

# Columbia River **CROSSING**

## **Project Purpose and Scope**

**Task Force Meeting**  
**January 4, 2006**



## Presentation Outline:

- Current project: NEPA EIS to select transportation improvements that address problems in the I-5 bridge influence area
- Builds on prior regional and corridor planning
  - History of regional and corridor studies
  - Multi-modal planning in the I-5 corridor
    - I-5 Trade Corridor Study
    - I-5 Transportation and Trade Partnership
- Scope of NEPA DEIS alternatives

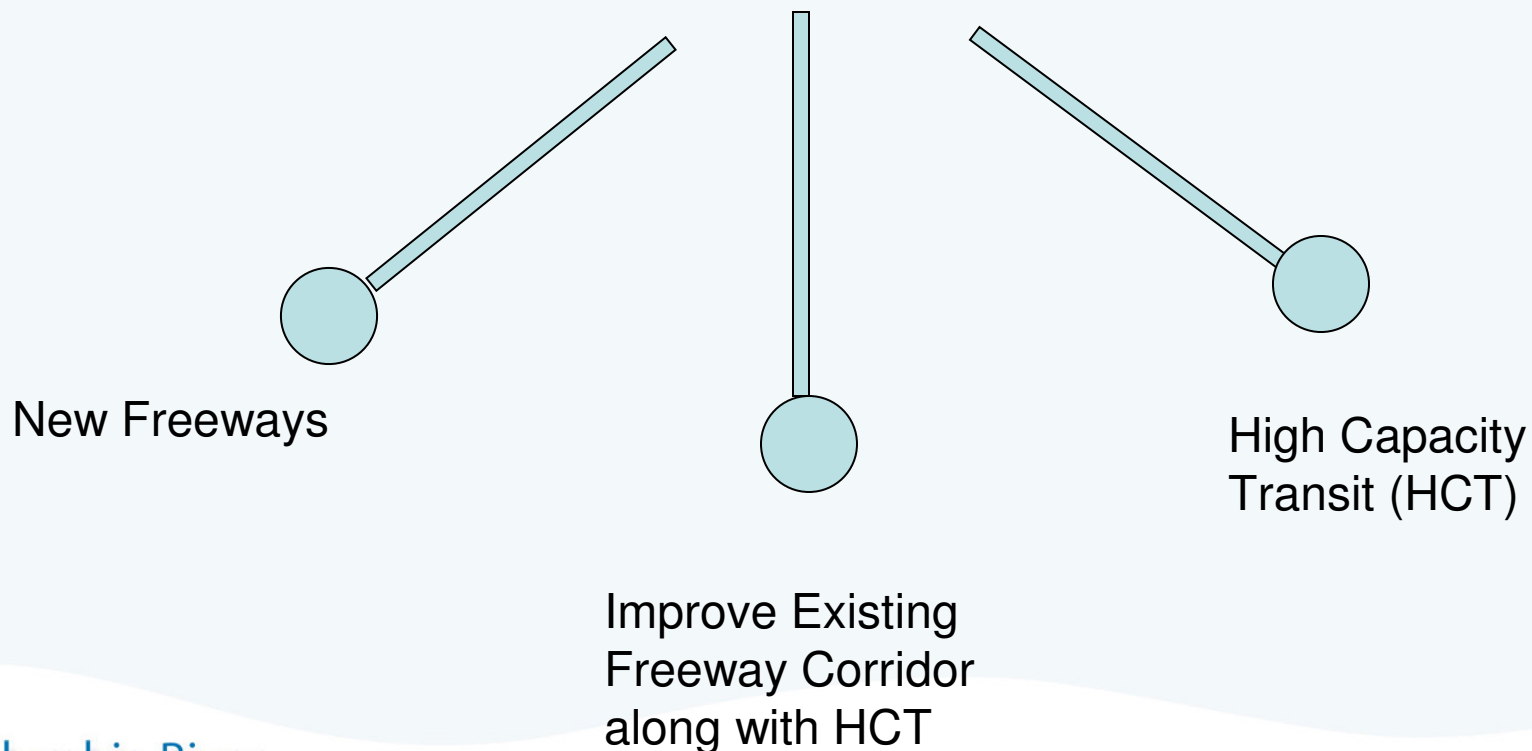
# Columbia River **CROSSING**

## **Planning Context**



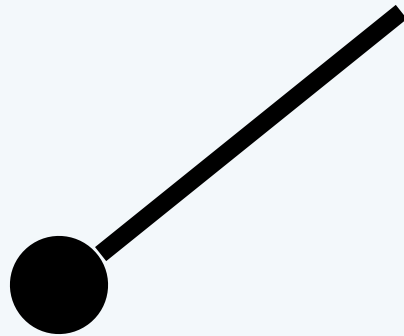
# Regional Planning History and Context

- Evolution of the Balanced Transportation System



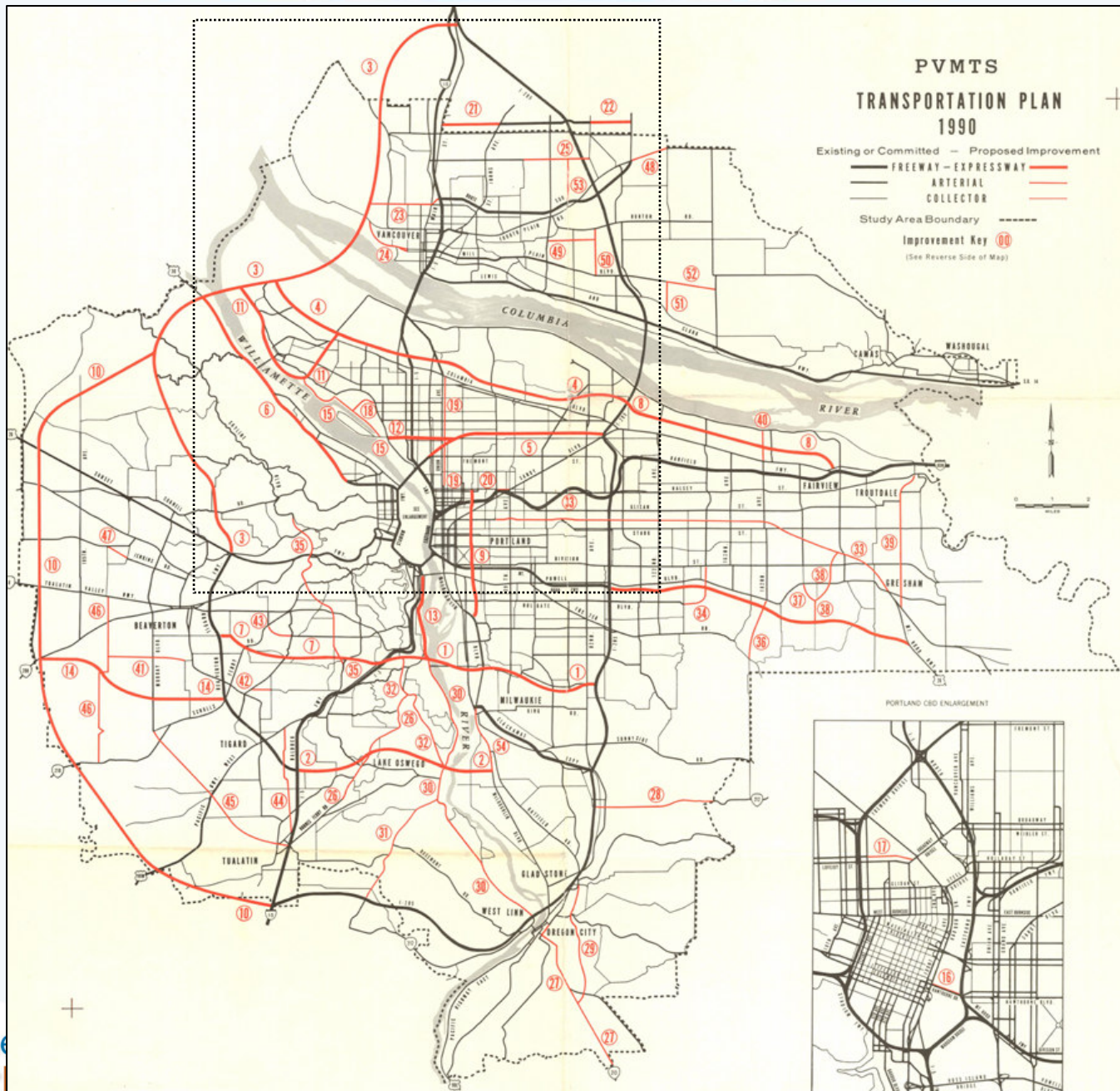
# Regional Planning History and Context

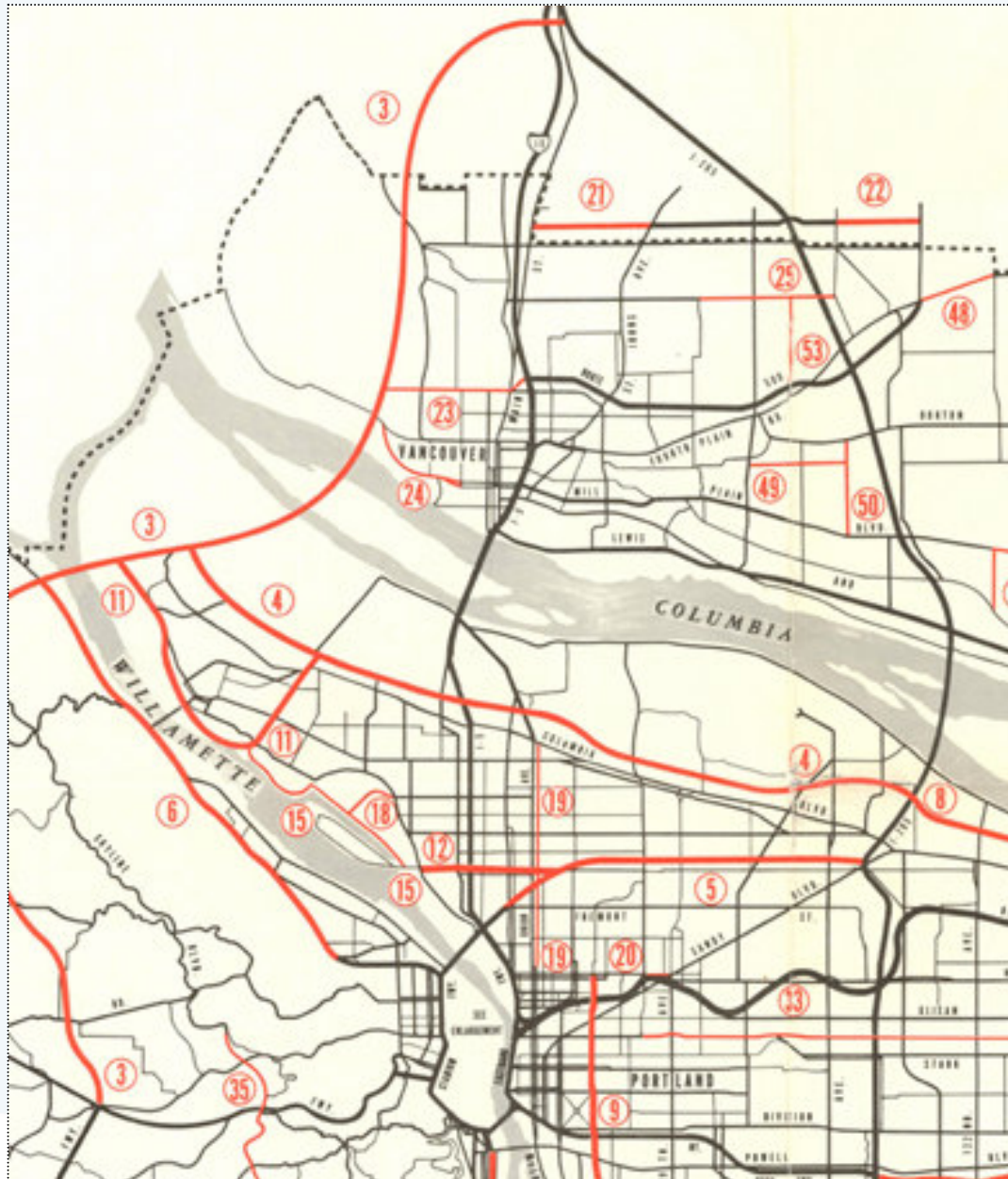
- Portland Vancouver Metropolitan Area Transportation Study – 1970, 1990 Horizon Year



New Freeways

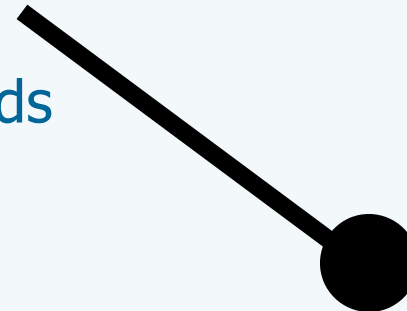
- Massive freeway program resulted in community backlash and major policy shift





# Regional Planning History and Context

- Public backlash to PVMTS resulted in major policy shift in early 1970's
  - Portland Downtown Plan 1972
  - Governor's Task Force 1973
  - Withdrawal of Interstate Funds
    - Mt Hood Freeway - 1973
    - I-505 - 1979
  - Shift funds to Light Rail



High Capacity  
Transit (HCT)



# 1973 Oregon Governor's Task Force Changed Policy Direction

- New major radial highway capacity would no longer be constructed in the region.
- Future capacity and level of service on major radial corridors would be primarily dependent on high capacity transit.
- Highway improvements would primarily be employed to fix bottlenecks, balance the system and respond to safety and weave problems.
- The pattern and type of development in the Portland region would be dependent on high capacity transit and the comprehensive plans of the counties and cities in the region would be based on that assumption.

# Policy Question: How to Provide Bi-State Mobility?

- Washington State legislative Study, 1977
- FHWA Feasibility Study, 1979
- Washington State Legislative Study, 1980
- Governor's Bi-State Task Force on Transportation, 1981
- Washington Legislature Bi-State Accessibility Study, 1988
- Bi-State Transportation Study, 1990

## Results of Bi-State Studies

- Third bridge is not a cost-effective solution
- Make better use of existing capacity through transportation system management
- Address existing bottlenecks
- Increase capacity with transit

