

DID YOU KNOW???

ROUNDABOUTS ON THE RISE – INTERSECTION OF CHOICE

Numerous local residents winter in Florida, many in The Villages, including some friends of mine. One of them sent me a very interesting article about roundabouts there, and I wanted to share some of the information from that article.

Armed with mounting data touting the benefits of roundabouts, experts around the country are persuading communities to do what The Villages has already done: rely on geometry rather than just signs and signal lights to keep traffic moving safely and efficiently. The Villages is home to 35 roundabouts (the first one installed in 1996), touted by engineers as smart replacements to crash-plagued stop sign intersections or congested traffic signal intersections. Even so, we're way behind European countries – in France, for example, you would be 25 times more likely to curve through a roundabout than you would in the U.S.

The main reason for installing roundabouts is safety. They are safer because they have only eight “conflict points” compared to 32 for traditional intersections. Typical crashes at signalized intersections are either side-impact or head-on; in roundabouts most crashes are simple side-swipes, which are much less likely to result in fatalities or serious injuries. Lower speeds and the lack of left turns in roundabouts cut fatalities by 90 percent and injuries by 75 percent from other types of traffic controls (signals and stop signs), according to Florida DOT and from other sources that I have seen. And, according to the Federal Highway Administration, roundabouts reduce crashes by 35 percent.

A look at traffic crash statistics, from the Lake Sumter Metropolitan Planning Organization, from a sample of six signalized intersections with six roundabouts in The Villages from 2012 to 2017 reveals the following;

- 6 Signalized intersections – 402 total collisions, 126 injuries, 4 fatalities, \$2.17 million in total damages
- 6 Roundabouts – 68 total collisions, 9 injuries, 1 fatality, \$680,500 in total damages

As ambitious as The Villages are in installing roundabouts, the heavyweight champ in roundabouts must be Carmel, Indiana. That city has well over 100 roundabouts with about 30 more planned. Since the late 1990s Carmel has been building and replacing signalized intersections with roundabouts because of their safety record, their compatibility with the environment, their aesthetics and their ability to make navigation easier for pedestrians and bicyclists. Since Carmel began construction of roundabouts, the number of crashes with injuries has been reduced by about 80 percent and the number of crashes overall was reduced by about 40 percent.

Furthermore, less time spent idling and less starting and stopping has led to significant gasoline savings. A city study on 10 roundabouts found an annual average savings of 24,000 gallons (the length of these savings was not stated). And, the average cost of crash damages in 2006 at four intersections found the cost of damages for the two roundabouts was \$3000-\$3500 versus \$7335-\$13,561 for the signalized intersections.

If the above statistics doesn't convince you about the benefits of roundabouts, I don't know what would. Are you on board yet?