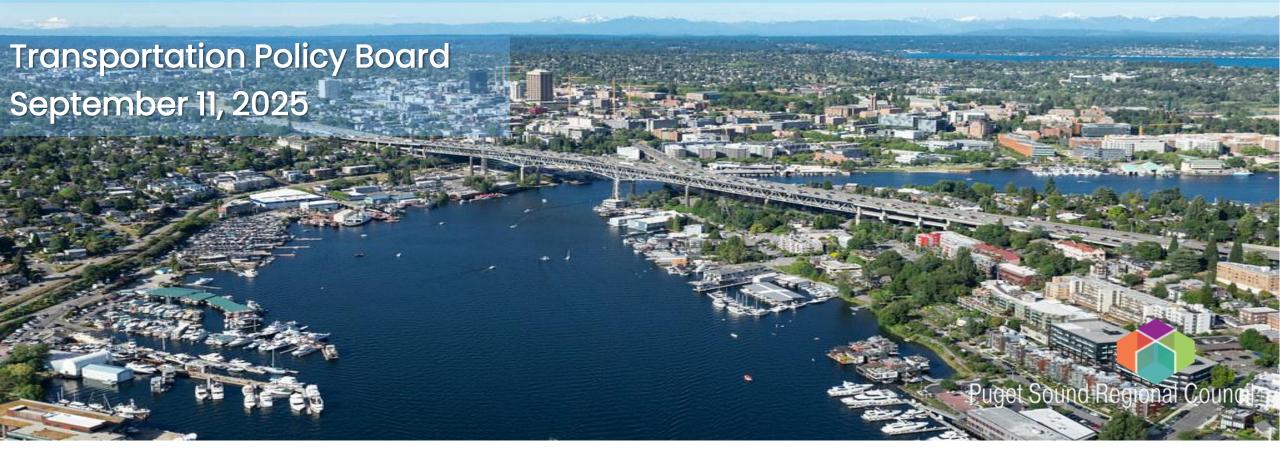
Regional Transportation Plan Scenario Analysis Results





We are leaders in the region to realize equity for all. Diversity, racial equity and inclusion are integrated into how we carry out all our work.

Today's Discussion – RTP Scenario Analysis Results

- Reminder of Scenario development process
- Review Scenarios and agenda packet materials
- Overview of analysis what's included, and what is not
- Summary results and comparison of Scenarios
- Board discussion and feedback
 - Action will be requested in October to select the draft plan investment and funding portfolio

RTP Available Revenues vs. Proposed Expenditures

Gap between available revenues and proposed expenditures = 21%

		NEI	EDS			REVENUES			
		System I	mprovements						
Sponsor Type	Maintenance, Preservation and Operations	Regional Capacity Projects	Other Improvements	Total	Current Law	New Revenue	Total	Revenue Gap	% of Revenue Gap
00004100	417.000	φ <u>τ</u> 000	Φ0.000	фо <u>г</u> 000	#10.000	Φ0	#10.000	ФО 200	100/
Counties	\$17,900	\$5,200	\$2,800	\$25,900	\$16,600	\$0	\$16,600	\$9,300	12%
Cities	\$45,300	\$8,500	\$23,200	\$77,000	\$41,700	\$0	\$41,700	\$35,300	45%
Local Transit	\$52,700	\$2,800	\$19,200	\$74,800	\$52,400	\$0	\$52,400	\$22,500	29%
Sound Transit	\$49,500	\$41,600	\$34,500	\$125,700	\$125,700	\$0	\$125,700	\$0	0%
WSF	\$11,300	\$0	\$6,100	\$17,300	\$11,400	\$0	\$11,400	\$6,000	8%
WSDOT	\$23,400	\$14,500	\$6,700	\$44,600	\$39,400	\$0	\$39,400	\$5,200	7%
Subtotal		\$72,700	\$92,500						
TOTAL	\$200,100	\$	165,200	\$365,300	\$287,100	\$0	\$287,100	\$78,200	21%



Investment Categories

Proposed Investments

- > Regional Capacity Projects (\$72.7 billion total)
 - Projects from cities, counties, ports, tribes, transit agencies and the state changing capacity on the regional system
 - Submitted from new comprehensive plans, current transit plans, new State Highway System Plan
 - Wide variety of investments meeting needs across modes, communities



