

## **JACKSON COUNTY BOARD OF COMMISSIONERS**

BRIAN McMAHAN Chairman CHARLES ELDERS
Vice Chairman

BOYCE DEITZ
Commissioner

MICKEY LUKER
Commissioner

RON MAU Commissioner

September 18, 2017

Mr. Steven Buchanan Division Traffic Engineer North Carolina Department of Transportation 253 Webster Road Sylva, NC 28779

Dear Mr. Buchanan:

The Jackson County Board of Commissioners is formally requesting that NCDOT conduct a speed study on Old Cullowhee Road. More specifically it is requested that this study be conducted between the southern intersection of Old Cullowhee Road/NC 107 and the intersection of Central Drive/Old Cullowhee Road (Tuck's Tap & Grille). Citizens in this area have raised concerns that the current 45 MPH speed limit is creating unsafe conditions. They have requested that the speed limit be lowered from 45 MPH to 35 MPH.

Please contact me if you have any questions or need additional information.

Sincerely,

Don Adams County Manager

## **Don Adams**

From:

Ward, Doyle M

Sent:

Tuesday, October 24, 2017 7:11 AM

To:

donadams@jacksonnc.org

Cc:

Buchanan, Steven M

**Subject:** 

Request to lower speed zone on SR 1002 (Old Cullowhee Road)

**Attachments:** 

Letter dated Sept 18, 2017 request to lower speed zone SR 1002 Jackson.pdf; Response

Letter for SR 1002 (Old Cullowhee Road).pdf

Dear Mr. Adams,

Please review our response in regards to letter dated September 18, 2017 requesting current 45 mph speed zone to be lowered. It appears that we have a speeding problem on Old Cullowhee Road. If you have any additional questions, please let us know.

#### **Thanks**

## Doyle M. Ward

Division 14 Assistant Traffic Engineer North Carolina Department of Transportation

828 631 1152 office 828 331 8649 mobile dmward@ncdot.gov

253 Webster Road Sylva, North Carolina 28779



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# STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

ROY COOPER GOVERNOR JAMES H. TROGDON, III

October 20, 2017

Don Adams 401 Grindstaff Cove Road Suite A-207 Sylva, NC 28779

SUBJECT: Request to lower present 45 MPH zone on SR 1002 (Old Cullowhee Road)

Dear Mr. Adams,

Speed limits are set to inform motorists of appropriate driving speeds under favorable conditions and speed limits should be posted near the 85th percentile speed. The 85th percentile speed is the speed at or below which 85 percent of drivers operate their vehicles, assuming that most drivers are capable of judging the speed at which they can safely operate. Other factors that are considered when establishing speed limits are road characteristics, shoulder condition, grade, alignment, sight distance and roadside development. Our 24 hour traffic speed study performed on 10/2/2017 showed that the annual average daily traffic count was 652 vehicles using Old Cullowhee Road with the 85th percentile speed of 53.33 MPH. Our speed study showed that the average speed for all classified vehicles was 42 mph with 24.57% were exceeding the posted speed of 45 MPH. Enforcement is critical to achieving compliance with speed limits and simply posting a speed limit sign will not achieve desired driving speeds. We do not recommend lowering the speed limit at this time because it would not be effective or warranted, however, we did identify two curves that need additional curve warning treatments. Please allow 4 weeks for the work to install the warning signs on the curves. The attached traffic counts are for your review and can be shared with law enforcement. If you have any questions, please call us at (828) 631-1152.

> Woyle M. Ware Doyle M. Ward

Assistant Division Traffic Engineer

dmw Attachments

## Nu-Metrics Traffic Analyzer Study Computer Generated Summary Report City: Cullowhee

Street: Old Cullowhee Rd

A study of vehicle traffic was conducted with HI-STAR unit number 6059. The study was done in the BOTH lane at Old Cullowhee Rd in Cullowhee, NC in Jackson county. The study began on Oct/02/2017 at 02:15:00 PM and concluded on Oct/03/2017 at 02:15:00 PM, lasting a total of 24.00 hours. Traffic statistics were recorded in 15 minute time periods. The total recorded volume showed 652 vehicles passed through the location with a peak volume of 25 on Oct/02/2017 at [17:00-17:15] and a minimum volume of 0 on Oct/02/2017 at [23:30-23:45]. The AADT count for this study was 652.

