



# DRAFT Workshop Agenda

**MEETING TITLE:** Project Sponsors Council Workshop with Integrated Project Staff  
**DATE:** Friday, June 11, 2010  
**TIME:** 10:00 a.m. – 12:30 p.m.  
**LOCATION:** Washington State Department of Transportation, SW Region  
11018 NE 51<sup>st</sup> Circle, Vancouver, Washington 98662

TIME	AGENDA TOPICS
10:00 a.m.	Welcome
10:15 a.m.	Hayden Island Interchange Design Report: <ul style="list-style-type: none"><li>• Review Concept 1: Remove Hayden Island interchange and provide alternative access</li><li>• Review Concept 2: Redesigned Hayden Island interchange</li></ul>
11:30 a.m.	Break
11:40 a.m.	IPS Work Plan Progress Report: <ul style="list-style-type: none"><li>• Metroscope</li></ul>
12:20 p.m.	IPS Work Group Updates
12:30 p.m.	Adjourn

**TRANSIT DIRECTIONS from PORTLAND:**

From Downtown Portland, take C-TRAN Express Bus #164 to the Fisher's Landing Transit Center. Transfer to Bus #80 (Van Mall/Fisher's) eastbound to 49th and 112th Avenue. WSDOT SW Region Headquarters is 2 blocks north of this bus stop.

**TRANSIT DIRECTIONS from VANCOUVER:**

From Downtown Vancouver take C-TRAN Bus #4 (Fourth Plain) eastbound to the Vancouver Mall Transit Center. Other buses to Vancouver Mall are #32, 72, 44 and 78. From the Mall Transit Center, transfer to Bus #80 (Van Mall/Fisher's) eastbound to 49th and 112th Avenue. WSDOT SW Regional Headquarters is 2 blocks north of this bus stop.

For detailed trip planning, please contact the two transit agencies: C-TRAN, [www.c-tran.com](http://www.c-tran.com), 360-695-0123, or TriMet, [www.trimet.org](http://www.trimet.org), 503-238-RIDE

Meeting facilities are wheelchair accessible and children are welcome. Individuals requiring reasonable accommodations may request written material in alternative formats or sign language interpreters by calling the project team at the project office (360-737-2726 and 503-256-2726) one week before the meeting or calling Washington State's TTY telephone number, 1-800-833-6388.

