

Spot Safety Project Evaluation

Project Information

Order ID: 41000029983

Project ID: 10-08-202

Location: SR 1315 (New Town Rd) at SR 1329 (Billy Howie Rd)

County: Union

Division: 10

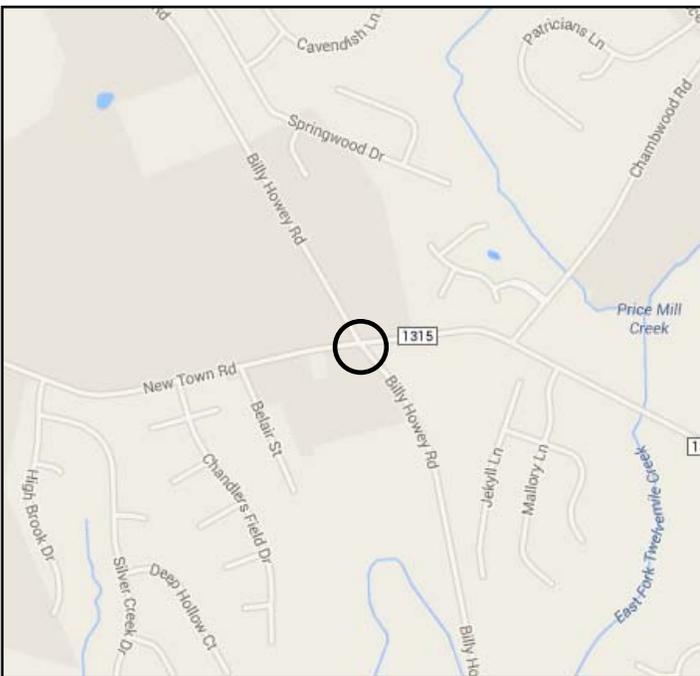
Signal ID: 10-2049

Countermeasure: Install a flasher with “Watch for Approaching Vehicles” sign.

Project Completion: June 8, 2010

Project Cost: \$19,000

Map and Aerial (from Google Maps – Coordinates are 34.9838687,-80.6878177)



Naive Before and After Analysis

Before Period: July 1, 2006 through April 30, 2010 (3.83 years)

Const. Period: May 1, 2010 through June 30, 2010

After Period: July 1, 2010 through April 30, 2014 (3.83 years)

Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection.

Target Crashes: Frontal Impact Crashes were the target crashes for the applied countermeasure. Frontal Impact Crash types include: Left turn, same roadway; Left turn, different roadways; Right turn, same roadway; Right turn, different roadways; and Angle.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	35	25	- 28.6 %
Total Severity Index	3.54	3.37	- 4.8 %
Target Crashes	30	23	- 25.8 %
Target Crash Severity Index	3.71	3.57	- 3.8 %
Volume (2008, 2012)	6600	6600	0.0 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	0	N/A
Class A injury Crashes	0	0	N/A
Class B injury Crashes	1	2	100.0 %
Class C Injury Crashes	11	6	- 45.5 %
Property Damage Only	23	17	- 26.1 %

Overall Summary Results

Total Crashes:	- 29 %	(reduction)
Total Crash Severity:	- 5 %	(reduction)
Target Crashes:	- 26 %	(reduction)
Target Crash Severity:	- 4 %	(reduction)
Volume:	0 %	(no change)

Items for Discussion/Concerns

The most common type of crash in both the Before and the After periods were Angle crashes between a northbound vehicle on SR 1329 and a westbound vehicle on SR 1315. This pattern experienced a 42% reduction from the Before period to the After period.

Data Prepared For

The Traffic Safety Unit *of the*
Transportation Mobility and Safety Division *of the*
Division of Highways *of the*
North Carolina Department of Transportation

Data Prepared By

Principal Investigator: Ian Pike, Summer Engineering Assistant
Checked by: Brad Robinson, PE

Work Group/Consultant: NCDOT - Safety Evaluation Group

Date: July 9, 2014

SS# 10-08-202
 Order# 41000029983
 Union County
 BEFORE Period
 7/1/06 - 4/30/10

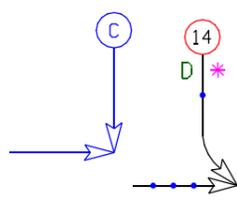
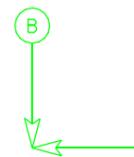
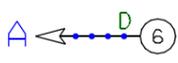
LEGEND			
	MOVING VEHICLE		ANGLE
	PARKED VEHICLE		TURNING
	PARKING VEHICLE		BACKING
	MOVABLE OBJECT		SIDESWIPE
	HEAD ON		INJURY
	REAR END		FATALITY
	RAN OFF ROAD		9 MPH OR LESS
	DAYLIGHT CRASH		10 MPH TO 19
	NIGHT CRASH		20 MPH TO 29
			30 MPH TO 39
			40 MPH TO 49
			50 MPH TO 59
			60 MPH TO 69
			70 AND UP
			SPEED UNKNOWN
			A ANIMAL
			P PEDESTRIAN
			B BICYCLE
			T TRAIN
			* DRIVER AT FAULT
			D DRY
			W WET
			I ICY OR SNOWY
			O Other

SR 1315
 (New Town Road)



ADT (2008)
 2600 (2008)

SR 1329
 (Billy Howey Road)



*Note: The car in #32 was pulling off road when it ran into a ditch.

