

Final Recommendations at a Glance



Transit:

- Provide a phased light rail loop in Clark County in the vicinity of the I-5, SR500/4th Plain and I-205 Corridors.
- Provide peak-hour, premium express bus service in the I-5 and I-205 Corridors to markets not well served by light rail.
- Increase transit service in the Corridor over the next 20 years called for in regional transportation plans.

Interstate 5:

- The I-5 freeway between the Fremont Bridge in Portland and the I-205 interchange in Vancouver will be a maximum of 3 through lanes in each direction. This includes widening I-5 to 3 lanes between Delta Park and Lombard, and 99th St. to I-205 in Vancouver.
- Designate one of the 3 through lanes for use as a high occupancy vehicle (HOV) lane during the peak period, in the peak direction.
- Add a new supplemental or replacement bridge across the Columbia River with up to 2 auxiliary and/or arterial lanes in each direction, and 2 light rail tracks.
- Improve interchanges between SR 500 and Columbia Blvd to address safety and capacity problems -- including making Columbia Blvd into a full interchange.
- In adding river crossing capacity and making interchange improvements every effort should be made to: 1) avoid displacements and encroachments, 2) minimize the highway footprint and 3) minimize the use of the freeway for local trips.

Additional Rail Capacity:

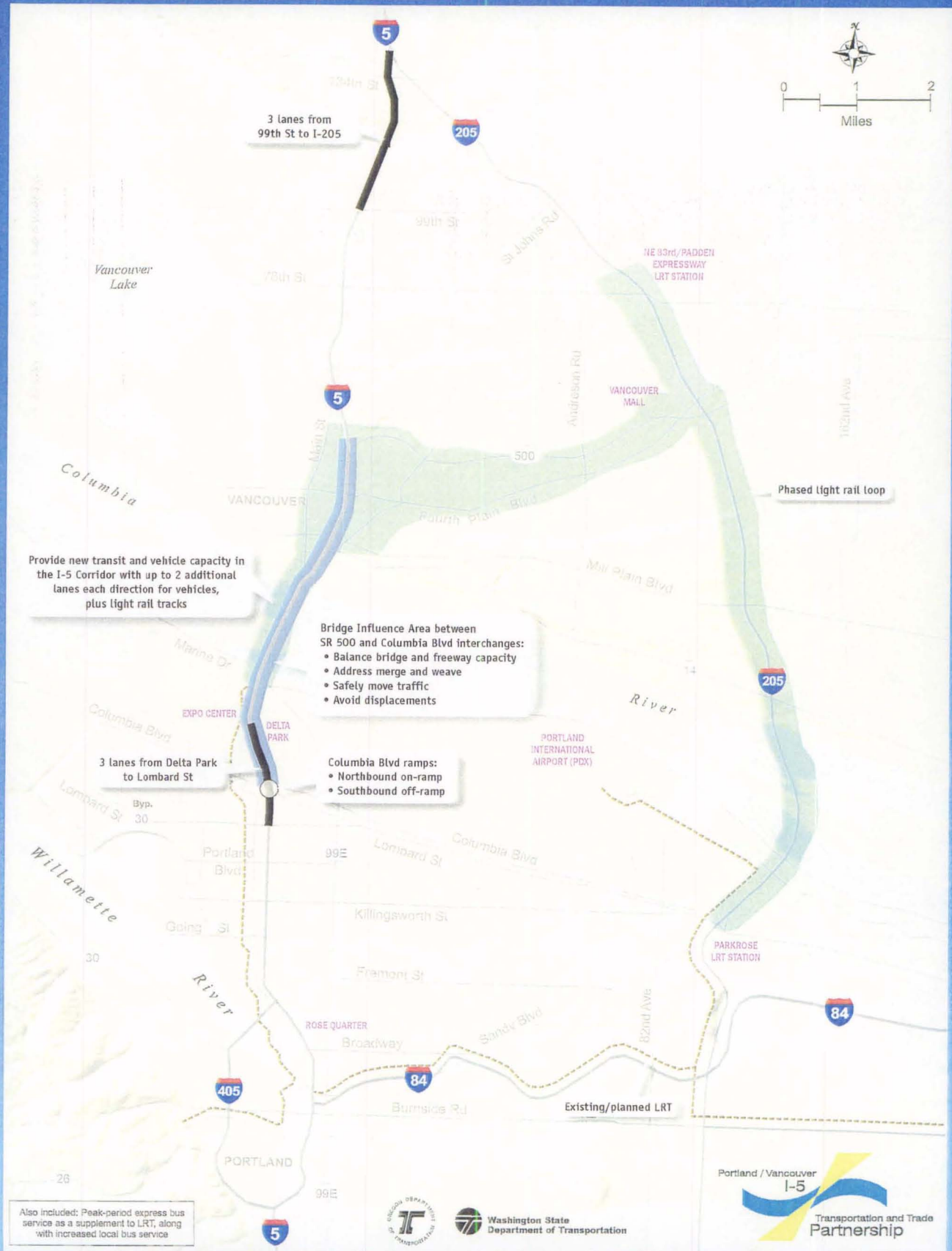
- Pursue the rail infrastructure improvements required to accommodate anticipated 20 year freight rail growth in the I-5 Corridor and frequent, efficient intercity passenger rail service.
- Establish a public/private Bi-State rail forum to advise regional decision makers about prioritizing, scheduling and funding of needed rail improvements.
- The rail forum and regional decision-makers should encourage funding for:
 - Additional inter-city passenger rail service in the Pacific Northwest High Speed Rail Corridor
 - High Speed Rail service in the Corridor; and
 - The replacement of the existing "swing span" with a "lift span" located closer to the center of the river channel

Land Use:

- Adopt and implement a Bi-State Coordination Accord to protect existing and new capacity and support economic development.
- Jurisdictions in the Corridor will develop and agree on a plan to manage land development to avoid adversely impacting I-5 or the Region's growth management plans.



Final Strategic Plan Recommendations



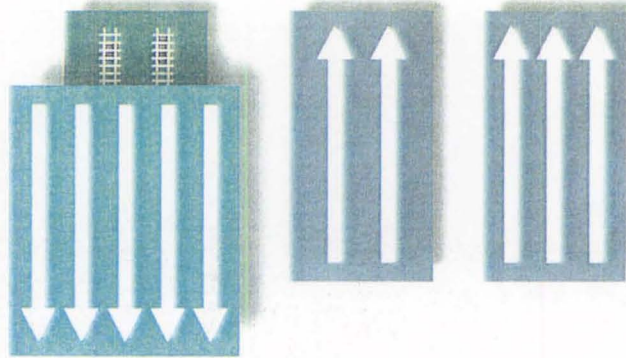
Columbia River Crossing Concepts

I-5 Transportation & Trade Partnership



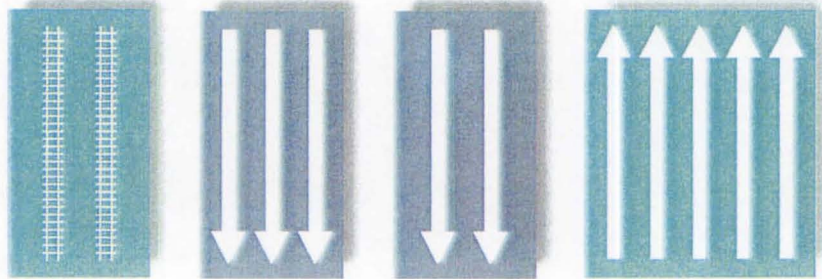
Concept #1

- 5 northbound lanes on existing bridges.
- 5 southbound lanes on new double-deck bridge, LRT on lower deck, west of existing bridges.



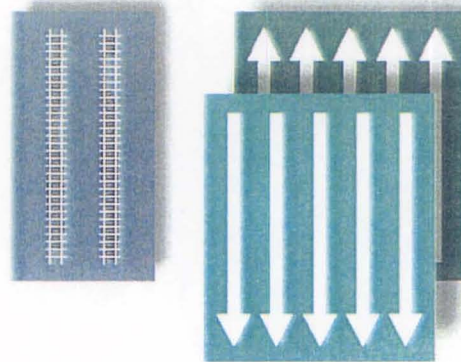
Concept #2

- 5 northbound lanes on new bridge east of existing bridges.
- 5 southbound lanes on existing bridges.
- New LRT bridge west of existing bridges.