# IPS CONCEPT #1 OFF-ISLAND ACCESS



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SCALE IN FEET

# IPS CONCEPT #2 ON-ISLAND ACCESS



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# REFINED LPA



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Evaluation of Interchange alternatives and their long-term impacts to the Hayden Island Community - 6-6-10					Peg
Criteria	Sub-Criteria	On-Island	Off-Island	LPA	Brad
General	Overall project footprint	Relatively smaller than LPA, without additional arterial bridge <b>Narrower N of Tomahawk; equal to LPA S of TID. Needs design refinement.</b>	May be smaller than LPA, but need to consider arterial connection <b>Narrower along main I-5 crossing; new 5-lane impact from new bridge; total impact unknown</b>	Huge, feels devastating. Ped, bike, scooter under the freeway on Tomahawk is way too big, not safe.	Tom
	Complexity and mass of project on Island	Still very complex and SPUI requires a wide grade level footprint. <b>Needs more refinement.</b>	Same	Concentrates in one corridor	Victor
	Iconic Value <b>Relatively unknown for all alts; need UDAG</b>	----- Increases # of structures over NPH, a view corridor (-). Needs fewer lanes on TID	Distractingly graceful drawing - could distract from underlying issues <b>Adds new corridor over NPH; negative impact to western view corridor for some HI, Bridgeton residents. Increases green opp'y/amenities pot'l in central island at I-5; may eliminate OS at HID/GC western edge</b>	Doesn't appear to have any iconic value	
Displacements	Residential/Floating Home Community Impacts	Significant JBMI displacements, but likely confined to east end <b>Impact of arterial added to LRT line unknown; appears equal to LPA w/ no net loss/gain. TID/Jantzen intersection moves to east, closer to homes (-)</b>	Highest impact on JBMI arterial will split moorage and prohibit left turn access to western docks - left turn restrictions will restrict direct access to public storage facility <b>Displaces add'l 16 homes at MLK crossing; may decrease permanent displacements at east end of JBMI by 7=net 9 add'l res. displacements. Pot'l increase of 100% in residential displacements at JBMI; eastern floating homes may be permanent displacements rather than temporary. Very negative compared to LPA.</b>	See on-island	
	Commercial/Retail Impacts	Less than LPA, but potential access impacts to waterfront businesses on the south shore - Access to near-freeway development sites restricted by SPUI design requirements - Tomhawk/Avenue A is not a functional local street. <b>Needs design changes to solve these issues.</b>	JB Center will likely be severely impacted & land could be used for other commercial uses - out of direction travel will impact all retail and commercial businesses on the island -DMI will be displaced <b>Lessens direct impact to neighborhood commercial on west and east sides of freeway but access issues to same businesses unknown; can they be successfully served by MLK Bridge?</b>	Lands all traffic from the north on Jantzen, forcing travel through the mall to get to the northwest. Mirror for traffic from the south.	
Hayden Island Plan	Impact on HIP Concepts and Values <b>All alternatives require changes to HIP</b>	Large unfriendly bike/ped area near SPUI - Station and TOD would need to be redesigned - Neighborhood Commercial area burdened with access problems - Pedestrian District west of freeway non-functional - circulation loop broken by relocation of Jantzen Dr <b>TID not island main street; no replacement identified.</b>	Street plan and vehicular circulation significantly different, concentrating traffic on Avenue D - reduced potential western residential footprint - eastside re-development opportunities improved vs LPA <b>Places new bridge infrastructure in center of planned residential.</b>	The notion of Tomahawk as a main street is pretty well shot because of the length of the tunnel under the freeway.	
Implementation Transition	Construction duration	Could be slightly less less than LPA <b>Unknown</b>	Probably less than LPA in time and total impact <b>Unknown</b>	Longest of the three	
	Short-term impact on Services	We're as screwed as with the LPA <b>Unknown</b>	Smaller footprint could reduce impact on adjacent businesses	Huge negative short term impact	
Access/Mobility (Vehicle, Bike/Ped/Scooter, Transit)	Vehicle Access/Mobility	Circulation loop broken - commercial area burdened with access issues - nice tie to Bridgeton neighborhood <b>Removes freeway traffic from HID and Jantzen Ave + . Design needs to include planned on-island street improvements; all of HID and Jantzen Ave.</b>	Mall access probable fatal flaw - more out of direction travel - great Bridgeton/Marine Dr, east connection <b>Probably forfeits on-island street improvements including HID, Jantzen and TID [-].</b>	Much north/south crossing of the island through the mall because of landing on the edges	
	Bike-Ped Access/Mobility	Need more info <b>Replaces below grade TID with at grade TID with multiple pedestrian/bike crossings through busy streets; corresponding improvements on HI &amp; Jantzen unknown.</b>	Need more info <b>Requires new on-island ped/bike plan west of I-5</b>	Probably not good because of the huge width	
	Transit Access	Improved vs LPA	Significantly worse than LPA		
Benefits/Land Use and Development	Potential for Improved Amenities	Improved street grid unknown compared to LPA; if less, (-). Equal to off-island.	Increases available land around I-5 for amenities, green areas; improved street grid unknown. If less (-). Equal to on-island.		
	Potential for new commercial development	Worse, East - worse, west vs LPA <b>Better than off-island. Need refinement of street alignments to open areas for development</b>	Better East, worse West vs LPA; <b>worse than on-island</b>		
	Potential for Residential development	Worsened on the west by pushing commercial/retail development away from the freeway [need more info on BH comment. Do you mean more vital business equals more residences?]; PJ thinks about equal to LPA. <b>Victor says delete</b>	Worsened on the West by arterial footprint and perceived out-of-direction access; <b>western residential now w/ inbetween freeway and arterial (-). Better for a quieter eastside</b>		

You had asked for an initial response to the three alternatives on the table for the Hayden Island Interchange. The following constitutes a summary of the SuperCenter's initial reactions to the three alternatives. The alternatives under consideration are the locally preferred alternative ('LPA'), draft concept for the off-island access dated June 3, 2010 ('Off-Island Interchange'), and the draft concept on on-island access dated June 3, 2010 ('On-Island Interchange').

Please understand that these comments are rendered quickly and can only be considered as an initial reaction to plans presented for the first time less than 24 hours ago. Further, these comments must be considered in light of the fact that there is no established criteria for evaluation of the alternatives. Thus, no more than 'shoot from the hip' response can be given. These responses focus upon the respective alternative's impacts upon the SuperCenter. Finally these comments must be considered in light of the purely conceptual graphics that exist. Details about transportation safety, capacity, compliance with state, federal, and local regulations, and basic geometry simply have not been developed at this point. Thus, comments can only be made at the most global level.

The Jantzen Beach SuperCenter has been seeking redevelopment of its site for many years and is in current conversations with tenants, the City of Portland, and others about redevelopment. In fact, the Hayden Island Plan as adopted by the City Council is a reflection of those conversations. Acting in reliance upon the Hayden Island Plan and its underpinnings, including the LPA, expectations about redevelopment on the site have been formed. Thus, alternatives to the LPA suffer from a basic problem from the SuperCenter perspective. That problem is that expectations have developed community-wide with respect to the LPA and the Hayden Island Plan and investments and planning have taken place in reliance upon those planning efforts.