# Choosing Between I-5 and I-205 for Transit: 1991 - 1993

1993: I-5/I-205 HCT Pre-Alternatives Analysis -

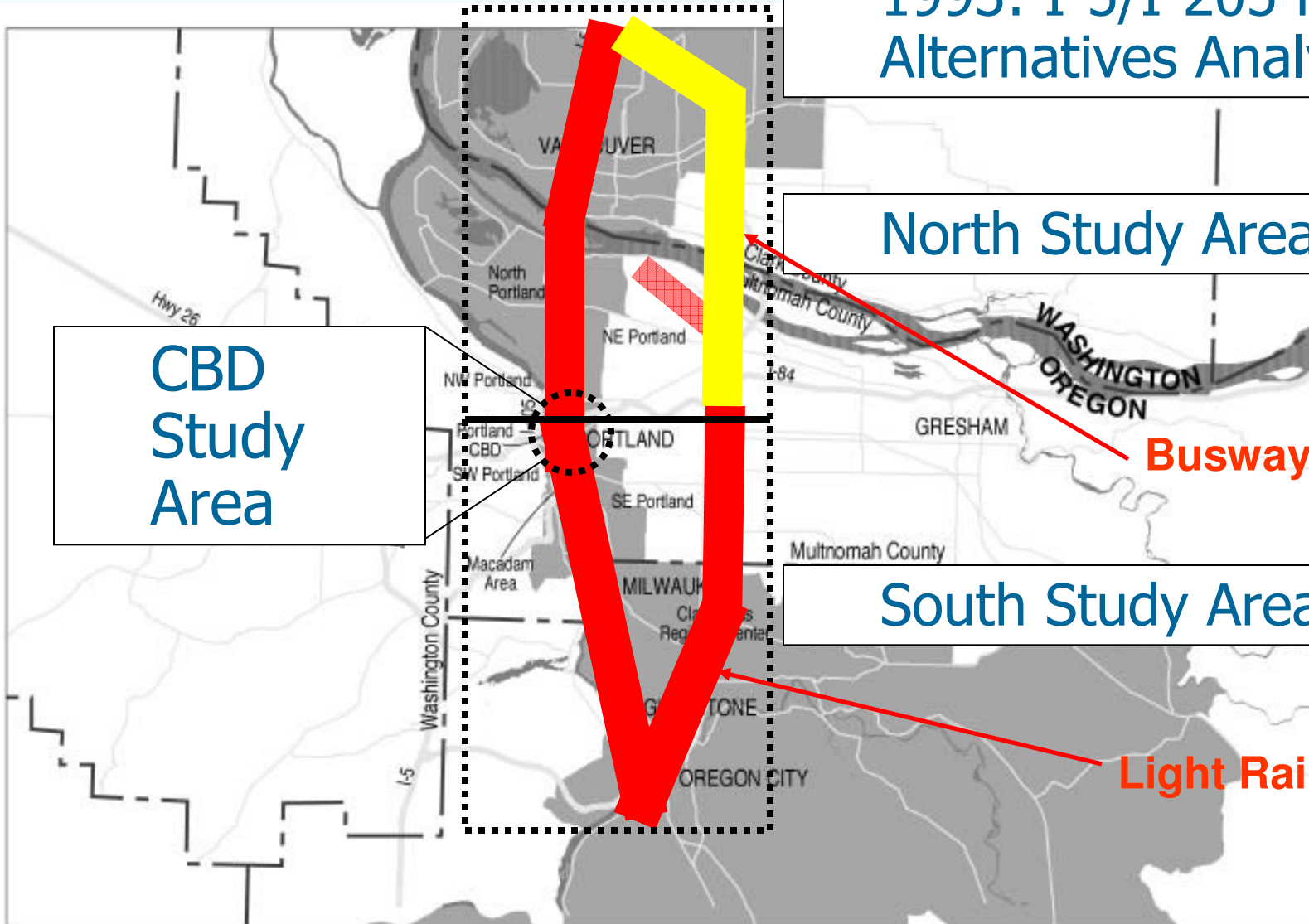
North Study Area

CBD  
Study  
Area

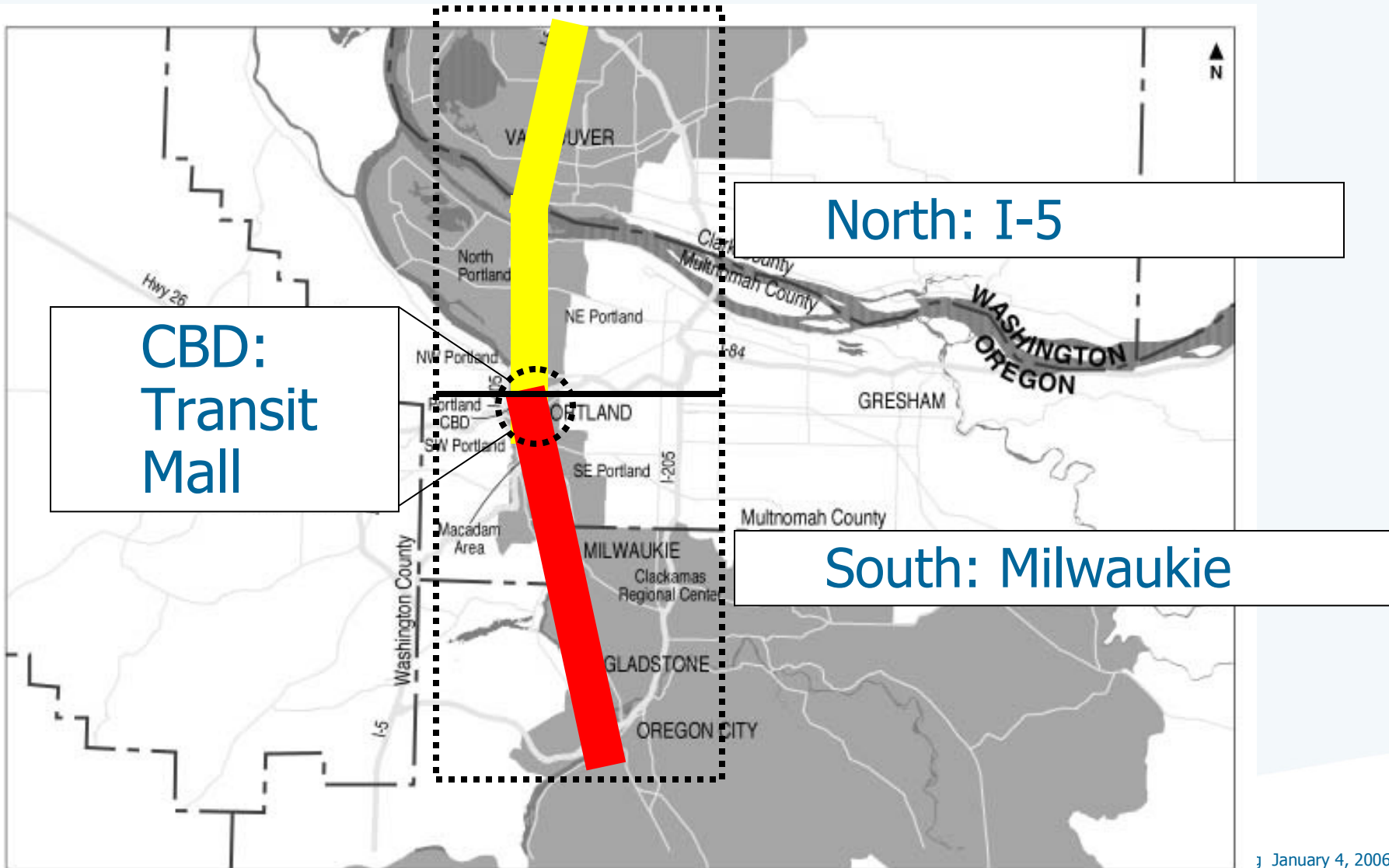
Busway

South Study Area

Light Rail



# Choosing Between I-5 and I-205: 1991 - 1993



# A Balanced Transportation System

- 2000 Regional Transportation Plan
- I-5 Trade Corridor Study
- I-5 Transportation and Trade Partnership



Improve Existing  
Freeway Corridor  
along with HCT

## 2000 Regional Transportation Plan

- Addressed multi-modal needs in I-5 Corridor through:
  - HOV lanes and peak period pricing
  - Improve transit
  - Consider added Interstate Bridge capacity
  - Maintain access between Portland and Clark County
  - Maintain off-peak freight mobility
  - Consider reversible express lanes on I-5
  - Consider new arterial freight connections between Highway 30, port facilities in Portland and Vancouver
  - Maintain access to freight intermodal facilities
  - Address freight rail needs
  - Construct Columbia Blvd interchange improvements for freight access
  - Reduce through-traffic on MLK and Interstate Ave

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## **I-5 Trade Corridor Study**





## I-5 Trade Corridor Study

- Initiated to address freight problem in the corridor
- Major conclusions:
  - Doing nothing will result in unacceptable economic impacts and congestion
  - Solution must be multi-modal

