Hwy 61/Hwy 43 Intersection FAQ

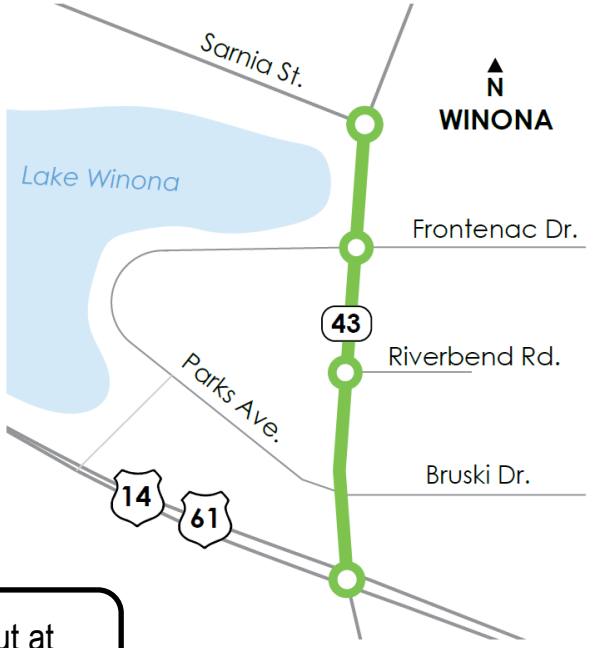
DEPARTMENT OF TRANSPORTATION

WHY IS A CHANGE NEEDED AT THIS INTERSECTION?

120 total crashes (including 2 fatal and 41 injury crashes) over the last 10 years. This is the 2nd highest crash cost intersection in southeast MN.

During morning and evening rush hour the traffic signal cycle length exceeds 3 minutes, causing long delays and traffic backups.

Pedestrians and bicyclists have a difficult time crossing because of long crossing distances and lack of accommodation.



MnDOT received $3.5 million in safety funding for a roundabout at Hwy 61/Hwy 43 in March 2020 based on the expected safety benefit.

WHY WILL A ROUNDABOUT WORK BETTER THAN A SIGNAL?

Traffic Signal

- Increased lanes and conflict points (i.e. a greater crash risk)
- Longer pedestrian crossings (~150 feet)
- More traffic delay & congestion than a roundabout
- Tangent approaches encourage speeding

Roundabout

- Fewer lanes and conflict points (i.e. lower crash risk)
- Shorter pedestrian crossings (~20-32 feet)
- Lower delay and shorter queues than a signal
- Curves force drivers to gradually slow down

ARE ROUNDABOUTS SAFER FOR PEDESTRIANS AND BICYCLISTS?

Compared to signalized intersections roundabouts have:

- ~88% fewer pedestrian fatal and injury crashes than signalized intersections
- ~25-60% fewer bicycle fatal and injury crashes than signalized intersections

Compared to signalized intersections multilane roundabouts have:

- ~70% lower crash rate for pedestrians
- ~50% lower crash rate for pedestrians and bicyclists

There have been no pedestrian fatalities in crosswalks at roundabouts in the United States since the advent of modern roundabouts over 20 years ago.

www.mankatoavereconstruction.com

DEPARTMENT OF TRANSPORTATION

Contact for more information:

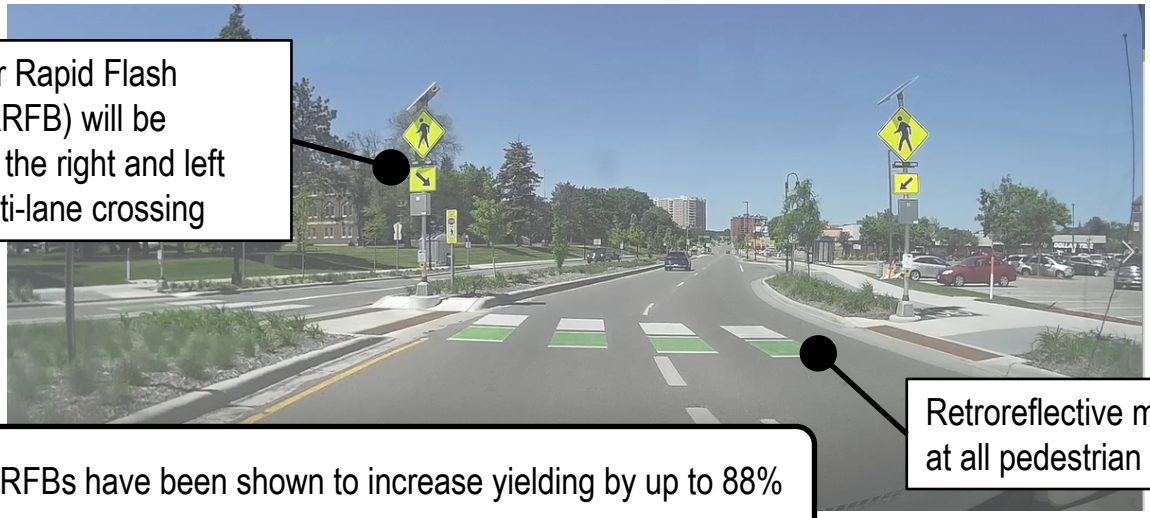
Chad Hanson, MnDOT PM › chad.hanson@state.mn.us › 507-286-7637

Hwy 61/Hwy 43 Intersection FAQ

DEPARTMENT OF TRANSPORTATION

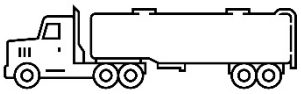
PEDESTRIAN & BICYCLE SAFETY MEASURES AT Hwy 61/Hwy 43 INCLUDE:

Rectangular Rapid Flash Beacons (RRFB) will be installed on the right and left of each multi-lane crossing



Retroreflective markings at all pedestrian crossings

- RRFBs have been shown to increase yielding by up to 88%



HOW WILL LARGE TRUCKS NAVIGATE THE ROUNDABOUT?

This roundabout will be designed to accommodate semi-trucks, oversized vehicles, and agricultural equipment. The roundabout will also have an inside truck apron to facilitate large trailer off-tracking.

CAN A ROUNDABOUT HANDLE THE EXPECTED TRAFFIC VOLUME AT HWY 61/HWY 43?

An urban multi-lane roundabout can handle **45,000** vehicles per day.

Currently the Hwy 61/Hwy 43 intersection has **35,000** vehicles per day

2,500 vehicles turn right daily from SB Hwy 43 to NB Hwy 61, effectively bypassing the roundabout and adding further available capacity to the roundabout.

- The proposed roundabout can handle approximately **10,000 more** daily vehicles before reaching capacity.

  The roundabout is being designed to allow for future modifications that would increase traffic capacity even further.

www.mankatoavereconstruction.com

DEPARTMENT OF TRANSPORTATION

Contact for more information:

Chad Hanson, MnDOT PM chad.hanson@state.mn.us 507-286-7637