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### What Have We Learned So Far?

Moving?

Portland/Vancouver I-5 Trade Corridor Study



### Portland/Vancouver I-5 Trade Corridor Leadership Committee Study

- Initiated as a response to growing concern in the public and private sectors about congestion
  - Designed to answer some basic questions:
    - How significant is the problem, now and in the future?
    - Are options promising enough to warrant further study?



### Leadership Committee

Name Peter Bennett Mike Bletko **Margaret Carter** Anthony Ching Wesley Hickey **Bill Hutchinson** Phil Kalberer Steve Madison **Bill Maris** Ken Novack Dick Pokornowski Vern Ryles **Carl Talton** Keith Thomson

Affiliation K-Line Fred Meyer Urban League Wafertech Tidewater Barge Lines Tooze, Duden, Creamer et al. Kalberer Food Service Cana Realty Market Transport, Ltd. Schnitzer Group Vancouver Citizen **Poppers Supply** PGE Port of Portland

Portland/Vancouver I-5 Trade Corridor Study

### Leadership Committee Charge

- What is the magnitude of the problem?
- What is the cost of inaction?

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- What improvements are needed?
- How can improvements be funded?
- What are the next steps?

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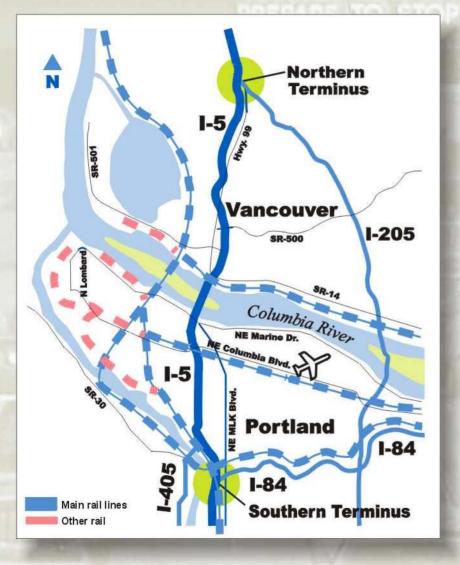
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### Leadership Committee Charge

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# What is the magnitude of the problem?



The Portland/Vancouver I-5 Trade Corridor:

- links Mexico, California,
  Oregon, Washington, Canada
  and Pacific Rim countries
- nexus of transportation facilities: deep-water shipping, barging, railroads and the interstate freeway system
- home to the region's largest industrial areas

What is the magnitude of the problem?

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#### Transportation and Trade

### What are today's "problems"?



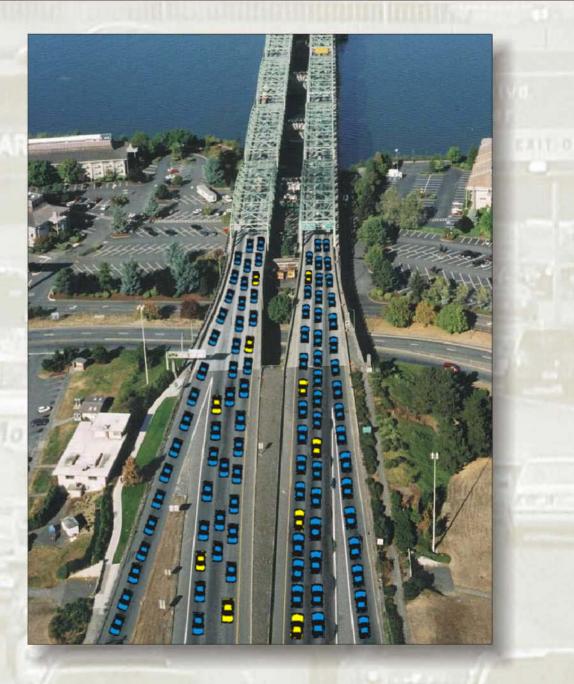
- Travel demands are exceeding available capacities
- This affects I-5
  and other
  roadways

