

Aston Township - Roundabouts

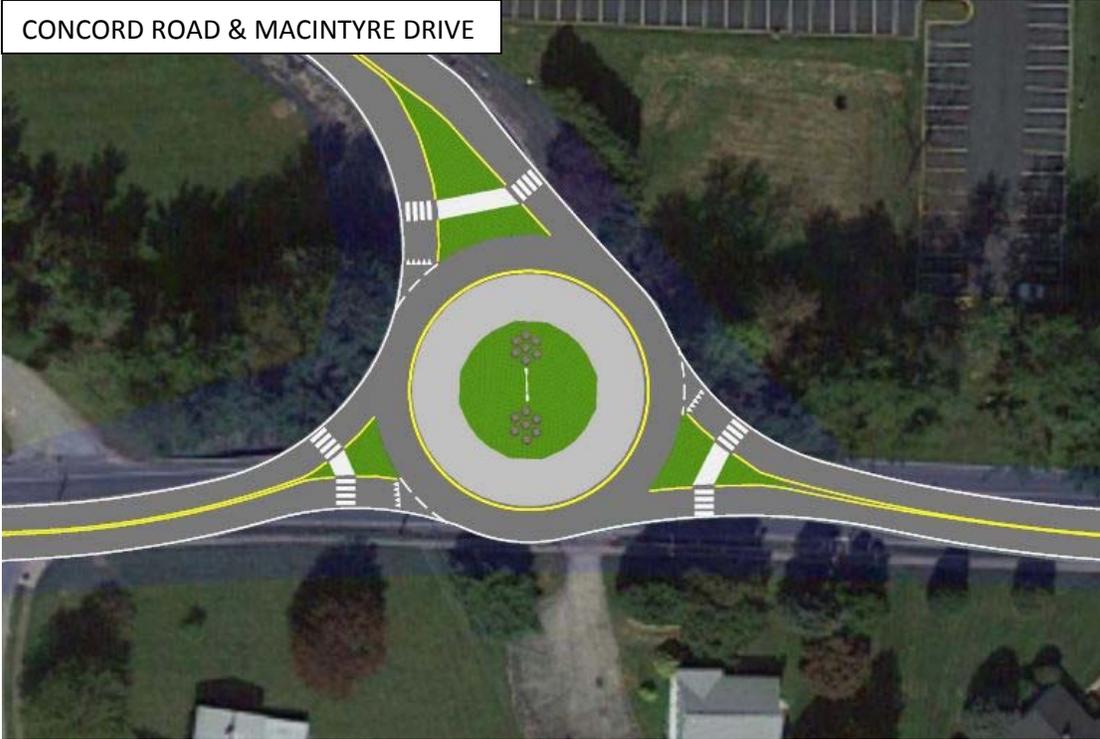
The Board of Commissioners is very much aware of the traffic issues and concerns along Concord Road, especially at the intersections of Concord Road and Donnelly Avenue and at Concord Road and MacInyre Drive. Until recently, the only option available was to install a traffic signal at each location. In 2014, the Township Engineer suggested that a recent change in PennDOT policy may in fact address most, if not all, of the traffic concerns at these intersections and this portion of Concord Road. After studying the design and operation of roundabouts for a number of years, PennDOT has established a policy in favor of constructing a roundabout in lieu of installing a traffic signal. PennDOT has determined that roundabouts offer improved safety over other at-grade intersection forms because roundabouts have fewer conflict points, slower speeds, and easier decision making. When comparing a roundabout to a signal, studies show that roundabouts provide a 90% reduction in fatal crashes, 75% reduction in injury crashes, 30-40% reduction in pedestrian crashes, and 10% reduction in bicycle crashes. Roundabouts improve pedestrian safety offering two simple crossings of one-way traffic moving at much slower speeds.

The Board of Commissioners directed the Engineer to conduct a feasibility analysis for constructing roundabouts at each location. Their analysis concluded that a roundabout at each location is feasible and would address the traffic concerns at both locations. It is intended to use the feasibility analysis as supporting documentation to accompany the PennDOT Automated Red Light Enforcement (ARLE) Grant application. If PennDOT approves the grant, design would occur in late 2015, with construction in 2016.

The conceptual graphics, presented below clearly demonstrate that each roundabout could be constructed without requiring any right-of-way from adjacent residents or businesses. Sidewalks and driveways at both locations would need to be adjusted to the new road alignment.

Aston Township will be submitting two grant applications to PennDOT's ARLE program. The applications for each intersection will be in the amount of \$475,000.00 for Concord Road and Macintyre Drive and \$450,000.00 for Concord Road and Donnelly Avenue. Please note that these costs include the cost of design and construction.

CONCORD ROAD & MACINTYRE DRIVE



CONCORD ROAD & DONNELLY AVENUE

