

# Project Overview & Goals



## Background

**Purpose of the Study:** This project will identify transportation projects that improve safety and reliability of the transportation system in the Grand Mound Urban Growth Area (UGA). Projects recommended by this study will also support growth by improving access to business and providing connections for bicyclists and pedestrians.

**Recommended Projects:**

- C1.** 196th Avenue SW & Sargent Road SW Intersection Improvements
- C3.** 196th Avenue SW & Elderberry Street SW Intersection Improvements
- C4.** US 12/Old Highway 99/Elderberry Street SW Intersection Improvements
- C7.** Old Highway 99 Improvements
- C8.** Sargent Road Improvements
- C10.** Sargent Road SW/201st Avenue SW/Old Highway 99 Intersection Improvements
- C11.** Old Highway 9 & Old Highway 99 Intersection Improvements
- C13.** Power Line Trail



## Overall Project Goals

To evaluate projects' consistency with the ultimate vision for Grand Mound, six goals that recommended projects must advance were developed. Goals for the Grand Mound Transportation Study include:



**Safety**

Transportation infrastructure in Grand Mound provides safe options for all users.



**Efficient**

Roadways and intersections have adequate capacity and function to avoid unacceptable levels of congestion for autos and freight, even as the region grows.



**Character**

Transportation infrastructure contributes to Grand Mound's identity as a distinctive place with rural character.



**Multi-Modal Connections**

Grand Mound's transportation system accommodates walking and biking, including connections to regional trails, transit, and commercial land uses.



**Economic Diversity & Tourism**

Transportation facilities support economic growth in Grand Mound, including residential, commercial, jobs, and tourism.



**Supported**

Transportation infrastructure in Grand Mound reflects community input

# C1. 196th Avenue SW & Sargent Road SW Intersection Improvements



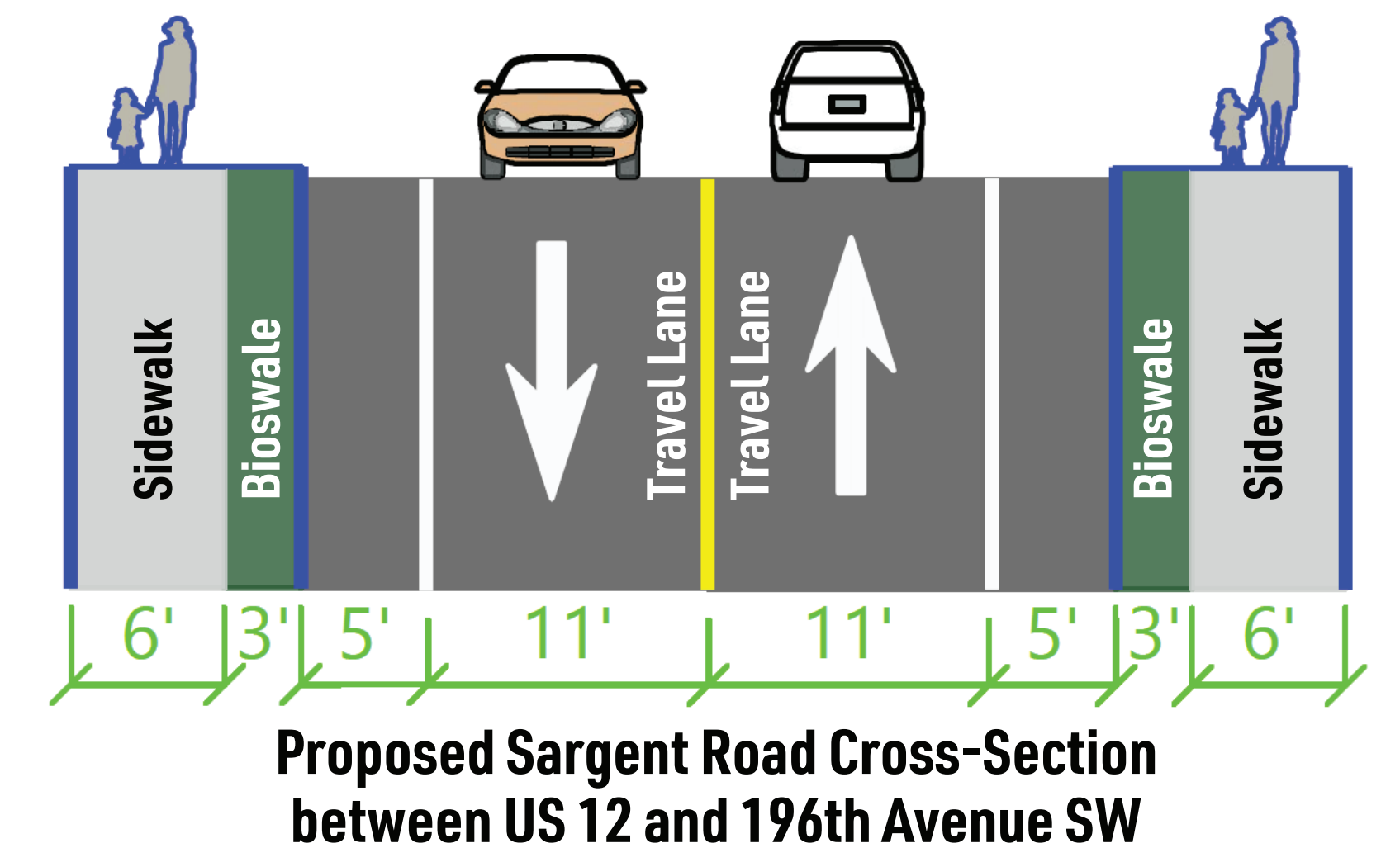
## PROJECT DESCRIPTION

Construction of a single-lane roundabout at the intersection and widening of sidewalks to 10 feet to provide a safe and comfortable option for bicyclists to navigate the roundabout.



