

# 2030 GHG Analysis and Climate Implementation Strategy

Transportation Operators Committee | January 25, 2023



Puget Sound Regional Council

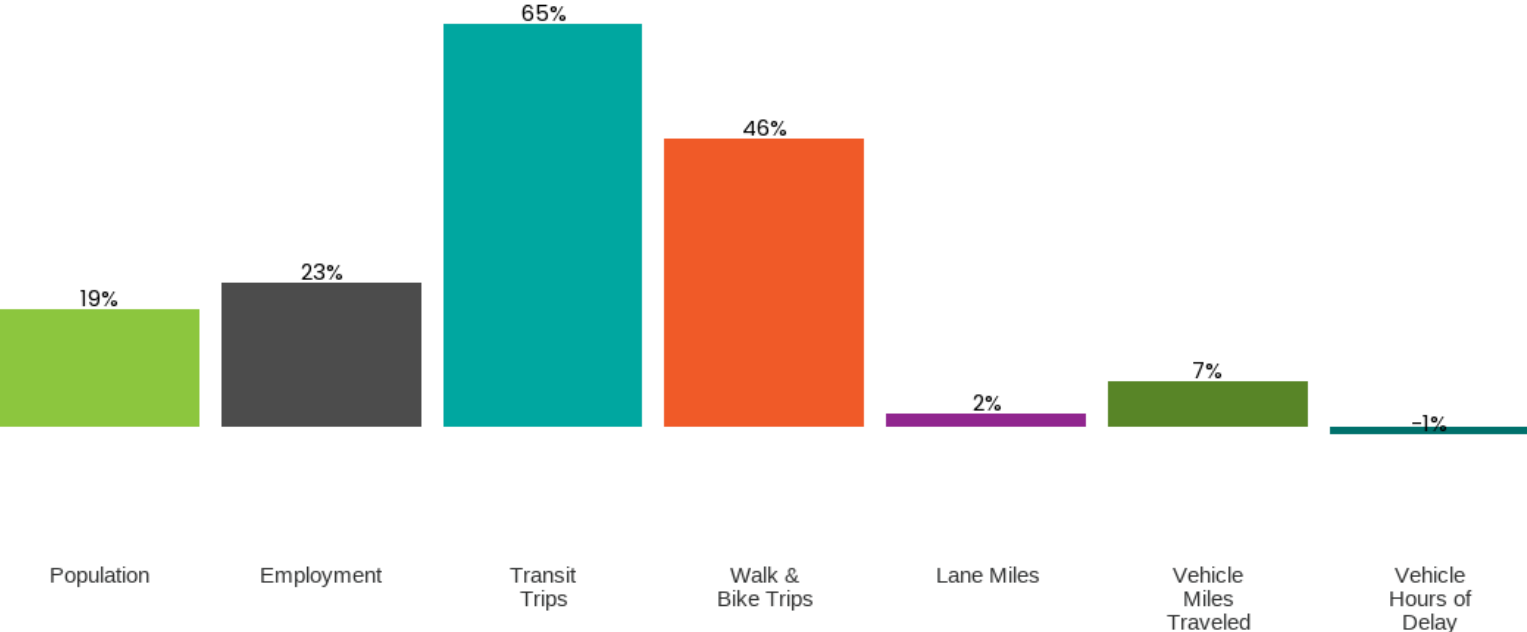
# Today's Briefing

- Work to date
- Overview of the technical report
- Analysis results of sensitivity tests
- Discussion of next steps



# The Plan is focused on transportation options

Percent Change between Base Year and 2030 Plan

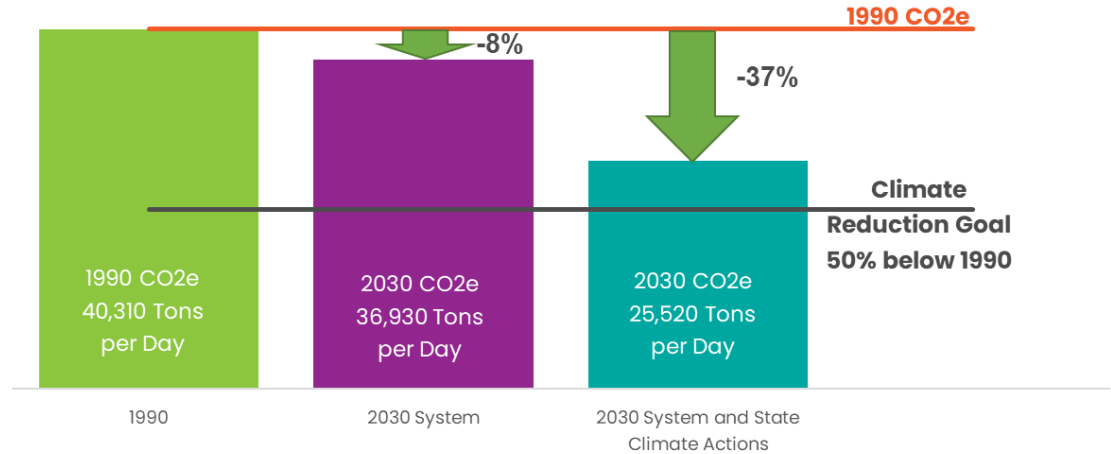


Source: PSRC SoundCast Activity Based Model, Fall 2022 for King, Kitsap, Pierce and Snohomish counties.



