

# ROUNDAABOUTS IN REVIEW

## OVERVIEW

Roundabouts are intersections that allow traffic to flow around a central island in a counterclockwise direction. They provide a safer alternative to signalized intersections and are increasing in popularity in the United States.

## BENEFITS

- There is a **78% reduction** in fatal and injury crashes compared to a signalized intersection.  
[https://highways.dot.gov/sites/fhwa.dot.gov/files/Roundabouts\\_508.pdf](https://highways.dot.gov/sites/fhwa.dot.gov/files/Roundabouts_508.pdf)
- **40% reduction** in pedestrian collisions & **90% reduction** in fatalities.  
<https://dot.ca.gov/-/media/dot-media/programs/risk-strategic-management/documents/mile-marker/mm-2017-q4-roundabout-a11y.pdf>
- From 2010-2022, **only 10 pedestrian/cyclist deaths** in the 8,800 US roundabouts vs **over 11,000 deaths** at regular intersections.  
<https://usa.streetsblog.org/2022/09/21/study-some-roundabout-designs-slash-crash-injuries-up-to-85>
- **Improves safety** by reducing conflict points from 32 in signal-controlled intersections to 8 with a 4-legged roundabout.  
<https://portal.ct.gov/-/media/dot/documents/dhighwaydesign/roundabout/guide-for-roundabouts-nchrp-research-report-1043.pdf>
- **Pedestrians only cross one direction of traffic** at a shorter distance, allowing drivers to focus on pedestrians apart from entering/exiting.  
<https://safety.fhwa.dot.gov/intersection/roundabouts/fhwasa15016.pdf>
- Roundabouts **reduce vehicle speeds** & provide overall traffic calming.  
<https://dot.ca.gov/caltrans-near-me/district-3/d3-popular-links/d3-roundabouts>
- **30-50% increase** in traffic volume through the intersection.  
<https://www.fdot.gov/agencyresources/roundabouts/benefits.shtm>
- **Pollution reduction**, as vehicle idle times are reduced.  
<https://dot.ca.gov/caltrans-near-me/district-3/d3-popular-links/d3-roundabouts>
- **Lower maintenance** and **higher service life**, compared to a typical signal. <https://www.fhwa.dot.gov/publications/research/safety/00067/00067.pdf>
- **Increased landscaping** and landscaping buffers improve the intersection's aesthetic.  
<https://www.fhwa.dot.gov/publications/research/safety/00067/00067.pdf>

