Transportation 2040

Update to the Regional Transportation Plan

A Conversation on Regional Transportation

Joint Transportation Committee

July 7, 2009

Puget Sound Regional Council
PSRC

Transportation 2040

Draft

Objectives

- Make progress on **major transportation system issues** and inform near-term project decisions
- Align with **VISION 2040** and the **Regional Economic Strategy**
- Respond to the **2040** growth forecasts for person and freight travel demand

Schedule

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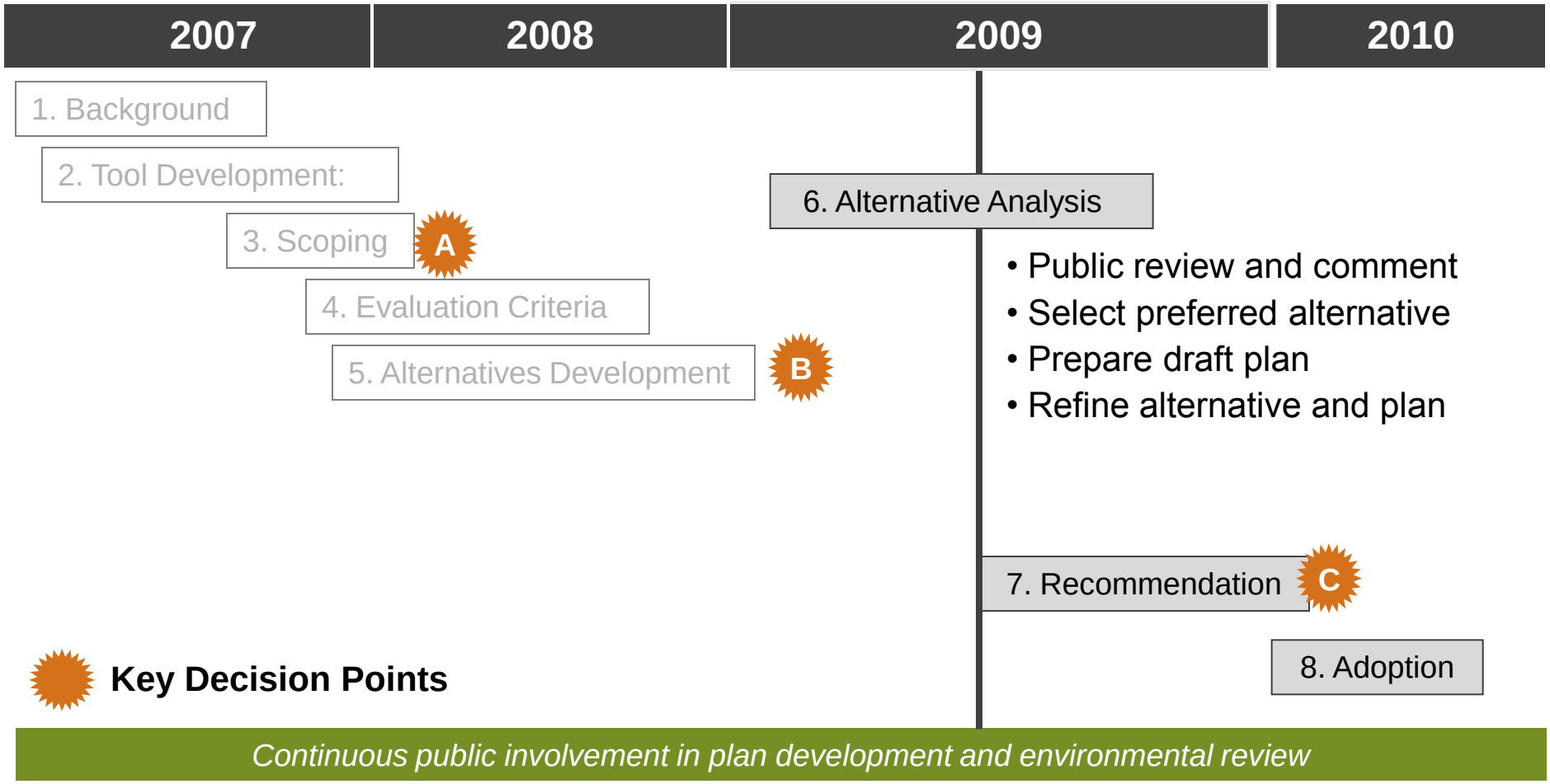

Overview

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1. Background
2. Critical Issues
3. Alternatives Descriptions
4. Evaluation Framework
5. Communication

Background

Background

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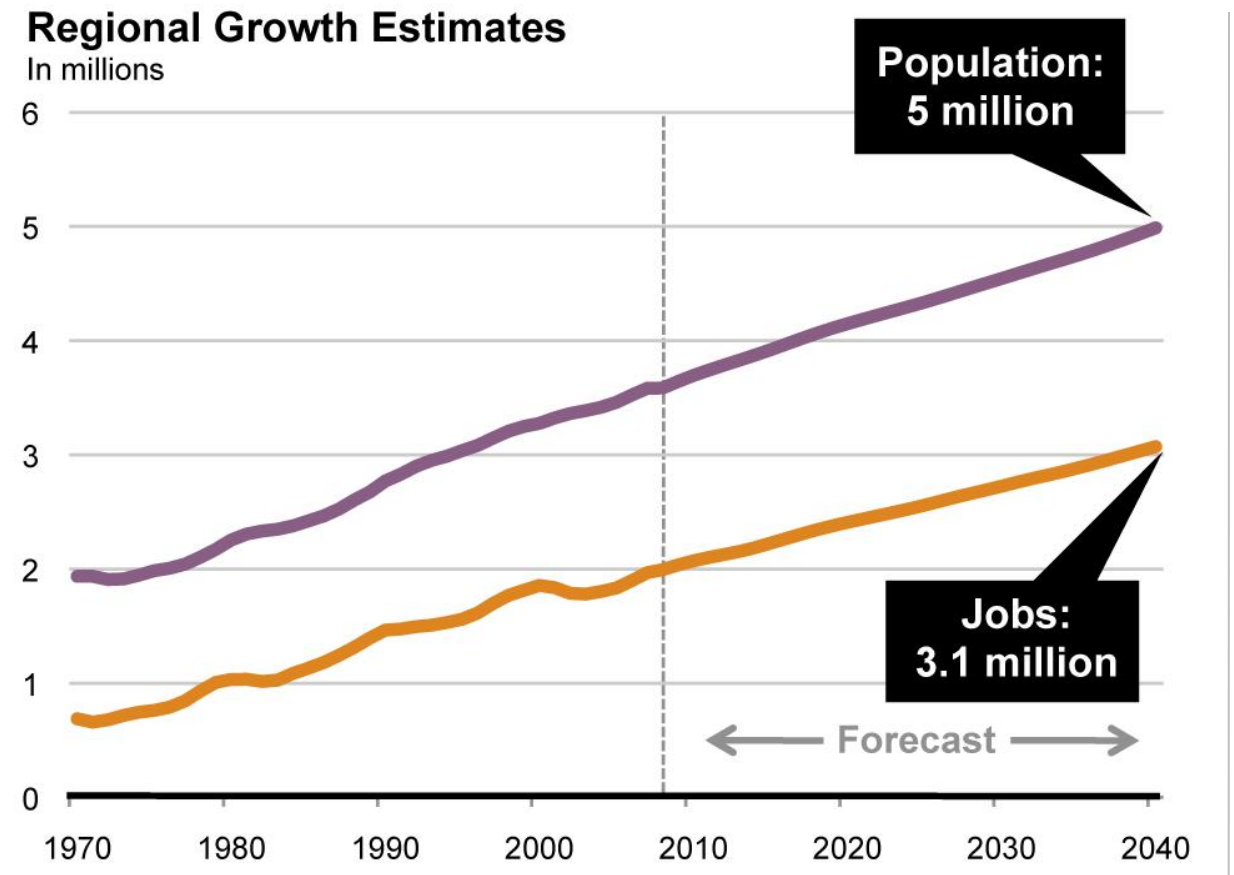

Source: PSRC

Puget Sound is forecast to see a 36% increase in population and a 51% increase in jobs by 2040

Background: Regional Growth

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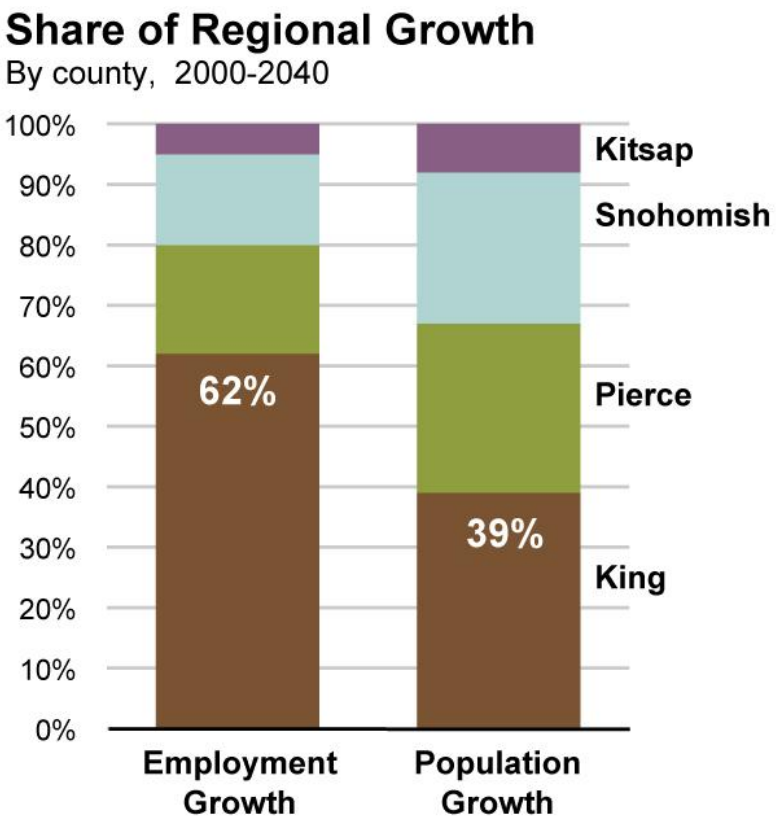


Sources: Bureau of Economic Analysis, PSRC

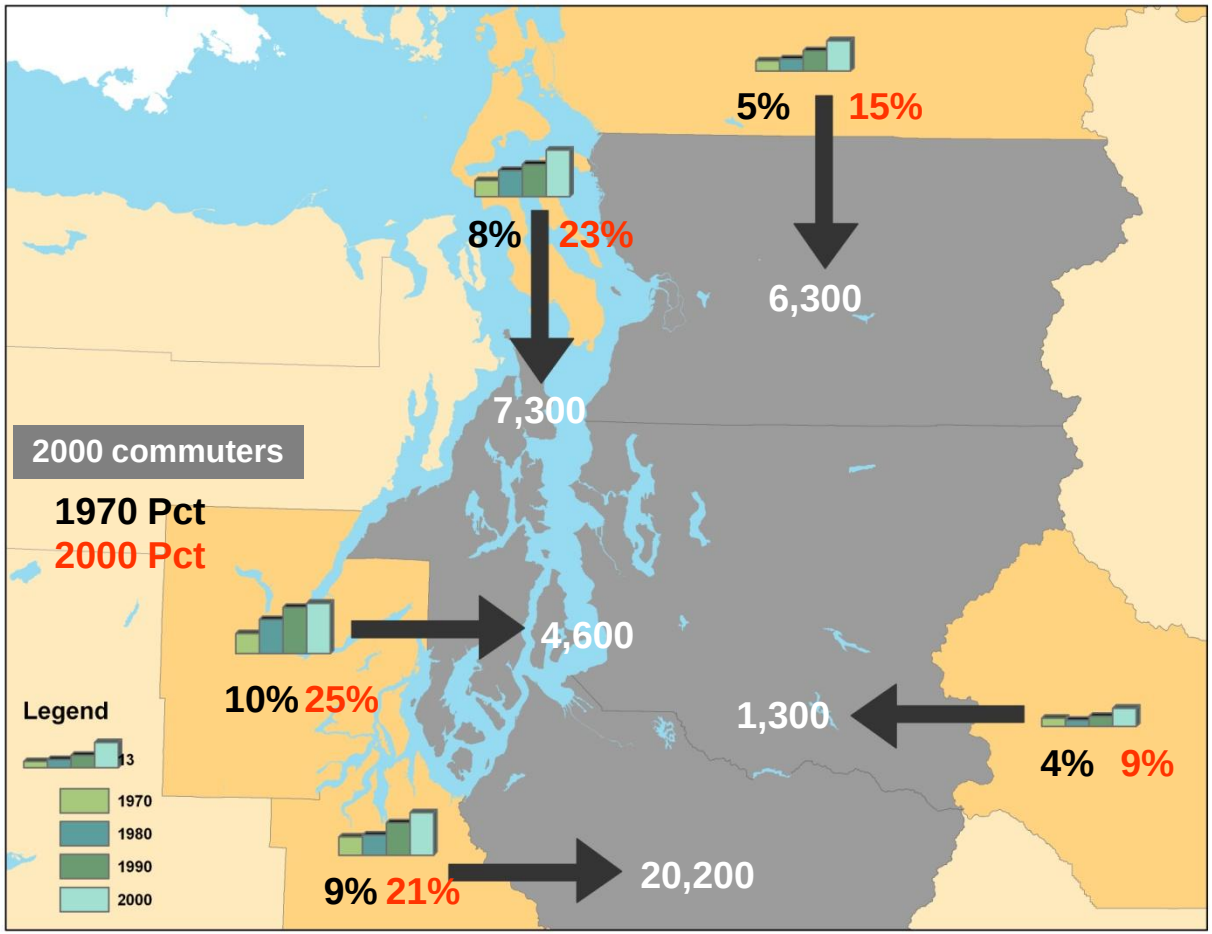
Job growth is forecast to outpace population growth in King County