## PROJECT CONSIDERATIONS

- Right-of-way impact on west, east, and north legs
- Signal control was also evaluated, but not recommended as roundabout maintains consistency with planned roundabout at US 12 intersection.



## COST

\$5.515M

## PROJECT BENEFITS



### Safety

- Roundabout control reduces speeds as vehicles enter the intersection
- Creates better alignment of east/west legs of the intersection



### Efficient

- Minimizes delay for vehicles on 196th Avenue SW as growth occurs in the area



### Character

- Creates consistency paired with other planned and proposed roundabouts along Sargent Road and 196th Avenue SW



### Multi-Modal Connections

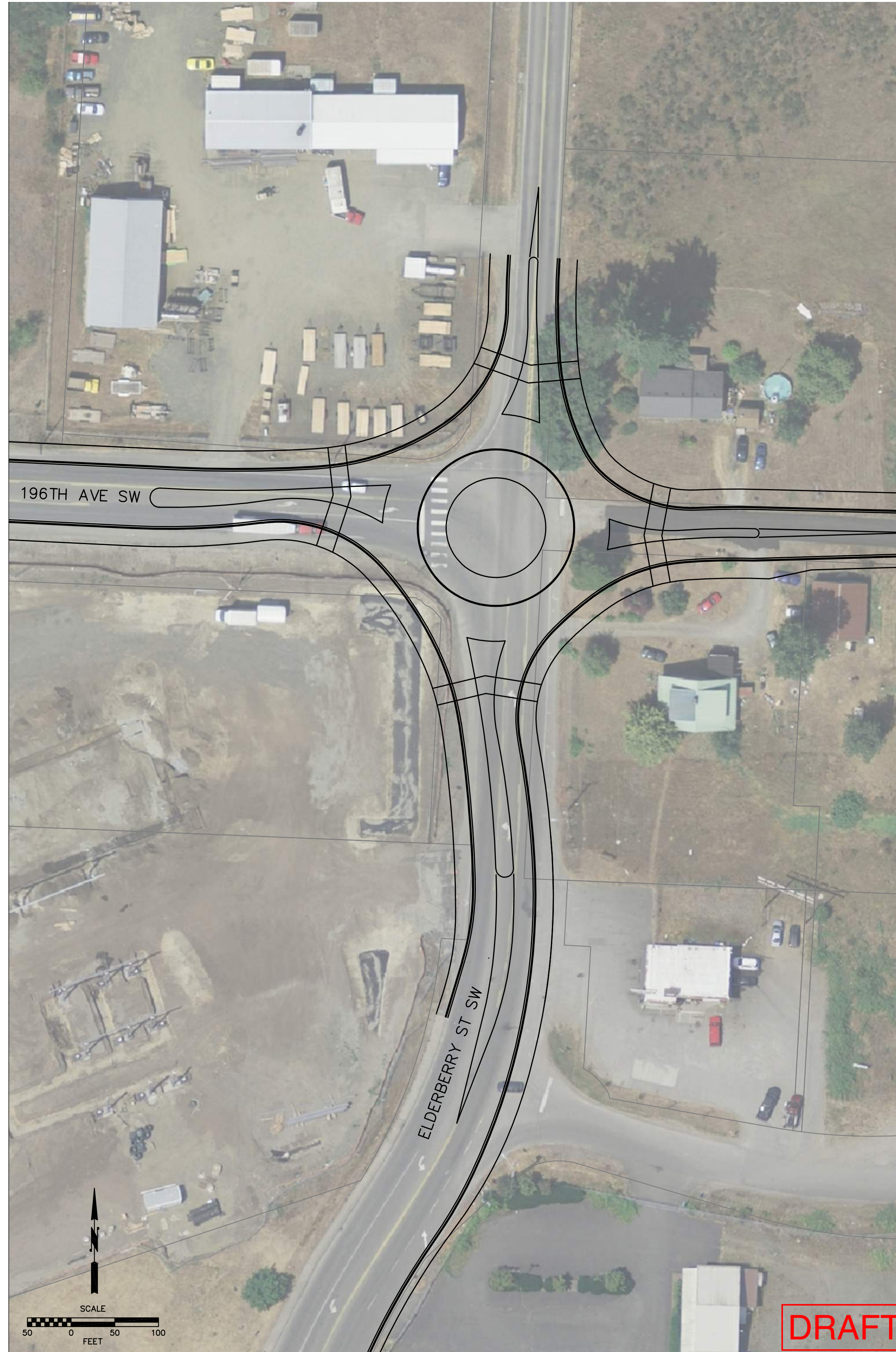
- Provides marked pedestrian crossings on all four legs
- Provides option for bicyclists to use sidewalk and marked crossings at the intersection



### Economic Diversity & Tourism

- Creates a reliable connection to potential development north of US 12

# C3. 196th Avenue SW & Elderberry Street SW Intersection Improvements



## PROJECT DESCRIPTION

This project would construct a single-lane roundabout at the intersection, including converting the existing driveway that aligns with the intersection on the east side of Elderberry Street to a full leg. This leg of the intersection would provide access to potential development to the east of Elderberry Street. This project would also widen sidewalks to 10 feet on all sides of the intersection to provide additional space on the sidewalk for bicyclists.

