

### Why cities should consider roundabouts



By Wes Guckert | OCTOBER 25, 2023

COMMENTARY | An alternative to traditional signalized intersections, roundabouts can substantially offset the dangers posed by larger vehicles, ensuring that any potential impact is less severe due to moderated speeds and oblique angles of collision.

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As a nation, the U.S. seems unable to shake its love affair with massive cars, a trend that has only intensified with each new generation of vehicles. In 2022, 80% of all new cars sold in the U.S. were SUVs and trucks—a trend that shows no sign of slowing. By 2027, the SUV market is projected to grow from a current level of \$886 billion to \$1.2 trillion.

There's a clear economic rationale behind this trend: Larger vehicles, while not much more expensive to produce, command a significantly higher sale price. But while they may offer a protective cocoon to their occupants, their larger size poses an increased risk to other road users. Sadly, the rise of bigger, heavier and more powerful vehicles has been accompanied by an alarming rise in fatalities.

Here's where roundabouts can play a major role. Roundabouts, or traffic circles, send vehicles in a single direction around a central island. They can substantially offset the dangers posed by larger vehicles, ensuring that any potential impact is less severe due to moderated speeds and oblique angles of collision.

#### The Roundabout: One Method to Prevent Fatalities

Roundabouts present an innovative alternative to traditional signalized intersections, offering several safety and operational advantages. One of their most significant benefits is a reduction in potential conflict points, meaning vehicles have fewer opportunities to collide. This feature, combined with the

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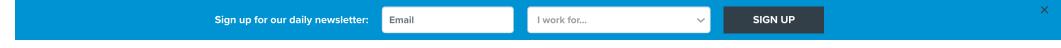




inevitable slowdown of vehicles entering and navigating the roundabout, allows drivers more reaction time, potentially minimizing the severity of accidents.

The roundabout design ensures a one-way traffic flow, eliminating high-speed, right-angle collisions common at signalized junctions. The continuous movement of vehicles, meanwhile, reduces the likelihood of rear-end collisions. When accidents do occur, they typically involve indirect angles of impact, leading to fewer severe injuries and property damage. Roundabouts also eliminate the possibility of red-light running, a dangerous behavior that can result in high-speed T-bone collisions.

Beyond safety, roundabouts enhance traffic flow. Off-peak hours especially benefit from smoother traffic flows, minimizing congestion and gridlock risks. There is one exception, though. Where there are significant pedestrian movements, such as in highly populated, walkable urban areas, roundabouts are not encouraged.



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equating to 10,445 individuals, occurred at intersections. The same year, an estimated 127,000 injuries were attributed to red-light running crashes.

European counterparts in adopting roundabouts. The U.K. alone has 25,000 roundabouts, while France and Spain boast more than 30,000 each. That stands in stark contrast to the 10,000 in the U.S.

#### The Need for State and Local Government Involvement

With three-quarters of the U.S. road network under the stewardship of local governance, the onus is squarely on state and local entities to improve road safety standards. Some have been proactive, setting ambitious Vision Zero targets—a global strategy aiming to eliminate all traffic-related fatalities and severe injuries. The journey has been challenging, however, with the pressures on local transportation departments often leading to a troubling preference for congestion alleviation over safety.

In 2000, Washington state pioneered the adoption of the Vision Zero, emphasizing high-visibility enforcement and engineering to decelerate traffic speeds, and states such as Minnesota and Maryland followed suit. Washington also legislated the Complete Streets program, mandating its principles of planning, designing and building safe streets for all users, for projects over \$500,000. Florida recognized a similar policy in 2014, though its adoption isn't uniform across the state.

Despite such initiatives, there has been no substantial decrease in traffic fatalities. Rather than prioritizing safety, many state transportation departments focus on construction. According to the American Road and Transportation Builders Association, states committed \$36.4 billion in highway and bridge formula funds from the Infrastructure Investment & Jobs Act to support more than 24,000 new projects through July 31, 2023. This is in addition to \$53.5 billion in investment and over 29,000 new projects supported in FY 2022. Nearly half of those projects (46%) were for repair or reconstruction work, while an additional 21% of funds were used for adding capacity, such as a new lane or major widening, to an existing roadway. Only 1% was designated for bike and pedestrian facilities.

It's a predicament I've emphasized repeatedly: The objectives of safety, capacity and congestion alleviation are often incompatible. Elevating safety invariably mandates speed reduction. Regrettably, under various pressures, many local transportation departments lean toward choices that alleviate congestion at the expense of safety, particularly at intersections.

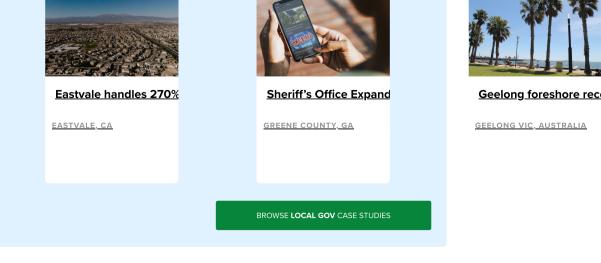
Despite some hesitation, the U.S. is more often considering roundabouts, adding 500-700 in each of the past 15 years. States such as New York and Virginia have adopted roundabout-first policies.

