

# Spot Safety Project Evaluation

## Project Information

Order ID: 41000028029

Project ID: 09-07-220

Location: NC 68 (National Highway) and SR 1772 (Hasty School Road)

County: Davidson

City: Thomasville

Division: 9

Signal ID: 09-0469

Countermeasure: Install a flashing yellow arrow on the northbound left-turn lane on NC 68 (Implemented November 2008)

Project Completion: May 19, 2009

Project Cost: \$31,500

## Map and Aerial (from Google Maps – Coordinates are 35.917994,-80.057357)



## Naive Before and After Analysis

Before Period: July 1, 2003 through September 30, 2008 (5 years 3 months)

Const. Period: October 1, 2008 through December 31, 2008

After Period: January 1, 2009 through March 31, 2014 (5 years 3 months)

Analysis Criteria: Treatment data consisted of all crashes within 150 feet of the subject intersection for the NC 68 and SR 1772 approaches.

Target Crashes: NC 68 Northbound Left Turn, Same Roadway Crashes

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	62	45	- 27.4 %
Total Severity Index	4.58	4.62	+ 0.9 %
Target Crashes	24	14	- 41.7 %
Target Crash Severity Index	5.01	6.81	+ 35.9 %
Volume (2006, 2011)	22,500	19,300	- 14.2 %

<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	8	11	+ 37.5 %
Class C Injury Crashes	22	11	- 50.0 %
Property Damage Only	32	23	- 28.1 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
NC 68 NB LT SR (Target)	24	14	- 41.7 %
Angle Crashes	7	2	- 71.4 %
Left-turn, different roadway	7	3	- 57.1 %
Rear End Crashes	15	14	- 6.7 %

### **Overall Summary Results**

Total Crashes:	- 27 %	(reduction)
Total Crash Severity:	+ 1 %	(increase)
Target Crashes:	- 42 %	(reduction)
Target Crash Severity:	+ 36 %	(increase)
Volume:	- 14 %	(reduction)

### **Additional Summary Results**

NC 68 NB LTSR (Target):	- 42 %	(reduction)
Angle Crashes:	- 71 %	(reduction)
Left-turn, different roadway:	- 57 %	(reduction)
Rear End Crashes:	- 7 %	(reduction)

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

The target crashes (NC 68 NB LTSR) experienced a 42 percent reduction (24 to 14 crashes). There was a 71 percent reduction in angle crashes (7 to 2 crashes) and a 57 percent reduction in left-turn, different roadway crashes (7 to 3 crashes). There was also a 7 percent reduction in rear end crashes (15 to 14 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: Austin Bell, EI  
Work Group/Consultant: AECOM  
Date: June 6, 2014

SS# 09-07-220  
 Order# 41000028029  
 Davidson County  
 BEFORE Period  
 7/1/03 - 9/30/08