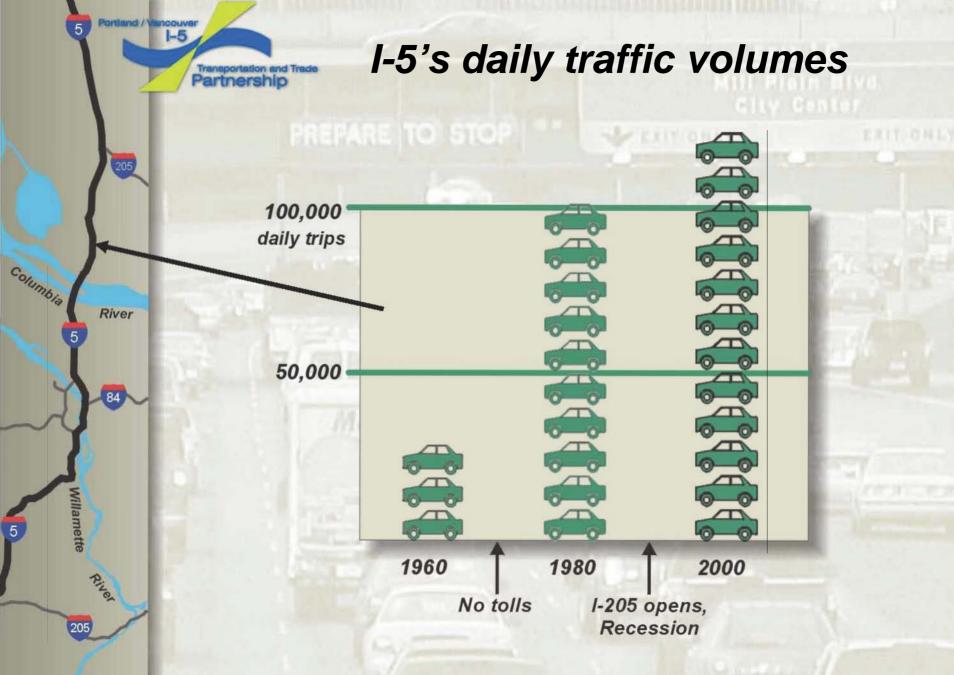
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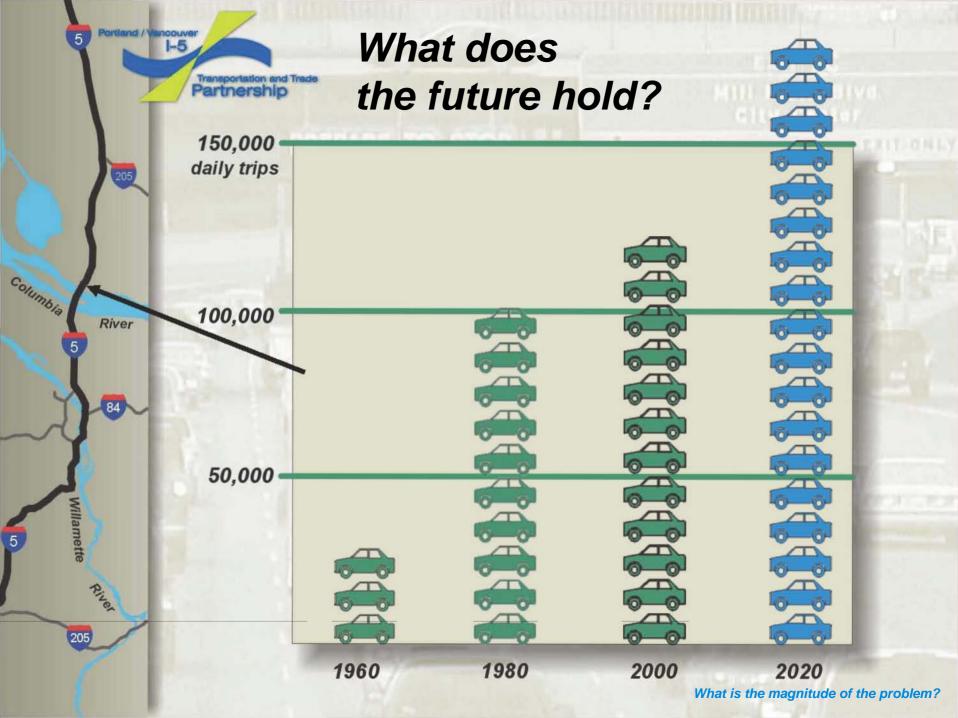
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### *I-5's current users:*

