
Appendix C
Description of Alternative Packages

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Description of the Phase 2 Alternative Packages

The alternative packages evaluated as part of the Phase 2 study effort are described below.

P1: No Action Alternative – 2020 and 2040:

The No Action Alternative in 2020 and 2040 is similar to the 2013 existing conditions with the addition of TIGER III Grant projects and the Madigan Access Improvements, as well as projects affecting the area from TIP and STIP programs. In addition, there are other off-I-5 improvements including various JBLM gate changes. Both the opening of the new Integrity Gate and modifications to the Mounts Road Gate may affect traffic volumes at the I-5 interchanges.

Transit service enhancements identified in PSRC's *Transportation 2040* regional plan are also assumed to be in place in this alternative. These enhancements focus primarily on the long-term plans of Sound Transit and include the extension of Sounder Commuter Rail to DuPont. For 2020, existing transit service is assumed.

P2: Enhanced Transit Alternative – 2020 and 2040:

This package contains all elements of the P1 – No Action Alternative. It would also add enhanced transit service including the following new bus routes with 15-minute headways during peak commute periods:

- Lacey to DuPont P&R to Main Gate to Lakewood
- Lacey to Yelm to East Gate to Spanaway or Puyallup
- Lacey to SR 512 park-and-ride lot to Downtown Tacoma
- Spanaway to Lakewood to Lacey
- Lacey to Main Gate to Lakewood

These new routes represent what would essentially be a doubling of existing service along the I-5 corridor. Alternative P2 also assumes an expanded shuttle bus system on JBLM that matches the off-Base transit schedule, thus facilitating a smooth and connected trip to and from the base.

P3: Alternative with Local Road Improvements with Enhanced Transit Service – 2020 and 2040: This package contains all elements of the P2 – Enhanced Transit Alternative and would also include the following local road improvements, as illustrated in Figure 1:

- B-3: Gravelly Lake Connector – Add a new 2-lane urban road west of and parallel to I-5 between Thorne Lane and Gravelly Lake Drive.
- B-13: SR 507 – Widen 507 to four lanes from McKenna to East Gate Road.
- B-17: New High Speed Road – Construct a new highway/high speed arterial road from the Joint Base Connector Road to 176th Street SE.
- C-7: South A Road Extension – Extend South A Road from Jackson Road to Logistics Gate.
- C-8: Joint Base Connector Phase 2 – Add a new 4-lane higher speed connection between Lewis Main and McChord Field.

- C-9: Fairway Road Extension – Improve and extend Fairway Road as 2-lane road from the new Joint Base Connector to Bridgeport Way.
- C-15b: New arterial – Add a two-lane urban road close to the I-5 corridor, from Mounts Road to Jackson Avenue.
- C-21: New JBLM Collector Street, DuPont Gate to East Gate – Construct or improve a new two-lane road, following the rail alignment and combat vehicle trail.
- C-30: On-Base Signalization Improvements – Synchronize existing traffic signal operations in the Pendleton Avenue/Jackson Avenue corridor.

P4: I-5 Express Lanes Alternative – 2020 and 2040:

Alternative P4 would add two I-5 express lanes in each direction. The express lanes would extend from north of the Center Drive Interchange to north of the Gravelly Lake Drive Interchange. These express lanes would be ‘managed lanes’ and can evolve over time to best address demand, technology, and future conditions. Some possible options for the managed lanes could include: congestion pricing, High Occupancy Vehicle (HOV) lane(s), High Occupancy and Toll (HOT) lane(s), “truck only” lane(s), and/or “smart car only” lane(s).

For analysis purposes, it was assumed that the express lanes would include an HOV lane and a GP lane in each direction. For the 2020 analysis, one of the existing GP lanes north of the Gravelly Lake Drive Interchange was assumed to be converted to an HOV lane. In the 2040 configuration, an HOV lane would be added to the existing four GP lanes north of Thorne Lane and would be added to the existing three lanes at the south end of the project into Thurston County.

