

## **Transportation GHG Emissions Reduction Options**

## **Comparison of Global Warming Commission Recommendations and State Actions 7/10/2020**

Category	GWC Recommendation	Actions Taken by State Agencies	Other Actions Required
Electric Vehicles	(1) Authorize the Energy Trust of Oregon to provide marketing, financing, and technical support for EV home charging systems	N/A	Legislative action required
	(2) Authorize utilities to deploy and rate-base 'FastCharge' infrastructure	Public Utilities Commission (PUC) has been working on these issues through their transportation electrification planning dockets: UM 1810 (PacifiCorp), UM 1811 (PGE), and UM 1815 (Idaho Power). This is also being discussed in Pacific Power's rate case UE 374.	
	(3) All new garage structures should be required to be preplumbed during construction for conduit (e.g., making them 'EV ready')	The Building Codes Division (BCD) has indicated they will add this requirement to residential building codes by October 1, 2022.	This can also be accomplished through local government ordinances.
	(4) By 2025, all existing garage structures should have been retrofitted with conduit (e.g., making them 'EV ready')	No current or planned state activities.	In general, existing structures are only added to building codes as something to be done when permitting for large structural updates for a particular building, and not as a requirement for all buildings.
	(5) Devise solutions to charging infrastructure for EV users without home or workplace garage charging *, **	This will be a component of the Oregon Department of Transportation's (ODOT) electric transportation needs assessment, as directed by Executive Order 20-04.	
	(6) Develop an app-based charging reservations system (7) Develop V2G, V2H Standards	No current or planned state activities.  This technology is too nascent	This action would likely need to

	for EVs	for specific standards. No current or planned state	be taken at the federal level.
	(8) Devise solutions to the first	activities.  Department of Environmental	The IRS also provides tax credits
	cost barrier for EVs and home/workplace charging**	Quality's (DEQ) clean vehicle rebate and charge ahead rebate help reduce initial costs for vehicles. The Charge Ahead rebate is available for low- and middle-income households.	to help offset the price of EVs.
	(9) Increase EV penetration of	Actions occurring through the	
	delivery, service vehicle fleets	Statewide Transportation Strategy (STS) Interagency Working Group (with ODOT, Oregon Department of Energy (ODOE), DEQ, and Department of Land Conservation and Development (DLCD)) include developing a transportation electrification infrastructure analysis, which would include these vehicles. The degree of	
		inclusion is yet to be determined.	
	(10) Incentivize use of electric	No current or planned state	
	bikes	activities.	
	(11) Allow public EV charging providers to generate credits in the Clean Fuels Program based on capacity rather than kWh consumption	No current or planned state activities.	
	(12) Adopt interim EV incentives	DEQ's Charge Ahead rebate is	
	for low-income, rural areas**	designed for low- and moderate-income Oregonians. There are no rural-specific incentives.	
Public Transit, Bike, and Pedestrian	(1) Adopt mode-blind transportation planning/funding	Within the constraints of funding requirements, the state has some discretion with funds. ODOT will be looking at its investment programs to better consider climate and support GHG reduction investments.	
	(2) Afford transit priority passage on roads	No current state activities, but DLCD is reviewing the Transportation Planning Rule requirements as one their strategies for the STS.	Most control is at the local level, but ODOT does own some roadways in urban areas.
	(3) Electrify public transit	ODOT, ODOE, and DEQ have partnered on providing cost savings and business case information on electric and alternative fuel buses, including ODOT's development of a cost	