### Regional vs. through trips



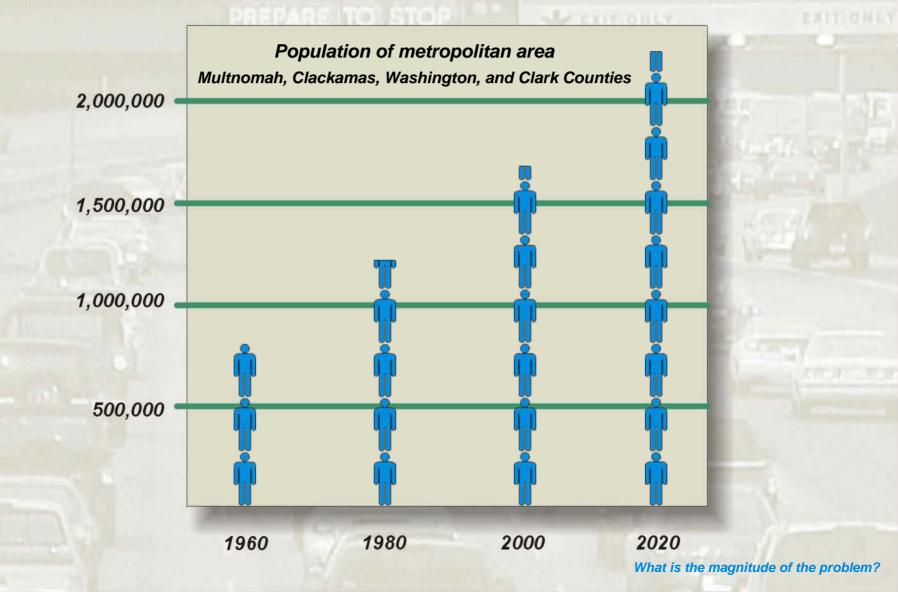




## Regional population growth is driving travel demand ...

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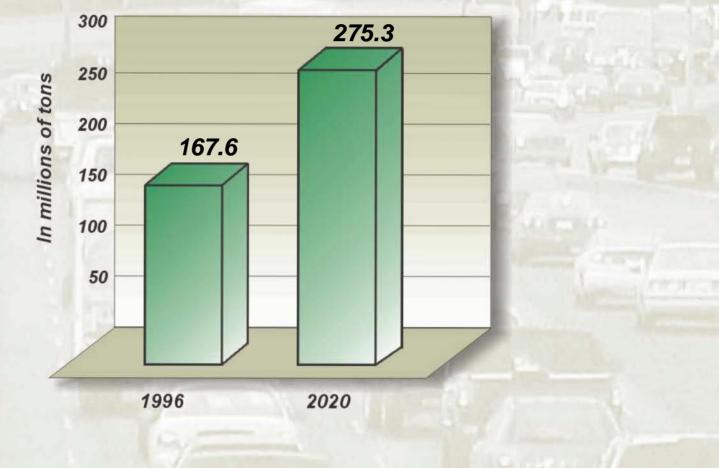


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## ... as is the region's projected growth in trade

Tons of commodity flowing through the region



## Congestion will become a problem throughout the morning ...



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### ... and the evening



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### **Congestion on the freeway ...**



What is the magnitude of the problem?



### ... on arterial roadways ...



What is the magnitude of the problem?

