

Traffic Circles vs. Modern Roundabouts: What's the difference?

Modern roundabouts are different from rotaries or traffic circles. These older designs are typically large, have high speed of entry, weaving within the circle, and low capacity. Neighborhood traffic circles are for traffic calming purposes, are generally small, consisting of only an island within the typical four-way intersection. A modern roundabout safely and efficiently circulates traffic by requiring motorists to yield on entry with no weaving in the circle. Speeds are low, capacity is high, and crashes are few and minor.

Project Schedule

Phase I (we are here)

- Transportation purpose and needs are identified
- Design alternatives evaluated
- Preferred plan selected
- Right-of-Way (ROW) needs identified
- Cost Estimate \$3.3 million
- **Public Hearing**
- Project Approval (Summer Season 2014)

Phase II

- Detailed Design & Contract Plans and ROW Acquisition (18-24 months)

Phase III

- Construction Begins

This improvement is included in the Department's FY 2014-2019 Proposed Multi-Modal Transportation Improvement Program. Our current engineering efforts are targeted to enable a contract letting in the middle portion of our current multi-year program contingent upon plan readiness, land acquisition, and funding availability through our future annual legislative appropriations.

Contact Information

Written questions and comments may be submitted during the Public Hearing or to IDOT no later than January 10, 2014. The correspondence should be sent to the address indicated below or emailed at DOT.IL58atWolfRAB@illinois.gov (email address is case sensitive).

Illinois Department of Transportation
Bureau of Programming
ATTN: Mr. Carlos Feliciano
201 W. Center Court
Schaumburg, IL 60196-1096

Next Steps: We want your input

Your comments are valuable and allow all relevant perspectives to be considered before IDOT approves a project. We invite you to provide your input on the project and design concepts at tonight's public hearing. IDOT is available to discuss the project exhibits and receive your written or oral comments.

IDOT will accept public comments for the 30 days following the hearing, and your input will be included in the public record for the project. In addition, stakeholder input is factored into the study recommendations in order to develop improvements that are consistent with community goals and objectives.

Public Hearing
December 11, 2013

Illinois Route 58 Golf Road
at Wolf Road (Cumberland Circle)

Open House
Public Hearing

Visit any time between
5:00pm and 8:00pm

Audio-visual
presentation

5:00pm to 7:30pm
(every half-hour)

Chippewa Middle
School

123 North Eighth Avenue
Des Plaines, IL 60016

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Work

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Next Steps

Contact Info



WELCOME

The Illinois Department of Transportation (IDOT) is conducting a Preliminary Engineering and Environmental (Phase I) Study for the purpose of improving the existing traffic circle for conversion into a modern roundabout. The intersection of Illinois Route 58 at Wolf Road is located in the City of Des Plaines, Cook County. This existing traffic circle has five legs under stop sign control and are under the jurisdiction and maintenance of IDOT: southwest Illinois Route 58 Golf Road, State Street (West), Wolf Road (North), east Illinois Route 58 Golf Road, and Broadway Street (South). All five legs accommodate PACE bus routes and are truck routes. Within the project limits, the existing traffic circle is surrounded by residential housing, churches, schools, parks, and businesses. METRA has a nearby train stop (Cumberland Station); however, it is not within the proposed project limits. Other existing features at the intersection include sidewalks on all legs except along the northbound side of the southwest leg of Golf Road.

The purpose of this Public Hearing is to:

- Present the Project Location and Existing Conditions
- Present the Purpose and Need for this Improvement
- Present the Proposed Scope of Work
- Provide an opportunity to review and comment on the proposed project plans for inclusion in IDOT's final report
- Discuss the Next Steps in the Phase I Process

Existing Conditions: Reported Vehicle Crashes (2005-2011)

421



44 (10.5%) Crashes with injuries

0 Fatalities

60 Minor Injuries (1 Pedestrian)

65 (15.4%) Crashes on wet pavement

307 (73%) Crashes during daylight hours

126 (30%)

Turning Crashes



111 (26%)

Rear End



91 (22%)