		analysis tool for differently fueled bus types. ODOT helps to support transit electrification through investment programs	
	(1)	and plans to work with agencies on becoming net-zero.	
	(4) Urban transit should extend service levels and be free of charge	No current or planned state activities. The STIF funding increase provided in the omnibus transportation bill, HB 2017 (2017), has funded extension of service levels.	This is under local jurisdiction. Additional transit funding would be needed to make this possible. The Oregon Legislature could consider increasing the employee payroll tax, and local jurisdictions could consider local levies and taxes.
	(5) Incentivize bicycle use with facilities and interconnected, separated land networks	oDOT bicycle and pedestrian investments are focused on filling gaps in the system and making biking and walking options more accessible. DCLD encourages this, but there are no specific programs in place. DLCD is reviewing the Transportation Planning Rule requirements as one their strategies for interagency collaboration to implement the STS.	Additional funding for biking and walking. Review STIP for opportunities.
	(6) Elevate urban pedestrian network accessibility and connectivity	See above item #5.	
Trucks	(1) Develop electrolytic hydrogen fuel supplies and fueling options	ODOT is looking into the pros and cons for the development of a hydrogen fueling network for medium- and heavy-duty vehicles and is coordinating with neighboring states.	
	(2) Low-carbon bridge fuels for trucks	Oregon DEQ's Clean Fuels Program is working to reduce the carbon intensity of all transportation fuels, which includes providing a market for the sale and purchase of clean fuels credits to meet program goals. In addition, the STS Interagency Working Group will be developing a medium- duty/heavy-duty alternative fuels analysis by vehicle use case, and ODOE will be doing an initial assessment of this in its Biennial Energy Report due this November 1, 2020.	

Carbon Efficient Land Use/Urban Design	(1) Require and support MPO carbon scenario planning.* The state should condition discretionary state transportation funding on MPO scenario planning and implementation  (2) Condition STIP funding on	As directed in EO 20-04, ODOT and DLCD are to identify and implement means to provide financial and technical assistance to MPOs to reduce GHG emissions resulting from transportation and land use plans.  Once DLCD/LCDC rulemaking is	Climate pollution planning requires MPOs to adopt plans consistent with DLCD GHG targets. Scenario planning was completed by Metro and Eugene-Springfield MPOs.
	MPO scenario planning where applicable, or otherwise showing carbon outcomes*	complete and as part of ODOTs efforts to implement the STS, consideration will be given to ways investment programs can be aligned in support of climate.	
	(3) Integrate carbon reduction into state transportation funding	This is integrated into the STS Interagency work and ODOT is required in EO 20-04 to consider GHG emissions when making STIP decisions.	
	(4) Deploy congestion pricing	The Value Pricing program is well underway in the Portland area, seeking federal approval for congestion pricing and developing potential options. Additional statewide policy work around pricing and tolling is under development.	The ability to implement most congestion pricing or tolling programs is determined through approval from the Federal Highway Administration.
	(5) Planning should prioritize mixed-use development to the fullest extent practical	Through their STS Interagency Working Group activities, DLCD and ODOT are looking into how to encourage more housing choice and other development with access to transit.	
	(6) Planning should prioritize transit-supportive development designs and densities	Under HB 2001, DLCD, BCD, and the Department of Consumer and Businesses Services (DCBS) are developing a model middle housing ordinance.	Local plans can be focused on providing people with transportation choice and access to destinations.
	(7) Cities should physically separate car and truck traffic from bicycle, scooter and pedestrian ways.	The Oregon Bicycle and Pedestrian Plan favors separated facilities to protect vulnerable users (bicyclists and pedestrians), but funding that outside the road right-of-way is extremely limited. Both ODOT and DCLD encourage this.	State Highway Funds cannot be used on investments outside the public road right-of-way and this cannot support most off-road / separated biking and walking facilities. Funding should be continued and enhanced for the Multi-Modal Active Transportation fund.
	(8) Cities should adopt parking strategies that support low-carbon outcomes.	No current state activities, but DLCD and ODOT are reviewing parking management as one their strategies for the STS.	
	(9) Cities should assure full and timely traveler information availability	ODOT is working with cities and local jurisdictions on ITS (intelligent transportation	

		system) plans. These include	
		strategies around traveler	
		information. ODOT also has a	
		Transportation Options	
		program with local providers	
		that get out traveler	
		information about construction	
		interruptions and other trip	
		planning and mode choice	
		information.	
Materials	(1) Limit total embodied carbon emissions in high-impact construction materials purchased for infrastructure projects*	ODOT included evaluation of embodied carbon intensity of construction products and materials in their 20-04 report.	Requiring use of Environmental Product Declarations (EPDs) for high impact materials (concrete, asphalt, steel, drainage pipe) enables establishment of upper thresholds and embodied carbon emissions reductions goals that can be decreased over time. Cement is the second most used substance in the world, generating 5-6% of annual global emissions.  Alternatives, like fly ash and slag, can significantly reduce the GWP of concrete.

Note: \* demarcates measures that are also addressed in Governor's Executive Orders 17-20 and 20-04.

\*\* indicates measures that link with equity outcomes.