

# NW Transportation Conference

## Climate-Friendly & Equitable Communities (CFEC) Vehicle Miles Traveled (VMT)

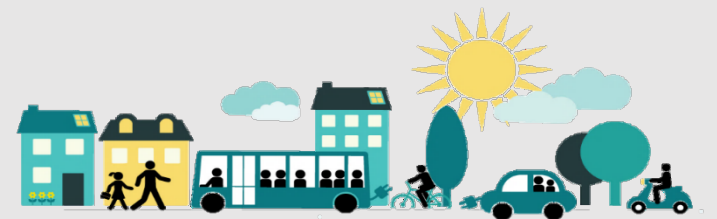
Zachary Horowitz

March 4, 2024

# Presentation Outline

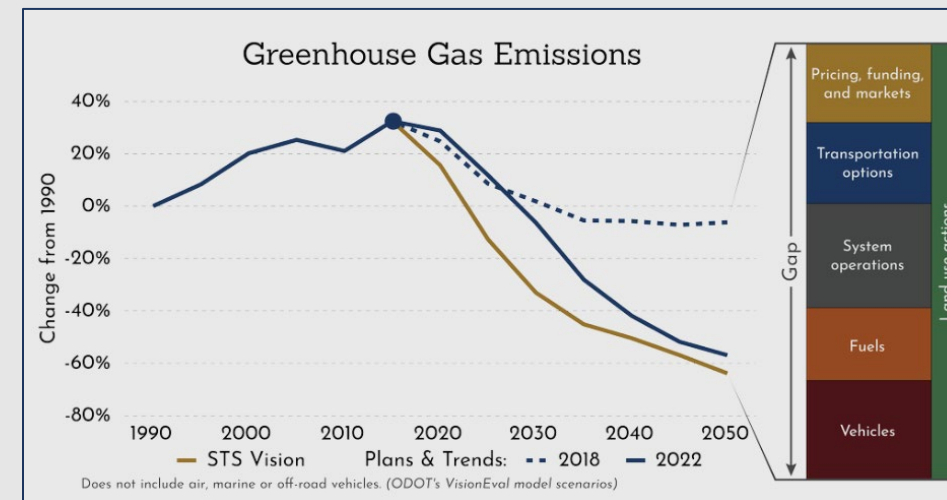
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- A brief history of greenhouse gas planning in Oregon
- Statewide policy to local plans - how did we get to Vehicle Miles Traveled (VMT) as a performance measure?
- Implementation within Transportation System Plans (TSP)
  - Rules to know
  - Key planning “levers” influencing VMT
  - VMT calculation methodology