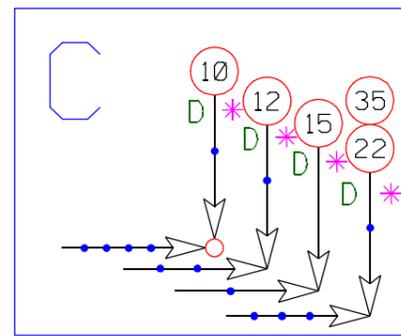
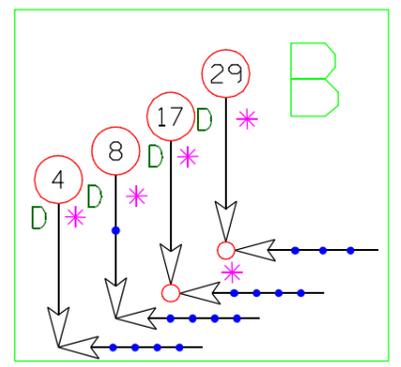
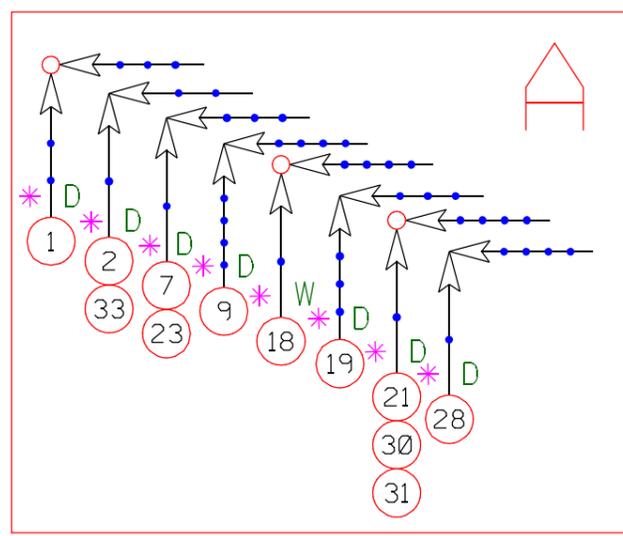
ADT (2008)
 4000 (2008)

45 MPH

45 MPH

ADT (2008)
 4000 (2008)

SR 1315
 (New Town Road)



SR 1329
 (Billy Howey Road)

ADT (2008)
 2600 (2008)

45 MPH



*Note: Crash #27 considered a target crash due to swerving to avoid a frontal impact collision with another vehicle.

Target Crashes



N.C. DEPARTMENT of TRANSPORTATION
 DIVISION of HIGHWAYS
 TRANSPORTATION MOBILITY and
 SAFETY DIVISION

TRAFFIC SAFETY UNIT

Date: 7-9-2014

Prepared By: Ian Pike

SS# 10-08-202
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 Union County
 AFTER Period
 7/1/10 - 4/30/14



SR 1315
 (New Town Road)

45 MPH

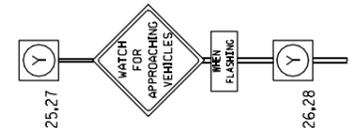
ADT (2012)
 3200 (2012)

SR 1329
 (Billy Howey Road)

LEGEND			
	MOVING VEHICLE		ANGLE
	PARKED VEHICLE		TURNING
	PARKING VEHICLE		BACKING
	MOVABLE OBJECT		SIDESWIPE
	HEAD ON		INJURY
	REAR END		FATALITY
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			T TRAIN
			* DRIVER AT FAULT
			D DRY
			W WET
			I ICY OR SNOWY
			O Other

*Note: Crash #3 considered a target crash due to swerving to avoid a frontal impact collision with another vehicle.

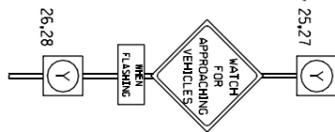
Located 300' from intersection



45 MPH

ADT (2012)
 3400 (2012)

45 MPH



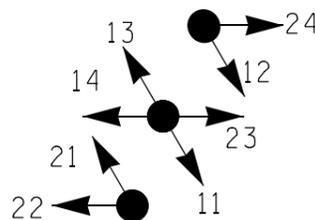
Located 300' from intersection

SIGNAL #10-2049

SIGNAL FACE I.D.

All Heads L.E.D.

21, 22	11, 12
23, 24	13, 14
25, 26	
27, 28	



ADT (2012)
 3400 (2012)

SR 1315
 (New Town Road)

Target Crashes



45 MPH

ADT (2012)
 3200 (2012)

SR 1329
 (Billy Howey Road)

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 SAFETY DIVISION

TRAFFIC SAFETY UNIT

Date: 7-9-2014

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