Result: More people will be commuting to King from other counties for work

Background: Regional Travel

Draft

Percent of neighboring county commuters that travel to the Central Puget Sound, 1970-2000



Source: 1970, 2000 Census Journey to Work

Background: How We Travel to Work

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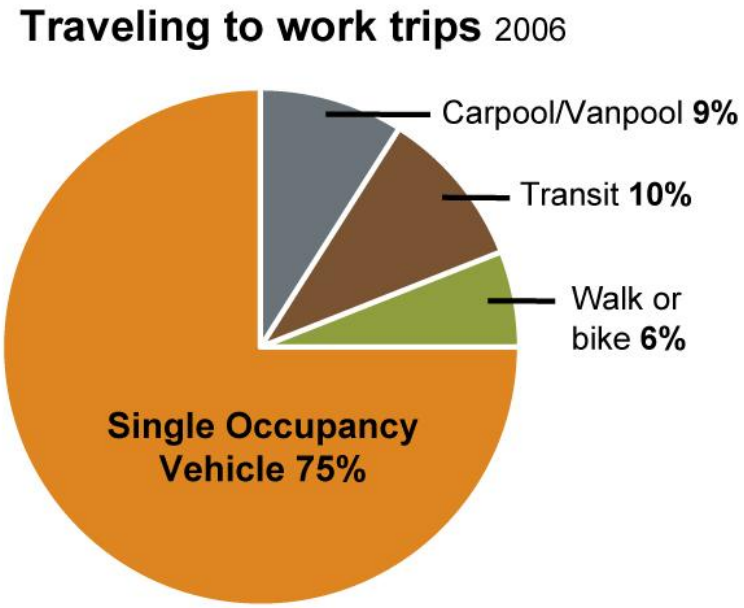

Source: PSRC

In 2006, 75% of all work trips were accomplished in Single Occupancy Vehicles

Background: Regional Comparisons

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Based on national data, Seattle is in the lower half of comparable regions for rate of growth and delay/congestion.

Population

San Francisco
Atlanta
Phoenix
San Diego
SEATTLE
Minneapolis
Denver
Vancouver BC
Portland

Population Density

San Diego
San Francisco
Portland
Phoenix
Denver
SEATTLE
Minneapolis
Atlanta

Rate of Growth

Phoenix
Atlanta
San Diego
Vancouver BC
Portland
Denver
SEATTLE
Minneapolis
San Francisco

Delay

San Francisco
Atlanta
San Diego
Denver
Phoenix
SEATTLE
Minneapolis
Portland

Non-SOV Commutes

Vancouver BC
San Francisco
SEATTLE
Portland
Phoenix
San Diego
Denver
Atlanta
Minneapolis

Home Affordability

Atlanta
Minneapolis
Denver
Portland
Phoenix
SEATTLE
Vancouver BC
San Diego
San Francisco

Critical Issues

Major Factors Shaping Transportation 2040

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Congestion and Mobility

- Regional economic vitality
- Mobility for people and goods movement

Environment

- Climate change
- Puget Sound water quality

Sustainable Funding

- New sources of revenue
- Reliable, predictable, sufficient

Congestion and Mobility

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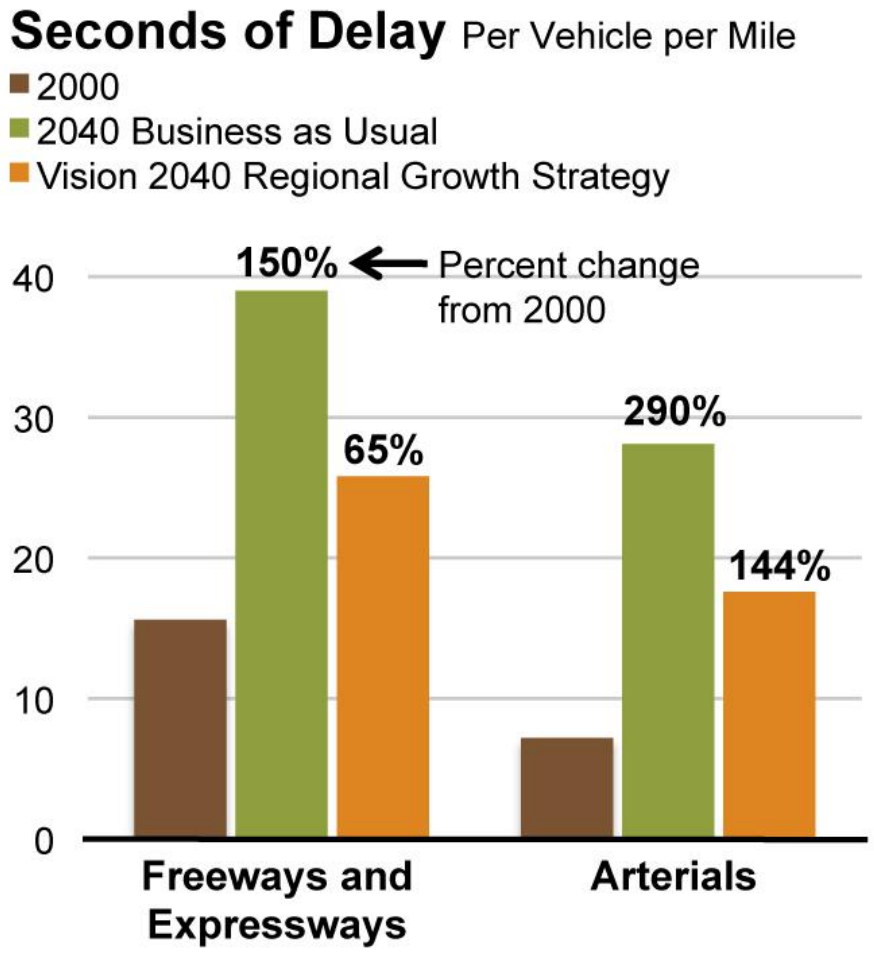

Delay and congestion will increase dramatically if Regional Growth Strategy goals are not achieved.

Environmental
Climate Change Sources

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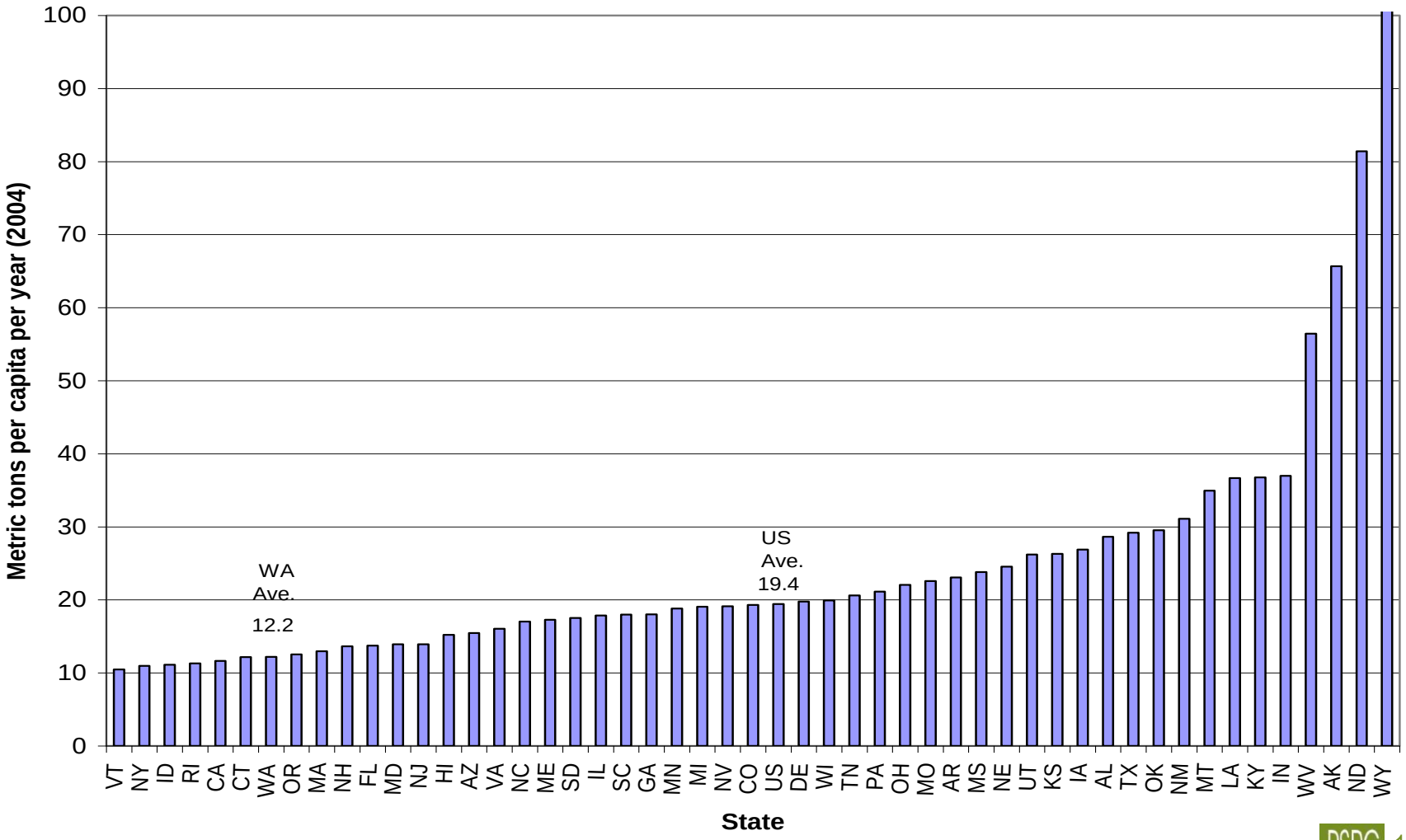
Washington State per capita CO2 emissions for 2004 (CTED)



