

Montpelier, Vermont, Constructs Roundabout Thanks to Local Roundabouts Steering Committee

Location

Montpelier, Vermont
(North-Eastern United States)

Implementation Stage

All phases of roundabout construction, including:

- ✓ Planning
- ✓ Design
- ✓ Construction
- ✓ Launch
- ✓ Post-Implementation

Roundabout Type/Setting

Single-lane roundabouts in a suburban location

Target Audience

- ✓ General public
- ✓ Elected Officials
- ✓ Engineers/Managers

Strategies Employed

- ✓ Presentations
- ✓ Public Meetings
- ✓ Flyers
- ✓ Brochures



Background

In the 1980s, a regional transportation plan for Montpelier, Vermont, identified the intersection of Main and Spring Streets as deficient. The three-way “T” intersection lacked pedestrian facilities and created a confusing traffic pattern for the public due to a triangular central island and a commercial driveway. To complicate matters further, a middle school was located nearby, which meant a number of children traversed this intersection to get to and from school.

Although the City planned to install a signal, a group of citizens approached the City Council about constructing a roundabout at the location instead. They successfully lobbied the Council to create a steering committee to investigate the feasibility of a roundabout at the intersection of Main and Spring Streets.

Because there were no roundabouts in the region at this time, and because this was several years before roundabouts were embraced by FHWA, the community as well as the Montpelier Department of Public Works were concerned about the validity of the design. With the assistance of a consultant experienced in constructing roundabouts in Florida, the City completed the design.

Approach

The Roundabouts Steering Committee actively lobbied the City Council and worked with the media to tout the benefits of roundabouts and dispel common myths. While the Roundabout Steering Committee engaged the media to gain public support, they also prepared informational pamphlets for distribution to drivers’ education programs at the local schools. The group also worked closely with the Montpelier Department of Public Works and the Vermont Agency of Transportation (AOT), which performed a pre- and post-construction traffic study. Once the roundabout was opened, the committee placed a flyer in the local newspaper with instructions on how to drive the new roundabout to assist citizens in navigating this new type of intersection.

“There was... skepticism in house. We were inventing the wheel here, so to speak.”

— Thomas J. McArdle
Assistant Director of Public Works
Montpelier, Vermont

Results

Engaging the public and elected officials through the Roundabouts Steering Committee gave Montpelier, Vermont the distinction of constructing one of the first modern roundabouts in the northeast, and one of the earliest in the entire United States as well. A follow-up survey conducted one year after the project’s completion showed that 85 percent of the respondents had a favorable or neutral opinion of the roundabout.



Figure 1: Overhead photo of the second roundabout completed in Montpelier.

In addition, this roundabout has improved safety, reducing speeds at the intersection of Main and Spring Streets, and providing more favorable crossing conditions for pedestrians. Officials at the middle school affected by the roundabout have said that the intersection is much safer after the construction. Prior to construction, a limited number of pedestrians traversed the intersection, but after the roundabout construction, a large number of students use the route on their way to and from school (30-50 in the mornings and 150 in the afternoons).

Montpelier’s pioneering effort with Vermont’s first roundabout has been followed by successful installations of roundabout intersections in Brattleboro and Manchester, and a second roundabout recently has been completed in Montpelier.

Lessons Learned

- Public outreach is a critical step in the planning process. It’s important to engage the local emergency service agencies, schools, stakeholders, and residents in an intersection design alternative review process.

Outreach Investment

There were costs associated with the printing of flyers but much of the public relations work was completed gratis for the Montpelier Department of Public Works by a volunteer and staunch roundabout advocate.

Learn More

Thomas J. McArdle

Assistant Director
Montpelier Department of Public Works

802.223.9508

tmcardle@montpelier-vt.org

Jeffrey Shaw

Intersections Program Manager
FHWA Office of Safety

202.738.7793

jeffrey.shaw@dot.gov

ROUNDABOUTS

What is a Modern Roundabout?

A modern roundabout is a new circular intersection design able to slow traffic while lowering delays and handling higher traffic volumes. Modern roundabouts have proved to more safely accommodate vehicles, pedestrians and bicyclists than alternatives, like stop signs or traffic signals. U-turns are permitted! Compared to other types of intersections, roundabouts save energy, reduce pollution, and require less land and maintenance. No intersections are perfect, but roundabouts generally provide the best conditions for movement of pedestrians, bicyclists, and all types of motor vehicles.

For Drivers...

Signs at Roundabouts

ROUNDABOUT AHEAD

A "Roundabout Ahead" and a "Reduced Speed Ahead" signs tell you that you are approaching a roundabout

REDUCED SPEED AHEAD

The "Advisory Speed Limit 15" sign tells the driver the maximum safe operating speed approaching the roundabout and operating through the roundabout

ADVISORY SPEED LIMIT 15

YIELD

Roundabout Yield Signs mean yield, that is, slow or stop at the entry line to the circular roadway when there are vehicles there—vehicles in the circulating roadway have the right-of-way over vehicles entering the roadway.

Remember: Vehicles must give way to pedestrians.

Pedestrians, bicycle riders and motorcyclists are often very hard to see. They are particularly at risk, so always keep an eye out for them.

Approaching the Roundabout

Slow down to about 10-15 mph when approaching the roundabout (the advisory speed limit for motor vehicles at the Montpelier roundabout is 15 mph). Also, be prepared to stop for pedestrians because pedestrian crossings are located one car length before the entry line and one car length after the exit points.

Yield at the Roundabout

Always yield at the entry line to vehicles already in the roundabout.

Enter the roundabout only when there is an adequate and safe gap in the traffic.

Remember: bicyclists and motorcyclists are the most difficult to see when entering a roundabout.—be on the lookout for them when entering the circulating roadway.

Signaling at Roundabouts

It is important and courteous to let others know your intentions, and it is the Vermont law. When approaching, show a right signal for right hand turns, no signal for through travel, and left signal for left hand turns. When nearing your exit point, use a right turn signal just past the exit before your exit.

One Lane Roundabouts – It's Quite Simple

Figure 2: A flier developed to outline roundabout features.