CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS

Policy Session Worksheet

Presentation Date: September 22, 2020 Approx. Start Time: 3:30 pm Approx. Length:

30 minutes

Presentation Title: S. Central Point and S. New Era Intersection Design

Department: Transportation and Development (DTD)

Presenters: Mike Bezner, Assistant Director of Transportation

Other Invitees: Scott Ciecko, County Counsel and Joel Howie, Civil Engineering Supervisor

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Direction on which design option to proceed with for the S. Central Point and S. New Era safety project.

EXECUTIVE SUMMARY:

DTD proposes to improve the intersection of the S. Central Point Rd and S. New Era Rd in an effort to reduce the number of recorded property damage and injury crashes at the intersection. During the period from 2011 to 2016, 18 crashes were reported with 11 of the crashes resulting in injuries and one crash was fatal. The existing intersection has a 75-degree skew that appears to be correlated to the majority of crashes. The negative effects of the skew make the intersection longer at some legs of the intersection. This enables motorists to make a turn at higher speeds and forces entering motorists to look backwards for conflicts potentially resulting in an approaching vehicle from the opposite direction being out of sight. This also places oncoming vehicles in the sight line within the car's right-side pillar obstructing the driver's view.

After careful engineering analysis of several options to improve the intersection, Staff have proceeded with a design that consists of realigning Central Point Rd and adding curvature on both approaches (see attached exhibit). This would relocate the intersection 35 feet to the south and eliminate the intersection skew. The curvature also has the added benefit of slowing drivers as they approach the intersection, similar to the speed management technique used in roundabout design. By relocating the intersection to the south, this creates more available intersection sight distance and provides a sight triangle clear of obstructions for drivers on Central Point Rd. The County design also includes flashing beacons on the 'stop' and 'stop ahead' signs. An independent, expert review of the County's design by DKS Associates concluded that the County's design is expected to reduce crashes and improve the overall safety of the intersection.

DTD considered an all-way stop at the intersection, but does not recommend it for two main reasons: (1) the subject intersection does not meet any of the Federal Highway Administration (FHWA) or Manual of Uniform Traffic Control Devices (MUTCD) warrants for an all-way stop and (2) the existing intersection configuration does not have sufficient intersection sight distance to safely install an all-way stop. The inadequate visibility of the intersection with an all-way stop would likely not reduce the frequency of crashes and could result in serious side-impact crashes. In addition, due to the steep slopes on S. New Era Road of 8 to 10%, heavier vehicles

could have a harder time stopping at the intersection. On similar grades, DTD is aware of situations where trucks experienced brakes overheating and loss of brake function resulting in fatal crashes. An Independent Safety Evaluation of the intersection performed in 2017 by Kittelson & Associates also determined that an all-way stop control should not be considered at this location.

DTD also considered a roundabout, but a roundabout is not a suitable solution due to the steep slopes and lack of visibility of the intersection. Additionally, it would be extremely costly to create a suitable flat area for the roundabout and the footprint of the roundabout would result in large right-of-way impacts.

DTD has evaluated the impacts that the project options will have on adjacent property owners. In doing so DTD employed independent geo-technical experts specifically to evaluate the impacts on the Staehley properties located on the northwest of the intersection. Although a four-way stop would admittedly have less impact on adjacent property owners, based on the geo-tech report, the impacts from the recommended project will be relatively small and are not expected to result in increased sliding or settling as compared to current conditions at the location. Thus, after carefully evaluating various alternatives to improve the intersection, and balancing the expected public benefits with the private impacts and available funds for the project, DTD recommends that the Board make a policy decision that the project proposed by staff should be constructed.

	FINANCIAL IMPLICATIONS	(current vear an	d ongoing):
--	------------------------	------------------	-------------

Is this item in your current budget?	⊠ YES	□NO
What is the cost? \$1,200,000 const What is the funding source? County		

STRATEGIC PLAN ALIGNMENT:

- How does this item align with DTD's Strategic Business Plan goals?
 Build a strong infrastructure.
- How does this item align with the County's Performance Clackamas goals? Ensure safe, healthy and secure communities.

LEGAL/POLICY REQUIREMENTS:

N/A

PUBLIC/GOVERNMENTAL PARTICIPATION:

N/A

OPTIONS:

- 1. Direct Staff to proceed with the current intersection design as shown on the attached exhibit.
- 2. Direct Staff to pursue an all-way stop controlled intersection.
- 3. Direct Staff to pursue a different option.

RECOMMENDATION:

Staff respectfully recommends that the Board choose Option #1, direct Staff to proceed with the current intersection design as shown on the attached exhibit.

ATTACHMENTS:

Exhibit of the proposed design of the S. Central Point and S New Era intersection.

SUBMITTED BY: Division Director/Head Approval Department Director/Head Approval County Administrator Approval
For information on this issue or copies of attachments, please contact Mike Bezner @ 503-742-4651.