Nonetheless, the following comments can be rendered about the three alternatives.

A. Impact on Hayden Island Plan

**LPA**—Consistent with the Hayden Island Plan.

**On-Island Interchange**—Inconsistent with Hayden Island Plan.

**Off-Island Interchange**—Inconsistent with Hayden Island Plan.

B. Impact on Access

**LPA**—Retains appropriate access to serve commercial and mixed-use redevelopment of the shopping center site.

**On-Island Interchange**—Retains on-island access, however, concentrates traffic in locations inconsistent with redevelopment of the shopping center and mixed-use development.

**Off-Island Interchange**–Access is unacceptable for redevelopment of a retail center and mixed-use development.

C. Building Orientation

**LPA**–Retains building orientation toward interchange and freeway to allow appropriate information to motorists about available services.

**On-Island Interchange**–Due to mobility restrictions on the east side of the shopping center, building orientation will no longer be oriented appropriately.

**Off-Island Interchange**–A lack of detailed description of on-island circulation makes a response difficult, however, it appears as if building orientation no longer would be appropriate.

D. Site Circulation

**LPA**–Appropriate on-site circulation distributes traffic appropriately across the site leaving circulation with an appropriate and understandable hierarchy of local roads. On-site circulation avoids concentration of traffic in inappropriate locations.

**On-Island Interchange**–The couplet concentrates traffic in inappropriate locations for redevelopment of the site and requires significant out of direction and irrational travel patterns on the site.

**Off-Island Interchange**–An on-site circulation plan has not been offered, however, it does not appear that appropriate distribution of traffic will be possible because of the concentration of traffic of the west island bridge. The alternative also suffers from a significant loading of noncommercial (resident) traffic being funneled through the commercial site.

E. Transportation Capacity

**LPA**–Inadequate information exists to understand transportation capacity on roadways and intersections on the SuperCenter site.

**On-Island Interchange**–Inadequate information exists to understand transportation capacity on roadways and intersections on the SuperCenter site.

**Off-Island Interchange**–Inadequate information exists to understand transportation capacity on roadways and intersections on the SuperCenter site.

F. Impact on Redevelopment

**LPA**–Allows for immediate redevelopment of the site to achieve the objectives of the Hayden Island Plan.

**On-Island Interchange**—Eliminates opportunities to redevelop the site and precludes opportunities to bring new tenants, including grocery tenants to the site.

**Off-Island Interchange**—Eliminates opportunities to redevelop the site and precludes opportunities to bring new tenants, including grocery tenants to the site.



**DRAFT CRC Interchange Alternatives Evaluation**  
**City of Portland**  
**June 4, 2010**

	LPA Refinement Option	On-Island Interchange Island Couplet with Tomahawk SPUI	Off-Island Interchange Modified Freight Bypass	Part On-Island/Part Off-Island Interchange Marine Drive-Hayden Island Hybrid
<i>Hayden Island Plan Vision</i>				
<i>Island Community</i>	<ul style="list-style-type: none"> <li>Island Community emphasized west of I-5 on Tomahawk Island Drive (TID) with the transit station as the focal point.</li> <li>Island Community continuity is compromised by large freeway footprint. Although this north-south freeway barrier exists today, the LPA adds much more structure and the intended connection provided by TID is below visual grade.</li> </ul>	<ul style="list-style-type: none"> <li>Island Community continuity is compromised by both east-west barrier (freeway) and north-south barrier (Tomahawk Island Drive 500' east and west of the freeway).</li> <li>Shopping center land uses are emphasized north and south of TID on the west side of I-5.</li> <li>Transit station is the focal point in the southwest quadrant of I-5 and is located south of TID.</li> <li>East of I-5, neighborhood retail land uses are oriented in the northeast quadrant along Hayden Island Drive and in the southeast quadrant along Jantzen Drive.</li> </ul>	<ul style="list-style-type: none"> <li>On-island continuity is enhanced due to the small freeway footprint and three east-west local street connections are feasible and nearly at-grade.</li> <li>On the east side of I-5, the local bridge connects the island to other communities.</li> <li>Island Community emphasized east and west of I-5 on Tomahawk Island Drive. The transit station is the focal point on the west side of I-5.</li> <li>The local bridge connection and neighborhood retail land uses at intersection of TID and Jantzen Beach Drive are focal points.</li> <li></li> <li></li> </ul>	<ul style="list-style-type: none"> <li>On-island continuity is enhanced due to the smaller footprint and three east-west local street connect and are nearly at-grade.</li> <li>Ramps structures to/from Vancouver cross the full length of Hayden Island.</li> <li>Island Community emphasized east and west of I-5 on Tomahawk Island Drive.</li> <li>The transit station is the focal point on the west side of I-5.</li> <li>East of I-5, the local bridge and neighborhood retail land uses along TID and Hayden Island Drive are focal points.</li> </ul>

