

Spot Safety Project Evaluation

Project Information

Order ID: 41000030464

Project ID: 01-05-208

Location: US 64 from NC 345 to Nags Head ML

County: Dare

City: Manteo

Division: 1

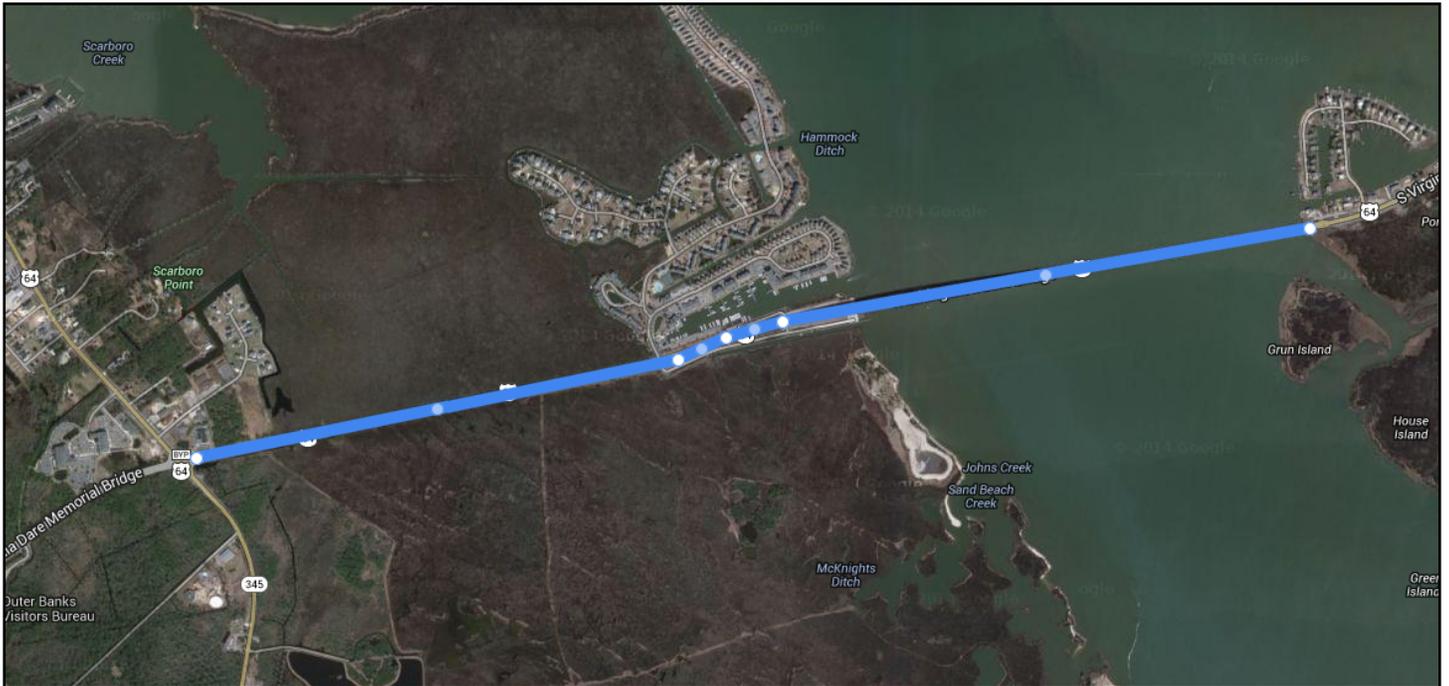
Signal ID: N/A

Countermeasure: Install centerline profile pavement markings.

Project Completion: March 12, 2009

Project Cost: \$31,000

Map and Aerial (from Google Maps – Coordinates are 35.894225, -75.637471)



Naive Before and After Analysis

Before Period: September 1, 2002 through September 30, 2007 (5.08 yrs)

Construction Period: October 1, 2007 through April 30, 2009

After Period: May 1, 2009 through May 31, 2014 (5.08 yrs)

Analysis Criteria: Treatment data consisted of all crashes along the subject strip from 150 ft East of the NC 345 intersection to Nags Head ML.

Target Crashes: The target crashes are Lane Departure crashes that crossed the centerline. This includes Head-on, Fixed Object, Overturn/Rollover, Parked Motor Vehicle, Ran Off Road – Straight, Ran Off Road – Left, and Sideswipe – Opposite Direction.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	40	47	17.5 %
Total Severity Index	10.62	2.73	- 74.3 %
Target Crashes	7	11	57.1 %
Target Crash Severity Index	35.60	1.67	- 95.3 %
Volume (2005, 2011)	17,000	16,000	- 5.9 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	2	0	- 100.0 %
Class A injury Crashes	2	0	- 100.0 %
Class B injury Crashes	2	3	50.0 %
Class C Injury Crashes	9	8	- 11.1 %
Property Damage Only	25	36	44.0 %

Overall Summary Results

Total Crashes:	+ 18 %	(increase)
Total Crash Severity:	- 74 %	(reduction)
Target Crashes:	57 %	(increase)
Target Crash Severity:	- 95 %	(reduction)
Volume:	- 6 %	(reduction)

Items for Discussion/Concerns

Due to Spot Safety Project #01-05-204, which was completed on July 7, 2006, the section of road from the western end of the bridge to 0.1 miles west of Pirate's Way has been excluded from this project.

