

Spot Safety Project Evaluation

Project Information

Order ID: 41000030502

Project ID: 14-08-206

Location: US-64/74 between NC-60 and SR 1593 (Gold Branch Rd)

County: Cherokee

City: West of Murphy

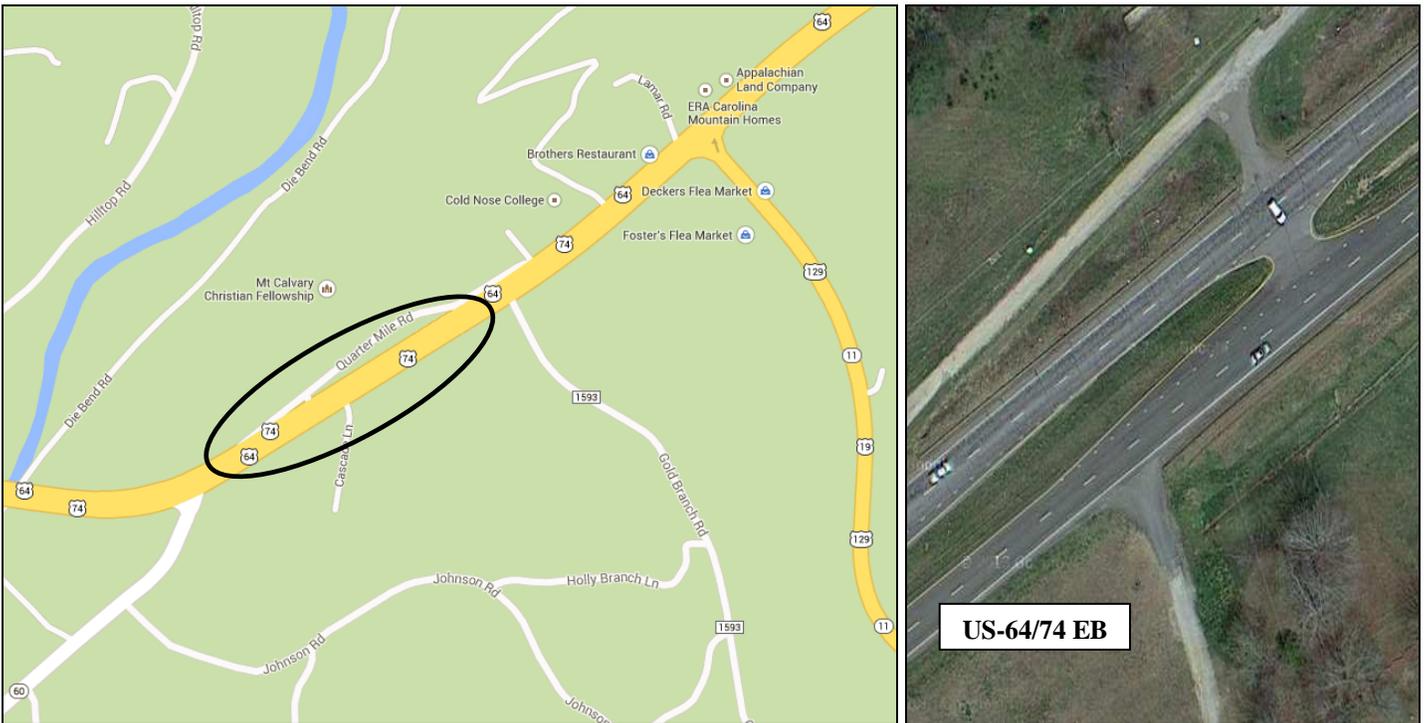
Division: 14

Signal ID: N/A

Countermeasure: Mill and Repave short section of Eastbound US-64/74

Project Completion: December 10, 2009 Project Cost: \$76,000

Map and Aerial (from Google Maps) – Coordinates: 35.028701,-84.108646



Naive Before and After Analysis

Before Period: April 1, 2005 through August 31, 2009 (4 years, 5 months)

Const. Period: September 1, 2009 through December 31, 2009

After Period: January 1, 2010 through May 31, 2014 (4 years, 5 months)

Analysis Criteria: Treatment data consisted of all crashes on eastbound US-64/74 only from 150-foot east of the NC-60 intersection to 150-foot west of the SR 1593 intersection (Milepost 14.095 to 14.449) with a 0-foot y-line.

