







Wrong Way Driving in Dallas County:

Seeking a Systemic Solution

2012 TexITE Fall Meeting Fort Worth, Texas

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North Central Texas Council of Governments





Presentation Overview



- What is NCTCOG?
- The Problem
- How Did We Get Here?



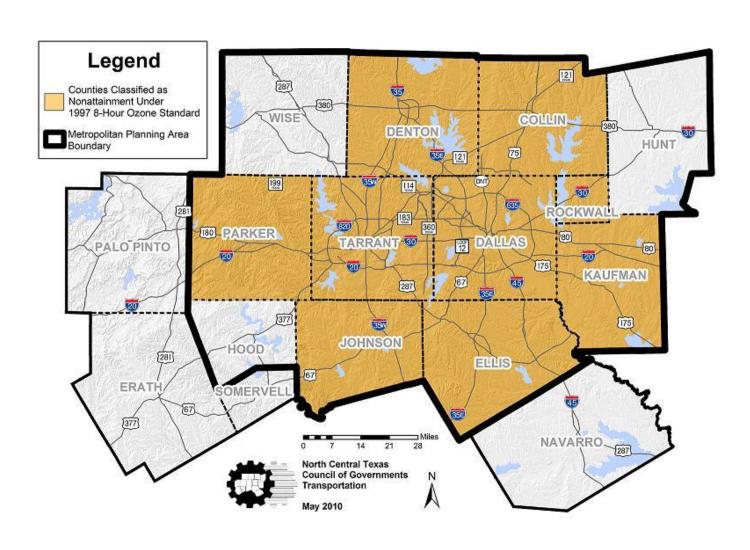
- Wrong Way Driving (WWD) Pilot Project Highlights
- Intersection Improvement Plans



Next Steps



What is NCTCOG?





The Problem: Regional WWD Crash Statistics







YEAR	2008	2008	2010	2011	2012 (As of April)	TOTAL
COUNTY	WWD Crashes	WWD Crashes	WWD Crashes	WWD Crashes	WWD Crashes	2008- 2012
COLLIN	26	17	12	19	6	80
DALLAS	183	159	162	166	42	712
DENTON	29	26	10	21	5	91
ELLIS	12	13	6	2	0	33
ERATH	4	7	1	1	0	13
HOOD	5	2	1	1	1	10
HUNT	7	2	3	2	2	16
JOHNSON	18	11	4	5	5	43
KAUFMAN	8	2	6	8	0	24
NAVARRO	3	2	1	3	1	10
PALO PINTO	4		5	1	0	10
PARKER	9	16	8	2	3	38
ROCKWALL	4	3	0	1	0	8
SOMERVELL	3	1	0	1	1	6
TARRANT	113	104	38	65	36	356
WISE	10	8	7	5	1	31
TOTAL	438	373	264	303	103	1481





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









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)





WWD Pilot Project Purpose



<u>Pilot Project Purpose</u>

 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



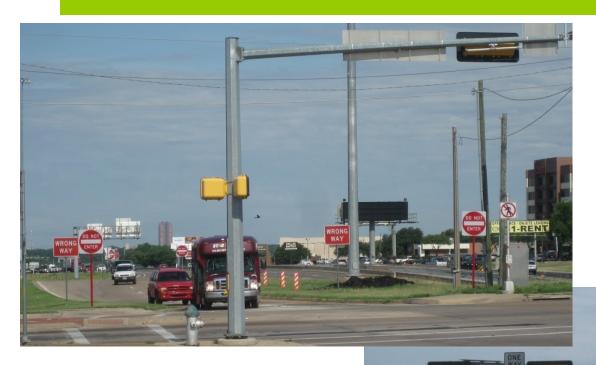
- Highway and Cross Street
- Signalized or Non-signalized
- Maintenance Responsibility
- Owner
- One Way Signs Present (R6-1 and R6-2)
- Route Markers (M5-1)
- Left Turn Bay
- Left Turn Pavement Arrows
- Green Arrow on Signal Head
- Do Not Enter Signs Present
- Lane Assignment Signs (R3-8VAR)
- Tape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





