

Spot Safety Project Evaluation

Project Information

Order ID: 41000030267

Project ID: 08-07-208

Location: US 1 (Jefferson Davis Hwy) at SR 1731 (Quail Ridge Rd)

County: Lee

City: South of Sanford

Division: 8

Signal ID: N/A

Countermeasure: Install right turn lane on south bound US 1 at SR 1731.

Project Completion: October 7, 2010 Project Cost: \$150,000

Map and Aerial (from Google Maps – Coordinates are 35.393373, -79.23121)



Naive Before and After Analysis

Before Period: October 1, 2006 through August 31, 2010 (3 years 11 months)

Const. Period: September 1, 2010 through November 30, 2010

After Period: December 1, 2010 through October 31, 2014 (3 years 11 months)

Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection for the US 1 and SR 1731 approaches.

Target Crashes: Southbound sideswipe crashes.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	2	1	- 50.0 %
Total Severity Index	38.90	1.00	- 97.4 %
Target Crashes	2	1	- 50.0 %
Target Crash Severity Index	38.90	1.00	- 97.4 %
Volume (2008, 2012)	11,300	13,200	+ 16.8 %

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

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Southbound Sideswipe Crashes (Target)	2	1	- 50.0 %
Fatal Crashes	1	0	- 100.0 %

Overall Summary Results

Total Crashes:	- 50 %	(reduction)
Total Crash Severity:	- 97 %	(reduction)
Target Crashes:	- 50 %	(reduction)
Target Crash Severity:	- 97 %	(reduction)
Volume:	+ 17 %	(increase)

Additional Summary Results

Southbound Sideswipe Crashes (Target):	- 50 %	(reduction)
Fatal Crashes:	- 100 %	(reduction)

Items for Discussion/Concerns

The study intersection experienced a 50 % reduction in total crashes (2 to 1 crashes).

The target crashes (Southbound Sideswipe Crashes) experienced a 50 % reduction (2 to 1).

The intersection experienced a decrease in fatal crashes (1 to 0 crashes).

Data Prepared For

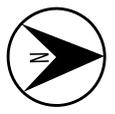
The Traffic Safety Unit *of the*
Transportation Mobility and Safety Division *of the*
Division of Highways *of the*
North Carolina Department of Transportation

Data Prepared By

Principal Investigator: Andrew Covington, EI
Work Group/Consultant: AECOM
Date: November 21, 2014

SS# 08-07-208
 Order# 41000030267
 Lee County
 BEFORE Period
 10/1/2006 - 8/31/2010
 3.92 Years