<p><i>Getting Around</i></p>	<ul style="list-style-type: none"> <li>• TID is the focal point of the local street network.</li> <li>• Jantzen Beach Drive and Hayden Island Drive act as freeway access streets, enabling TID to accommodate local traffic and pedestrian oriented accessible land uses.</li> </ul>	<ul style="list-style-type: none"> <li>• TID is the primary freeway access street and focal point.</li> <li>• The street divides the shopping center and east neighborhood commercial area north/south.</li> <li>• Jantzen Beach and Hayden Island drives become the local pedestrian streets.</li> <li>• The bridge connection provided as part of the LRT bridge across the N. Portland Harbor to Jantzen Beach Drive enables neighborhood to neighborhood connections from HI to Bridgeton and Kenton, potential episodic conflicts with Expo and PIR event traffic.</li> </ul>	<ul style="list-style-type: none"> <li>• TID is the focal point of the local street network.</li> <li>• Jantzen Beach Drive and Hayden Island Drive act as complimentary local access streets. On-off island access is oriented to Avenue C in the Jantzen Beach Shopping Center.</li> <li>• Arterial bridge could create an access route for trucks to access industrial uses on west Hayden Island.</li> <li>• Arterial bridge in this location lengthens distance local traffic from east Hayden Island travels to get on/off island.</li> <li>• East local bridge connection at Jantzen Beach Drive enables neighborhood to neighborhood connections from HI to Bridgeton and Kenton.</li> </ul>	<ul style="list-style-type: none"> <li>• TID is the focal point of the local street network.</li> <li>• Jantzen Beach Drive becomes a freeway access street for Washington traffic.</li> <li>• Avenue C in the Jantzen Beach Shopping Center becomes the Marine Drive access street for Portland traffic. Hayden Island Drive acts as complimentary local access street to TID.</li> <li>• Arterial bridge could create an access route for trucks to access industrial uses on west Hayden Island.</li> <li>• Arterial bridge in this location lengthens distance local traffic from east Hayden Island travels to get on/off island</li> <li>• East local bridge connection to TID enables neighborhood to neighborhood connections from HI to Bridgeton and Kenton.</li> <li>•</li> </ul>
<p><i>Environment and Open Space</i></p>	<ul style="list-style-type: none"> <li>• Thunderbird Hotel site planned for park use, access restricted by IAMP.</li> <li>• Transit plaza integrated with local street network adjacent to TID.</li> </ul>	<ul style="list-style-type: none"> <li>• Thunderbird Hotel site planned for park use, fully accessible from adjacent local streets.</li> <li>• Transit plaza connected to local street network in southwest quadrant.</li> <li>• Median greenspace in TID freeway access street west of I-5 has potential for stormwater management.</li> </ul>	<ul style="list-style-type: none"> <li>• Thunderbird Hotel site planned for park use, fully accessible from adjacent local streets.</li> <li>• Transit plaza integrated with local street network adjacent to TID.</li> </ul>	<ul style="list-style-type: none"> <li>• Thunderbird Hotel site planned for park use, fully accessible from adjacent local streets.</li> <li>• Transit plaza integrated with local street network adjacent to TID</li> </ul>
<p><i>Hayden Island Plan Concept</i></p>				
<p><i>Residential</i></p>	<ul style="list-style-type: none"> <li>• Allows residential development to occur in local street network easily accessible to LRT.</li> <li>• Impacts to moorage residents focused near freeway.</li> </ul>	<ul style="list-style-type: none"> <li>• Allows residential development to occur in isolated local street network in southwest quadrant ; easily accessible to LRT.</li> <li>• Impacts to moorage residents focused near freeway.</li> </ul>	<ul style="list-style-type: none"> <li>• Allows greatest flexibility for residential development to occur in local street network and easily accessible to LRT.</li> <li>• Impacts to moorage residents spread to West Bridge location and present circulation and access issues to address.</li> </ul>	<ul style="list-style-type: none"> <li>• Allows residential development to occur in local street network easily accessible to LRT</li> <li>• Impacts to moorage residents spread to West Bridge location and present circulation and access issues to address.</li> </ul>

