

Spot Safety Project Evaluation

Project Information

Order ID: 41000033968

Project ID: 02-10-6806

Location: Intersection of NC 11 and SR 1113 (Old Snow Hill Road)/Snow Hill Street

County: Pitt

City: Ayden

Division: 2

Signal ID: 02-0844

Countermeasures: Installed advance actuated shoulder dual mounted warning flashers and “Vehicle Entering When Flashing” warning signs on both NC 11 approaches to SR 1113 and Snow Hill Street.

Project Completion: July 6, 2011

Project Cost: \$55,000.00

Map and Aerial (from Google Maps, Coordinates are 35.466490, -77.435876)



Naive Before and After Analysis

- Before Period: July 1, 2007 through April 30, 2011 (3 years, 10 months)
- Const. Period: May 1, 2011 through July 31, 2011
- After Period: August 1, 2011 through May 31, 2015 (3 years, 10 months)
- Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection for the NC 11 and SR 1113/Snow Hill Street approaches.
- Target Crashes: Frontal Impact Crashes (left-turn, same roadway; left-turn, different roadway; right-turn, same roadway; right-turn, different roadway; head-on; and angle crashes) in the intersection.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	16	15	- 6.3 %
Total Severity Index	10.36	9.51	- 8.2 %
Target Crashes	16	9	- 43.8 %
Target Crash Severity Index	10.36	13.53	+ 30.6 %
Volume (2008, 2013)	16,500	16,200	- 1.8 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	1	1	0.0 %
Class A injury Crashes	0	0	0.0 %
Class B injury Crashes	3	3	0.0 %
Class C Injury Crashes	7	4	- 42.9 %
Property Damage Only	5	7	+ 40.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Angle (Target)	14	8	- 42.9 %
Left Turn, Same Roadway (Target)	1	1	0.0 %
Left Turn, Different Roadway (Target)	1	0	- 100.0 %
Rear End, Slow or Stop	0	2	+ 100.0 %
Rear End, Turn	0	2	+ 100.0 %
Sideswipe	0	1	+ 100.0 %
Animal Collision	0	1	+ 100.0 %

Overall Summary Results

Total Crashes:	- 6 %	(reduction)
Total Crash Severity:	- 8 %	(reduction)
Target Crashes:	- 44 %	(reduction)
Target Crash Severity:	+ 31 %	(increase)
Volume:	- 2 %	(reduction)

Additional Summary Results

Angle (Target):	- 43 %	(reduction)
LTSR (Target):	0 %	(n/a)
LTDR (Target):	- 100 %	(reduction)

Items for Discussion/Concerns

Angle crashes decreased from 14 crashes in the before period to 8 crashes in the after period.

Left Turn, Different Roadway crashes decreased from 1 crash in the before period to 0 crashes in the after period.

Rear End, Slow or Stop crashes increased from 0 crashes in the before period to 2 crashes in the after period.

Rear End, Turn crashes increased from 0 crashes in the before period to 2 crashes in the after period.

Of the 14 Angle crashes in the before period, 10 of them occurred between southbound NC 11 and SR 1113/Snow Hill Street vehicles. In the after period, only 4 angle crashes occurred between southbound NC 11 and SR 1113/Snow Hill Street vehicles.

Of the 14 Angle crashes in the before period, 4 of them occurred between northbound NC 11 and SR 1113/Snow Hill Street vehicles. In the after period, there remained 4 angle crashes occurring between northbound NC 11 and SR 1113/Snow Hill Street vehicles.

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: Rosi Hennein

Work Group/Consultant: Stantec Consulting Services Inc

Date: July 17, 2015

SS# 02-10-6806
 Order# 41000033968
 Pitt County
 Before Period
 7/1/07 - 4/30/11

Note Crash #12:
 Vehicle #2 ran off road
 in avoidance of vehicle #1
 who attempted to travel WB
 across NC 11
 No contact between vehicles

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 1113 (Old Snow Hill Road)

