



# West Kitsap Way Planning Study



## Appendix B

### Future Transportation Conditions



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# Future Transportation Conditions

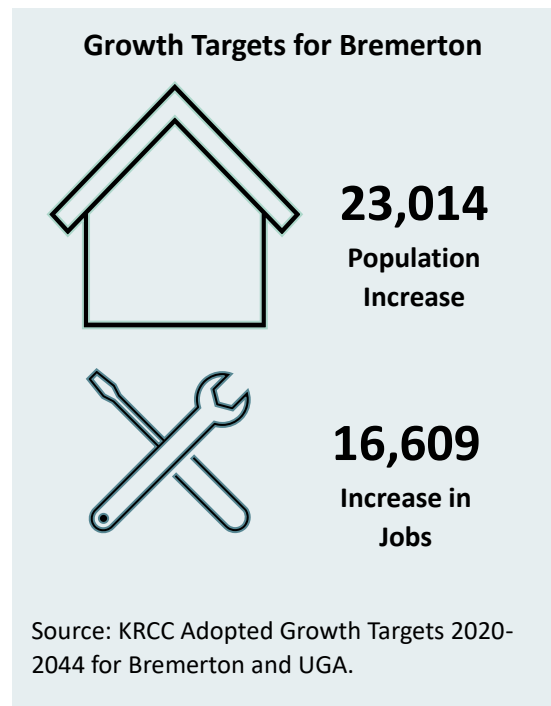
This appendix describes the future growth and forecasts used to describe the future conditions of the Kitsap Way.

## Future Growth

The Kitsap Regional Coordinating Council (KRCCO) developed 2020-2044 growth targets for cities and communities in Kitsap County (February 15, 2022). Approximately 23,014 new residents and 16,609 new jobs will be accommodated within the Bremerton and its Urban Growth Area. Most of the growth within Bremerton is expected to occur within the Downtown and designated Centers.

The Puget Sound Regional Council (PSRC) maintains a regionwide travel demand model to help communities understand how future growth in vehicle traffic may impact streets. Throughout the County, higher levels of growth are expected in designated urban growth areas, such as Silverdale, with lower growth in more rural areas.

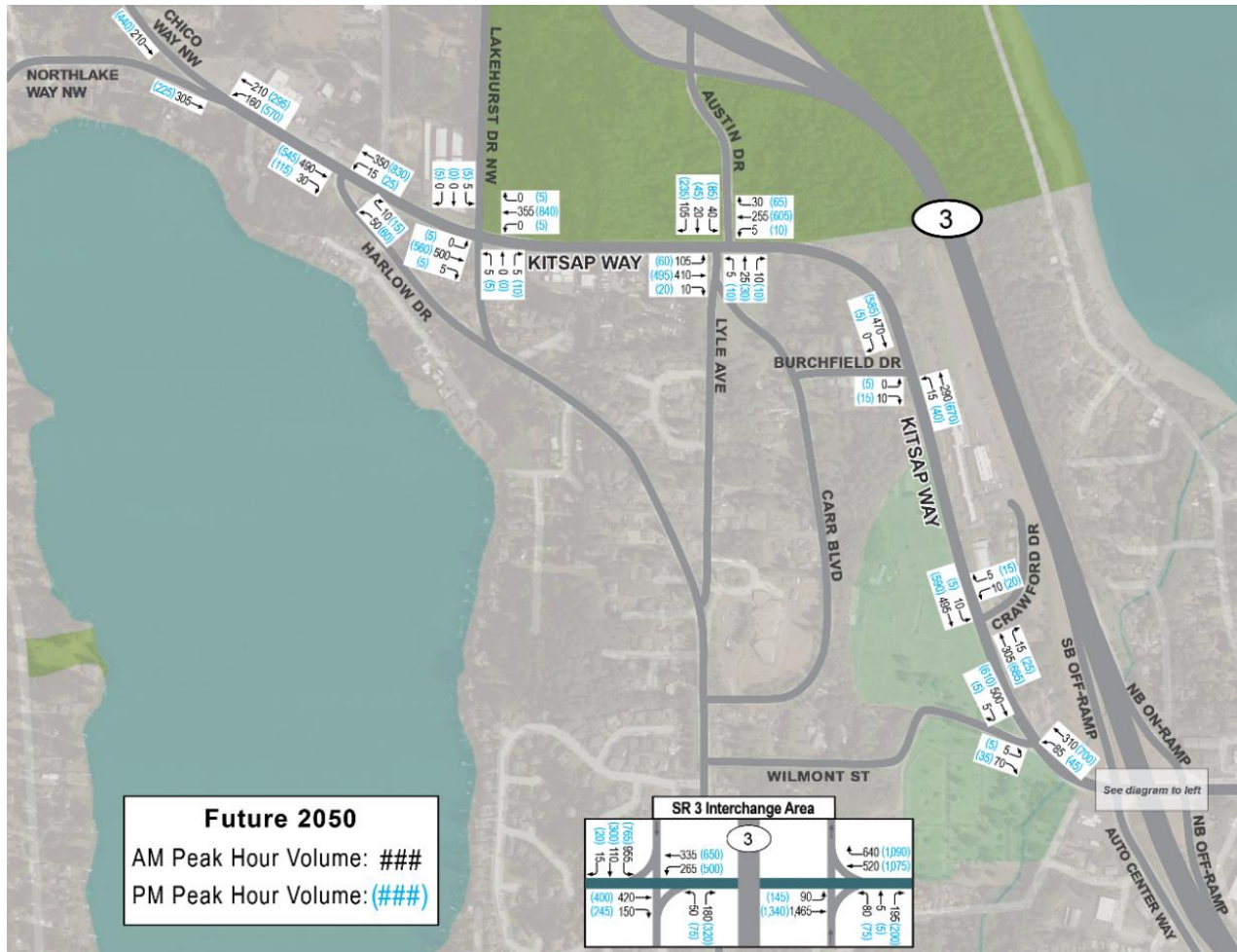
Land uses near the West Kitsap Way corridor are mostly zoned for low-density residential (R-10) with areas of general commercial (GC) in Kitsap Junction and along the east side of Kitsap Way. Near the SR 3 interchange, there are a few parcels with freeway commercial (FC) zoning. An area of potential growth is the Ueland Tree Farm, west of the corridor off of Northlake Way NW, which could be redeveloped for residential homes.



