

Spot Safety Project Evaluation

Project Information

Order ID: 41000034195

Project ID: 02-07-001

Location: US 17-70/NC 55 bridges over the Trent River and US 17/NC 55 bridges over the Neuse River

County: Craven

City: New Bern

Division: 2

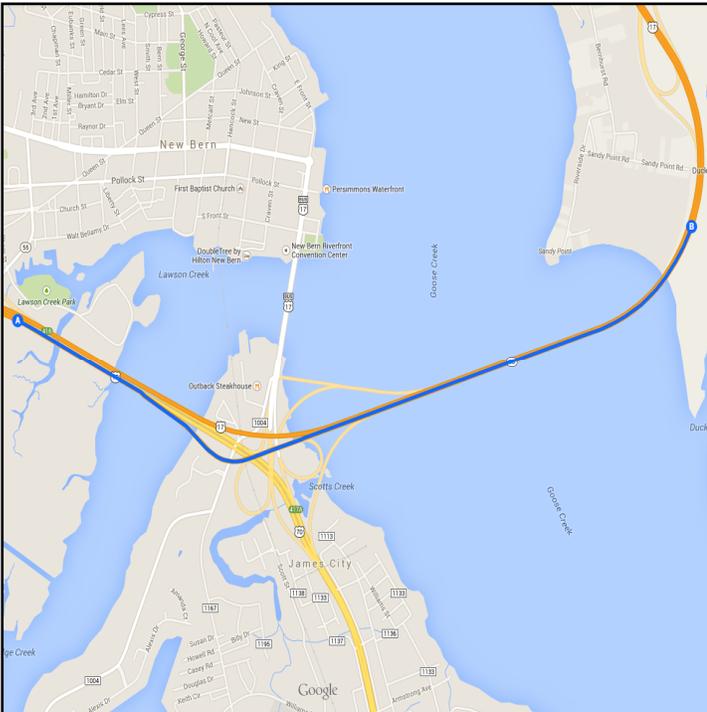
Signal ID: N/A

Countermeasure: Install five closed-circuit television cameras four sets of static warning signs with remote activated flashers, and three dynamic message signs.

Project Completion: December 14, 2010

Project Cost: \$635,000

Map and Aerial (from Google Maps – Coordinates are 35.0994455,-77.053226)



Naive Before and After Analysis

Before Period: December 1, 2006 through October 31, 2010 (3.92 years)

Construction Period: November 1, 2010 through January 31, 2011

After Period: February 1, 2011 through December 31, 2014 (3.92 years)

Analysis Criteria: Treatment data consisted of all crashes along the US 17-70/NC 55 bridges over the Trent River and US 17/NC 55 bridges over the Neuse River

Target Crashes: The target crashes for this project are Parked Motor Vehicles.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	87	101	16.1 %
Total Severity Index	5.91	4.99	- 16.7 %
Target Crashes	10	14	40.0 %
Target Crash Severity Index	20.60	9.59	- 52.4 %
Volume (2008, 2013)	33,500	37,100	10.7 %

<u>Injury Crash Summary</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Fatal injury Crashes	1	0	- 100.0 %
Class A injury Crashes	2	2	0.0 %
Class B injury Crashes	4	11	175.0 %
Class C Injury Crashes	23	23	0.0 %
Property Damage Only	57	65	14.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Night Crashes	14	30	114.3 %
Wet Crashes	18	19	5.6 %
Alcohol/Drug Related Crashes	1	3	200.0 %
Animal Crashes	0	1	100.0 %

Overall Summary Results

Total Crashes:	+ 16 %	(increase)
Total Crash Severity:	- 17 %	(reduction)
Target Crashes:	+ 40 %	(increase)
Target Crash Severity:	- 52 %	(reduction)
Volume:	+ 11 %	(increase)

Items for Discussion/Concerns

In both the Before and After periods, 6 target crashes occurred at night, accounting for 60% in the Before and 43% in the After of the total target crashes.

One target crash in the Before period involved drivers that had exited their vehicles to remove debris from the roadway and resulted in a fatality. There was also one target crash in the After period that involved a driver attempting to repair their vehicle in the roadway that resulted in type A injury (disabling).