## PROJECT CONSIDERATIONS

- Project will require Right-of-Way acquisition on all four corners
- Roundabout design must accommodate large trucks traveling to and from land uses north of 196th Avenue SW
- Would require changes to driveways between US 12 and 196th Avenue SW

## COST

\$4.51M

## PROJECT BENEFITS



### Safety

- Roundabout configuration ensures vehicles on 196th Avenue SW can safely access the intersection as traffic on Elderberry Street increases in the future



### Character

- Creates consistency paired with other planned and proposed roundabouts along 196th Avenue SW



### Multi-Modal Connections

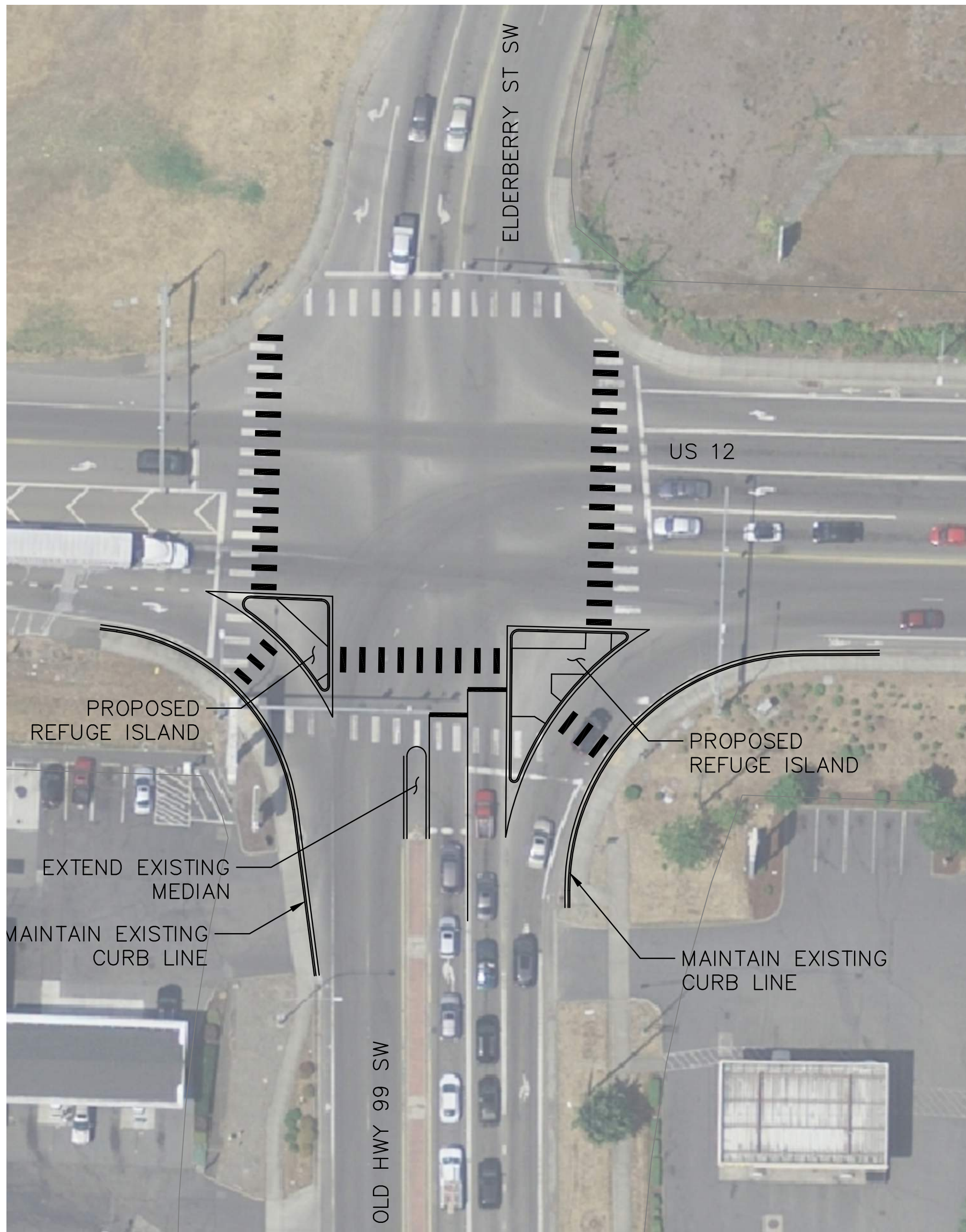
- Provides marked pedestrian crossings on all four legs
- Provides wider sidewalks at the intersection and option for bicyclists to use sidewalk and marked crossings at the intersection



### Economic Diversity & Tourism

- Roundabout configuration reconfigures intersection to accommodate growth and create driveway access for potential development to the east of Elderberry Street

# C4. US 12/Old Highway 99/Elderberry Street SW Intersection Improvements



Source: CMAP, 2020

## PROJECT DESCRIPTION

This project would construct pedestrian refuge-islands for pedestrians crossing the east, west, and south legs of the intersection. Addition of the pedestrian islands would decrease crossing times for pedestrians, resulting in decreased pedestrian exposure, and allowing the signal to operate more efficiently.