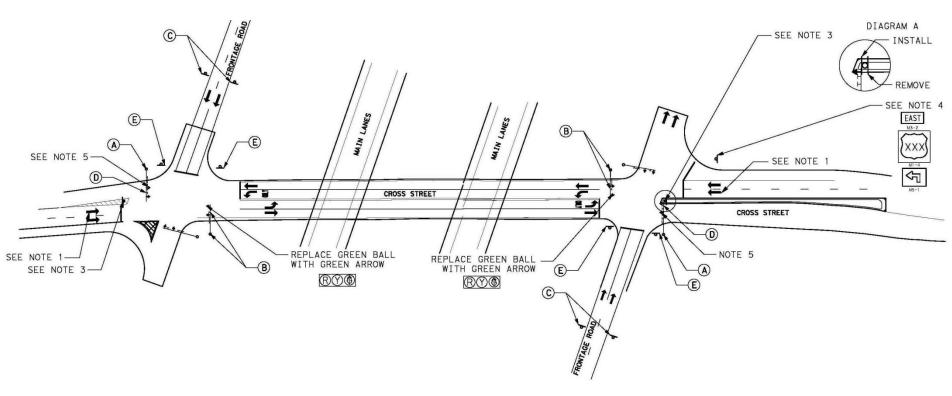


Intersection Location Inventory





Signalized Intersection Layout





R6-2L 2 EA.



R6-2R 4 EA.



FOR NTTA
MAINTAINED
FACILITIES,
ADD REFLECTIVE
TAPE ON POST



R10-12 (24"X30") 2 EA.



R5-1 WITH REFLECTIVE TAPE ON POST 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)



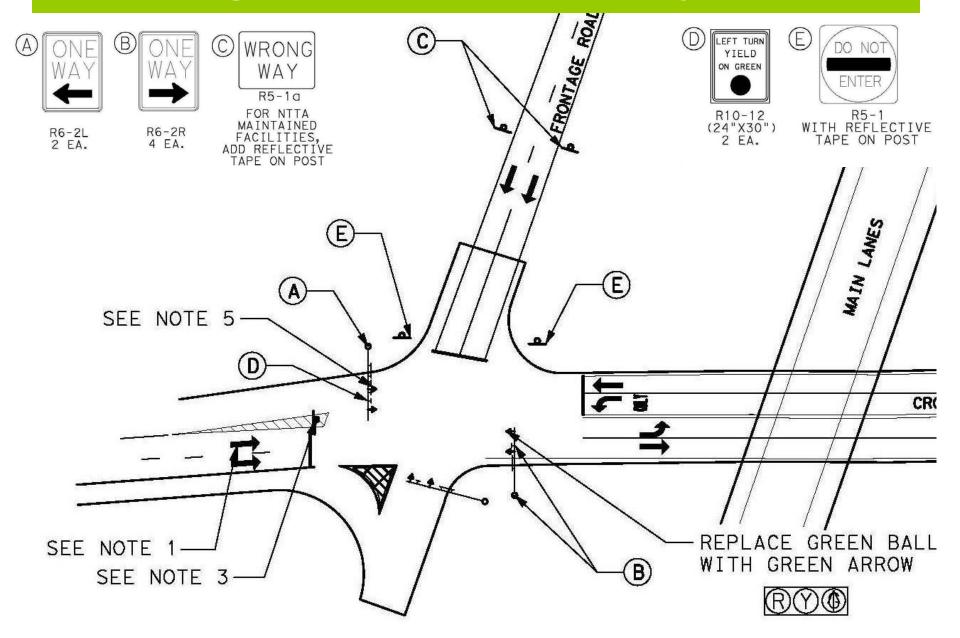
3. REMOVE LANE ASSIGNMENT SIGNS THAT EXIST ON THE OUTSIDE APPROACH TO THE INTERSECTION. INSTALL LANE ASSIGNMENT SIGN ON THE EXISTING POST OR PLACE ON MAST ARM, SEE DIAGRAM A. (2 EA)