## 2050 Forecasts

The Puget Sound Regional Council (PSRC) maintains a regionwide travel demand model to help communities understand how future growth in vehicle traffic may impact area streets. These forecasts were used to determine the future growth and 2050 volumes on Kitsap Way. Between 2022 and 2050, the analysis shows that approximately 28 percent growth on Kitsap Way. **Figure B-1** below shows the 2050 the AM and PM peak hour traffic volumes at the study intersections.

**Figure B-1. 2050 AM and PM Peak Hour Volumes**



## 2050 Intersection Operations

Applying the 2050 forecasts to the existing transportation network identified locations where future traffic operations issues will occur. Of the study intersections, three will operate below LOS D. Without improvements the Austin Drive-Lyle Avenue / Kitsap Way intersection at LOS E and the SR 3 Southbound Off-Ramp-Auto Center Way/ Kitsap Way intersection will operate at LOS F during the PM peak hour and the Harlow Drive/ Kitsap Way will operate at LOS E during the PM peak hour.

**Table 1. 2050 Intersection LOS and Delay (Seconds)**

Intersection	Traffic Control	2050	
		AM Peak Hour	PM Peak Hour
Northlake Way NW-Chico Way NW / Kitsap Way	Yield	<b>A (8)</b>	<b>B (12)</b>
Harlow Drive / Kitsap Way	Stop Sign	<b>C (17)</b>	<b>E (40)</b>
Lakehurst Drive NW / Kitsap Way	Stop Sign	<b>C (15)</b>	<b>C (23)</b>
Austin Drive-Lyle Avenue / Kitsap Way	Stop Sign	<b>C (22)</b>	<b>F (252)</b>
Kitsap Way / Burchfield Drive	Stop Sign	<b>A (10)</b>	<b>B (14)</b>
Kitsap Way / Crawford Drive	Stop Sign	<b>B (13)</b>	<b>C (18)</b>
Kitsap Way / Wilmont Street	Stop Sign	<b>B (11)</b>	<b>B (11)</b>
SR 3 Southbound Ramp-Auto Center Way / Kitsap Way	Signal	<b>C (30)</b>	<b>F (90)</b>
SR 3 Northbound Ramps / Kitsap Way	Signal	<b>B (14)</b>	<b>C (32)</b>

Note: LOS calculated using HCM 6th Edition methodology. For unsignalized intersections, the side street stop delay is reported for the worst stop-controlled approach.

## 2050 Roadway Capacity

With 4 lanes, Kitsap Way has the capacity to accommodate approximately 30,000 vehicles per day or more than twice the capacity than the forecasted 2050 daily traffic volumes of 14,000 vehicles per day and three times the capacity as needed to accommodate the existing 10,000 vehicles per day. The excess capacity in the existing four-lane configuration encourages higher speeds. In addition, not all of the capacity of a four-lane roadway is used, because drivers avoid the middle lanes to not be delayed by vehicles waiting to turn left.

Reducing the number of lanes on Kitsap Way to a single through lane in each direction will better match the 2050 volumes forecast, while lowering speeds and improving safety. This lane reduction will also create space in which to provide safety and non-motorized improvements along the corridor.

## **Corridor Needs**

The current corridor will need improvements by 2050 with or without the project to address the safety, operational, and maintenance issues of the corridor and will have significant associated costs. The following are the primary future needs of the corridor:

**Roadway Reconstruction** – As identified in the existing conditions analysis and the geotechnical report, multiple sections of the corridor are at the end of their useful life and need to be reconstructed or rehabilitated.

**Intersection Operations** – The 2050 Level of Service analysis found that the Harlow Drive/Kitsap Way, Austin Drive-Lyle Way/Kitsap Way, and the SR 3 ramp-Auto Center Way/Kitsap Way intersections are expected to operate below city standards and may require improvements to address congestion.

**Pedestrian and Bicycle Needs** – Higher volumes of pedestrians and bicycles are expected to use Kitsap Way for commute and recreational purposes. Without adding separated facilities for non-motorized users, vehicle-pedestrian and vehicle-bicycle conflicts are likely to continue.

**Corridor Safety** – The analysis of 5-years of crash data found that there were multiple crashes along the corridor. Without corridor improvements, the number of crashes is expected to increase along the corridor. The existing four-lane configuration encourages higher speeds and vehicles must turn left from the through travel lane, both of which are primary causes of crashes along the corridor.

## **Summary of Future Conditions Analysis**

Results of the analysis of future conditions are summarized below:

- Approximately 28 percent growth in traffic levels on Kitsap Way between 2022 and 2050.
- The SR 3 Southbound Off Ramp-Auto Center Way/Kitsap Way intersection will operate at LOS F during the evening commute.
- The Austin Drive-Lyle Way/Kitsap Way intersection will operate at LOS F during the evening commute.
- The Harlow Way/Kitsap Way intersection will operate at LOS E during the evening commute.
- Improvements to the corridor are needed to intersection operation issues, roadway reconstruction, pedestrian and bicycle safety, and corridor safety.