

Purpose

- High traffic volumes and the number of collisions at the intersection of County Road 43 and South Gower Drive (County Road 22) have triggered the need for intersection improvements
- Peak hour traffic volume of 935 vehicles (for comparison, CR 19 and CR43 has 2075 vehicles)
- Two road improvement options are being considered:
 - Traffic signal with turning lanes option
 - Roundabout option



Roundabout Option



Traffic Signal Option

Traffic Safety

Community and traffic safety is the top priority for this project

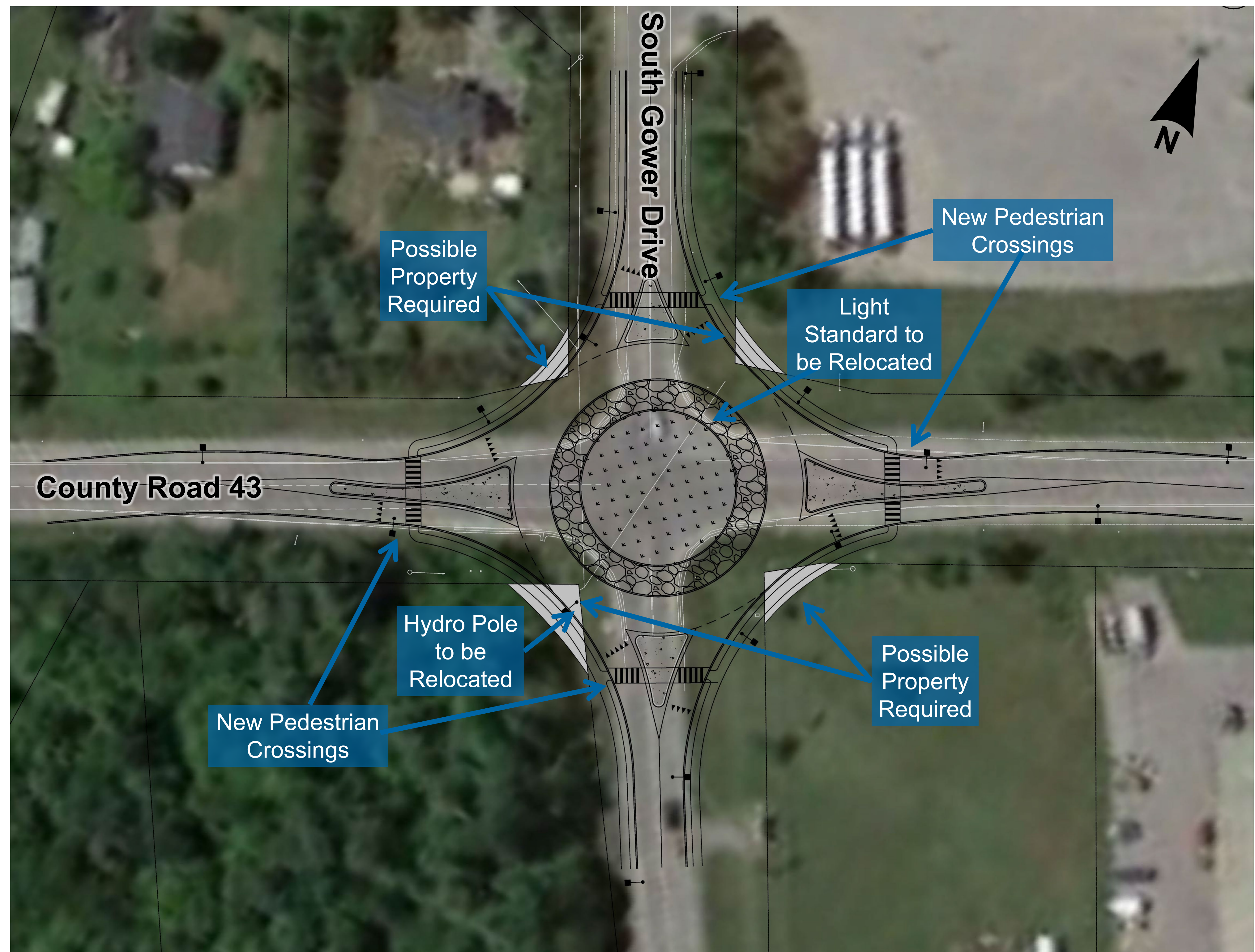
- The green line indicates the total number of collisions each year
- The bars indicate the type of collisions as:
 - Non-fatal injury
 - Property damage