<i>Transit Oriented Development</i>	<ul style="list-style-type: none"> <li>Allows potential for TOD in contiguous local street network adjacent to station. Station is focal point over TID.</li> <li>TOD less viable east of I-5 due to widest footprint of I-5 mainline and ramps.</li> </ul>	<ul style="list-style-type: none"> <li>Allows potential for TOD in limited local street network adjacent to station. Station focal point potential may be diminished due to limited access and visibility to station area</li> <li>TOD less viable east of I-5 due to footprint of I-5 mainline and ramps traffic landing on TID..</li> </ul>	<ul style="list-style-type: none"> <li>Allows optimum potential for TOD in contiguous local street network adjacent to station. Station is focal point for broader area than LPA.</li> <li>TOD more viable east of I-5 due to minimal footprint of I-5 mainline.</li> </ul>	<ul style="list-style-type: none"> <li>Allows potential for TOD in contiguous local street network adjacent to station. Station is focal point over TID.</li> <li>TOD may be viable east of I-5 due to TID providing low traffic street leading to LRT station.</li> </ul>
<i>Regional Retail</i>	<ul style="list-style-type: none"> <li>Regional retail is visible and accessible from freeway on Hayden Island.</li> <li>Short distance from freeway ramp terminals to shopping center.</li> </ul>	<ul style="list-style-type: none"> <li>Regional retail is visible and accessible from freeway on Hayden Island.</li> <li>Shortest distance and most direct from freeway ramp terminals to shopping center.</li> </ul>	<ul style="list-style-type: none"> <li>Regional retail is visible from freeway on Hayden Island and accessible via Marine MLK bridge to island.</li> <li>Longest distance from freeway to shopping center.</li> </ul>	<ul style="list-style-type: none"> <li>Regional retail is visible and accessible from freeway for Washington origin trips.</li> <li>Regional retail is accessible via MLK and arterial bridge to island for Portland origin trips.</li> </ul>
<i>Neighborhood Retail Center</i>	<ul style="list-style-type: none"> <li>Neighborhood retail center area compromised by IAMP access restrictions and wide footprint of I-5 mainline and ramps.</li> </ul>	<ul style="list-style-type: none"> <li>Neighborhood retail center compromised by IAMP access restrictions. <ul style="list-style-type: none"> <li>East of the freeway the loss of land south of TID is reduced and the land north of TID is reclaimed from the current loop ramp area.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Neighborhood retail center provided with full access from adjacent local streets, local bridge access to Bridgeton and mainland neighborhoods.</li> </ul>	<ul style="list-style-type: none"> <li>Neighborhood retail center provided with access from adjacent local streets, some access limits may apply on Jantzen Avenue.</li> <li>Development area focused at intersection of TID and Jantzen Beach Drive.</li> <li>Local bridge access to Bridgeton and mainland neighborhoods adds to visibility and accessibility.</li> </ul>
<i>Industrial</i>	<ul style="list-style-type: none"> <li>Provides access to industrial uses in western plan area via Jantzen Beach Drive and Hayden Island Drive, generally avoids TID.</li> </ul>	<ul style="list-style-type: none"> <li>Provides access to industrial uses in western plan area via TID through shopping center to Avenue C to Hayden Island Drive.</li> </ul>	<ul style="list-style-type: none"> <li>Provides shortest distance to access to industrial uses in western plan area via Avenue C in shopping center to Hayden Island Drive.</li> </ul>	<ul style="list-style-type: none"> <li>Provides shortest distance to access to industrial uses in western plan area from Portland via Avenue C in shopping center to Hayden Island Drive.</li> <li>Industrial access from Washington will have to travel via Jantzen Beach Drive to Hayden Island Drive.</li> </ul>
Hayden Island Street Plan				