# CFEC Background

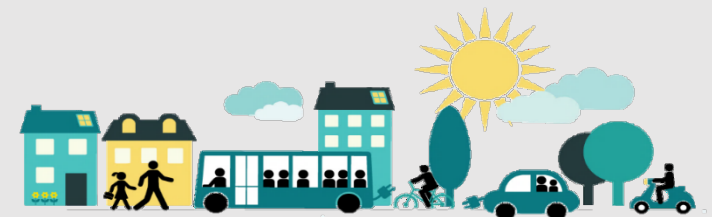
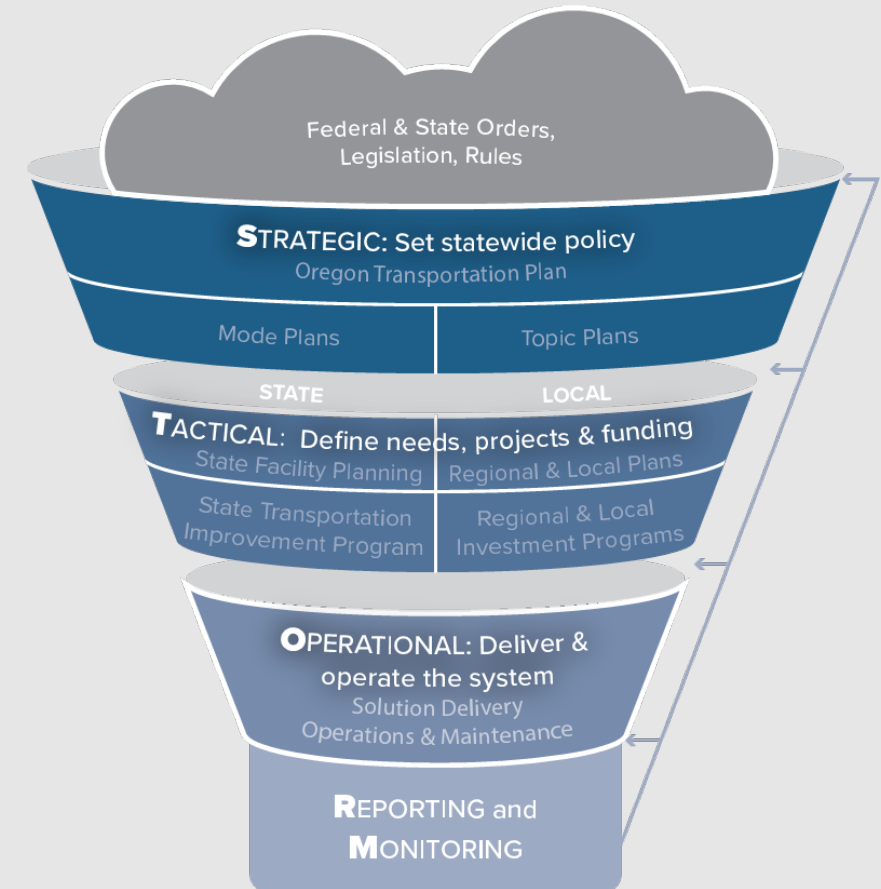
- **ORS 468A.205** was adopted by Legislature in 2007, setting a goal to reduce GHGs to 75% below 1990 levels by 2050.
- In 2011, LCDC adopted rules (OAR 660-044) that set **GHG Reduction Targets** for metropolitan areas of the state.
- **Statewide Transportation Strategy** outlined actions to meet that goal (2013)
- **Executive Order 20-04** directed ODOT and DLCD to adopt amendments to the TPR directing cities to meet GHG reduction targets through transportation plans



Source: [Oregon Transportation Emissions website](#)

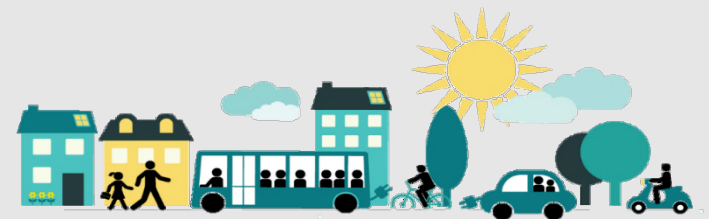
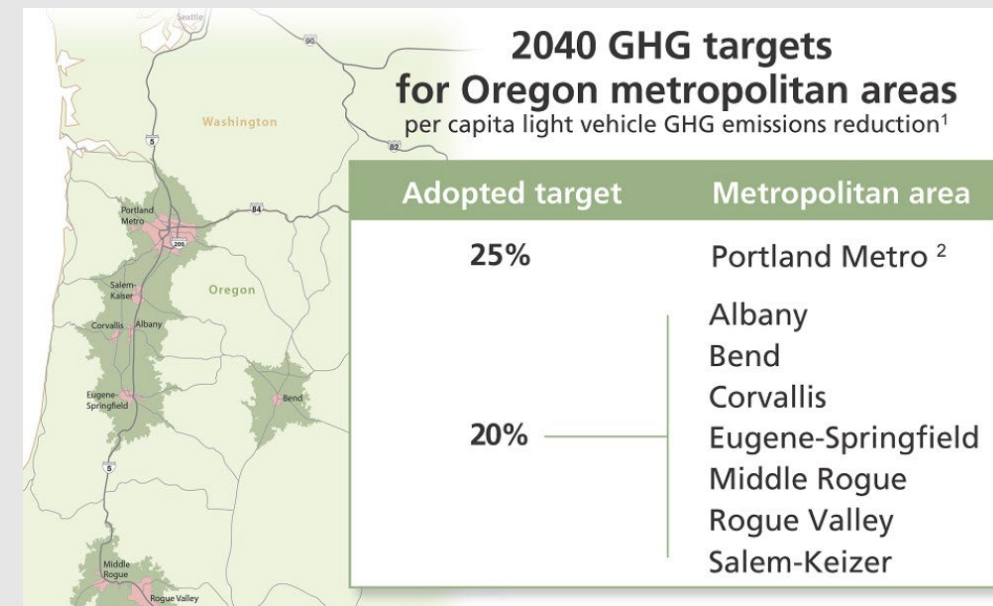
# CFEC in the Planning Process

