

# Safety Project Evaluation

Order ID:	41000068830
Project ID:	11-14-202 (W-5601AV)
Signal ID:	11-0521
Location:	Intersection of US 52 Bus/NC 89 (Renfro St) and NC 103/SR 2432 (Pine St)
GPS Coordinates:	36.499957, -80.605383
County:	Surry
City:	Mt Airy
Division:	11

Countermeasure(s):	Upgraded wheelchair ramps, installed pedestrian signal heads, and repainted crosswalks.
Estimated Project Cost:	\$145,000
Completion Date:	9/12/2017

	Start Date	End Date	Length
Before Period	9/1/2011	6/30/2017	5y, 10m
Construction Period	7/1/2017	9/30/2017	0y, 3m
After Period	10/1/2017	7/31/2023	5y, 10m

Analysis Criteria:	Intersection Analysis, with 150' y-line on all approaches
--------------------	---

Target Crashes:	Pedestrian and Bicycle Crashes
-----------------	--------------------------------

### Project Development Comparison

Crashes Per Year by Project Time Period	Project Development	Before Period	After Period
Years	5.00 years	5.83 years	5.83 years
Start Date	4/1/2009	9/1/2011	10/1/2017
End Date	3/31/2014	6/30/2017	7/31/2023
Total	3.60	3.09	3.26
Fatal Injury	0.00	0.00	0.00
Class A Injury	0.00	0.00	0.17
Class B Injury	0.00	0.34	0.34
Class C Injury	1.00	1.03	1.03
Property Damage Only	2.60	1.71	1.71

### Items for Discussion

- The target crash in the Before Period was a pedestrian crash, where the pedestrian left the sidewalk on the south leg and crossed Renfro St going westbound (140 ft south of the intersection). The pedestrian was then hit by a southbound driver.
- There were 7 frontal impact crashes in the Before Period and 8 in the After Period. In the Before Period, 5 of these were angle crashes (including 2 eastbound drivers and 1 southbound driver who ran a red light). In the After Period, 6 of these were angle crashes (including 4 eastbound drivers, 1 northbound driver, and 1 southbound driver who ran a red light).
- During the Before Period, there were 5 night crashes and 8 wet crashes. During the After Period, there were 7 night crashes and 5 wet 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

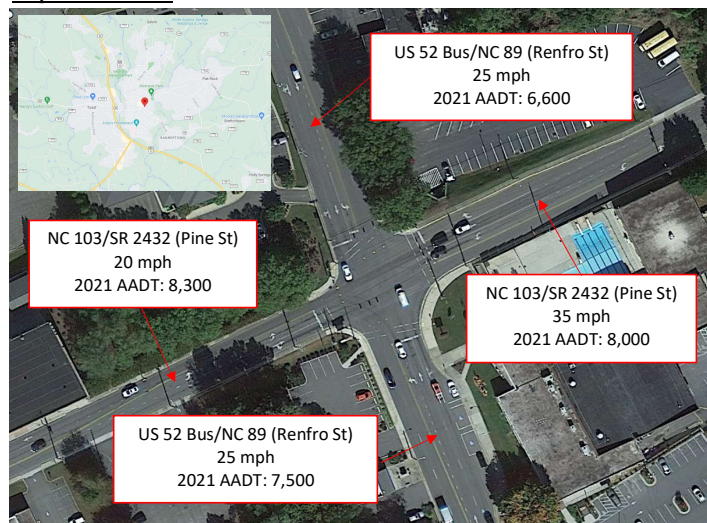
Treatment Information	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	18	19	5.56%
Total Severity Index	4.29	8.11	88.98%
Target Crashes	1	0	-100.00%
Target Crash Severity Index	8.40	0.00	-100.00%
Volume (2017, 2021)	16,600	15,200	-8.43%

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	2	2	0.00%
Class C Injury Crashes	6	6	0.00%
Property Damage Only	10	10	0.00%

Target Injury Crash Summary	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	0	0	n/a
Class C Injury Crashes	1	0	-100.00%
Property Damage Only	0	0	n/a

Additional Information	Before	After	Percent Reduction (-) Percent Increase (+)
Rear End Crashes: Northbound	2	0	-100.00%
Rear End Crashes: Eastbound	1	2	100.00%
Rear End Crashes: Southbound	0	1	n/a
Rear End Crashes: Westbound	1	5	100% +

### Map/Satellite Views



### Data Prepared By:

Principal Investigator:	Emily Chen
Work Group/Consultant:	Kittelson & Associates, Inc.
Date:	11/6/2023

**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.***