# 2030 GHG Gap Analysis

- The 2030 system reflects VISION 2050, the RTP and the region's vehicle fleet under current federal fuel economy standards
- Further gains are seen from the latest adopted state actions – clean fuels, zero emission vehicles and the Climate Commitment Act



**The region needs to reduce GHG an additional 13% to meet climate goals**



# Sensitivity Tests



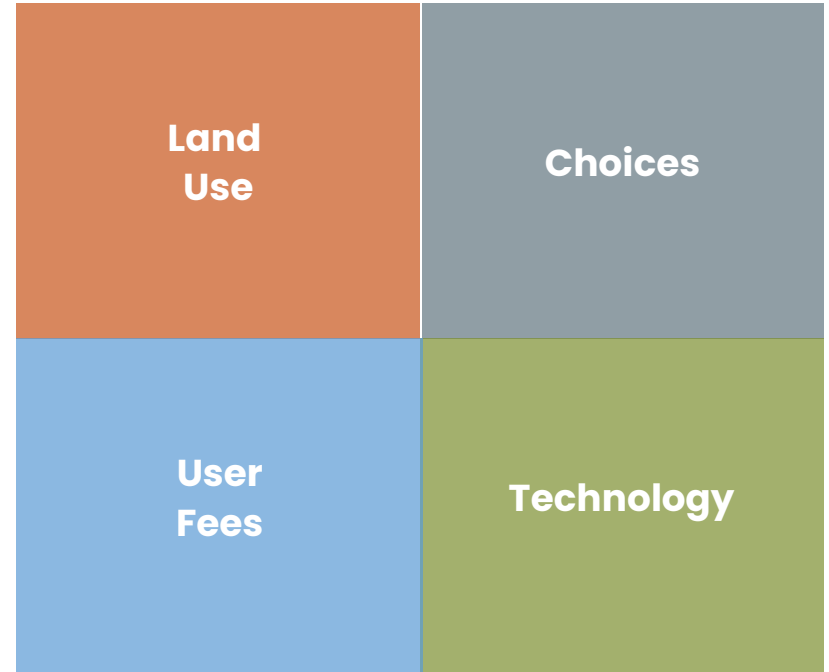
# Four-Part Greenhouse Gas Strategy

**Land Use:** VISION 2050 regional growth strategy

**Choices:** Expanded and integrated regional transit network, active transportation and other multimodal investments

**User Fees:** State facility tolls, transition to road usage charge in later years

**Technology:** Shift to zero emission vehicles, Clean Fuels Standard, etc.



# Sensitivity Tests

## User Fees

- Tested different rates of a **Road Usage Charge (RUC)**, deviating from the assumed rates in the RTP of \$0.10/mile Peak and \$0.05/mile Off-Peak
- Changes in emissions from the plan between +4% to -10%

## Choices

- Tested increasing transit access, frequencies, and accelerating network changes
- Given when growth will occur and where transit is already expanding by 2030, minimal impacts to emissions from the plan



# Sensitivity Tests

## Choices

- Tested work from home levels at 2021 levels of 30%
- Strong emission reduction potential of up to 10%
- Recognize that working from Home is not available for all markets and locations and lowers transit ridership

## Choices

- Tested the elimination of roadway capacity projects
- No change to emissions; reduces VMT slightly but increases delay
- Projects support transit and freight movement as well as congested areas, and impact performance of the system





