

K23546 Portland & surrounding areas signal system coordination

The Signal System Coordination Project will include evaluating 62 signalized intersections throughout 5 corridors (7 project locations), throughout Washington and Clackamas Counties including the cities of Happy Valley, Tigard, Sherwood, Hillsboro, and Cornelius. The primary goal of the Signal System Coordination Project is to reduce average fuel consumption and emissions by improving traffic mobility and decreasing travel times, traffic delays and the number of vehicle stops at signalized intersections.

The corridors were selected based on need through input from signal managers and overlaid with census tracts identified through Justice40 criteria – i.e., historically disadvantaged communities facing overburdens including diesel particulate matter exposure, traffic proximity and volume, and income. 36 (58%) of the project’s signal locations fall within census tracts that meet burden thresholds and associated socioeconomic thresholds for disadvantaged communities.

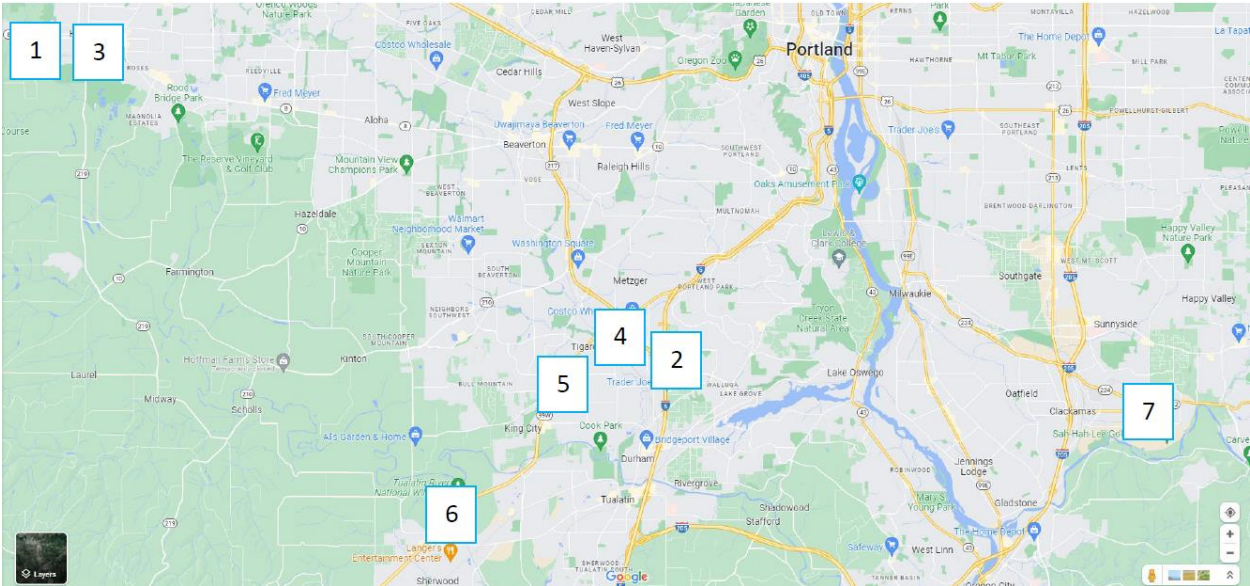
The primary work to be completed by this project is signal corridor retiming. Beyond some minor detection upgrades, there is no plan for major physical upgrades to any intersections. For each identified corridor, the project will complete:

- **Traffic Counts.** Collect traffic data including traffic volume counts and turning movements in order to inform the project traffic models.
- **Component Assessment.** Conduct a signal system hardware and communication components assessment to determine upgrades needed to support the retiming work.
- **Build and Calibrate Traffic Models.** Create and review a traffic model to develop signal system timing coordination plans for each corridor.
- **Implementation.** Implement the new timing plans in the field, and fine-tune them to real traffic conditions. As necessary, install new traffic signal controller equipment, detection, signal heads, and communication infrastructure based on the completed assessment.
- **Post-Implementation Analysis.** Conduct a “before” and “after” analysis and documenting the project benefits.

