

Naive Before and After Analysis

- Before Period: May 1, 2006 through May 31, 2010 (4 years 1 month)
- Const. Period: June 1, 2010 through August 31, 2010 (3 months)
- After Period: September 1, 2010 through September 31, 2014 (4 years 1 month)
- Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection for the SR 1587 and SR 1581 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	5	3	- 40.0 %
Total Severity Index	3.96	8.4	+ 112.1 %
Target Crashes	5	3	- 40.0 %
Target Crash Severity Index	3.96	8.4	+ 112.1 %
Volume (2008, 2012)	2,100	2,000	- 4.8 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	0	0	N/A
Class A injury Crashes	0	0	N/A
Class B injury Crashes	0	1	+ 100.0 %
Class C Injury Crashes	2	2	0.00 %
Property Damage Only	3	0	- 100.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Frontal Impact Crashes (Target)	5	3	- 40.0 %
Angle Crashes	4	3	- 25.0 %

Overall Summary Results

Total Crashes:	- 40 %	(reduction)
Total Crash Severity:	+ 112 %	(increase)
Target Crashes:	- 40 %	(reduction)
Target Crash Severity:	+ 112 %	(increase)
Volume:	- 5 %	(reduction)

Additional Summary Results

Frontal Impact Crashes (Target):	- 40 %	(reduction)
Angle Crashes:	- 25 %	(reduction)

Items for Discussion/Concerns

The study intersection experienced a reduction of target frontal impact crashes (5 to 3 crashes).

The intersection experienced a reduction in angle crashes (4 to 3 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 14, 2014

SS# 07-07-213
 Order# 41000030266
 Alamance County
 BEFORE Period
 5/1/2006 - 5/31/2010
 4.08 Years

SR 1587 (Pagetown Rd)
 55 MPH
 2008 ADT - 1,300

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



SR 1581 (Stoney Creek Church Rd)
 45 MPH
 2008 ADT - 480

SR 1581 (Stoney Creek Church Rd)
 45 MPH
 2008 ADT - 860

Note: The car in crash #5 swerved to avoid collision with a vehicle that was traveling southbound

SR 1587 (Pagetown Rd)
 55 MPH
 2008 ADT - 1,600

Frontal Impact Crashes

AECOM

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

TRAFFIC SAFETY UNIT

Date: 11-14-2014	Prepared By: Andrew Covington, EI
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SS# 07-07-213
 Order# 41000030266
 Alamance County
 AFTER Period
 9/1/2010 - 9/30/2014
 4.08 Years

SR 1587 (Pagetown Rd)
 55 MPH
 2012 ADT - 1,200

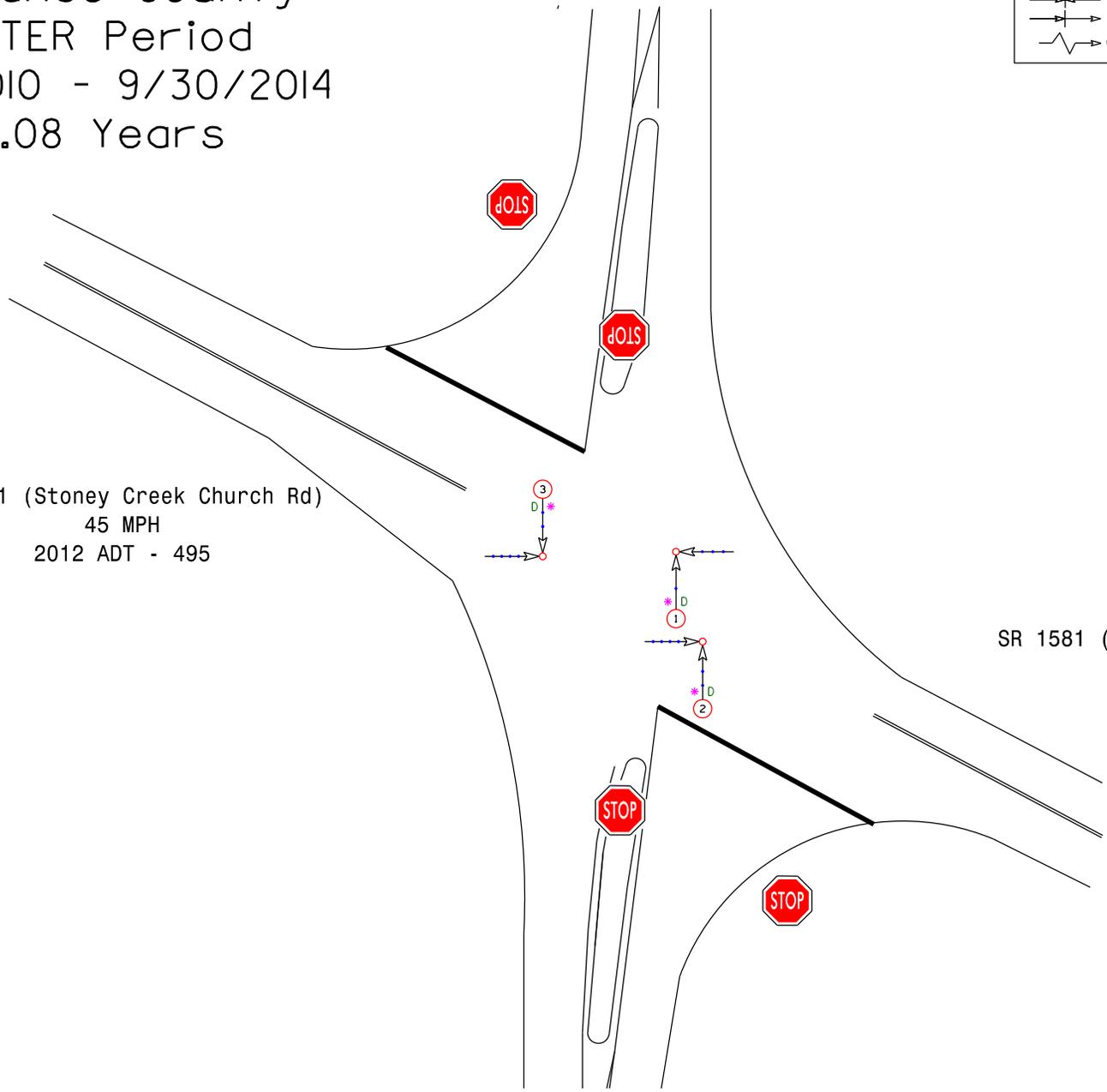
SR 1581 (Stoney Creek Church Rd)
 45 MPH
 2012 ADT - 495

SR 1581 (Stoney Creek Church Rd)
 45 MPH
 2012 ADT - 855

SR 1587 (Pagetown Rd)
 55 MPH
 2012 ADT - 1,400

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
	PARKING VEHICLE		SIDESWIPE		30 MPH TO 39		DRY
	FIXED OBJECT		OUT OF CONTROL		40 MPH TO 49		WET
	HEAD ON		HIT AND UP		50 MPH TO 59		ICY OR SNOW
	NEAR END		FATALITY		60 MPH TO 69		ONLY
	RAN OFF ROAD		SPEED UNKNOWN		70 AND UP		



Frontal Impact Crashes

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