Environment

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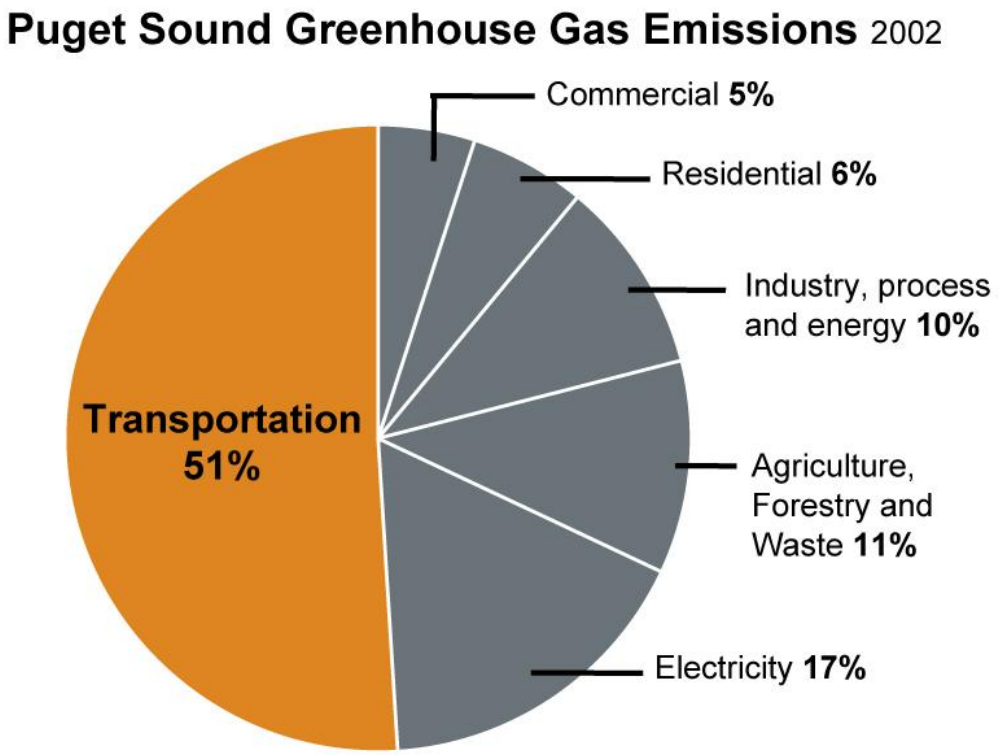

Source: Puget Sound Clean Air Agency

More than half of all Puget Sound greenhouse gas emissions comes from transportation sources

Sustainable Funding

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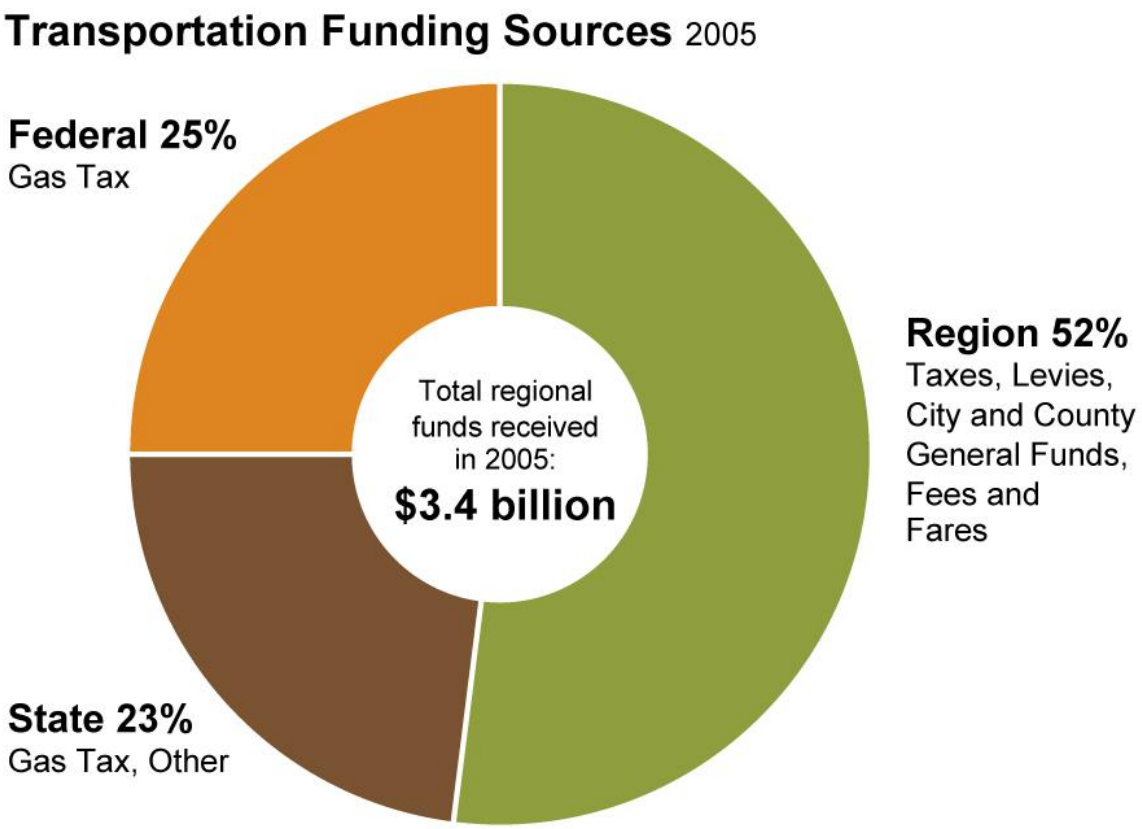
Close to half of the region's transportation funding returned to the region through State and Federal programs in 2005



Sustainable Funding

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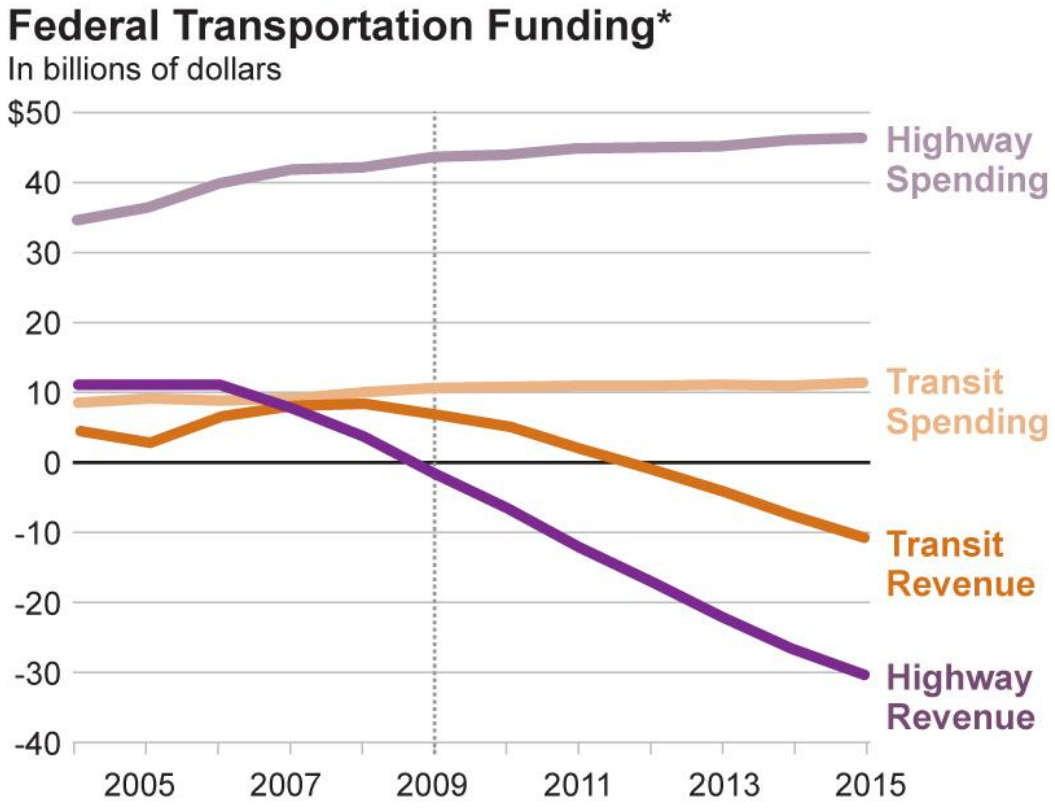

* Figures do not account for The American Recovery and Reinvestment Act of 2009 (ARRA).

In 2009, revenue will be inadequate to meet federal transportation spending guarantees

Sustainable Funding

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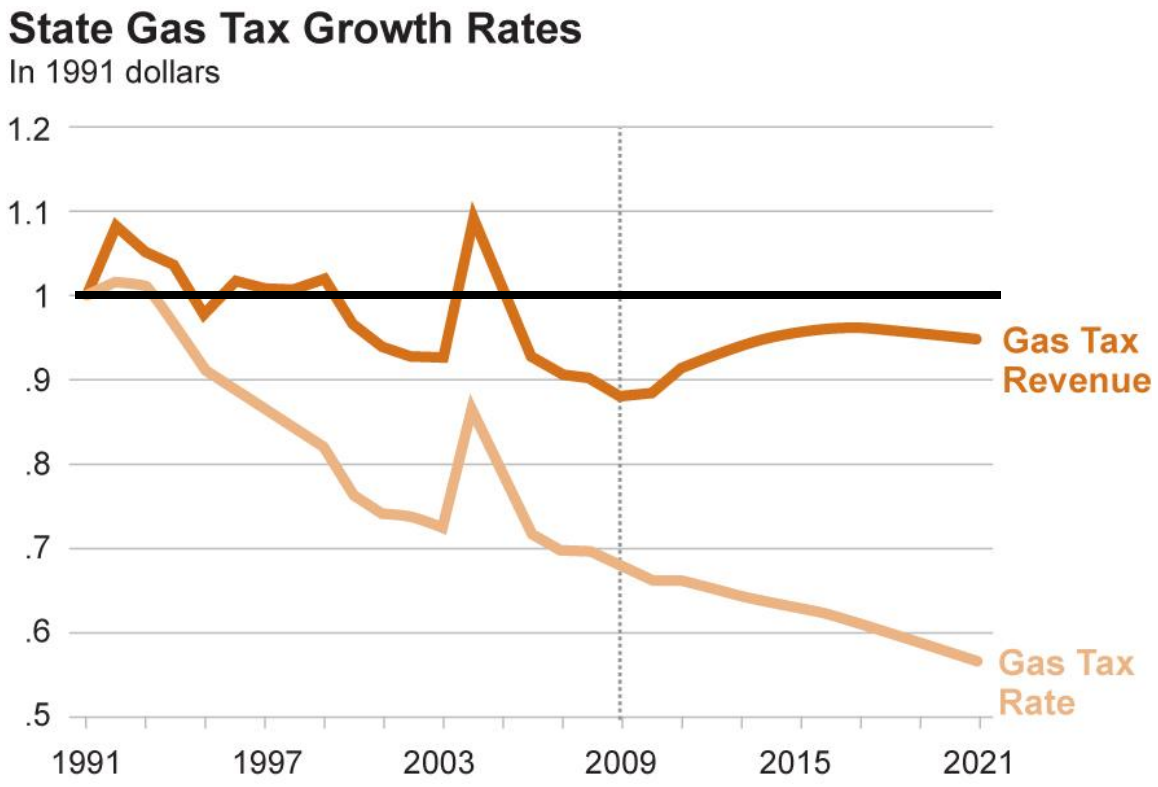

Source: Washington State Department of Transportation

Even with recent increases, the purchasing power of the State Gas Tax has declined since 1991

