

Spot Safety Project Evaluation

Project Information

Order ID: 41000029854

Project ID: 14-08-205

Location: US 74 Eastbound Off-Ramp at NC 108 and SR 1531-Fox Mountain Rd

County: Polk

City: N/A

Division: 14

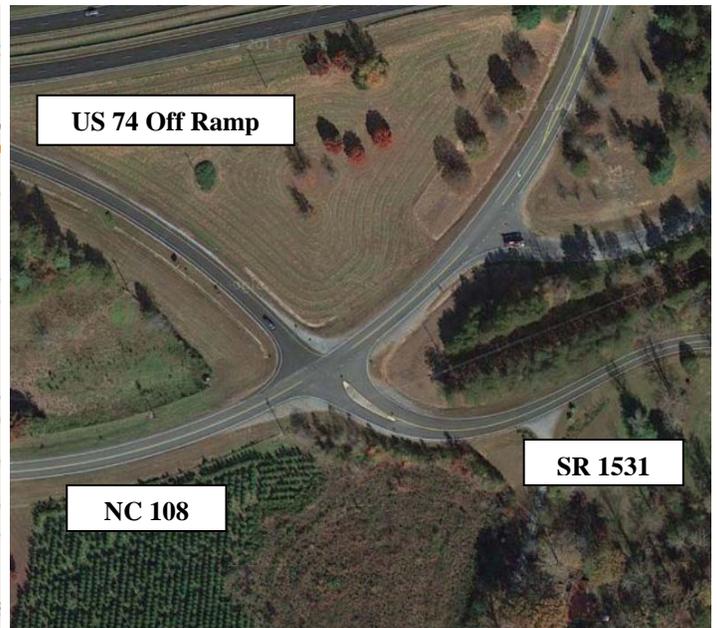
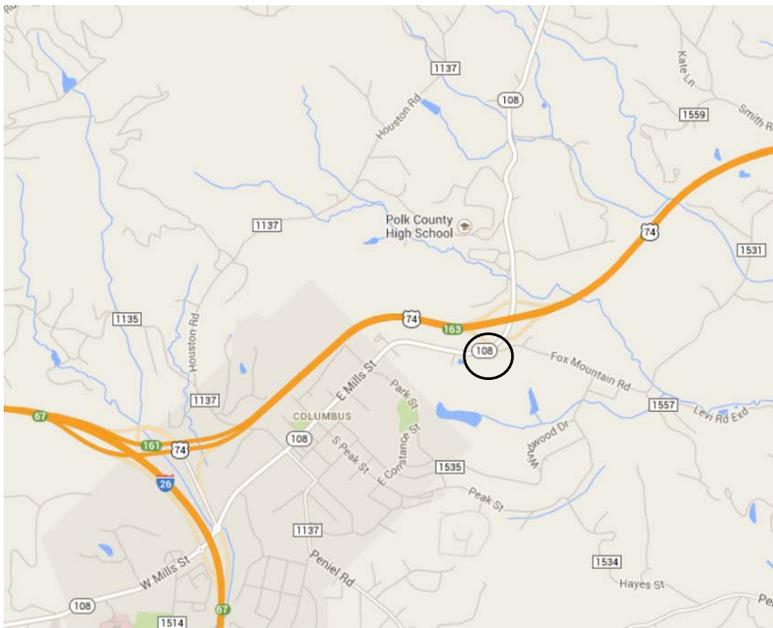
Signal ID: N/A

Countermeasure: Remove concrete island on the Off-Ramp to re-align this approach and repave/restripe the intersection

Project Completion: August 3, 2009

Project Cost: \$16,000

Map and Aerial (from Google Maps – Coordinates are 35.257482,-82.184139)



Naive Before and After Analysis

Before Period: December 1, 2004 through June 30, 2009 (4.58 years)

Const. Period: July 1, 2009 through September 30, 2009

After Period: October 1, 2009 through April 30, 2014 (4.58 years)

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

Target Crashes: Frontal Impact Crashes involving vehicles on the off-ramp

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	8	9	12.5%
Total Severity Index	11.40	3.47	- 69.6%
Target Crashes	3	3	0.0%
Target Crash Severity Index	26.27	3.47	- 86.8%
Volume (2007, 2012)	11,200	8,800	- 21.4%

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	0	N/A
Class A injury Crashes	1	0	-100.0%
Class B injury Crashes	0	0	N/A
Class C Injury Crashes	1	3	200.0%
Property Damage Only	6	6	0.0%

Overall Summary Results

Total Crashes:	+ 13 %	(increase)
Total Crash Severity:	- 70 %	(reduction)
Target Crashes:	0 %	(no change)
Target Crash Severity:	- 87%	(reduction)
Volume:	- 21%	(reduction)

Items for Discussion/Concerns

N/A

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: Carrie L. Simpson, PE
Work Group/Consultant: NCDOT - Safety Evaluation Group
Date: September 4, 2014

SS #14-08-205
 Order #41000029854
 Polk County
 Before Period
 12/1/2004 - 6/30/2009



