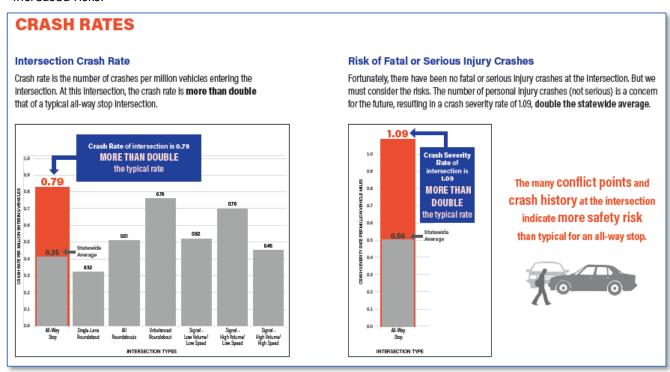
## **Comments and Questions (April 2020)**

## **Roundabout Feasibility Study**

Diamond Path (County Road 33) & 140<sup>th</sup> Street/Connemara Trail

Dakota County and the Cities of Apple Valley and Rosemount appreciate your interest in the planning process for the proposed roundabout. Below we've summarized the top questions and comments we've heard along with responses. For more information see <a href="Dakota County's Project Web Page">Dakota County's Project Web Page</a>.

1. Why is it necessary to make the proposed investment at this intersection? The problem we're looking at is an above-average crash rate today combined with future increases in traffic volume and increased risks.



2. Why not design and build a signalized intersection instead of a roundabout? Dakota County and the cities have considered the safety issues and alternatives to address the project intersection periodically over the last 10+ years. The types of crashes observed (which have become more frequent) are the main reason we're focusing on a roundabout vs. a signal. The charts above show that crashes are occurring at a rate roughly double the statewide average for similar 4-way-stop intersections. We've also seen a trend toward crossing-type or angle crashes, which can be more severe and raise the risk of fatal or serious-injury crashes. Signals have proven to be ineffective in reducing angle crashes vs. roundabouts. In fact, signalized intersections allow for high speeds through intersections, increasing the risk of severe crashes, serious injuries, and fatalities.

The other reasons a roundabout "fits" this site are because entering traffic volumes are similar in all four legs and because high speeds through the intersection are not needed for good traffic flow. A roundabout at this location will slow all drivers equally as they approach and yet cause minimal delay.

3. Are Dakota County and the Cities concerned about Diamond Path (County Road 33) north and south of the project intersection? Residents have noted the lack of trails for pedestrians and bicyclists to the north, difficulty making left turns, and the school zone to the south. Through this roundabout study, Dakota County and the Cities have had opportunities to discuss other transportation needs along connected roadways. Our first priority is the intersection, with the reconstruction into a roundabout planned and budgeted for 2022. Additional planning and design for Diamond Path, including

trails extending north, will follow, to address the need for trails and concerns about left turns. While we have not identified the budget year for reconstruction, it is reasonable to expect that improvements north to Pilot Knob Road would not be completed until at least a few years after the roundabout.

This current roundabout study will identify design ideas to the north, including roadway/trail designs that could work in that area's rolling terrain. The design work for the roundabout includes trail connections and marked pedestrian crossings on all four approaches.

To address Diamond Path to the south, Dakota County is now underway with a School Assessment for all school zones on county roads. Diamond Path Elementary School and the other school-district functions nearby will be included in the School Assessment. Recommendations to improve school safety will likely improve the function and safety throughout the south approach.

- **4.** Will replacement of the 4-way-stop with a roundabout result in fewer gaps in traffic along the connected roadways? This question has been studied and observed quite often. The finding: roundabouts under peak traffic do allow some vehicles to flow while others are stopped; the roles then shift as cycles change. The result is that gaps are similar, and can often be longer, for traffic leaving a roundabout versus traffic flows from a 4-way stop. Please note, another factor at 137th Street (& similar) will be whether Diamond Path (County Road 33) should be modified to better facilitate left turns possibly by converting to a 3-lane design with a center turn lane.
- 5. How do pedestrians cross the road at a roundabout? The picture here shows Dakota County Road 8 (Wentworth Ave.) at County Road 73 (Oakdale Ave.) in West St. Paul. Note the crosswalks on all four approaches. Pedestrians at this/similar roundabouts cross one lane at a time with a median halfway which provides more safety. This is another frequently asked question and more information can be found on Dakota County's Roundabout Education Web Page. Safety is the main reason we're planning for the project.



- **6.** Is planning for this project considering MVTA Express Bus Routes 476 and 478, which may stop near the intersection? Will a transit shelter be included in the project? Dakota County and cities coordinate projects regularly with MVTA's planning/operations staff, and the conceptual design now includes bus-stop features south of intersection. As more detailed design proceeds, we'll be considering input from transit riders, project neighbors, and MVTA. Any addition of a shelter will be MVTA's decision based on system priorities and budgets, with MVTA responsible for a shelter's cost and maintenance.
- 7. Would the Delta Place/Delta Avenue intersection with Connemara Trail remain open for all turns with completion of the new roundabout? Dakota County has completed a traffic simulation to address this question in detail for high future traffic volumes (2040 forecast). This simulation shows that delays may occur during the morning rush hour, but delays would be similar to those experienced today. See this YouTube Video of the Traffic Simulation for more details.