

Information on Roundabouts



What is a roundabout? Why are roundabouts used instead of a traffic signal? Are roundabouts safer? How do I navigate a roundabout?

What is a roundabout?

A modern roundabout is an unsignalized circular intersection engineered to maximize safety and minimize traffic delay. Over the last few decades, thousands of roundabouts have been installed in Europe, Australia, and other parts of the world. Recently, roundabouts have gained support in the United States with many states getting experience with their use and design. In the cities and towns where roundabouts have been built, and even where the public has been hesitant about accepting them initially, roundabouts ultimately have been accepted enthusiastically because of the increased safety they provide along with traffic calming, and aesthetic benefits.

Why are roundabouts used instead of traffic signals?

In a recent Insurance Institute for Highway Safety study of 24 intersections in the United States where STOP control and traffic signals were replaced with modern roundabouts, there was a large drop in crashes.

- ► 39 percent overall crash reduction
- ► 76 percent overall injury reduction
- ► 90 percent fatal crash reduction

Roundabouts reduce vehicle speeds, minimize vehicle weaving, automatically establish right-of-way and reduce points of conflict.

How can such a drop in crashes be explained?

One reason is that there is a reduction in the number of conflict points within the intersection. The circulatory vehicle movements at roundabouts eliminate or drastically reduce the critical conflicts resulting from red light running, left turn against opposing traffic, right angle conflicts at corners and rear-end collisions. As the figure below shows, a standard intersection has 32 potential vehicle-to-vehicle conflicts versus eight for a roundabout, according to the Federal Highway Administration's Roundabout Guide. In addition, modern roundabouts are designed such that traffic enters at nearly right angles to the circulating traffic. Also, roundabouts are relatively small (compared to traffic circles) so traffic speeds are slower. This allows more opportunities to enter the circulating traffic and fewer crashes result.





This flyer is for general purposes only. For more information, please contact the Clark County Department of Public Works, Traffic Management Division at (702) 455-6000 or email <u>InTheWorks@ClarkCountyNV.gov</u>.

NOTE: The MUTCD is used throughout the country as the standard by which traffic control decisions are made. Nevada Revised Statute 484A.430 and County Code 14.12.070 require the County to use the MUTCD for placement of all traffic control devices. The complete MUTCD can be found at: <u>https://mutcd.fhwa.dot.gov/kno_11th_Edition.htm</u>