<i>Hayden Island Drive and Jantzen Avenue</i>	<ul style="list-style-type: none"> <li>Developed as part of project.</li> <li>Large streets; serve as ramp access and island collectors.</li> </ul>	<ul style="list-style-type: none"> <li>Project development status unknown.</li> <li>Become more local distribution minor collectors.</li> </ul>	<ul style="list-style-type: none"> <li>Project development status unknown.</li> <li>Likely to continue as significant collectors and traffic streets.</li> </ul>	<ul style="list-style-type: none"> <li>Project development status unknown.</li> <li>Jantzen becomes freeway access street.</li> </ul>
<i>Avenue B – core access street</i>	<ul style="list-style-type: none"> <li>Developed as part of project; completes access loop on west side.</li> </ul>	<ul style="list-style-type: none"> <li>Likely developed as part of project; key access street connecting Jantzen and Hayden Island.</li> </ul>	<ul style="list-style-type: none"> <li>Core access function may shift to Avenue C and will likely be developed as part of project.</li> </ul>	<ul style="list-style-type: none"> <li>Core access function may shift to Avenue C and will likely be developed as part of project.</li> </ul>
<i>Tomahawk Island Drive</i>	<ul style="list-style-type: none"> <li>Functions as local connector/main street.</li> <li>TID is depressed under I-5 and intermittently covered by bridge/ramp structures for over 600' creating tunnel effect and greatest east to west separation of land uses.</li> <li>Land use access restricted by grades of TID .</li> </ul>	<ul style="list-style-type: none"> <li>Functions as major freeway access street - proposed as couplet through the shopping center.</li> <li>TID is at-grade and is covered by I-5 mainline only, greatly reducing tunnel effect. Separation of land uses east to west for width of I-5 mainline and ramp terminals (500'?).</li> <li>IAMP access restrictions to land uses from TID either side of I-5.</li> </ul>	<ul style="list-style-type: none"> <li>Functions as local connector/main street.</li> <li>TID covered by I-5 mainline only greatly reducing tunnel effect. Separation of land uses east to west minimized to width of I-5 mainline (150'?).</li> <li>No restrictions to land use access either side of freeway.</li> </ul>	<ul style="list-style-type: none"> <li>TID coverage by I-5 reduced compared to LPA, reducing tunnel effect.</li> <li>Local "main street" with access points; elevation of TID may improve compared to LPA.</li> </ul>
<i>Street Connectivity and Network Connectivity</i>	<ul style="list-style-type: none"> <li>TBD</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>
<i>Pedestrian and Bicycle Systems and Routes</i>	<ul style="list-style-type: none"> <li>TID, Jantzen and Hayden Is. Drive provide local pedestrian and bicycle access.</li> <li>Pedestrian District is intact west of I-5.</li> </ul>	<ul style="list-style-type: none"> <li>Tomahawk Island Drive may be a high volume couplet and possibly difficult to cross for pedestrians and may impact Pedestrian District.</li> </ul>	<ul style="list-style-type: none"> <li>TID, Jantzen and Hayden Is. Drive provide local pedestrian and bicycle access.</li> <li>Pedestrian District is intact west of I-5.</li> </ul>	<ul style="list-style-type: none"> <li>TID, Jantzen and Hayden Is. Drive provide local pedestrian and bicycle access.</li> <li>Pedestrian District is intact west of I-5.</li> </ul>
<b>Hayden Island Plan Implementation</b>				
<i>Comp Plan and Zoning Map</i>	<ul style="list-style-type: none"> <li>No changes needed.</li> </ul>	<ul style="list-style-type: none"> <li>Likely no changes needed.</li> </ul>	<ul style="list-style-type: none"> <li>TBD - changes may suggest consideration of designations west of Avenue C and other areas.</li> </ul>	<ul style="list-style-type: none"> <li>TBD - changes may suggest consideration of designations west of Avenue C and other areas.</li> </ul>

<i>Zoning Code</i>	<ul style="list-style-type: none"> <li>No changes needed.</li> </ul>	<ul style="list-style-type: none"> <li>TBD - possible revisions to plan district to address changes in access, street functions and development orientation.</li> </ul>	<ul style="list-style-type: none"> <li>TBD - possible revisions to plan district to address changes in access, street functions and development orientation.</li> </ul>	<ul style="list-style-type: none"> <li>TBD - possible revisions to plan district to address changes in access, street functions and development orientation.</li> </ul>
<b>Other Considerations</b>				
<i>Freight Mobility and Truck Access at Marine Drive Interchange</i>	<ul style="list-style-type: none"> <li>Marine Drive interchange designed for freight mobility function.</li> </ul>	<ul style="list-style-type: none"> <li>Marine Drive interchange designed for freight mobility function.</li> </ul>	<ul style="list-style-type: none"> <li>Marine Drive interchange provides access to both industrial areas and Hayden Island.</li> <li>Although intended by design to separate these functions ramp congestion and weaving conflicts may occur.</li> </ul>	<ul style="list-style-type: none"> <li>Marine Drive interchange provides access to industrial areas and for south based connections to Hayden Island to/from I-5 and MLK.</li> </ul>
<i>Footprint Size and Right-of-Way Consumption</i>	<ul style="list-style-type: none"> <li>Large freeway and ramp footprint on Hayden Island.</li> </ul>	<ul style="list-style-type: none"> <li>Reduces freeway footprint from LPA.</li> </ul>	<ul style="list-style-type: none"> <li>Least freeway footprint on Hayden Island but increases right-of-way in Marine Drive vicinity and area of arterial bridge crossing.</li> </ul>	<ul style="list-style-type: none"> <li>Reduces freeway footprint on Hayden Island but increases right-of-way in Marine Drive vicinity and area of arterial bridge crossing.</li> </ul>
<i>Harbor Bridges</i>	<ul style="list-style-type: none"> <li>Consolidates impacts around freeway mainline</li> </ul>	<ul style="list-style-type: none"> <li>Consolidates impacts around freeway mainline</li> </ul>	<ul style="list-style-type: none"> <li>Spreads impacts in broader area</li> </ul>	<ul style="list-style-type: none"> <li>Spreads impacts in broader area.</li> </ul>
<i>Interchange Area Management Plan</i>	<ul style="list-style-type: none"> <li>TBD</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>	<ul style="list-style-type: none"> <li>TBD</li> </ul>

