

Hazard Elimination Project Evaluation

Project Information

Order ID: 41000032969

Project ID: W-5208D

Location: US 1 from SR 1333 (Westover Dr) northward to US 421

County: Lee

City: Sanford

Division: 8

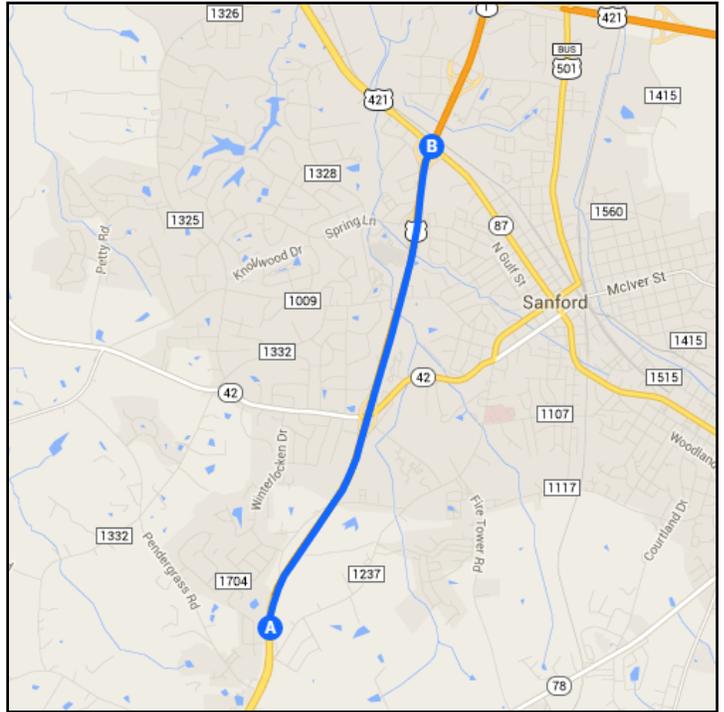
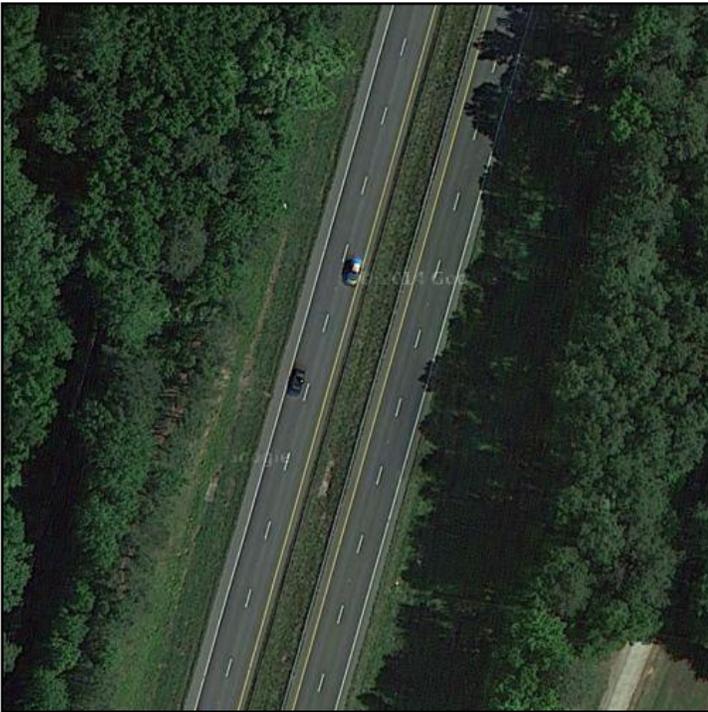
Signal ID: N/A

Countermeasure: Install rumble strips along the shoulder and the median.

Project Completion: August 7, 2010

Project Cost: \$35,000

Map and Aerial (from Google Maps – Coordinates are 35.447312, -79.214989)



Naive Before and After Analysis

Before Period:	June 1, 2006 through June 30, 2010 (4.08 yrs)
Construction Period:	July 1, 2010 through September 31, 2010
After Period:	October 1, 2010 through October 31, 2014 (4.08 yrs)
Analysis Criteria:	Treatment data consisted of all crashes along the US 1 mainline from SR 1333 (Westover Dr) to US 421.
Target Crashes:	The target crashes for this project are Lane Departure crashes including Ran Off Road – Right, Ran Off Road – Left, Ran Off Road – Straight, Fixed Object, Head-on, Parked Motor Vehicle, and Overturn/Rollover.
Correctable Crashes:	Correctable crashes are Lane Departure crashes that are potentially correctable by rumble strips. Crashes are considered correctable if: the first event involved at least one vehicle crossing a roadway edge line; it was <u>not</u> caused by a vehicle swerving to avoid a vehicle, person, animal, or other object in the roadway; it was <u>not</u> caused by mechanical problems, blown tires, or a medical problem with the driver; it was <u>not</u> caused by the weather, such as hydroplaning or sliding on ice; and it was <u>not</u> clear from the crash diagram/narrative that the driver lost control prior to crossing the edge line.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	65	67	3.1 %
Total Severity Index	4.10	2.88	- 29.8 %
Target Crashes	39	20	- 48.7 %
Target Crash Severity Index	3.09	3.96	28.3 %
Correctable Crashes	8	6	- 25.0 %
Correctable Severity Index	2.85	4.70	64.9 %
Volume (2008, 2012)	21,400	24,700	15.4 %

<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	8	3	- 62.5 %
Class C Injury Crashes	9	14	55.6 %
Property Damage Only	48	49	2.1 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Animal Crashes	11	18	63.6 %
Night Crashes	31	21	- 32.3 %
Wet Crashes	14	17	21.4 %
Alcohol/Drug Related Crashes	5	2	- 60.0 %

Overall Summary Results

Total Crashes:	+ 3 %	(increase)
Total Crash Severity:	- 30 %	(reduction)
Target Crashes:	- 49 %	(reduction)
Target Crash Severity:	+ 28 %	(increase)
Correctable Crashes:	- 25 %	(reduction)
Correctable Severity:	+ 65 %	(increase)
Volume:	+ 15 %	(increase)

Items for Discussion/Concerns

None.