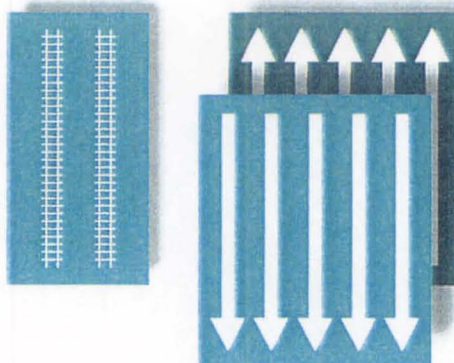
Concept #3

- New 5-lane double-deck bridge, southbound upper deck, northbound lower deck.
- LRT on existing west bridge.



Concept #4

- New 5-lane double-deck bridge, southbound upper deck, northbound lower deck.
- LRT on new bridge west of existing bridges.
- Only option to shift navigational channel.*



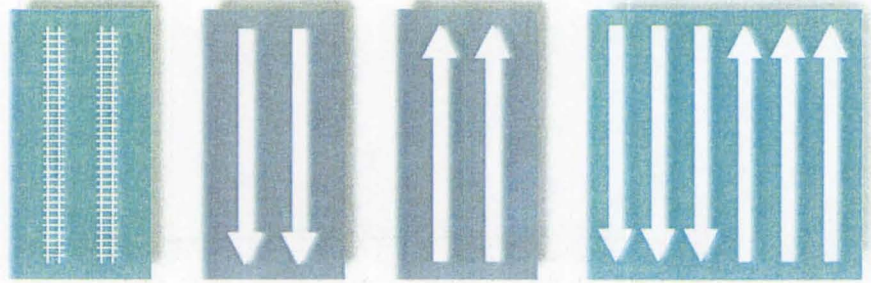
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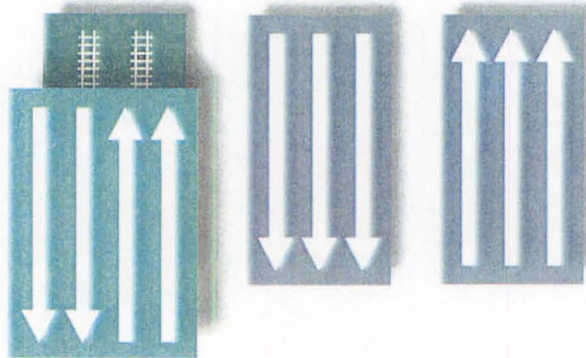
Concept #5

- New 6-lane bridge east of existing bridges.
- 2 lanes northbound/southbound collector-distributor on existing bridges.
- LRT on new bridge west of existing bridges.



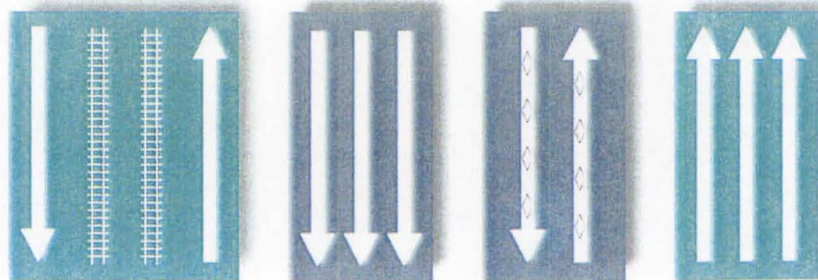
Concept #6

- 3 lanes northbound/southbound on existing bridges.
- New 4-lane collector-distributor double-deck bridge with LRT on lower deck.



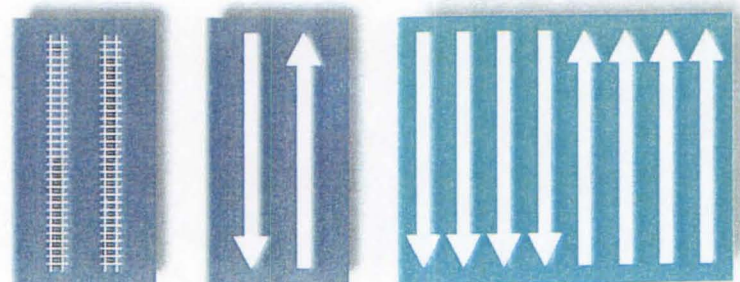
Concept #7

- 3 southbound lanes on existing west bridge.
- HOV only, southbound and northbound, on existing east bridge.
- 3 northbound lanes on new bridge east of existing bridges.
- 2 arterial lanes and LRT on new bridge west of existing bridges.

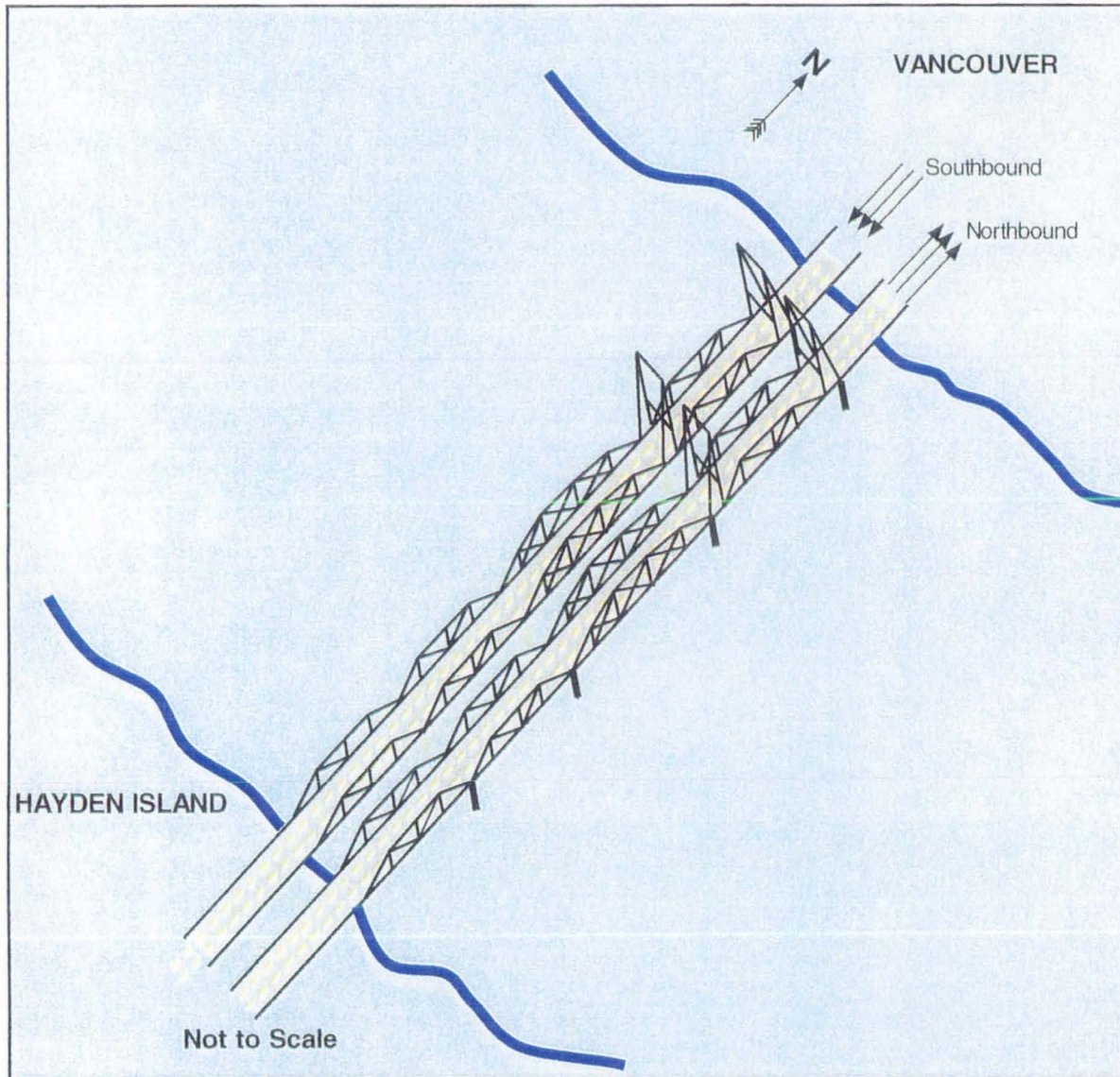


Concept #8

- New 8-lane bridge east of existing bridges.
- Local arterials on existing northbound bridge..
- LRT on existing southbound bridge.



