

Safety Project Evaluation

Order ID:	41000056283
Project ID:	W-5201B / 01-12-19552
Signal ID:	N/A
Location:	NC 344 at SR 1131 (Consolidated Road)
GPS Coordinates:	36.250813, -76.177643
County:	Pasquotank
City:	Elizabeth City
Division:	1

Countermeasure(s):	Construct left-turn lane on Southbound NC 344 at SR 1131 intersection.
Estimated Project Cost:	\$190,000
Completion Date:	7/17/2015

	Start Date	End Date	Length
Before Period	12/1/2008	4/30/2015	6y, 5m
Construction Period	5/1/2015	7/31/2015	0y, 3m
After Period	8/1/2015	12/31/2021	6y, 5m

Analysis Criteria:	Treatment data consisted of all crashes within 150' of the subject intersection.
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Target-1 Crashes:	Rear-end crashes approaching intersection along treated approach (SB NC 344)
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Target-2 Crashes:	Left-turn, same roadway crashes from treated approach (SB NC 344)
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Project Development Comparison

Crashes Per Year by Project Time Period	Project Development	Before Period	After Period
Years	5.00 years	6.42 years	6.42 years
Start Date	5/1/2007	12/1/2008	8/1/2015
End Date	4/30/2012	4/30/2015	12/31/2021
Total	2.20	1.71	2.03
Fatal Injury	0.00	0.00	0.00
Class A Injury	0.00	0.00	0.16
Class B Injury	0.40	0.47	0.31
Class C Injury	0.80	0.31	0.00
Property Damage Only	1.00	0.94	1.56

Items for Discussion

- The SR 1131 approach was ordinances at 45 mph until 5/10/2013 at which point it was ordinances to 35 mph. Of the eight rear-end crashes along this approach, seven occurred after the speed limit change. There were 0.23 rear-end crashes per year along this leg before the speed limit change and 0.81 rear-end crashes per year afterwards.
- Two of the three before period B-injury target crashes were rear-end crashes. One involved an avoidance of a rear-end crash that resulted in a head-on collision while the other involved a motorcycle.
- Both target crash types saw either no change or a reduction, however, total crashes increased. Of the other crash types, lane departures saw the largest increase from 0 to 3 and includes a run through stop sign from the SR 1131 approach that resulted in a B-injury.
- In September 2016, the injury crash definitions were revised in the DMV-349 instruction manual. Since the reporting changes, there have been noticeable increases in the number of reported A-injury crashes in NC. Some injuries that may have been reported as less severe prior to the changes are now being reported as A-injury crashes. The impacts of the reporting change will be apparent in crash analyses that include data both before and after September 2016. For this specific project location, there were no Class A-injury crashes during the before period and one Class A-injury crash during the after period that occurred after September 2016.

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

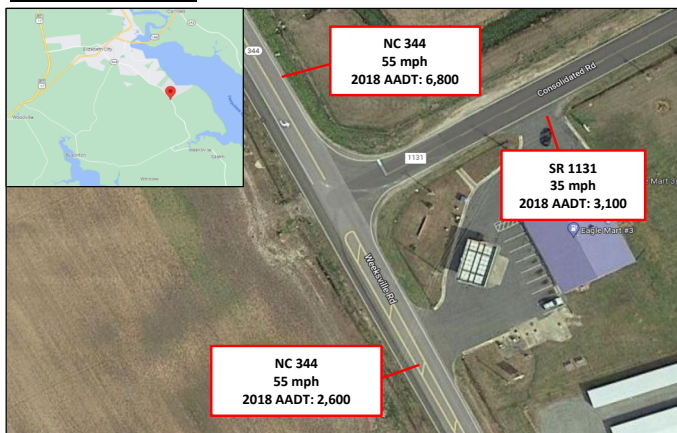
Treatment Information	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	11	13	18.18%
Total Severity Index	4.36	7.97	82.63%
All Target Crashes	5	2	-60.00%
All Target Crash Severity Index	6.92	38.90	462.14%
Target-1 Crashes	3	0	-100.00%
Target-1 Crash Severity Index	5.93	0.00	-100.00%
Target-2 Crashes	2	2	0.00%
Target-2 Crash Severity Index	8.40	38.90	363.10%
Volume (2015, 2018)	6,600	6,300	-4.55%

Injury Crash Summary	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal Injury Crashes	0	0	n/a
Class A Injury Crashes	0	1	n/a
Class B Injury Crashes	3	2	-33.33%
Class C Injury Crashes	2	0	-100.00%
Property Damage Only	6	10	66.67%

All Target Injury Crash Summary	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal Injury Crashes	0	0	n/a
Class A Injury Crashes	0	1	n/a
Class B Injury Crashes	3	0	-100.00%
Class C Injury Crashes	1	0	-100.00%
Property Damage Only	1	1	0.00%

Additional Information	Before	After	Percent Reduction (-) Percent Increase (+)
Rear-end crashes along SR 1131	3	5	66.67%
Frontal Impacts, S leg's PVA entrance	1	0	-100.00%
Other Frontal Impacts within Intersection	2	2	0.00%
n/a			n/a

Map and Satellite Views



Data Prepared By:

Principal Investigator:	Tyler J. Fowler, PE
Work Group/Consultant:	HNTB
Date:	3/15/2022