Target Crashes: Lane Departure Crashes on the eastbound direction of US-64/74 were the selected Target Crashes, which includes the following: Ran-Off Road (Left, Right, Straight); Fixed Object; and Sideswipe (Same Direction). Lane Departure Wet Roadway (Codes 2-3) crashes are also highlighted below.

<u>Treatment Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Total Crashes	3	3	0.0 %
Total Severity Index	3.47	1.00	- 71.2 %
Target Crashes – Lane Departure	3	2	- 33.3 %
Lane Departure Severity Index	3.47	1.00	- 71.2 %
Lane Departure Wet Roadway Crashes	3	0	- 100.0 %
LD-Wet Crash Severity Index	3.47	0.00	- 100.0 %
Volume (2007, 2012) – Both Directions	14,000	13,500	- 3.6 %

<u>Injury Crash Summary</u>	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	- 100.0 %
Property Damage Only	2	3	50.0 %

<u>Additional Information</u>	Before	After	Percent Reduction (-) Percent Increase (+)
Night Crashes	1	1	0.0 %
Wet Crashes	3	0	- 100.0 %
Alcohol / Drugs Involvement Crashes	0	0	N/A

Overall Summary Results

Total Crashes:	0 %	(no change)
Total Crash Severity:	- 71 %	(reduction)
Target Crashes:	- 33 %	(reduction)
Target Crash Severity:	- 71 %	(reduction)
Volume:	- 4 %	(reduction)

Additional Summary Results

Lane Departure Wet Road (Target):	- 100 %	(reduction)
Night Crashes:	0 %	(no change)

Items for Discussion/Concerns

The countermeasure successfully eliminated wet roadway lane departure crashes in the after period. There were two (2) lane departure crashes in the after period, both of which were sideswipe crashes from vehicle merging into the inside lane.

