## **Part 2: Project Information**

## **Project 1 Title: Citywide Horizontal Curve Safety Improvements**

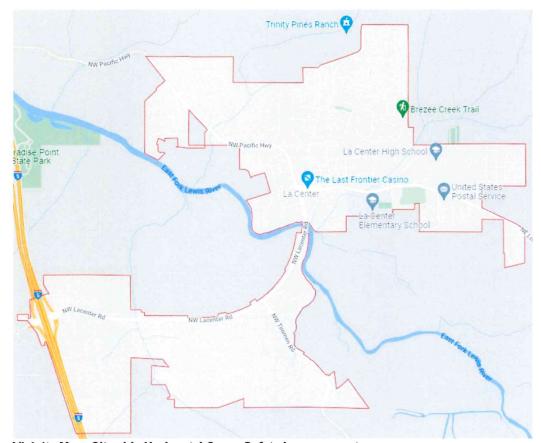
Districts the project falls within: See http://app.leg.wa.gov/districtfinder/ for more information on the following.

- State legislative district #(s): 18
- Congressional district #(s): 3

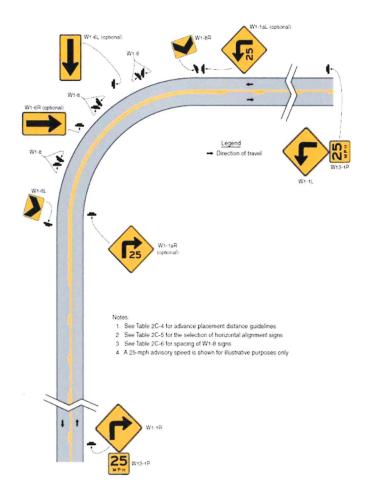
**Description of Work:** This safety project will provide current MUTCD standard curve warning signs at all horizontal curves on arterials and major collectors in the city limits (approximately 20 curves to be determined during the study).

- Conduct a horizontal curve inventory study and posted speed limit study to assess existing conditions
  - Collect advisory speed data for each curve and turn
  - Collect operating speeds near each curve and turn, then analyze that data using current methodologies to determine the most appropriate posted speed limit.
  - Calculate the difference between advisory speed and posted speed limit (per MUTCD)
- Design signing treatments
  - Determine the required (shall) and recommended (should) sign package for each curve per MUTCD Table 2C-5 (e.g., advanced warning sign, advisory speed plaque, chevrons, and/or one direction large arrow).
  - Confirm sign placement feasibility via field review
  - Produce plans, specifications, and estimates (PS&E) for curve signing
- Install horizontal curve warning signs

Vicinity Map: Work to be conducted city-wide.



Vicinity Map: Citywide Horizontal Curve Safety Improvements



## Conceptual Plan: Citywide Horizontal Curve Safety Improvements

Project Schedule (Estimated milestones): Copy this table for each project.

| Project agreement signed with WSDOT Local Programs  Begin PE (PE phase authorized by FHWA through WSDOT Local Programs)  Community/stakeholder engagement complete  Environmental documents (required for every project) approved by WSDOT Local Programs  Begin right-of-way (RW phase authorized by FHWA through WSDOT Local Programs)  Right-of-way completed (certification by FHWA through WSDOT Local Programs)  11 | Jest deficació (Estimated fillestoffes). Copy una table for cach project. |  |  |
|---|---|--|--|
| Begin PE (PE phase authorized by FHWA through WSDOT Local Programs)  Community/stakeholder engagement complete  Environmental documents (required for every project) approved by WSDOT Local Programs  Begin right-of-way (RW phase authorized by FHWA through WSDOT Local Programs)  Right-of-way completed (certification by FHWA through WSDOT Local Programs)  11   | 2022  |  |  |
| Community/stakeholder engagement complete  Environmental documents (required for every project) approved by WSDOT Local Programs  Begin right-of-way (RW phase authorized by FHWA through WSDOT Local Programs)  Right-of-way completed (certification by FHWA through WSDOT Local Programs)  11  | /2022   |  |  |
| Environmental documents (required for every project) approved by WSDOT Local Programs  11 Begin right-of-way (RW phase authorized by FHWA through WSDOT Local Programs)  21/2 Right-of-way completed (certification by FHWA through WSDOT Local Programs)   | 2023  |  |  |
| Begin right-of-way (RW phase authorized by FHWA through WSDOT Local Programs)  Right-of-way completed (certification by FHWA through WSDOT Local Programs)  11  | 2023  |  |  |
| Right-of-way completed (certification by FHWA through WSDOT Local Programs) 11  | /2023   |  |  |
|   | 2023  |  |  |
| Contract advertised   | 2023  |  |  |
| Contract advertised 212   | 2024  |  |  |
| Contract awarded 4/2  | 2024  |  |  |
| Construction complete 10  | /2024   |  |  |

| d. | <b>Does the project have current federal funding?</b> □ No. □ Yes. Identify the funding program (Highway Safety     |
|----|---|
|    | Improvement Program, Surface Transportation Block Grant Program, etc.). Federal funds cannot be used for the match. |

## **Project 2 Title: Systemic Roadway Departure Treatments**

Districts the project falls within: See http://app.leg.wa.gov/districtfinder/ for more information on the following.