Sustainable Funding

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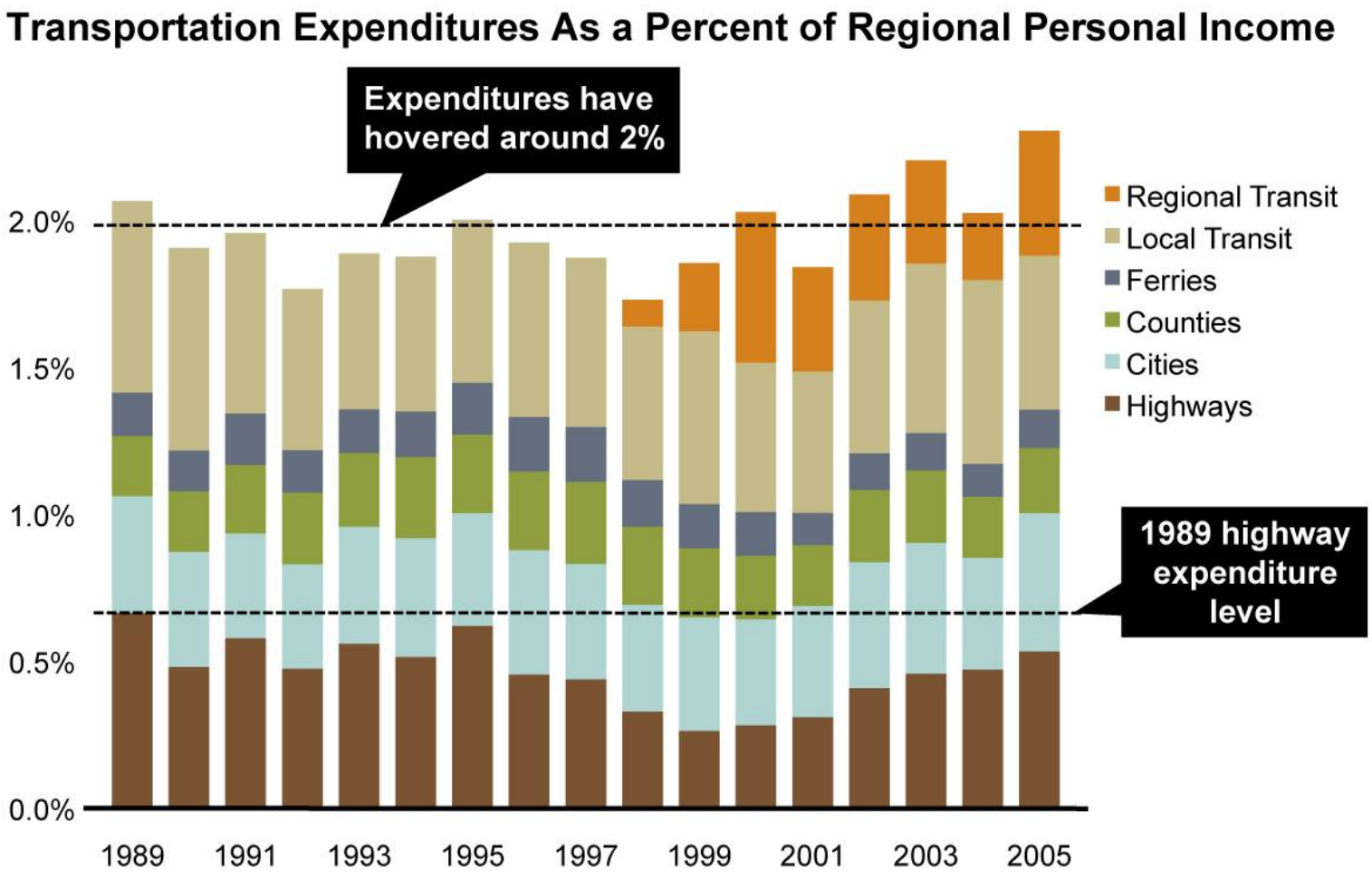

Alternatives

Summary of Alternatives

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Baseline

- Includes all planned and funded projects and programs
- Starting point for comparing other alternatives

Alternative 1

- Makes existing transportation system more efficient with traditional funding sources
- Includes a High Occupancy Toll (HOT) lane system

Alternative 2

- Closest to current long-range plan
- Funded from traditional sources
- Adds substantial roadway and transit capacity
- Includes a two-lane HOT system

Alternative 3

- Uses tolls to pay for most critical roadway improvements
- Traditional funding for new transit, bicycle and pedestrian network improvements

Alternative 4

- Uses tolls to manage system and fund programs
- Improves roadway choke points, transit and non-motorized travel options

Alternative 5

- Largest expansion of high capacity transit, bus service, bicycle and pedestrian facilities
- Funded by freeway and arterial tolls
- Uses traditional strategies plus tolling to reduce carbon emissions

Text Summary of Alternatives

Draft

Description	Base Alt.	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Focus	Build funded projects	Maximize the efficiency of the existing system	Expand roadway and transit capacity	Use toll revenues to expand capacity and improve efficiency	Combine traditional revenues and tolls to maximize efficiency	Reduce emissions with limited highway investments and regional tolling
Roadway Miles Investment	Least new lane miles		Most new lane miles			
Regional Transit	ST 2	ST 2	More rail and bus	ST 2	More rail and bus	ST long-range plan build out
Local Transit	1% bus service increase per year	High bus service increase	Least bus service increase	Bus service increases on tolled corridors	High bus service increase	Highest total bus service increase
Ferries	Maintain existing services	5 New passenger-only routes	2 New passenger-only routes	4 New passenger-only routes	7 New passenger-only routes	Focus investments on existing routes; some new passenger only routes
New Walk/Bike Facilities	Lowest number					Highest number
User Fees/ Tolling Uses	Fewest tolls	HOV to 1 HOT lane; 2 HOT lanes on 405	2 HOT lane on freeway network	Toll core freeway with improvements/ spend dollars in tolled corridors	Toll most of freeway network; Spend revenues on transportation projects throughout region	Most Tolls; All freeway and arterials tolled; Spend revenues on transportation projects throughout region

Data Summary of Alternatives

Draft

Change in Key Transportation Features

Increase from 2006-2040

Biggest increase Smallest increase

	2006	Baseline	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5
Freeway lane miles	2,652	94	207	510	488	388	204
Arterial lane miles	9,981	181	263	648	323	302	259
Freeway and arterial lane miles	12,633	276	470	1,158	812	690	463
Daily bus service hours*	135,000	40,000	54,000	39,000	53,000	62,000	71,000
Daily commuter and light rail services hours*	327	5,100	6,800	8,700	6,800	8,700	13,000
Light rail miles**	2	68	68	95	68	95	161
Sound Transit Program Phases	ST-1	ST-2	ST-2	ST-3	ST-2	ST-3	ST-4
Commuter rail miles	82	0	0	0	0	0	46
Daily vanpools	1,714	1,000	2,600	1,500	2,100	2,100	2,600
Auto Ferry Routes	7	0	0	1	0	0	0
Passenger Ferry Routes	4	0	11	4	6	9	11
Off-road, non-motorized miles	538	35	147	146	141	146	458

** A.M. and mid-day ** Light Rail or other High Capacity Transit*

Cost Breakdown

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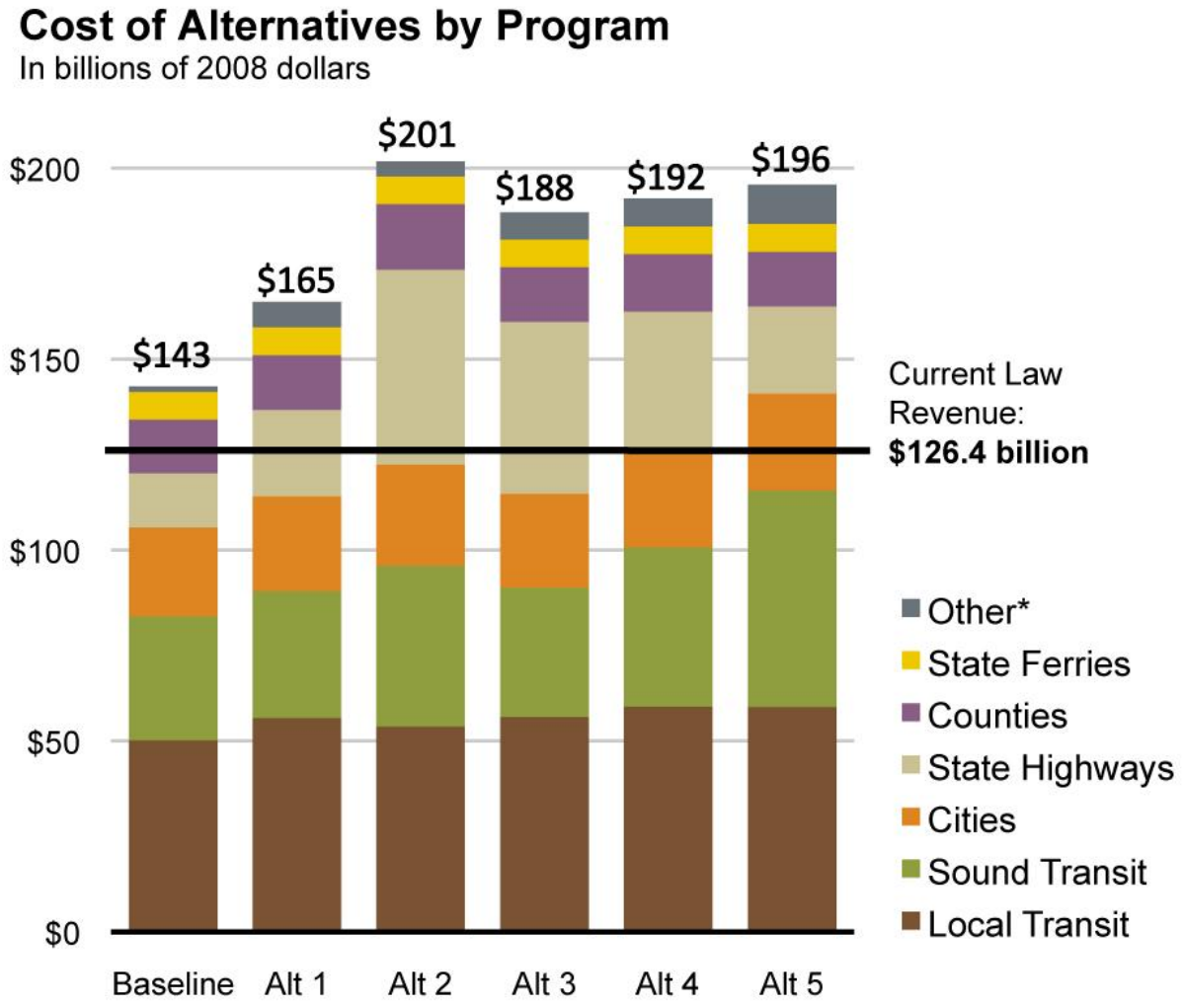

* Includes Toll System, Regional Non-Motorized, Transportation Demand Management, Inelligent Transportation System and Passenger-Only Ferries

Evaluation Framework

An Integrated Evaluation Framework

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- **Environmental Review** will assess alternatives based on environmental impacts. DEIS released May 29, 2009.
- **Policy Analysis** will assure alternatives are consistent with VISION 2040 and meet regional goals and policies.
- **Technical Analysis** will evaluate alternatives using quantitative methods including a benefit and cost analysis.

Evaluation Criteria

Draft

Mobility

Travel Time Savings

Reliability

Finance

Operation and Maintenance Costs

Revenues

Capital Cost

Growth Management

Land Use and Demographics

Economic Prosperity

Economic Development

Equity

Geographic

Socio-Demographic

Freight

Environment

Emissions

Impervious Surfaces

Open Spaces

Quality of Life

Health

Safety

Security

Congestion and Mobility Analysis Results

Congestion and Mobility

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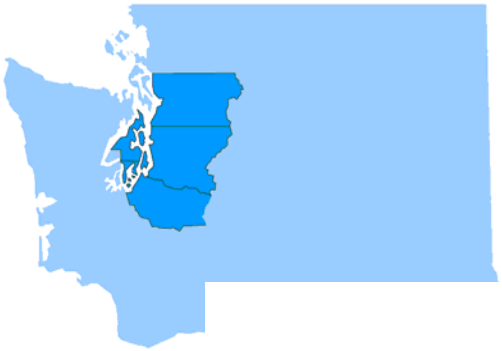
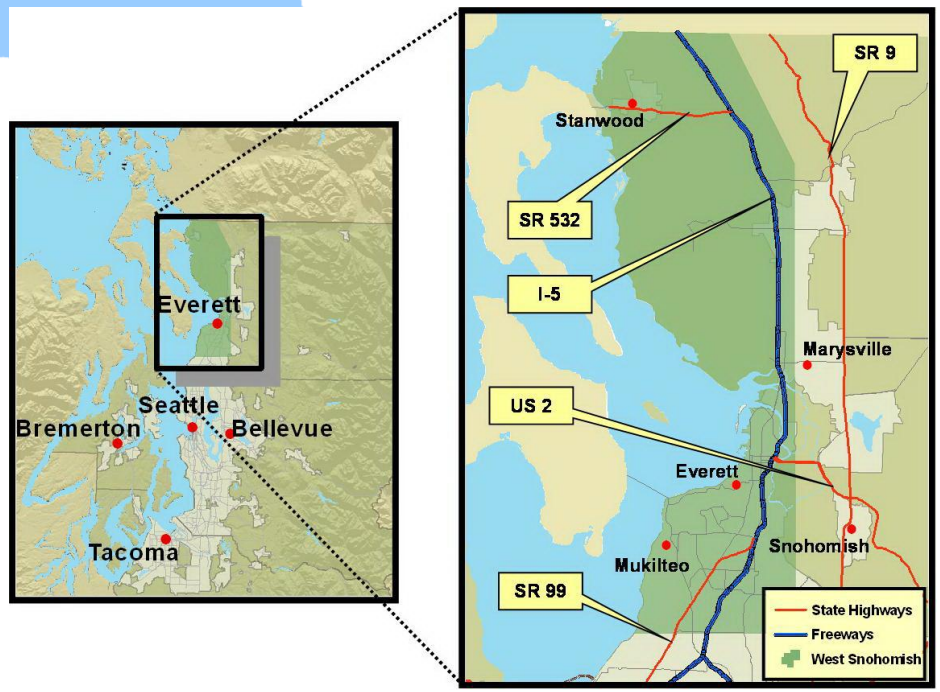
Levels of Analysis