Project Budget:

Phase	Planned STIP Year	Phase Total Estimated Cost
Preliminary Engineering	2024	\$539,400
Construction	2025	\$379,900
Other (<i>for post-implementation analysis</i>)	2026	\$80,000
	Total	\$999,300

Project Location Overview:



- 1. Tualatin Valley Hwy (OR8) #029 – 3 signals between 20th Ave and 26th Ave (MP 15.72-16.06) Sherwood, Washington County**



- 2. **SW 72nd Ave #144 – 3 signals at OR217 interchange (MP 6.59-6.74)**
Tigard, Washington County



- 3. **Tualatin Valley Hwy (OR8) #029 – 13 signals at downtown Hillsboro couplet (MP 12.69-13.92)**
Hillsboro, Washington County

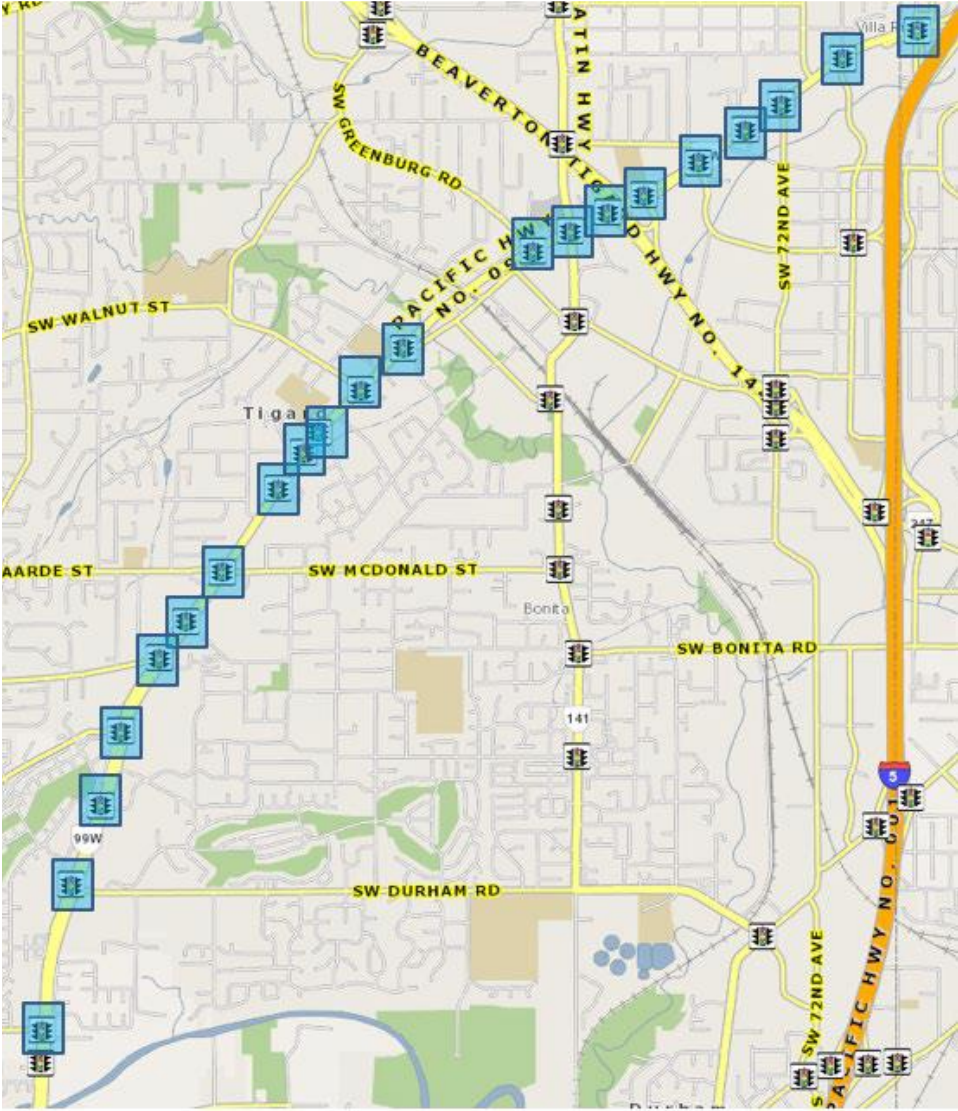


- 4. **Beaverton-Tualatin Hwy (OR141) #141 – 6 signals between SW Hunziker Rd and SW Sattler St**
(MP 5.25-6.66)
Tigard, Washington County