## PROJECT CONSIDERATIONS

- Could be paired with shared use path between Sargent Road and Old Highway 99
- Pedestrian overcrossing to the west of intersection was also considered to improve pedestrian crossings
- Improvements at this intersection would require additional coordination with Washington State Department of Transportation
- Northbound turn lane on Old Highway 99 frequently used for U-turns

## COST

\$250,000

High-level cost estimate to be refined through additional analysis.

## PROJECT BENEFITS



### Safety

- Shortens pedestrian crossing distance, reducing pedestrian exposure time while crossing US 12 and Old Highway 99
- Signal timing improvements improve queueing, reducing potential for rear-end collisions



### Efficient

- Improvements to signal timing improve intersection to acceptable levels of delay in the future



### Multi-Modal Connections

- Improves existing crossings for bicyclists and pedestrians



### Economic Diversity & Tourism

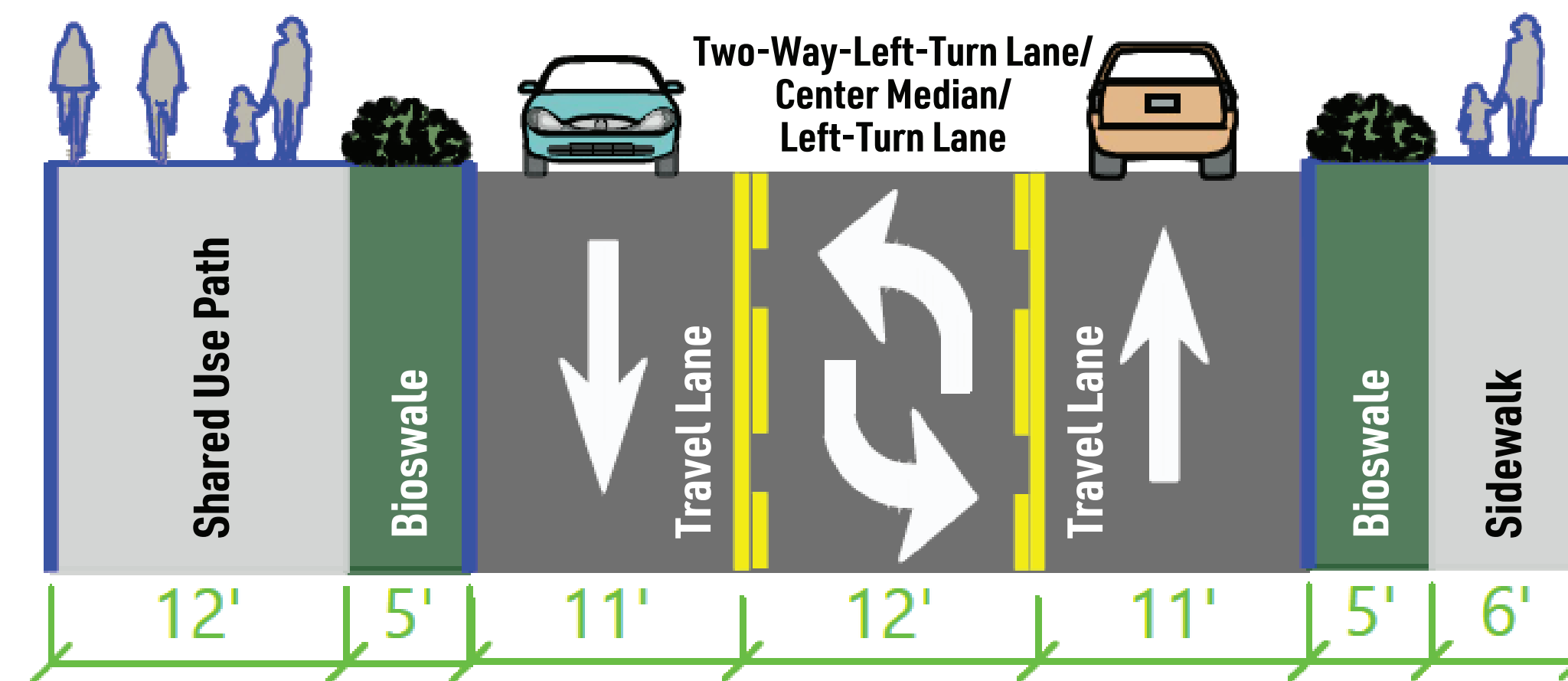
- Key connection to recent and planned development for all modes of travel.

# C7. Old Highway 99 Improvements



## PROJECT DESCRIPTION

Bicyclists would be accommodated on a shared-use path on the west side of Old Highway 99. On the east side of Old Highway 99 existing sidewalks, which are intermittent along the corridor today, would be connected between Old Highway 9 and 198th Avenue SW. The existing three-lane cross-section would be maintained, with the center lane transitioning between a two-way-left-turn-lane, left-turn pockets, and a median based on access requirements along the corridor. At least two mid-block crossings would also be recommended as part of these improvements. Specific locations should be identified as land use along the corridor develops, creating desire lines for pedestrian travel across Old Highway 99.



