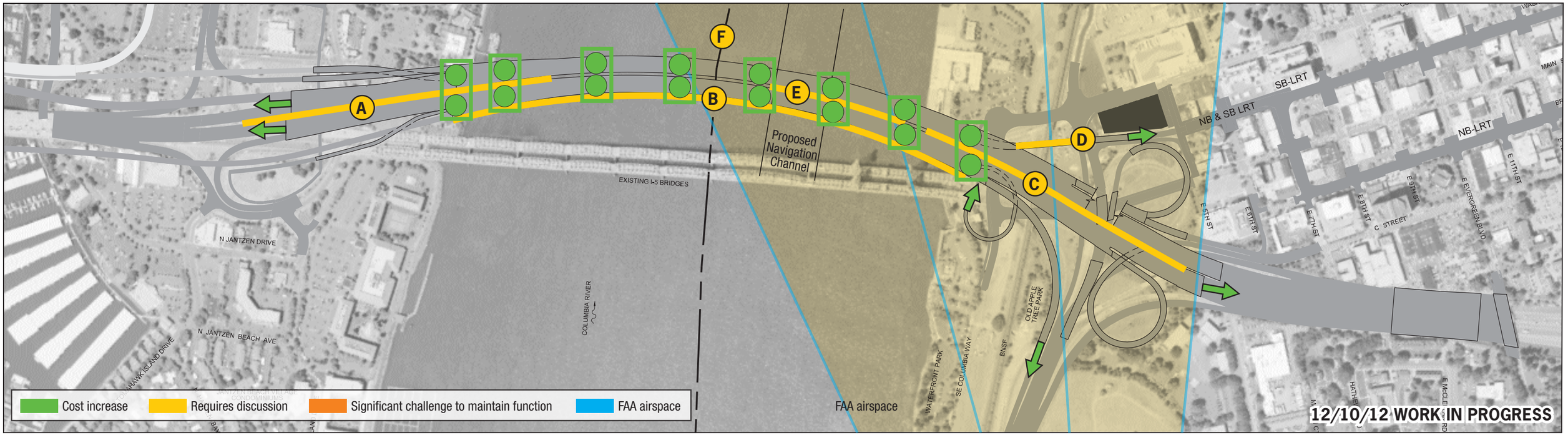
Columbia River CROSSING

Refined analysis - 115-116 feet

9-11 vessels/users potentially impacted*



* Potential impacts at 16 ft river stage and 10 ft air gap. Some of the vessels would pass at a lower river stage and/or with a smaller air gap. For this illustration each fabricator was represented by 1 vessel.

		Hayden Island	Main Crossing	Vancouver	TOTAL COST
Cost increase estimate over 95 feet**	60%	~ $9 million	~ $10 million	~ $10 million	+/- $30 million
Highway/Transit/Landside 115-116 foot vertical clearance with previously described impacts for 110 foot clearance.		**A** In Oregon the mainline grade increases to 3.8% from 2.8%. This would need a design exception for a grade above 3%.	**B** More traffic analysis needed to address changes to traffic operations due to increased grades. **E** Top of roadway deck at centerline is 21' below FAA surface. **F** Foundation sizes may increase, however, they are still consistent with FEIS.	**C** In Washington the mainline grade increases to 4.0% from 3.4%. **D** Transit grade on Washington approach is 6% for an additional 130 feet.	

**Based on 2011 CEVP, does not include mitigation costs.