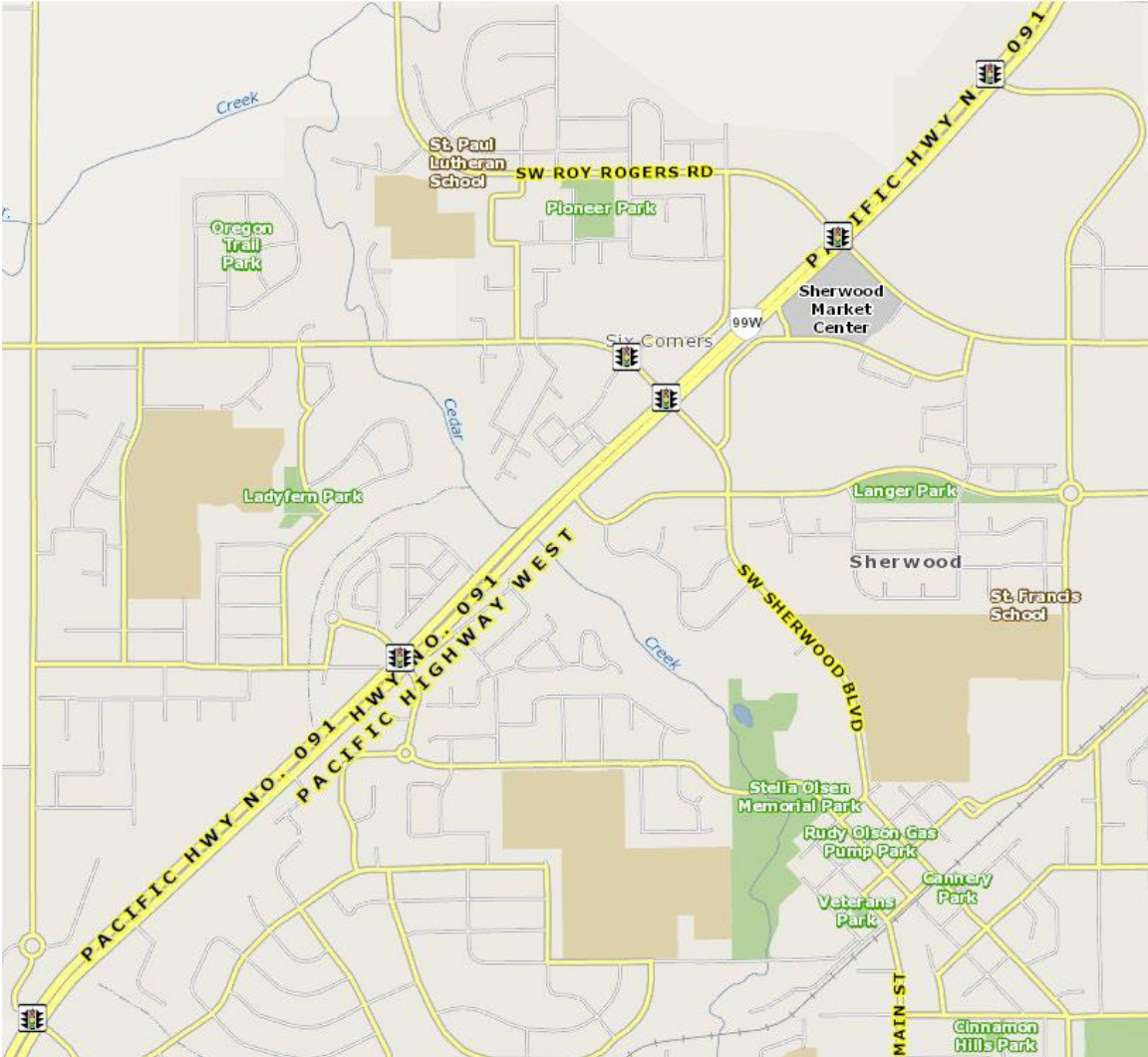


5. Pacific Hwy (OR99W) #091 – 22 signals between SW 64th Ave and SW Fischer Rd (MP 7.56-11.92)

Tigard, Washington & Multnomah Counties



6. Pacific Hwy (OR99W) #091 – 5 signals between SW Langer Farms Pkwy and SW Sunset Blvd (MP 14.67-16.67)
Sherwood, Washington County



7. Clackamas Hwy (OR212/224) #171 – 10 signals between I-205 SB ramp and Rock Creek Junction (MP 4.89-8.20)
Happy Valley, Clackamas County