55 MPH
 ADT (Year)
 1,500 (2009)

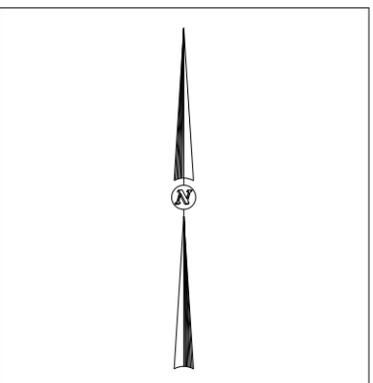
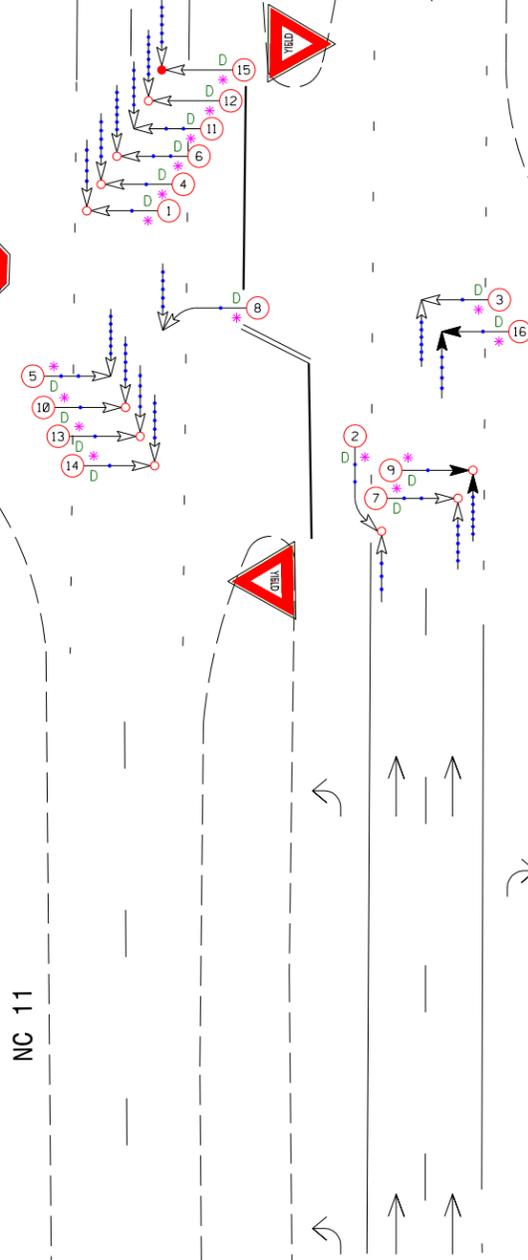
60 MPH
 ADT (Year)
 15,000 (2009)

Snow Hill Street

ADT (Year)
 1,500 (2009)

35 MPH

60 MPH
 ADT (Year)
 15,000 (2009)

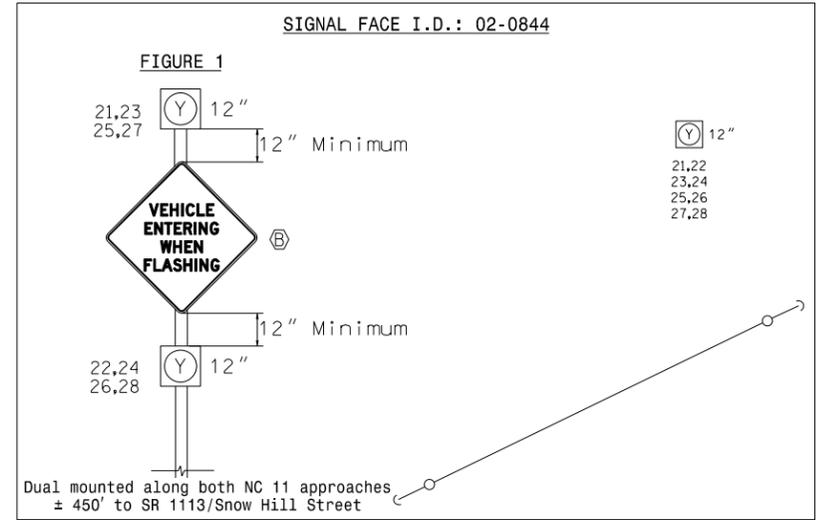


Target Crashes

N.C. DEPARTMENT of TRANSPORTATION DIVISION of HIGHWAYS TRANSPORTATION MOBILITY and SAFETY DIVISION		
Date: 7/7/2015	Prepared By: RRH	
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SS# 02-10-6806
 Order# 41000033968
 Pitt County
 After Period
 8/1/11 - 5/31/15

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



Note Crash #11:
 Vehicle struck animal
 heading NB on NC 11

SR 1113 (Old Snow Hill Road)

55 MPH
 ADT (Year)
 1,200 (2013)

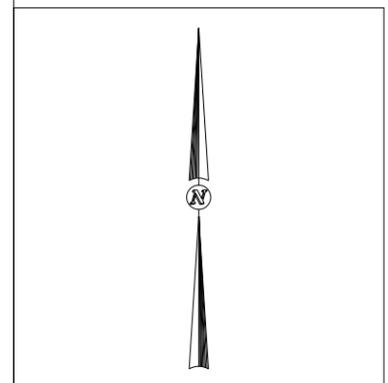
60 MPH
 ADT (Year)
 15,000 (2013)

ADT (Year)
 1,200 (2013)

35 MPH

60 MPH
 ADT (Year)
 15,000 (2013)

⊕ Target Crashes



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

Date: 7/7/2015

Prepared By: RRR

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