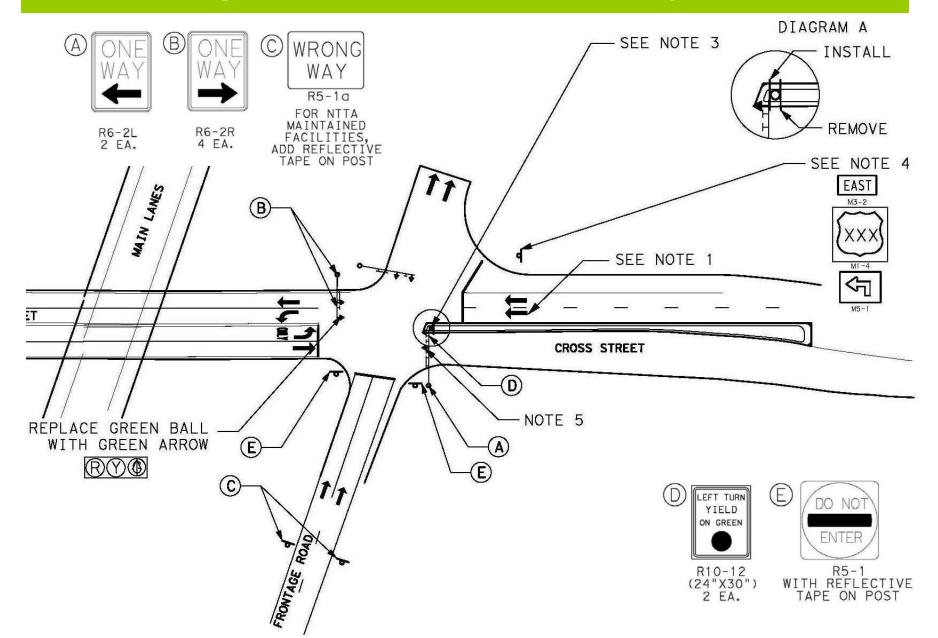
- 4. IF EXISTING SIGN IS A LEFT ARROW,
- REPLACE WITH AN UP/LEFT ARROW.

 REPLACE GREEN BALL WITH GREEN
 ARROW ON RIGHT MOST SIGNAL HEAD
 OR VERTICAL SIGNAL HEAD IF PRESENT
 TO AVOID RIGHT TURNS.

