

OFFICE OF SAFETY Proven Safety Countermeasures



Safety Benefits: Two-Way Stop-Controlled Intersection to a Roundabout



Signalized Intersection to a Roundabout



For more information on this and other FHWA Proven Safety Countermeasures, please visit <u>https://highways. dot.gov/safety/provensafety-countermeasures</u> and <u>https://highways.dot.gov/ safety/intersection-safety/</u> intersection-types/roundabouts.

Roundabouts

The modern roundabout is an intersection with a circular configuration that safely and efficiently moves traffic. Roundabouts feature channelized, curved approaches that reduce vehicle speed, entry yield control that gives right-ofway to circulating traffic, and counterclockwise flow around a central island that minimizes conflict points. The net result of lower speeds and reduced conflicts at roundabouts is an environment where crashes that cause injury or fatality are substantially reduced.

Roundabouts are not only a safer type of intersection; they are also efficient in terms of keeping people moving. Even while calming traffic, they can reduce delay and queuing when compared to other intersection alternatives. Furthermore, the lower vehicular speeds and reduced conflict environment can create a more suitable environment for walking and bicycling.

Roundabouts can be implemented in both urban and rural areas under a wide range of traffic conditions. They can replace signals, twoway stop controls, and all-way stop controls. Roundabouts are an effective option for managing speed and transitioning traffic from highspeed to low-speed environments, such as freeway interchange ramp terminals, and rural intersections along high-speed roads.



Illustration of a multilane roundabout. Source: FHWA



Example of a single-lane roundabout. Source: FHWA

1 (CMF ID: <u>211,226</u>) AASHTO. The Highway Safety Manual, American Association of State Highway Transportation Professionals, Washington, D.C., (2010).