**EVALUATION CRITERIA FOR I-5 INTERCHANGES AT MARINE DRIVE AND HAYDEN ISLAND  
INPUT FROM PORT OF PORTLAND**

Criteria	Measurement	LPA Phase I	On-Island Option	Off-Island Option
Intersection Traffic Operations (1)	Level of service, average delay, v/c ratio			
	I-5/Marine Drive	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	I-5/Tomahawk Island Drive	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Marine Drive/ Force Avenue	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Accommodation of weekend peaks	Separation of weekend retail peak from special events at Expo Center and/or PIR	Separation of weekend retail peak from special events at Expo Center and/or PIR	Combined weekend peak traffic activity when special events occur
Ramp Design	Weaving distances compared to HDM	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Number of lanes needed to/from I-5 to the north	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Speed at curves	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
Ramp Operations	Level of service, average delay, v/c ratio			
	Marine Drive to I-5 NB	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Marine Drive to I-5 SB	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Potential for spillback into arterial intersections	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Potential for spillback to I-5 mainline	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
Road Design	Number of curves and speeds on Marine Drive (Force to I-5)			
	Eastbound	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Westbound	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Number of signalized intersections – T-6 to I-5			
	Eastbound	2 signals	2 signals	3 signals
Westbound	2 signals	2 signals	2 signals	
	Consistency with FHWA guidance for NHS facility	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team

Criteria	Measurement	LPA Phase I	On-Island Option	Off-Island Option
Separation of Primary Traffic Movements	By direction of traffic			
	EB Marine Drive to NB I-5	No separate ramp, mixes with other Marine Drive traffic	Flyover provided	Flyover provided
	SB I-5 to WB Marine Drive	Direct movement with separate ramp	Weaves with Hayden Island SB on-ramp	Joint ramp with Hayden Island traffic
	Hayden Island to NB I-5	Direct movement with separate ramp	Direct movement with separate ramp	Mixes with industrial traffic to SB I-5 and EB MLK
	Logical, clear and intuitive traffic movement through interchange area	Logical	Logical	MLK movement to Hayden Island requires vehicle to be on the left side to go right. Being in the right lane seems more natural.
Freeway Mainline	Number of lanes required for reasonably safe and effective traffic operations			
	North Portland Harbor	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	On Hayden Island Columbia River Crossing	Needs input from traffic team Needs input from traffic team	Needs input from traffic team Needs input from traffic team	Needs input from traffic team Needs input from traffic team
Safety	Number of sub-standard decision points entering/exiting I-5	Needs input from traffic team	Needs input from traffic team	Needs input from traffic team
	Difficulty in providing clear signage	Less complex	Less complex	More complex
	Ease of wayfinding to/from Rivergate, T-5 and T-6, potential for driver confusion	Less difficult, 2 decision points from SB I-5 to WB Marine Drive	Less difficult, 2 decision points from SB I-5 to WB Marine Drive	More difficult, 3 quick decision points from SB I-5 to WB Marine Drive (~ 1,200 feet)
Wetlands	Estimated acres that could be impacted	No impact	Potentially no impact	Greater potential for impact due to need to use Expo Road to get between Marine Drive to the west and Hayden Island
Feasibility of Future North Portland Harbor Bridge Crossings	Number of piers in water	Potentially more viable to permit	Potentially more viable to permit	Potentially less viable to permit

(1) Operations analysis must include full build-out of Rivergate and intensification of T-6 as per data previously provided to CRC staff.

NOTE: More technical evaluation is needed for On-island and Off-island access alternatives to be able to compare quantitatively more completely the differences from LPA phase 1. This matrix does not encompass all criteria for which these alternatives will be evaluated. The criteria and values below are qualitative at this time to help the Hayden Island Design Group, IPS, and PSC determine if more evaluation is needed.

