# Hayden Island Interchange options - key characteristics:

## **Locally Preferred Alternative (LPA)**

- Provides all needed movements directly to/from Hayden Island while separating this traffic from the Marine Dr. truck traffic.
- Access patterns support short and long term redevelopment of the SuperCenter and an attractive redevelopment focus around a new LRT station west of I-5.
- However, it is at the cost of producing a substantial footprint across the island at 540' on 10 structures and Tomahawk Island Dr. at 14' below grade.

#### Concept A - Arterial Access

- Provides complete access from Hayden Island to the full road network, including Interstate access to I-5 and new arterial bridges across the Harbor providing regional access to MLK and Marine Drive and local access to the Bridgeton/Expo area.
- New connections between the island and mainland via arterial streets create a better neighborhood scale of connectivity between Hayden Island and Portland neighborhoods.
- Although street patterns and access routes on the island are supportive of short-term redevelopment of the SuperCenter and long term development focused around an attractive area around LRT, freeway access to/from the south is more challenged due to an exit farther south and through the Marine Drive interchange.
- Finally, the barrier effect of the footprint on the island is modestly less than the LPA (470' vs. 540' on 6 structures vs. 10 structures and Tomahawk Island Drive is 6' below grade vs. 14' below grade).

#### Concept B - Smallest Footprint

- Provides ramp connections to Hayden Island with the most substantial reduction in footprint across the island compared to the LPA (340' vs. 540' on 4 structures vs. 10 structures and Tomahawk Island Drive is 5' below grade vs. 14' below grade).
- However, it challenges redevelopment plans by focusing freeway traffic on Tomahawk Island Drive and has a more challenging LRT station development area.
- And, it has a more challenged access to the freeway to/from the south due to ramps connecting just south of the North Portland Harbor but not as far south as Concept A.

### Concept C – Remove local access from the Hayden Island Interchange

- Like the LPA, provides direct Hayden Island freeway ramps between Jantzen Drive to/from the north and between Hayden Island Drive to/from the south. It shifts the southbound ramps further south to braid over the North Portland Harbor rather than across the island. Finally, it removes freeway ramps between Hayden Island Drive and the Marine Drive interchange replaced with a local street connection between Tomahawk Island Drive and the Expo/Bridgeton street network.
- This produces a narrower but taller footprint than the LPA (450' vs. 540' on 7 structures vs. 10 structures and Tomahawk Island Drive is 7' below grade vs. 14' below grade).
- In addition, it is supportive of short-term redevelopment of the SuperCenter and has an attractive redevelopment focus around a new LRT station west of I-5. It also creates a new arterial access route adjacent to the LRT Bridge over the Harbor for the island to the mainland Portland neighborhoods.

#### Piers in the water

- The LPA adds three new structures across North Portland Harbor involving 35 new piers. Consideration of a "biological assessment" by the federal agencies is underway.
- Migration to Concepts A, B or C will require further federal consultation due to more piers in the water: Concept A – 45 piers on 4 structures, Concept B – 49 piers on 5 structures, Concept C – 45 piers on 4 structures.

#### Cost

- Concept A requires implementing the Marine Drive NB Flyover and SB Braided Ramp @ \$120 million rather than delaying to a future phase.
- Concept B & C will likely be lower in cost than the LPA.
- Concept A provides the advantage of two arterial bridge connections to Hayden Island which will likely be at a higher cost than the LPA although one of the bridges could be delayed to a future phase.