## PROJECT CONSIDERATIONS

- Access to Old Highway 99 should be limited to one access point per parcel to limit bicyclist and pedestrians crossing driveways
- Opportunities to consolidate access between parcels should be explored
- As development occurs, the ideal locations for mid-block crossings should be identified

## COST

\$8.24M

## PROJECT BENEFITS



### Safety

- Creates dedicated space for all users on a corridor with high number of collisions
- Consolidation of access points would reduce potential conflict points for all modes



### Character

- Creates consistent cross-section along Old Highway 99



### Multi-Modal Connections

- Improves existing bicycle and pedestrian facilities to provide separation from vehicles
- Completes missing connections on both sides of Old Highway 99 for bicyclists and pedestrians



### Economic Diversity & Tourism

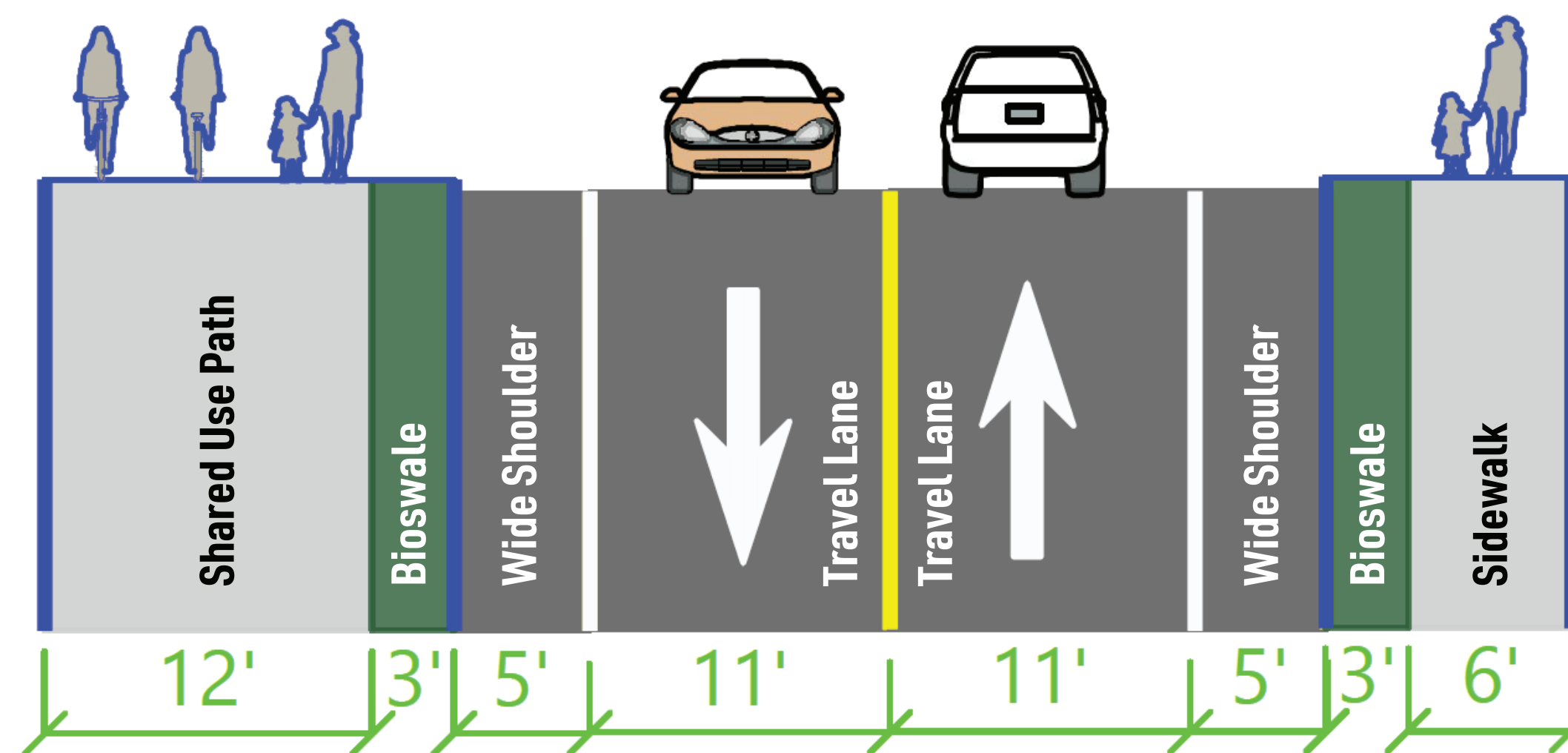
- Would create safe crossings to access development on both sides of Old Highway 99
- Completes bicycle and pedestrian connection from existing development to commercial area near US 12/Old Highway 99

# C8. Sargent Road Improvements



## PROJECT DESCRIPTION

This project would widen the existing Sargent Road cross-section to accommodate bicyclists and pedestrians, while providing adequate capacity for vehicles. The proposed Sargent Road cross-section includes a two-lane roadway with additional storage at intersections to provide storage for left-turning vehicles. To ensure bicyclists of all ages and all abilities have a facility separated from vehicles a shared-use path on the south/west side of Sargent Road for bicyclists and pedestrians is proposed. The north/east side of Sargent Road would also provide a sidewalk for pedestrians.



