

# Safety Project Evaluation

Order ID:	41000074913
Project ID:	R-5749 (06-13-24883)
Signal ID:	N/A
Location:	US 74/ US 76 (Andrew Jackson Hwy) at SR 1001 (Hallsboro Road)
GPS Coordinates:	34.33268, -78.59938
County:	Columbus County
City:	Hallsboro
Division:	Division 6

Countermeasure(s):	Convert a full movement stop-controlled intersection to a diamond interchange.
Estimated Project Cost:	\$8,080,000
Completion Date:	6/12/2020

	Start Date	End Date	Length
Before Period	11/1/2013	3/31/2018	4y, 5m
Construction Period	4/1/2018	6/30/2020	2y, 3m
After Period	7/1/2020	11/30/2024	4y, 5m

Analysis Criteria:	Treatment data consists of all crashes occurring at US 74/ US 76 (Andrew Jackson Hwy) [MP 23.49 - 24.16] and SR 1001 (Hallsboro Road) [MP 10.545 - 10.903]
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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)
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## Project Development Comparison

Crashes Per Year by Project Time Period	Project Development	Before Period	After Period
Years	5.00 years	4.42 years	4.42 years
Start Date	5/1/2008	11/1/2013	7/1/2020
End Date	4/30/2013	3/31/2018	11/30/2024
Total	2.40	7.47	6.11
Fatal Injury	0.40	0.00	0.23
Class A Injury	0.00	0.68	0.23
Class B Injury	0.20	1.36	0.45
Class C Injury	0.40	1.36	1.13
Property Damage Only	1.40	4.08	4.08

## Items for Discussion

- Safety funds only contributed to 33% of the overall cost of the project.
- The study limits for the project development crash analysis used a 150' y-line from the intersection of US 74 [MP 23.809 - 23.865] and SR 1001 [MP 10.669 - 10.725].
- With the completion of the project, the unsignalized full movement intersection of US 74 and SR 1001 was converted to a grade separated diamond interchange. Both ramp intersections are full movement stop-controlled intersections with dedicated left-turn lanes on SR 1001 and channelized right-turn lanes on the US 74 off-ramp approaches. Additionally, at the time of the project, the outside shoulders on US 74 were widened, and US 74 was resurfaced.
- In the Before period, the northbound and southbound approaches of SR 1001 had W3-1 "Stop Ahead" warning signs and dual stop signs, and US 74 had W2-1 "Crossroad Intersection" warning signs on both approaches and a speed reduction warning sign on the eastbound approach that decreased the speed limit from 70 mph to 60 mph.
- The speed limit on US 74 was increased from 60 mph to 70 mph in the vicinity of SR 1001 on September 18, 2020.
- Frontal impact crashes decreased from 15 crashes in the Before period to 1 crash in the After period. The one frontal impact crash in the After period was a fatal crash that occurred on March 26, 2023. This crash involved a wrong-way vehicle traveling west in the eastbound lanes of US 74 and colliding head-on with an eastbound vehicle. At the time of the crash, there was an active work zone at Lake Waccamaw.
- There was an increase in lane departure crashes from 5 in the Before period to 12 in the After period. In the After period, 8 of the 12 lane departure crashes occurred during wet road conditions.

## 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

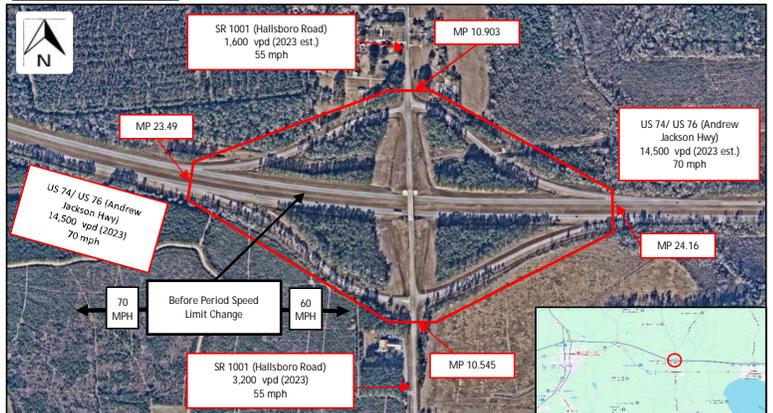
Treatment Information	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	33	27	-18.18%
Total Severity Index	10.58	8.53	-19.36%
Target Crashes	15	1	-93.33%
Target Crash Severity Index	10.99	76.80	599.03%
Volume (2017, 2023)	19,400	16,900	-12.89%

Injury Crash Summary	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal Injury Crashes	0	1	n/a
Class A Injury Crashes	3	1	-66.67%
Class B Injury Crashes	6	2	-66.67%
Class C Injury Crashes	6	5	-16.67%
Property Damage Only	18	18	0.00%

Target Injury Crash Summary	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal Injury Crashes	0	1	n/a
Class A Injury Crashes	1	0	-100.00%
Class B Injury Crashes	5	0	-100.00%
Class C Injury Crashes	5	0	-100.00%
Property Damage Only	4	0	-100.00%

Additional Information	Before	After	Percent Reduction (-) Percent Increase (+)
Wet Roadway Condition Crashes	0	10	n/a
Lane Departure Crashes	5	12	140.00%
Angle Crash - NB Failure to Yield	10	0	-100.00%
Angle Crash - SB Failure to Yield	5	0	-100.00%

## Map/Satellite Views



## Data Prepared By:

Principal Investigator:	Israel J. Manley
Work Group/Consultant:	Kimley-Horn and Assoc., Inc.
Date:	1/31/2025

**DISCLAIMER FOR 2020 DATA:**

*Reductions in typical roadway volumes were experienced Statewide in 2020 due to the COVID-19 pandemic. In addition, the frequency of total crashes in 2020 was found to have decreased from prior years, but the frequency of fatal crashes in 2020 was found to have increased from prior years. The potential impact of the COVID-19 pandemic and shift in data trends should be kept in mind when reviewing traffic safety analyses and/or data reports that incorporate 2020 volume and/or crash data. The analyses and reports that include this data may not represent typical conditions of the areas and locations being reviewed.*