

# Spot Safety Project Evaluation

## Project Information

Order ID: 41000028349

Project ID: 07-07-203

Location: US 220 Bus in vicinity of curve 0.2 mi South of SR 1395 (Janet Rd)

County: Rockingham

City: Northeast of Mayodan

Division: 7

Signal ID: N/A

Countermeasure: Installation of solar powered flashing beacon to existing northbound curve warning and 40 mph speed plate sign assembly.

Project Completion: September 4, 2008

Project Cost: \$10,000

## Map and Aerial (from Google Maps- Coordinates are 36.433627,-79.944656)



## Naive Before and After Analysis

Before Period: February 1, 2003 through June 30, 2008 (5 years, 5 Months)

Const. Period: July 1, 2008 through September 30, 2008

After Period: October 1, 2008 through February 28, 2014 (5 years, 5 Months)

Analysis Criteria: Treatment data consisted of all crashes from MP 5.624 to MP 6.124 on US 220B.

Target Crashes: Northbound Lane Departure Crashes.

<u>Treatment Information</u>	<b>Before</b>	<b>After</b>	<b>Percent Reduction (-) Percent Increase (+)</b>
Total Crashes	21	13	- 38.1 %
Total Crash Severity Index	11.04	3.28	- 70.3 %
NB Lane Departure Target Crashes	12	5	- 58.3 %
NB Lane Departure Target Crash Severity Index	17.33	2.48	- 85.7 %
Volume (2006, 2010)	4,300	3,200	- 25.6 %

<u>Injury Crash Summary</u>	<b>Before</b>	<b>After</b>	<b>Percent Reduction (-) Percent Increase (+)</b>
Fatal injury Crashes	2	0	- 100.0 %
Class A injury Crashes	0	0	N/A
Class B injury Crashes	2	0	- 100.0 %
Class C Injury Crashes	6	4	- 33.3 %
Property Damage Only	11	9	- 18.2 %

### **Overall Summary Results**

Total Crashes:	- 38 %	(reduction)
Total Crash Severity:	- 70 %	(reduction)
NB Lane Departure Target Crashes:	- 58 %	(reduction)
NB Lane Departure Target Crash Severity:	- 86 %	(reduction)
Volume:	- 26 %	(reduction)

### **Items for Discussion/Concerns**

None

### **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: Justin Green, EI  
Work Group/Consultant: NCDOT - Safety Evaluation Group  
Date: April 16, 2014

LEGEND			
	WALK		P PEDESTRIAN
	TURNING		T TRAIN
	BODGING		+ OTHER AT FAULT
	SOLOMPC		D OFF
	SLIPPED		W WET
	SLIPPED		I ICT OF DRIVER
	SLIPPED		SPEED UNKNOWN
	SLIPPED		O OTHER

SR 1395 (Janet Rd)