# Columbia River **CROSSING**

## **I-5 Transportation and Trade Partnership**



## Key Findings from the I-5 Partnership

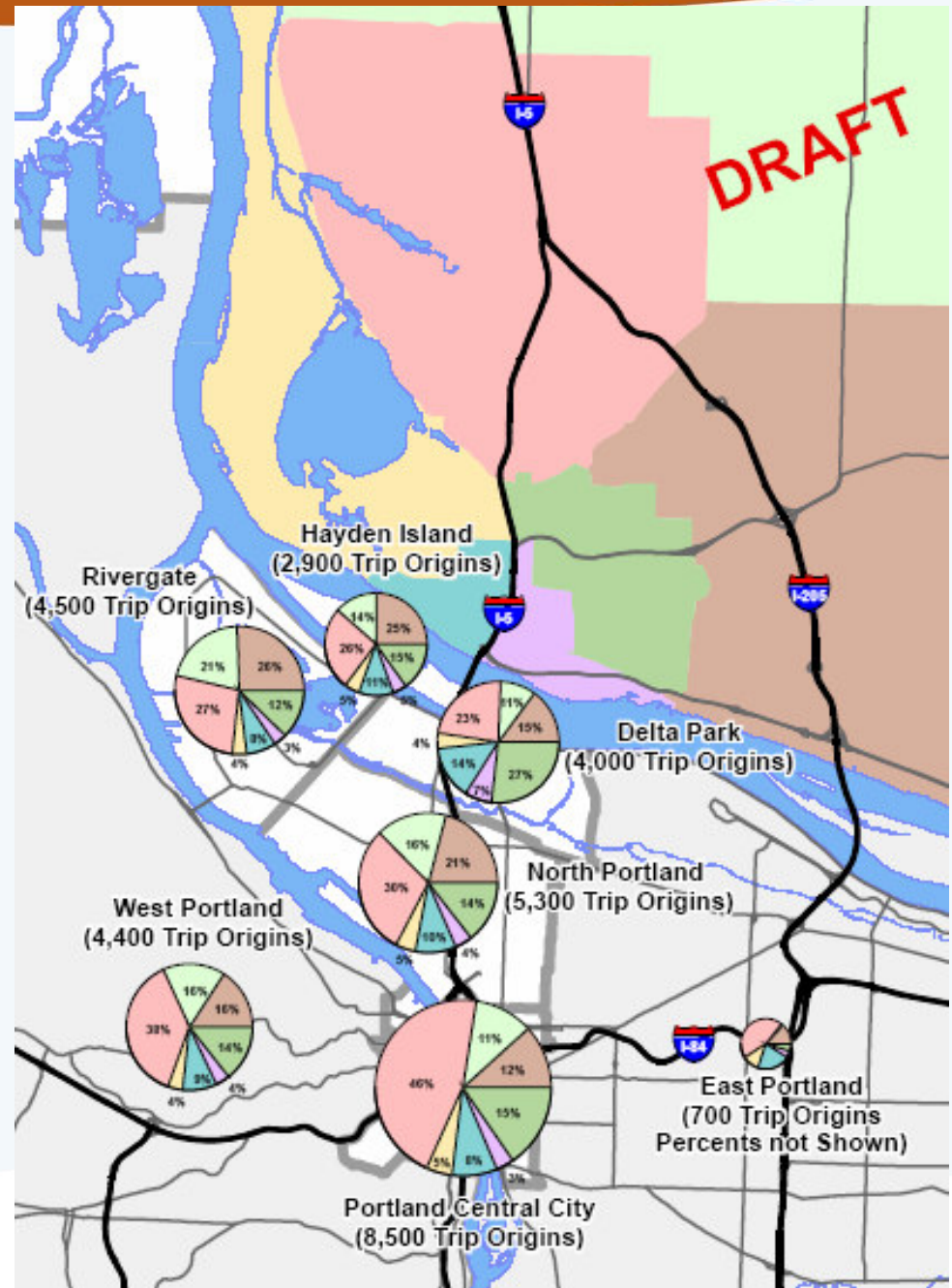
- “Without attention, the corridor’s problems are likely to increase significantly, further impacting the mobility, accessibility, livability, and economic promise of the entire region.”
- Doing nothing in the next 20 years:
  - Traffic volumes increase by 45%
  - Vehicle travel times increase 22%
  - Vehicle hours of delay increase by 77%;  
by 92% along truck routes
  - Congested lane-miles increase by 40%
  - Value of truck delay increases by 140%

## Key Findings from the I-5 Partnership

- Bridge Influence Area concepts improve traffic speeds, lessen delays and reduce congestion
- I-5 is the most direct route for the majority of trips across the Columbia River due to the high number of employment and other activity centers served by I-5
- Many trips enter and/or exit I-5 within the Bridge Influence Area
- Bridge Influence Area improvements are likely to result in minimal traffic increases on I-5 outside of the Area

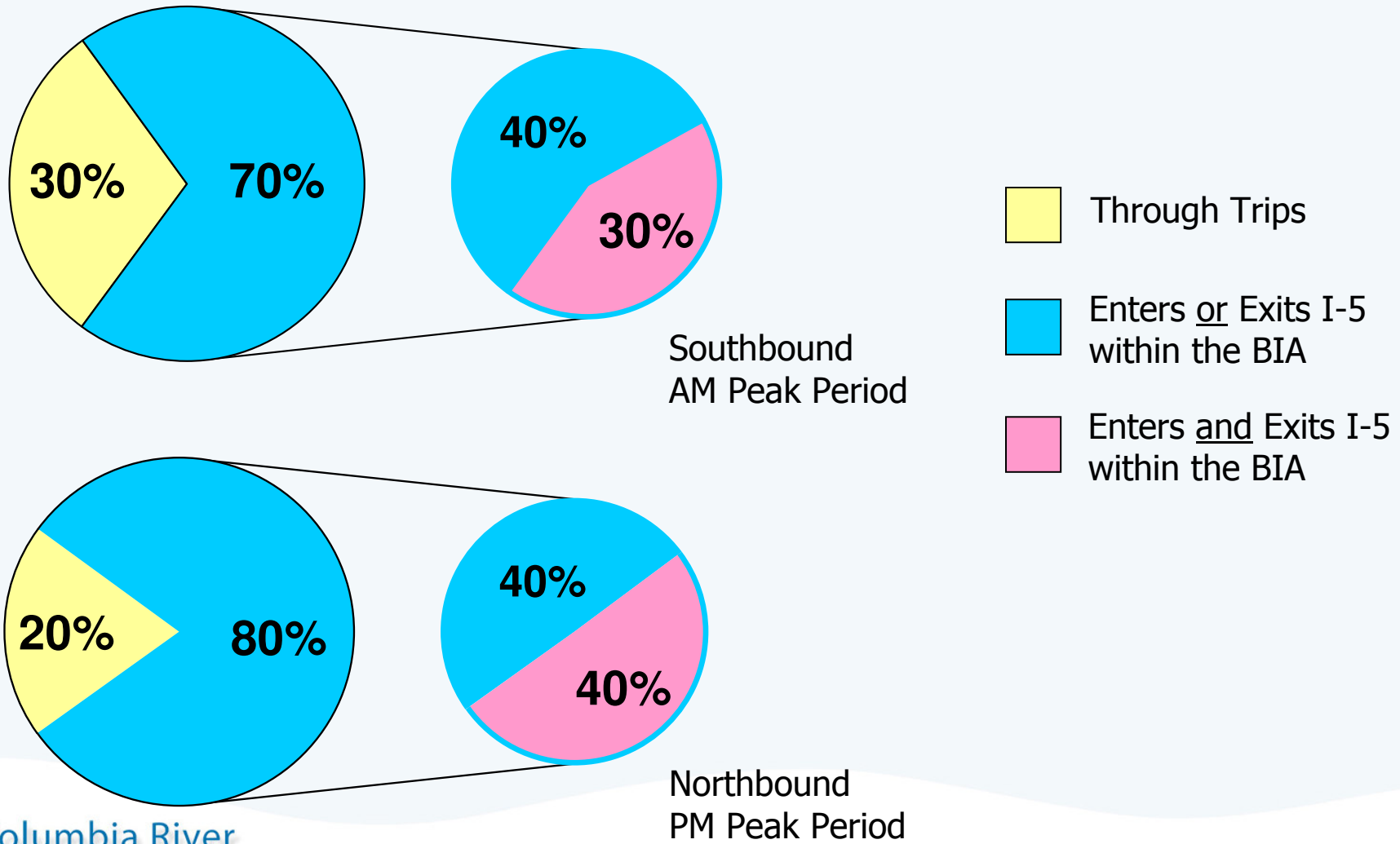
# Trips across the I-5 Bridge

- Year 2020 projections
- Most trip origins and destinations focused along I-5 corridor



