Modern Roundabouts

FACT SHEET

Modern Roundabout

A modern roundabout is a one-way, circular intersection where traffic flows counter clockwise around a center island. Modern roundabouts use yield signs rather than traffic lights to control vehicles entering the intersection. This intersection design only has eight potential conflict points, opposed to a traditional "four-way" signalized intersection which has 32 potential conflict points.

Driving in a Modern Roundabout

To drive in a modern roundabout, follow these simple steps: slow down as you approach the intersection, yield to traffic already in the circle, enter the circle and follow the loop in a counter clockwise direction, and then make a right turn to exit the roundabout. Road signs, pavement markings and its design help guide drivers through a modern roundabout.

Advantages of a Modern Roundabout

A modern roundabout can help save driver and pedestrian lives, as well as greatly reduce the number and severity of crashes. A modern roundabout saves commute time by increasing traffic capacity 30% to 50% even with vehicles traveling at slower speeds. The community also benefits from a safer intersection that lasts more than twice as long as traffic lights that have to be installed, maintained, adjusted, and repaired. There is also a reduction in air pollution and an increase in fuel savings because vehicles are not idling at traffic lights.

Contact Information

For additional information on modern roundabouts, watch a short demonstration on YouTube or contact TxDOT Public Information Officer Kelli Reyna at 512-832-7060 or kelli.reyna@txdot.gov.

Please slow down and be alert and extra cautious in work zones

FM 1626 (Kyle Parkway) at Kohlers Crossing

Anticipated Letting Date: TBD/September 2016

Anticipated Construction Date: TBD/December 2016

Construction Costs: $545,000 (estimated)

Construction Duration: 3-6 months?

Modern Roundabouts Frequently Asked Questions

- ***What is a roundabout?*** A roundabout is a circular intersection where vehicles travel counterclockwise around a raised center island. Vehicles entering the roundabout yield the right-of-way to traffic already in the roundabout.
- ***Are roundabouts the same as traffic circles?*** Roundabouts are not the same as traffic circles. Roundabouts differ in that speed is controlled at the approaches to the intersection by adding deflection prior to entering the roundabout. This design feature communicates to the driver to slow down prior to yielding. The deflection also aligns entering vehicles into the correct lanes. In short, modern roundabouts are smaller, have sharper curves to enter, and have lower operating speeds.
- ***Why does this intersection need a roundabout rather than installing traffic signals?*** Roundabouts reduce the number of severe and fatal crashes typically found at signalized intersections. Roundabout accidents are more often side-swipe rather than right-angle, left-turn, and head-on collisions typically experienced at high speed traditional intersections controlled by stop signs or traffic signals. A traffic modeling study was performed for the Kohlers and FM 1626 intersection. The study compared a signalized, roundabout, and no-build alternatives against future growth of the area. The roundabout was more efficient at handling higher traffic volumes, reduction in delays, and improving travel times as future development continues.
- ***What are other benefits of roundabouts?*** A few of the benefits include:
    - No signal equipment to install or repair
    - Time Savings due to reduction in delays
    - Reduction in fuel consumption and vehicle emissions from sitting at intersections.

- ***Will construction of this project conflict with the ACC Hays Campus academic school year?*** Construction is not anticipated to be concurrent with the opening of the new Campus. As the design progresses, a project schedule will be available on the TxDOT webpage for public viewing.
- ***Will there be additional opportunities to learn about driving roundabouts?*** TxDOT foresees additional meetings as opportunities to offer education and public awareness on using roundabouts. Our Agency understands modern roundabouts are new to Central Texas, so education and getting started on the right foot is essential.
- ***Will right-of-way or easements be required for constructing this project?*** There is no anticipated need for additional right-of-way or easements. The footprint of the improvements can be constructed within right-of-way.
- ***Will the roundabout address the usage by pedestrians and bicyclists?*** The roundabout will provide an accessible route, so that the pedestrians may cross either roadway. Bicyclists will have two options for using the roundabout. First, they may use exit the roadway onto the sidewalk using the bike ramp. Once on the sidewalk, the bicyclists will use the crosswalks as a pedestrian. The 2nd option for bicyclists, advance rider, is to enter the roundabout in the appropriate lane. The operating speed of the roundabout will be low enough for an advance bicyclist to handle.
- ***Are there any new features that drivers will encounter?*** The will be pavement markings and warning signs that are specific for roundabouts. The graphics on these signs and markings communicate to the user the roundabout and lane configuration.
- ***Is the Kohlers Crossing roundabout designed for tractor trailers?*** Yes, the roundabout will be designed for tractor trailers. A truck apron will be constructed on the island to permit the truck's trailer to overhang. However, with all intersections, drivers should always use caution around tractor trailers making turns due to blind spots.