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: Ian Pike, Engineering Assistant
Checked by: Brad Robinson, PE

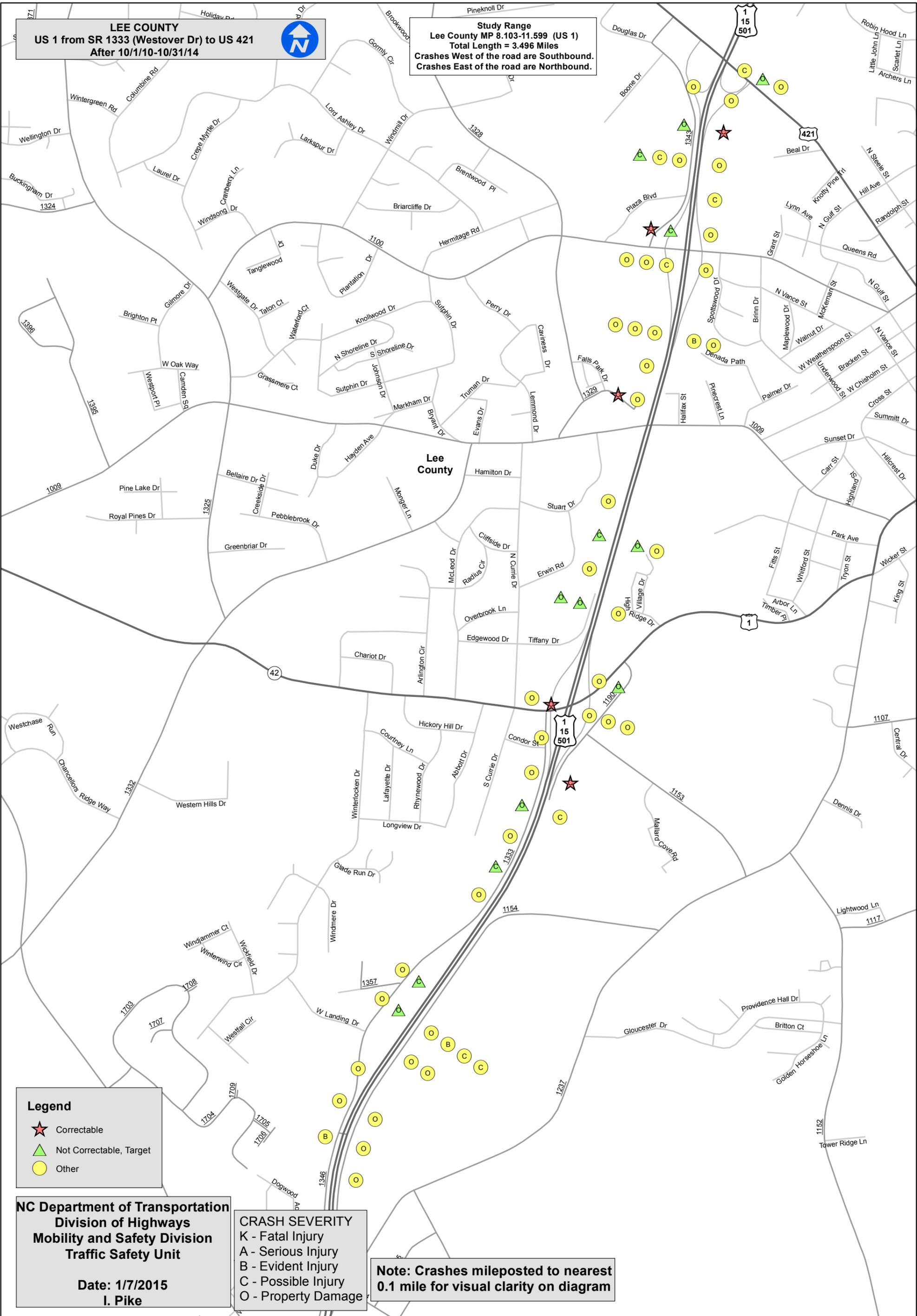
Work Group/Consultant: NCDOT - Safety Evaluation Group

Date: January 6, 2015

LEE COUNTY
US 1 from SR 1333 (Westover Dr) to US 421
After 10/1/10-10/31/14



Study Range
Lee County MP 8.103-11.599 (US 1)
Total Length = 3.496 Miles
Crashes West of the road are Southbound.
Crashes East of the road are Northbound.



Legend

- ★ Correctable
- ▲ Not Correctable, Target
- Other

NC Department of Transportation
Division of Highways
Mobility and Safety Division
Traffic Safety Unit

Date: 1/7/2015
I. Pike

CRASH SEVERITY
K - Fatal Injury
A - Serious Injury
B - Evident Injury
C - Possible Injury
O - Property Damage

Note: Crashes mileposted to nearest 0.1 mile for visual clarity on diagram