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

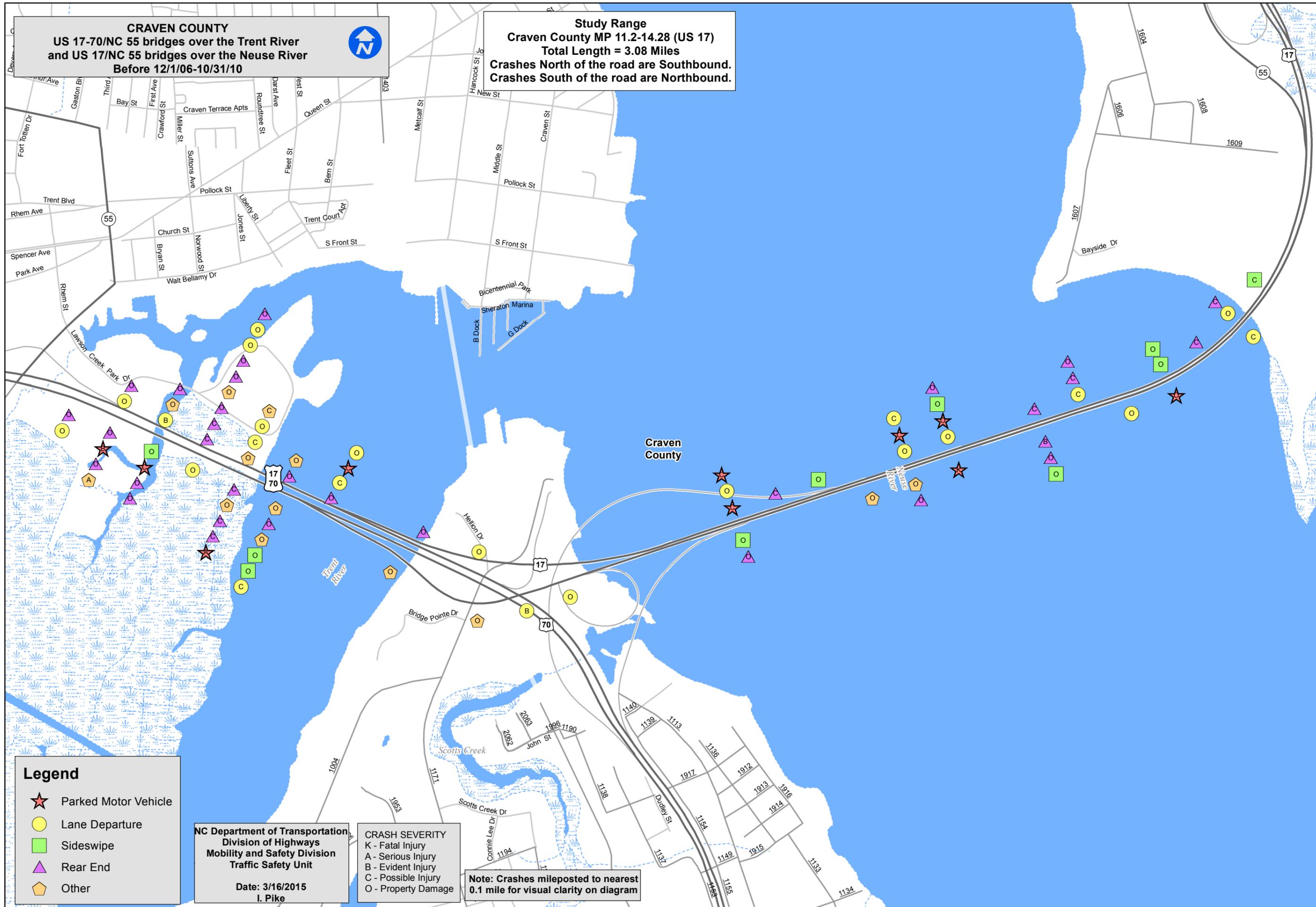
Data Prepared By

Principal Investigator: Ian Pike, Engineering Assistant
Checked by: Brad Robinson, PE
Work Group/Consultant: NCDOT - Safety Evaluation Group
Date: March 16, 2015

CRAVEN COUNTY
US 17-70/NC 55 bridges over the Trent River
and US 17/NC 55 bridges over the Neuse River
Before 12/1/06-10/31/10



Study Range
Craven County MP 11.2-14.28 (US 17)
Total Length = 3.08 Miles
Crashes North of the road are Southbound.
Crashes South of the road are Northbound.