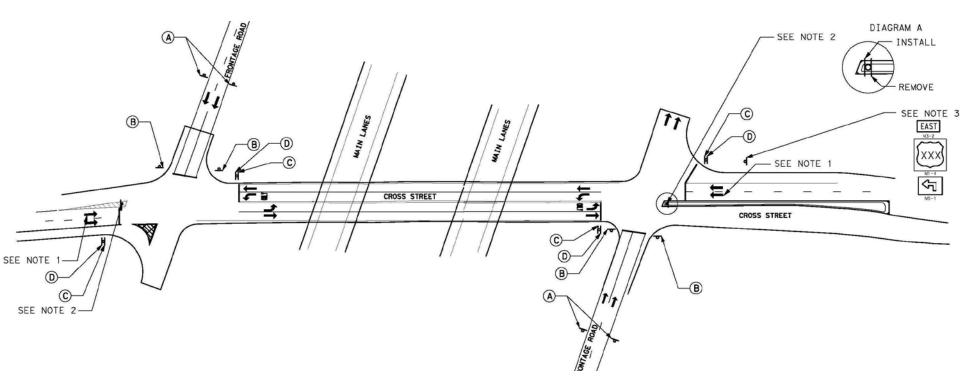
Signalized Intersection Layout



Signalized Intersection Layout



Non-Signalized Intersection Layout





FOR NTTA MAINTAINED FACILITIES. ADD REFLECTIVE TAPE ON POST



R5 - 1WITH REFLECTIVE TAPE ON POST





R6-1L



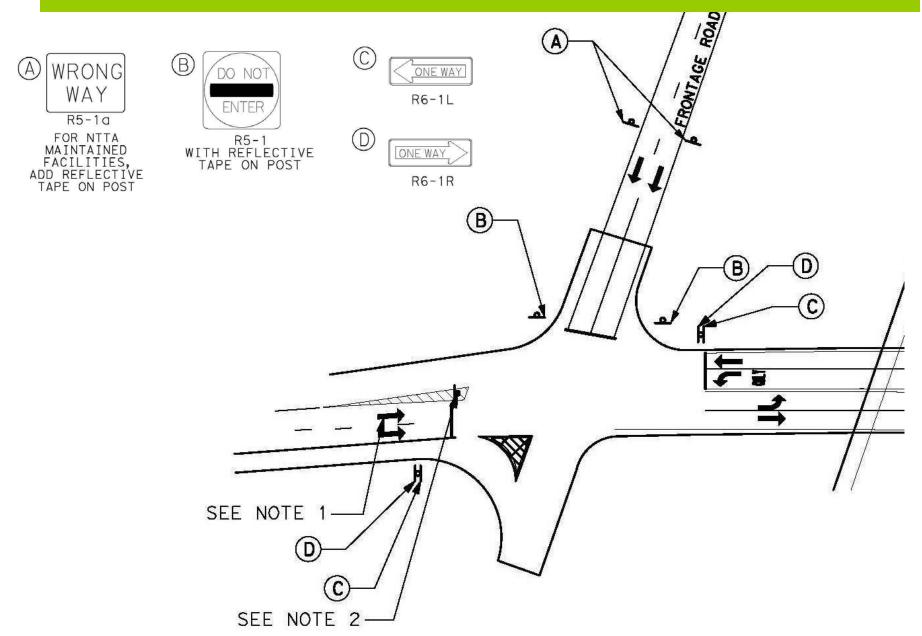
R6-1R

- 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)

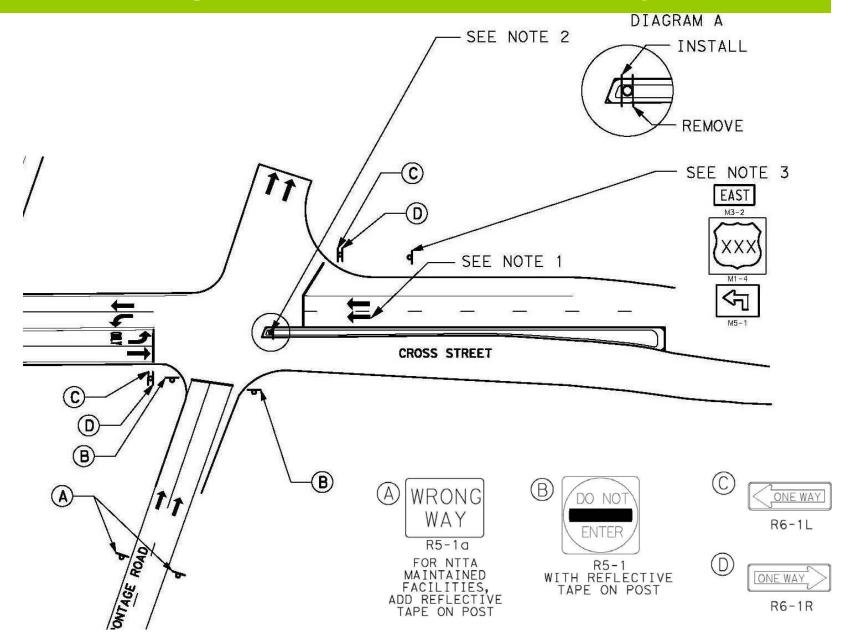


3. IF EXISTING SIGN IS A LEFT ARROW, REPLACE WITH AN UP/LEFT ARROW.

Non-Signalized Intersection Layout



Non-Signalized Intersection Layout





Next Steps



- Complete Location Inventories
- Finalize Tailored Design Based on Intersection Type
- Procure Contractor to Implement Improvements
- Implement Improvements



Conduct Project After-study







Questions



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