- Statewide Transportation Strategy (STS)
- Scenario Planning (OAR 660-044)
- Transportation Planning Rule (OAR 660-012)
  - Transportation System Plans
  - Climate Friendly Areas (CFA)
  - Performance measures
  - VMT analysis and reporting



# Metropolitan Greenhouse Gas (GHG) Reduction

- ODOT Climate Office models GHG through the VisionEval (formerly Greenstep) model
  - Required in Metro, Salem and Eugene
  - Regional targets set in OAR 660-044
  - VisionEval is not the same as a travel demand model
- Ties to the TPR (OAR 660-012) via performance measures
  - Housing, employment, active transportation, transportation options, parking, etc.
  - And...VMT per capita



# Household-based (HH) VMT per capita

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- This is the key performance measure from the new TPR
- Cities and counties subject to the rules must develop CFEC-compliant TSPs that reduce HH-based light vehicle VMT per capita

$$GOAL = \text{Emission Rate} \times TARGET$$

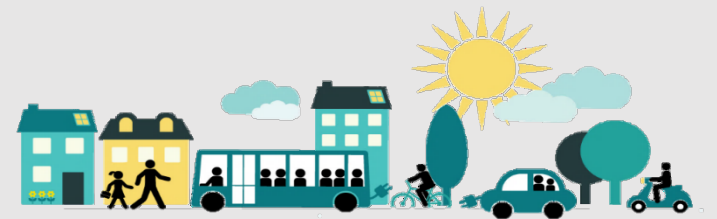
$$\frac{\text{Emissions}}{\text{Persons}} = \overset{\text{or equivalently}}{\frac{\text{Emissions}}{\text{Miles}}} \times \frac{\text{Miles}}{\text{Persons}}$$

# What About a Technology Solution?

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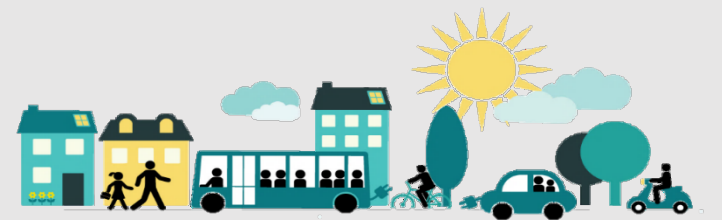
- Electric vehicles – what if everyone drove an EV?
  - Still need to generate and transport electricity
  - Still need to construct and develop the infrastructure
  - Still need to build EVs, maintain roadways, etc.
  - Will take a long time based on current fleet mix
- EVs + Pricing (tolls, VMT pricing, HOT lanes)
  - Effective to raise revenue, reduce congestion and manage demand
  - Not implemented yet