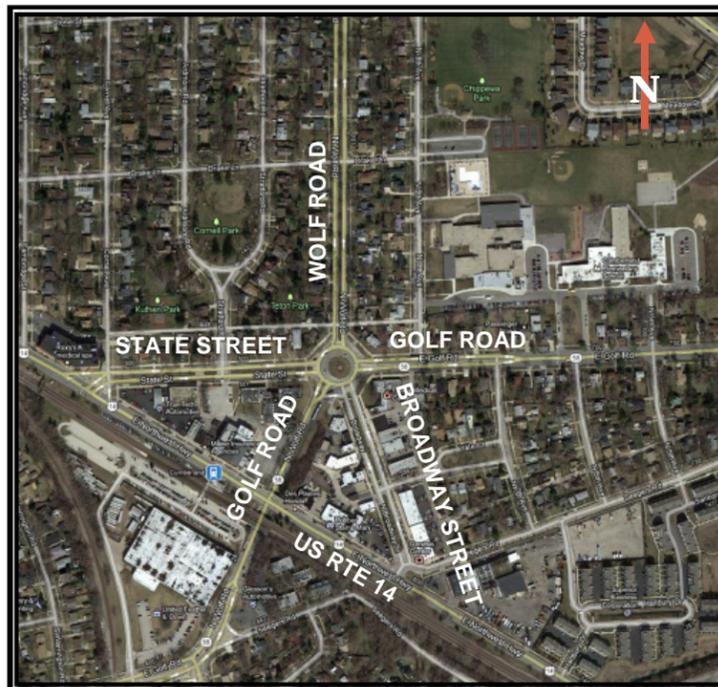
Sideswipe Same Direction



The existing intersection of Illinois Route 58 Golf Road at Wolf Road was created in 1928 with the recording of the H.M. Cornell Company's Cumberland Subdivision. Soon after, a traffic circle, also known as Cumberland Circle was constructed within the limits of the platted intersection.

The Cumberland Circle was one of several constructed throughout the United States in the first of the twentieth century. Like the others, this circle was built with the purpose of accommodating movement from multiple legs of the intersection in a manner that would be safer than a more traditional intersection layout. And throughout the years, Cumberland Circle has achieved this purpose by minimizing the severity of crashes and injuries associated with those crashes. Over the years, a once quiet residential area grew and traffic increased significantly.

At the Cumberland Circle, unclear lane assignments and poor signage and striping make it difficult for motorist to distinguish travel lanes. Excessive pavement within the circle and poor entry angles on all five legs provide little to no geometric guidance in and out of the traffic circle. All of these items contribute to a high number of low severity crashes as well as poor operations resulting in long delays. The proposed drainage plans will provide larger storm sewers along State Street, the roundabout and Broadway Street.



Traffic Circle

Traffic Control

- Some traffic circles use stop control, or no control, on one or more entries.

Speed Reduction

- Deflection is optional
- Circulating speeds are allowed to be higher than modern roundabouts.

Modern Roundabout

Traffic Control

- Yield control is used on all entries.

Speed Reduction

- Approaches are designed to slow vehicles and properly align them to travel through the circulating lanes
- Entering vehicles negotiate the roundabout at slow speeds.
- In the circulating lanes, vehicle paths are further defined by the central island.

Circulating Vehicles

- Circulating vehicles have the right-of-way.

Direction of

Circulation

- All vehicles circulate counterclockwise and pass to the right of the central island.

Proposed Scope of Work Modern Roundabout

The proposed scope of work for this project is to convert the existing traffic circle into a modern roundabout. In evaluating the conversion of this traffic circle to a modern roundabout, IDOT proposes the following scope of work while improving the safety and mobility of the intersection:

- Provide visible crosswalks for pedestrians and bicyclists
- Reducing the excessive footprint of the circle
- Clearly define lane assignments with the use of pavement striping, roadway signs, and landscaped splitter islands (medians) on all five legs
- Provide improved signage that encourages correct lane usage depending on travel destination
- Provide a truck apron for large truck wheels over-tracking
- Improve drainage within the project limits
- Provide adequate lighting within the project limits

The construction of the proposed improvement is expected to be built in stages, and will last 1 to 2 construction seasons. In order to expedite construction, detours of State Street and Broadway will be needed through various stages of construction. When State Street is closed, Broadway Street will be utilized to access U.S. Route 14 and conversely; when Broadway Street is closed for construction, State Street will be utilized to access U.S. Route 14. Access to driveways and businesses will be maintained throughout construction. These detours are expected to be in place for approximately 2 to 4 weeks at a time dependent on weather, utilities and construction site conditions. In order to build this improvement IDOT will require the acquisition of approximately 0.141 acres of temporary construction easements for the reconstruction of driveways, sidewalk removal & replacement, and drainage improvements. There will be no significant environmental impacts as part of this construction process and acquisitions.