#### SPEED

Chart 1 lists the values of the speed bins and the total traffic volume for each bin. At least half the vehicles were traveling in the 45 - 50 MPH range or lower. The average speed for all classifed vehicles was 42 MPH with 24.57% vehicles exceeding the posted speed of 45 MPH. The HI-STAR found 1.89 percent of the total vehicles were traveling in excess of 55 MPH. The mode speed for this traffic study was 45MPH and the 85th percentile was 53.33 MPH.

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3	22	24	17	18	42	93	128	132	90	54	8	3	1	0	i i		i i i i i i i i i i i i i i i i i i i	1	tra julturii.

CHART 1

## **CLASSIFICATION**

Chart 2 lists the values of the classification bins and the total traffic volume accumulated for each bin. Problem with the battery detected. Try discharging and fully charging it

Most of the vehicles classified during the study were Passenger Vehicles. The number of Passenger Vehicles in the study was 370 which represents 58 percent of the total classified vehicles. The number of Vans & Pickups in the study was 231 which represents 36 percent of the total classified vehicles. The number of Busses & Trucks in the study was 21 which represents 3 percent of the total classified vehicles. The number of Tractor Tailers in the study was 13 which represents 2 percent of the total classified vehicles.

<	18	24	28	32	38	44	62		1					
to 17	to 23	to 27	to 31	to 37	to 43	to 61	to >							
370	231	15	6	7	2	1	3						house a second	

CHART 2

#### **HEADWAY**

During the peak traffic period, on Oct/02/2017 at [17:00-17:15] the average headway between vehicles was 34.615 seconds. During the slowest traffic period, on Oct/02/2017 at [23:30-23:45] the average headway between vehicles was 900 seconds.

## **WEATHER**

The roadway surface temperature over the period of the study varied between 58.00 and 121.00 degrees F.

## **Don Adams**

From:

Buchanan, Steven M

Sent:

Tuesday, October 24, 2017 8:18 AM

To:

donadams@jacksonnc.org

Cc:

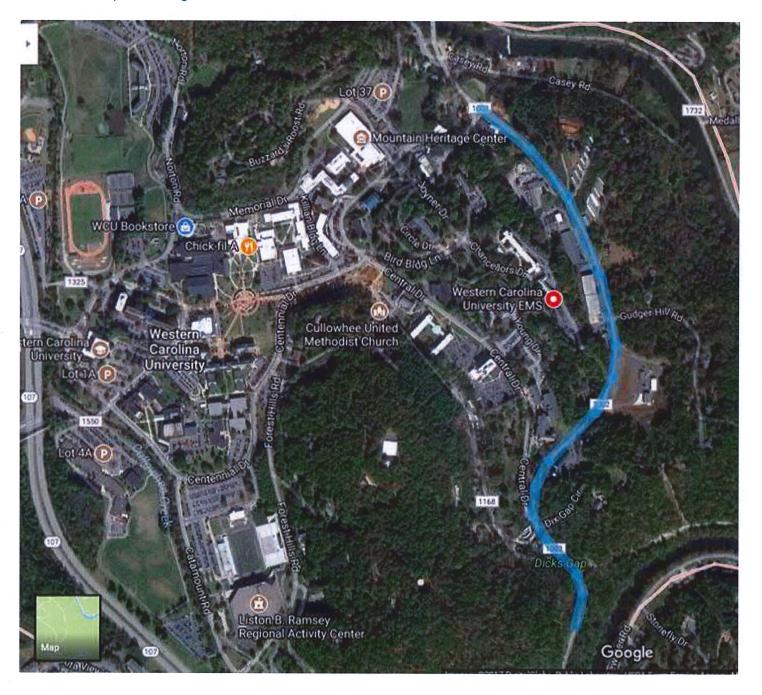
Ward, Doyle M

Subject:

RE: Request to lower speed zone on SR 1002 (Old Cullowhee Road)

## Mr. Adams,

However, we would like to note that in August of 2016 our office did extend the 35 mph speed zone from Tuck's to past the new development along the river.



# Google Maps



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