It's time for comprehensive planning, design and driver education to align with the broader aim of Vision Zero. Only through this alignment can the full potential of roundabouts be realized. We must translate this vision into tangible action, ensuring safer roads for everyone. The question that remains: Are we ready to make this vision a reality?

Wes Guckert is president and CEO of <u>The Traffic Group</u> a service-disabled veteran-owned small business, Maryland-based traffic engineering and transportation planning firm.

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# Legacy programs stymie Biden's efforts to boost equity in infrastructure spending

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By Daniel C. Vock | OCTOBER 25, 2023

Communities of color benefit when federal agencies pick transportation projects, but most infrastructure money is doled out using old rules that favor whiter areas, according to a new report from the Urban Institute.

TRANSPORTATION STATE AND FEDERAL RELATIONS INFRASTRUCTURE

A new report finds that federal agencies have heeded one of President Joe Biden's top promises for infrastructure spending: that it be directed to help communities of color.

But that success has largely been limited to the few areas where federal agencies get to choose projects, not to the vast majority of infrastructure spending that Congress allocates with decades-old formulas that automatically give states and localities a predetermined share, according to the Urban Institute.

The report is one of the most extensive looks yet at how well federal agencies are living up to the promises of bringing infrastructure improvements where they are needed most. Urban Institute researchers examined federal infrastructure spending through dozens of programs during 2022, the first full year Biden's infrastructure law was in place. They tracked where the money was spent, down to the neighborhood level. And they analyzed how well that corresponded to the infrastructure needs, income levels and demographics of those areas.

The team also found:

 Counties that have relatively few employees won fewer competitive federal grants than counties with more bureaucratic capacity. Doubling the number of local transportation staff increased a county's chances of winning one type of major federal grant by 31%. "There seems to be a

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very clear relationship between capacity and winning a grant, no matter what the program, no matter the location of that county or state," said Tomi Rajninger, one of the report's authors.

- Federal competitive grants disproportionately went to higher income counties, which could be a sign that the process of applying for federal infrastructure grants is too cumbersome for lower income jurisdictions.
   Researchers found, though, that the more affluent counties that won those federal grants tended to use them to improve lower income communities within their boundaries.
- Programs designed to improve broadband service and transit do appear to be targeting places that show a significant need for those upgrades. But housing programs "have a less clear relationship" with needs by local residents.

The report, though, highlights some of the difficulties facing the Biden administration as it tries to help communities of color or low-income

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Justice40 initiative, making it difficult to determine whether they are actually living up to that promise.

researchers wanted to use other ways to measure equity, because the administration's definition was "nebulous." Instead, they looked at whether places with the highest levels of specific needs received funding to address those needs.

One of the Biden administration's most promising ways for addressing inequities, they found, was through competitive transportation grants. That includes programs like the popular Raise Grants that help states and localities build multimodal projects that have a major local or regional impact.

"Many of the competitive transportation dollars are genuinely focused in communities of color, likely following agency equity plans they have developed over the past few years," the researchers wrote. "But there is little evidence that the federal government provides progressively more funding to communities with the largest share of people of color or low-income populations, compared to the rest of the country. The federal government could further target grantmaking for these areas."

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On the other hand, Congress allocated the vast majority of spending in the 2021 infrastructure law to programs that use decades-old formulas to distribute money.

Money for highways, broadband and water "tend to disproportionately benefit states with lower shares of people of color because of their emphasis on providing minimum funding to states with low populations and providing substantial support to states with more roads," the researchers said.

"The result is a doubling down on existing inequitable patterns of infrastructure investment. This is a concern for highway funding especially, given that most federal road funding can be leveraged for other uses, such as public transportation or pedestrian and bicycling projects; states with a higher share of people of color are missing out on a fair share of funding that they can use for the transportation investments of their choice," they argued.

What's more, the advantage for disproportionately white states isn't just a matter of those states having more rural highways that need upkeep, Freemark said. "We actually found that there was no statistical difference in the amount of money that was going to states with more or fewer highways per capita," he explained.

The report also highlighted other ways that older formulas don't match current needs. For example, the Department of Housing and Urban Development distributes money for public housing. But with so little public housing being built in recent decades, those funds often favor places that built housing in the 1960s and 1970s, rather than the places that need housing now.

In other words, the formula programs tend to reinforce current conditions rather than prepare states and localities to make needed changes. They "are not





designed to assist communities that want to make change or require communities to address longstanding exclusion—instead, they often reinforce decades of policies rooted in systemic inequity," the researchers wrote.

More detailed information on how various infrastructure funds were distributed at

#### the local level can be found here. 🖨

Daniel C. Vock is a senior reporter for Route Fifty based in Washington, D.C.

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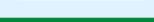




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