



Last week I asked for suggestions for topics to be covered in future Facts. The following is one of the responses I received: “I was wondering if you had some great pictures and/or facts that highlighted the enhanced pedestrian accommodations and benefits that are provided with well designed roundabouts.”

Above are pictures of the crosswalks at the Center Park West roundabout in Henrico County that was featured in Week 11.

Now for the Facts: Pedestrian Considerations

Benefits:

- Easy to determine gaps
- Cars only coming from one direction at a time
- Fewer lanes to cross
- Splitter Island provides refuge
- Slower Speeds - Vehicles [are forced] to Approach and Travel through Slowly - Pedestrians involved in crashes are more likely to be killed as vehicle speed increases. The fatality rate for a pedestrian hit by a car at 20 mph is 5 percent. The fatality rate rises to 80 percent when vehicle speed is increased to 40 mph
- Much lower number of Conflict Points
- Inattentive Driving is Reduced
- Pedestrian Exposure to Traffic is Much Lower

Trade Offs:

- Must assess gaps
- No protected phase - The idea that a signal has a “protected” phase can be a fatal mistake because of right turns on red and the red light runners. Also, both left and right turns on permissive phases (green) can contribute to the fatal assumptions that signalized intersections automatically offers better pedestrian protection. According to the Federal Highway Administration, Pedestrian Safety at Intersections “Although

intersections represent a very small percentage of U.S. surface road mileage, more than one in five pedestrian deaths is the result of a collision with a vehicle at an intersection. An average of 5,475 pedestrians died in traffic crashes annually between 1990 and 2000.

- Sight impaired persons - The Access Board is proposing mandating pedestrian signals on all 2 lane roundabouts. They are represented on the National Roundabout Task Force (ANB75T) and the members are seeking other alternatives to accommodate the sight impaired pedestrians.