

Typical signalized intersections vs. typical roundabouts



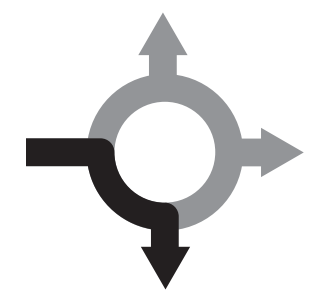
Signalized intersection

Typical pros:

- Provide a familiar experience that drivers are comfortable with
- Provide orderly movement of traffic moving in different directions
- Provide clear guidance to people walking on when it is safe to cross

Typical cons:

- High maintenance costs
- Can fail during power outages
- Cause delay for people walking, biking, and driving during non-peak hours
- More conflict points and higher speeds compared to roundabouts resulting in poorer safety outcomes for people walking, biking, and driving



Roundabout

Typical pros:

- Improve safety for all users (90% reduction in fatalities¹, 76% reduction in injuries², and 35% reduction in all crashes²)
- Reduced delay for people walking, biking, and driving at peak hours and other times
- Reduced air and noise pollution and fuel use with fewer stops, hard accelerations, and idling
- Low maintenance cost (relative to signalized intersection control)

Typical cons:

- People walking can find it uncomfortable to cross without the familiarity of a signalized crossing
- Drivers may not be familiar with how to drive through a roundabout, which can cause confusion and discomfort
- Can require more space
- More complicated construction phasing

¹"Safety Effect of Roundabout Conversions in the United States: Empirical Bayes Observational Before-After Study." Transportation Research Record 1751, Transportation Research Board (TRB), National Academy of Sciences (NAS), Washington, D.C., 2001.

²NCHRP Report 572: Roundabouts in the United States. National Cooperative Highway Research Program, TRB, NAS, Washington, D.C., 2007.