Investment Categories

Proposed Investments

- > Programmatic System Improvements (\$92.5 billion total)
 - Broad categories of investments from cities, counties, transit agencies and the state
 - E.g., local roads, sidewalks, bike lanes, signals, intersection improvements, etc.
 - Identified from new comprehensive plans, current transit plans, new State Highway System Plan- all needed / desired investments to improve the system, projected through 2050



Investment Categories

Proposed Investments

- > Maintenance, Preservation and Operations (\$200.1 billion total)
 - Maximum investment = all asset categories are maintained, preserved and operated in a full state of good repair through 2050
 - Represents wide variety of assets and operations from cities, counties, transit agencies and the state
 - Includes estimates to address all backlogs, then maintain into the future; also includes operations of current transit system



Board Discussions to Date

To address the gap between all proposed investments and available revenues:

- Majority consensus to pursue a balance between levels of investment and new revenues
 - Reviewed different levels of investment across all categories: regional capacity projects, programmatic system improvements, maintenance / preservation, growth in transit service
 - Reviewed different levels of new revenues



Four Scenarios Advanced

Scenario 1
Current Funding
Sources

Scenario 2B*
Focus on
Maintenance
and Transit

Scenario 2A More Than Today

Scenario 3 Maximum Investment



^{*} Developed from Board polling

Scenario 1 – Current Funding Sources

Regional Capacity Projects with some level of committed funding Programmatic
System
Improvements at 70%
of full unconstrained
needs

Maintenance,
Preservation and
Operations at today's
levels

Local Transit Service Growth at 1.0% per year No New Revenues required



Scenario 2A – More Than Today

Regional Capacity
Projects starting
before 2040

Programmatic
System
Improvements at 80%
of full unconstrained
needs

Maintenance,
Preservation and
Operations at 90% of
optimal levels

Local Transit Service Growth at 1.5% per year New Revenues required = \$42.8 billion



Scenario 2B – Focus on Maintenance and Transit

Regional Capacity
Projects starting
before 2040

Programmatic
System
Improvements at 70%
of full unconstrained
needs

Maintenance,
Preservation and
Operations at full,
optimal levels

Local Transit Service Growth at 2.0% per year New Revenues required = \$48.9 billion



Scenario 3 – Maximum Investment

All Regional Capacity
Projects

Programmatic System Improvements at 100% of identified needs

Maintenance, Preservation and Operations at full, optimal levels

Local Transit Service Growth at 2.0% per year New Revenues required = \$78.2 billion



Additional Scenario Background

Information on *INPUTS* to the scenario analyses:

- 33% growth in both population and jobs by 2050
 - > 1.4 million people, 740,000 jobs
- Assumptions about a Road Usage Charge are <u>not</u> included in the scenario analyses
 - Further discussions on the financial strategy will resume in October



Additional Scenario Background

Information on *OUTPUTS* for each scenario:

- Programmatic investments cannot be modeled, but qualitative comparison across scenarios are included
- An extensive suite of performance metrics will be included in the final plan
 - Scenario results represent key metrics related to the board identified policy priorities



Summary of Scenario Analysis Results

Overall:

- Levels of total investment across the four scenarios above the base year ranges from \$287 billion to \$365 billion
- Modest differences between scenarios for many of the modeled performance metrics
- Greater distinctions between scenarios from the spatial and qualitative measures



Overall performance is similar by scenario

Metric	Scenario #1	Scenario #2a	Scenario #2b	Scenario #3			
VMT & Delay							
Daily Vehicle Miles Traveled	98,398,000	98,650,000	98,716,000	98,731,000			
Daily VMT per Capita	17.0	17.0	17.1	17.1			
Daily Vehicle Hours of Delay	339,000	332,000	332,000	333,000			
Annual Delay per Capita	18.7	18.4	18.4	18.4			
Air Quality & Climate							
Greenhouse Gas Emissions	6,910	6,960	7,000	7,000			
PM 2.5	0.79	0.79	0.79	0.79			
Active Transportation							
Walk Trips	4,460,000	4,452,000	4,452,000	4,454,000			
Bike Trips	391,000	390,000	391,000	391,000			
Minutes Walking & Biking per day	14.2	14.2	14.2	14.2			
Safety							
% of Projects on the High Injury Network	26%	55%	55%	63%			