Several crashes in the Before and After period had inaccurate location data that placed the crashes on the mainland despite the crash narratives and diagrams placing them on the bridge. Due to this, these crashes were evenly distributed along the bridge.

Despite the increase in Target crashes, there was a large decrease in Target crash severity.

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

Principal Investigator: Ian Pike, Summer Engineering Assistant
Checked by: Brad Robinson, PE

Work Group/Consultant: NCDOT - Safety Evaluation Group

Date: September 10, 2014

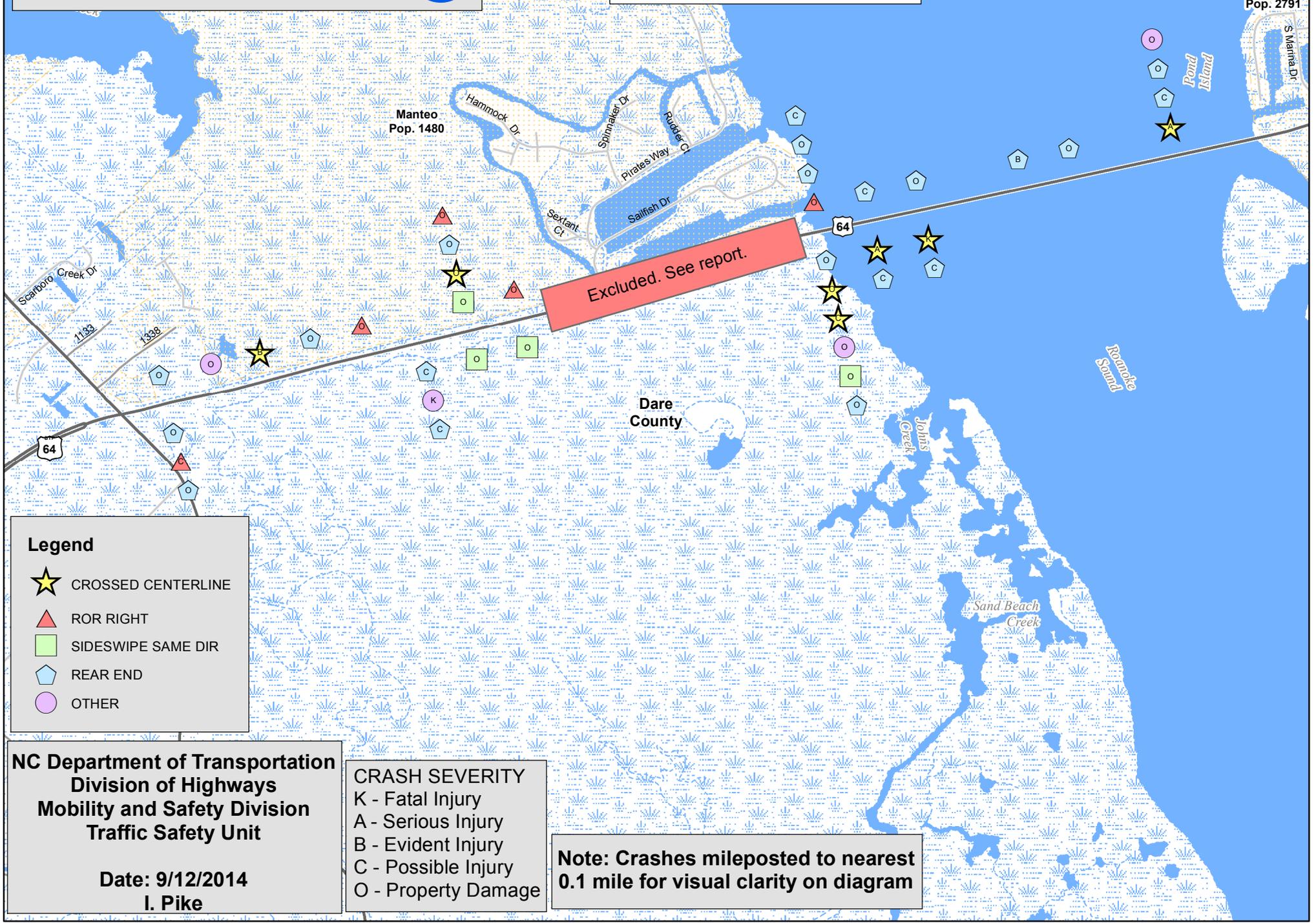
Shallowbag

DARE COUNTY
US 64 from NC 345 to Nags Head CL
Before Period - 9/1/02-9/30/07



Study Range
Dare County MP 25.121-27.289
Total Length = 2.168 Miles
Crashes North of US-64 are Westbound Crashes
Crashes South of US-64 are Eastbound Crashes

Nags Head
Pop. 2791



Legend

- CROSSED CENTERLINE
- ROR RIGHT
- SIDESWIPE SAME DIR
- REAR END
- OTHER

NC Department of Transportation
Division of Highways
Mobility and Safety Division
Traffic Safety Unit

Date: 9/12/2014
I. Pike

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

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

Shallowbag

DARE COUNTY
US 64 from NC 345 to Nags Head CL
After Period - 5/1/09-5/31/14



Study Range
Dare County MP 25.121-27.289
Total Length = 2.168 Miles
Crashes North of US-64 are Westbound Crashes
Crashes South of US-64 are Eastbound Crashes

Nags Head
Pop. 2791

Manteo
Pop. 1480

Excluded. See report.

Dare County

Legend

- CROSSED CENTERLINE
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