

Map and Aerial (from Google Maps – Coordinates are 34.875807, -76.903554)



Naive Before and After Analysis

Before Period: August 1, 2008 through December 31, 2011 (3 years 5 months)

Const. Period: January 1, 2012 through July 31, 2012

After Period: August 1, 2012 through December 31, 2015 (3 years 5 months)

Analysis Criteria: Treatment data consisted of all crashes on US 70 from just south of NC 101 to 150 feet south of Forest Hills Dr, MP 34.666 to MP 36.058, with a zero-foot y-line.

Target Crashes: The Target Crashes chosen were collisions due to movements eliminated with the addition of the protected concrete / grass medians in the After Period. These included Angle, Left Turn, Sideswipe, and Rear-End in the previous Before Period Center Turn Lane.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	156	129	- 17.3 %
Total Severity Index	3.39	3.60	+ 6.19 %
Target Crashes	25	0	- 100.0 %
Target Crash Severity Index	5.81	0.00	- 100.0 %
Volume (2010, 2014)	29,400	27,900	- 5.10 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	1	1	0.00 %
Class A injury Crashes	1	0	- 100.0 %
Class B injury Crashes	3	13	+ 333.0 %
Class C Injury Crashes	27	22	- 18.5 %
Property Damage Only	124	93	- 25.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Night Crashes	24	20	- 16.7 %
Wet Crashes	26	23	- 11.5 %
Alcohol/Drug Involvement Crashes	5	6	+ 20.0 %
Lane Departure – Median Side	2	11	+ 450.0 %
U-Turn at Authorized Location	0	3	+ 100.0 %
U-Turn – Across Median (Unauthorized)	1	0	- 100.0 %

<u>Target Crash Type Analysis</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Intersection Left – Concrete After	8	0	- 100.0 %
PVA Left – Concrete After	9	0	- 100.0 %
Center Turn Lane – Rear-End	1	0	- 100.0 %
Center Turn Lane – Sideswipe	7	0	- 100.0 %

The Total and Target Crashes were further examined in the before and after period by each individual location:

Treatment Information	Milepost	Before Total	After Total	Total Crash % Reduction (-) % Increase (+)	Before Target	After Target	Target Crash % Reduction (-) % Increase (+)
1: NC 101 - Signal	34.666-34.693	18	11	- 38.9%	0	0	N/A
1-2: Concrete After	34.694-34.941	23	15	- 34.8%	4	0	-100.0%
2: Wood Haven Dr/ Roosevelt Blvd- Signal	34.942-35.058	25	19	- 24.0%	1	0	-100.0%
2-3: Concrete After	35.059-35.101	2	1	- 50.0%	0	0	N/A
3: Jaycee St - SB Crossover	35.102-35.158	5	6	+ 20.0%	0	0	N/A
3-4: Concrete After	35.159-35.247	1	0	- 100.0%	0	0	N/A
4: Cunningham Blvd - Signal	35.248-35.304	13	15	+ 15.4%	0	0	N/A
4-5: Concrete After	35.305-35.521	6	8	+ 33.3%	1	0	-100.0%
5: Fort Macon to Oakwood Dr	35.522-35.638	13	5	- 61.5%	8	0	-100.0%
5-6: Concrete After	35.639-35.641	1	0	- 100.0%	0	0	N/A
6: Hollywood Blvd - Signal	35.642-35.698	16	18	+ 12.5%	0	0	N/A
6-7: Concrete After	35.698-35.731	1	2	+ 100.0%	0	0	N/A
7: Vine St/Charles St - Median	35.732-35.808	13	9	- 30.8%	3	0	-100.0%
7-8: Concrete After	35.809-35.821	0	0	N/A	0	0	N/A
8: Elizabeth St/ Carolina St - Median	35.822-35.895	6	5	- 16.7%	4	0	-100.0%
9: Fairview St/Dogwood St: NB Crossover	35.895-35.968	7	10	+ 42.9%	3	0	-100.0%
9-10: Concrete After	35.969-35.981	1	0	- 100.0%	0	0	N/A
10: Pineview St/Forest Hills Dr: SB Crossover	35.982-36.058	5	5	0.0%	1	0	-100.0%
Total		156	129	-17.3 %	25	0	-100.0%

Overall Summary Results

Total Crashes:	- 17 %	(reduction)
Total Crash Severity:	+ 6 %	(increase)
Target Crashes:	- 100 %	(reduction)
Target Crash Severity:	- 100 %	(reduction)
Volume:	- 5 %	(reduction)

Items for Discussion/Concerns

This countermeasure was successful in reducing the uncontrolled cross movement collisions by physically preventing the movement with a concrete median in the after period. Due to the amount of crashes along this segment throughout the analysis, GIS Collision Diagrams are only provided for the selected target crashes from the evaluation.

There was one fatal crash in the after period. The crash was a head on collision involving a vehicle travelling the wrong way evading police.

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

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Work Group/Consultant: AECOM
Date: March 11, 2016

W-5101 - Craven County - TARGET CRASHES ONLY
US 70 (Main St) - MP 34.666 - 36.058 (1.392 Miles)
After Period - 8/1/2012-12/31/2015 (3.42 Yrs)



Northbound crashes plotted to right of US 70
 Southbound crashes plotted to left of US 70

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

Note: There are no target crashes in the after period

Legend

Target

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

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 Mobility and Safety Division
 Traffic Safety Unit

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