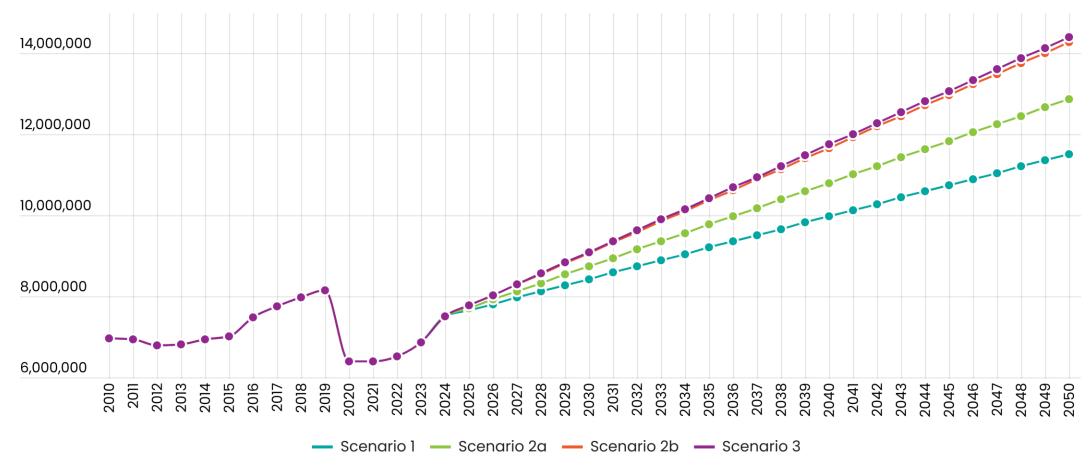
Overall performance for trucks is similar by scenario

Metric	Scenario #1	Scenario #2a	Scenario #2b	Scenario #3
Daily Truck Trips	386,000	386,000	386,000	386,000
Annual Truck Delay per Trip	23.0	22.5	22.5	22.3
Daily Truck Miles per Trip	18.5	18.5	18.5	18.5
% of Freight Network with Severe Congestion	8.9%	8.5%	8.4%	8.4%