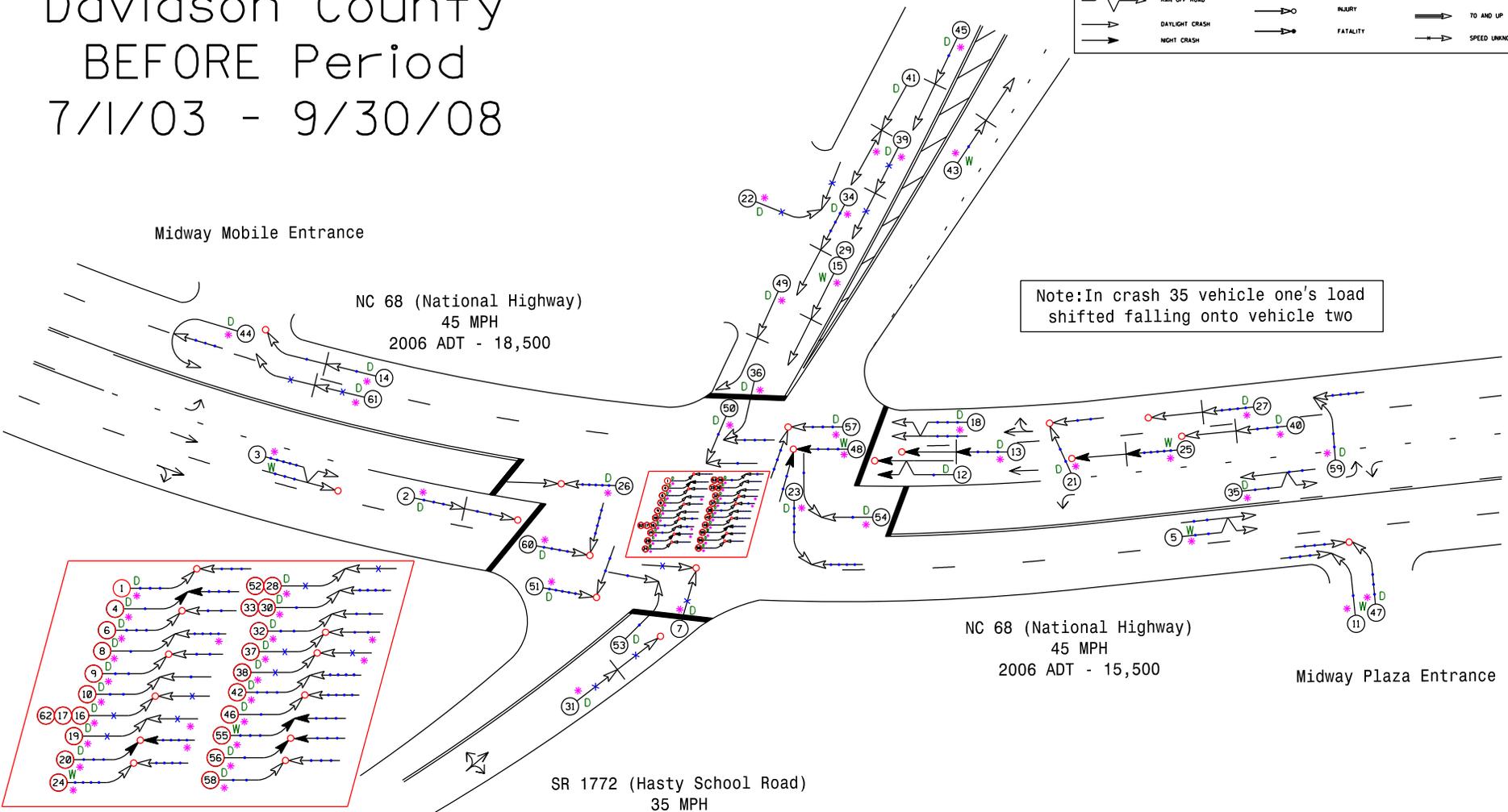
SR 1772 (Hasty School Road)  
 45 MPH  
 2006 ADT - 7,900

NC 68 (National Highway)  
 45 MPH  
 2006 ADT - 18,500

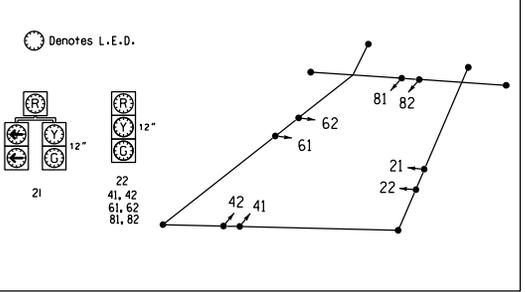
NC 68 (National Highway)  
 45 MPH  
 2006 ADT - 15,500

SR 1772 (Hasty School Road)  
 35 MPH  
 2006 ADT - 3,150

LEGEND							
	MOVING VEHICLE		ANGLE		9 MPH OR LESS		A ANIMAL
	PARKED VEHICLE		TURNING		10 MPH TO 19		P PEDESTRIAN
	PARKING VEHICLE		BACKING		20 MPH TO 29		B BICYCLE
	MOVABLE OBJECT		SIDESWIPE		30 MPH TO 39		T TRUCK
	HEAD ON		INJURY		40 MPH TO 49		• DRIVER AT FAULT
	REAR END		FATALITY		50 MPH TO 59		D DRY
	RAN OFF ROAD		SPEED UNKNOWN		60 MPH TO 69		W WET
	DAYLIGHT CRASH				70 AND UP		I ICY OR SNOW
	NIGHT CRASH						O OTHER