	On-island access	Off-island access
<b>1 Parcel Impact</b>		
<i>Business displacements</i>	increases impact to the east of the interchange (old Zupan's, fire station, Columbia Crossing moorage); increases impact to west of interchange through supercenter mall (Target	very likely reduction on west side of highway, increase in moorage impact to Columbia Crossing, and Pier 99; increase in impact to Expo (displacement of building), RISG, DMI
<i>Residential displacements</i>	increased impact to townhouses south of TI and homes on Jantzen Beach Ave. and TI east of Jantzen Beach Ave.	increased impacts to JBMI (about 17 additional homes)
<i>Parcel access and circulation</i>	access restricted to Jantzen Drive (North of Tomahawk Island Drive) as well as Avenue A	access challenges for JBMI, majority of island traffic required to circulate through mall area
<b>2 Natural and Community Resources</b>		
<i>Piers/Construction in the water Section 4(f) (Parks)</i>	more piers - 3 additional bridges in NPH Delta Park sliver impact NW edge of park	more piers - 3 additional bridges in NPH increase in 40-mile Loop Trail impact (likely no longer de minimis); potentially small impact to Delta Park; greater impact to historic levee
<i>Historical</i>	no change	higher impact to historic levee
<i>Archeology</i>	little change	slightly higher - more earth moving, foundations
<i>Stormwater treatment options</i>	little change	potentially requires add'l treatment locations
<i>Wetland impacts</i>	no change	flyover potentially impacts wetland buffer
<i>Environmental justice</i>	little change	new displacements increases potential for impacts to EJ residents
<i>Community cohesion</i>	Similar - TI Drive would no longer be Hayden Island community's Main Street, and LRT station would not be so centrally located. Lower volume community roads would be Hayden Island and Jantzen Drive	Worse - splits the floating home community into more pieces; much more traffic adjacent to manufactured home community on N. Hayden Island Drive
<i>Endangered Species</i>	Greater hydroacoustic impacts with additional in-water structures	Greater hydroacoustic impacts with additional in-water structures
<b>3 Impacts to Community Plans</b>		
<i>MD stakeholders</i>	added local access	complete revision
<i>Hayden Island neighborhood</i>	complete revision	complete revision
<b>4 Constructability</b>		
<i>In-water duration</i>	Additional ESA impacts - potential to be 2x as long in the water	Additional ESA impacts - potential to be 1.5x as long in the water
<i>phasing complexity</i>	similar to LPA	similar to LPA
<b>5 Geometry</b>		
<i>Safety</i>	introduces weave on SB CD	Introduces several weaving sections including across East Bridge in northbound direction just prior to traffic signal
<i>Standards</i>	Traffic evaluation needed to further refine design with respect to access location and lane configuration. Some exceptions and access spacing deviations will be required.	Traffic evaluation needed to further refine design with respect to access location and lane configuration. Some exceptions and access spacing deviations will be required.
<i>truck accommodation</i>	forces trucks from I-5 Southbound to weave across local traffic on SB CD	Introduces several weaving sections - needs traffic analysis
<b>6 Traffic impacts</b>		
<i>Noise</i>	slightly higher due to local road connection nearer to floating homes.	slightly worse - source of noise on two sides of floating homes
<i>Air quality</i>	SPUI could become new hotspot. Violations are unlikely.	little change
<i>traffic movement restrictions</i>	forced left; access to/from Tomahawk Island Drive may need additional turn restrictions (TBD - traffic analysis). Victory/Denver northbound traffic forced to use local bridge due to combined off-ramp with Marine Drive braided with Victory/Denver on-ramp	HI to and from MD to the west forced out of direction, Victory/Denver northbound traffic and potentially southbound traffic (pending southbound weaving analysis) are forced to use local bridge due to combined off-ramp with Marine Drive braided with Victory/Denver on-ramp
<i>operations</i>	more delay, worse HI operations at SPUI and east of interchange on TI at Jantzen Drive and Jantzen Beach Ave.- additional lanes/turn restrictions may be required specifically left-turn at Jantzen Drive due to queuing backing into SPUI), sb weave on CD?	more delay, worse HI operations, HI out of direction travel, worse weaving operations eastbound/westbound for truck and auto traffic, new bridgeton roadway network would need additional lanes to handle east HI bridge volumes.
<i>emergency response time</i>	same as LPA	longer time to east side, shorter for west side
<b>7 Highway Policies</b>		
<i>FHWA</i>	same as LPA	same as LPA
<i>Oregon Highway Plan</i>		
<i>Mobility</i>	TBD	TBD
<i>Access spacing</i>	HI is worse than LPA, MD is no change	HI is better than LPA, MD is worse
<i>Rail Safety</i>	same as LPA	same as LPA
<b>8 Bike/Ped access and connectivity</b>		
	lower traffic volume streets are the outer roads on island, bike/ped access through the core of the island will be a higher volume traffic street that serves as the interchange ramp terminal. Limits of HI streets to be improved by the project TBD.	no change for HI, impact on MD with 40-Mile Loop Trail. Limits of HI streets to be improved by the project TBD.
<b>9 LRT impacts</b>		
	keeps rail between highway and ramp, forces station to south half of island, adds to travel time	provides flexibility for station location on island. Could add travel time.
<b>10 Cost</b>		
	more expensive	more expensive
<b>11 Other Considerations</b>		
<i>Risk for supplemental EIS</i>	low	high
<i>Risk for BO delay</i>	high	high
<i>Risk for ROD delay</i>	high	high
<i>Temporary construction impacts</i>	higher on HI to east	higher for JBMI and for shopping center to the west around Home Depot / Farr Avenue