Every scenario has significant growth in transit service

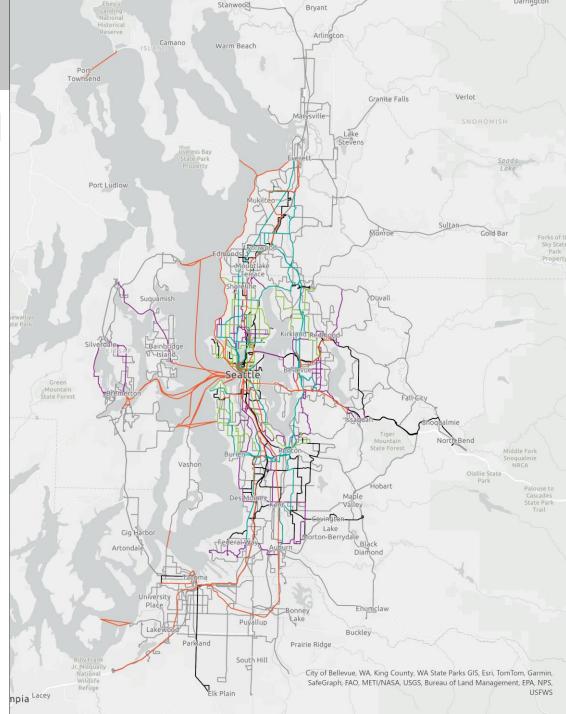
Annual Revenue-Hours by Scenario





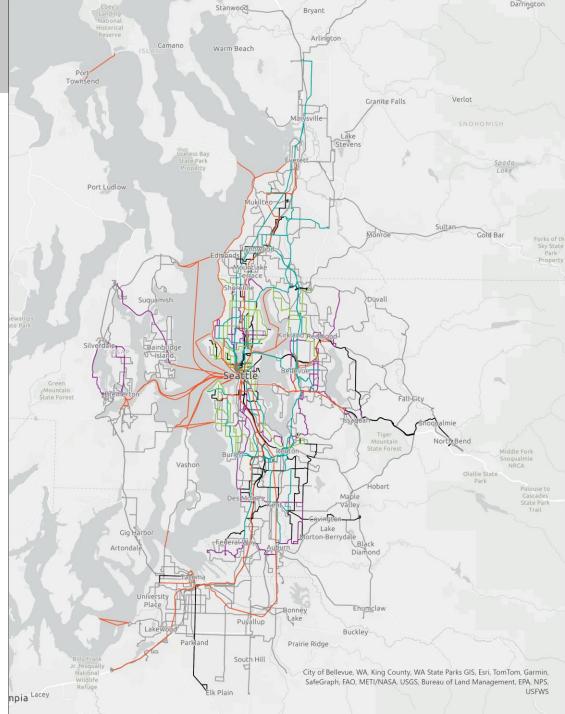
Transit: Scenario 1

Metric	Today	Scenario #1	Change					
Transit Routes								
Total Routes	307	316	9					
Local Routes	104	104	-					
All-Day Routes	28	64	36					
Frequent Routes	43	43	-					
BRT Routes	11	17	6					
High-Capacity Transit Routes	27	33	6					
Regiona	l Transit Metrics	S						
Annual Revenue-Hours	7,517,640	11,522,000	53%					
Annual Boardings	173,324,000	505,812,000	192%					
Daily Transit Trips	351,000	1,010,000	188%					
People in Transit Supportive	Densities witho	ut Supportive Trans	it					
Gap near Local Transit	948,000	1,408,000	460,000					
Gap near All-Day Transit	444,000	719,000	275,000					
Gap near Frequent Transit	60,000	298,000	238,000					
Gap near High-Capacity Transit	91,000	412,000	321,000					



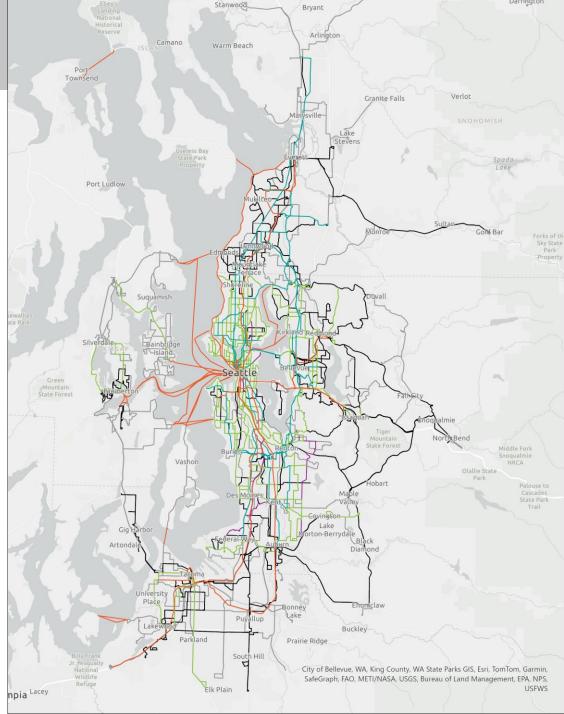
Transit: Scenario 2a

Metric	Today	Scenario #2a	Change					
Transit Routes								
Total Routes	307	319	12					
Local Routes	104	107	3					
All-Day Routes	28	66	38					
Frequent Routes	43	47	4					
BRT Routes	11	22	11					
High-Capacity Transit Routes	27	36	9					
Region	al Transit Metri	cs						
Annual Revenue-Hours	7,517,640	12,874,000	71%					
Annual Boardings	173,324,000	530,798,000	206%					
Daily Transit Trips	351,000	1,036,000	195%					
People in Transit Supportive	e Densities with	out Supportive Trans	it					
Gap near Local Transit	948,000	1,324,000	376,000					
Gap near All-Day Transit	444,000	661,000	217,000					
Gap near Frequent Transit	60,000	248,000	188,000					
Gap near High-Capacity Transit	91,000	412,000	321,000					



