

Public meeting Q&As

Thanks to everyone who joined us for the public meeting held at the Wilmot Recreation Complex on April 5, 2023 for the discussion about the possible implementation of a roundabout at Snyders Road and Nafziger Road.

For anyone who was not available to attend, we've provided answers to questions that we were asked that evening. You can find this information under FAQ section to the right of this page.

Why is the Region of Waterloo proposing a roundabout at this location?

In April 2003, Regional Council passed a by-law stating that roundabouts must be considered when:

- A new intersection is proposed
- Traffic signals are warranted
- Improvements are planned at an existing intersection to address safety or capacity problems.

A screening was completed for this location to assess the feasibility of a roundabout vs other forms of traffic control based on order of life cycle costs. Based on this initial screening, we found a roundabout should be explored as an option for this intersection. We then compared the feasibility of a roundabout vs. a traffic signal with a left turn lane.

The quantitative criteria used to compare traffic signals and a roundabout includes:

- safety performance for all users
- operational performance for motorists
- estimated capital (construction plus property) costs
- twenty-year Life cycle costs (including collision costs and operating costs)

We also considered criteria such as fuel consumption and vehicle emissions, effects on pedestrians, transit and emergency services, speed control, compatibility with adjacent land use, accesses and aesthetics.

Based on the criteria assessment, staff recommends a roundabout at this location due to the proven safety performance of roundabouts, in particular, the reduction in serious injury collisions.

How many collisions have occurred at this intersection?

Staff has reviewed the five-year collision history (2016 to 2020) at the Nafziger Road/Waterloo Street intersection and found there has been five injury collisions. The most dominant collision type is the rear-end type collision which represents 60 per cent

of the total. During this period, the intersection ranks 23 out of approximately 3351 intersections assessed. Intersections with a high ranking like this one are flagged as problem areas and countermeasures to improve the intersection are evaluated and placed in the Transportation Capital Program to be addressed in the near future.

What is the anticipated traffic at this intersection compared to other single lane roundabouts in the Region?

Snyder's Road & Nafziger Road — estimated daily total traffic is 14,172

Hergott Road & Ament Line — estimated daily total traffic is 6,045

Fountain Street & Blair Road — estimated daily total traffic is 22,817

How can you accommodate the volume of commercial truck traffic in this roundabout?

It is typical for commercial truck traffic to make use of roundabout intersections throughout Waterloo Region. The proposed single-lane roundabout, including the entrance and exit to the roundabout, would be designed geometrically to adequately accommodate all types of large commercial vehicles. Roundabout design will include a truck-turning apron with a mountable curb on the central island to compensate for a larger vehicle's off-tracking and reduce the points of conflict in the roundabout. Of the estimated daily total of 14,172 vehicles that use this intersection, 190 are commercial trucks.

Can this roundabout accommodate large agricultural equipment?

We discussed this topic with neighbouring property owners. These businesses/ property owners have detailed knowledge of the size and mobility of large agricultural equipment that would require passage through this roundabout location.

This roundabout, including the entrance and exit to the roundabout, would be designed geometrically to adequately accommodate large agricultural equipment. Roundabout design will include mountable curb and gutter with an adjacent asphalt surface behind the curb to provide the required width for large agricultural equipment.

The property owners we spoke with about this, did not express concern regarding the proposed roundabout project provided there is adequate width for large agricultural equipment to pass through.

The Region has constructed other roundabouts in rural settings (recently at Hergott Rd and Ament Line) where agricultural equipment uses the roundabout with no concerns.

What is the cost to build this roundabout?

The construction cost for this proposed roundabout is estimated at \$3,000,000.

The construction cost for new traffic signals with additional turning lanes is estimated at \$2,000,000.

The proposed roundabout would reduce injury collisions, reduce delays, have lower life-cycle costs, and reduce idling times resulting in fuel savings and reduced vehicle emissions. These construction costs will be funded by development charges.

What are the traffic impacts during construction?

People who use this intersection will be impacted during roundabout construction. Once we complete the detailed design, we'll develop construction staging and appropriate detours based on a detailed assessment of the construction scope and traffic management options. Our staff will work with Wilmot Township staff and emergency services personnel to develop staging and detour plans, and we'll communicate these plans to the public well in advance of construction.