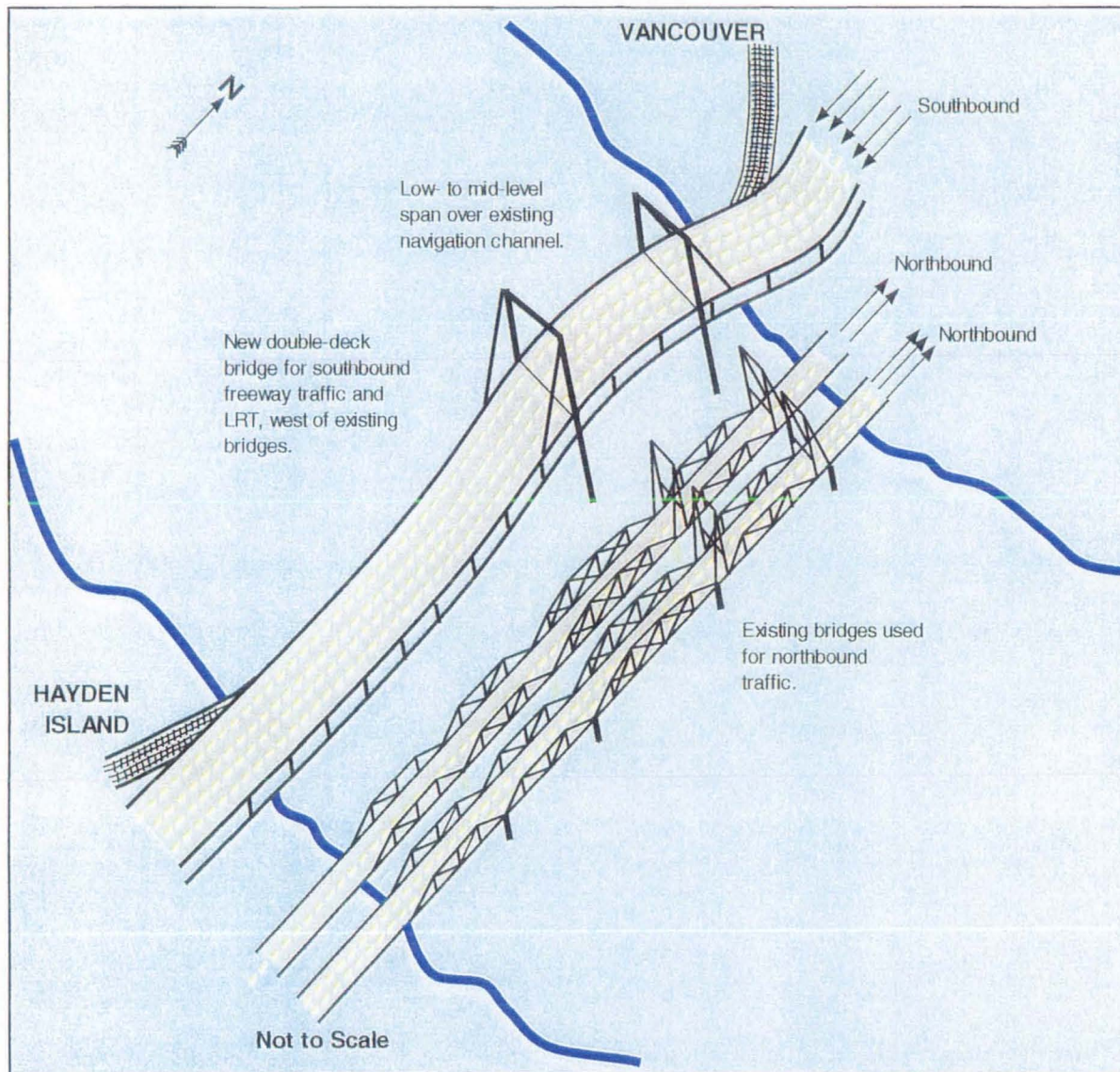
Bridge Influence Area Analysis



Existing configuration:

Two three-lane, low-level lift span bridges

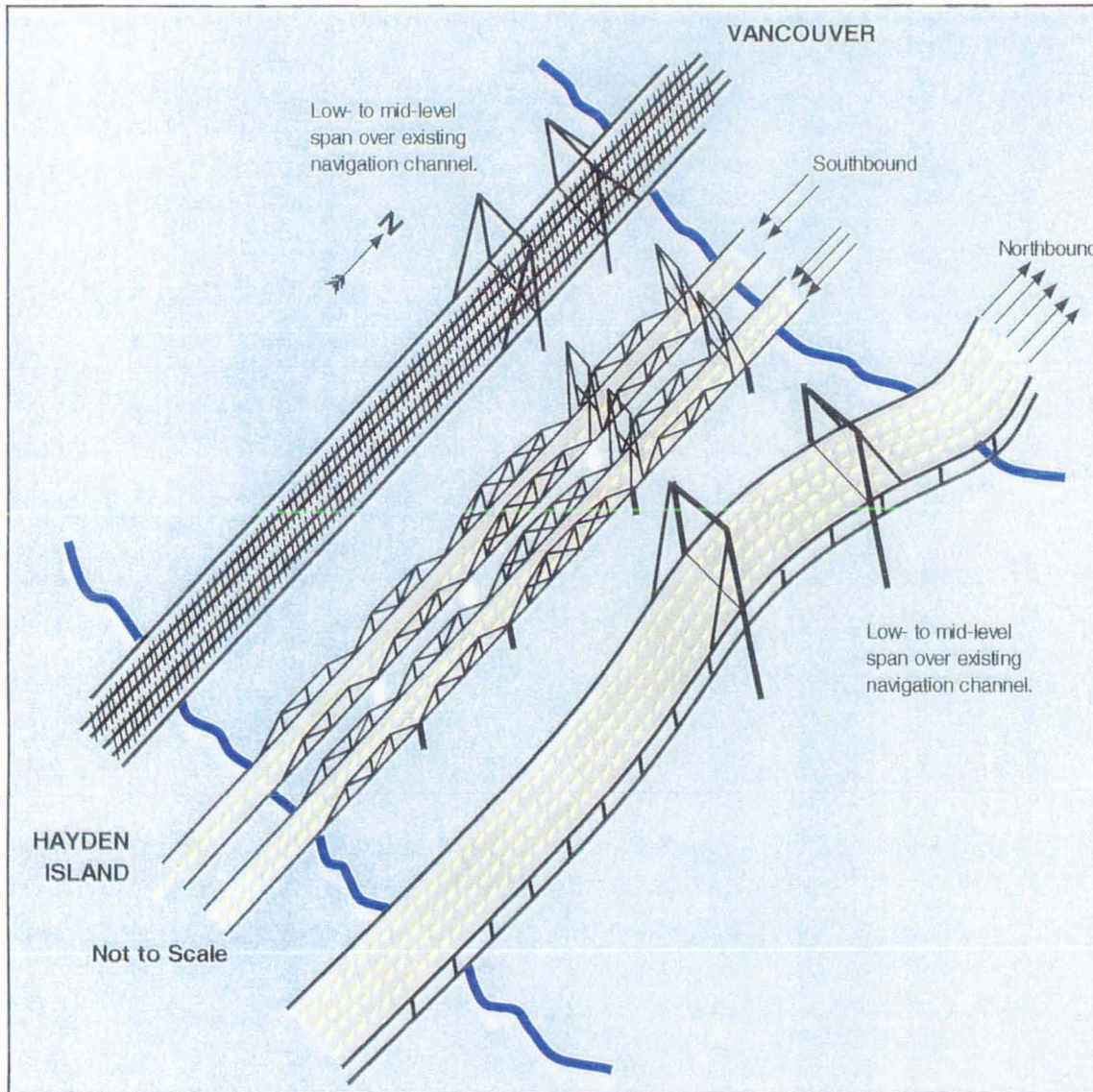
Bridge Influence Area Analysis



Concept 1: Five-lane supplemental bridge w/LRT, west of existing bridges

1. Southbound traffic on new five-lane bridge, LRT on lower deck
2. Low- to mid-level bridge, with lift span over existing navigation channel
3. Northbound traffic would be split between the two existing bridges