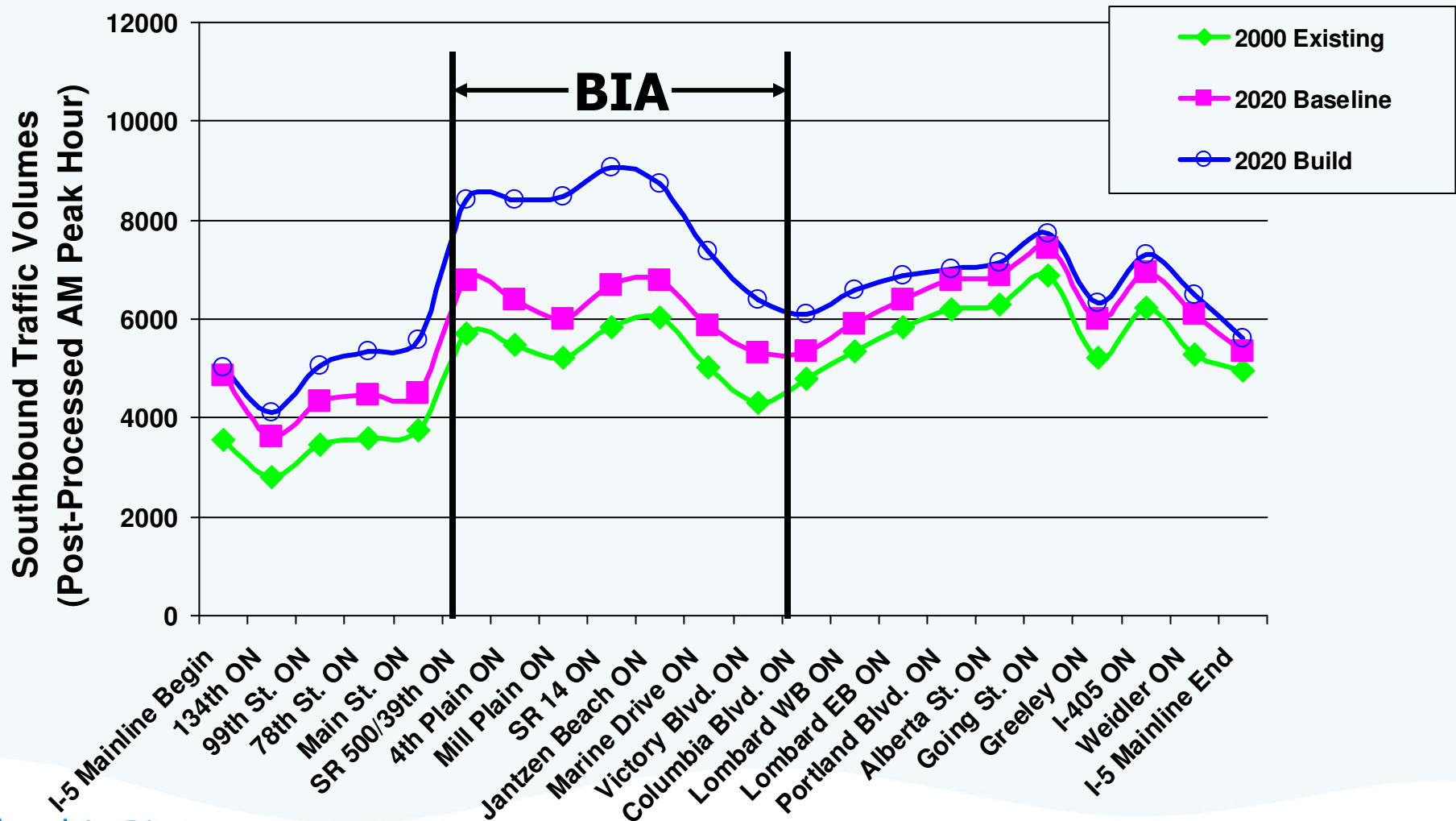
# I-5 Columbia River Bridge Traffic

## 2020 Through Trips vs. Bridge Influence Area Trips



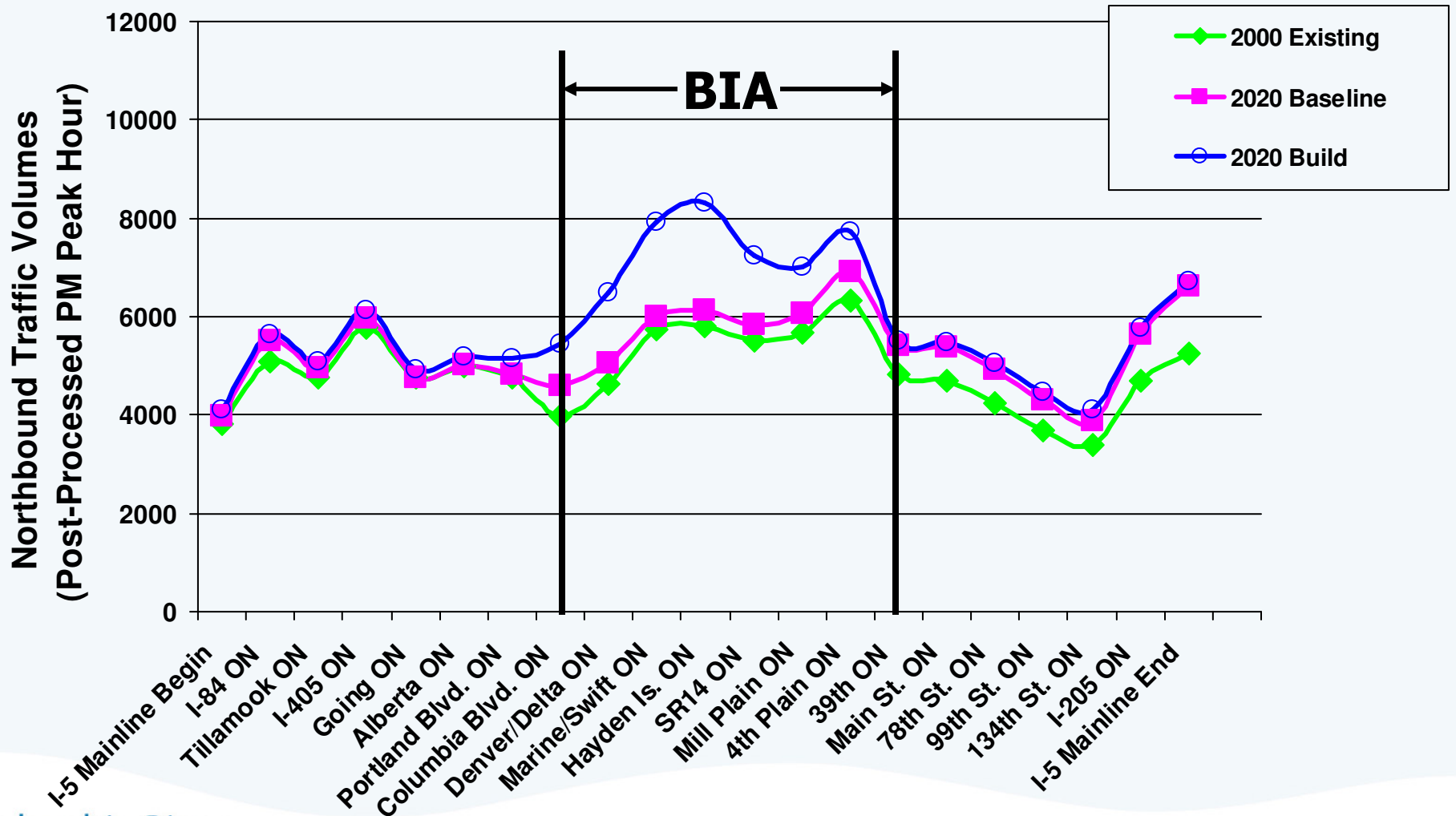
# Southbound Travel Volumes

Along I-5 (AM Peak Hour)



# Northbound Travel Volumes

Along I-5 (PM Peak Hour)