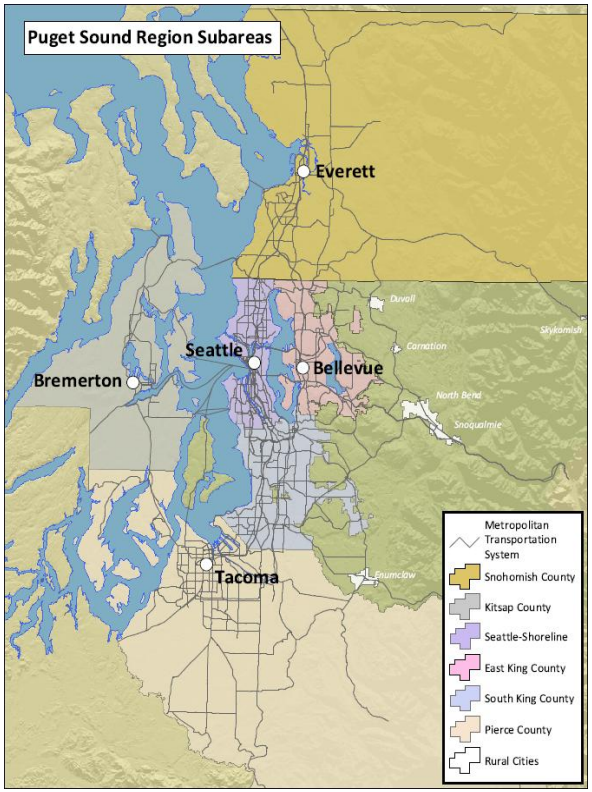
Region



Corridors



Sub-areas



Congestion and Mobility

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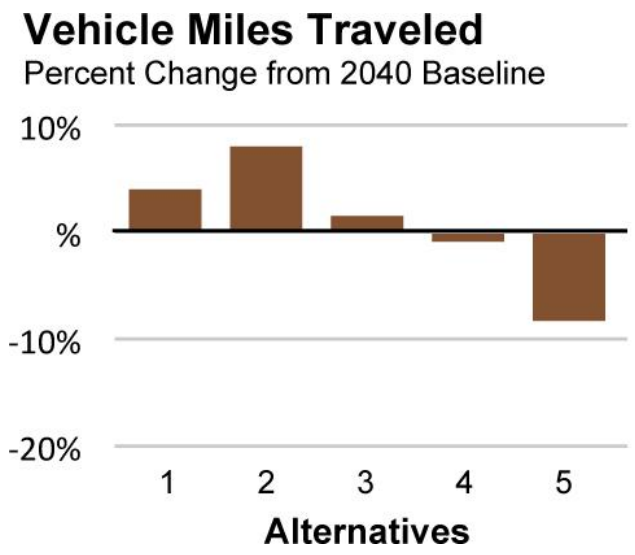
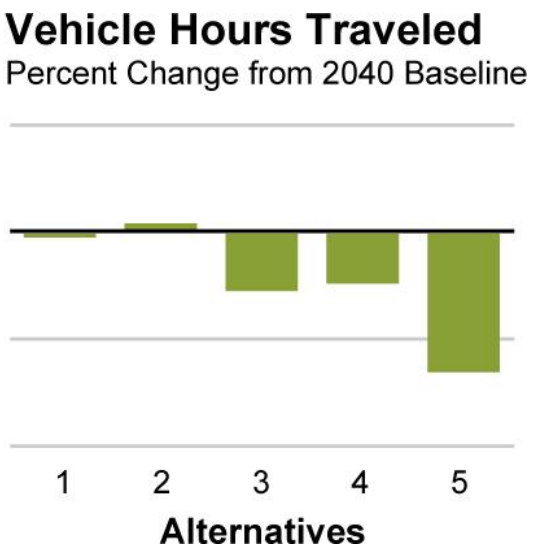
Decreasing VMT and VHT will improve congestion and mobility





Congestion and Mobility

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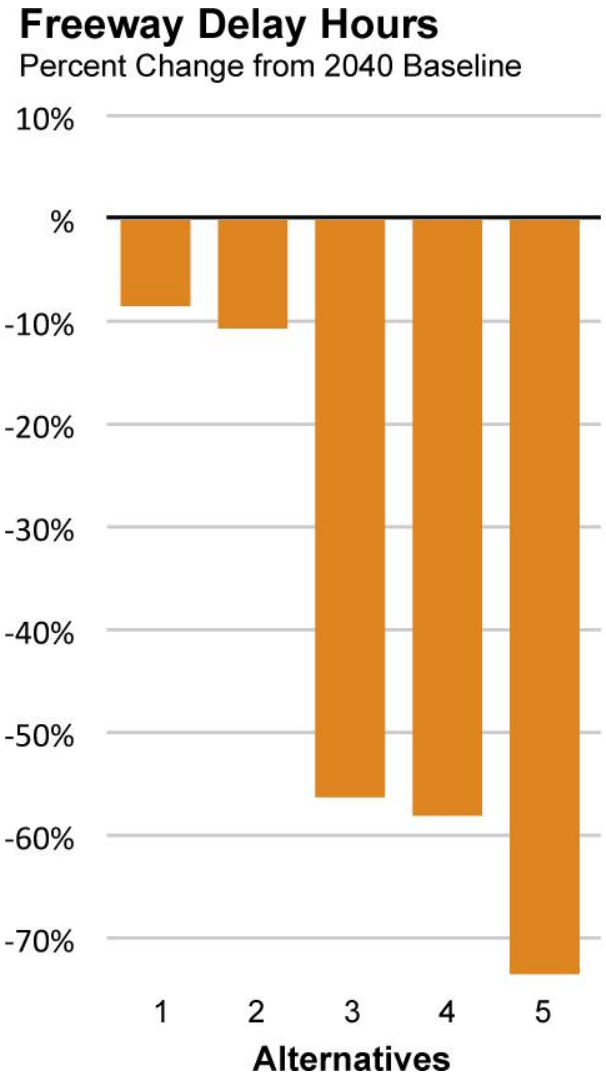

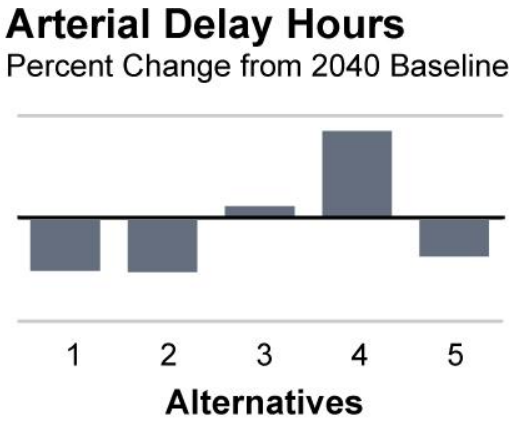

Freeway delay hours will decrease significantly in Alternatives 3, 4 and 5

Arterial delay is estimated to increase slightly in Alternatives 3 and 4

Corridor Analysis: Eastside Key Findings

(on selected commutes)

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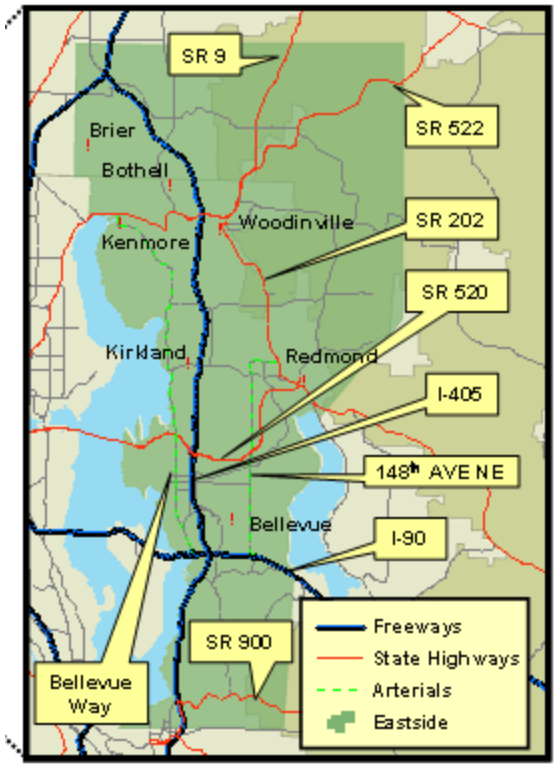

Relative to the Baseline:

- Alternatives 4 & 5 show large vehicle travel time reductions across all commutes with Alternative 5 showing the most improvement. Travel times in Alternatives 1 & 2 provide less benefit to commuters.
- For transit, Alternative 5 shows the most improvement in travel times while Alternative 1 shows the least improvement -- with that exception, all action alternatives show improvement.

Mobility Benefits

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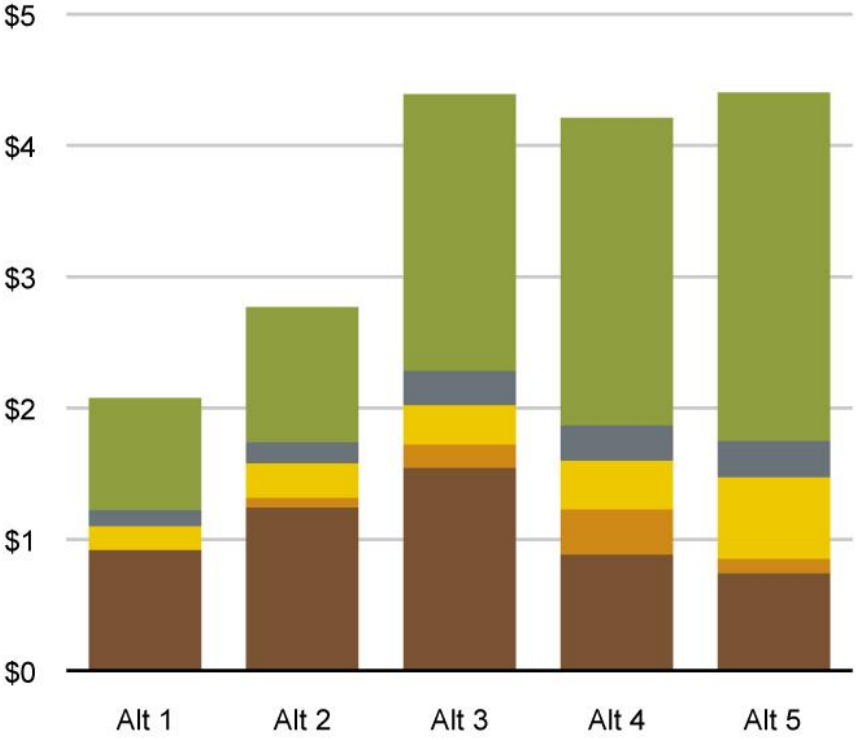
All alternatives provide mobility benefits

Annual Mobility Benefits

Change from 2040 Baseline, in billions of 2008 dollars



Note: Mobility benefits include travel time savings, reliability and operating costs and are shown here using a dollar value for time. The various users of the transportation system have different values for time savings in the travel model and benefit-cost analysis.