End Study  
MP 6.124

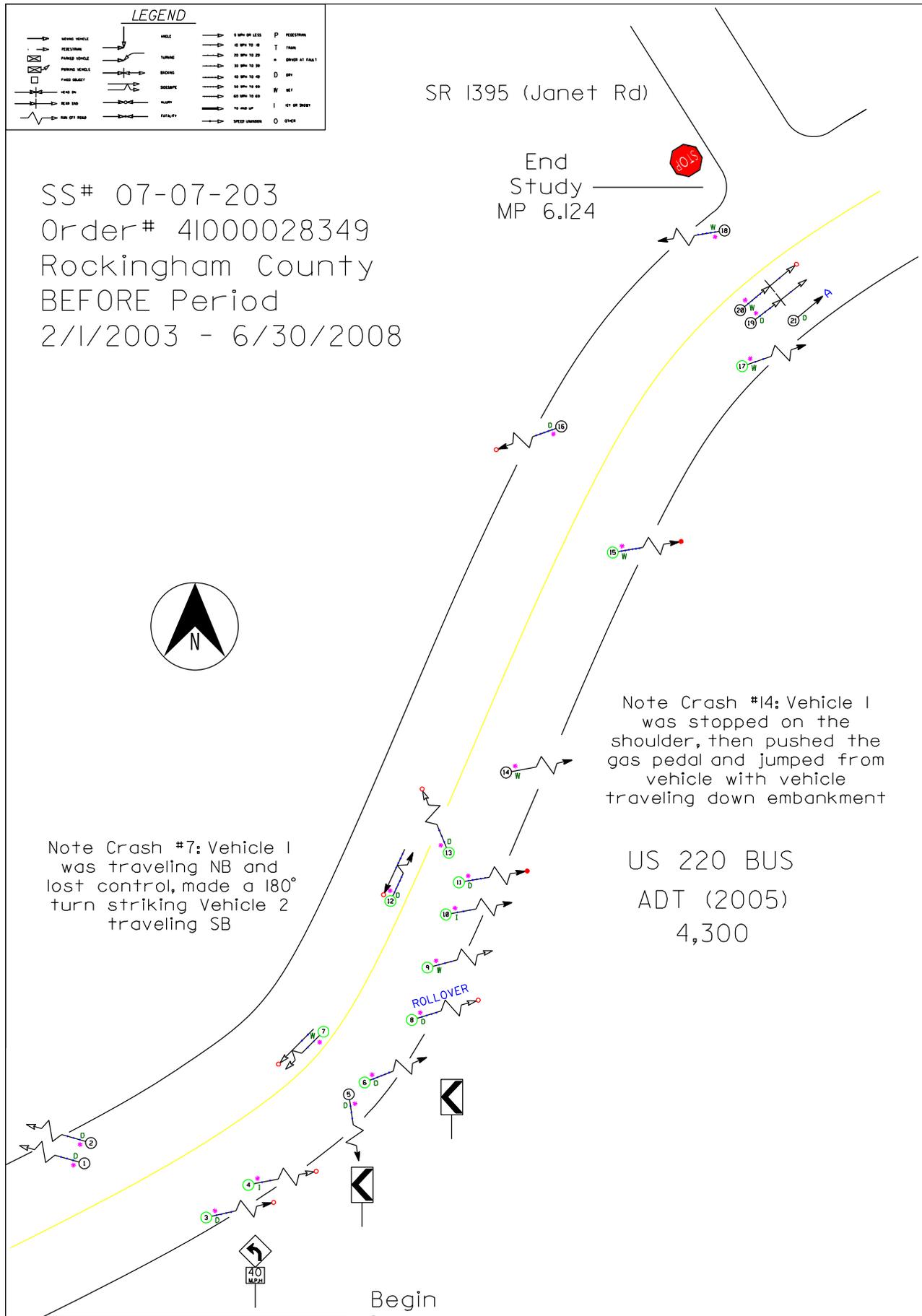
SS# 07-07-203  
Order# 41000028349  
Rockingham County  
BEFORE Period  
2/1/2003 - 6/30/2008



Note Crash #7: Vehicle 1 was traveling NB and lost control, made a 180° turn striking Vehicle 2 traveling SB

Note Crash #14: Vehicle 1 was stopped on the shoulder, then pushed the gas pedal and jumped from vehicle with vehicle traveling down embankment

US 220 BUS  
ADT (2005)  
4,300



Begin Study  
MP 5.624

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

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**TRAFFIC SAFETY UNIT**

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Date: April 2014      Prepared By: J. Green

NB Lane Departure  
Target Crashes

LEGEND			
	WHEEL	0 MPH OR LESS	P PEDESTRIAN
	TURNING	10 MPH TO 20	T TRAIN
	BRIDGES	20 MPH TO 30	+ OTHER AT FAULT
	SKIDMARKS	30 MPH TO 40	D OFF
	FLAUNT	40 MPH TO 50	H HIT
	FATALITY	50 MPH TO 60	I ICT OF DUTY
		60 MPH TO 70	U UNLAWFUL
		70 MPH TO 80	O OTHER

SR 1395 (Janet Rd)

End Study  
MP 6.124

SS# 07-07-203  
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Rockingham County  
AFTER Period  
10/1/2008 - 2/28/2014



ROLLOVER

US 220 BUS  
ADT (2011)  
3,200

Added Solar Powered  
Flashing Beacon  
to Curve Warning Sign

Begin Study  
MP 5.624

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

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NB Lane Departure  
Target Crashes