



I-5 Partnership Update

March 2002

www.i-5partnership.com

Introduction

- Bi-state planning project
- Sponsored by ODOT, WSDOT and FHWA
- Led by a 28-member bi-state Task Force
- Purpose of Project:
 - Develop a strategic plan for I-5 corridor between Portland and Vancouver



Background

- Key Findings From Previous Corridor Work:
 - The most economically important corridor in the state
 - Doing nothing threatens the economic promise and livability of the region
 - There is no silver bullet - answer is multi-modal
 - Funding will have to include innovative finance

Project Overview/Purpose

- Multi-faceted plan – looking not only at freeway, but also...
 - transit service in the corridor
 - managing demand
 - freight and passenger rail and
 - land use implications of making and not making improvements

Status of Project

- In January a 28-member bi-state task force began its work.
- Members of the committee include elected, business, neighborhood and community representatives.
- The Task Force spent January - June 2001 working with the public and one another to determine what improvements should be studied.
- Reviewed the evaluation results in the Fall of 2001, and made draft recommendations for the corridor in January 2002.

Option Packages Evaluated

- Existing Conditions (2000)
- No Build (2020)
- Baseline (2020)
- West Arterial
- Express Bus/3 Lanes
- LRT/3 Lanes
- Express Bus/4 Lanes
- LRT/4 Lanes

Draft Recommendations:

- Widen I-5 to 3 lanes where it is currently 2 lanes between: a) Delta Park and Lombard and b) 99th St. to I-205 in Vancouver.
- Establish a phased, light rail loop system in the vicinity of the I-5, SR 500/4th Plain and I-205 to serve travel needs within Clark County and between the two states.
- Provide peak-hour, premium express bus service to supplement light rail.

Draft Recommendations - Cont.:

- Provide more capacity across the Columbia River for vehicles, light rail and buses (2 new lanes in each direction for vehicles and buses and 2 light rail tracks).
- Consider interchange improvements between SR500 in WA and Columbia Blvd. in OR, where necessary for the Interstate to function smoothly and safely.
- Make the Columbia Blvd. interchange in Oregon into a full interchange to facilitate freight movement and design with Delta Park project.

Draft Recommendations - Cont.:

- Washington and Oregon need to agree now on a plan for managing land development around interchanges to protect and support the region's transportation investments.
- Before construction of any additional cross-river transportation capacity, Oregon and Washington will develop and agree to a workable accord for an integrated regional transportation and land use system.

Other Recommendations:

- Do not widen I-5 to four through lanes in each direction between the Fremont Bridge in Oregon and the I-205 Interchange in Washington
- Further study of a new west arterial road should be pursued and identified as a potential transportation solution for consideration in the future. Impacts in Vancouver will need to be mitigated.
- The transportation issues near the Rose Quarter must be addressed and solved as part of an evaluation of the entire I-5/I-405 freeway loop.

Work for Feb - June 02

- What is potential use and extent of HOV through the I-5 Corridor?
- Should river crossing be a joint-function structure (light rail and vehicles) or two separate structures?
- Should new capacity be on a replacement bridge or a supplemental bridge?
- What combination of freeway and arterial lanes across the river might be appropriate?

Work for Feb - June 02 - Cont.

- How can the bridge influence area: SR 500 to Columbia Blvd. be designed to minimize disruption to neighborhoods and the environment, address merging and safety problems, and safely move traffic on and off the freeway?
- Develop Model IGA to protect the capacity and functionality of interchanges and transit stations
- Develop a regional accord outlining how to achieve a functionally integrated, regional transportation and land use system (if new river crossing capacity is added)

Work for Feb - June 02 - Cont.

- What TDM/TSM actions should be implemented before new cross river transportation capacity is added?
- How should congestion pricing be used as a tool for managing demand?
- What are the needs of the freight and passenger rail system?
- What is the viability of commuter rail in the corridor?

Work for Feb - June 02 - Cont.

- What is needed to address environmental justice and enhance the impacted communities?
- What is the financing and phasing strategy for potential improvements?

Next Steps

Feb - April 2002:

- Work on:
 - Bridge Influence Area
 - Finance and Implementation
 - Freight and Passenger Rail
 - Transportation Demand Management
 - Environmental Justice and Community Enhancements

May 2002:

- Public feedback on “additional work” options

Next Steps - Continued

June 2002:

- Public review of final draft recommendations
- Task Force adopts final recommendations and strategic plan

Post 2002:

- Review by bi-state and regional transportation authorities
- Adoption into regional transportation plans
- Environmental impact studies on any major improvements recommended

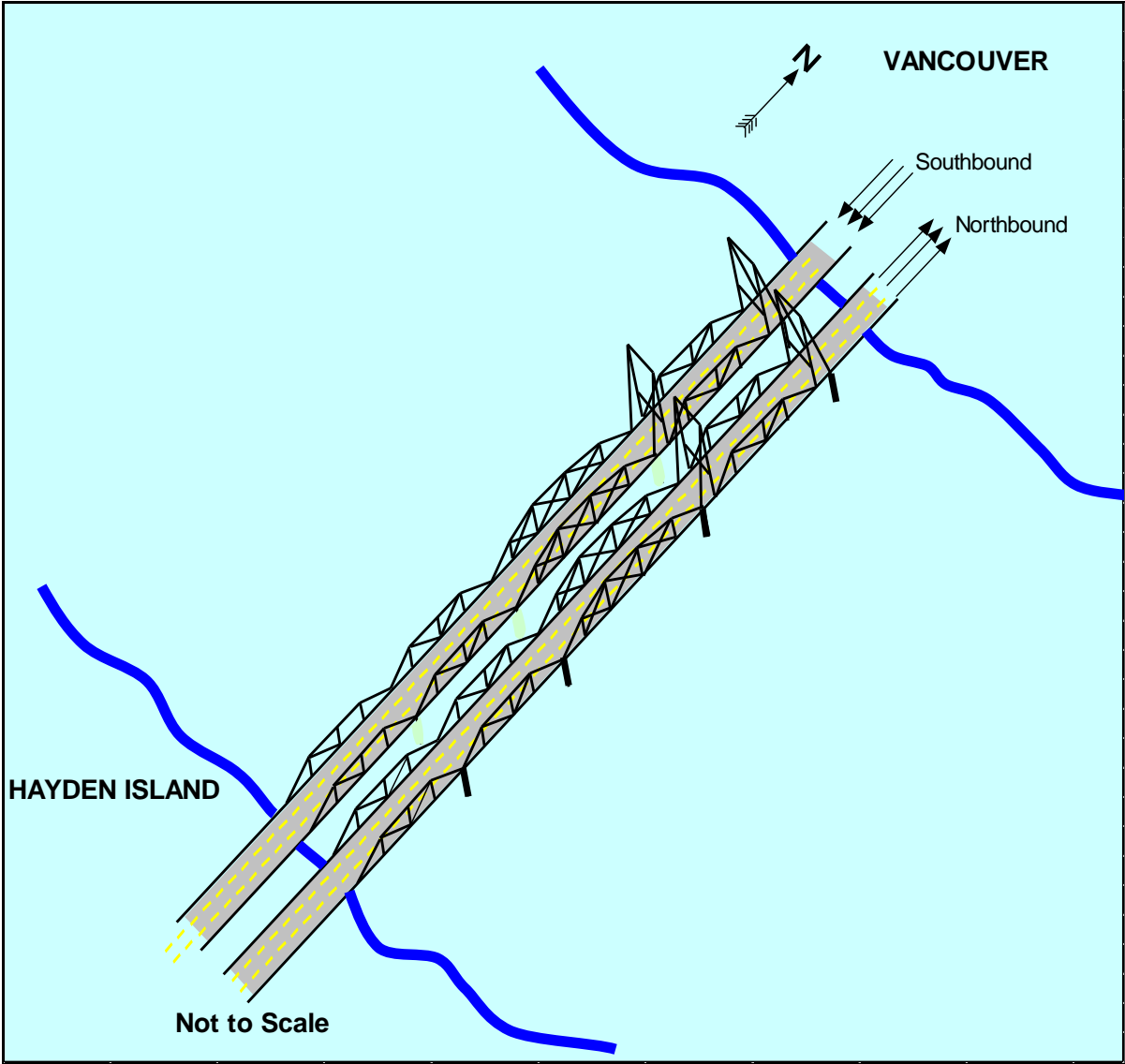
River Crossing Options

River crossing options

Range of options developed to consider:

- Supplemental vs. replacement bridge options
- Joint use (LRT-highway) vs. separate bridges
- Alignments east and west of existing bridges
- Freeway lanes and arterial lanes