SIG ID: 09-0469 3 Phase Fully Actuated



NC 68 NB LTSR Crashes

**AECOM**

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

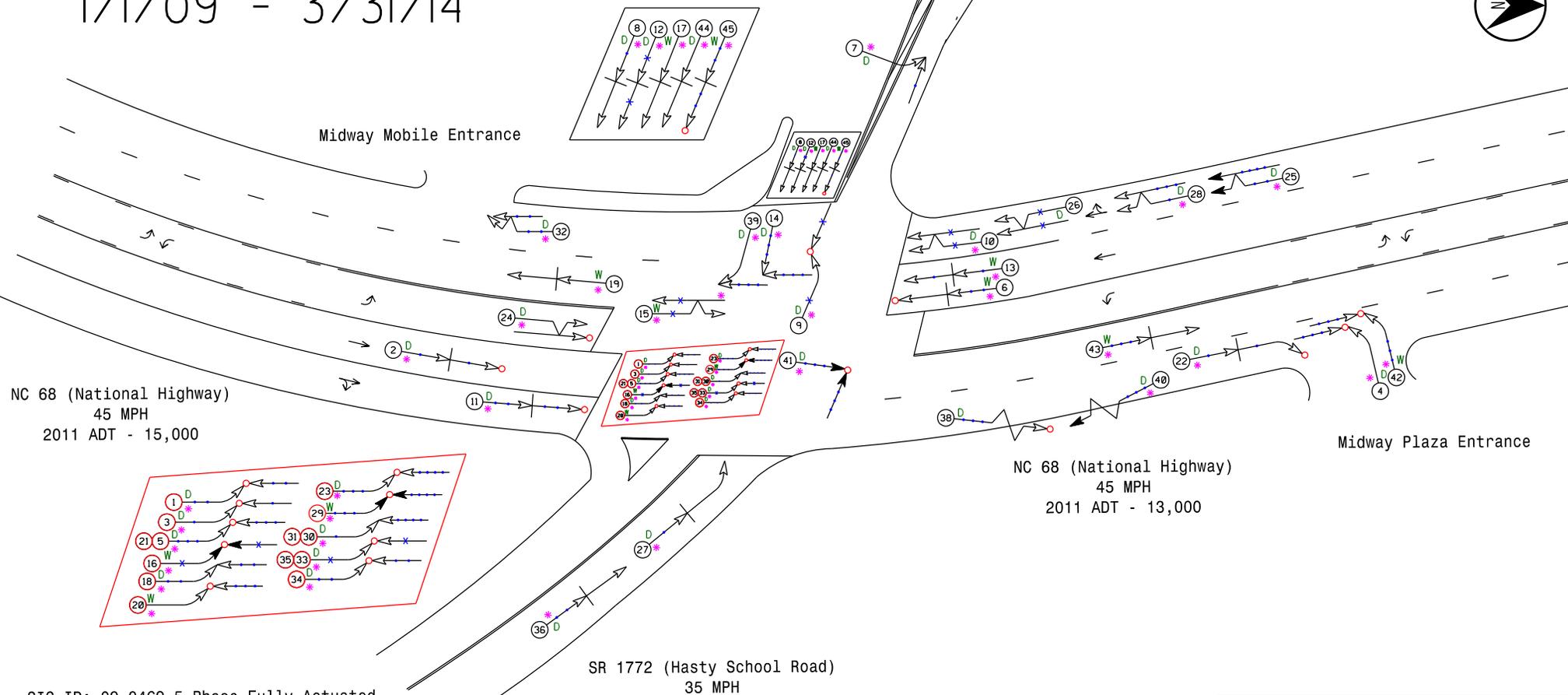
**TRAFFIC SAFETY UNIT**

Date: June 6, 2014      Prepared By: Austin Bell, EI

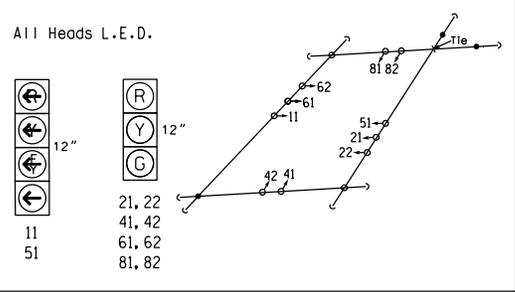
SS# 09-07-220  
 Order# 41000028029  
 Davidson County  
 AFTER Period  
 1/1/09 - 3/31/14

SR 1772 (Hasty School Road)  
 45 MPH  
 2011 ADT - 7,300

LEGEND							
	MOVING VEHICLE		ANGLE		9 MPH OR LESS		A ANIMAL
	PARKED VEHICLE		TURNING		10 MPH TO 19		P PEDESTRIAN
	PARKING VEHICLE		BACKING		20 MPH TO 29		B BICYCLE
	MOVABLE OBJECT		SIDESWIPE		30 MPH TO 39		T TRUCK
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	NIGHT CRASH						



SIG ID: 09-0469 5 Phase Fully Actuated



NC 68 NB LTSR Crashes

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**TRAFFIC SAFETY UNIT**

Date: June 6, 2014      Prepared By: Austin Bell, EI