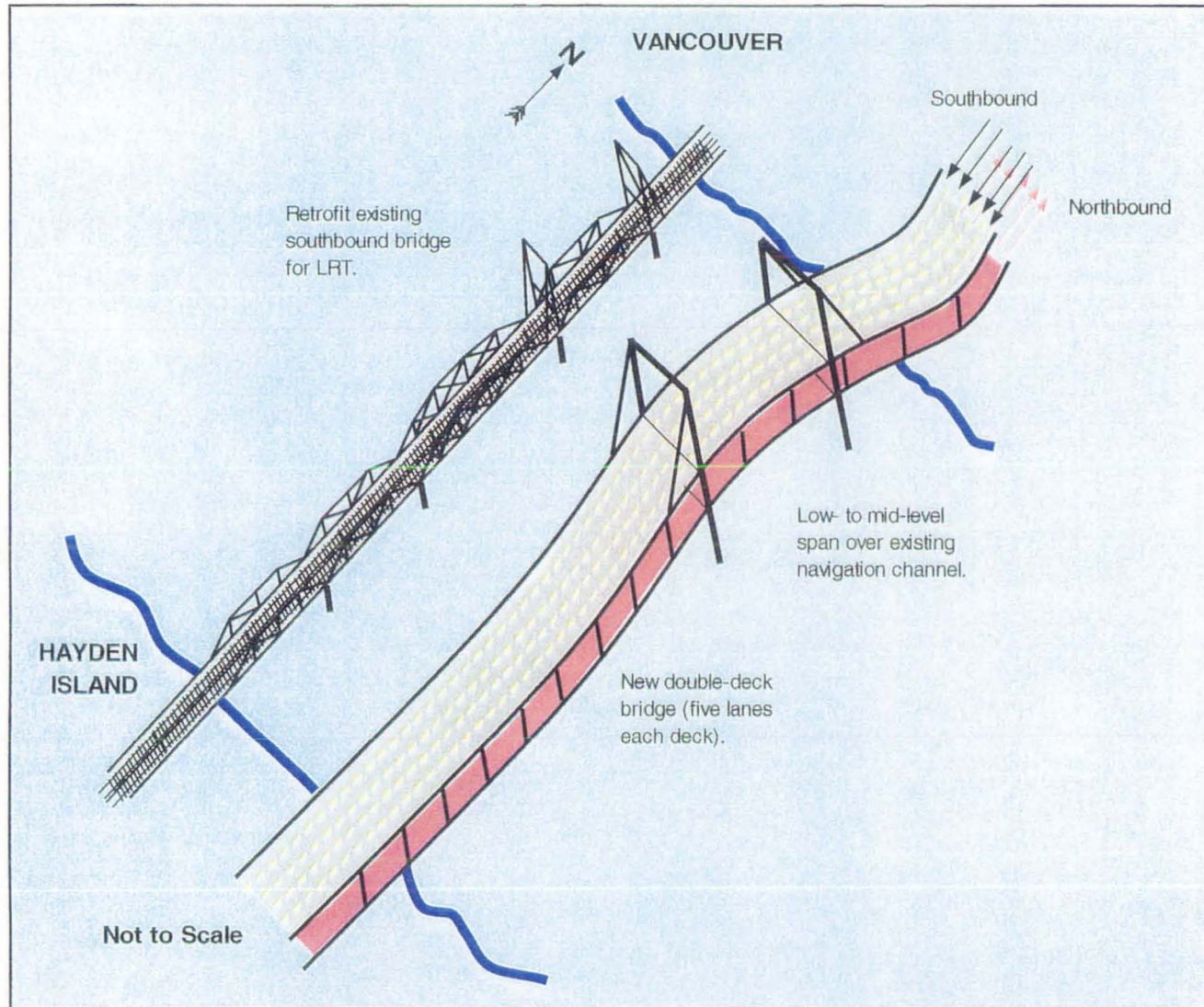
Bridge Influence Area Analysis



Concept 2: Five-lane supplemental bridge east of existing bridges, separate LRT bridge to the west

1. Northbound traffic on new five-lane bridge
2. LRT on new "stand-alone" bridge
3. Low- to mid-level bridges, with lift spans over existing navigation channel
4. Southbound traffic would be split between the two existing bridges, providing five to six lanes

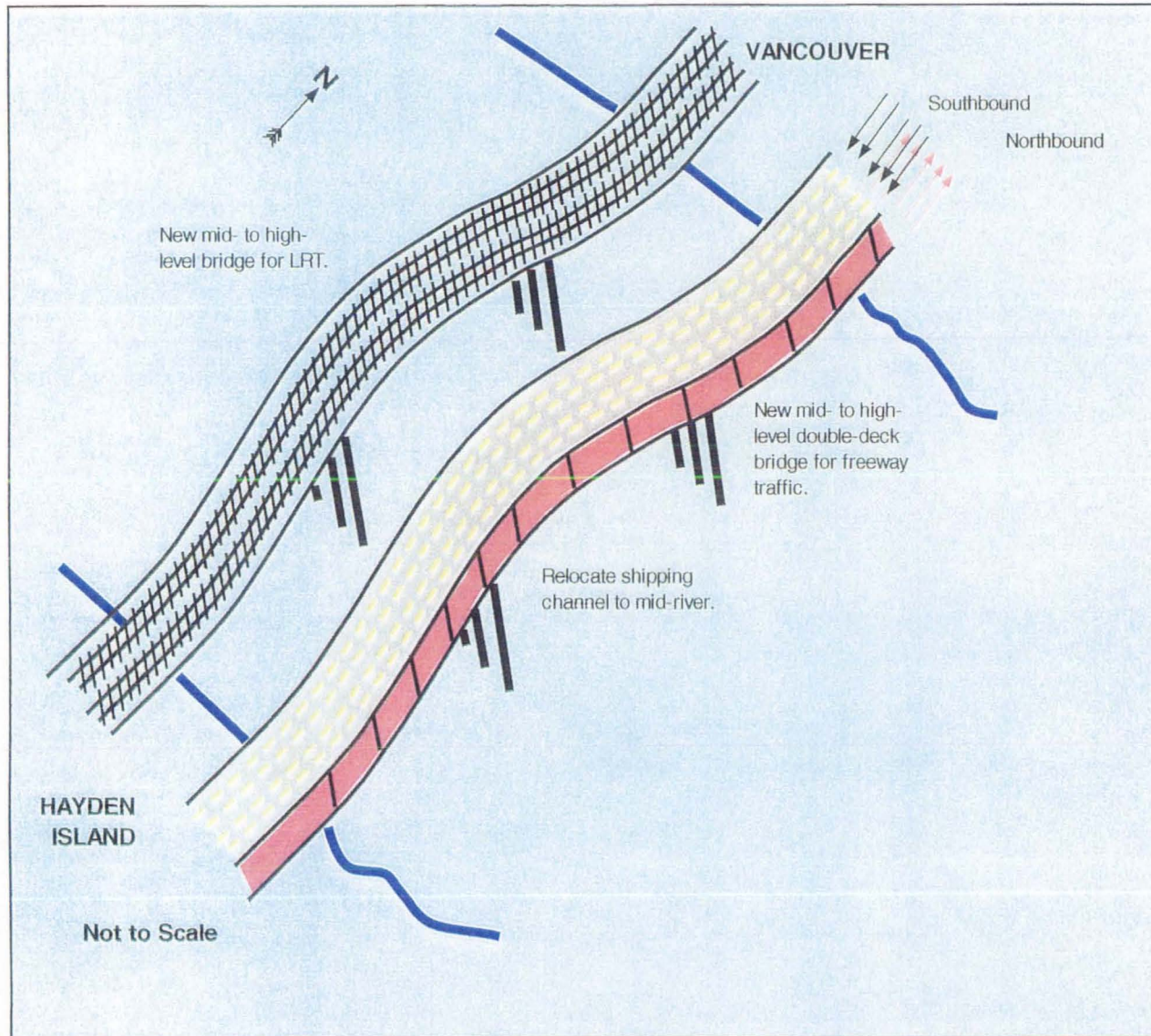
Bridge Influence Area Analysis



Concept 3: Ten lanes on double-deck five- lane bridge, with LRT retrofitted on existing bridge