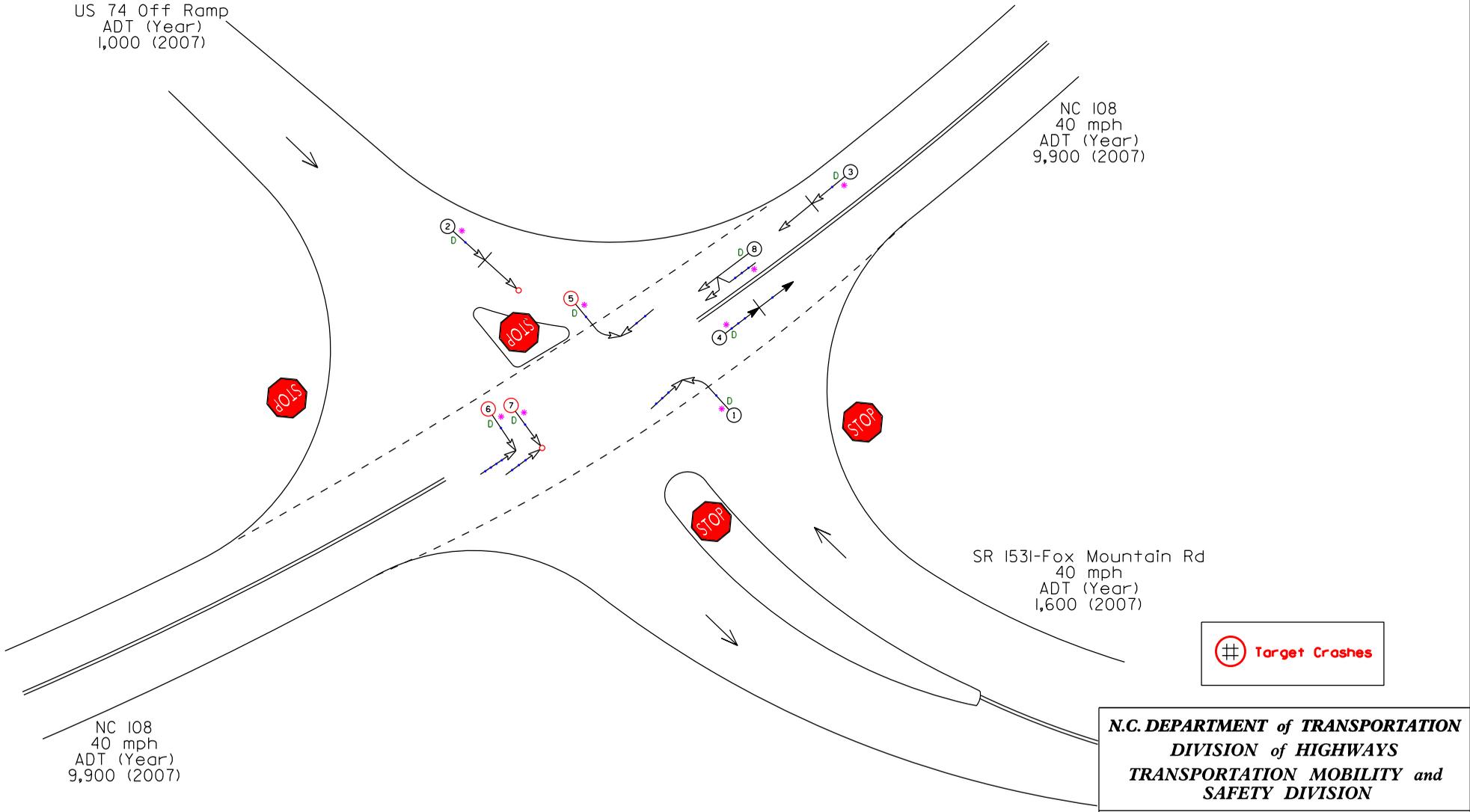
LEGEND			
	MOVING VEHICLE		ANGLE
	PEDESTRIAN		TURNING
	PARKED VEHICLE		BACKING
	PARKING VEHICLE		SIDESWIPE
	FIXED OBJECT		OUT OF CONTROL
	HEAD ON		INJURY
	REAR END		FATALITY
	RAN OFF ROAD		SPEED UNKNOWN
			9 MPH OR LESS
			10 MPH TO 19
			20 MPH TO 29
			30 MPH TO 39
			40 MPH TO 49
			50 MPH TO 59
			60 MPH TO 69
			70 AND UP
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			
			

US 74 Off Ramp
 ADT (Year)
 1,000 (2007)

NC 108
 40 mph
 ADT (Year)
 9,900 (2007)

SR 1531-Fox Mountain Rd
 40 mph
 ADT (Year)
 1,600 (2007)

NC 108
 40 mph
 ADT (Year)
 9,900 (2007)



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

TRAFFIC SAFETY UNIT

Date: 9-4-2014

Prepared By: Carrie Simpson

SS #14-08-205
 Order #41000029854
 Polk County
 After Period
 10/1/2009 - 4/30/2014

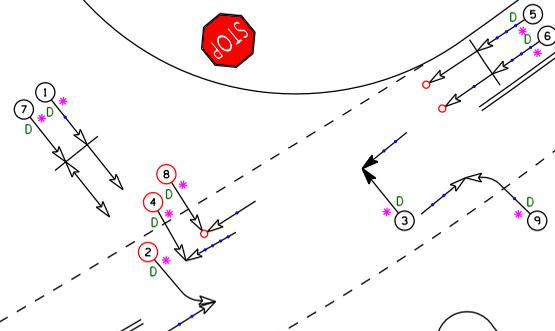


LEGEND			
	MOVING VEHICLE		ANGLE
	PEDESTRIAN		TURNING
	PARKED VEHICLE		BACKING
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			SPEED UNKNOWN
			P PEDESTRIAN
			A ANIMAL
			* DRIVER AT FAULT
			D DRY
			W WET
			I ICY OR SNOWY
			O OILY

US 74 Off Ramp
 ADT (Year)
 1,000 (2012)

NC 108
 40 mph
 ADT (Year)
 7,600 (2012)

SR 1531-Fox Mountain Rd
 40 mph
 ADT (Year)
 1,400 (2012)



NC 108
 40 mph
 ADT (Year)
 7,600 (2012)

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