# Sensitivity Tests

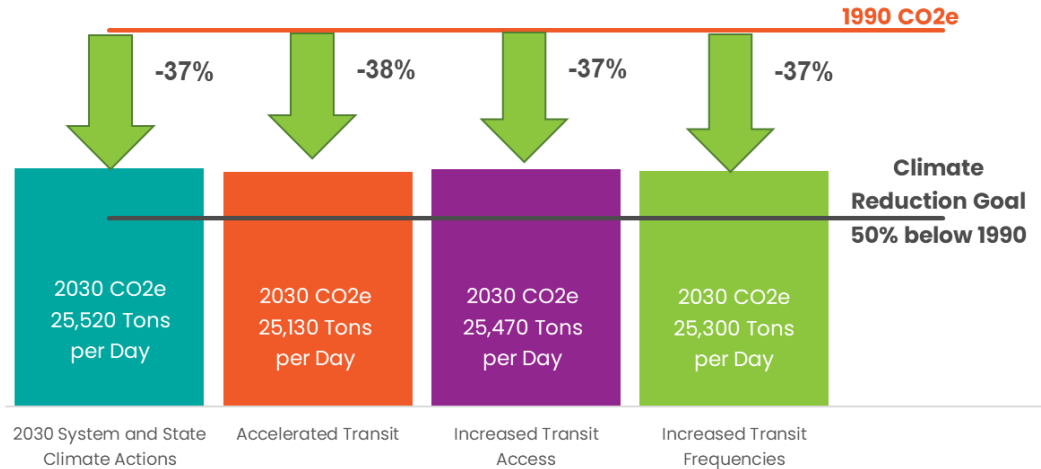
## Technology

- Tested an increase from the base to 100% of new vehicle sales by 2030 being **Zero Emission Vehicles (ZEV)**
- Current state actions are forecasted to result in ZEVs being approximately 65% of all new sales by 2030
- Approximate additional emission reductions up to 7%



# 2030 Transit

- Increased transit access has a bigger impact in 2050 when the system is covering more places.
- Increased frequency increases transit usage and lowers delay and VMT but has minimal emission impacts in 2030.
- Accelerating Transit and the increased accessibility has a greater impact in 2050 due to further population growth around those station areas, especially around BRT.



# Hybrid Scenario

User  
Fees

Choices

Technology

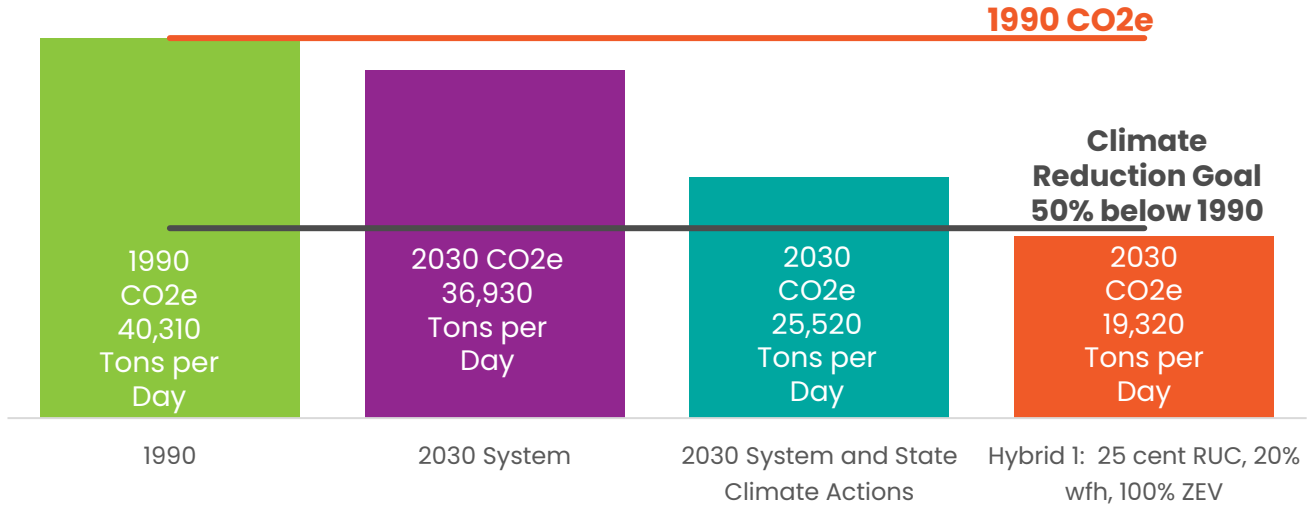
Looked at the three most promising levers from the sensitivity testing:

- RUC – new test at midpoint of sensitivity tests -- \$.25 per mile
- Work from home – new test at midpoint of observed levels -- 20%
- Increase in ZEV sales – *same as sensitivity test*



# Hybrid Scenario

*The combination of the 2030 RTP, VISION 2050, state actions and these three sensitivity levers have the capacity to achieve the 2030 climate goal of 50% below 1990 levels*



*Continued commitment to implementation of each element is critically important in order to achieve the results*



# Next Steps

From board and committee feedback to date, additional hybrid scenarios to pursue:

- *Current RTP levels of RUC in combination with additional levers*
- *Include transit access / frequency sensitivities*
- *Consider more aggressive ZEV turnover*

Additional TOC feedback on the transit sensitivity tests for 2030?



# Thank you

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