

June 7, 2023

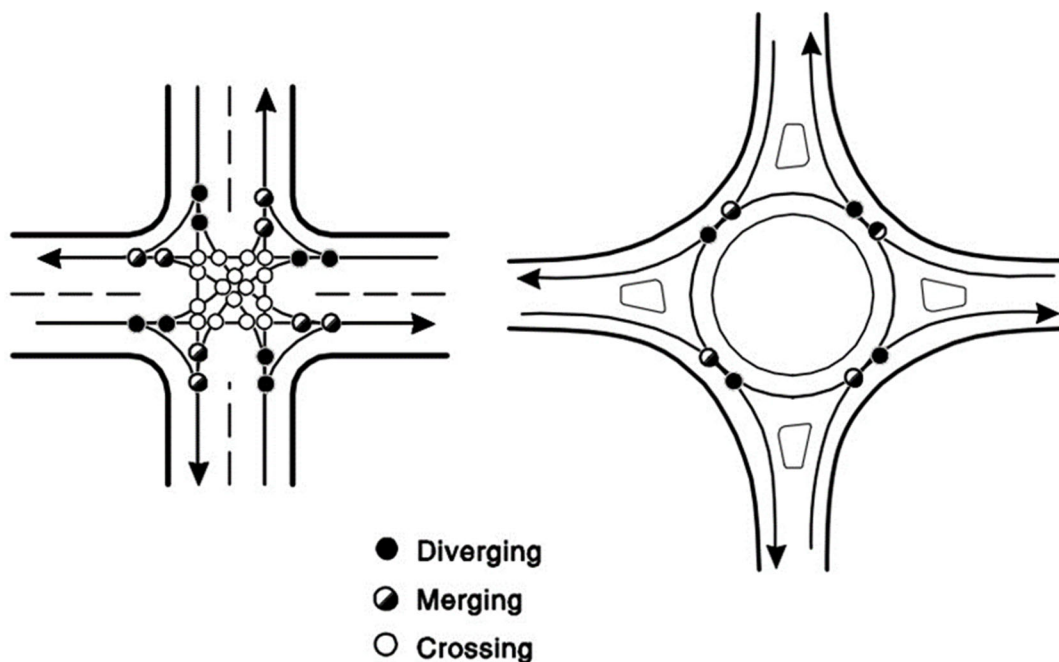
Dear Commissioner's,

I am proposing the county installs a modern single lane roundabout in the intersection of Marcus Street and Kurtz Lane in Hamilton. I am a school bus driver for Hamilton and I watch the congestion of this intersection with anticipation of an accident occurring. Every morning and afternoon both vehicle and pedestrian traffic from the high school and off of East Side Highway this intersection becomes very congested and unsafe. In this letter I will be overviewing the safety of roundabouts, how they increase capacity, reduce delay, and improve traffic flow. As well as the long-term cost effectiveness and the environmental benefits to roundabouts.

The circular shape of a roundabout is designed to control the direction of traffic and reduce speeds to 15 to 20 mph. This reduces the likelihood of a t-bone or head on collisions. During morning and afternoon hours this intersection is so congested that most of the time it's better to flow with traffic than to cross traffic which is dangerous. Studies have shown roundabouts to be safer than traditional stop sign or traffic signal intersections. They reduce injury crashes by 75 percent at intersections where stop signs or traffic signal were previous, according to a study by Insurance Institute of Highway Safety. Federal Highway Administration have shown that roundabouts achieve 37 percent reduction in overall collisions, a 75 percent reduction in injury collisions, a 90 percent reduction in fatality collisions, and a 40 percent reduction in pedestrian collisions. The few collisions that occur in roundabouts are minor and cause few injuries since they are at such low speeds.

A roundabout reduces the number of points where vehicles can cross paths and eliminates the potential for right-angle and head-on crashes. The lower speeds give drivers more time to react.

The diagram below compares a traditional intersection and a roundabouts conflict points.



Studies by the Federal Highway Administration have found that roundabouts increase traffic capacity by 30 to 50 percent compared to traditional intersections. They are designed to promote continuous, circular flow of traffic. Roundabouts move traffic through an intersection more quickly, and with less congestion on approaching roads. Kansas State University measured traffic flow before and after conversion to roundabouts, and in each case led to a 20 percent reduction in delays. The Insurance Institute of Highway Safety found roundabouts contributed to an 89 percent reduction in delays and 56 percent reduction in vehicle stops.

The efficiency of roundabouts because fewer vehicles have to sit and wait at a stop sign or traffic light benefit the environment. If vehicles are stopped and idling, they are consuming more gas and spewing greenhouse gases into the air. In 2022 the American Society of Civil Engineer's monitored vehicles at roundabouts and calculated the average fuel consumption involved. They concluded drivers saved as much as \$4 million in fuel each year at every intersection that was converted to a roundabout.

Finally, the cost difference between building a roundabout and building a traffic signal is very comparable. A roundabout eliminates hardware, maintenance, and electrical costs associated with traffic signals, which long-term costs can reach between \$5,000 and \$10,000 per year. When an intersection is completely reconstructed, the construction costs of a roundabout versus a signalized intersection is considered about the same. The estimated cost of a single lane roundabout typically ranges from \$1.2 to \$1.8 million. A roundabout may need more property within the actual intersection, but often takes up less space on the streets approaching the roundabout.

As a school bus driver and citizen of Ravalli County I really care about the safety of this intersection. It makes my heart stop every time I see a highschooler/pedestrian running across this intersection to get to school. I don't want to see an accident happen here when we can prevent it from happening. The potential for saving lives is too significant to ignore. Hamilton and the surrounding area are growing and the benefits of a roundabout here out way not changing this intersection. I've given you the facts from several different sources about safety, efficiency, and the cost of roundabouts so I hope and pray you will make the right decision.

Thank you,

Shasta Bahr

Resources

wsdot.wa.gov/travel/traffic-safety-methods/roundabouts. Accessed 10 May 2023.

www.dot.ga.gov/GDOT/Pages/Roundabouts.aspx. Accessed 10 May 2023.

highways.dot.gov/sites/fhwa.dot.gov/files/2022-06/fhwasa14097.pdf. Accessed 12 May 2023.

wisconsin.dot.gov/Pages/safety/safety-eng/roundabouts/faq.aspx. Accessed 12 May 2023.

<https://www.asce.org/publications-and-news/civil-engineering-source/civil-engineering-magazine/issues/magazine-issue/article/2021/03/modern-roundabouts-boost-traffic-safety-and-efficiency>. Accessed 12 May 2023.