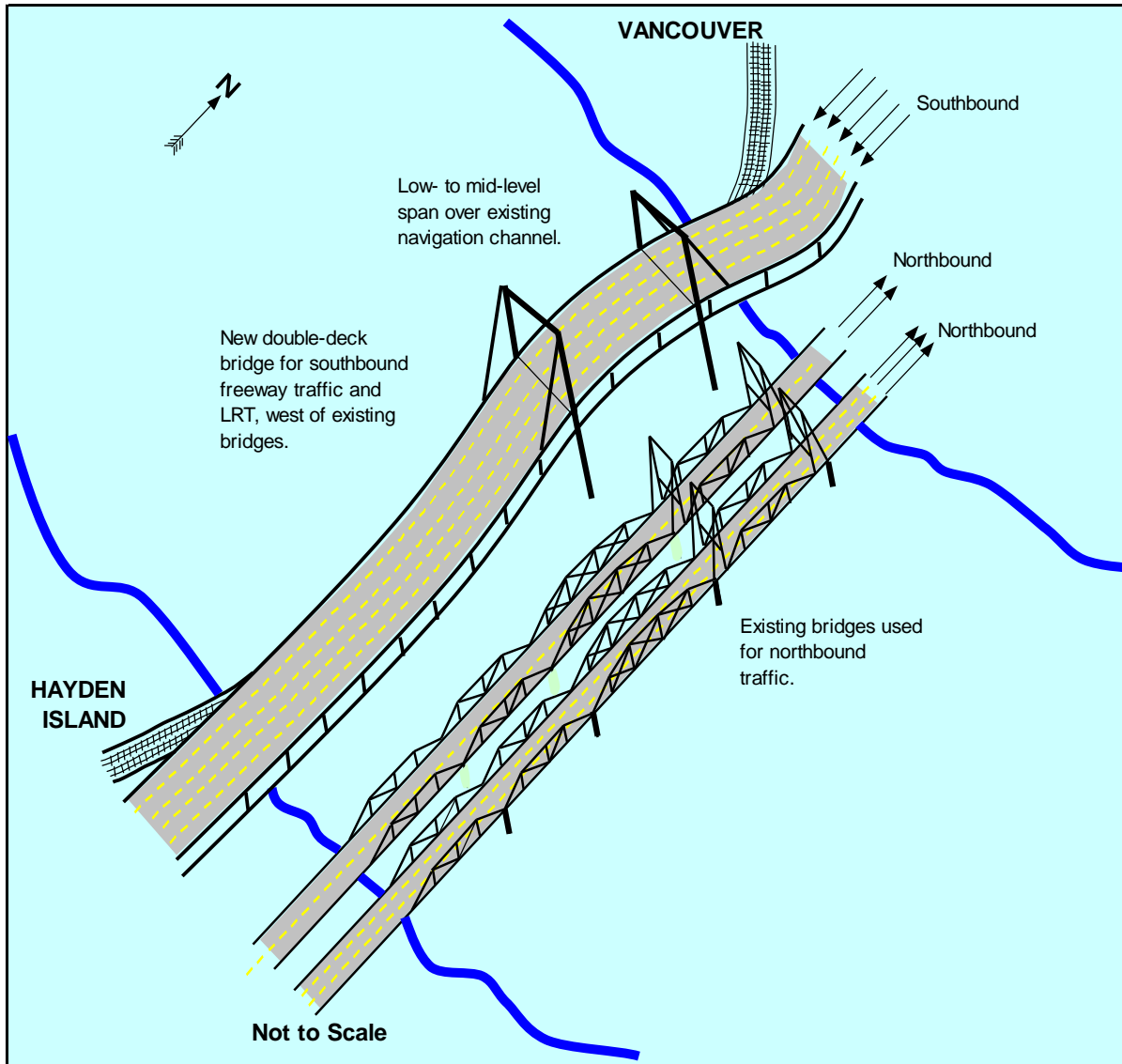
Bridge Influence Area Analysis



Existing configuration:

Two three-lane, low-level lift span bridges

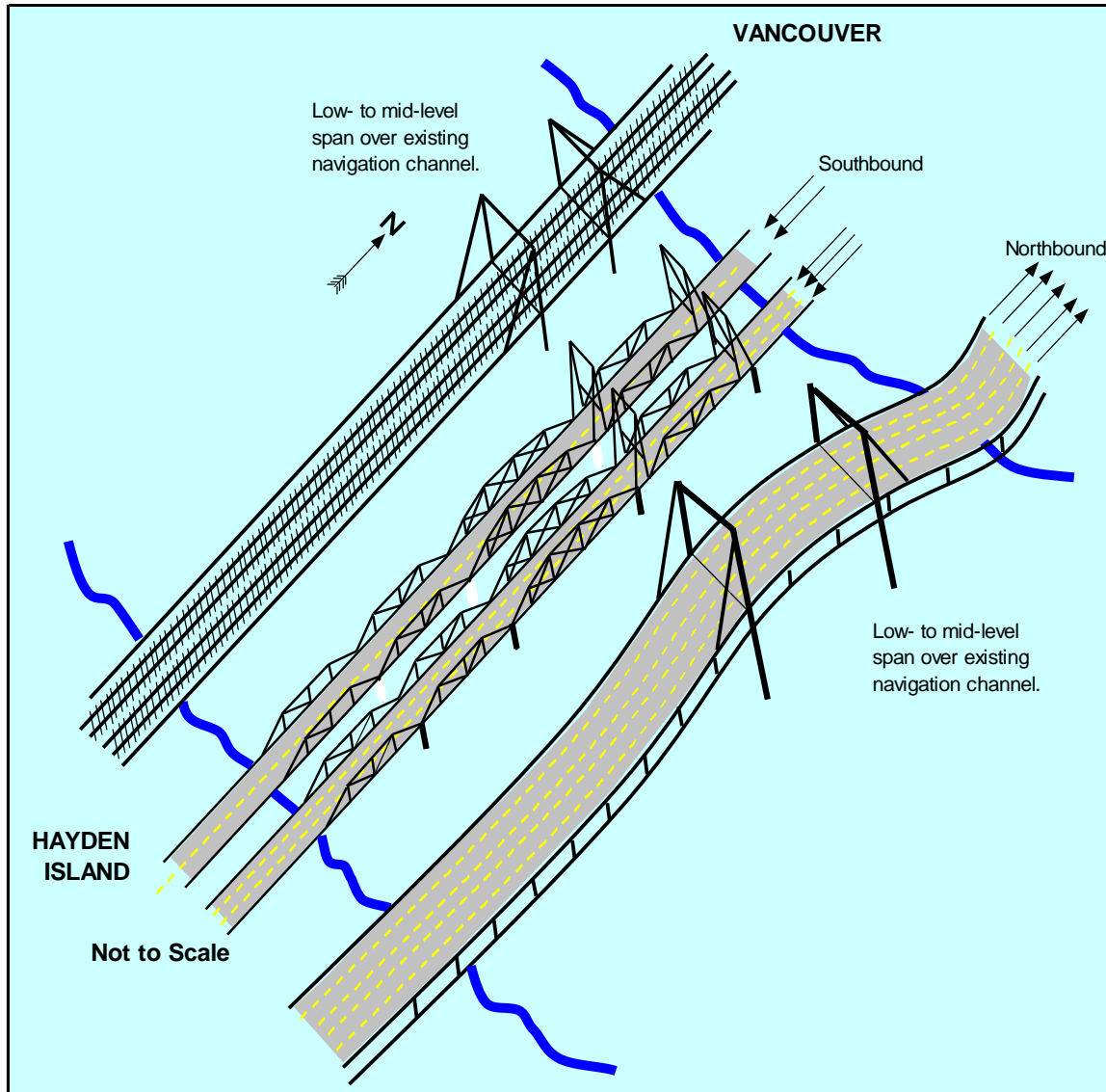
Bridge Influence Area Analysis



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

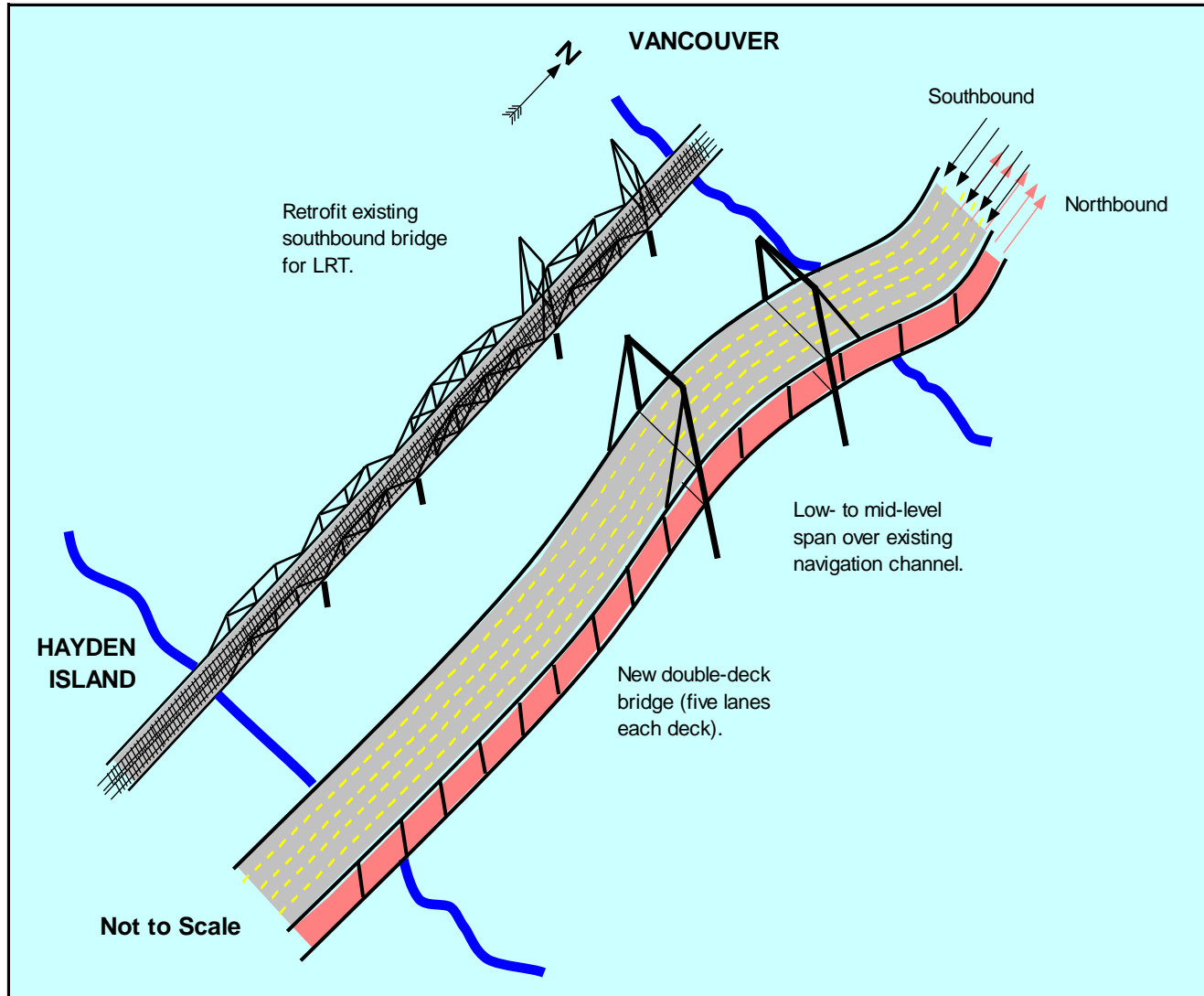
Bridge Influence Area Analysis



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

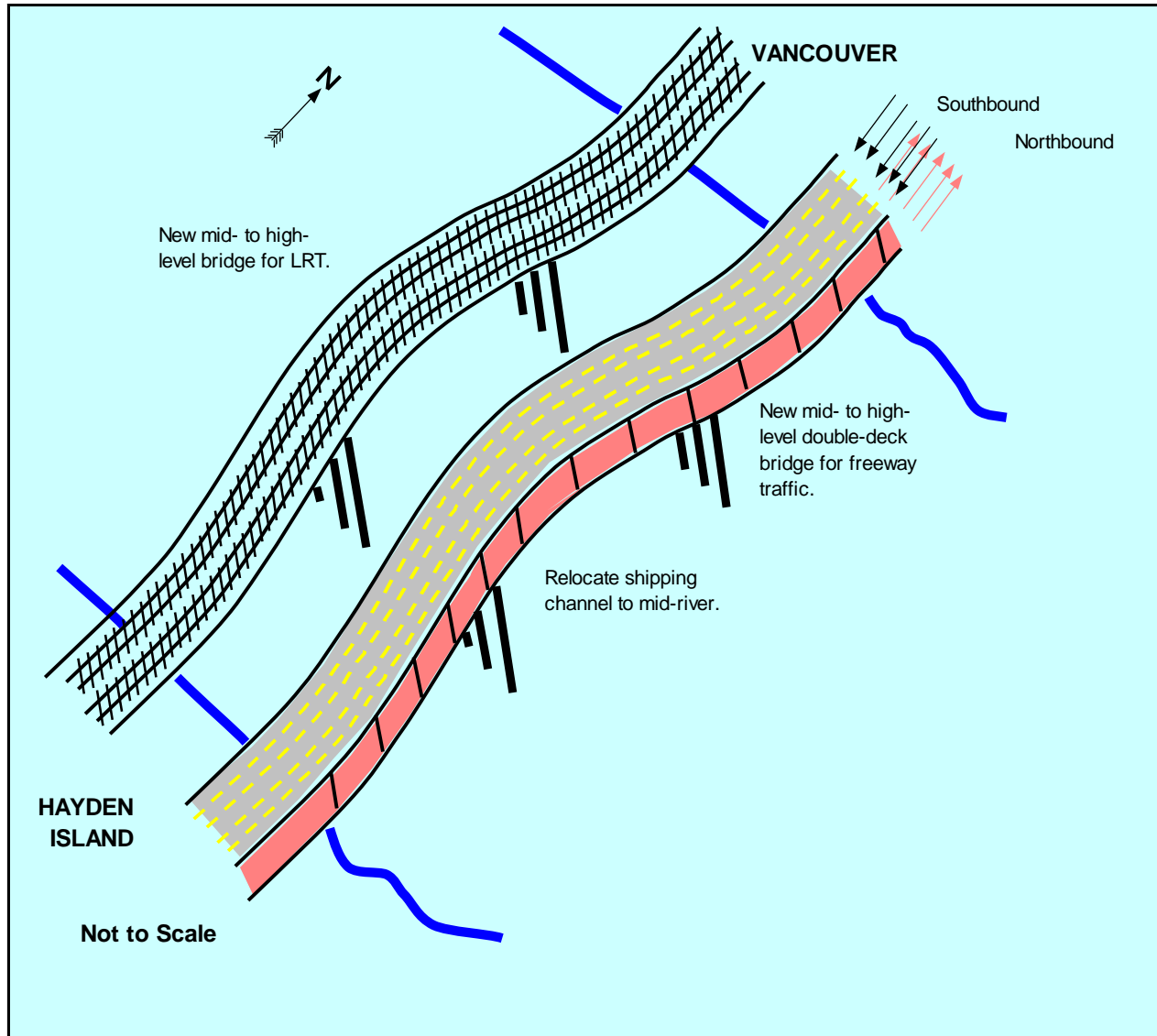
Bridge Influence Area Analysis



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)