P4a: I-5 Express Lanes Alternative with Local Road Improvements – 2020 and 2040:

This alternative package would include all the improvements in the P4 – Express Lane Alternative and would add the three local road improvements listed below:

- B-3: Gravelly Lake Connector – A new 2-lane urban road west of and parallel to I-5 between Thorne Lane and Gravelly Lake Drive
- C-8: Joint Base Connector – A new 4-lane higher speed connection between Fort Lewis and McChord Field.
- C-9: Fairway Road Extension – Improve and extend Fairway Road as 2-lane road from the new Joint Base Connector to Bridgeport Way.

These local improvements would provide alternative on-Base and off-Base local routes for travel between downtown Lakewood and the Tillicum neighborhood without using I-5, for internal travel between the Lewis Main and McChord Field areas of JBLM, and for travel from Lewis Main to Lakewood without using I-5.

P5: I-5 HOV and CD/Auxiliary Lanes Alternative – 2020 and 2040:

Alternative P5 would add an HOV lane in each direction and two sets of CD Lanes connected by auxiliary lanes. One set of CD lanes would link the ramps at the Mounts Road, Center Drive, and Steilacoom-

DuPont Road Interchanges. The other set would use an auxiliary lane to link ramps at the Berkeley Street and Thorne Lane Interchanges to Gravelly Lake Drive. These two sets of CD lanes would be connected with auxiliary lanes between the Steilacoom-DuPont CD lanes and the Berkeley CD lanes. For the 2020 analysis one of the existing GP lanes north of the Thorne Lane Interchange is assumed to be converted to an HOV lane. In the 2040 configuration, an HOV lane would be added to the existing four GP lanes at the north end and to the existing three lanes at the south end of the project.

P5a: I-5 HOV and CD/Auxiliary Lanes Alternative with Local Road Improvements – 2020 and 2040:

This alternative package would include all the improvements in the P5 – HOV and CD Lanes Alternative and would add the three local road improvement projects associated with Alternative Package P4a.

P6: I-5 HOV and GP Lanes Alternative – 2020 and 2040:

Alternative P6 would add an HOV lane and a GP lane in each direction along I-5. A fourth GP lane would be added from Mounts Road to Thorne Lane in each direction. For the 2020 analysis, the HOV lanes would end south of the Steilacoom-DuPont Road Interchange and one of the existing GP lanes north of the Thorne Lane Interchange is assumed to be converted to an HOV lane. In the 2040 configuration, an HOV lane would be added to the existing four GP lanes at the north end of the project, and to the existing three lanes at the south end. For modelling purposes in 2040, the HOV lane is assumed to extend from Thurston County to Tacoma.

P6a: I-5 HOV and GP Lanes Alternative with Local Road Improvements – 2020 and 2040:

This alternative package would include all the improvements in the P6 – HOV and GP Lanes Alternative and would add the three local road improvements associated with Alternative Package P4a.

P7: I-5 HOV Lane Alternative – 2020 and 2040:

Alternative P7 would add an HOV lane in each direction along I-5. For 2020, the extra lanes would begin and end at the Center Drive Interchange and the inside northbound lane would become an HOV lane at the Steilacoom-DuPont Road Interchange. For the 2020 analysis one of the existing GP lanes north of the Thorne Lane Interchange is assumed to be converted to an HOV lane. In the 2040 configuration, an HOV lane would be added to the existing four GP lanes at the north end and to the existing three lanes at the south end of the project. For 2040 modelling purposes, the I-5 configuration assumes the HOV lanes extend from Thurston County to Tacoma. An existing GP lane in each direction north of the Thorne Lane Interchange would be converted into an HOV lane.

P7a: I-5 HOV Lane Alternative with Local Road Improvements and Transit Enhancements – 2020 and 2040:

This alternative package would include all the improvements in the P7 – HOV Lanes Alternative and would add the enhanced transit improvements included in Alternative P2. It would also add the three local road improvement projects associated with Alternative Package P4a.

P7b: I-5 HOV Lane Alternative with Local Road Improvements – 2020 and 2040:

This alternative package is the same as Alternative P7a except the enhanced transit improvements would not be included.

Figure 1: Selected Local Road Improvements in Alternative Package P3