1. Low- to mid-level bridge with lift span over existing navigation channel
2. Requires retrofitting existing bridge for LRT (feasibility may be questionable)

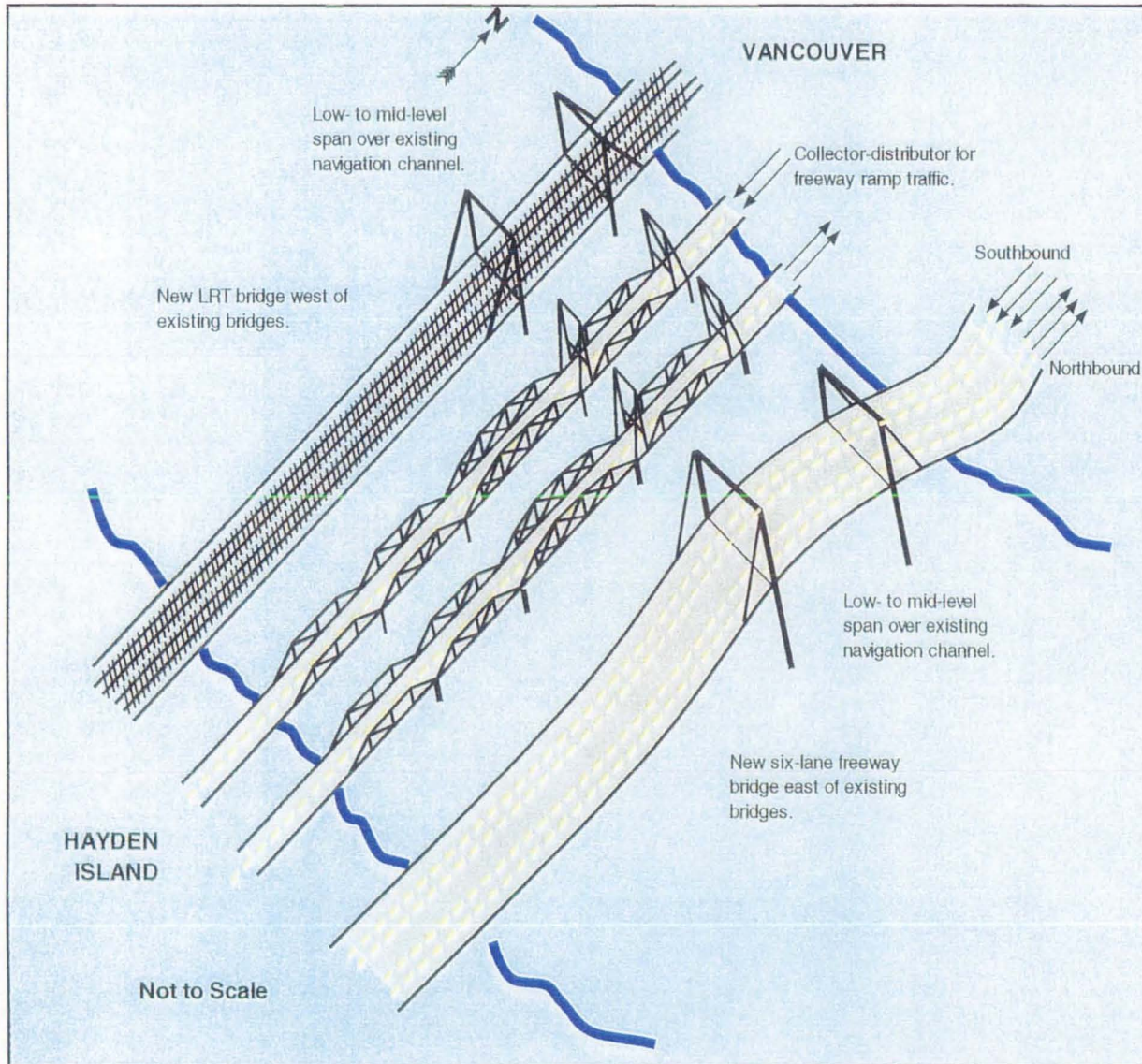
Bridge Influence Area Analysis



Concept 4: Ten lanes on double-deck bridge, with LRT on separate new bridge

1. Mid- to high-level bridges. Navigation channel relocated to center of river
2. Potential fixed spans for highway and LRT (with Coast Guard reduction of existing lift requirements), or lift spans

Bridge Influence Area Analysis



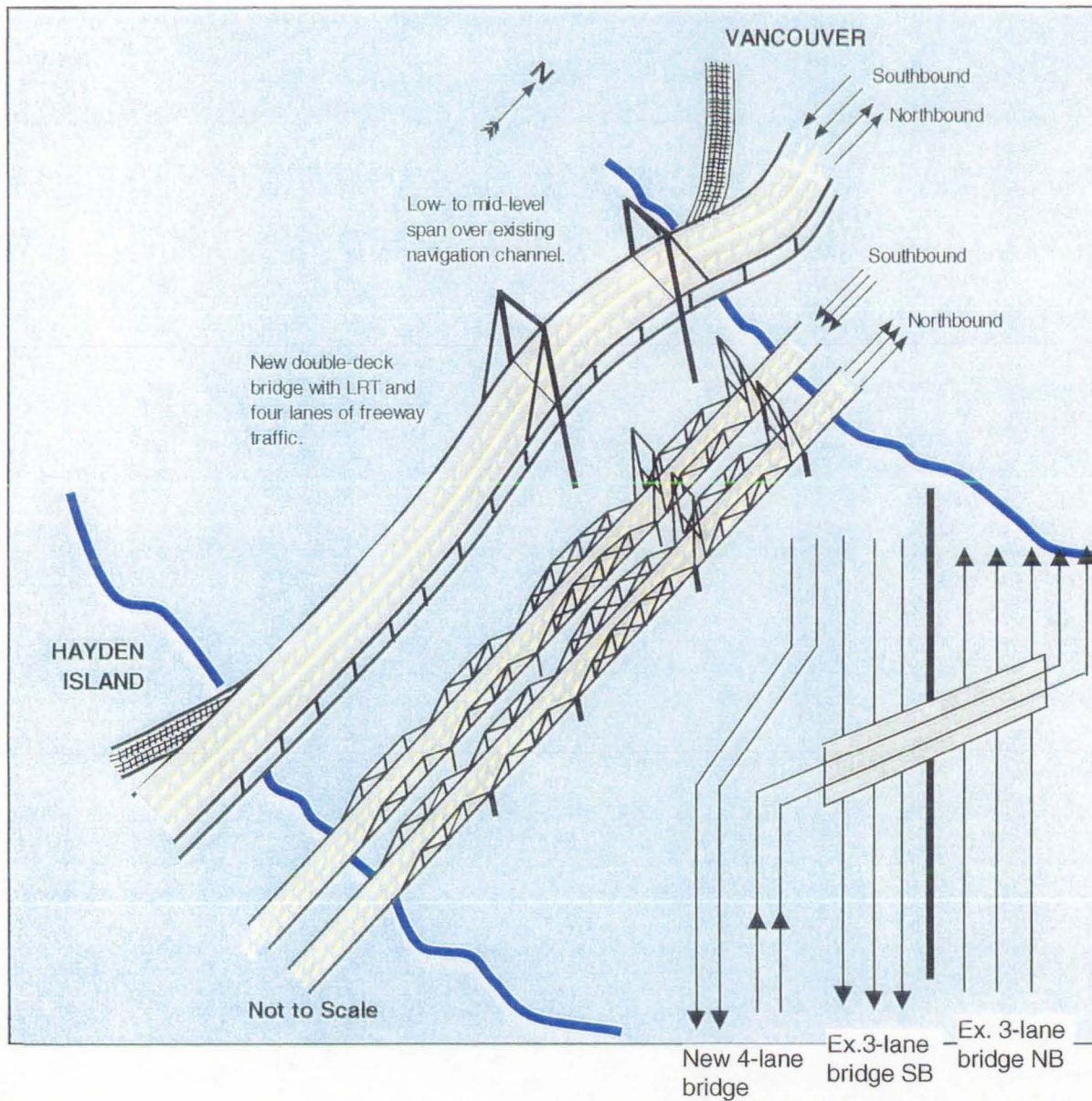
Concept 5: New six-lane supplemental bridge, use existing bridges for collector-distributor, new LRT bridge

