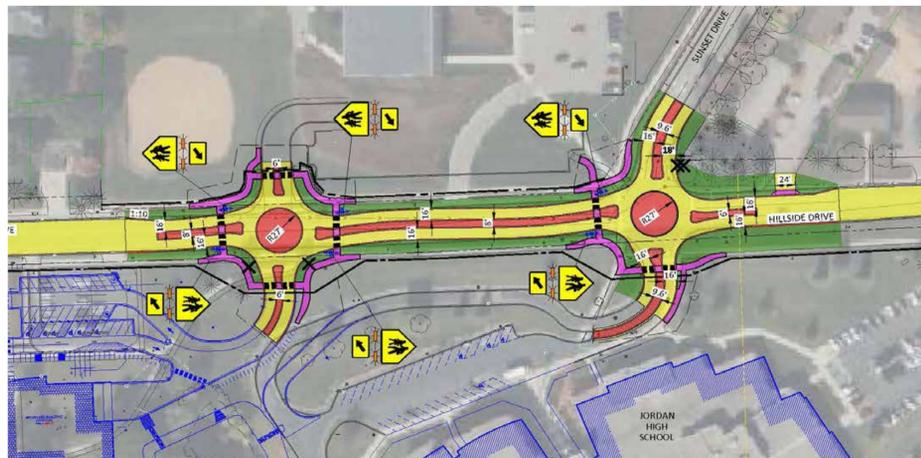


Roundabout Safety



Proposed Compact Roundabouts

Based on traffic volumes, the existing stop signs at the high school entrance/Sunset Drive are not needed. This leads to drivers rolling through the stop signs, increasing the risk of a pedestrian crashes.



- › Smaller diameter than 'full sized roundabout'
- › Reduces costs and property impacts while still meeting safety and capacity needs.
- › Helps further reduce vehicle speeds and serious injury crashes.

What diameter roundabout(s) is proposed?

- › 90' compact roundabouts are proposed to allow less common, large vehicles to drive over the center, while still facilitating traffic movements for passenger vehicles, box trucks and buses using the roundabout lanes.

How do these compare in size to other compact roundabouts?

- › 82': Duluth Ave SE Village Lake Dr SE, Prior Lake
- › 78': Lyndale Ave / W 67th St, Richfield
- › 78': Lyndale Ave / W 70th St, Richfield
- › 75': Vierling Dr E / CR 79, Shakopee
- › 75': TH 19 / 1st Ave NE, New Prague
- › 69': Lyndale Ave / W 68th St, Richfield

Safety

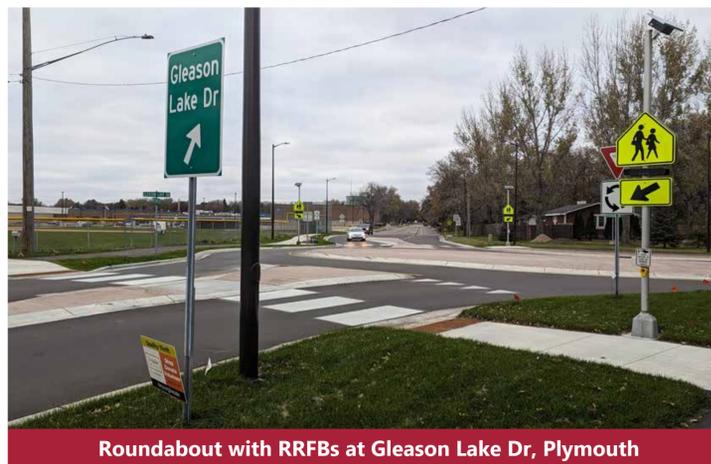
- › Roundabouts have a 15-20 mph vehicle design speed. Two consecutive roundabouts will help maintain lower speeds.
- › Only 2 pedestrian/vehicle interaction points instead of 6 at a traditional intersection, improving safety.
- › Consistently reduce traffic congestion, delays, and serious injury crashes.
- › Pedestrian crossings are half the distance of a traditional intersection.
- › Overall greater interaction (e.g. eye-to-eye contact) between drivers and pedestrians.
- › 87% fewer pedestrian injury crashes at a roundabout compared to a signalized intersection.¹

 **Give 'em a brake**
State law requires that traffic entering and exiting a roundabout **must yield to pedestrians** in the crosswalk.

Increased Yield Rates
83% of vehicles yield to pedestrians in single-lane roundabouts.²

Enhanced Pedestrian Crossings

Signage with flashing pedestrian beacons (RRFBs) are planned on all crossings of Sunset Drive to alert motorists when a pedestrian is crossing. These increase yield rates of vehicles to enhance pedestrian safety.



Roundabout with RRFBs at Gleason Lake Dr, Plymouth

 **Simplified Decision Making**
Crosswalks are set back to increase pedestrian visibility and allow drivers to focus on pedestrians crossing separate from vehicle traffic in the roundabout.



Sources 1. "A Study of the Traffic Safety at Roundabouts in Minnesota" - addendum, Minnesota Department of Transportation. 2018

2. "Report 572: Roundabouts in the United States," National Cooperative Highway Research Program. 2006.