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### ... and on-ramps

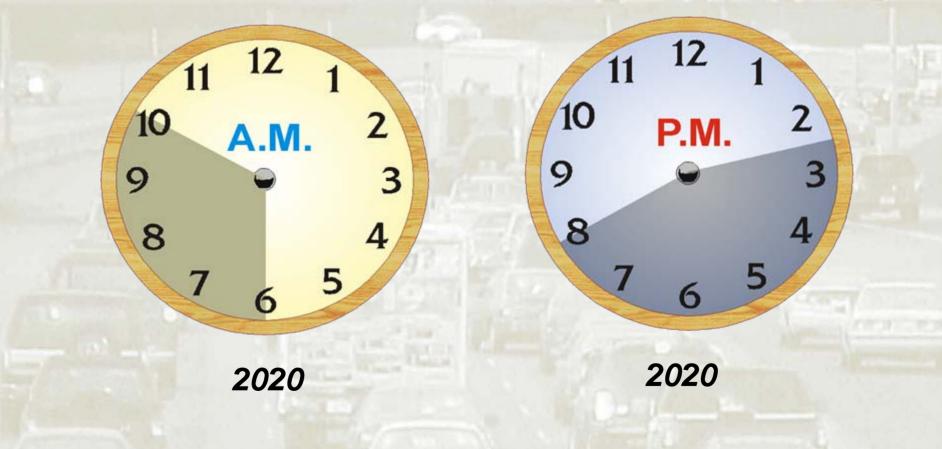


### The duration of congestion will extend to several hours

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Leadership Committee Charge

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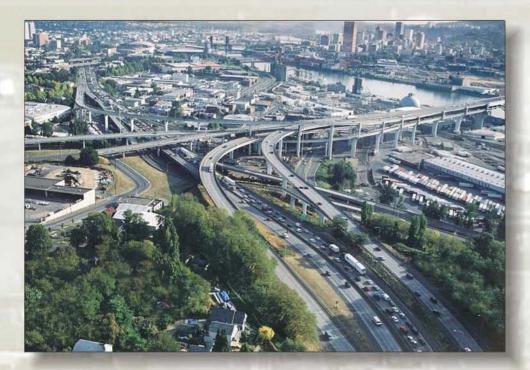
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- What improvements are needed?
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### What is the cost of inaction?

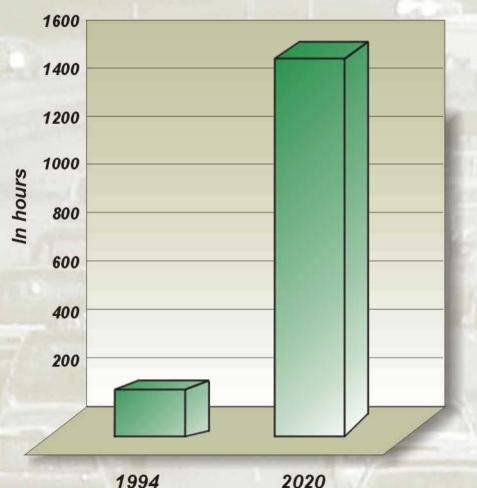


- Future congestion threatens the economic promise of the region
- Maintaining mobility is key to our quality of life

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### The economic promise of the region is threatened

Truck hours of delay (2-hour pm peak)

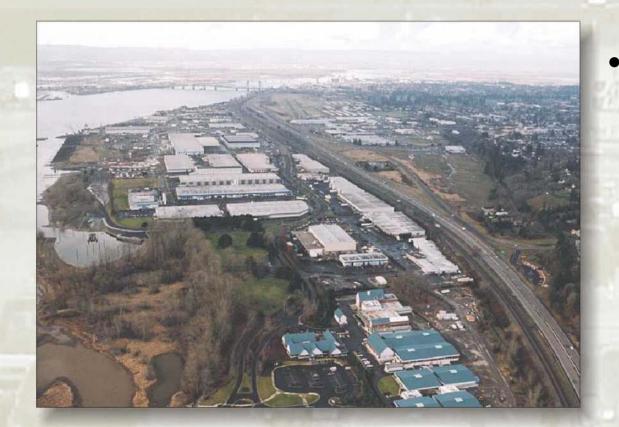


 Freight and trade will be adversely impacted by congestion, especially during midday

 Lack of reliability will increase transportation costs more than increases in delay

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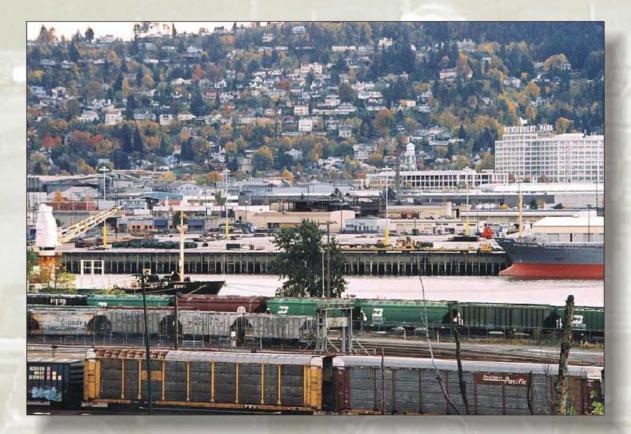
### **Economic promise**



Increases in cost and uncertainty will influence business location and expansion decisions