## PROJECT CONSIDERATIONS

- The cross-section would include shoulders which confident bicyclists could use on Sargent Road, consistent with Thurston County Bike Plan designations
- Would provide a safe connection for users of all ages and abilities to 198th Way SW and improvements on Old Highway 99

## COST

\$2.93M

## PROJECT BENEFITS



### Safety

- Cross-section would keep vehicle speeds low making Sargent Road safer for all users
- Separated bicycle and pedestrian facilities limit exposure to vehicles for those modes



### Character

- Creates consistent facilities for bicyclists and pedestrians connecting to Old Highway 99



### Multi-Modal Connections

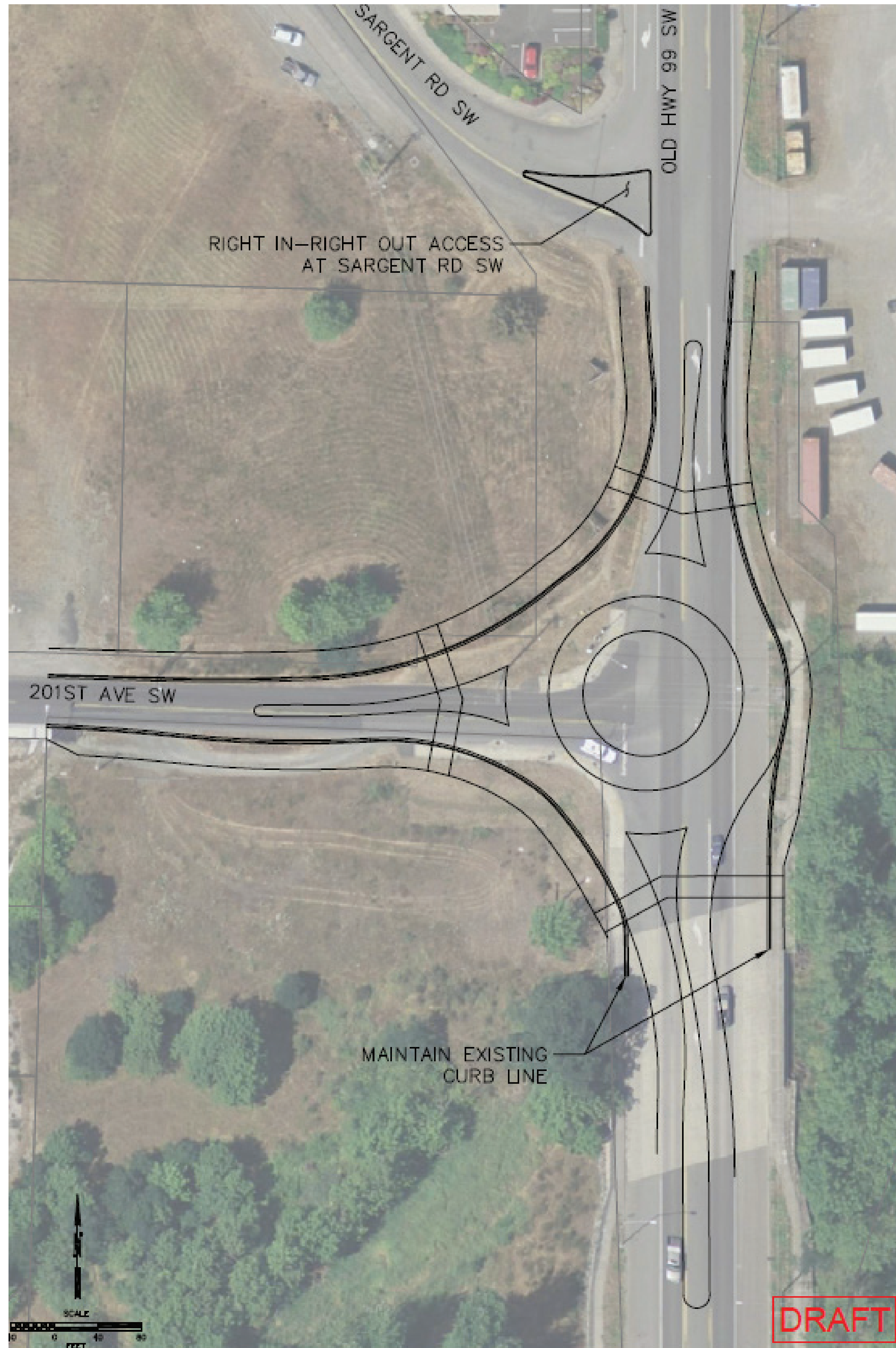
- Improves existing route to provide options for users of all ages and abilities



### Economic Diversity & Tourism

- Connects residential area west of Sargent Road to potential development near US 12 and on Old Highway 99

# C10. Sargent Road SW/201st Avenue SW/Old Highway 99 Intersection Improvements



## PROJECT DESCRIPTION

Reconfigure Sargent Road to allow right-in/right-out access only at Old Highway 99 and construct a single lane roundabout at 201st Avenue SW.