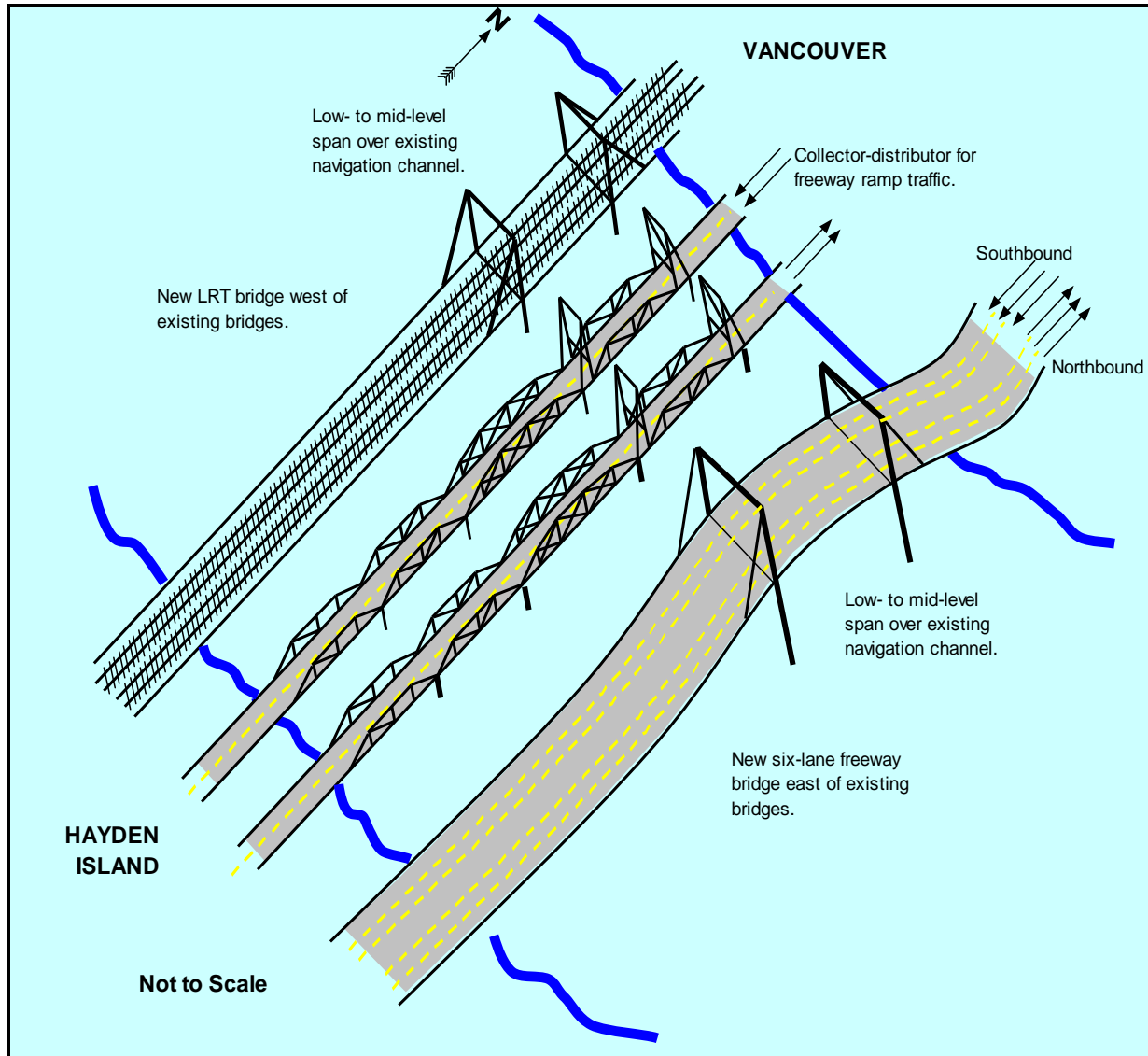
Bridge Influence Area Analysis



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

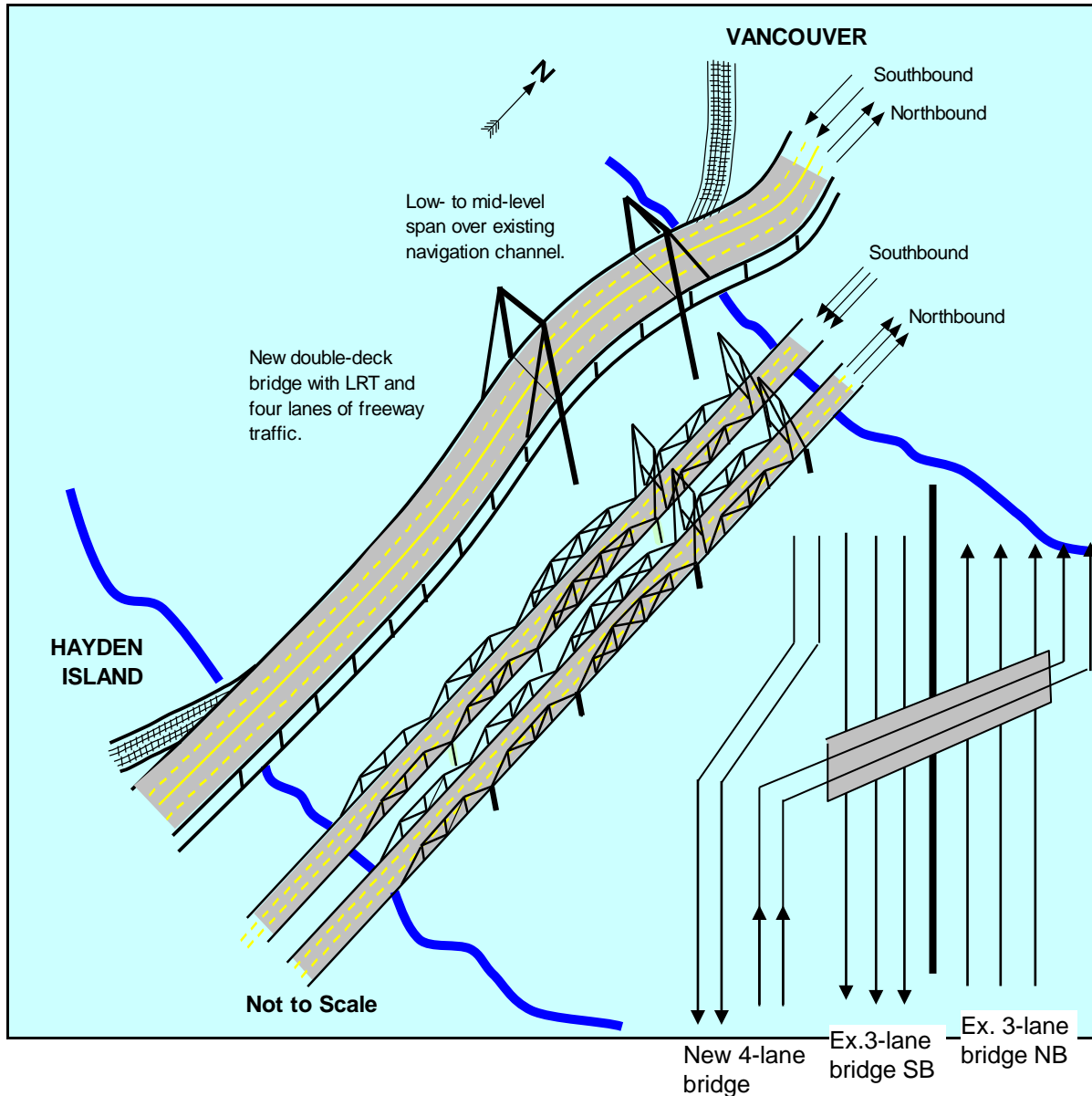
Through traffic on
new six-lane bridge

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

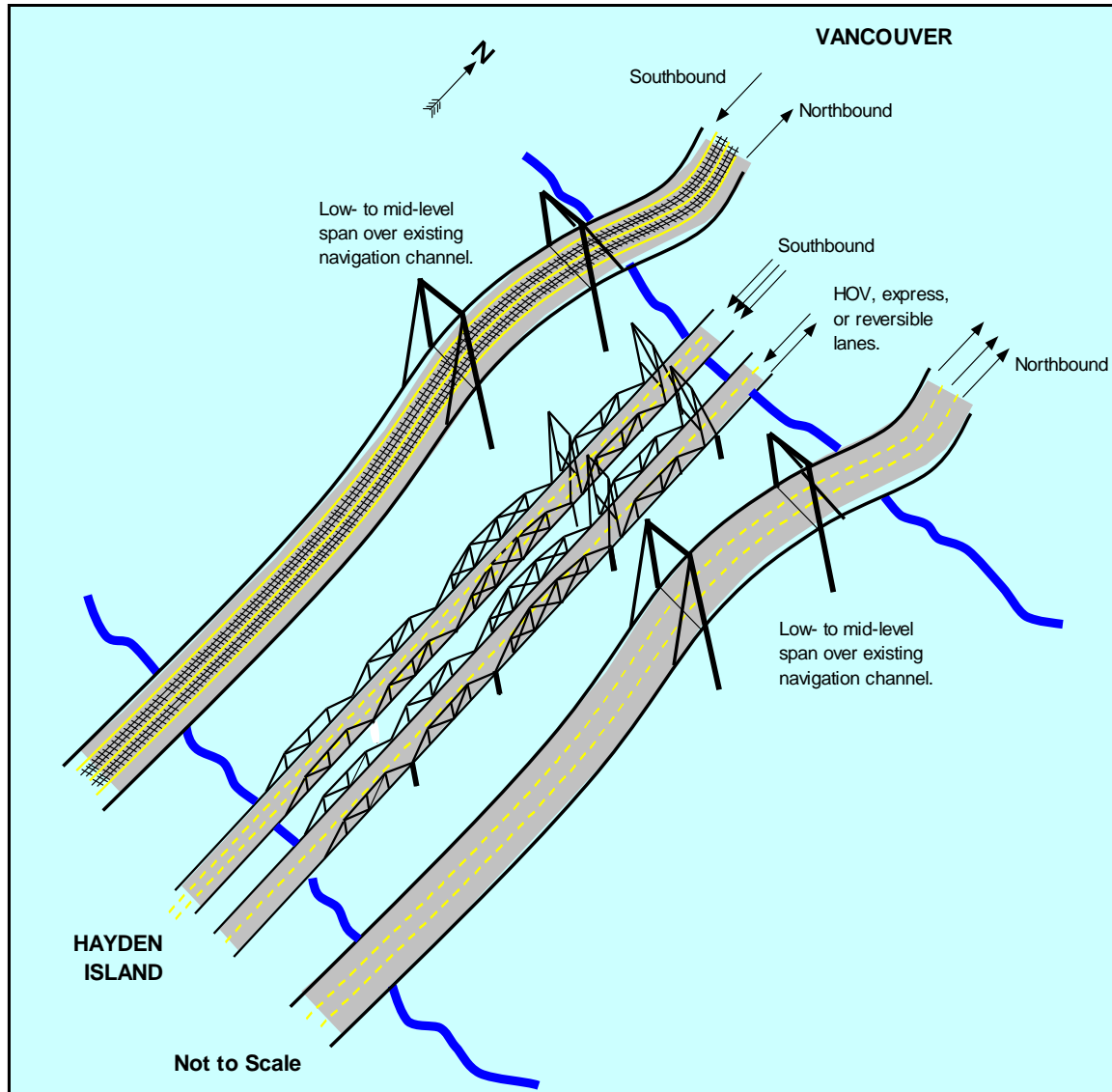
Bridge Influence Area Analysis



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

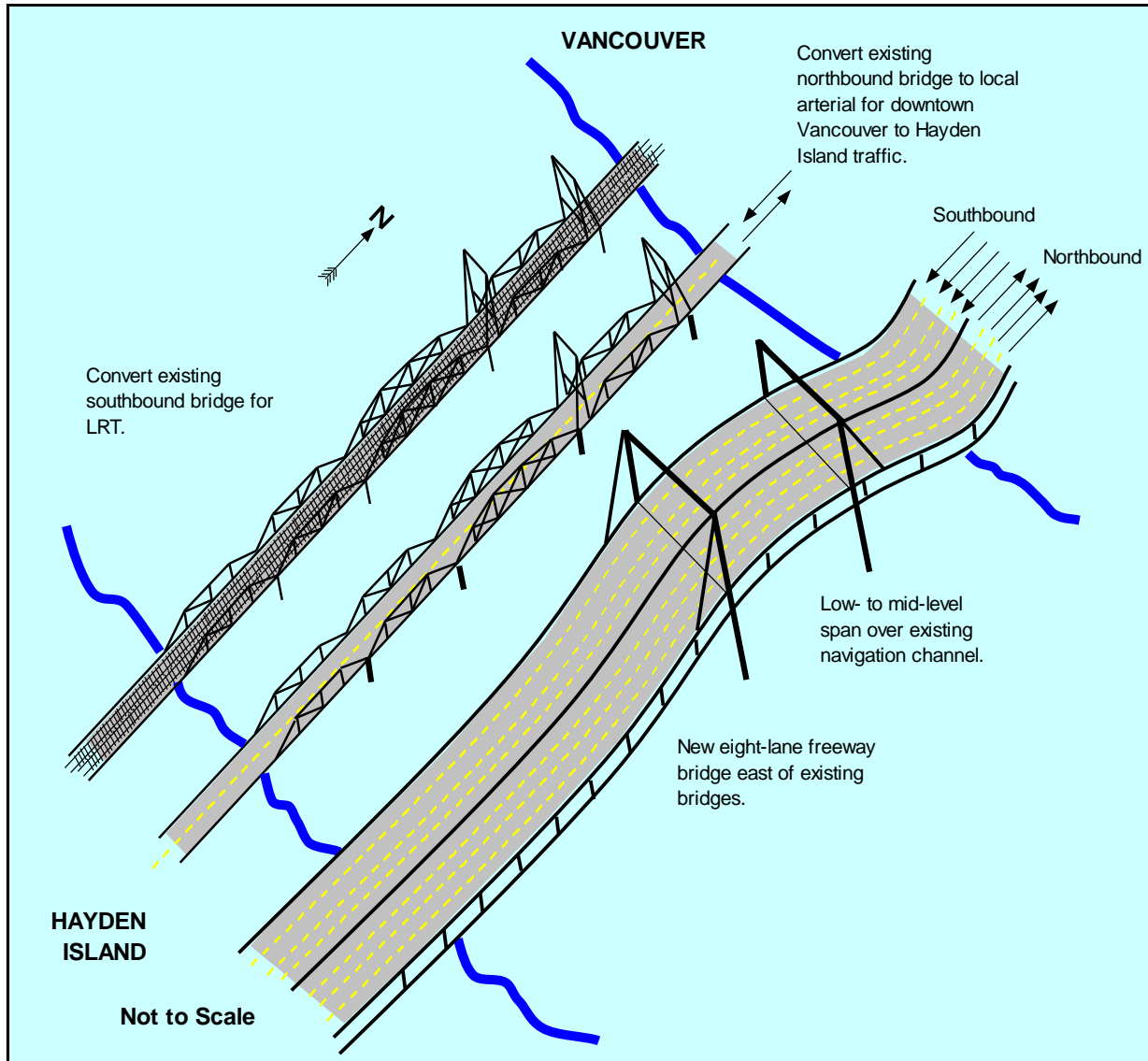
Bridge Influence Area Analysis



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