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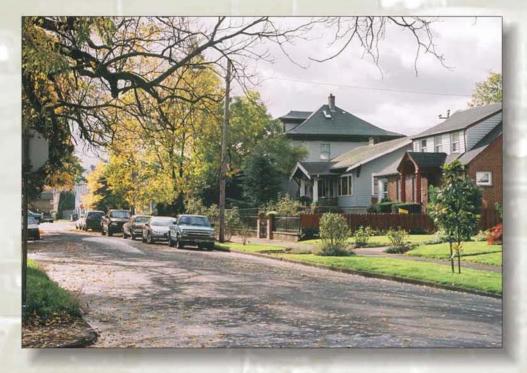
### **Economic promise**



- Lack of accessibility will limit the ability to attract future jobs in key industrial areas
- Planned growth may be affected by congestion



## Mobility in the I-5 Trade Corridor is key to our quality of life



 "Spillover" traffic from I-5 will congest neighborhood streets



### Mobility and quality of life



Congestion threatens development potential of downtown Vancouver



### Stakeholders interviewed say — "I-5 is our lifeline"

- Community and business stakeholders rely on it 24/7
- The, or one of the, top transportation priorities
- Consequences of inaction:
  - lack of mobility for neighborhoods, shippers and commuters
  - economic and trade impacts
  - livability (traffic in neighborhoods, time ...)
  - can't meet land-use plans (industrial areas, Lloyd district, downtowns)
- But don't ignore consequences of action air quality, displacements, noise, land use



### The broader public agrees — I-5 needs help

- 85% of opinion survey participants say problems are serious or very serious
- Freight and trade in the corridor is important to the economy (87%), and most think the problems will hurt the economy
- Most feel personal impacts as well
- Most don't anticipate significant neighborhood or environmental impacts

Leadership Committee Charge

- What is the magnitude of the problem?
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- What improvements are needed?
- How can improvements be funded?
  - What are the next steps?

#### What are the next steps?

• The Strategic Plan should:

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- be developed with citizen input
- identify specific improvements and their phasing
- be coordinated with other regional economic development, transportation and land use plans

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#### Next steps

- The Strategic Plan should address:
  - demand management strategies
  - needed highway, transit and rail improvements
  - land-use opportunities and impacts

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environmental issues

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#### Transportation and Trade Partnership

#### Next steps

#### Portland/Vancouver I-5 Transportation and Trade Partnership Target Schedule for Public Input Opportunities



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### **Questions and Answers**

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### Thinking about the Future ...

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Leadership Committee Charge

- What is the magnitude of the problem?
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Transportation and Trade

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Leadership Committee Charge

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and / Vancouver

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# Leadership Committee findings regarding planned projects

- Planned improvements are important, but projected travel will still vastly exceed system capacity
- Without improvements, congestion will greatly increase
- The problem's magnitude requires new passenger and freight capacity across the Columbia River



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#### What improvements are needed?

Leadership Committee conclusion: "Best solution will use a variety of tools"

- Transit and demand management
- Highway improvements
- Truck improvements
- Freight rail improvements



### Transit and demand management tools





- High-capacity transit
  - express bus
  - light rail
- Expanded bus service
- Parking policies
- Employer-oriented programs
  - flex-time
  - vanpools
- Land-use changes

What improvements are needed?

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### Highway improvement tools



#### Additional travel lanes

- general purpose
- HOV / special purpose
- Interchange
  improvements

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### Truck improvement tools



Freight-oriented travel lanes and ramps

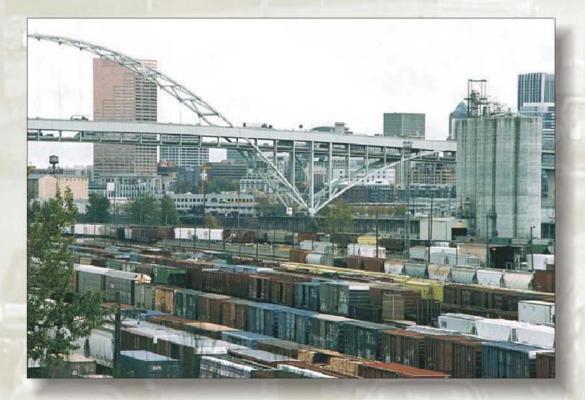
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What improvements are needed?