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

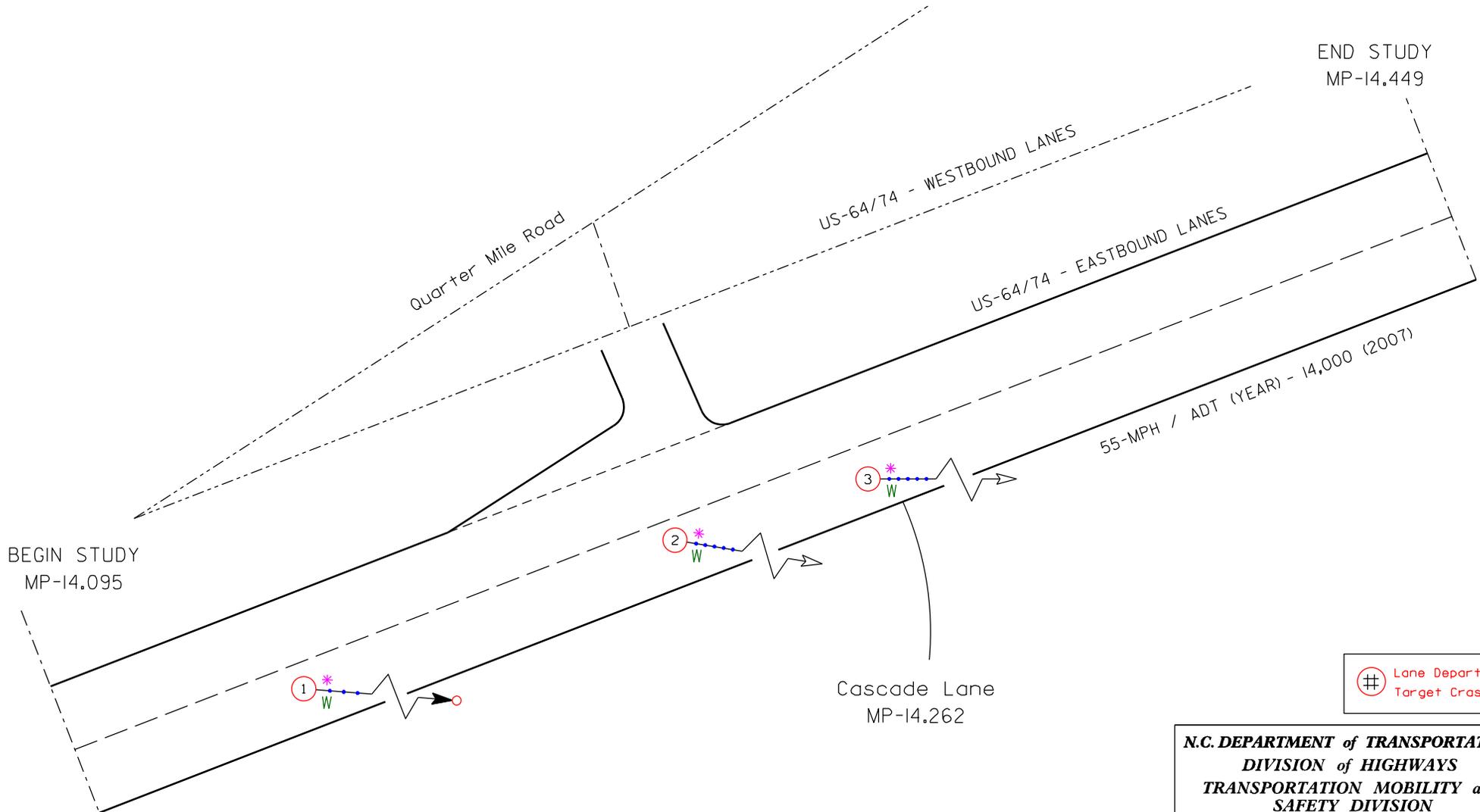
Data Prepared By

Principal Investigator: Jason B. Schronce, EI
Work Group/Consultant: NCDOT - Safety Evaluation Group
Date: October 7, 2014

SS# 14-08-206
 Order# 41000030502
 Cherokee County
 BEFORE Period
 4/1/2005 - 8/31/2009



LEGEND							
	MOVING VEHICLE		ANGLE		9 MPH OR LESS		PEDESTRIAN
	PARKEED VEHICLE		TURNING		10 MPH TO 19		TRAIN
	PARKING VEHICLE		BACKING		20 MPH TO 29		DRIVER AT FAULT
	FIXED OBJECT		SIDESWIPE		30 MPH TO 39		DRY
	HEAD ON		RAN OFF ROAD		40 MPH TO 49		WET
	REAR END		INJURY		50 MPH TO 59		ICY OR SNOWY
	RAN OFF ROAD		FATALITY		60 MPH TO 69		70 AND UP
			SPEED UNKNOWN		90 AND UP		OTHER



N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
TRANSPORTATION MOBILITY and SAFETY DIVISION

