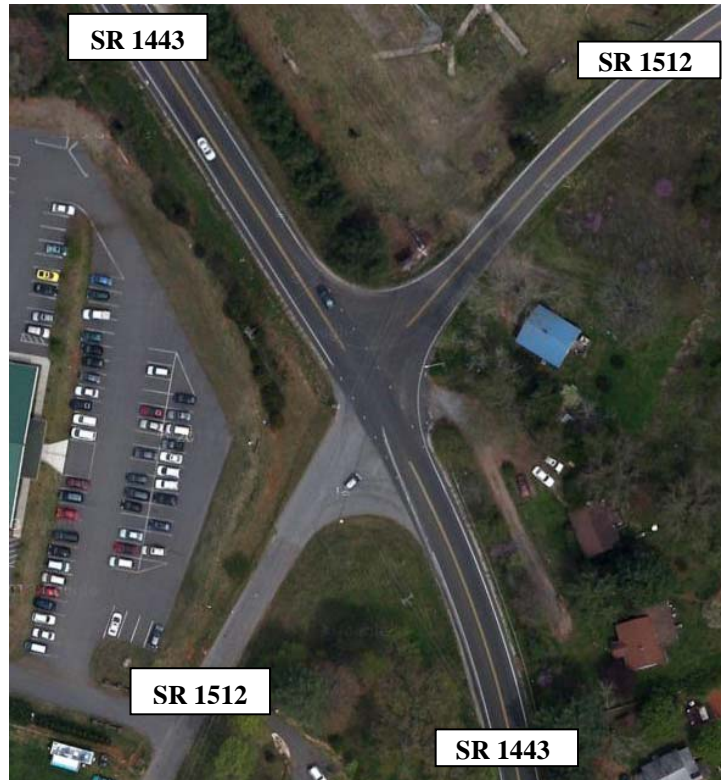
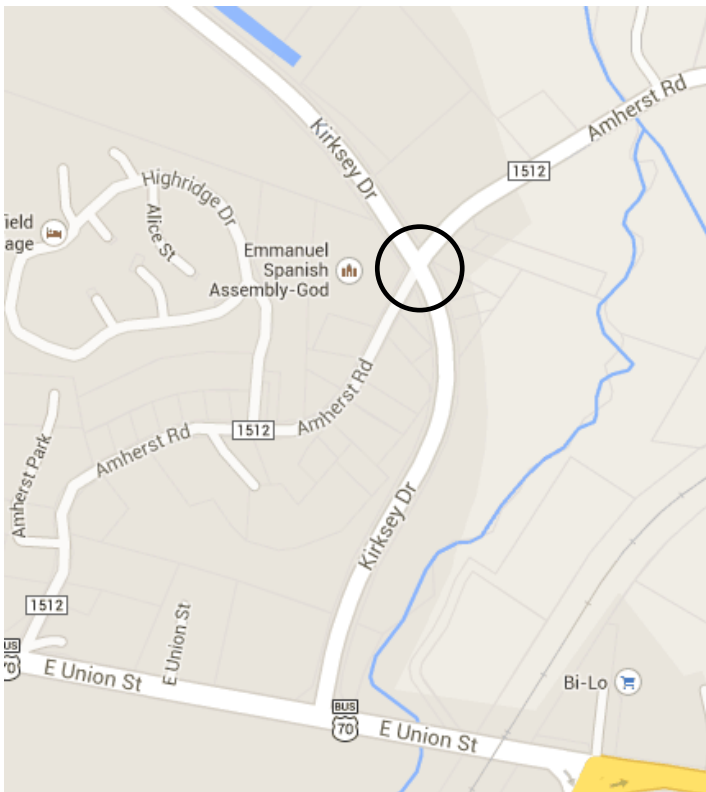


Spot Safety Project Evaluation

Project Information

Order ID: 41000028032
Project ID: 13-05-204
Location: SR 1443 (Kirksey Drive) at SR 1512 (Amherst Road)
County: Burke
City: Morganton
Division: 13
Signal ID: N/A
Countermeasure: Upgraded the signing and made some minor pavement improvements
Project Completion: July 21, 2009
Project Cost: \$6,000

Map and Aerial (from Google Maps – Coordinates are 35.758574,-81.657832)



Naive Before and After Analysis

Before Period: January 1, 2005 through May 31, 2009 (4 years 5 months)

Const. Period: June 1, 2009 through August 31, 2009

After Period: September 1, 2009 through January 31, 2014 (4 years 5 months)

Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection for the SR 1443 and SR 1512 approaches.