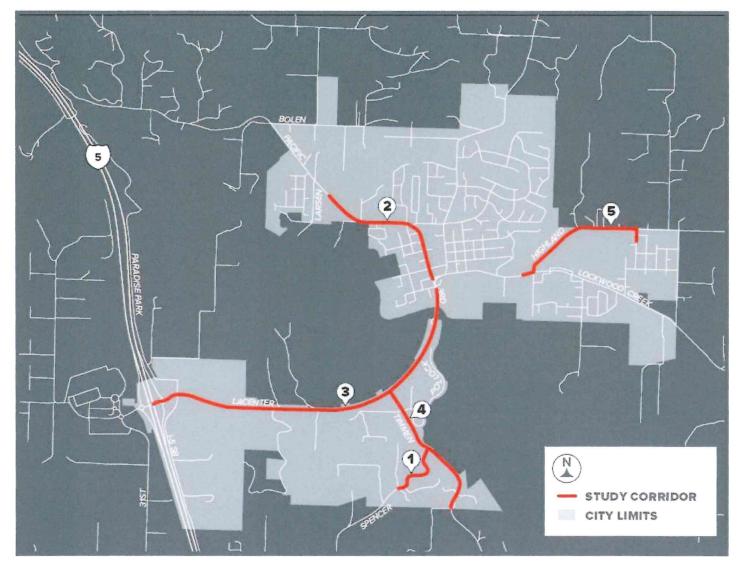
- State legislative district #(s): 18
- Congressional district #(s): 3

**Description of Work:** Low-cost roadway departure treatments focus primarily on keeping vehicles on the road and in their lane, and since motorists can depart the roadway at an infinite number of locations (versus the finite number of intersections in a jurisdiction), blanketing an entire corridor with roadway departure treatments can prevent future collisions, even at locations that have not experienced one in the past. The following treatments should be considered along select corridors.

- Enhanced Curve Safety Package. On top of the minimum requirements, horizontal curve signing will be enhanced to provide
  additional warning for motorists: doubled-up signs, oversized signs fluorescent yellow sheeting, chevrons alignment signs,
  flexible delineators, flashers, speed feedback warning, and pavement marking. Additionally, High Friction Surface Treatment
  may be appropriate at select curves.
- Rumble Strips or Profiled Pavement Marking. Provide visual, tactile, and auditory feedback to drivers either via rumble strips or profiled pavement marking depending on the surrounding land use.
- **Nighttime Delineation.** Provide delineation via vertical delineators or products added to current appurtenances (e.g., guardrail) to improve visibility of roadway alignment in dark conditions.
- **Fixed Object Treatments.** For each fixed object within the right-of-way (with priority for those objects in the clear zone), address each using the following hierarchy per FHWA:
  - a. Remove the obstacle.
  - b. Redesign the obstacle so it can be safely traversed.
  - c. Relocate the obstacle to a point where it is less likely to be struck.
  - d. Reduce impact severity by using an appropriate breakaway device.
  - e. Shield the obstacle with a longitudinal traffic barrier designed for redirection or use a crash cushion.
  - f. Delineate the obstacle if the previous alternatives are not appropriate.

Project Locations and Vicinity Map: Work to be conducted along the following corridors:

- NW Spencer Rd from NW Timmen Rd to NW 5th Ct
- NW Pacific Hwy from Downtown to 16th Ave
- NW La Center Rd from Interstate 5 to W 3<sup>rd</sup> Street
- NE/NW Timmen Road from NE 309th Circle to NW La Center Road
- NE Highland Ave / NE 339th Street from E 4th Street to NE 24th Avenue



- 1. NW SPENCER RD FROM NW TIMMEN RD TO NW 5TH CT
- 2. NW PACIFIC HWY FROM DOWNTOWN TO 16TH AVE
- 3. NW LA CENTER RD FROM INTERSTATE 5 TO W 3RD ST
- 4. NE/NW TIMMEN RD FROM NE 309TH CIRCLE TO NW LA CENTER RD
- 5. NE HIGHLAND AVE / NE 339TH SVVT FROM E 4TH ST TO NE 24TH AVE

Vicinity Map: Systemic Roadway Departure Treatments