Environmental Analysis Results

Environment

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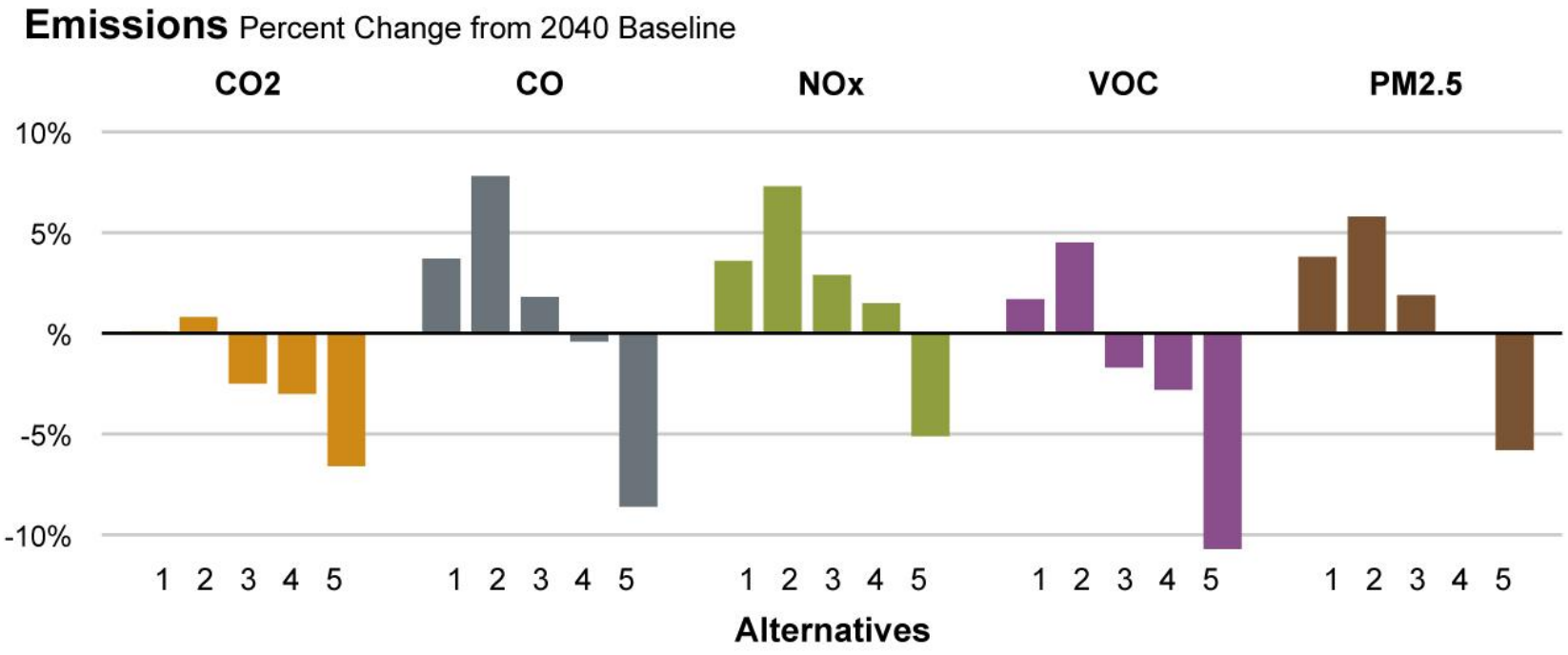
Alternatives 3, 4 and 5 decrease some emissions



Comparison to State Goals

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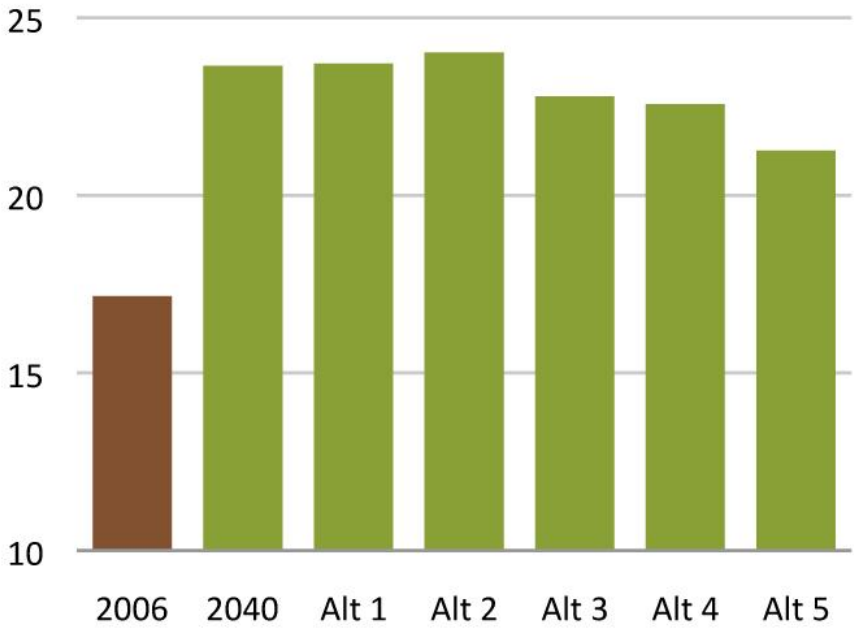
Greenhouse Gas Emissions

In millions of tons of CO_2 produced per year, mobile sources only, vehicle fleet held constant, existing regulations



STATE GOALS

1990 levels by 2020

25% below 1990 by 2035

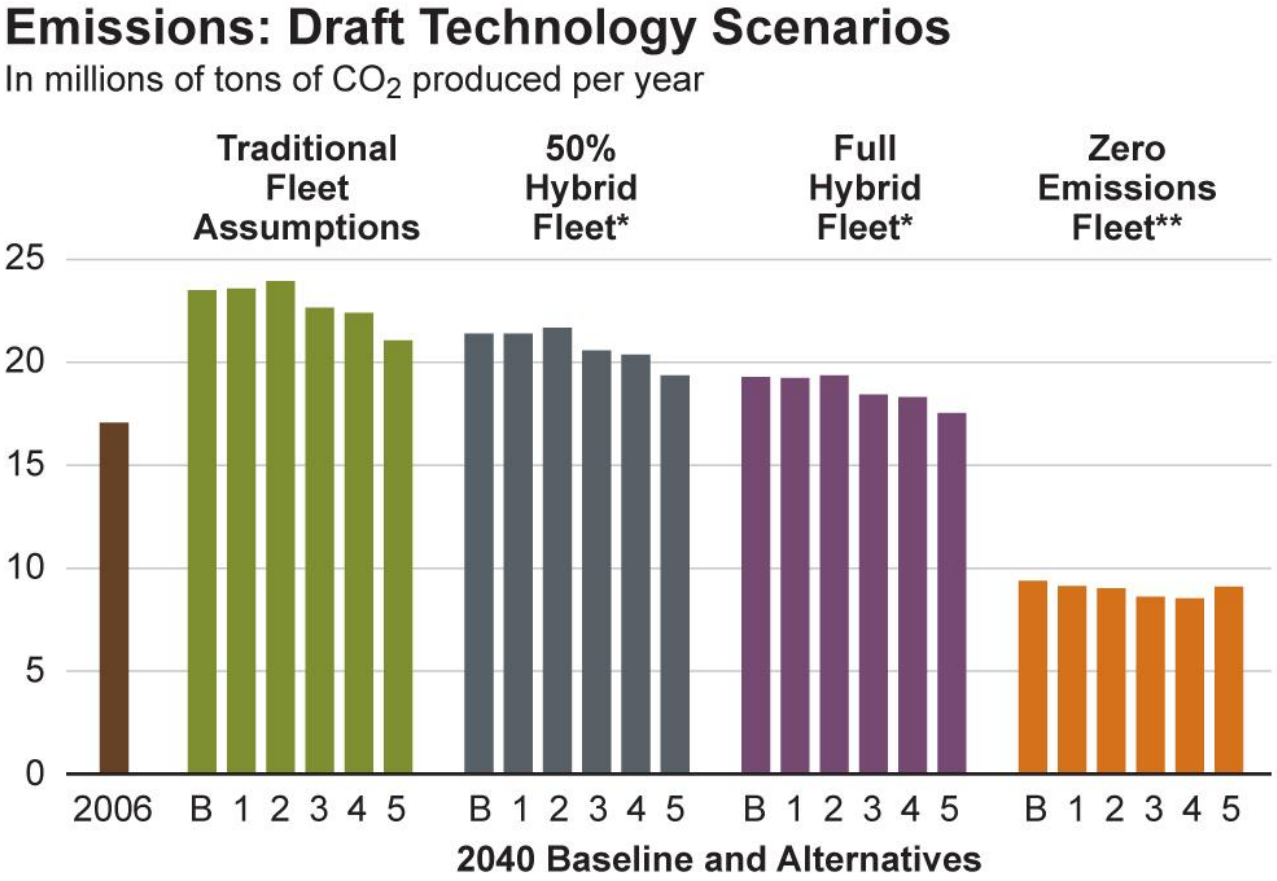
50% below 1990 by 2050

None of the alternatives alone will reduce CO_2 emissions below 1990 levels

Environment

Draft

Reducing reliance on gas-powered vehicles will reduce emissions across alternatives



* Passenger cars and light trucks only.

** For example, electric vehicles.

NOTE: Data assumes hybrid vehicles produce 30% fewer Greenhouse Gases than traditional vehicles.

Comparison to State VMT Per Capita Benchmarks

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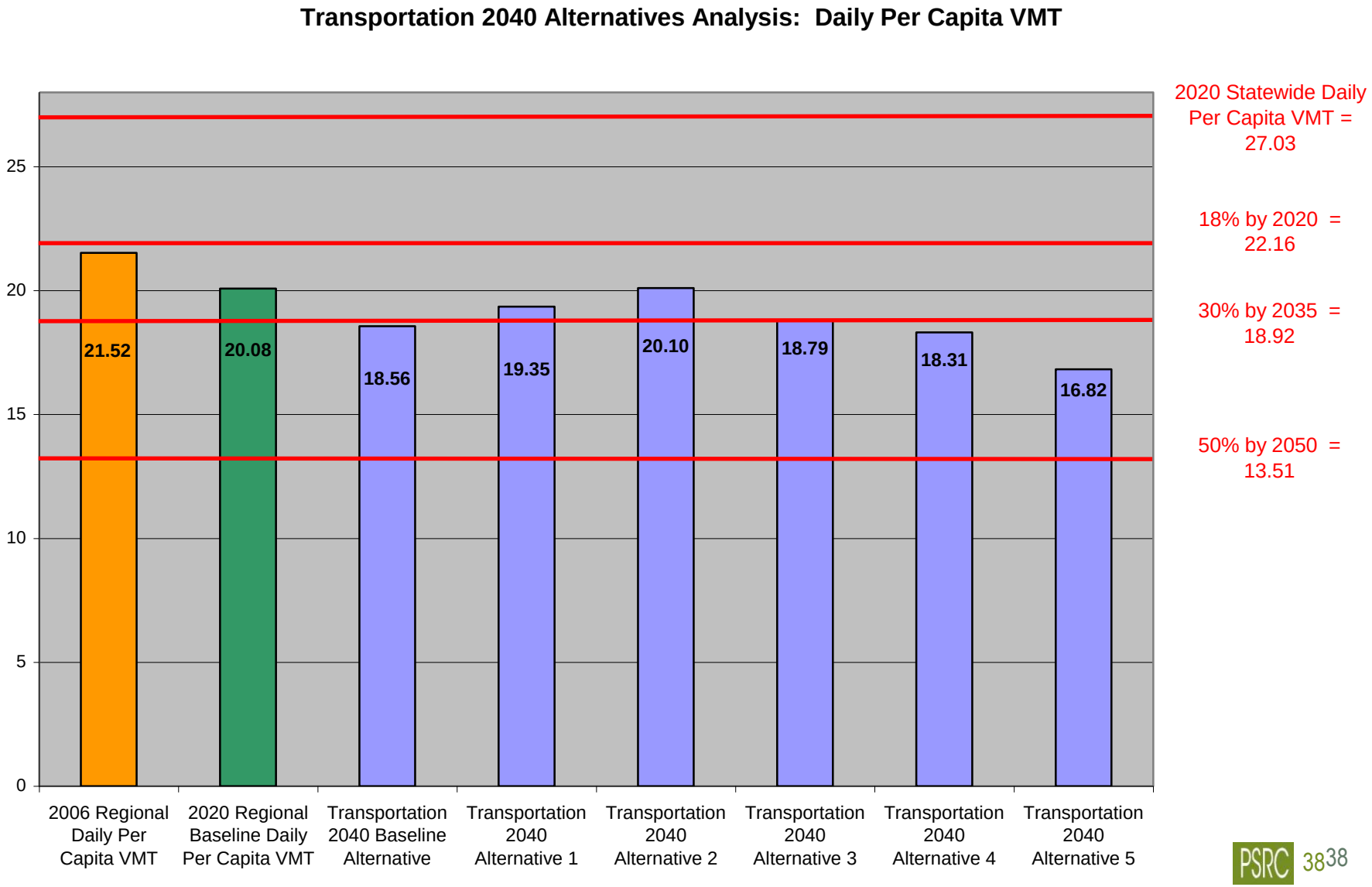