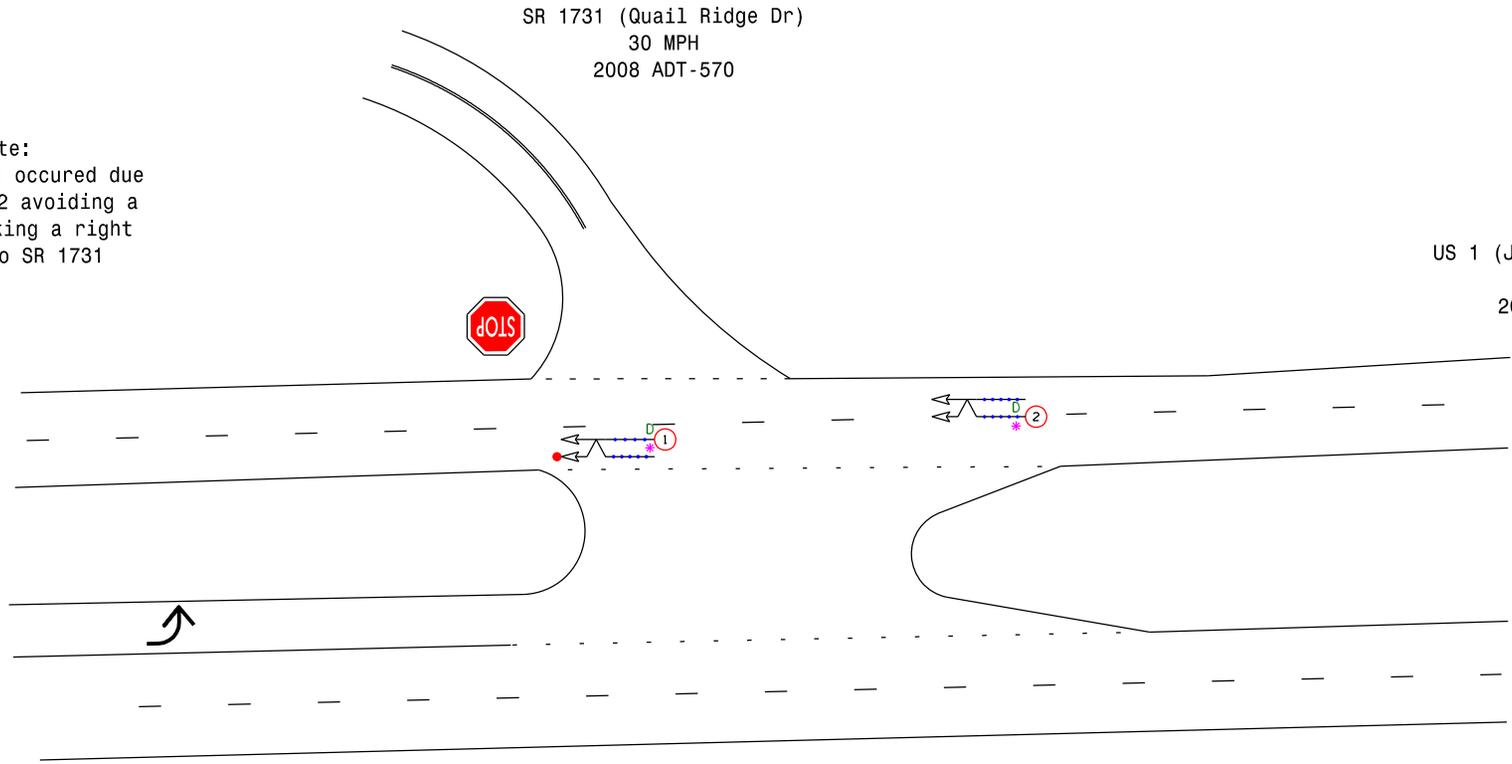
LEGEND							
	MOVING VEHICLE		ANGLE		1 MPH OR LESS		PEDESTRIAN
	PEDESTRIAN		TURNING		10 MPH TO 19		TRAIN
	PAKED VEHICLE		BACKING		20 MPH TO 29		DRIVER AT FAULT
	PAKED VEHICLE		SIDESWIPE		30 MPH TO 39		DRY
	FIXED OBJECT		OUT OF CONTROL		40 MPH TO 49		WET
	HEAD ON		HURRY		50 MPH TO 59		ICY OR SNOW
	NEAR END		FATALITY		60 MPH TO 69		SPEED UNKNOWN
	RAN OFF ROAD				70 AND UP		ONLY



Note:
 Collision #1 occurred due
 to vehicle 2 avoiding a
 vehicle making a right
 turn onto SR 1731

SR 1731 (Quail Ridge Dr)
 30 MPH
 2008 ADT-570

US 1 (Jefferson Davis Hwy)
 55 MPH
 2008 ADT-11,000



US 1 (Jefferson Davis Hwy)
 55 MPH
 2008 ADT-11,000

AECOM

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

TRAFFIC SAFETY UNIT

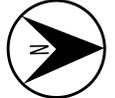
Date: 11-21-2014	Prepared By: Andrew Covington, EI
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SB Sideswipe
 Crashes

SS# 08-07-208
 Order# 41000030267
 Lee County
 AFTER Period
 12/1/2010 - 10/31/2014
 3.92 Years

