



how about a **ROUNDABOUT?**



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benefits of roundabouts

Traffic Safety - Studies have shown significant safety improvements at intersections converted from conventional forms to roundabouts. The physical shape of roundabouts eliminates crossing conflicts that are present at conventional intersections.

Environmental Factors - Roundabouts often provide environmental benefits by reducing vehicle delay and the number and duration of stops compared with signalized or all-way stop controlled alternatives. This reduces noise and air quality impacts and fuel consumption significantly.

Access Management - Since roundabouts can facilitate U-turns, they can be a key element of a comprehensive access management strategy to reduce or eliminate left-turn movements at driveways between major intersections.

Traffic Calming - Roundabouts can have traffic calming effects on streets by reducing vehicle speeds using geometric design rather than relying solely on traffic control devices.

Pedestrian Safety - Due to the reduction of vehicle speeds in and around the intersection, roundabouts can improve pedestrian

crossing opportunities. Splitter islands allow pedestrians to focus on one traffic stream at a time.

Operational Performance - When operating within their capacity, roundabouts typically have lower overall delay than signalized and all-way stop-controlled intersections.

Aesthetics - The central island and splitter islands offer the opportunity to provide attractive entries to communities through use of landscaping, monuments, and art.

Land Use - Roundabouts can provide a transition area between high-speed rural and low-speed urban environments.

Ongoing Operations and Maintenance - A roundabout typically has lower operating and maintenance costs than a traffic signal due to the lack of technical hardware, signal timing equipment, and electricity needs.

Approach Roadway Width - A roundabout may reduce the amount of widening needed on the approach roadways in comparison to alternative intersection forms.

reduction in crashes

Roundabouts produce a significant reduction in all types of crashes, including injury crashes, for a variety of conditions. The notable exception is the all-way stop. Fatal crashes at roundabouts are extremely rare events.



Reduction in Crashes after Conversion to Roundabout

	All Intersections	Signal Urban	All-Way Stop	Two-Way Stop Urban
Total Crashes	35%	same	same	72%
iotal crushes				
Severe Injury	76%	60%	same	60%

NCHRP, Report 572, Roundabouts in the United States

delays vs. intersection type

	Traffic Volume	Roundabout	Signal	4-Way	2-Way
A	7,500 A.D.T.	7.5 sec.+	11 sec.*	35 sec.	100 sec.
в	10,000 A.D.T.	10 sec.+	13 sec.*	73 sec.	550 sec.
c	12,500 A.D.T.	7.5 sec. ++	19 sec.**	157 sec.	810 sec.

+ Single Lane Roundabout

++ Dual Lane Roundabout

* Two Phase Signalized Intersection ** Three Phase Signalized Intersection A - 7,500 A.D.T. Maj. Rd./4,000 A.D.T. Min. Rd.
B - 10,000 A.D.T. Maj. Rd./5,000 A.D.T. Min. Rd.
C - 12,500 A.D.T. Maj. Rd./6,500 A.D.T. Min. Rd.



For more information about roundabout design and construction, call our Engineering Division at 337.237.2200.

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roundabout projects ence

State Highway 89 / State Highway 92 State Highway 89 / Chemin Metairie Pkwy State Highway 92 / Bonin Rd State Highway 92 / Chemin Metairie Pkwy Chemin Metairie Pkwy / Viaulet Rd State Highway 733 / Kaliste Saloom Road Bonin Rd / Fortune Rd Settlers Trace / River Ranch Blvd State Highway 3025 / Bendel Road State Highway 89 / Fortune Road St. Bernard Avenue / Cater Street



Proposed Roundabout at W. 2nd Street, Voorhies Street, Congress Street, S. Pierce Street, and W. Garfield St. in Lafayette, LA

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