Target Crashes: Crashes resulting from vehicles running the stop signs. Vehicles were considered running a stop sign if explicitly stated in the crash report or if the vehicle was traveling more than 20 mph.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	14	9	- 35.7 %
Total Severity Index	9.06	11.07	+ 22.2 %
Target Crashes	4	3	- 25.0 %
Target Crash Severity Index	21.80	31.20	+ 43.1 %
Volume (2007, 2011)	7,200	6,800	- 5.6 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	0	N/A
Class A injury Crashes	1	1	0.0 %
Class B injury Crashes	2	0	- 100.0 %
Class C Injury Crashes	3	2	- 33.3 %
Property Damage Only	8	6	- 25.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Vehicles Running Stop Signs (Target)	4	3	- 25.0 %
Left-Turn Different Roadway	5	2	- 60.0 %
Angle Crashes	6	5	- 16.7 %

Overall Summary Results

Total Crashes:	- 36 %	(reduction)
Total Crash Severity:	+ 22 %	(increase)
Target Crashes:	- 25 %	(reduction)
Target Crash Severity:	+ 43 %	(increase)
Volume:	- 6 %	(reduction)

Additional Summary Results

Vehicles Running Stop Signs (Target):	- 25 %	(reduction)
Left-Turn Different Roadway:	- 60 %	(reduction)
Angle Crashes:	- 17 %	(reduction)

Items for Discussion/Concerns

The target crashes (Vehicles Running Stop Signs) experienced a 25 % reduction (4 to 3 crashes). There was also a 60 % reduction in left-turn different roadway crashes (5 to 2) and a 17 % reduction in angle crashes (6 to 5).

It should be noted that the target crash severity index increased by 43 %.

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

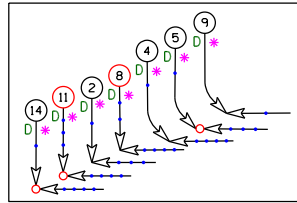
Principal Investigator: Heath Gore, PE
Work Group/Consultant: AECOM
Date: April 11, 2014

SS# 13-05-204
 Order# 41000028032
 Burke County
 BEFORE Period
 1/1/05 - 5/31/09

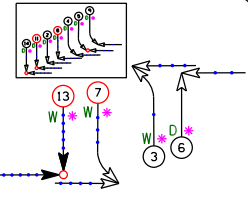
SR 1512 (Amherst Road)
 55 MPH
 2007 AADT - 2,350

LEGEND

	MOVING VEHICLE		ANGLE		9 MPH OR LESS		PEDESTRIAN
	PEDESTRIAN		TURNING		10 MPH TO 19		TRAIN
	PAKED VEHICLE		BACKING		20 MPH TO 29		DRIVER AT FAULT
	PAKED VEHICLE		SIDESWIPE		40 MPH TO 49		DRY
	FIXED OBJECT		OUT OF CONTROL		50 MPH TO 59		WET
	HEAD ON		HURRY		60 MPH TO 69		TALL OR SHORT
	REAR END		FATALITY		TO AND UP		ONLY
	RAN OFF ROAD				SPEED UNKNOWN		



SR 1443 (Kirksey Drive)
 45 MPH
 2007 AADT - 5,700



SR 1443 (Kirksey Drive)
 45 MPH
 2007 AADT - 5,400

SR 1512 (Amherst Road)
 No Posted Speed Limit
 2007 AADT - 1,000 (Assumed)

Vehicles Running Stop Signs

AECOM

Prepared For:
 N.C. DEPARTMENT of TRANSPORTATION
 DIVISION of HIGHWAYS
 TRANSPORTATION MOBILITY and SAFETY DIVISION

TRAFFIC SAFETY UNIT

Date: 4-11-2014 Prepared By: Heath Gore, PE

SS# 13-05-204
 Order# 41000028032
 Burke County
 AFTER Period
 9/1/09 - 1/31/14

SR 1512 (Amherst Road)
 55 MPH
 2011 AADT - 2,050

LEGEND							
	MOVING VEHICLE		ANGLE		9 MPH OR LESS		PEDESTRIAN
	PEDESTRIAN		TURNING		10 MPH TO 19		TRAIN
	PARKED VEHICLE		BACKING		20 MPH TO 29		DRIVER AT FAULT
	PARKED VEHICLE		SIDESWIPE		30 MPH TO 39		DRY
	FIXED OBJECT		OUT OF CONTROL		40 MPH TO 49		WET
	HEAD ON		HURRY		50 MPH TO 59		ICY OR SNOWY
	REAR END		FATALITY		60 MPH TO 69		TO AND UP
	RAN OFF ROAD		SPEED UNKNOWN		TO AND UP		ONLY



SR 1443 (Kirksey Drive)
 45 MPH
 2011 AADT - 5,300

SR 1443 (Kirksey Drive)
 45 MPH
 2011 AADT - 5,200

SR 1512 (Amherst Road)
 No Posted Speed Limit
 2011 AADT - 1,000 (Assumed)

Crash #9 - Crane truck hit overhead powerline causing power pole to fall in road.

Vehicles Running Stop Signs

AECOM

Prepared For:
 N.C. DEPARTMENT of TRANSPORTATION
 DIVISION of HIGHWAYS
 TRANSPORTATION MOBILITY and SAFETY DIVISION

TRAFFIC SAFETY UNIT

Date: 4-11-2014 Prepared By: Heath Gore, PE