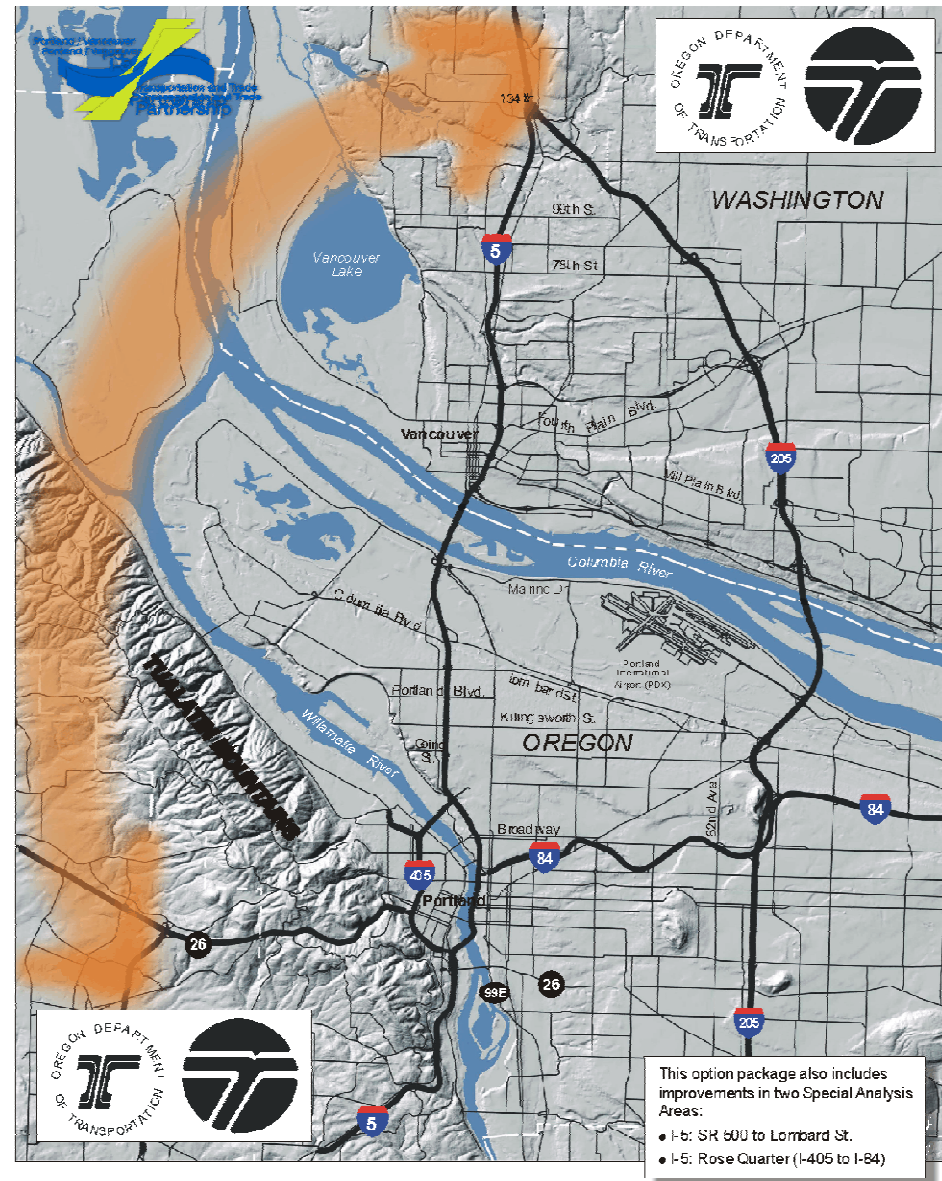
# Findings from the I-5 Partnership for Other Corridors

1. New freeway corridor/western bypass
2. Added capacity to I-205
3. West arterial road
4. Arterial only bridge

# New Freeway Corridor/ Western Bypass

- New westside freeway corridor connecting Clark County, WA and Washington County, OR

## Option Package No. 9: New freeway corridor

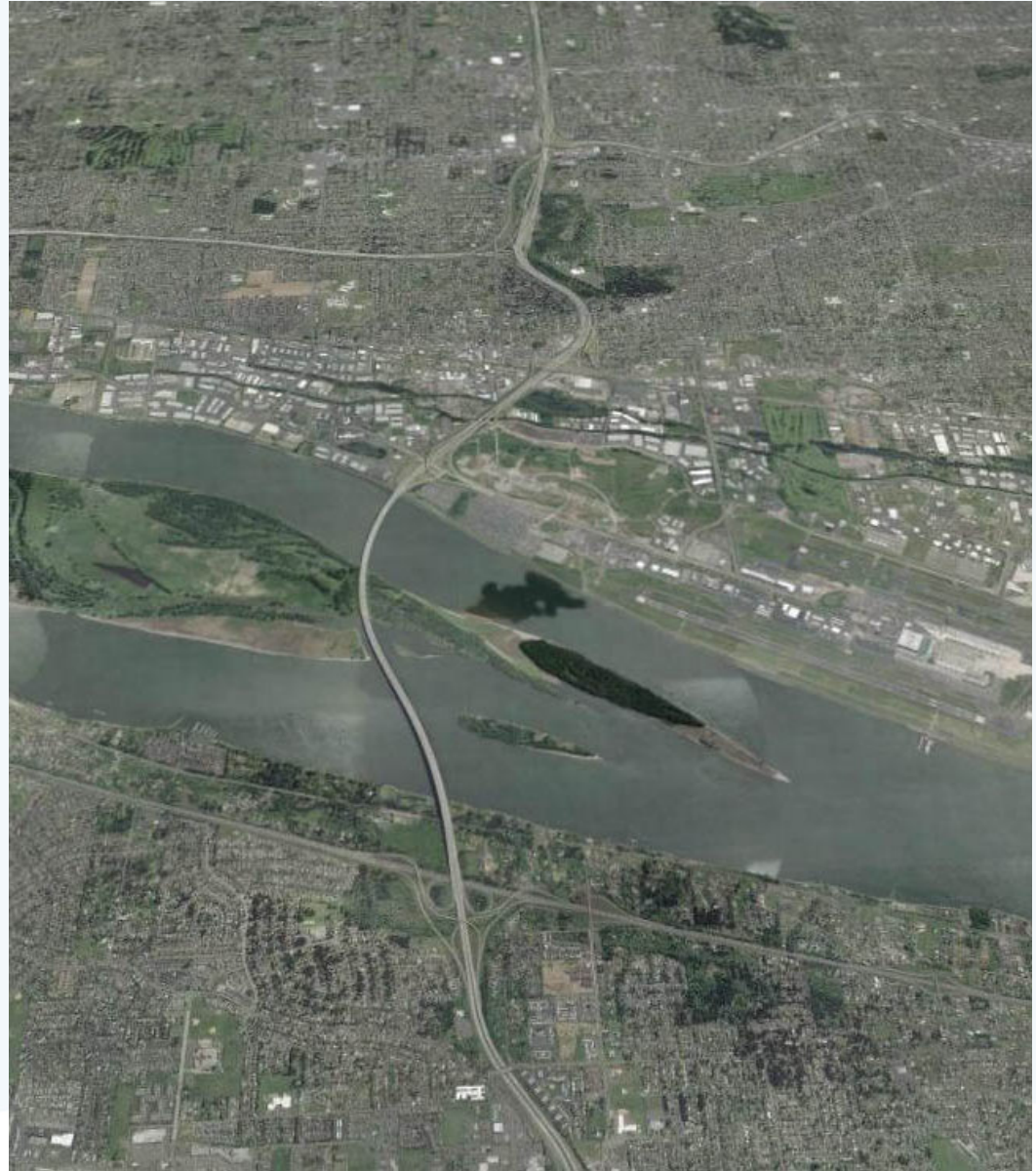


## New Freeway Corridor/Western Bypass

- Bypass would do little to address congestion in I-5 corridor (most trips in I-5 corridor start or end near I-5)
- Would be located outside of Urban Growth Boundary and would result in very significant impacts to Vancouver lowlands, Sauvie Island, Tualatin Mountains
- Conflicts with local, regional, and state land use policies
- Bi-state boards (RTC and Metro) rejected this as an option
- Governor's Task Force recommended against further study