## PROJECT CONSIDERATIONS

- Limited access at Sargent Road would increase use of 198th Way SW
- Close spacing between 201st Avenue SW and Sargent Road SW limits options for intersection control
- Roundabout at 201st could be used to as turn-around for drivers to access northbound Old Highway 99
- Identification of additional north-south connection between Old Highway 99 and Tea Street SW would ensure more direct access to residential areas from 201st Avenue SW

## COST

\$5M

Cost-estimate to be refined through additional analysis

## PROJECT BENEFITS



### Safety

- Improves location with multiple collisions, including one fatal collision
- Roundabout at 201st Avenue SW slows speeds on Old Highway 99 and reduces potential vehicle conflicts at the 201st Avenue SW and Sargent Road intersections



### Character

- Roundabout control is consistent with recent improvements on Old Highway 99 and planned improvements on Sargent Road



### Efficient

- Without improvements the 201st Avenue SW intersection will operate with unacceptable levels of congestion in the future

# C11. Old Highway 9 & Old Highway 99 Intersection Improvements



## PROJECT DESCRIPTION

This project would construct a traffic signal at the Old Highway 9 intersection with Old Highway 99.

## PROJECT CONSIDERATIONS

- Intersection must be able to accommodate large trucks
- Need to maintain access to land use east of Old Highway 99
- Roundabout control also evaluated at this intersection, but screened due to access and Right-of-Way impacts

## COST

\$900,000

Cost to be refined through further evaluation

## PROJECT BENEFITS



### Safety

- Signal control will reduce potential conflict between all modes, improving safety at intersection
- Traffic control would create safer crossing opportunities for bicyclists and pedestrians



### Efficient

- Without improvements, this intersection will experience significant congestion in the future
- Ensures access from Old Highway 9 as volume on Old Highway 99 increases



### Economic Diversity & Tourism

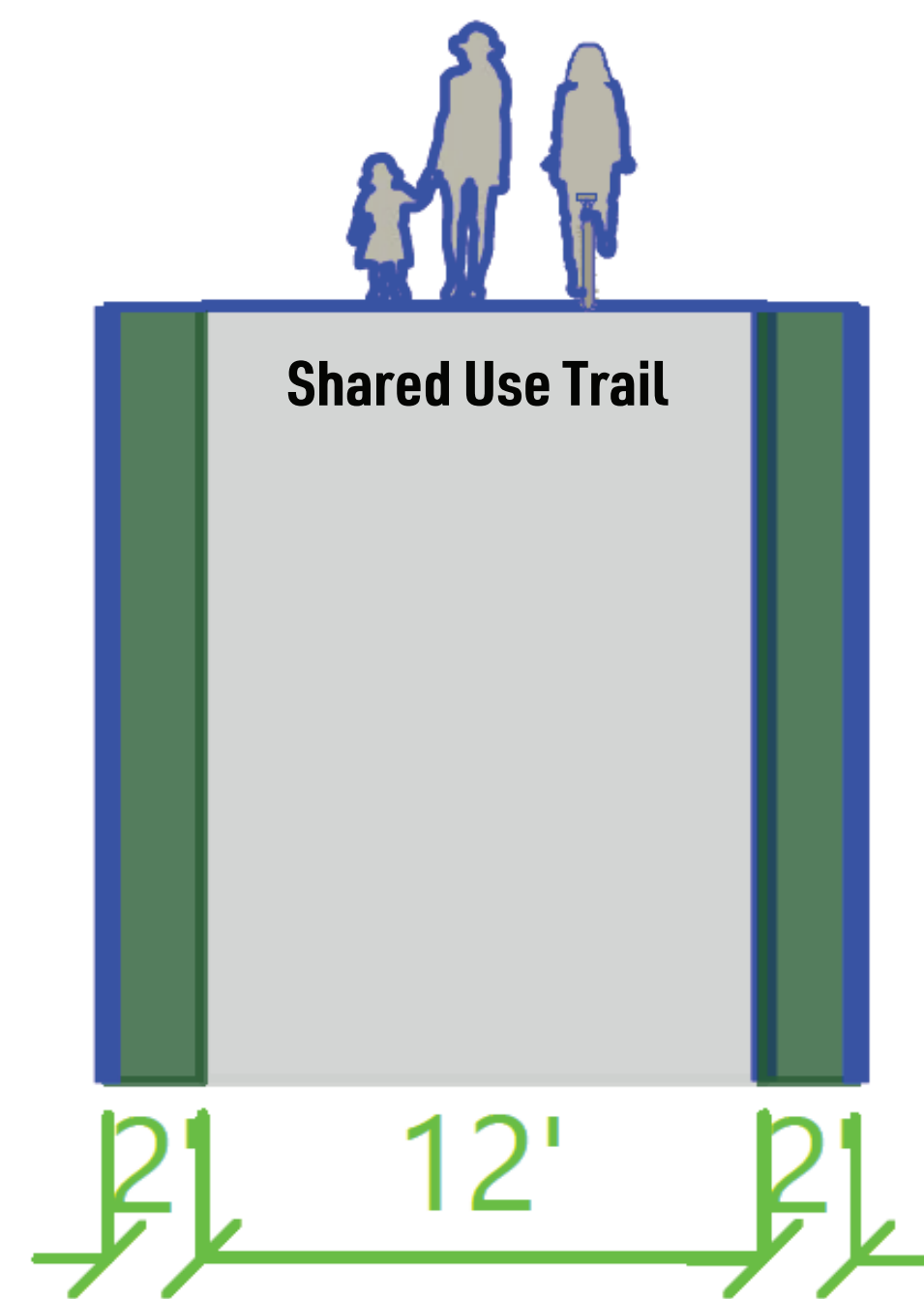
- Key intersection for access to Maple Lane and Grand Mound & Rochester Schools

# C13. Power Line Trail



## PROJECT DESCRIPTION

This project would construct a multi-use trail following the current power lines alignment for bicyclists and pedestrians.