Roundabout Option

Advantages

- Up to 82% reduction in collisions
- Reduces vehicle speed
- Decreases angle of contact for collisions
- Reduces risk of severe collisions (t-bone or head-on collisions)
- Typically lower maintenance and operating costs
- Allows for higher vehicle capacity
- Lower delays than signalized intersections
- Shorter pedestrian crossing distance (4 m at a time)



Traffic Signal with Turning Lanes Option

Advantages

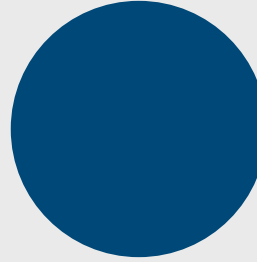
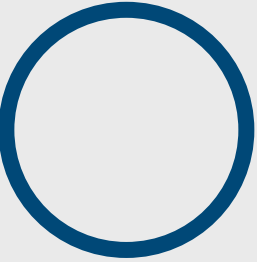
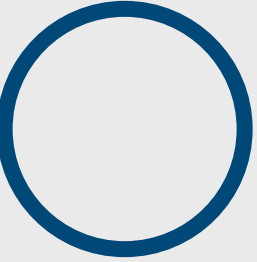
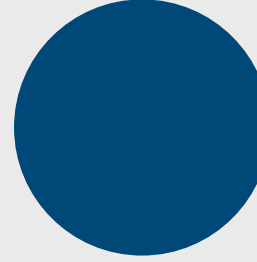
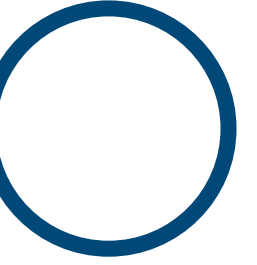
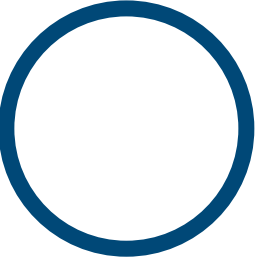
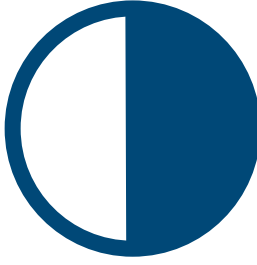
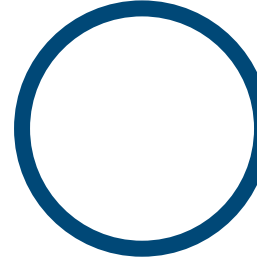
- Between 15-44% reduction in collisions
- Improved traffic and road safety
- Improved intersection operations

Disadvantages

- Potential for delays
- Potential disobedience of traffic signals
- Long pedestrian crossing distance (15 m) and potential conflict with left turning vehicles



Evaluating the Options

Intersection Improvement Options	Level of Service	Property Impacts	Capital Costs	Safety
Roundabout	 Least delay for all roads	 One utility pole, possible corner impacts	 \$1 to \$1.2 Million	 71% reduction in collisions 82% reduction in injuries
Traffic Signals/ Turning Lanes	 Little delay for CR43, some delay for South Gower Drive	 One utility pole	 \$700,000 to \$900,000	 44% reduction in collisions

Recommendation: Roundabout

- Best for safety, level of service, and traffic operations

Thank you for Attending!

Questions? Contact Us!

Please fill in the feedback form or you can email your comments to the contact information below by **August 6, 2019**. These comments will be considered as part of the design process.

Material from this presentation will be on the County website www.leedsgrenville.com

Contact Information

Phone: 613-342-3840 ext 2425

Email: roads@uclg.on.ca with CR43/22 in the subject line