## Added Capacity to I-205

- Proposal to provide additional capacity to the I-205 corridor



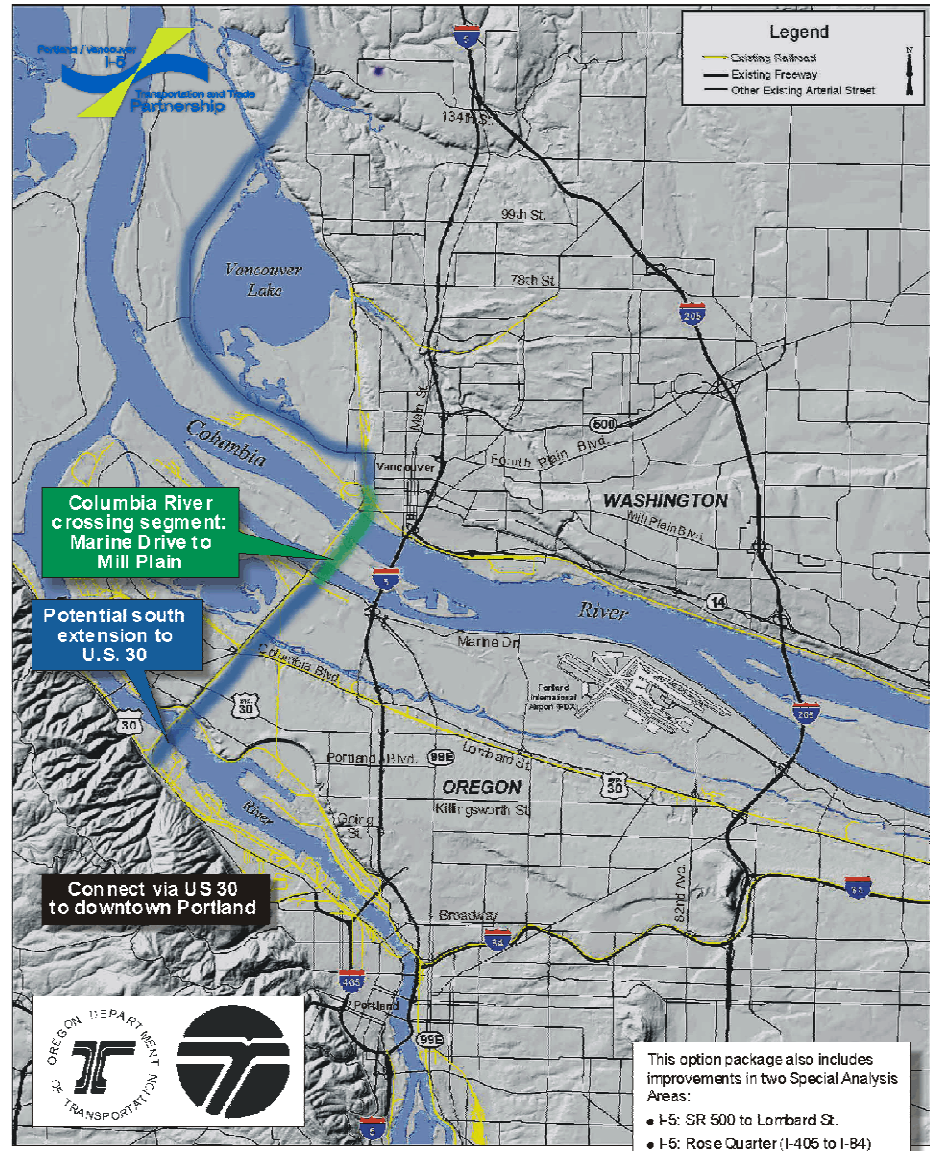
## Added Capacity to I-205

- Many vehicle-trips are currently made on I-205 due to congestion on I-5
- Previous analysis showed that 12% to 14% of I-205's traffic would shift to I-5 with Bridge Influence Area capacity improvements ...
- Resulting in shorter trips (less vehicle-miles traveled) in the region, as well as less congestion on I-205
- This also validates that I-5 is the most direct route for the majority of trips across the Columbia River and adding capacity to I-205 would only marginally improve I-5 operations

# West Arterial Road

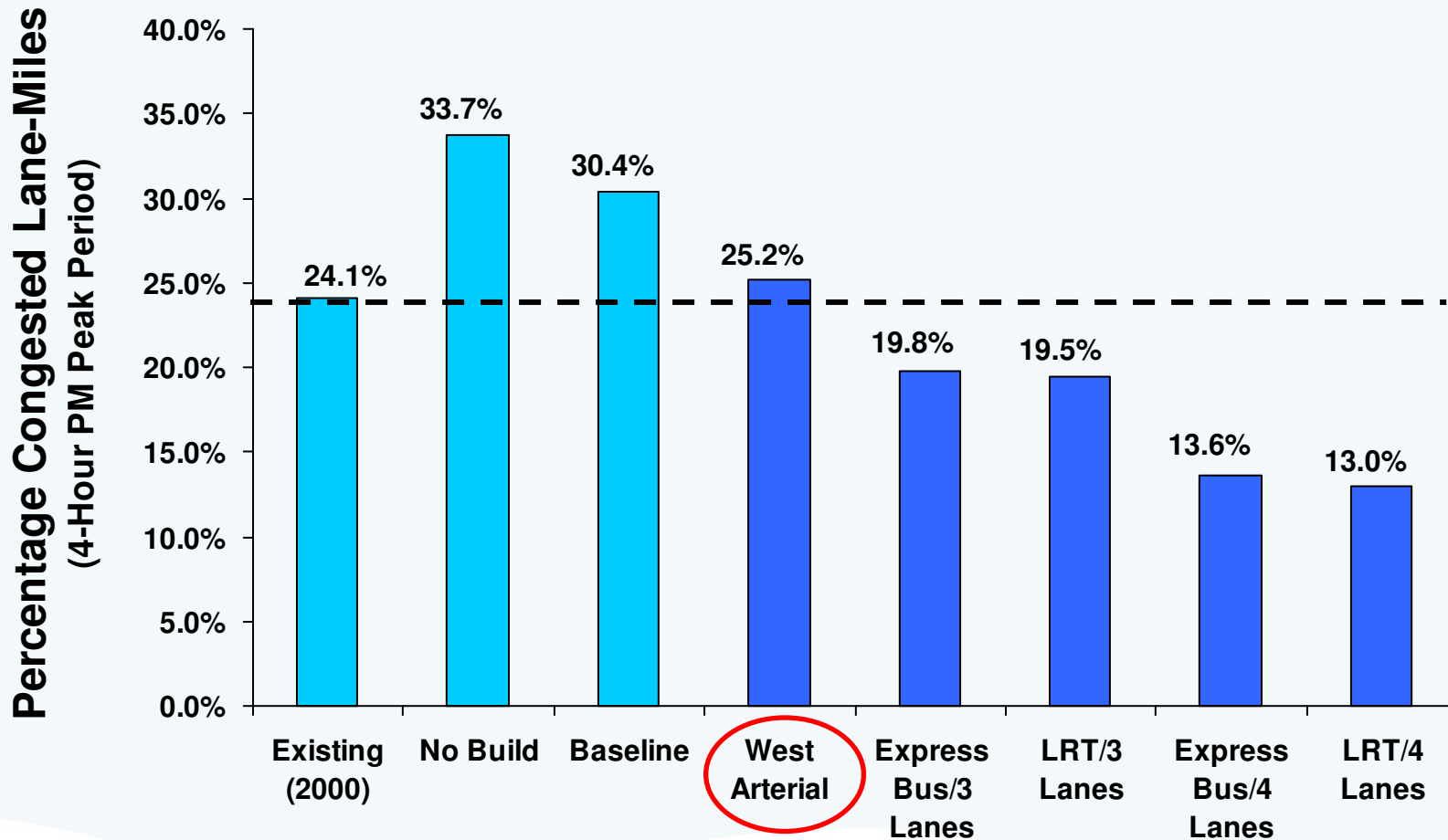
- New arterial roadway corridor between Mill Plain Blvd. and Marine Drive or US 30
- Would follow railroad alignment

Option Package No. 8:  
New arterial corridor / Columbia River crossing



# Congestion on I-5 and I-205

## Congested Lane-Miles (PM Peak)



# Traffic Increases on Vancouver Streets with inclusion of West Arterial Road

- North/south arterial roadways parallel to I-5:
  - Highest hourly volumes of all options considered
  - Over 500 vph more than under Baseline conditions
  - Up to 900 vph more than under Bridge Influence Area options
- East/west arterial roadways west of I-5:
  - Highest hourly volumes of all options considered
  - Over 900 vph more than under Baseline conditions
  - Up to 1,200 vph more than under Bridge Influence Area options



