

FHWA Report Summary

Roundabouts: An Informational Guide

Background

Modern roundabouts are a form of intersection control that allows traffic to flow in a one-way counterclockwise motion around a center island. Roundabouts have been used successfully throughout the world. However, in the United States, many transportation professionals and agencies have been hesitant to recommend and install roundabouts due to a lack of objective nationwide guidelines on planning, performance, and design.

Report Features

This 2000 guide (which is presently being updated) provides information and guidance on roundabouts, aimed at producing designs that are suitable for a variety of typical conditions in the U.S. The scope of the guide is to provide general information, planning techniques, evaluation procedures for assessing operational and safety performance, and design guidelines for roundabouts.

The guide has been structured to address the needs of a variety of readers including the general public, policy makers, transportation planners, operations and safety analysts and engineers, and designers. Roundabout categories discussed range from mini and urban compact roundabouts to rural double-lane roundabouts, with design characteristics provided for each category.

Roundabouts have demonstrated safety benefits, exhibiting average overall crash reductions of 37% and injury crash reductions of 51% at 11 U.S. intersections converted to either single-lane or double-lane roundabouts. The safety benefits over traditional intersections are a result of slower operating speeds, fewer conflict points, elimination of left turns, fewer stops and delays, and the yield-upon-entry operation. Also, given sufficient space, roundabouts can be designed to accommodate high traffic volumes.

Contacts

For more information on how to obtain a copy of this report, please see the FHWA website at <http://safety.fhwa.dot.gov>, or contact Ed Rice, Intersection Safety Team Leader, at 202-366-9064, ed.rice@dot.gov. The report number is FHWA-RD-00-067.



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