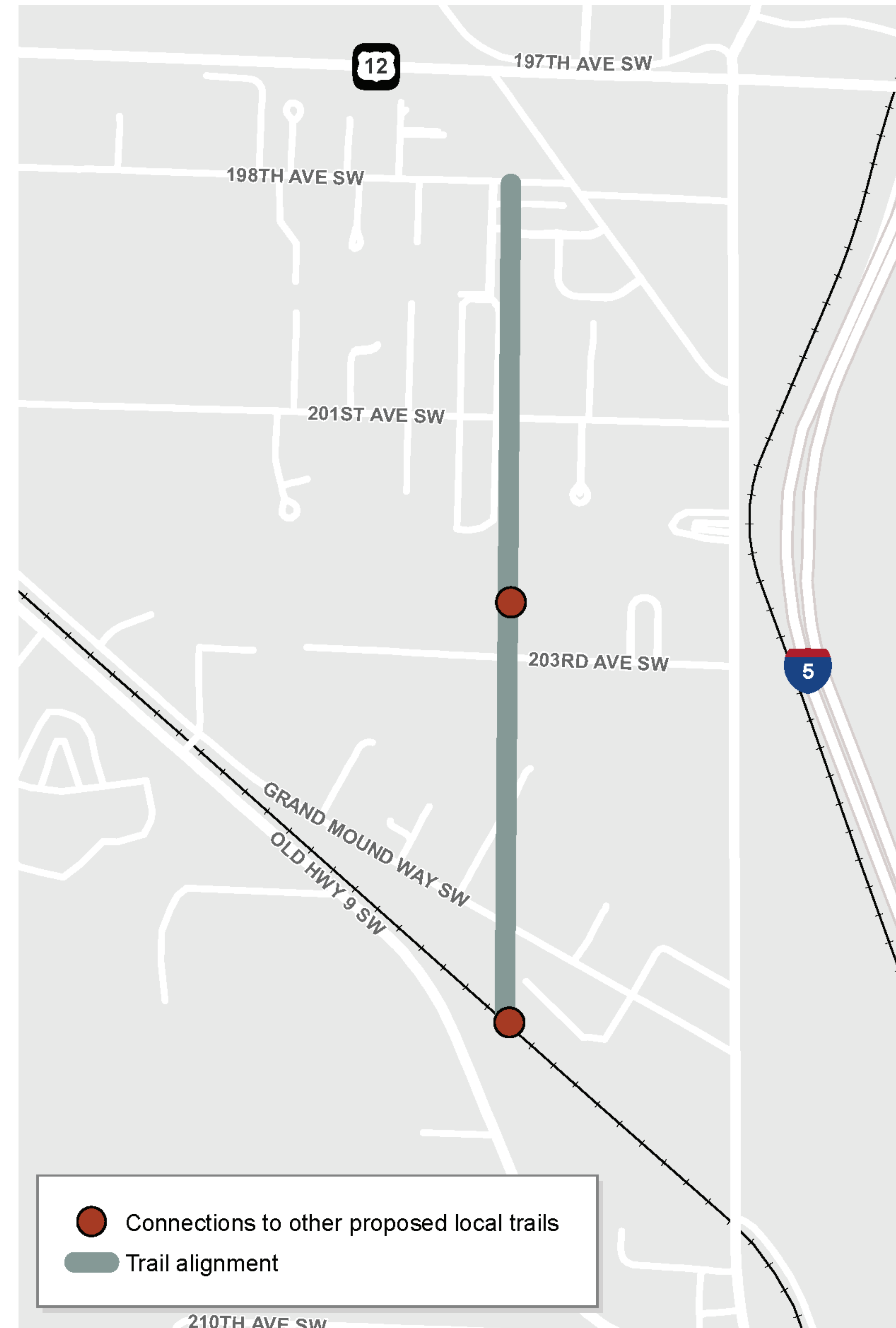


## PROJECT CONSIDERATIONS

- Will require coordination with PSE
- Treatments for trail crossings at local streets will be included as part of study recommendations
- Will require wayfinding signage to direct users to trail

## COST

\$3M



## PROJECT BENEFITS

### Multi-Modal Connections

- Creates a direct north-south connection for bicyclists and pedestrians from Old Highway 9 to 198th Way SW
- Could provide local connections to a Prairie Creek Trail and the Grand Mound -Rochester Trail

### Safety

- Replaces existing on-street options for bicyclists and pedestrians with dedicated facility

### Economic Diversity & Tourism

- Creates multi-modal connection between residential areas and commercial areas