Implementation of Roundabouts: City of Greenwood’s Experience

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Implementation of Roundabouts: City of Greenwood’s Experience

HOW DID WE START?

Mark Richards, PE

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Main Street and Averitt Road intersection
Main Street and Averitt Road Roundabout
WHERE ARE WE GOING NOW?

Mark Richards, PE

Trent Newport, PE, LS

Jay Vorisek, PE
Smith Valley and SR 135 intersection
Smith Valley and SR 135
Roundabouts
Smith Valley and Madison Avenue intersection
Smith Valley and Madison Avenue Roundabout
WHAT HAVE WE LEARNED SO FAR?

Mark Richards, PE

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Roundabout planned for Greenwood’s new I-65 interchange

By JESSICA PETE, jpete@dailyjournal.net
DAILY JOURNAL staff writer
First Posted: April 23, 2015 - 8:56 pm
Last Updated: April 23, 2015 - 8:56 pm

The city is planning a roundabout at Worthsville and Sheek roads. The idea is to show first-time visitors pulling off the interstate that Greenwood is a progressive city.

A two-lane roundabout will add about $500,000 to a roadway project that’s estimated to cost $20 million, community development assistant Mark Richards said.

Greenwood is widening Worthsville Road to four lanes between U.S. 31 and Interstate 65, where a new exit will be built.

The extra expense of a no-stop intersection should be well worth it, redevelopment commission president Lee Money said.

“Those are questions good ideas,” Money said. “Those are questions we should consider and answer ourselves.”

A roundabout will make the interchange safer, reduce the number of accidents and move traffic faster, he said. Vehicles won’t collide with oncoming traffic, and reduce the number of dangerous collisions that occur when a vehicle turning left is struck by another.

Roundabouts can also be built fairly quickly, typically requiring 60 days or less once the intersection is closed.

Greenwood will complete two roundabouts this year but has several more in planning stages along Smith Valley Road and the city’s east-west corridor. Franklin is considering up to five roundabouts along the city’s east-west corridor, and Whiteland is planning to move over one four-way stop that frequently backs up during peak hours.

The Greenwood Redevelopment Commission decided by consensus Tuesday to add a roundabout to the design of the widened road. Board members didn’t take a vote, but all agreed on the roundabout.

The city also plans roundabouts at Main Street and Avanti Road and at Stones Crossing and Honey Creek roads. Johnson County has a roundabout at Morgantown and Fairview Roads in the Center Grove area and plans more.


Additional Intersections slated for conversion

By STEVE GARRETT, sgarrett@dailyjournal.net
DAILY JOURNAL staff writer
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Two new roundabouts will be built in Johnson County this year, but a dozen more are planned during the next five years.

Expect to see even more 90-degree turns as intersections become round in the future.

Roundabouts are cost-effective to build, safer than traditional four-way intersections and are a great solution for intersections that don’t exactly line up in a cross, engineers said.

Two new roundabouts will be built in Johnson County this year, but a dozen more are planned during the next five years.

Roundabouts are cost-effective to build, safer than traditional four-way intersections and are a great solution for intersections that don’t exactly line up in a cross, engineers said.

They keep traffic moving more quickly than stop signs or stoplights at busy intersections and reduce the number of dangerous collisions that occur when a vehicle turning left is struck by another.

Roundabouts can also be built fairly quickly, typically requiring 60 days or less once the intersection is closed.

Greenwood will complete two roundabouts this year but has several more in planning stages along Smith Valley Road and the city’s east-west corridor. Franklin is considering up to five roundabouts along the city’s east-west corridor, and Whiteland is planning to move over one four-way stop that frequently backs up during peak hours.

Drivers won’t be able to use the interchange at Main Street and Avanti Road in Greenwood this summer, which will be closed for construction after school lets out for winter. Greenwood City engineer and director of community development services Mark Richards said. While the intersection is torn up, the city will do paving work to U.S. 31 and put in a median that will prevent people from making left turns into Daryl Queen, which often causes traffic to stall in the intersection.

Greenwood is finishing the roundabout at Sheek and Worthsville Roads, which has been under construction since last year as part of the ongoing Worthsville Road widening project. That project has taken considerably longer, since the city opted to build the roundabout in quarters in order to keep the intersection partially open for traffic, Richards said.

The continuing construction at Worthsville Road caused a delay in another roundabout project, since Whiteland opted not to build its first roundabout at Graham and Whiteland roads yet. The project originally was scheduled for this year, but the state has started major projects on Interstate 63 this year and drivers have been using Graham and Whiteland roads to get around the closures at Worthsville Road, said Greenwood engineer vice president Trent Newport, whose firm designed the roundabout.

Instead of being built this summer, that roundabout has been delayed until next spring, Newport said.

http://www.dailyjournal.net/view/local_story/Additional-intersections-planned_for_Greenwood_142983634... 3/2/2016
Confused by roundabouts?

By Corey Elliott elliottc@dailyjournal.net
Last Updated: July 20, 2015 - 8:28 pm

One of Greenwood’s busiest intersections should become safer and let traffic move through more smoothly, but residents need to understand how to use it.

The city decided to install a roundabout at Main Street and Arvand Road after a traffic study showed more than 30,000 vehicles pass through the intersection every day between 6 and 9 a.m. and 4 and 7 p.m.

After several months of construction, the roundabout is set to be completed Aug. 1.

Residents are encouraged to attend a meeting at 6 p.m. Wednesday at the city building, 300 E. Madison Ave., to learn about it.

CrossRoad Engineers will give a presentation providing information and answer the public’s questions regarding the new roundabout.

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Roundabout coming to busy intersection

By Corey Elliott elliottc@dailyjournal.net
Last Updated: January 15, 2016 - 7:26 pm

Every day, residents from three Greenwood subdivisions converge along Yorktown Road and sit at the stop sign, waiting for a break in traffic to turn onto Smith Valley Road.

The city is planning to build a roundabout at the intersection, with the goal of ending that daily routine of waiting and changing an accident.

Construction of the roundabout will begin in June 2017, with the roundabout likely opening in August of that year, city engineer Mark Richards said. The roundabout will take the same amount of time to construct as the new one at Arvand Road and Main Street, which was completed last summer, Richards said.

In 2011, a traffic study revealed the need for improvements at the intersection of Smith Valley and Yorktown roads, near the Barrington East and new subdivisions, Richards said.

“Is one of the top intersections that needs improvement,” Richards said.

The design and planning of the roundabout will cost about $1.6 million and will be funded through a federal grant. The city of Greenwood will have to pay about $120,000 for engineering costs and the land needed to build the roundabout, Richards said. Construction will cost about $1.35 million, and 80 percent will be funded through a grant. The city will cover about $270,000 of the construction costs, Richards said.

In the next five years, the city of Greenwood is looking at several intersections that could be transformed into roundabouts, including Yorktown and Arvand roads, Monahan and Main streets and south of the current Greenwood Middle School at Smith Valley Road and Monahan Street, officials said.

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• The Advantages of Roundabouts
• How to Navigate Roundabouts
• Update on Main & Averitt Roundabout Project Schedule
QUESTIONS?

Mark Richards, PE

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