



Memorandum

To: Mayor Nelson and Members of the City Council
From: Daniel R. Buchholtz, MMC, Administrator, Clerk/Treasurer
Date: March 10, 2022
Subject: 81st Avenue restriping

81st Avenue, between Old Central (CSAH 35) and Pleasantview Drive, is scheduled to be sealcoated in 2022. With the sealcoating comes the opportunity to look at an alternative traffic lane configuration for this segment.

The current traffic configuration is two lanes of traffic in each direction. There is not enough traffic on this segment of roadway to justify this alignment. In addition, it encourages speeding on the roadway.

Staff would like to propose transitioning this segment to a three-lane configuration. One lane of traffic would be open in each direction with a center turn lane. This configuration would also allow for a 6' bike lane on each side of the street. With future plans for a bike trail connection along CSAH 10, this would be a cost-effective way to make a connection between CSAH 10 and the bike trail on Old Central. In addition, with narrower traffic lanes, speeds should reduce.

This section of roadway has average daily traffic counts of between 1,400-2,050 per day.

Below is the State Aid rules for minimum design standards for on-road bicycle lanes.

8820.9941 MINIMUM DESIGN STANDARDS: ON-ROAD BICYCLE FACILITY FOR URBAN; NEW OR RECONSTRUCTION PROJECTS.

The bicycle facility design standard in this part applies when the road authority has determined that the roadway will be specifically designed to include an on-road bicycle facility.

New or reconstruction projects for urban roadways must meet or exceed the dimensions indicated in the following design chart.

Projected Traffic Volume	Design Speed	Lane Width (a)	Curb Reaction Distance (c)	Parking Lane Width (e)	Bikeway Design Roadways with Two Travel Lanes		Bikeway Design Roadways with Four or more Travel Lanes Urban
	(mph)	(feet)	(feet)	(feet)	(ADT)	(feet)	(feet)
ADT <2,000	25-30	10-11 (b)	1-2 (d)	7-8	<500	SL	N/A
					500-2,000	WOL 14-16 or BL 5-6	
	35-45	10-11 (b)	1-2 (d)	7-8	<500	SL or BL 5	BL 5-6
					500-2,000	WOL 14-16 or BL 5-6	
50 or over	11-12	2	8-10		BL 5-6	BL 5-6	

ADT 2,000-5,000	25-30	10-11 (b)	1-2 (d)	7-8		WOL 14-16 or BL 5-6	WOL 14-16 or BL 5-6
	35-45	10-11 (b)	1-2 (d)	7-8		BL 5-6	BL 5-6
	50 or over	11-12	2	8-10		BL-6	BL 6
ADT 5,000-10,000	25-30	10-11 (b)	1-2 (d)	7-8		BL 5-6	WOL 14-16 or BL 5-6
	35-45	10-11 (b)	1-2 (d)	7-8		BL 5-6 or PS 8	BL 5-6
	50 or over	11-12	2	8-10		BL 6 or PS 8 or SUP	BL 6 or PS 8 or SUP
ADT >10,000	30-35	10-11 (b)	1-2 (d)	7-10		BL 6 or PS 8-10 or SUP	BL 6 or PS 8-10 or SUP
	40-45	11-12	1-4	7-10		BL 6 or PS 8-10 or SUP	BL 6 or PS 8-10 or SUP
	50 or over	11-12	2-4	Not allowed		BL 6 or PS 8-10 or SUP	BL 6 or PS 8-10 or SUP

(SL = shared lane; BL = bicycle lane; WOL = wide outside lane; PS = paved shoulder; SUP = shared use path)

Engineering judgment should be used to choose a lane-width, on-road bicycle facility, or shoulder width dimension other than the widths indicated in the chart. Factors to consider include safety, speed, population/land use, benefit/cost analysis, traffic mix, peak hourly traffic, farm equipment, environmental impacts, terrain limitations, bicycle traffic, pedestrian traffic, on-street parking, intersection and driveway spacing, rights-of-way constraints, vehicle turn lane configuration, sight distance, sight lines, bus routes, other nonmotorized uses, functional classification, or other factors. Dimensions less than those indicated in the chart require a variance in accordance with parts [8820.3300](#) and [8820.3400](#).

(a) Twelve feet should be considered in industrial areas. Eleven feet minimum is required on four-lane, undivided facilities. One-way turn lanes must be at least ten feet wide, except 11 feet is required if the design speed is 50 mph or over.

(b) A combination of all minimum widths for the driving lane, on-road bicycle lane, and parking lane is only permissible with a variance. Ten feet may be considered where truck and bus volumes are relatively low, rights-of-way are constrained, and design speeds are 35 mph or less.

City Engineer Gravel has drawn a potential layout that is included in the packet. Engineer Gravel will be at the meeting to answer any questions you may have about this proposed layout.

If you have any questions, please don't hesitate to contact me at 763-784-6491.