### Freight rail tools



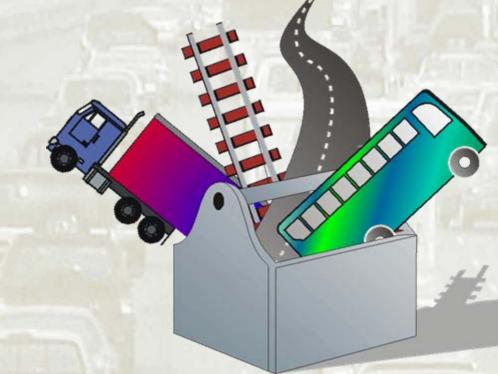


- Mainline track
  improvements
- Switchyard improvements
- Integrated system
  management

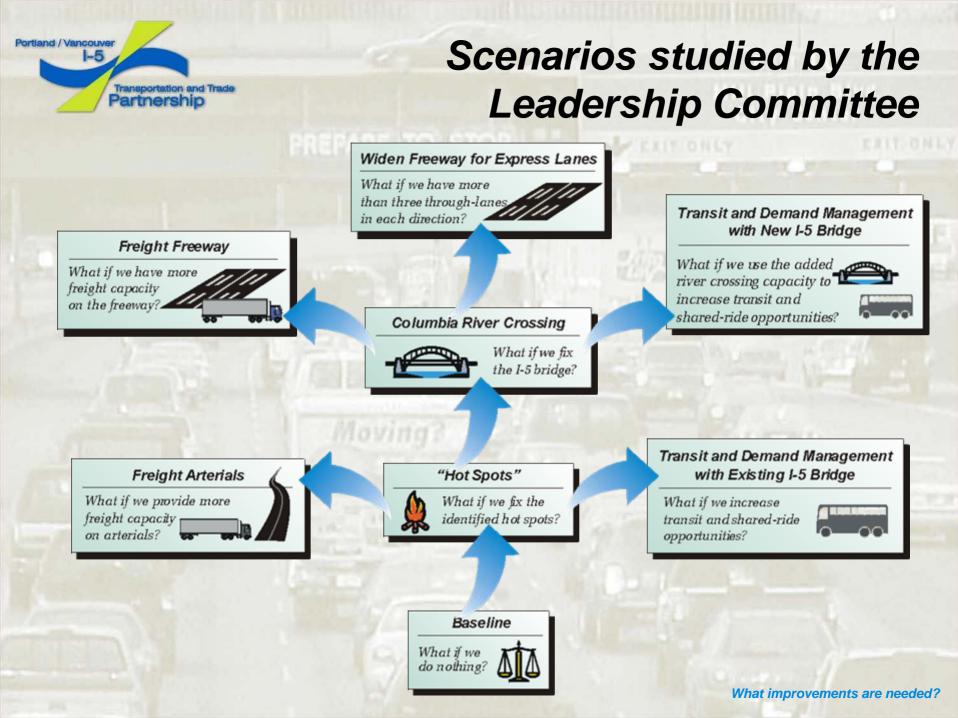
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### Scenarios studied by the Leadership Committee

• The Leadership Committee evaluated a wide range of improvement scenarios, with varying levels of investment and combinations of:

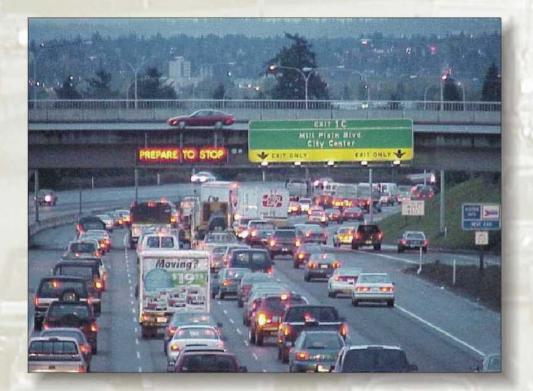


- high-capacity transit
  - freeway improvements (including options for a new bridge)
- demand management
- freight improvements





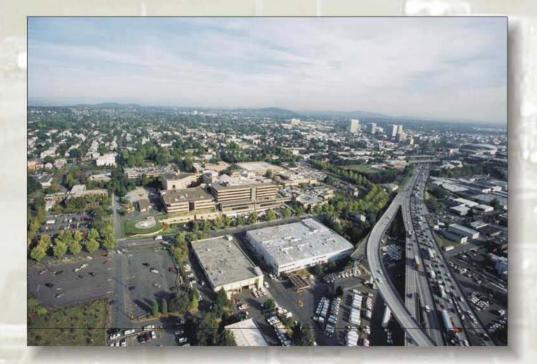
# How will potential improvements affect congestion and delay?



