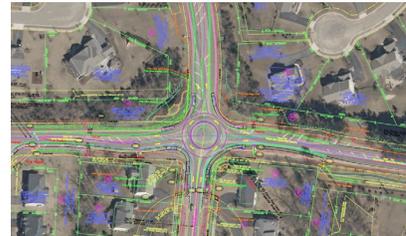




# Poland / Edgewater Instant Roundabout

Loudoun County, Virginia

Virginia Department of Transportation



Counterclockwise from top: Temporary "instant" roundabout from two different perspectives; aerial of intersection (@Virginia Department of Transportation).

A pilot project improved intersection safety with an "instant roundabout".

## CONTEXT

- Constructed in 2012.
- Southeast.
- \$90,000.
- 3,600-3,900 Annual Average Daily Traffic.



## SAFETY+ IMPROVEMENTS

- Responded quickly to a serious crash/injury problem.
- Low cost makes it replicable for other agencies.
- Promoted as part of Every Day Counts-2 for intersection and interchange geometrics.
- Demonstrates agency dedication to the public and to financial stewardship.

## WHAT WAS THE PROJECT DRIVER?

The intersection of Poland Road (Route 742) and Edgewater Street in Loudoun County, Virginia is a key point of access within the South Riding community, located between the Little River Elementary School and a community recreation center. The two-way stop-controlled intersection was the site of an average of nine crashes per year as increasing development and rising traffic volumes in the area were contributing factors. Local officials and the community wanted an immediate and efficient fix to prevent the high number of injuries and to improve the significant backups during rush hours. The construction of an "instant roundabout," a temporary roundabout built using off the shelf materials, took only six days and cost less than a permanent roundabout.

## HOW DID THIS CONNECT THE COMMUNITY?

After local officials voiced concerns about the safety of the intersection, the Virginia Department of Transportation (DOT) staff presented their idea for the planned instant roundabout **pilot project** at public information meetings. Before moving



*Top: View of Poland Road and Edgewater Street intersection's "instant roundabout" (@Virginia Department of Transportation). Bottom: Intersection in 2012 (Original Photo: ©2015 Google®)*

forward with the construction, meetings were facilitated by Loudoun County elected officials, and attended by local homeowners' associations including Ridings at Blue Springs Homeowners Association, and by organizations like the South Riding Proprietary Board of Directors.

The Poland Road and Edgewater Street roundabout was both quick and inexpensive to construct because it used existing, on-hand materials in a creative manner. Virginia DOT engineers used materials such as tubular markers and plastic curb sections. The temporary

roundabout cost only \$90,000, about 5 percent of the cost of a traditional roundabout. Three years after the installation, crashes were reduced by 89 percent. The roundabout also effectively reduced traffic delays, as motorists previously had waited up to three minutes to get through the intersection. The pilot project itself served as a community engagement initiative as the ability to quickly demonstrate the safety and accessibility benefits of the roundabout helped garner support for the treatment as a permanent solution.

#### WHAT WERE THE BENEFITS?



#### REPAIR

This project prioritized safety while creating an innovative, immediate, and cost-effective solution to a dangerous roadway. In addition to the safety improvements, the intersection experienced efficiency in the traffic flow with better movement without stops and traffic signals.

Due to the significant success of this instant roundabout demonstrated over the course of several years, Virginia DOT moved forward with installation of a permanent structure in 2018.

This project was recognized with the National Roadway Safety Award in 2017 by the Roadway Safety Foundation and the Federal Highway Administration for its safety achievement focusing on minimizing traffic death and injuries.

#### For more information:

[http://www.virginiadot.org/projects/northernvirginia/poland\\_road\\_and\\_edgewater\\_street.asp](http://www.virginiadot.org/projects/northernvirginia/poland_road_and_edgewater_street.asp)

[http://www.virginiadot.org/newsroom/northern\\_virginia/2018/poland\\_road\\_roundabout\\_pardon126251.a](http://www.virginiadot.org/newsroom/northern_virginia/2018/poland_road_roundabout_pardon126251.asp)

[sp](https://safety.fhwa.dot.gov/roadwaysafetyawards/2017/npg2017.pdf)  
<https://safety.fhwa.dot.gov/roadwaysafetyawards/2017/npg2017.pdf>