2030 GHG Analysis and Climate Implementation Strategy

Transportation Policy Board | January 12, 2023

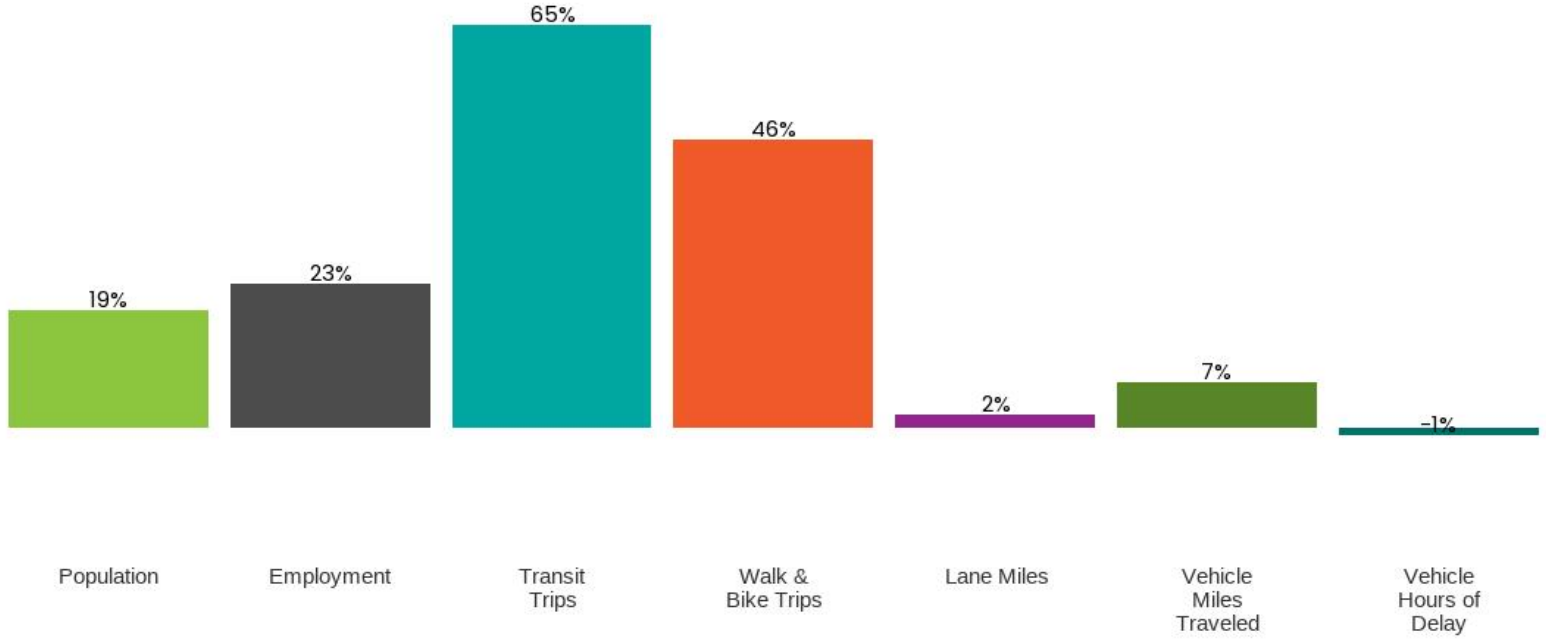
Puget Sound Regional Council

Today's Briefing

- Reminder of work to date and previous briefings
- Overview of the technical report
- Analysis results of a hybrid scenario
- Discussion of next steps

The Plan is focused on transportation options

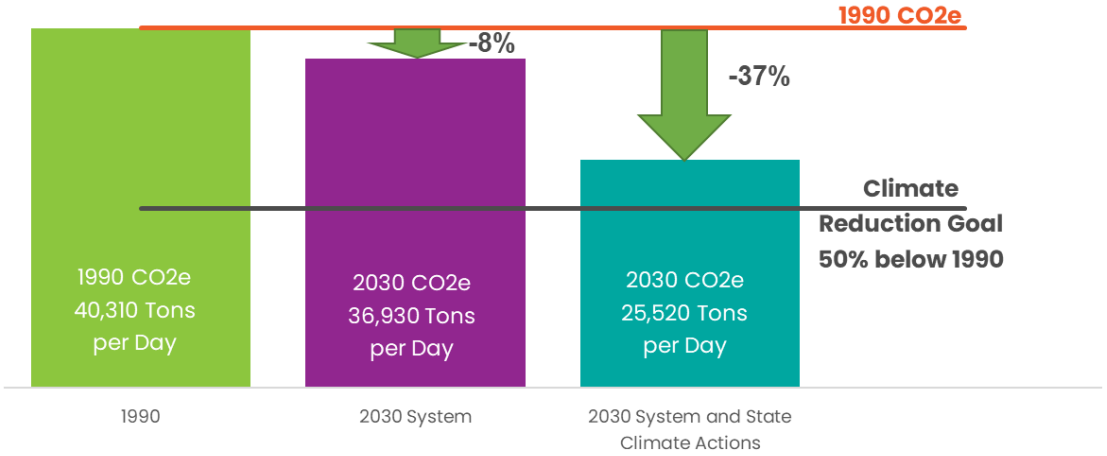
Percent Change between Base Year and 2030 Plan