A combination of new highway and transit capacity across the river will result in the the fewest number of congested hours of travel per day, but congested periods will still last longer than they do today



# How will potential improvements affect travel times in the corridor?



Compared to today, "rush hour" travel times will increase under nearly any assumption about future improvements, but will be much worse if nothing is done Portland / Vancouver I-5 Transportation and Trade Partnership How will potential improvements affect transit ridership in the corridor?





Compared to today, transit ridership will be substantially greater in the future under all scenarios studied. The greatest ridership increases will result from investments in high capacity transit (express bus or LRT).

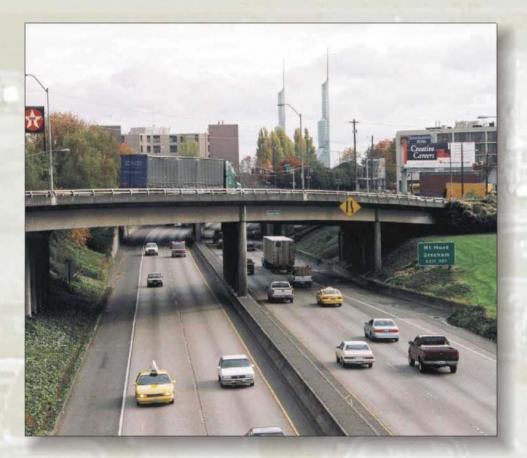
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### Leadership Committee conclusions

- The problem is complex and requires new capacity to be multi-faceted
  - there is no silver bullet
  - the most successful scenarios would combine highway and transit improvements
  - the best solution will need to be phased
  - there are no pre-conceived solutions



## Phased improvements based on further study of:



Improving two-lane bottlenecks at

- Rose Quarter and Delta Park in Portland
- Downtown Vancouver and 99th-134th in Clark County



### Phased improvements based on further study of:



New highway and transit capacity at the Columbia River and at key points throughout the corridor



### Phased improvements based on further study of:



### Improvements to critical freight arterials



## Phased improvements based on further study of:



Improvements to the freight rail system



#### But ... not ... so ... fast ...

- Even with improvements there will be a capacity problem in the future
- Analysis showed that under all scenarios, the congestion in the peak period will get worse than today
- For the economic health of the region, other solutions must be examined:
  - peak-period pricing
  - transportation-efficient development
  - express and/or HOV lanes



# Stakeholders interviewed support a mix of solutions

- Opinions differ about how best to address the problem
- A big majority believe we need both transit and road improvements
- Most consistent support for: fixing bottlenecks, more transit, expanding or replacing the bridge
- Inconsistent support for: an additional bridge elsewhere, a fourth lane, demand management
- Other options: reversible lanes, truck-only lanes, shifting jobs to Vancouver



# Survey shows public also wants a mix of solutions

- Four solutions rated very highly:
  - fixing bottlenecks / a third lane
  - more transit
  - a combination of road and transit improvements
  - incentives to reduce peak-hour commutes
- More than half also want:
  - expand or replace the bridge
  - a fourth lane

Leadership Committee Charge

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### **Funding Options**

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- Funding for improvements will need to go beyond existing resources and potential federal support
  - Both states should make funding of infrastructure improvements in the corridor a priority
  - Private financing should be sought where appropriate
  - Tolling and other innovative financing tools will need to be considered



### Survey and interviews no easy funding solutions

- Nearly all stakeholders interviewed say:
  - "we need to find the funds to fix the problems"
  - most support user fees; some support new taxes
  - accountability is the key
- Telephone survey shows the broader public believes:
  - there's enough money in the system to pay for improvements
  - we need new funding to pay for a solution
  - but they're ambivalent about how to pay

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# Conclusion - Thoughts for visioning and values

- "The game has changed"
  - Traditional planning and engineering meant forecasting travel demands and building the capacity to serve it
  - We can't meet all the potential demand the region will need to make hard choices



# Thoughts for visioning and values, cont.

- Key points:
  - demand management will be important
  - there are real limits to our ability to add capacity to the corridor
  - new capacity across the Columbia River will be the linchpin in any transit or highway investment strategy

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#### **Questions and Answers**

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