Bridge Influence Area Analysis

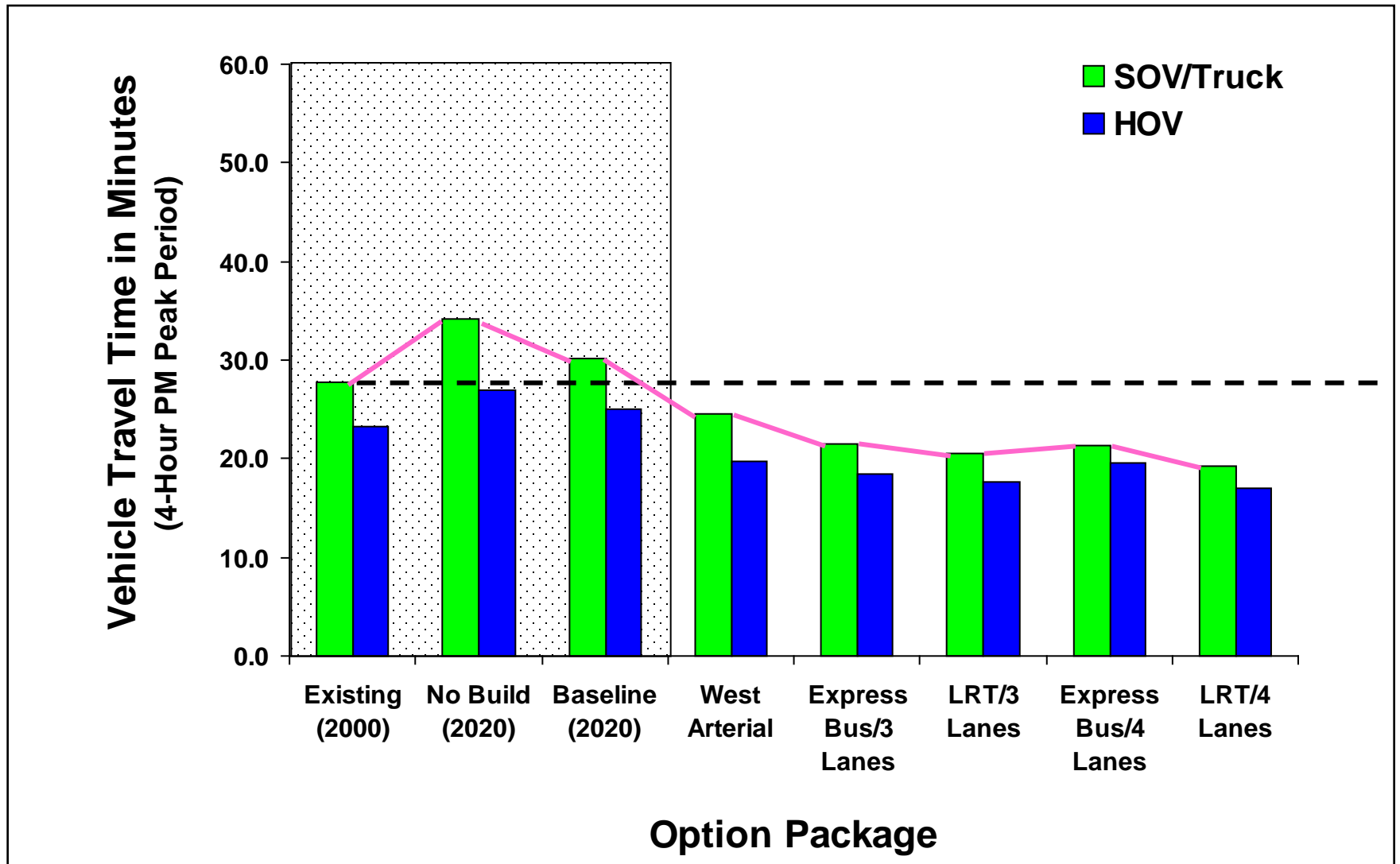
River crossing concepts:

All eight concepts will be considered in conceptually, and four will be developed in greater detail:

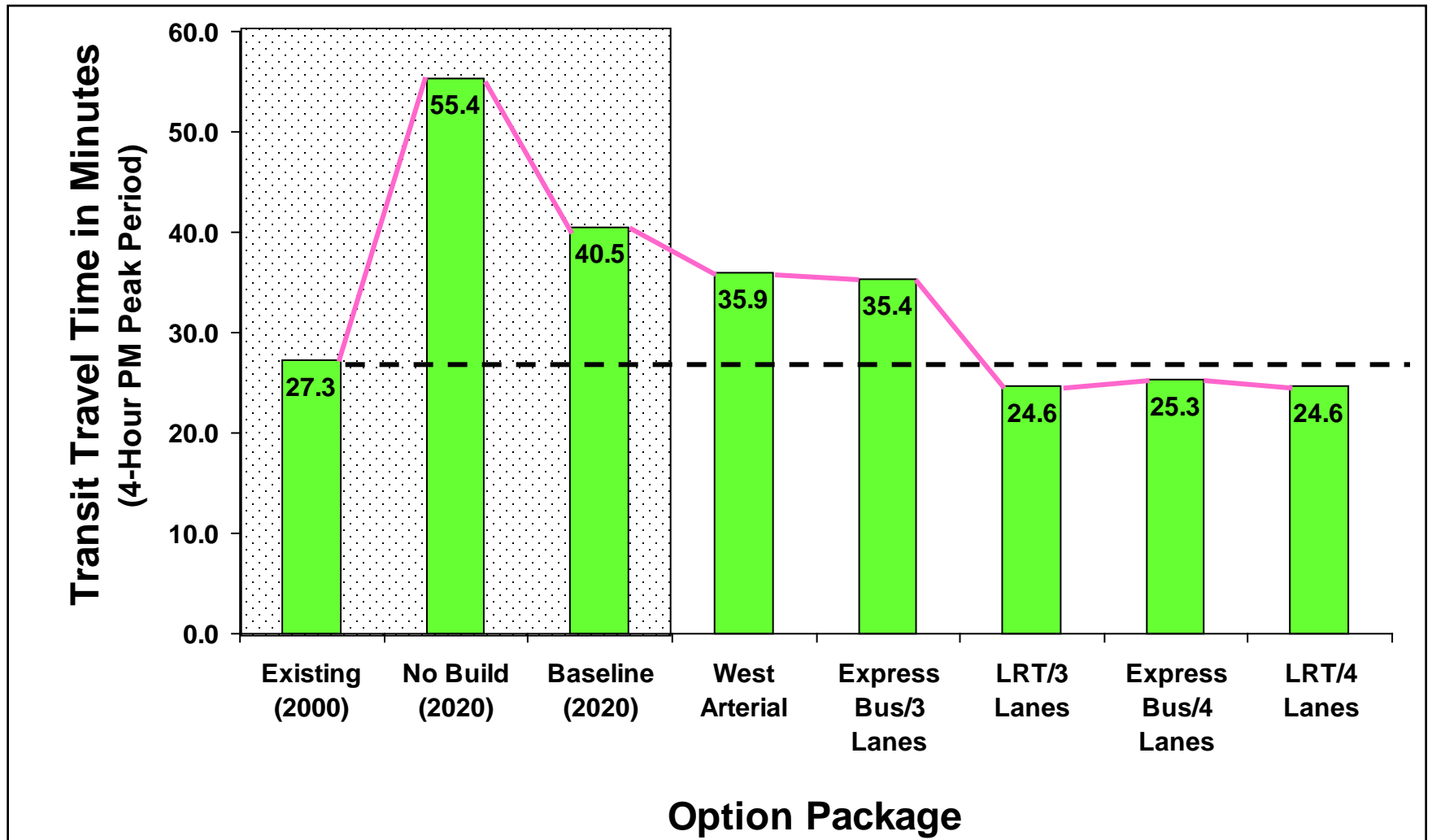
- # 1: New five lane southbound bridge with LRT
- # 4: New double deck freeway bridge, with separate new LRT bridge
- # 6: New four lane/LRT bridge for ramp traffic
- # 7: New LRT bridge with two arterial lanes, plus new three lane freeway bridge