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

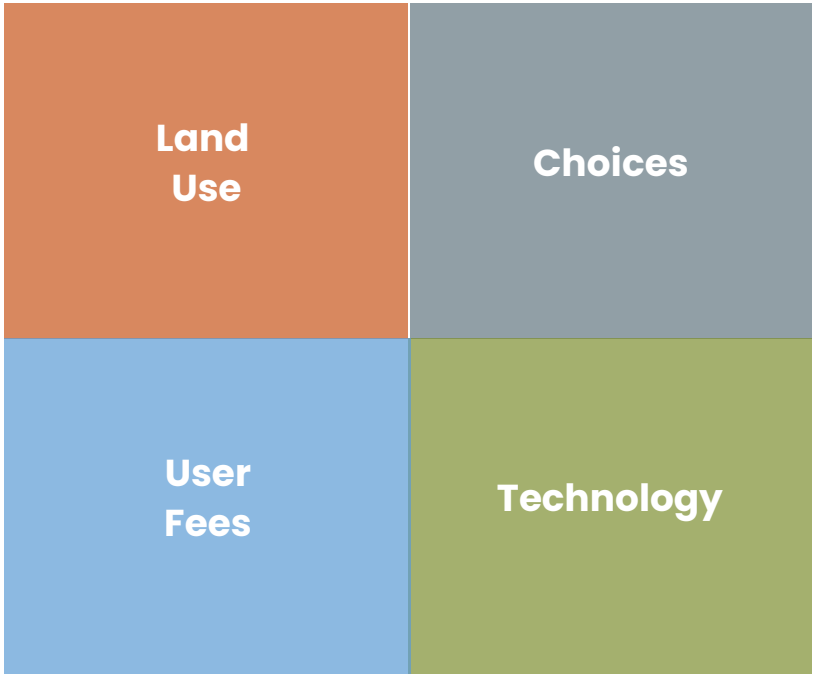
Four-Part Greenhouse Gas Strategy

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%

Hybrid Scenario

User Fees

Choices

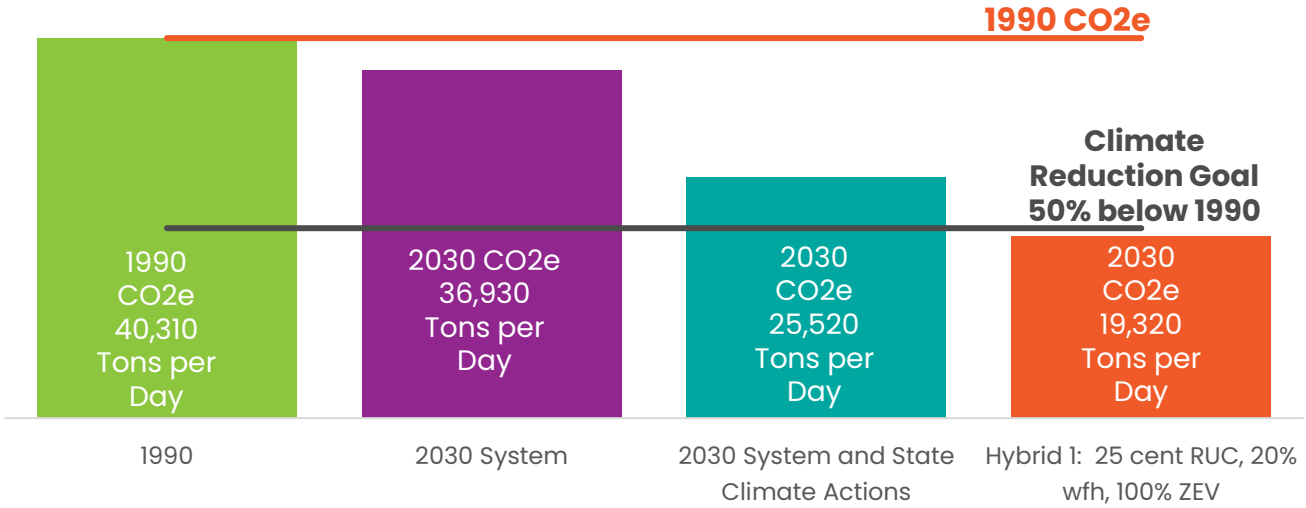
Technology

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

Board feedback on the hybrid scenario and next steps –

- Are there additional levels of RUC, work from home or ZEV that should be tested?
- Are there other hybrid combinations to test?
- Feedback on implementation actions and next steps?

Thank you

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