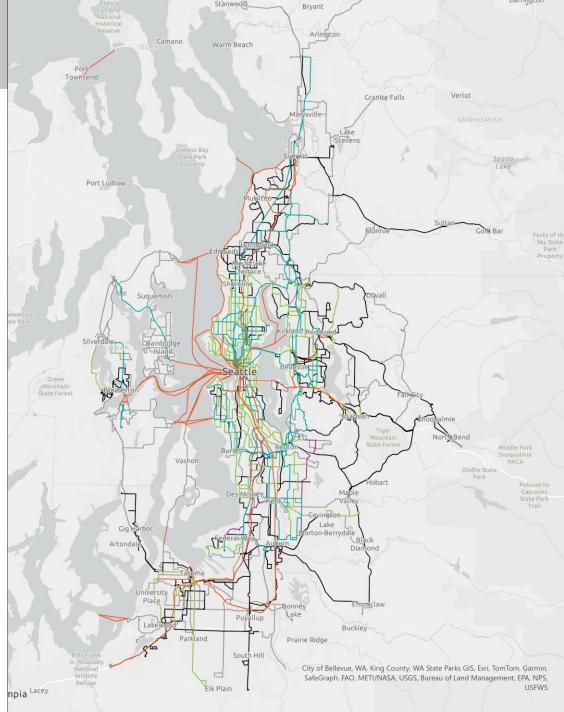
Transit: Scenario 2b

Metric	Today	Scenario #2b	Change					
Transit Routes								
Total Routes	307	319	12					
Local Routes	104	183	79					
All-Day Routes	28	75	47					
Frequent Routes	43	90	47					
BRT Routes	11	22	11					
High-Capacity Transit Routes	27	36	9					
Regional Transit Metrics								
Annual Revenue-Hours	7,517,640	14,278,000	90%					
Annual Boardings	173,324,000	531,423,000	207%					
Daily Transit Trips	351,000	1,032,000	194%					
People in Transit Supportive	e Densities with	out Supportive Trans	it					
Gap near Local Transit	948,000	639,000	-309,000					
Gap near All-Day Transit	444,000	651,000	207,000					
Gap near Frequent Transit	60,000	105,000	45,000					
Gap near High-Capacity Transit	91,000	412,000	321,000					



Transit: Scenario 3

Metric	Today	Scenario #3	Change					
Transit Routes								
Total Routes	307	319	12					
Local Routes	104	183	79					
All-Day Routes	28	76	48					
Frequent Routes	43	93	50					
BRT Routes	11	34	23					
High-Capacity Transit Routes	27	36	9					
Regional Transit Metrics								
Annual Revenue-Hours	7,517,640	14,407,000	92%					
Annual Boardings	173,324,000	531,422,000	207%					
Daily Transit Trips	356,000	1,028,000	193%					
People in Transit Supportive	Densities witho	ut Supportive Trans	it					
Gap near Local Transit	948,000	639,000	-309,000					
Gap near All-Day Transit	444,000	649,000	205,000					
Gap near Frequent Transit	60,000	105,000	45,000					
Gap near High-Capacity Transit	91,000	412,000	321,000					



Comparison of transit across scenarios

Metric	Scenario #1	Scenario #2a	Scenario #2b	Scenario #3			
Percentage above Today							
Transit Service Hours	53.4%	71.4%	90.0%	91.5%			
Transit Trips	183.7%	191.3%	189.9%	188.8%			
Total increase in people within	1/4 mile of Higl	n-Capacity Trai	nsit				
Total People	109,000	127,000	127,000	178,000			
People of Color	219,000	250,000	250,000	303,000			
People with Lower Incomes	191,000	222,000	222,000	267,000			
People with Limited English	174,000	203,000	203,000	244,000			
People with a Disability	170,000	201,000	201,000	242,000			
Older adults	132,000	147,000	147,000	174,000			
Youth	50,000	67,000	67,000	92,000			
Transit Supportive Densities an	d Gaps in Serv	ice					
Gap within 1/4 mile of Local Transit	1,408,000 (33%)	1,324,000 (31%)	639,000 (15%)	639,000 (15%)			
Gap within 1/4 mile of All-Day Transit	719,000 (28%)	661,000 (26%)	651,000 (25%)	649,000 (25%)			
Gap within 1/4 mile of Frequent Transit	298,000 (17%)	248,000 (14%)	105,000 (6%)	105,000 (6%)			
Gap within 1/4 mile of High- Capacity Transit	412,000 (33%)	412,000 (33%)	412,000 (33%)	412,000 (33%)			