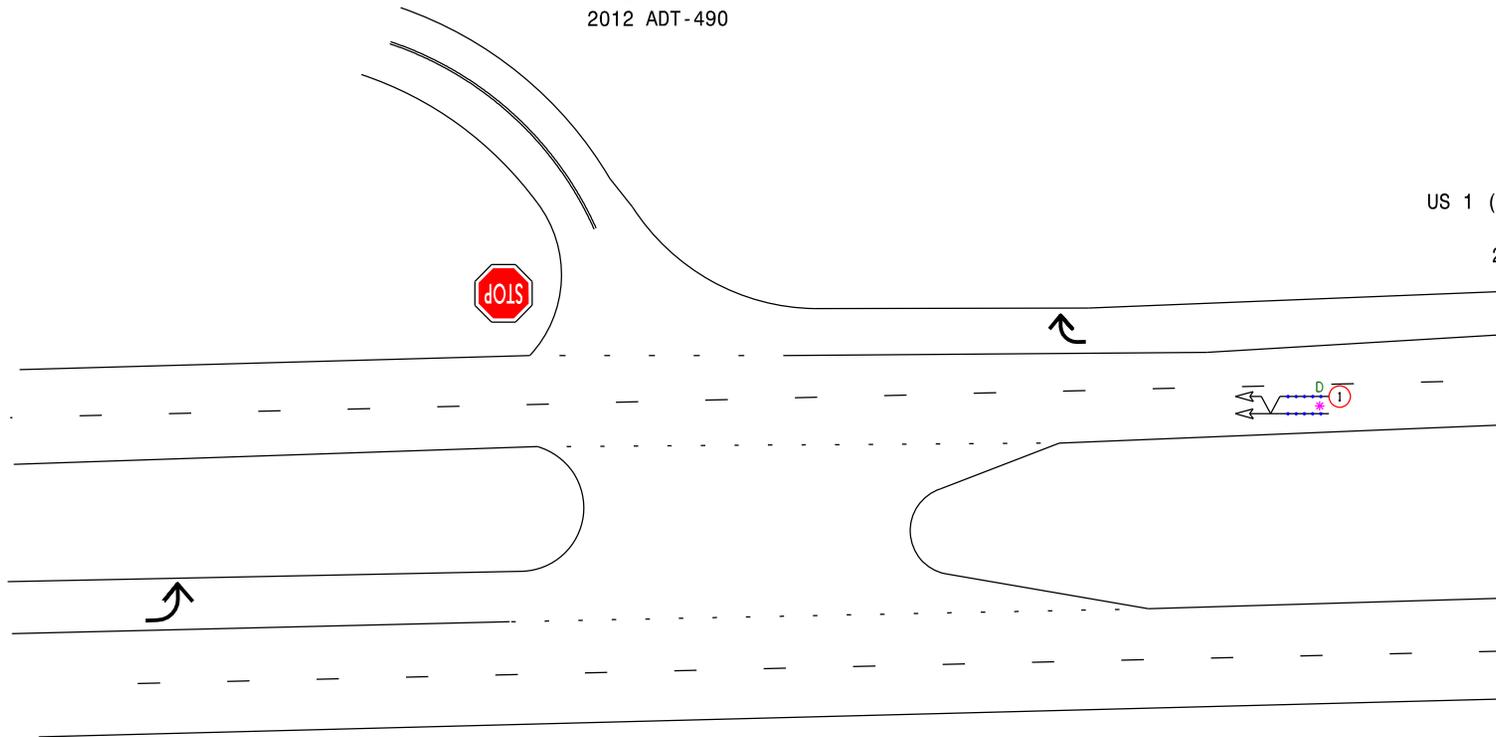
LEGEND

	MOVING VEHICLE		ANGLE		1 MPH OR LESS		PEDESTRIAN
	PEDESTRIAN		TURNING		10 MPH TO 19		TRAIN
	PAKED VEHICLE		BACKING		20 MPH TO 29		DRIVER AT FAULT
	PARKED VEHICLE		SIDESWIPE		40 MPH TO 49		DRY
	FIXED OBJECT		OUT OF CONTROL		50 MPH TO 59		WET
	HEAD ON		HIT AND UP		60 MPH TO 69		ICY OR SHORT
	NEAR END		HURRY		70 AND UP		SPEED UNKNOWN
	RAN OFF ROAD		FATALITY		0 ONLY		



SR 1731 (Quail Ridge Dr)
 30 MPH
 2012 ADT-490

US 1 (Jefferson Davis Hwy)
 55 MPH
 2012 ADT-13,000



US 1 (Jefferson Davis Hwy)
 55 MPH
 2012 ADT-13,000

AECOM

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

TRAFFIC SAFETY UNIT

Date: 11-21-2014 Prepared By: Andrew Covington, EI

SB Sideswipe Crashes