Some Evaluation Results

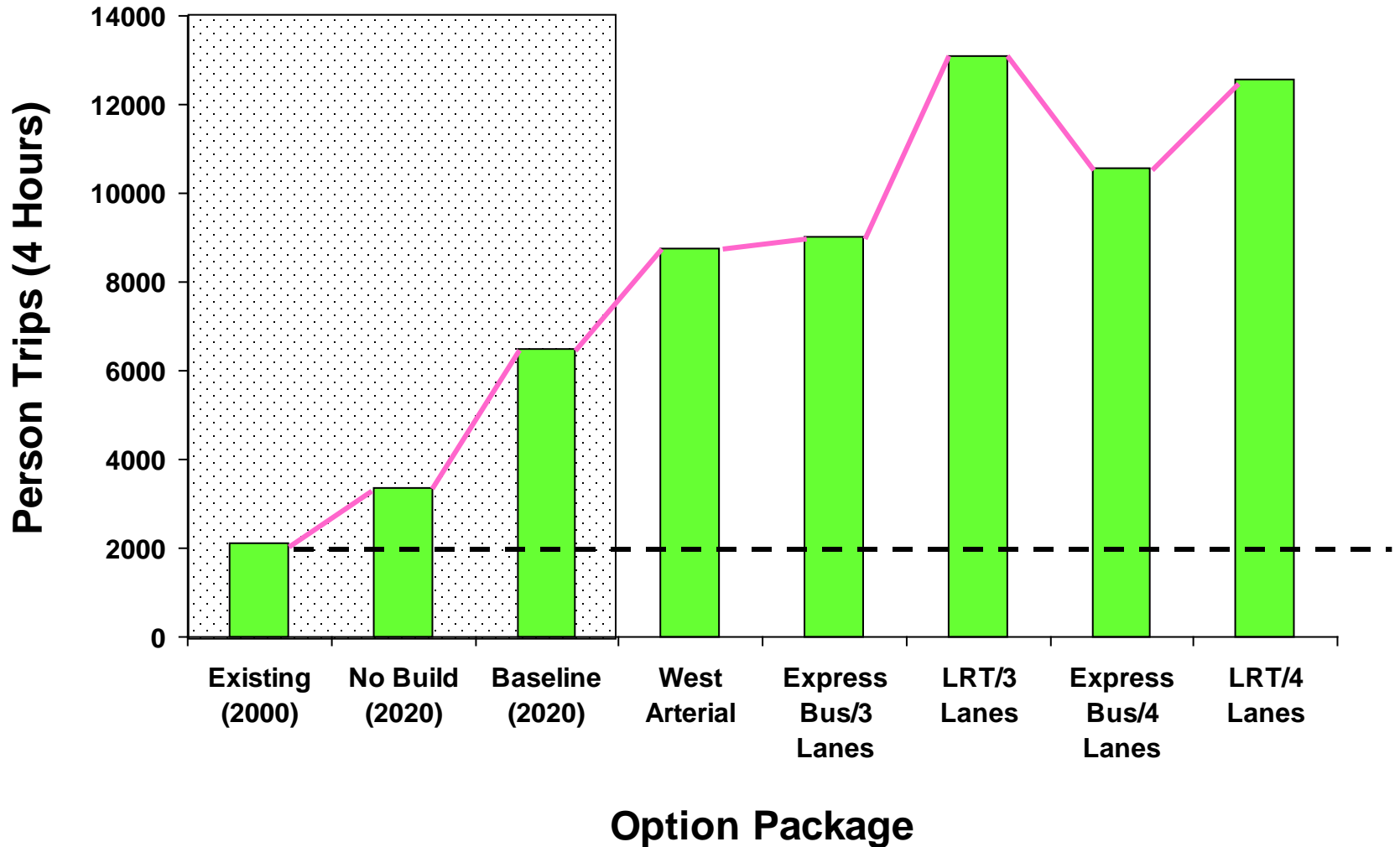
Vehicle Travel Times:Downtown Portland to Downtown Vancouver (PM Peak)



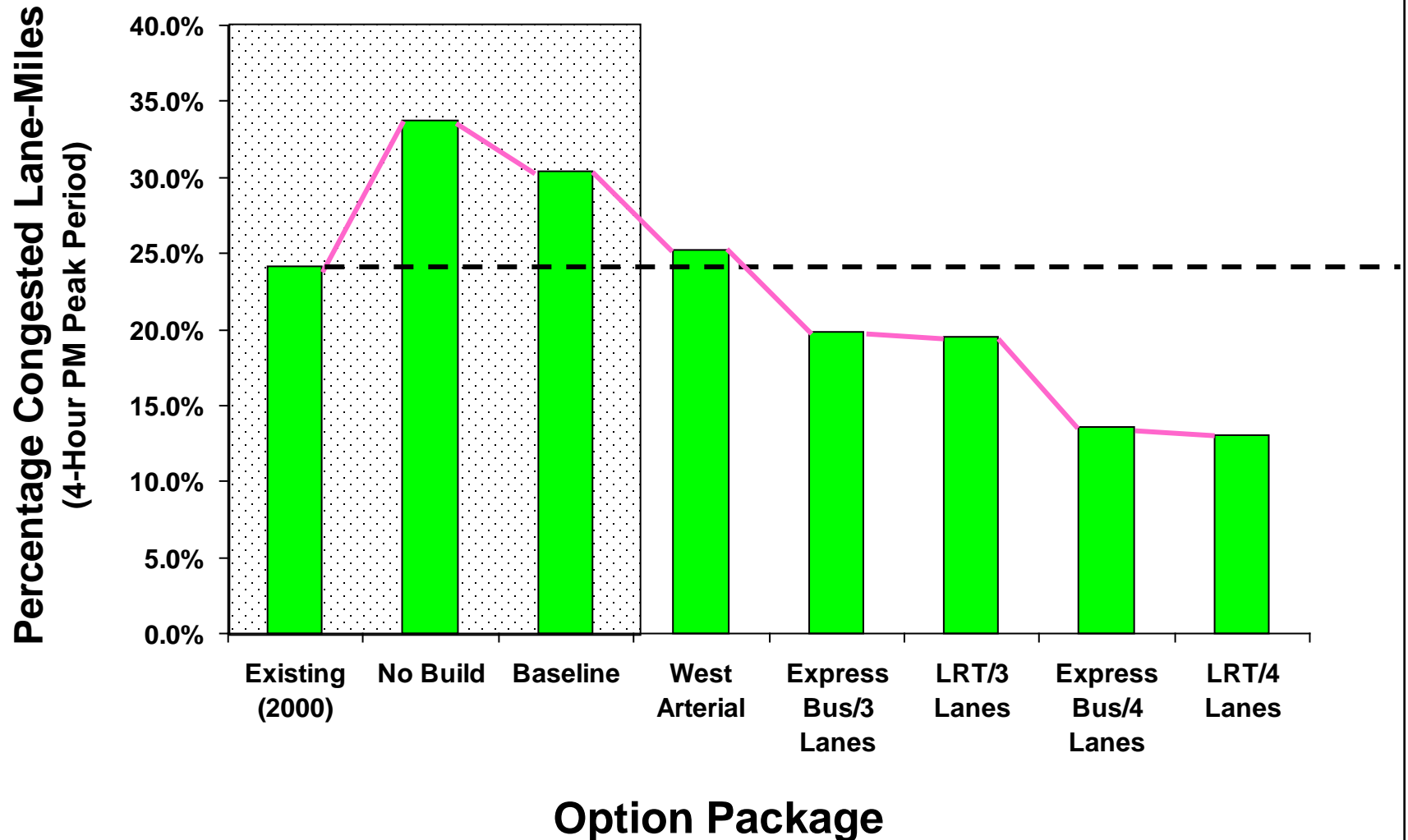
Transit Travel Time: Downtown Portland to Downtown Vancouver (PM Peak)



