What is a Roundabout?

A roundabout is a type of circular intersection, but is quite unlike a neighborhood traffic circle or large rotary. Roundabouts have been proven safer and more efficient than other types of circular intersections.

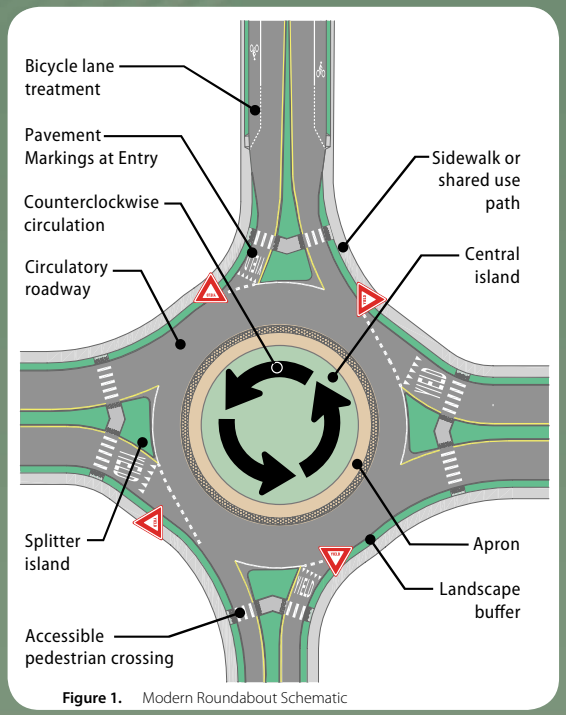

Figure 1. Modern Roundabout Schematic

Roundabouts have certain essential distinguishing features:

- **Counterclockwise Flow.** Traffic travels counterclockwise around a center island.
- **Entry Yield Control.** Vehicles entering the roundabout yield to traffic already circulating.
- **Low Speed.** Curvature that results in lower vehicle speeds throughout the roundabout.

FHWA identified roundabouts as a **Proven Safety Countermeasure** because of their ability to substantially reduce the types of crashes that result in injury or loss of life. Roundabouts are designed to improve safety for all users, including pedestrians and bicycles. They also provide significant operational benefits compared to conventional intersections.

Partnering on Roundabouts

Successfully delivering a roundabout project requires coordination with all stakeholders. This naturally includes the road authorities involved, but efforts should also be made to seek input from other public safety providers (i.e., police, fire, EMS) and members of the community. Open communication can help clarify goals and expectations, and provide feedback that shapes the roundabout design for the better, ultimately ensuring that the final project can appropriately serve its users – from large trucks moving freight to children walking to school.

Like any intersection, a roundabout can sometimes be jointly owned by multiple units of government, such as a tribe and county. This makes building partnerships between all stakeholders a necessity. However, it also presents opportunities to pool and leverage resources, share costs, and ultimately lead to a project becoming a reality sooner than would otherwise be possible. The cost to construct a roundabout varies based on many factors, but is often a cost beneficial alternative to traffic signals.

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To learn more about roundabouts, please visit:
safety.fhwa.dot.gov

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Safe Roads for a Safer Future
Investment in roadway safety saves lives

Cover image source: Torey Nelson - Skagit County Public Works

U.S. Department of Transportation
Federal Highway Administration

ROUNDABOUTS
& Tribal Governments

The Benefits of Roundabouts

Roundabouts can provide lasting benefits and value to tribal communities in many ways.

- **Roundabouts improve safety.** They slow vehicle speeds to a range of 15-25 mph, and reduce the number of severe crashes by 78-82%.[1]
- **Roundabouts enhance traffic flow.** Roundabouts do not have the same stop-and-go conditions as traditional intersections. This allows for a smoother, more efficient flow of traffic.
- **Roundabouts have lower lifecycle costs.** They eliminate the equipment, maintenance, and electrical costs necessary for traffic signals.
- **Roundabouts provide opportunities for aesthetic or cultural enhancements.** The center island at a roundabout can incorporate features and landscaping that highlight tribal heritage. There are many examples of roundabouts from around the United States with thoughtful and appropriate center island treatments.
- **Roundabouts offer benefits to pedestrians and bicyclists.** Low vehicle speeds at roundabouts mean reduced risk for people walking and biking. Crosswalks are set back from the circle, have shorter crossing distances, and involve only one direction of traffic at a time – making crossings simpler for both pedestrians and drivers. Bicyclists can choose to ride through a roundabout at a comfortable speed consistent with traffic or to follow shared use paths when provided.

[1] AASHTO, Highway Safety Manual (Washington, DC: AASTHO, 2010)

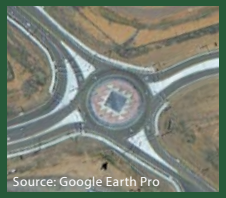
Roundabout Highlights

Haxton Way at Kwina Road

Location: Bellingham, WA
Tribe: Lummi Nation
Noteworthy Attributes:
- Oval layout with hardscaped center island including totem features and native language

Source: Kirk Vinish – Lummi Nation

Indian Route 15 at U.S. 191/AZ 264


Source: Google Earth Pro

Location: Ganado, AZ
Tribe: Navajo Nation
Noteworthy Attributes:
- Features a design pattern that reflects Navajo Nation heritage
- Along a high-speed rural highway with high school in SW corner


Source: Google Earth Pro

Wisconsin State Route 172


Source: Brown County

Location: Oneida, WI
Tribe: Oneida of Wisconsin
Noteworthy Attributes:
- Tribal identity reflected in center island turtle-shaped landscaping
- Functions as main entrance to regional airport and tribal casino

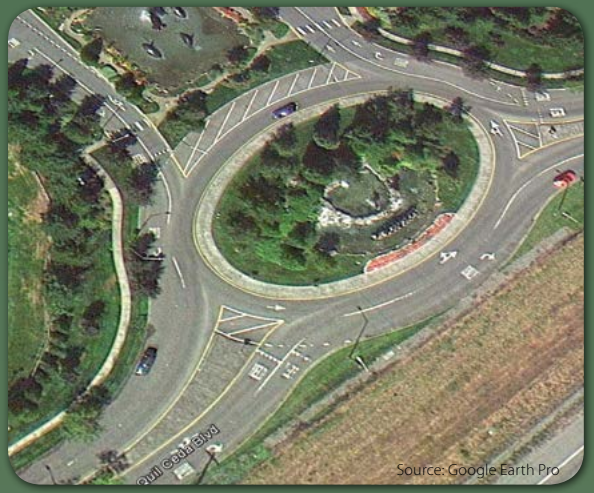

Source: Google Earth Pro

Tulalip Testimonial

In 2001, the Tulalip Tribes constructed a roundabout at the entrance of their newly developed Tulalip Resort Casino in Washington State. For the intersection of 34th Avenue NE and Quil Ceda Boulevard, the Tribes chose a roundabout over a traffic signal because of the immediate safety and mobility benefits, as well as lower future maintenance costs.

Though initially hesitant, as they learned more the Tribes realized roundabouts provided more advantages. The roundabout was landscaped with features that reflected tribal heritage using colors, materials and other elements. The roundabout now serves as the grand entrance to the development.

For the Tulalip Tribes, the roundabout is a safer, cost-effective, more visually appealing alternative to a traffic signal.


Source: Google Earth Pro

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