- Legend**
- ★ Parked Motor Vehicle
 - Lane Departure
 - Sideswipe
 - △ Rear End
 - ◇ Other

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

Date: 3/16/2015
 I. Pike

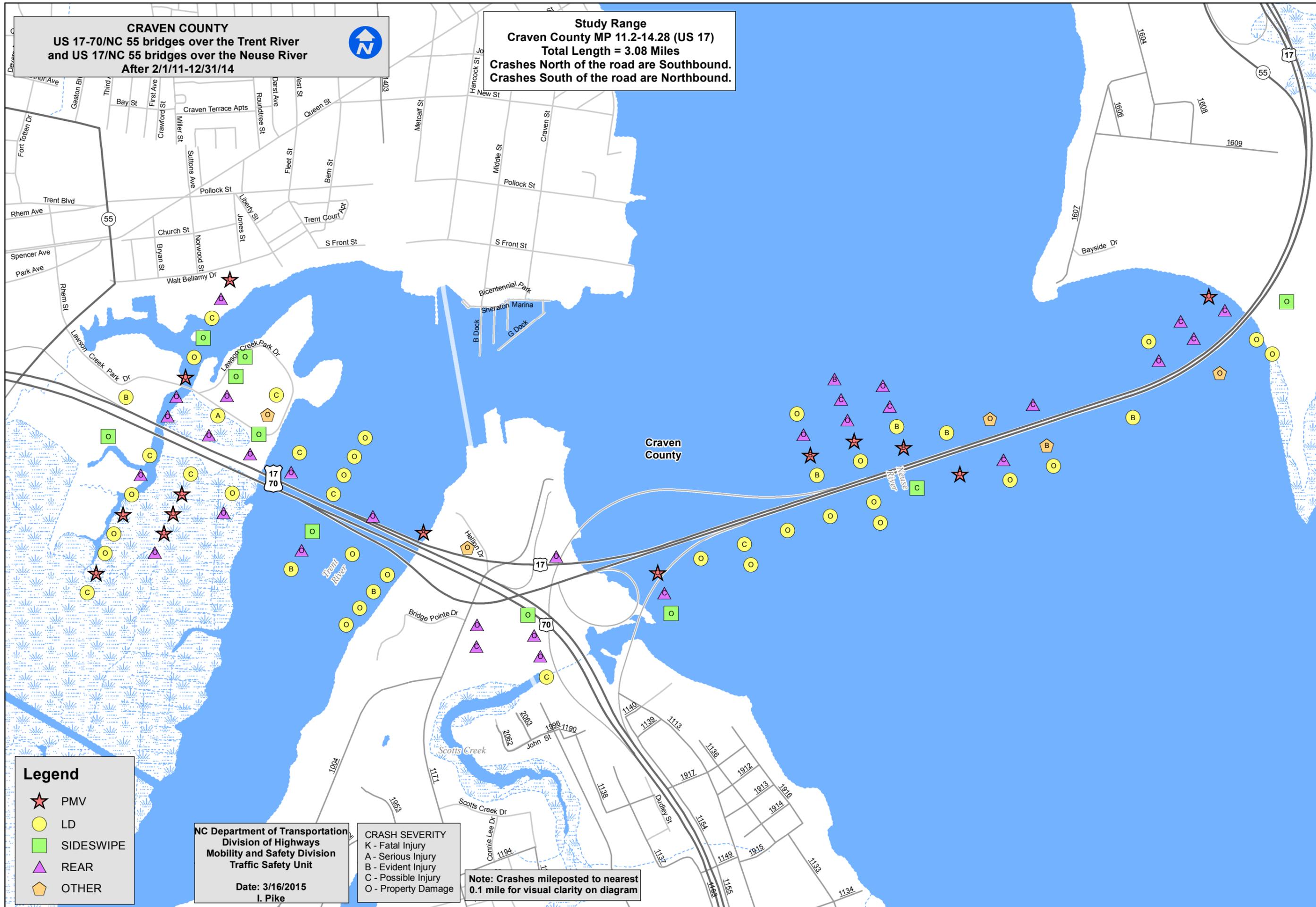
- CRASH SEVERITY**
- K - Fatal Injury
 - A - Serious Injury
 - B - Evident Injury
 - C - Possible Injury
 - O - Property Damage

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

CRAVEN COUNTY
US 17-70/NC 55 bridges over the Trent River
and US 17/NC 55 bridges over the Neuse River
After 2/1/11-12/31/14



Study Range
Craven County MP 11.2-14.28 (US 17)
Total Length = 3.08 Miles
Crashes North of the road are Southbound.
Crashes South of the road are Northbound.



Legend

- ★ PMV
- LD
- SIDESWIPE
- △ REAR
- ⬠ OTHER

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