

Gilmer Road and Midlothian Road Intersection

The Lake County Division of Transportation has initiated a Phase I preliminary engineering study for the improvement of the intersection of Gilmer Road and Midlothian Road in Hawthorn Woods and unincorporated Lake County. The purpose of the study is to evaluate alternatives to improve safety and traffic operations while minimizing environmental impacts. A conventional signalized intersection and a modern roundabout intersection will be evaluated in the course of the study.

What is the Purpose of Public Meeting #2?

- Present and explain the alternatives being considered
- Explain differences between the alternatives
- Solicit public input on the alternatives
- Provide educational materials related modern roundabouts
- Aid Lake County in determining a preferred alternative

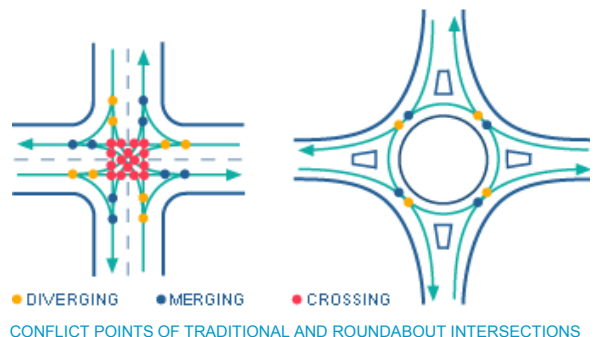
What Was Considered in the Alternatives Analysis?

The proposed alternatives considered for implementation must adhere to the design standards of the Lake County Division of Transportation for Gilmer Road and the Illinois Department of Transportation for Midlothian Road. In addition, the operational goal for the proposed alternatives is that the intersection capacity meet a minimum Level of Service (LOS) of C for the AM and PM peak traffic hours, which equates to an average intersection delay of 21–35 seconds per vehicle for the 2040 design year. The “No Action” alternative which maintains the same configuration as today does not meet the operational goal, with a LOS F (82.8 sec/veh) in the AM peak hour and LOS E (62.1 sec/veh) in the PM peak hour. Primary criteria considered in the Alternatives Analysis also included:

SAFETY ISSUES	ENVIRONMENTAL IMPACTS	PEDESTRIAN & BIKE ACCESS	VISUAL CHARACTER
COMMERCIAL IMPACTS	CONSTRUCTION COST	EMERGENCY VEHICLE ACCESS	MAINTENANCE
RESIDENTIAL IMPACTS	UTILITY RELOCATIONS	EFFECT OF CN RAILROAD	CONSTRUCTABILITY
RIGHT-OF-WAY REQUIRED	ACCESS MANAGEMENT	FUTURE IMPROVEMENTS	ENERGY CONSUMPTION

Are Modern Roundabouts Safe?

Many site specific factors must be taken into account when analyzing either signalized or modern roundabout intersections. Some conditions such as high or low traffic volume extremes may preclude one or the other from consideration. Modern roundabouts are not necessarily the best solution in every situation, but when appropriately analyzed and designed they are typically safer than traditional signalized intersections. The primary reasons for improved safety are the reduction in the number of possible Conflict points along with lower operating speeds in the intersection. Crashes that do occur in modern roundabouts typically result in less property damage and fewer injuries. Pedestrians and bicyclists also benefit from the lower operating speeds and a wide center median refuge that enables them to only have to cross traffic approaching from one direction at a time.



Public Input

Tonight:
Speak with project staff or provide a written comment

Mail:
Pre-addressed forms are available for written comments to be mailed to the Lake County Division of Transportation

Website:
Comments can be provided on the project website at www.improvegilmermidlothian.com

Comment Deadline:
May 1, 2013

Gilmer Road and Midlothian Road Intersection

Alternatives Comparison

The proposed alternatives both contain additional accommodations for pedestrians and bikes at the intersection. In addition, the proposed right-of-way (ROW) has been included in both alternatives that is required to construct a multi-use path between the SW project limit on Midlothian Rd. and the intersection, and from the intersection to Chevy Chase Rd. along Gilmer Rd. The final location of proposed multi-use trails will be determined by the units of local government that will be responsible for the construction cost and ongoing maintenance of the trails.

Signalized Alternative



- Requires 2 through lanes in each direction on Gilmer Rd.
- Requires approx. 3.0 acres of proposed ROW
- Requires 2 residential displacements for prop. ROW
- AM Peak Hour LOS C* (29.6 sec/veh)
- PM Peak Hour LOS C* (30.5 sec/veh)
- High operating speeds for through traffic
- High angle conflict potential
- Pedestrians/bikes protected by signalized crosswalk
- Approx. 225,000 SF of total pavement area constructed
- Access at Shell eliminated from NE and to SE
- Access at Road House eliminated from SE and to SW

* Signalized LOS from analysis using HCM

Roundabout Alternative



- Requires two lanes in roundabout and on approaches
- Requires approx. 1.1 acres of proposed right-of-way
- AM Peak Hour LOS A/B** (8.3–13.6 sec/veh)
- PM Peak Hour LOS A/B** (9.0 – 14.4 sec/veh)
- Low operating speeds for all movements
- Fewer variables for driver to consider upon approach
- No high angle conflicts
- Pedestrians/bikes cross one direction of traffic at a time
- Approx. 160,000 SF of total pavement area constructed
- Full closure & detour required for 4 weeks in construction
- Access is maintained to and from all businesses

** Range of Roundabout LOS from analysis using HCM, ARCADY, and SIDRA

Next Steps

The comments received from Public Meeting #2 along with the analysis to date will be taken into consideration in the determination of a preferred alternative. The design for the preferred alternative will be refined to determine the specific right-of-way parcels to be acquired. The environmental impacts of the preferred alternative and the required mitigation will be determined. A public hearing will be conducted in summer of 2013 to present the details for the preferred alternative.