

Legislation Text

File #: 2019-2915, **Version:** 1

Discussion - Ward and Persels Intersection

Issue/Request:

Discussion - Ward and Persels Intersection

Key Issues:

- The existing intersection is a combination of two closely spaced offset "T" intersections with coordinated temporary (span wire) traffic signal control.
- The Rock Island Rail Corridor passes between the two closely spaced offset "T" intersections.
- The intersections do not have turn lanes; which hinders operational efficiency and safety.
- Operation and safety concerns have been expressed by staff, school district transportation and residents as the need for improvements become more significant.
- There is currently no programmed funds or capital project to improve the intersection(s) as recommended.

Background:

The intersections of Ward Road and Persels Road are offset by approximately 175 feet. Both "T" intersections share temporary traffic signal control (span wire signal) and are split by the Rock Island Rail Corridor. The Rock Island Rail Corridor is currently under the control of the Jackson County Rail Authority and has an improved trail facility (i.e. the Rock Island Trail) for non-motorized transportation and recreation (also a planned extension of the KATY) with reservations for possible freight/commuter transit rail service in the future. Prior to the corridor acquisition by Jackson County Rail Authority, the inactive rail was controlled by the Union Pacific Railroad. The UPRR would not approve any new at-grade rail crossings, whether or not, the existing rail was inactive. This obstacle prevented the realignment of Persels and associated plans to improve the intersection were placed on hold at that time pending a change of control and/or position.

An intersection improvement project about 10 years ago included turn lanes and a permanent traffic signal installation. The project at that time did not include intersection realignment as noted previously due to the UPRR constraint. Since the safety and operational benefits are mostly impacted by roadway realignment, the project was postponed for future opportunities that support a better result. The funds associated with the previous capital project were re-prioritized.

There has been an increasing crash rate at this intersection over the last few years as development in southwest Lee's Summit continues and the traffic volumes increase. The impact of school redistricting boundaries has not been observed yet, but could also increase traffic utilization at this intersection. There are also more bicycle and pedestrian crossings due to the Rock Island Trail opening in 2019.

The increase in traffic, non-motorized use, development, crash experience and delay have generated more public concern and request for intersection improvements. The City has also received request for

improvement from the School District. Staff considers the intersection improvements a priority among unfunded projects during its annual review of the Capital Improvement Plan. A conceptual design for these improvements is illustrated in the attached Exhibit.

Some of the aforementioned public comments and concerns have been heard by the City Council. In June, 2019, the City Council requested a discussion pertaining to this intersection and a potential capital improvement project. The discussion was assigned to the Public Works Committee.

Impact/Analysis:

A capital project to improve this intersection has a conceptual cost estimate of \$3M. The results of this project would be improved safety for all users and significantly less delay. The Rock Island Trail crossings would also be improved.

Michael Park, PE, PTOE, City Traffic Engineer

Committee Recommendation: