW, ELIMINATE AND REPLACE WITH STRAIGHT ARROW
2. REMOVE ALL R6-1 SIGNS (4 EA)
3. REMOVE LANE ASSIGNMENT SIGNS THAT EXIST ON THE OUTSIDE APPROACH TO THE INTERSECTION. INSTALL LANE ASSIGNMENT SIGN ON THE EXISTING POST OR PLACE ON MAST ARM. SEE DIAGRAM A. (2 EA)
4. IF EXISTING SIGN IS A LEFT ARROW, REPLACE WITH AN UP/LEFT ARROW
5. REPLACE GREEN BALL WITH GREEN ARROW ON RIGHT MOST SIGNAL HEAD OR VERTICAL SIGNAL HEAD IF PRESENT TO AVOID RIGHT TURNS.

A ONE WAY 2 EA.
B ONE WAY 4 EA.
C WRONG WAY
R5-1a FOR NTTA MAINTAINED FACILITIES, ADD REFLECTIVE TAPE ON POST
D LEFT TURN YIELD ON GREEN R10-12 (24"X30") 2 EA.
E DO NOT ENTER R5-1 WITH REFLECTIVE TAPE ON POST

Frontage Road

Diagram A
INSTALL
REMOVE
SEE NOTE 3
SEE NOTE 4
EAST
XXX
SEE NOTE 1
NOTE 5
Signalized Intersection Layout

- **A**: ONE WAY (R6-2L 2 EA., R6-2R 4 EA.)
- **B**: ONE WAY
- **C**: WRONG WAY (R5-1a for NTTA maintained facilities, add reflective tape on post)
- **D**: See Note 3
- **E**: See Note 4

**Diagram A**
- INSTALL
- REMOVE
- SEE NOTE 3
- SEE NOTE 4

**Notes**
1. **SEE NOTE 1**
2. **SEE NOTE 2**
3. **SEE NOTE 3**
4. **SEE NOTE 4**

**Road Signs**
- **R6-2L**: ONE WAY (2 EA.)
- **R6-2R**: ONE WAY (4 EA.)
- **R5-1a**: WRONG WAY (for NTTA maintained facilities, add reflective tape on post)
- **R5-1**: LEFT TURN (24" X 30") (2 EA.)
- **R5-1**: WITH REFLECTIVE TAPE ON POST
Non-Signalized Intersection Layout

NOTES:
1. IF EXISTING PAVEMENT MARKING IS A LEFT TURN ARROW, ELIMINATE AND REPLACE WITH STRAIGHT ARROW.
2. REMOVE LANE ASSIGNMENT SIGNS THAT EXIST ON THE OUTSIDE APPROACH TO THE INTERSECTION. INSTALL LANE ASSIGNMENT SIGN ON THE EXISTING POST OR PLACE ON MAST ARM. SEE DIAGRAM A. (2 EA)
3. IF EXISTING SIGN IS A LEFT ARROW, REPLACE WITH AN UP/LEFT ARROW.
Next Steps

- Complete Location Inventories
- Finalize Tailored Design Based on Intersection Type
- Procure Contractor to Implement Improvements
- Implement Improvements
- Conduct Project After-study
Questions

Sonya Jackson Landrum
Principal Transportation Planner
North Central Texas Council of Government
817-695-9273
slandrum@nctcog.org