

Hazard Elimination Project Evaluation

Project Information

Order ID: 41000037098

Project ID: W-5209C

Location: 3 Interchanges: I-85 @ US-601 (Jake Alexander Blvd), I-85 @ US-52 (Innes Street), I-85 @ NC-8 (Cotton Grove Road)

County: Rowan / Davidson

City: Salisbury / Near Lexington

Division: 9

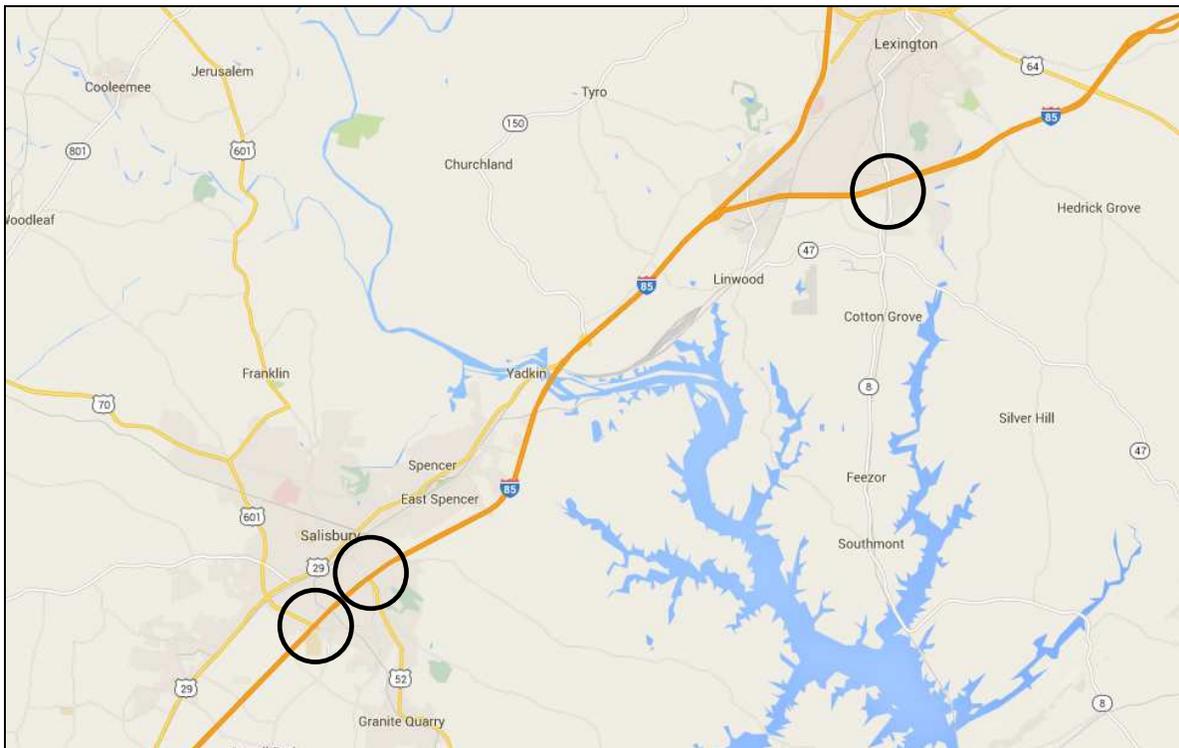
Signal ID: N/A

Countermeasure: Repair/Upgrade Highmast Lighting/Streetlights at 3 Interchanges

Project Completion: September 24, 2010

Project Cost: \$50,000

Map and Aerial (from Google Maps) – Coordinates 35.642440, -80.480600



Naive Before and After Analysis

- Before Period: September 1, 2005 through June 30, 2010 (4 years, 10 months)
- Const. Period: July 1, 2010 through September 30, 2010
- After Period: October 1, 2010 through July 31, 2015 (4 years, 10 months)
- Analysis Criteria: Treatment data consisted of all crashes within the three (3) interchange areas: 0.3 mile in both directions on I-85, all ramps to the interchange, and 150-foot y-line of each ramp terminal.
- Target Crashes: Collisions coded as occurring during Night Time (Dark) Conditions – Codes 4 through 6 in Box-7 on the NC DMV-349 Report.

<u>Rowan: I-85 @ Jake Alexander</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	185	173	- 6.5 %
Total Severity Index	3.08	2.89	- 6.2 %
Night Crashes (Codes 4-6)	43	39	- 9.3 %
Night Crash Severity Index	3.24	1.76	- 45.7 %
Fatal injury Crashes	0	0	0.0 %
Class A injury Crashes	0	1	100.0 %
Class B injury Crashes	6	8	33.3 %
Class C Injury Crashes	46	26	- 43.5 %
Property Damage Only	133	138	3.8 %

<u>Rowan: I-85 @ Innes</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	213	209	- 1.9 %
Total Severity Index	2.74	2.89	5.5 %
Night Crashes (Codes 4-6)	55	51	- 7.3 %
Night Crash Severity Index	2.48	2.31	- 6.9 %
Fatal injury Crashes	0	0	0.0 %
Class A injury Crashes	0	1	100.0 %
Class B injury Crashes	18	7	- 61.1 %
Class C Injury Crashes	32	36	12.5 %
Property Damage Only	163	165	1.2 %

<u>Davidson: I-85 @ NC-8</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	81	115	42.0 %
Total Severity Index	6.27	3.27	- 47.8 %
Night Crashes (Codes 4-6)	20	34	70.0 %
Night Crash Severity Index	8.12	3.18	- 60.8 %
Fatal injury Crashes	2	0	- 100.0 %
Class A injury Crashes	1	1	0.0 %
Class B injury Crashes	2	3	50.0 %
Class C Injury Crashes	25	22	- 12.0 %
Property Damage Only	51	89	74.5 %

Items for Discussion/Concerns

Due to the countermeasures installed and the magnitude of the area around the interchanges analyzed, collision diagrams were not provided for this evaluation.

The two interchanges in Rowan County experienced a slight reduction in crashes with a near 10 percent reduction in night time collisions throughout the evaluation.

Data Prepared For

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

Data Prepared By

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