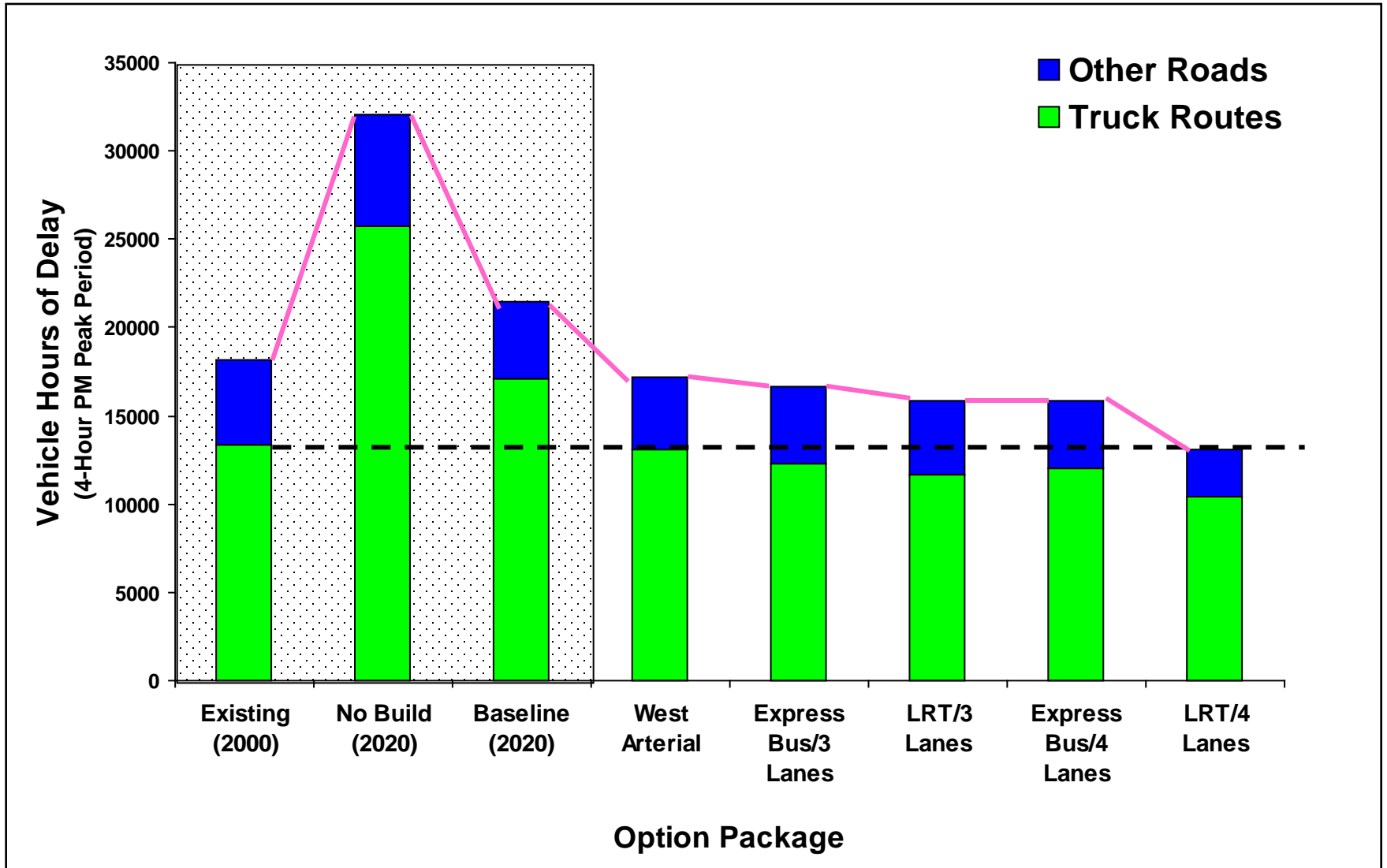
Transit Trips Across the Columbia River (PM Peak)



Congested Lane-Miles on I-5 and I-205 (PM Peak)



Vehicle Hours of Delay in the Study Area (PM Peak)

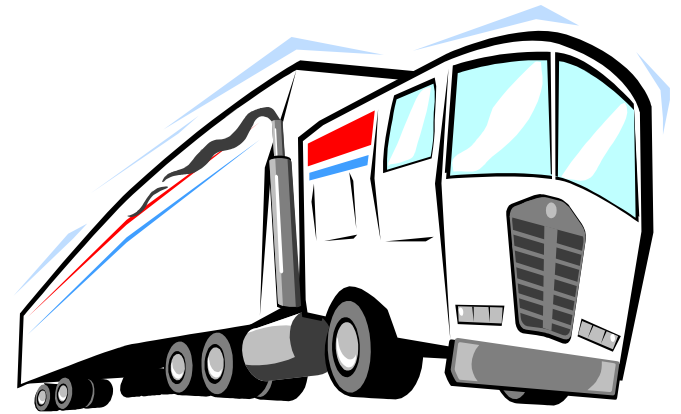


Freight Mobility

How Do The Recommendations Address Freight Needs?

- **Eliminates bottlenecks at:**

- Delta Park
- Columbia River Bridge
- 99th in Vancouver

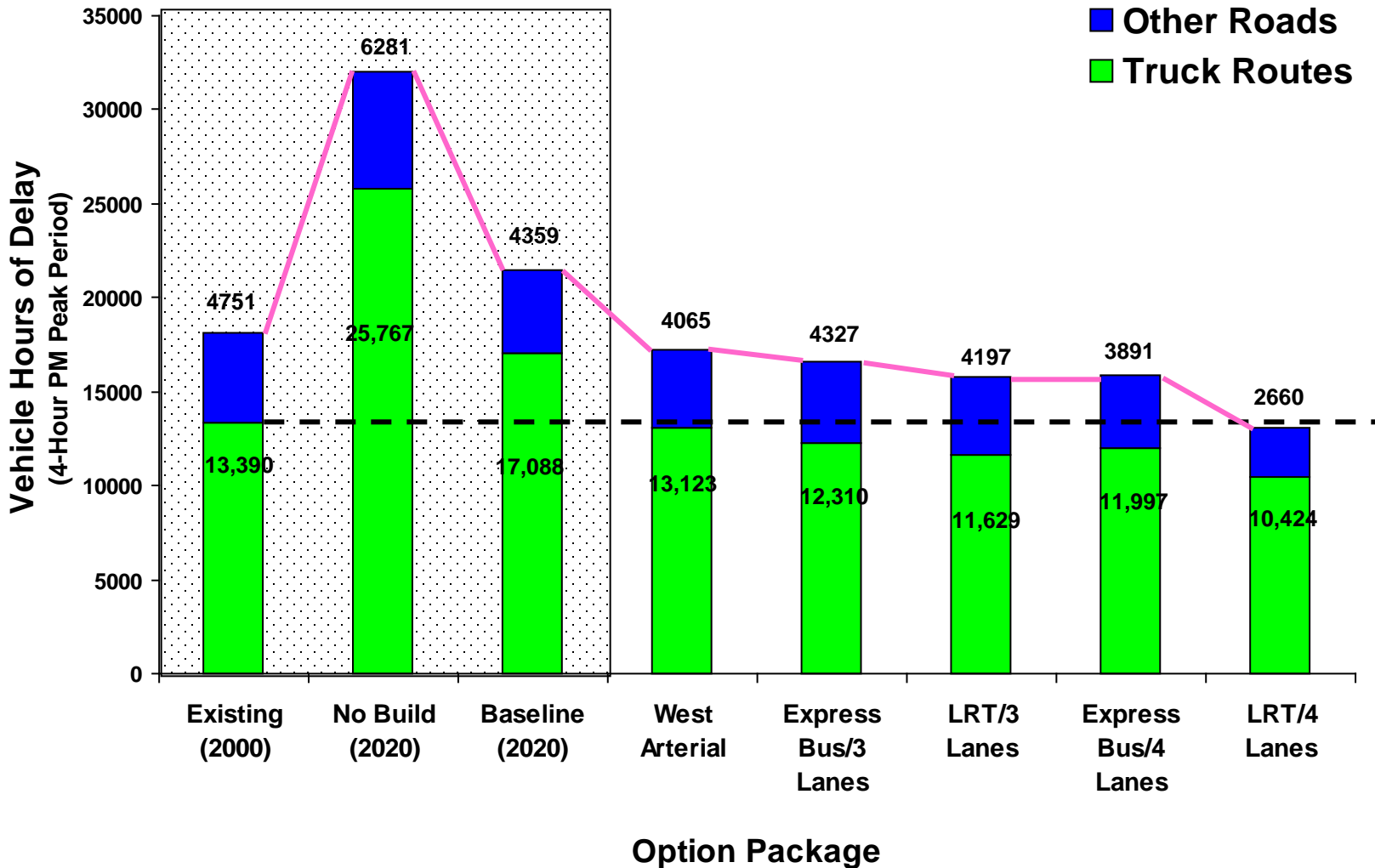


- **Significantly reduces:**

- vehicle hours of delay on truck routes
- lane miles of congestion on truck routes
- the cost of truck delay

