Modern Roundabouts | A Livability Fact Sheet

Myth-Busting!

"Roundabouts require too much land."

Roundabouts, which can be installed on virtually any size street, range from single-lane mini-roundabouts to two lanes or more.⁷ A single-lane roundabout can be as narrow as 80 feet in diameter, measuring across the circle from the outside edges of the vehicle lanes.

Also, a well-placed roundabout can keep a road from needing to be widened, saving up to 10 million dollars per mile in land and construction costs.⁸

as low as 15 mph — also allow more time for drivers and pedestrians to react to one another, which reduces the chance and consequences of error. A bicyclist can be given the option of riding in the lane of slow-moving cars or crossing as a pedestrian.¹¹

Real Possibilities

Walkable and Livable

Communities Institute

AARP

"Roundabouts hurt business."

The lower the speed of traffic through an area, the easier it is to park a car, walk, bicycle and locate and approach a business. Since roundabouts are also quieter than conventional intersections, any outdoor seating nearby is more enjoyable. In Golden, Colo., retail sales increased 60 percent after the addition of a string of roundabouts — and that was during the 1989 recession. Sales in Golden outpaced those of all other cities in the state.¹²

"The public will object to using a roundabout."

Before several two-lane modern roundabouts were installed in Bellingham, Wash., only one in three people surveyed by the Insurance Institute for Highway Safety supported the creation of a roundabout.

Once the roundabout was built, the numbers reversed, and 70 percent of respondents became supportive.⁹ In another study conducted by the Institute, support for six different roundabouts went from a low of 22 percent to a high of 87 percent five years after installation.¹⁰ Building one roundabout in a community is usually all it takes to convince most people of their benefits.

"Fire trucks, snowplows, buses and semis can't use roundabouts."

A "truck apron" in the center of a roundabout can accommodate emergency vehicles, buses, snow equipment and large trucks, including those with wheelbase lengths of 50 or more feet.

"Roundabouts aren't good for older adults."

By 2025, about 25 percent of all drivers in the United States will be over the age of 65. Forty percent of all car crashes that involve drivers over the age of 65 occur at intersections.¹³

As we age, we lose our ability as drivers to judge leftturn gaps.¹⁴ Roundabouts don't require those decisions, and they eliminate head-on and right-angle crashes. When collisions do occur, they are generally at lower speeds and less harmful.

"Roundabouts aren't safe for bicyclists and pedestrians."

By using space to pause on the "splitter island," pedestrians need to watch only one direction of traffic at a time, which simplifies the task of crossing the street. The low vehicle speeds through a roundabout — which can be

"Pedestrians with limited vision can't cross" roundabouts."

A known issue with roundabouts and other street crossings — such as mid-block crossings and right-turn slip lanes — is that it's difficult for pedestrians with limited vision to determine when traffic has stopped and it is safe to cross. Solutions are being sought to address this problem.^{15, 16}

- 1. U.S. Department of Transportation's Federal Highway Administration (FHWA) (n.d.), safety.fhwa.dot.gov. Modern Roundabouts: A Safer Choice. http://safety.fhwa. dot.gov/intersection/roundabouts/fhwasa10023/transcript/audio_no_speaker/
- U.S. DOT FHWA (n.d.), safety.fhwa.dot.gov. Proven Safety Countermeasures. http://safety.fhwa.dot.gov/provencountermeasures/fhwa_sa_12_005.htm 2.
- U.S. DOT FHWA (n.d.), fhwa.dot.gov. Roundabouts: An Informational Guide. http://www.fhwa.dot.gov/publications/research/safety/00067/000674.pdf 3.
- U.S. DOT FHWA (n.d.), safety.fhwa.dot.gov. http://www.fhwa.dot.gov/resourcecenter/teams/safety/teamsafe_rndabout.pdf 4.
- Kittelson & Associates, Inc. (August 2000), roundabout.kittelson.com. Modern Roundabouts. Retrieved Feb. 3, 2014, http://roundabout.kittelson.com/Roundabouts/ 5. Search
- U.S. DOT FHWA (February 2010). Technical Summary: Mini Roundabouts. http://safety.fhwa.dot.gov/intersection/roundabouts/fhwasa10007/fhwasa10007.pdf 6.
- American Road and Transportation Builders Association (n.d.), ARTBA.org: electronic references. http://www.artba.org/faqs/#20
- Insurance Institute for Highway Safety (February 2013). Public Opinion, Traffic Performance, the Environment, and Safety after the Construction of Double-Lane 8. Roundabouts. Retrieved Feb. 3, 2014, http://www.iihs.org/frontend/iihs/documents/masterfiledocs.ashx?id=2033
- Transportation Research Record: Journal of the Transportation Research Board (2007). Long-Term Trends in Public Opinion Following Construction of Roundabouts. 9.

http://trb.metapress.com/content/1162251045856345/?genre=article&id=doi%3a10.3141%2f2019-26

10. City of Golden and LSC Transportation Consultants, Inc. (April 2006). Development Opportunities: Golden, Colorado Case Study. http://lscdenver.com/Papers/ Minnesota%20Revised%202006.pdf

11. U.S. FHWA. (n.d.) Modern Roundabouts: A Safer Choice. http://safety.fhwa.dot.gov/intersection/roundabouts/fhwasa10023/transcript/audio_no_speaker/ 12. National Cooperative Highway Research, Transportation Research Board, National Academies of Science. Roundabouts in the United States, Program Report 572. http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_572.pdf