# West Arterial Road

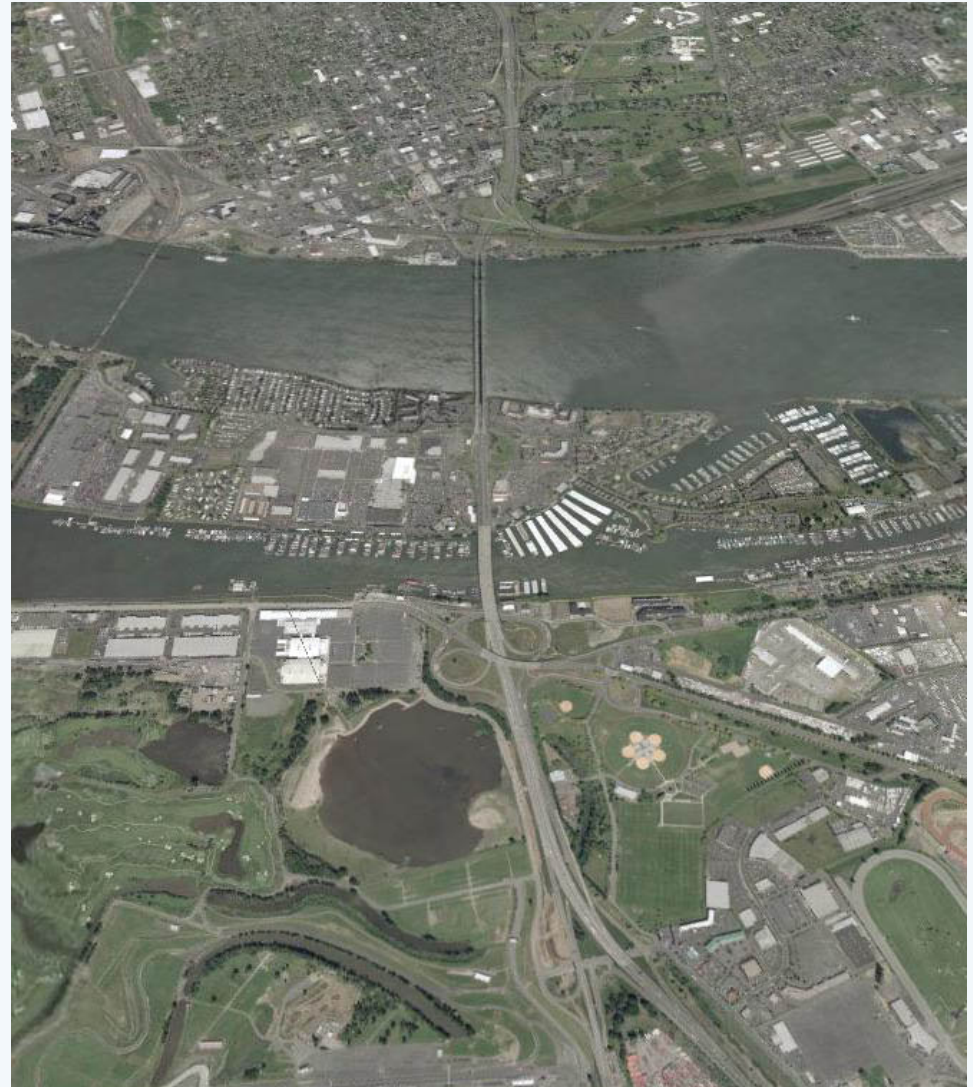
- Pluses:
  - Would benefit the regional transportation system by providing an additional connection
  - Would connect the ports
  - Would relieve St. Johns neighborhood of through truck traffic
  - Would provide an efficient south-north arterial for freight and other traffic in North Portland

# West Arterial Road

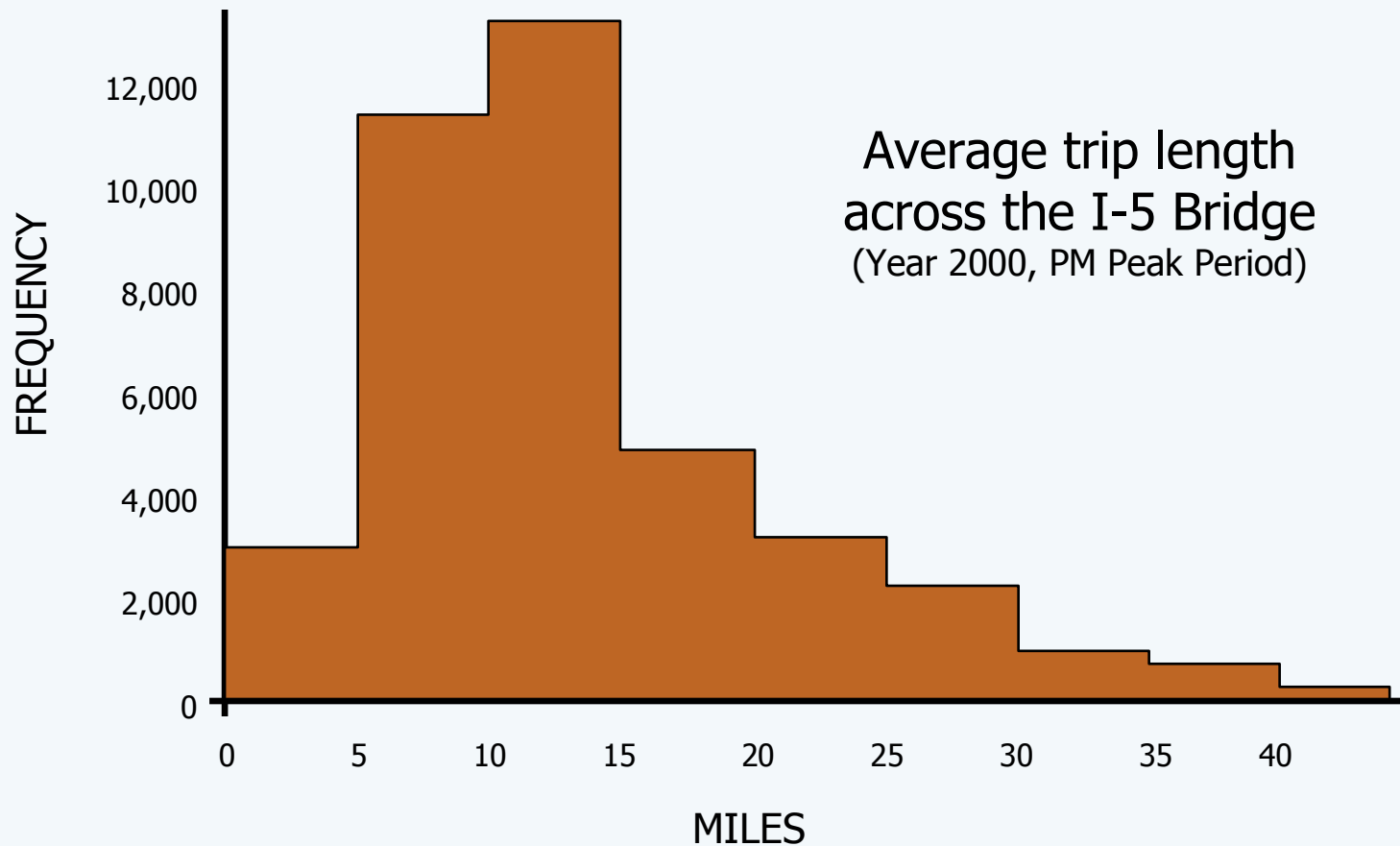
- Minuses:
  - Would not connect the primary travel origins and destinations in the I-5 corridor
  - Would not perform near as well as any Bridge Influence Area options, e.g., travel speeds, congestion
  - Would impact downtown Vancouver and Vancouver neighborhoods
  - Would likely result in major environmental impacts to Hayden Island that would be difficult to mitigate
- Strategic Plan: Recommendation not to study as alternative to Bridge Influence Area options.

## Arterial Only Bridge

- Would be a stand-alone bridge providing a connection between downtown Vancouver, Hayden Island, Marine Drive and Victory Boulevard



# Lengths of Vehicle-Trips Across I-5 Bridge



## Arterial Only Bridge

- Most trips are regional, not local
- Arterial only bridge would slightly improve freeway performance by removing local trips, but ...
- Up to 25% of this traffic would be to or from I-5
- Users of I-5 would continue to experience a significant increase in congestion and delay

## Arterial Only Bridge

- Additional congestion would occur in downtown Vancouver and at Marine Drive
- Arterial bridge, in combination with I-5 mainline improvements, could provide some transportation benefits
- Strategic Plan: States that arterial-only concepts do not show promise for addressing the Corridor's problems and should not be considered in the EIS

# Columbia River **CROSSING**

## **Range and Scope of I-5 Bridge Influence Area Alternatives**



## Alternatives Considered:

- All concepts suggested during scoping must be considered.
- Concepts will be screened using the Evaluation Framework (Step A and Step B screening).
  - To what degree does the concept address the Purpose and Need for the project?
  - Using the evaluation criteria, how does the concept rank relative to other concepts?
- Where appropriate, information from prior studies will be used to evaluate proposed concepts that have been previously considered.



**Questions?**