Through traffic on
new six-lane bridge

2. Existing bridges used
for collector-distributor
(moving freeway access
away from through
traffic)

3. LRT on new bridge

4. Low- to mid-level
bridges, with lift span
over existing navigation
channel



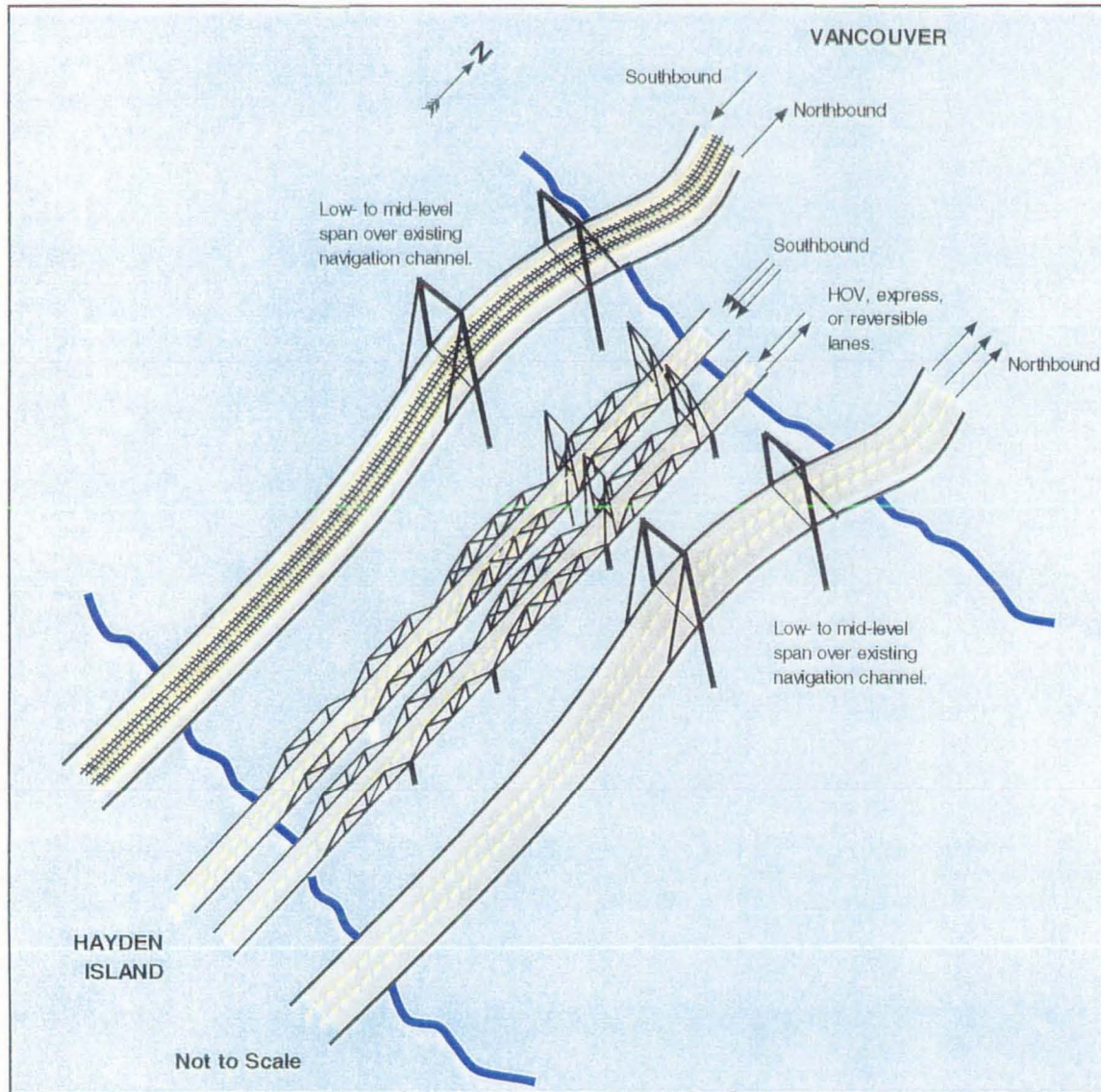
Concept 6: Four-lane supplemental bridge w/LRT, west of existing bridges

1. Provides for new four-lane bridge with LRT

2. Low- to mid-level bridge with lift span over current navigation channel

3. Use four-lane bridge as collector-distributor (i.e., ramp access for Hayden Island, etc.). Requires fly-over ramps north and south, as shown in the schematic on the left

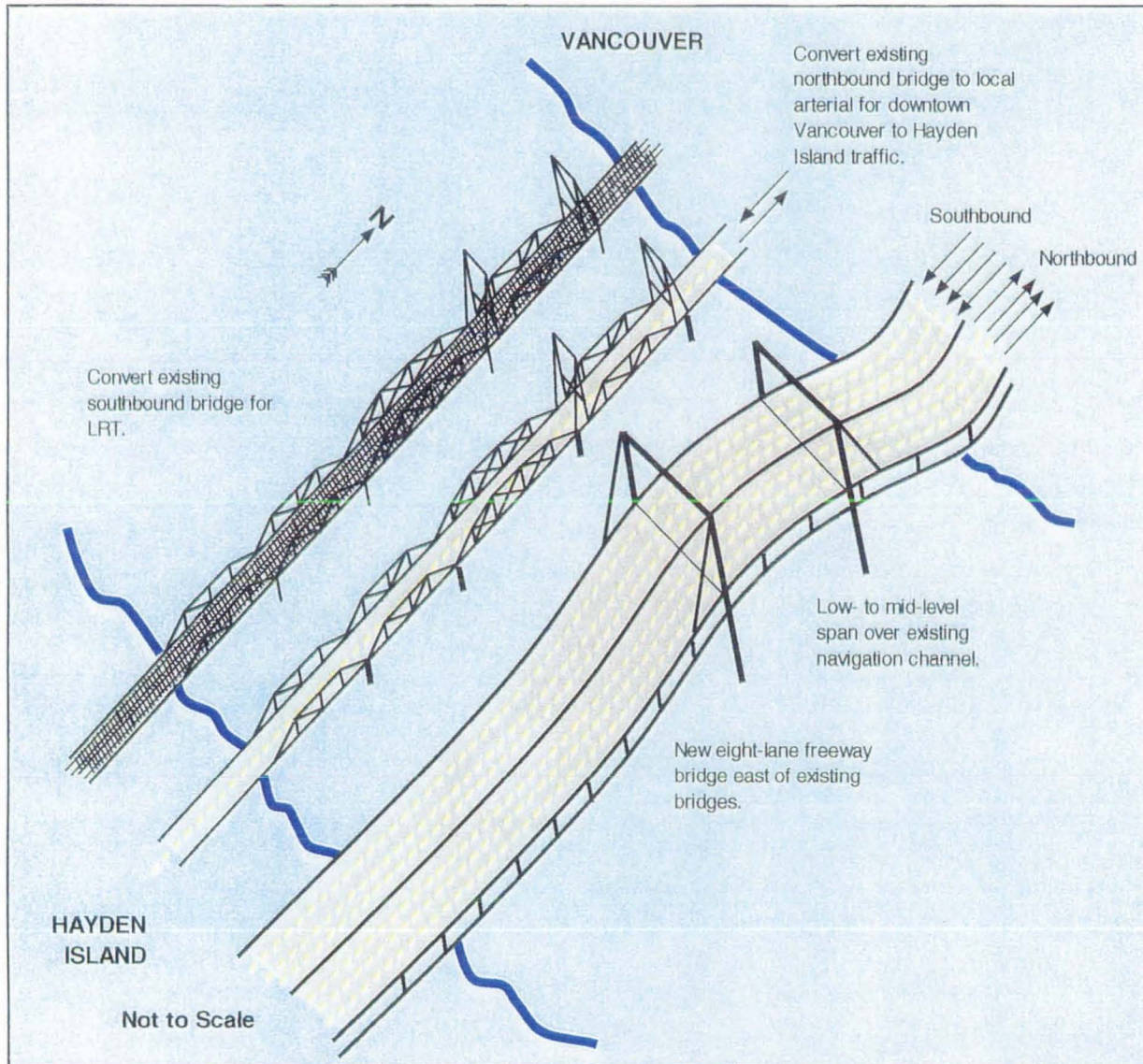
Bridge Influence Area Analysis



Concept 7: LRT bridge with two-lane arterial, plus new three-lane supplemental bridge for freeway traffic

