UPDATE -After I sent out Week 7 Roundabout Facts dealing with the question “Do roundabouts require more space than traditional intersections?” I received two interesting emails.

The first one was from Jakob Helmboldt, VDOT’s Statewide Bicycle & Pedestrian Program Coordinator. His comments were “Do you know what impact that RA had on the LOS? That is an amazing example of how much reduction in pedestrian exposure can be achieved, and if the LOS numbers aren’t significantly impacted it is a great selling point.”

Then, I received an email from Anthony Butzek, PE, who is a Transportation Engineer in Portland Oregon. He stated “This was a roundabout I designed with assistance from Michael Wallwork while I was city traffic engineer in Asheville. I'm happy to see that it is being used as an example. Just some additional info about this site: no right-of-way was required for this roundabout, as the existing street was 76' curb-to-curb. I don't recall the exact right-of-way width, but it was approximately 100'. The roundabout allowed me to reduce the lane count from 4 to 2, leaving space for a median, parking, bike lanes, and curb extensions.

When I forwarded Jakob’s question about the LOS to Anthony, he responded “The roundabout here (College Street & Oak Street intersection) actually improved the PM peak-hour intersection LOS, I believe from C to A (even with fewer lanes). The pre-existing signal here ran a split-phase pattern to deal with the volume imbalance that exists due to missing parallel street connections (removed when the nearby I-240 was built). The split-phasing provided plenty of capacity, but poor LOS given the demand. The roundabout addresses this volume imbalance much more elegantly, thereby substantially improving the LOS.”

“I was able to reduce the number of total approach lanes from 11 to 4: EB 3>1; WB 4>1; SB 2>1; NB 2>1. This speaks as much to the inefficiency of traditional signal design as it does the efficiency of roundabouts.”

“I was also able to demonstrate reduced corridor travel times for the 1/4-mile project - the reduced delay at the roundabout more than making up for the increased delay associated with the road diet. Corridor LOS was improved from D to C in one direction, and remained at D in the other direction.”

The application of the Roundabout at this location significantly reduced pedestrian exposure while improving the "LOS". Coupled with the reduction of serious crashes, fuel savings and cleaner air, this is truly an amazing example of the benefits of the Roundabout.