Sustainable Funding

Sustainable Funding

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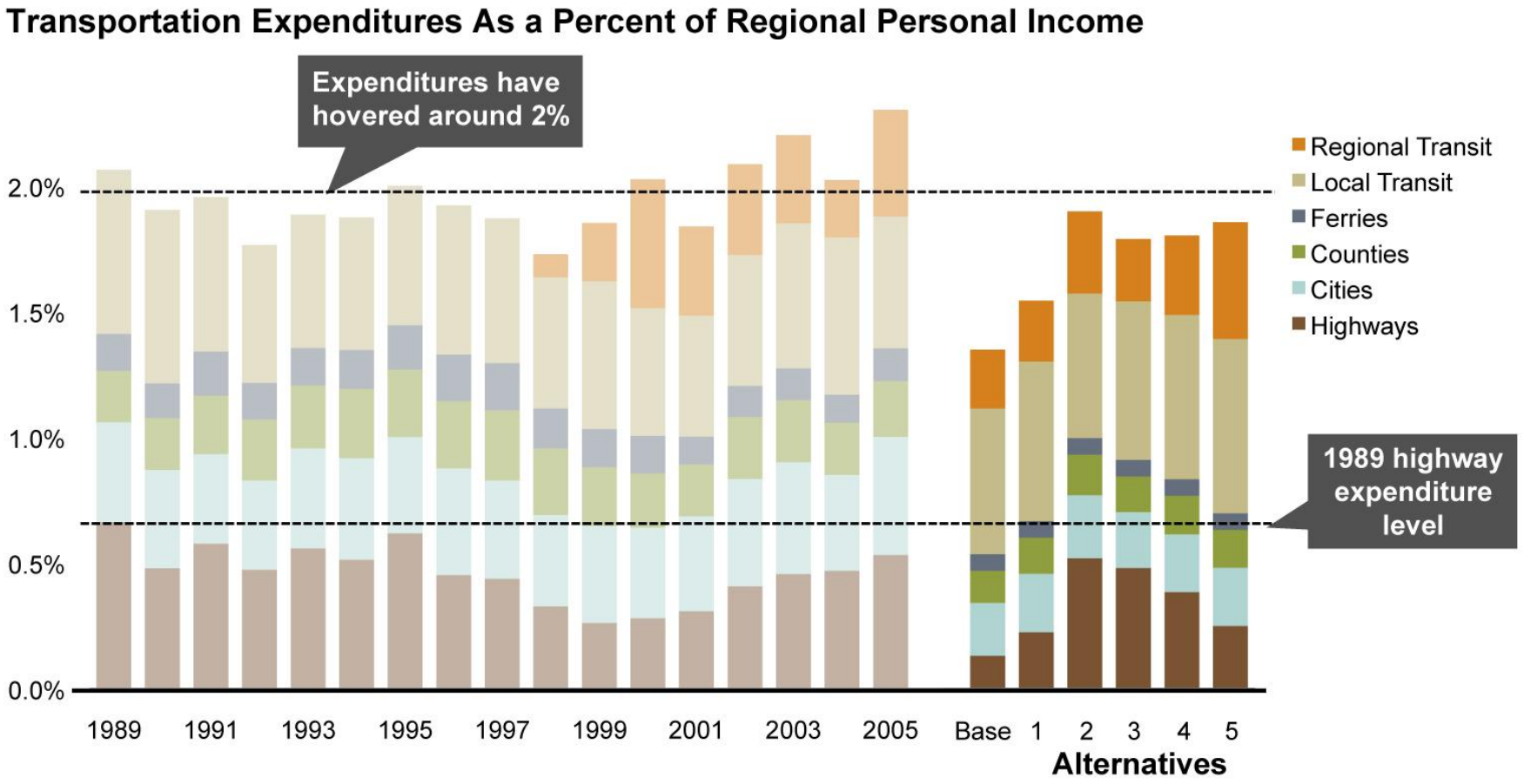
All alternatives keep transportation spending below 2% of regional personal income



Sustainable Funding

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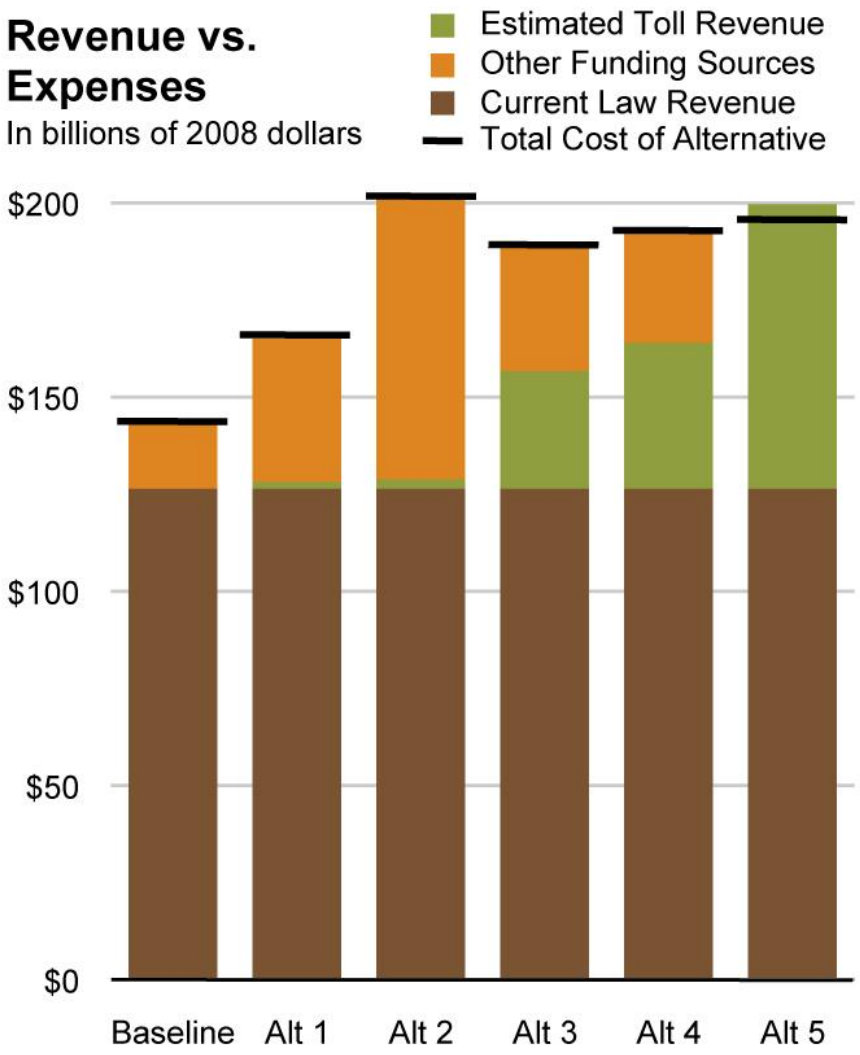

The final plan must have a constrained financial plan

Funding vs. Performance

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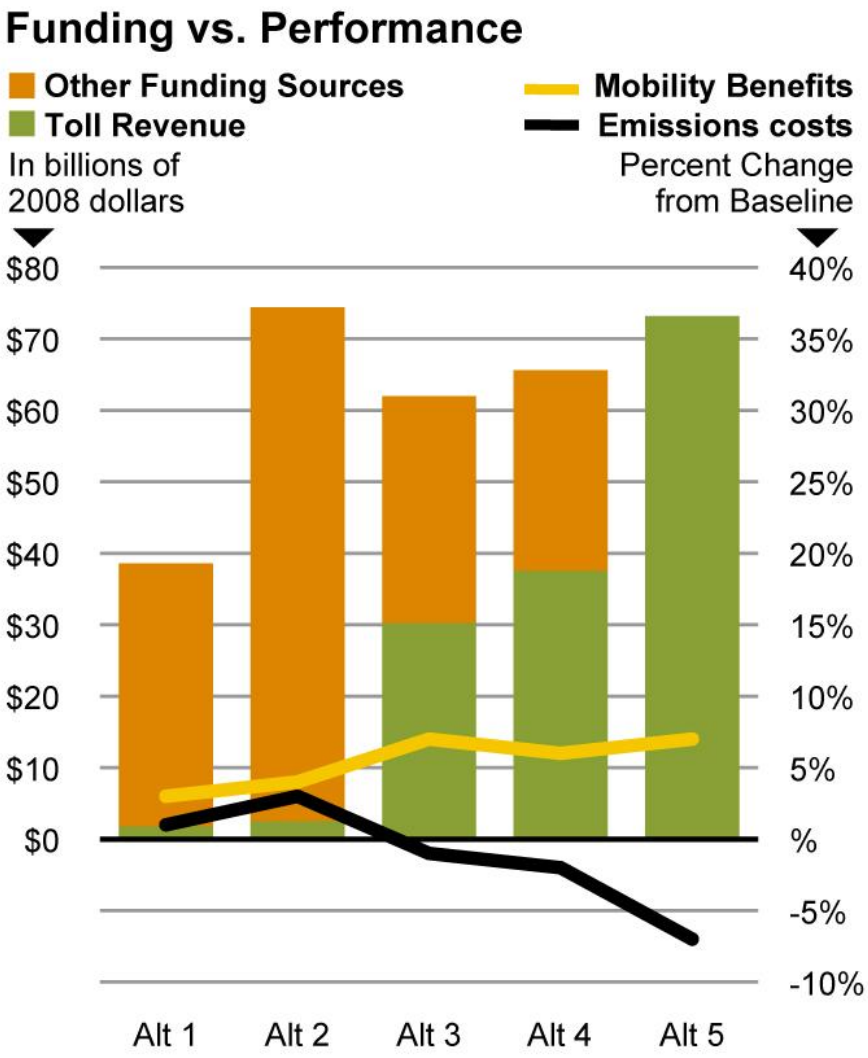

The Alternatives are estimated to provide varying levels of emissions, toll revenues and travel time savings.

Comparing Benefits and Costs in 2040

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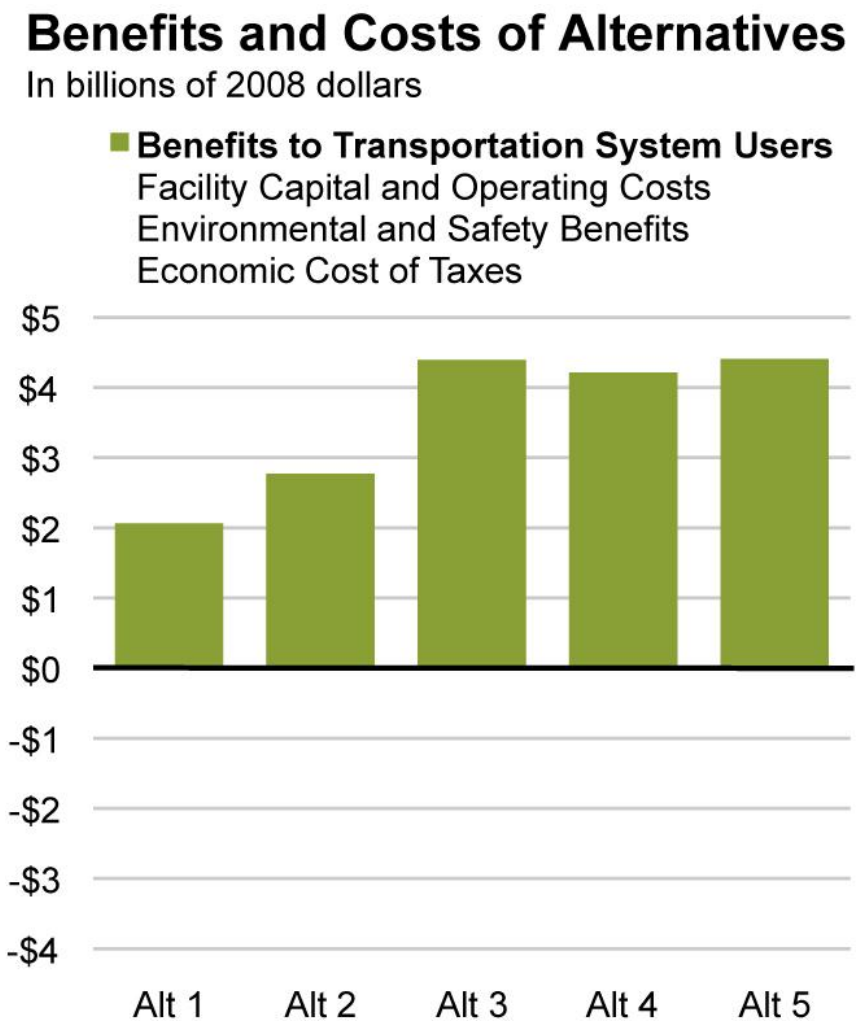