1. Provides for new four-lane bridge with LRT
2. Low- to mid-level bridges with lift spans over current navigation channel
3. Two lanes on existing northbound bridge could be used for HOV, express lanes, or (potentially) reversible lanes

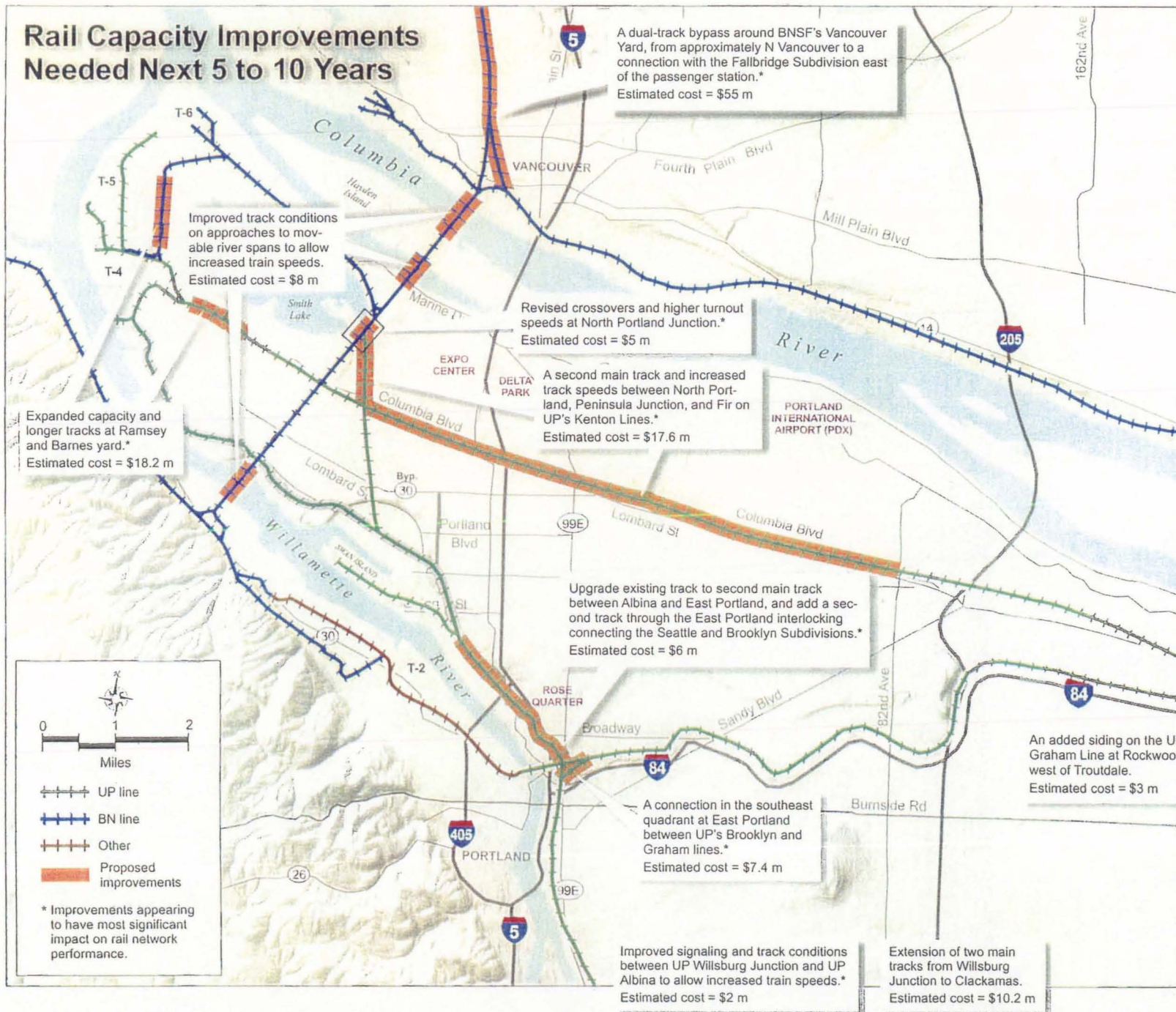
Bridge Influence Area Analysis



Concept 8: Eight-lane supplemental bridge east of existing bridges, LRT retrofit and two-lane arterial

1. Through traffic on new eight-lane bridge
2. Existing northbound bridge converted to local arterial between Hayden Island and downtown Vancouver
3. LRT on retrofitted southbound bridge
4. Low- to mid-level bridge, with lift span over existing navigation channel

Rail Capacity Improvements Needed Next 5 to 10 Years



A dual-track bypass around BNSF's Vancouver Yard, from approximately N Vancouver to a connection with the Fallbridge Subdivision east of the passenger station.*
Estimated cost = \$55 m

Improved track conditions on approaches to movable river spans to allow increased train speeds.
Estimated cost = \$8 m

Revised crossovers and higher turnout speeds at North Portland Junction.*
Estimated cost = \$5 m

Expanded capacity and longer tracks at Ramsey and Barnes yard.*
Estimated cost = \$18.2 m

A second main track and increased track speeds between North Portland, Peninsula Junction, and Fir on UP's Kenton Lines.*
Estimated cost = \$17.6 m

Upgrade existing track to second main track between Albina and East Portland, and add a second track through the East Portland interlocking connecting the Seattle and Brooklyn Subdivisions.*
Estimated cost = \$6 m

An added siding on the UP Graham Line at Rockwood, west of Troutdale.
Estimated cost = \$3 m

A connection in the southeast quadrant at East Portland between UP's Brooklyn and Graham lines.*
Estimated cost = \$7.4 m

Improved signaling and track conditions between UP Willsburg Junction and UP Albina to allow increased train speeds.*
Estimated cost = \$2 m

Extension of two main tracks from Willsburg Junction to Clackamas.
Estimated cost = \$10.2 m

0 1 2
Miles

UP line
BN line
Other
Proposed improvements

* Improvements appearing to have most significant impact on rail network performance.