**Bottom line: Technology helps, but VMT needs to be reduced to meet statewide climate goals**



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# VMT in TSPs: What to Know



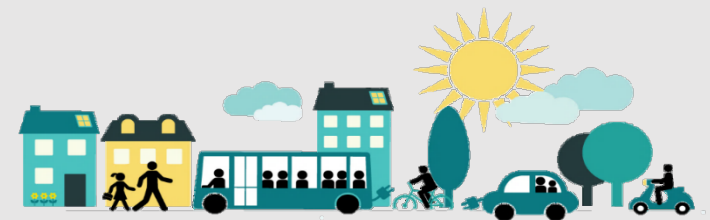


# Rule 660-012-0160 (Reducing VMT in TSPs)

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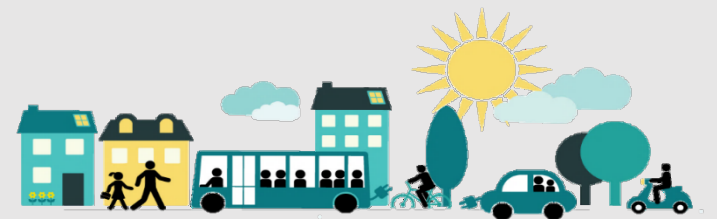
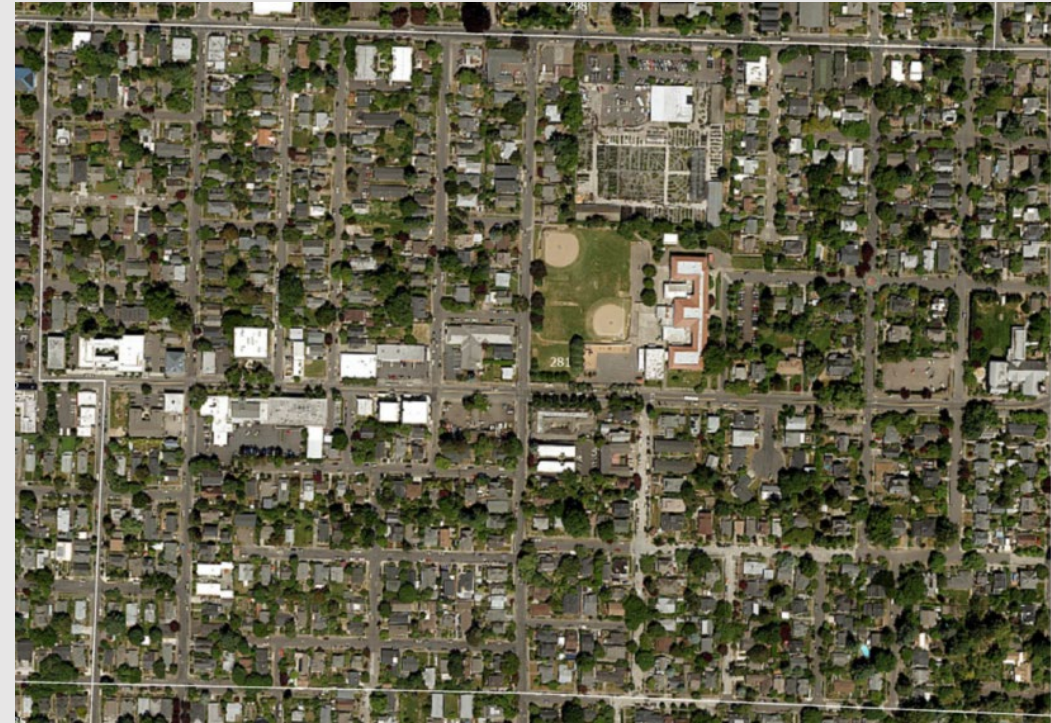
## Key Messages:

- Calculated based only on a jurisdiction's households
- Based on the TSP fiscally-constrained project list
- TSPs may only be adopted if the horizon year VMT per capita is no greater than the base year VMT per capita
- VMT is measured on a per capita basis



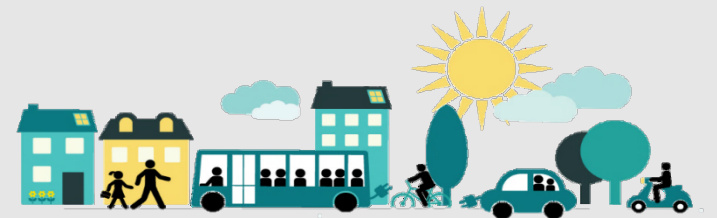
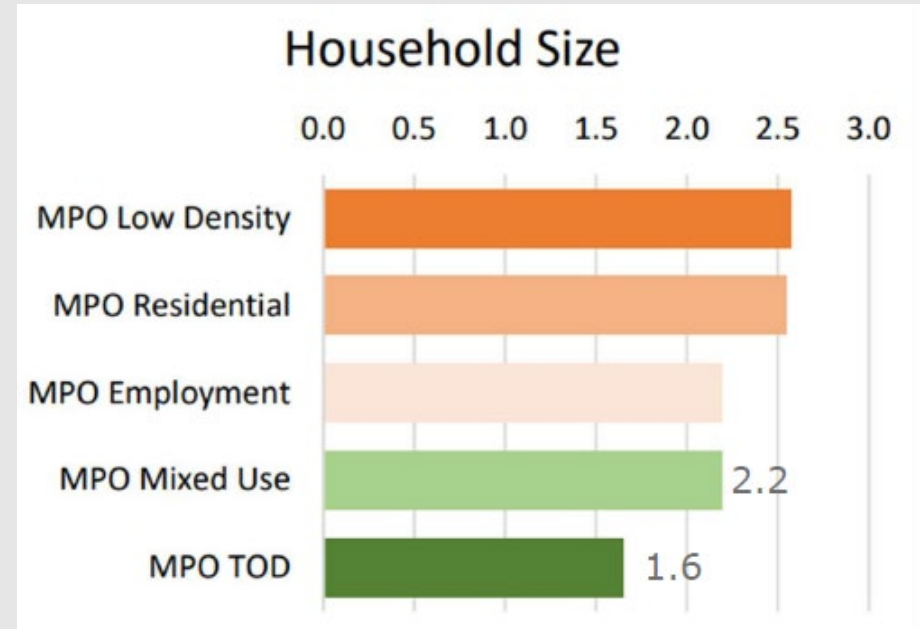
# VMT “levers” within TSPs: Land Use

