

# ROUNDBABOUTS

## Description

Intersections are common sources of recurring congestion and crashes that cause additional problems. Traffic signals and stop signs are inherent sources of delay because they stop one direction of traffic to permit a conflicting movement to proceed.

The modern roundabout design counteracts those sources of delay with yield signs controlling the entering traffic and appropriate roadway curvature to reduce vehicle speeds on each approach. As a result, all vehicles slow to enter and traverse the roundabout, but they do not stop unless waiting for a gap in traffic on the circulating roadway. Thus, while speeds are lower, more vehicles can be served with less delay.

## Target Market

Modern roundabouts are frequently used on suburban area minor and major streets, though there are also applications for rural and urban installations where right-of-way is available and the design is appropriate for operating speeds.

## How Will This Help?

- Reduce delay and fuel use and improve capacity by eliminating unnecessary stops.
- Increase safety by reducing the number of conflict points and eliminating right-angle and head-on crashes.
- Reduce maintenance costs by eliminating traffic signals.



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<b>Cost:</b>	●●●●○
<b>Time:</b>	Moderate
<b>Impact:</b>	Spot/Corridor
<b>Who:</b>	City/State
<b>Hurdles:</b>	Right-of-Way

## Success Stories

- A roundabout in Daingerfield, Texas, successfully accommodated the movements of a four-leg intersection with an overlapping railroad crossing.
- A roundabout corridor in Golden, Colorado, reduced delay and travel time while traffic volumes increased by 35 percent.

## Implementation Issues

Right-of-way, proper geometric design principles to ensure low speeds, and driver education are key to the success of a modern roundabout intersection.