TRAFFIC SAFETY UNIT

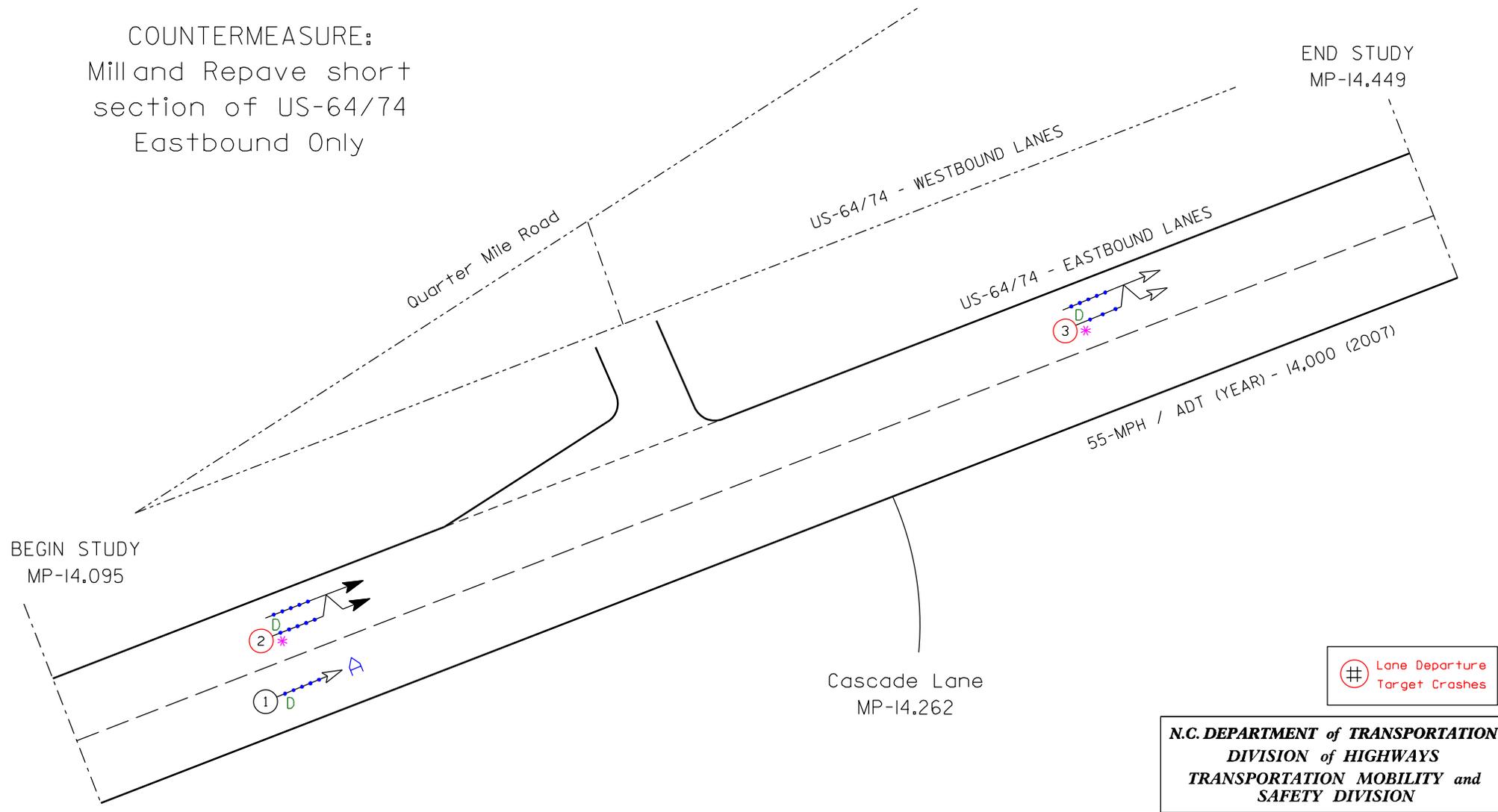
Date: 9-18-2014 Prepared By: J. Schronce

SS# 14-08-206
 Order# 41000030502
 Cherokee County
 AFTER Period
 1/1/2010 - 5/31/2014



LEGEND							
	MOVING VEHICLE		ANGLE		9 MPH OR LESS		P PEDESTRIAN
	PAIRED VEHICLE		TURNING		10 MPH TO 19		T TRAIN
	PARKING VEHICLE		BACKING		20 MPH TO 29		* DRIVER AT FAULT
	FIXED OBJECT		SIDESWIPE		30 MPH TO 39		D DRY
	HEAD ON		RAN OFF ROAD		40 MPH TO 49		W WET
	REAR END		FATALITY		50 MPH TO 59		I Icy or Snowy
	RAN OFF ROAD		SPEED UNKNOWN		60 MPH TO 69		O OTHER

COUNTERMEASURE:
 Milland Repave short
 section of US-64/74
 Eastbound Only



Lane Departure
 Target Crashes

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
TRANSPORTATION MOBILITY and SAFETY DIVISION

TRAFFIC SAFETY UNIT

Date: 9-18-2014 Prepared By: J. Schronce