\$132 million

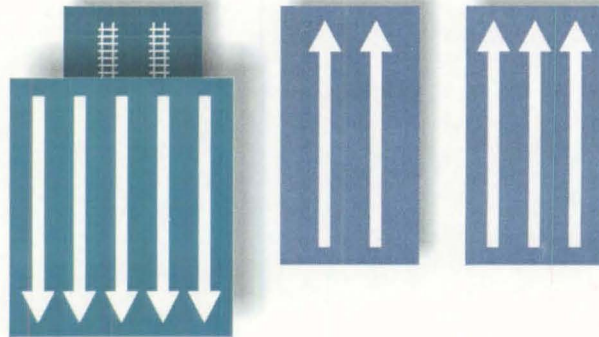
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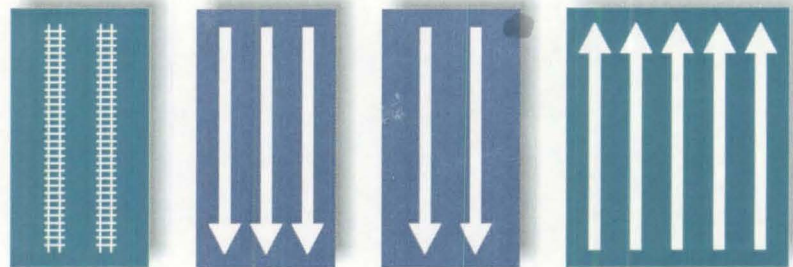
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Volumes =
marine dr/Hayden /s to
cd to SR 500 before
move to main line(m)

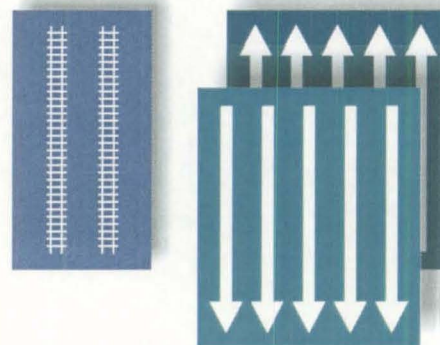
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- 5 southbound lanes on existing bridges.
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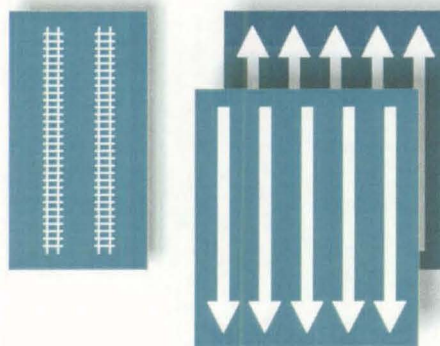
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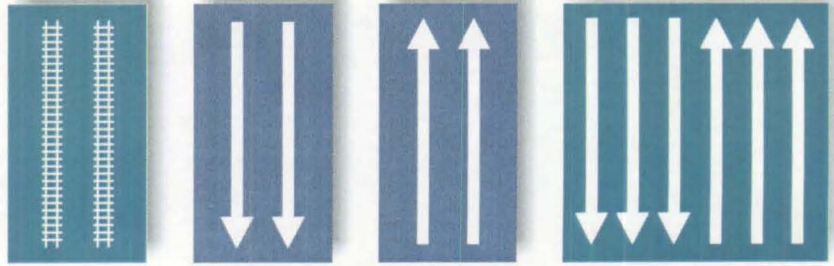
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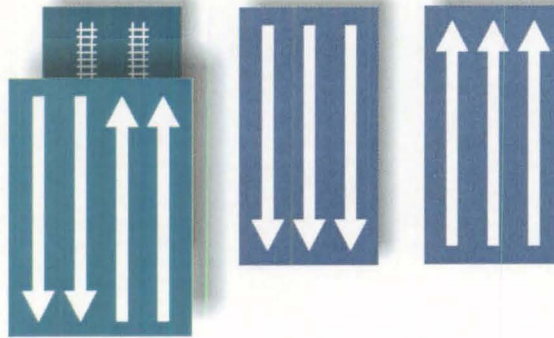
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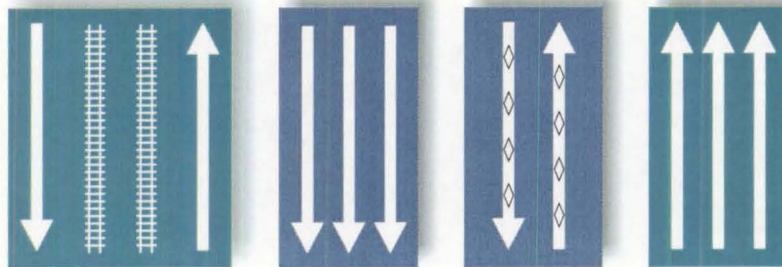
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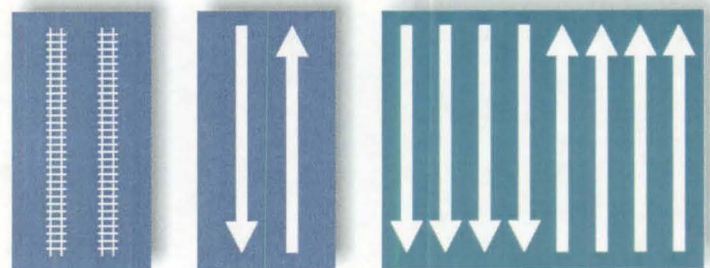
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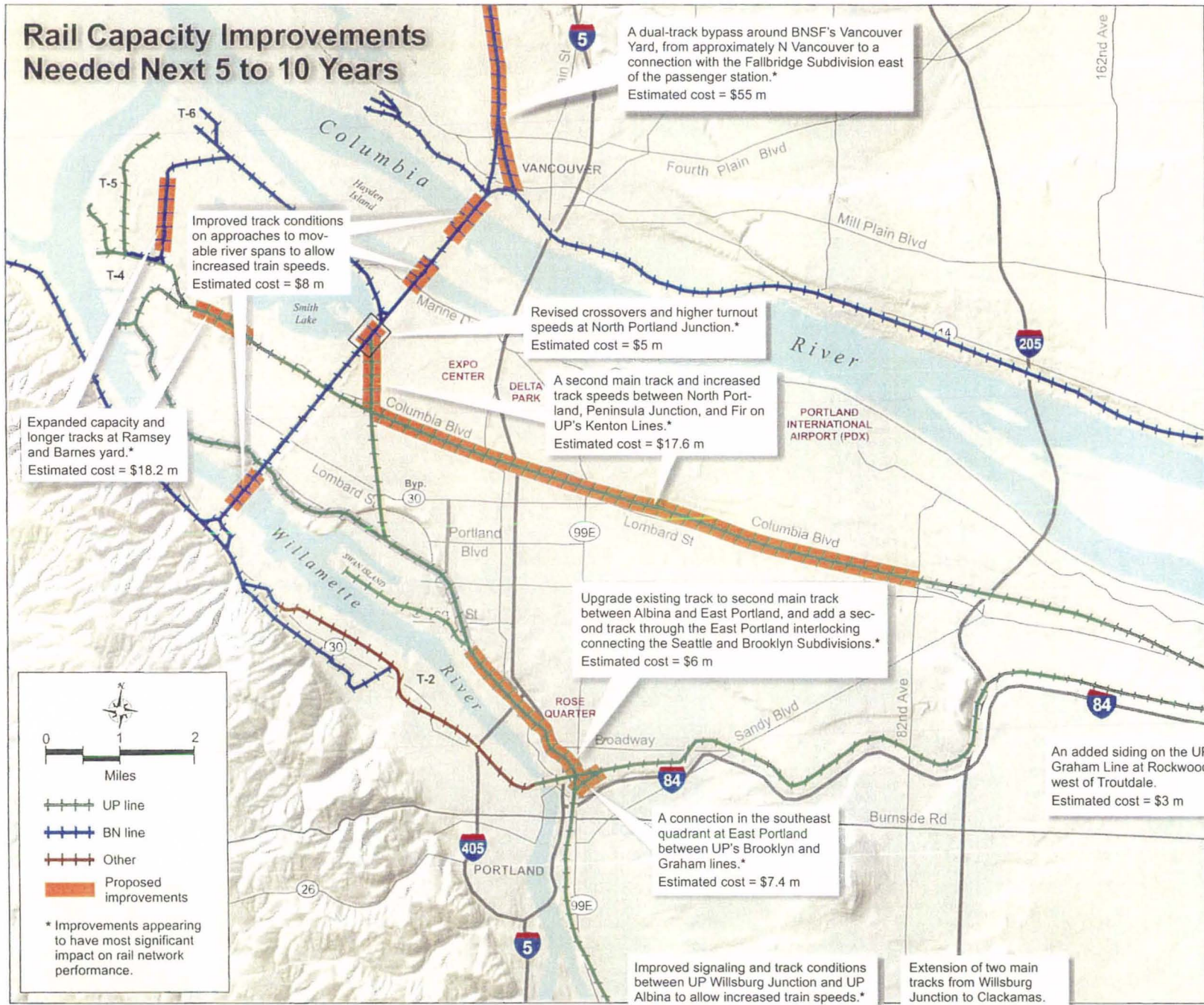


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