- Land use inputs
  - Climate Friendly Areas (CFAs)
  - Elimination of Rule 660-012-0060 in CFAs
  - Mixed-use, higher density neighborhoods
  - Transportation projects that support short, non-auto trips
  - Parking rules



# VMT “levers” within TSPs: Demographics

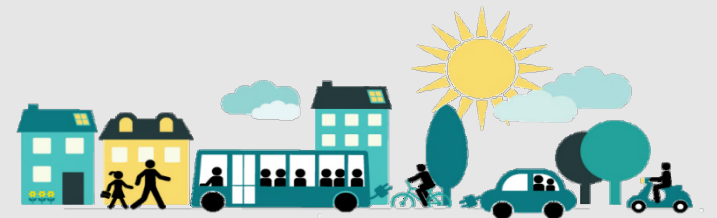
- Demographic inputs
  - Future population forecasting – going beyond just counting people
  - Household allocations in CFAs
    - Household size
    - Single-family/multi-family housing
  - Housing needs assessments – bring your best and newest data (and make time to work with it!)
  - Employment forecasting/type/allocation



# VMT “levers” within TSPs: Project Selection

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- Project prioritization
  - Based on community values and planning goals
  - Use pedestrian/bicycle/transit inventories
  - Level of Traffic Stress (LTS) maps and tools
  - Incorporate PlaceTypes and urban design
  - Identify/prioritize funding resources



# VMT Calculation

- VMT definition per OAR 660-012-0005(64)

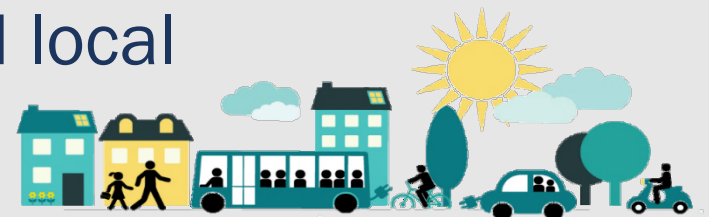
- Originating within a jurisdiction
- Household-based
- Light vehicle

	VMT				
	1	2	3	4	
1	1.76	2.35	8.82	2.35	15.29
2	4.12	0.29	4.71	5.29	14.41
3	6.92	5.54	6.23	2.31	21.00
4	2.53	3.79	1.58	0.71	8.61
	15.33	11.97	21.34	10.67	59.31

- When is VMT required to be calculated?

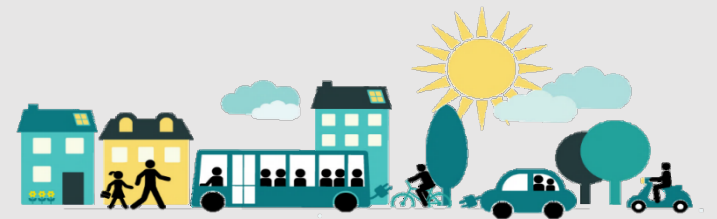
- Based on fiscally-constrained project list
- Exempt unless there is an -0830 project

- Rule 660-012-0215 allows for VMT as an adopted local performance standard



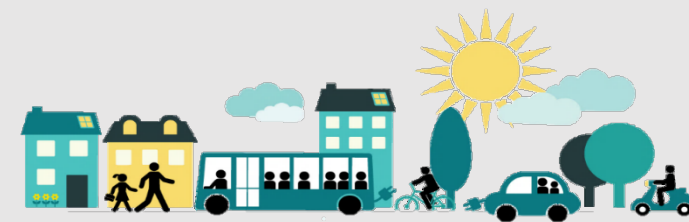
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# Discussion & Questions



# Contact Information

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