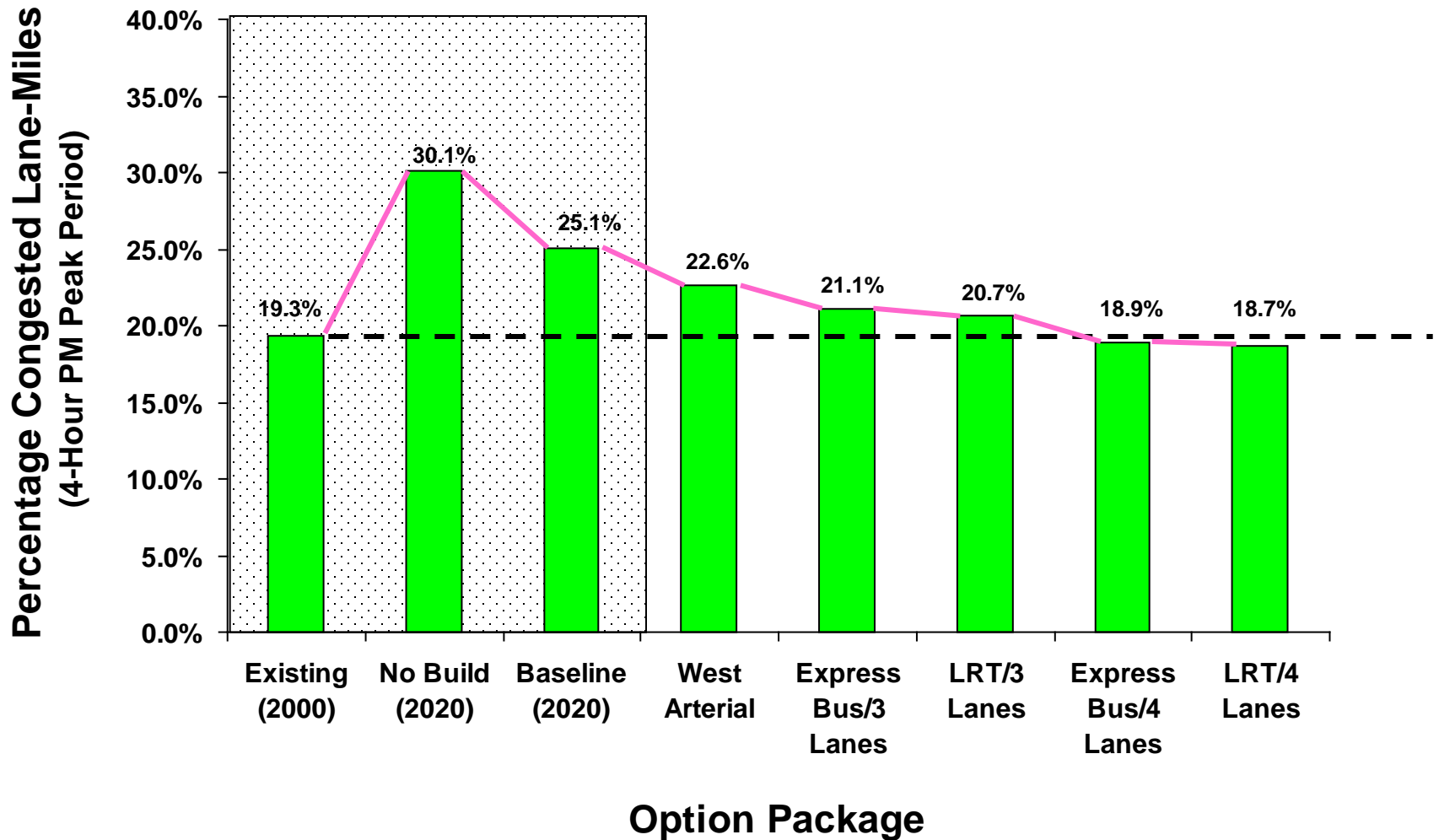
Vehicle Hours of Delay

In the Study Area (PM Peak)



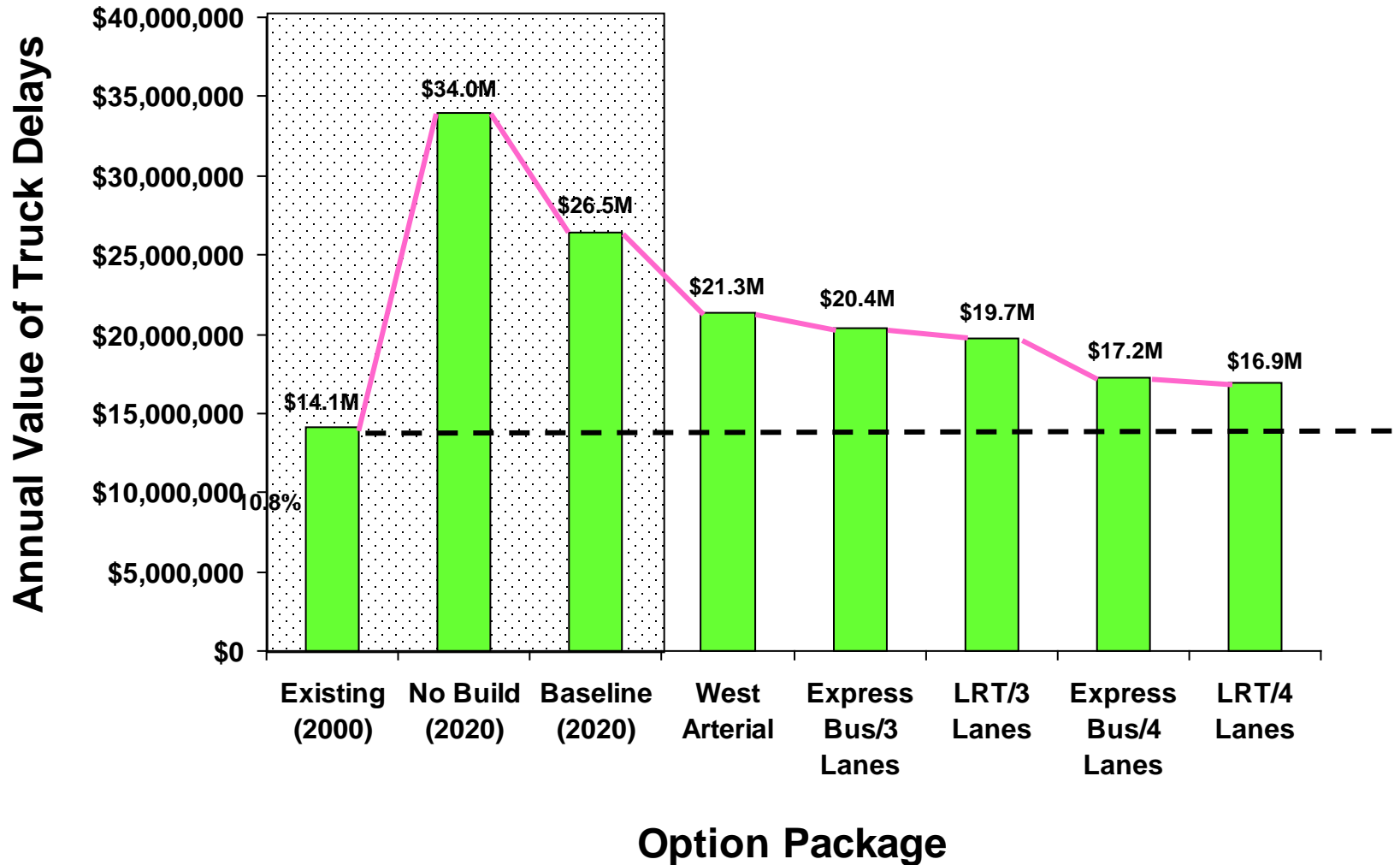
Congestion on Truck Routes

Congested Lane-Miles (PM Peak)



Value of Truck Delay

(In the Study Area)



How Do The Recommendations Address Freight Needs?



- **Makes Columbia Blvd into a full access interchange:**
 - Provides a direct connection to I-5 for one of the region's busiest freight routes (Columbia Blvd).
 - Reduces congestion at the Marine Drive interchange.
 - Improves utilization of Columbia Blvd for trucks.

How Will “Additional Work” Activities Address Freight Needs?

- Continuing work in the bridge influence area SR 500 to Columbia Blvd. will address freight related needs at:
 - Marine Drive interchange in OR
 - Victory Blvd. interchange in OR
 - SR 14 in WA
 - Vancouver interchanges
- Freight rail needs and improvements will be identified this Spring.