Comparing Benefits and Costs in 2040

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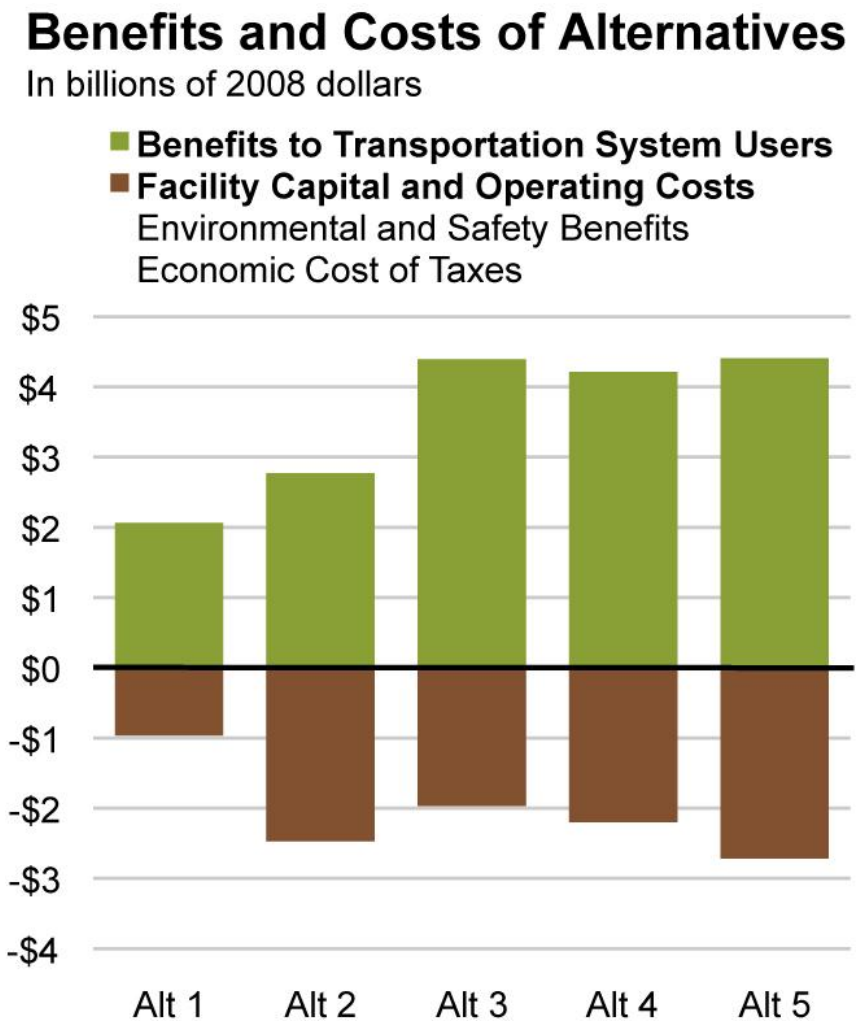

Comparing Benefits and Costs in 2040

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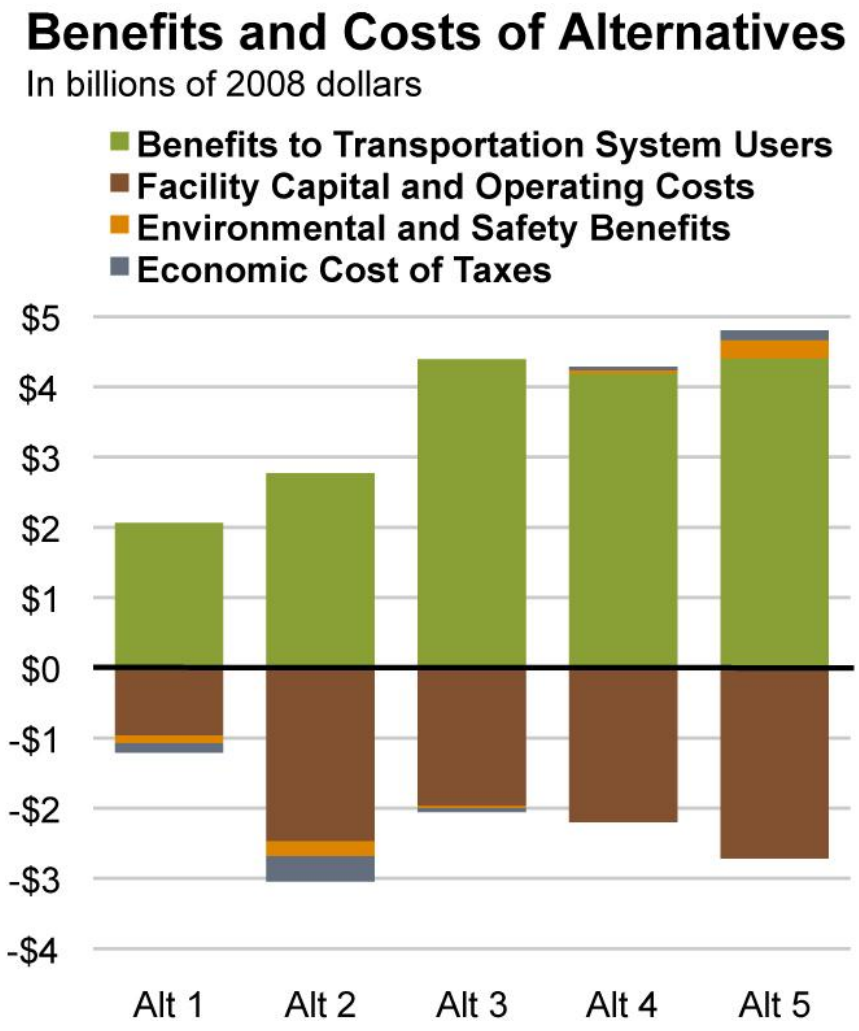

NOTE: Economic Costs of Taxes represent the influence that additional taxes have upon other economic activities

Comparing Benefits and Costs in 2040

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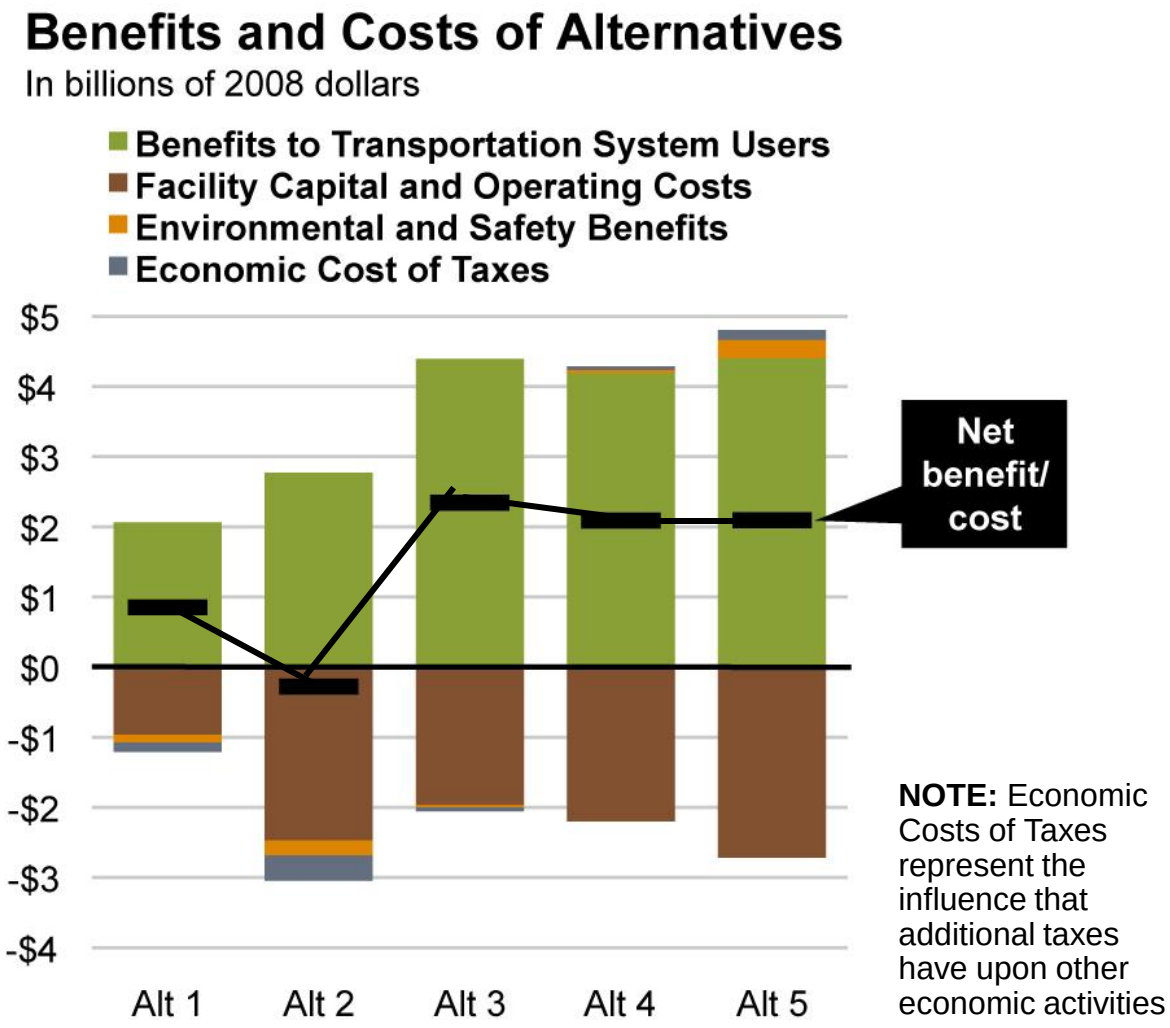

NOTE: Economic Costs of Taxes represent the influence that additional taxes have upon other economic activities

Alternatives 3, 4 and 5 provide the highest net benefit

Transportation 2040
June 2009 Meetings

Draft

June

6/2 City of Kirkland
6/3 City of Woodinville
6/4 South King County Town Hall Meeting
6/5 Transportation Operators Committee
6/5 Transportation Choices Forum
6/8 Port of Edmonds Commissioners
6/8 Institute of Transportation Engineers
6/8 Pierce County Environmental Justice Meeting
6/9 Seattle/King County Public Health
6/9 Quality Growth Alliance
6/10 Freight Action Strategy Group (FAST)
6/11 Transportation Policy Board
6/11 Growth Management Policy Board
6/11 Kitsap County Commissioners
6/12 Snohomish County Tomorrow
6/15 Alternatives Technical Group
6/16 City of Seattle Transportation Committee

June

6/16 King County Environmental Justice Meeting - Rainier Beach Library
6/17 Kitsap County Environmental Justice Meeting, United Way of Kitsap County
6/17 Regional Technical Forum
6/22 City of Lake Stevens
6/18 Regional Staff Committee
6/18 Port of Seattle
6/22 Transportation Operators Committee focus meeting
6/22 City of Lake Stevens
6/23 City of Issaquah, follow up meeting
6/24 Snohomish County Environmental Justice Meeting – United Way of Snohomish County
6/25 King County Environmental Justice Meeting – Auburn Library
6/25 City of Duvall
6/30 Transportation 2040 Working Group/ Pricing Task Force joint meeting

Transportation 2040
July 2009 Meetings
(scheduled as of June 30, 2009)

Draft

July

7/7 Joint Transportation Committee
7/7 City of Sammamish
7/7 City of Redmond
7/8 Suburban Cities Association
7/9 Transportation Policy Board
Transportation 2040 Open House
Transportation 2040 Courtesy Hearing
7/15 Special Needs Transportation Committee
7/15 Regional Technical Forum
7/16 Regional Staff Committee
7/22 Freight Strategy focus group
7/23 Executive Board

Draft Environmental Impact Statement (DEIS) Released: May 29, 2009

Draft

Nearly 2,000 copies of the Transportation 2040 DEIS were mailed on May 29, 2009.

The DEIS is available online at psrc.org and will be delivered to libraries throughout the region.

To comment on the Transportation 2040 DEIS:

1. **Return the comment form located in the back of the Executive Summary**
2. **Visit psrc.org and submit the online comment form**
3. **Write a letter to PSRC**
4. **Email comments to transportation2040@psrc.org**
5. **Schedule or attend a presentation on Transportation 2040 and submit a written comment at the meeting**
6. **Attend the Transportation Policy Board open house and public hearing on July 9**

DEIS comments accepted through July 13, 2009

Information and Contacts

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