Statewide Transportation Strategy: A 2050 Vision for Greenhouse Gas Reduction

Multi-Agency Implementation Work Plan
June 2020 - June 2022

OREGON DEPARTMENT OF TRANSPORTATION, OREGON DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT, OREGON DEPARTMENT OF ENERGY, OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Appendix- Work Program Action Details

Contents

Statewide Trip Reduction Policy Action 2
Parking Management Action 5
Interagency Zero Emission Vehicle (ZEV) Action Plan Action 8
Transportation Electrification Infrastructure Needs Analysis Action 11
Expand the Clean Fuels Program Action 15
Truck Alternative Fuels Study and Implementation Action 18
Adopt New Emissions Standards and ZEV Requirements for Medium- and Heavy-Duty Trucks Action 20
Climate Friendly and Equitable Communities Action 23
Scenario and Climate Pollution Reduction Planning Action 28
Performance Monitoring Indicators and Analysis Action 31

Statewide Trip Reduction Policy Action

Objective

The objective of this task is to expand the existing Employee Commute Options Rule (ECO-Rule) statewide to reduce automobile-related air pollution, traffic congestion, and energy use through regulations and employer-based programs that encourage the use of alternatives to single-occupant vehicle travel. Alternatives may include telecommuting, flexible work schedules (to shift travel out of peak hours), free or subsidized transit passes, parking cash-out programs, encouraging bike and pedestrian options, and other actions.

Description

Currently, DEQ's ECO-Rule only applies to the Portland Metropolitan area where it began as a strategy to reduce ozone. The program has been implemented since 1995 and only minimally modified since then, primarily to change the applicability of the employer size from 50 to 100 employees. The basic framework of the regulation is that employers must survey their employees about how they get to work and then develop a plans to reduce their average single-occupant vehicle travel rate over time. Expansion of the ECO-Rule to have statewide impact will require rulemaking by DEQ and will include all medium and large metropolitan areas.

The employers should use TDM measures to encourage employees to use commute options and reduce drive-alone commute trips to the work site beyond an established baseline and be tracked over time. State agencies should assist with implementation of the new statewide ECO-Rule including helping employers develop plans, provide resources and guidance, and for administrative oversight and tracking. Specific requirements for businesses and areas will need to be determined based on the availability of transportation options, such as level of transit service, and equity considerations. Overall monitoring and tracking requirements are needed to ensure that plans are being implemented and lead to GHG reductions. The program should be designed with current best practices from behavioral economics in promoting transportation choice.

Opportunities

- There are existing programs in other states that we can model the statewide Oregon program after.
- Existing state agency programs, including DEQ's ECO Program and ODOT's Transportation Demand Management and Transportation Options programs, can be restructured to support a Statewide Trip Reduction Policy.
- Existing stakeholder groups, such as the transit agencies and the Transportation Options Group of Oregon, can provide valuable input before and during rulemaking.
- Greater flexibility in commuting may help employers to attract and retain top talent.

Challenges

- There may be pushback from employers due to potential increases in costs to deliver the program.

- There may be pushback from employers over being required to conduct surveys, do trip reduction planning, reporting, and monitoring.

Equity Considerations

Equity is considered for this task by ensuring that this program will apply to areas of the state that have adequate alternatives to driving alone. For low income households, increasing access to public transit will likely reduce their cost to commute. Care should be given to ensure that benefits and dis-benefits are considered, and to how implementing specific programs may affect all employees. In addition to special considerations for low income households, equity must also factor into the requirements on employers to ensure that the economic impact of implementing a trip reduction program is not too burdensome. These considerations can be addressed through on-going stakeholder engagement with businesses and practitioners in the background research and rulemaking process, and implementation.

Roles and Responsibilities

- *Lead Agency*: DEQ will lead the rulemaking process. Overall, DEQ's role is regulation and compliance.
- *Supporting Agency:* ODOT will support the process by leading parts of the background work and providing implementation resources. Overall, ODOT's role is technical support.

Scope of Work

Phase 1: Background, Communications, Rulemaking

- Timeline: 12-18 months
- Cost: Staff Time Only
- FTE Required: DEQ 1.00 FTE (0.5 FTE AQ Operations, 0.5 FTE AQ Planning)
  ODOT 0.25 FTE (Transportation Options Program Manager)

Phase 2: Implementation

- Timeline: After rulemaking is complete
- Cost: $200,000 annually for Transportation Options Providers (managed through ODOT)
- FTE Required: DEQ 0.75 FTE (support for the new statewide program)
  OODT 0.50 FTE (coordinator of technical support)

**Costs and staff FTE are above and beyond current resources, thus requiring additional funding*

Phase 1 of this task will involve doing background research, communicating the intent of the effort with stakeholders, and conducting a formal rulemaking process to expand the ECO Program to become a statewide program. The background work will include research of existing commute trip reduction ordinances in other states, holding pre-meetings with key agency partners, and development of a communications plan. DEQ will then begin a formal rulemaking process that will include convening a rulemaking advisory committee and holding multiple meetings to consider design options for a proposed statewide program. Depending on the complexity of options and the level of consensus amongst the stakeholders, the rulemaking process may take between 6 and 12 months. The Environmental Quality Commission will consider the proposed program and need to vote to adopt the program to be effective.

Phase 2 of this task will involve implementing the adopted statewide program. It will need to refocus existing state agency programs to support the local jurisdictions in order to provide employers the necessary guidance and resource to meet the requirements of the program.

Summary of Tasks

Task	Agency Responsibility	Timeline
1. Background Research		
a. Conduct web based research and interviews on existing commute reduction programs to identify opportunities to model the Oregon statewide program against	Lead: ODOT 0.25 FTE Support: DEQ minimal	2 months
b. Gather data on employers, VMT and congestion around the state to determine eligible entities, size of businesses, etc.	Lead: ODOT 0.25 FTE Support: DEQ minimal	
c.		
d. Develop business cases to support effort (e.g. household cost savings).	Lead: ODOT 0.25 FTE Support: DEQ minimal	
2. Communications		
a. Engage with the Transportation Group of Oregon (ToGo) Board and other stakeholders	Lead: DEQ 1.00 FTE Support: ODOT 0.25 FTE	1 month
b. Develop communications plan		
3. Program Design and Rulemaking		
a. Convene Advisory Committee	Lead: DEQ 1.00 FTE Support: ODOT minimal	9-12 months
b. Consider design options for the statewide program		
c. Develop performance measures and accountability processes.		
d. Determine staffing and resource needs for implementation and program management.		
e. Environmental Quality Commission adopt rules		
4. Implementation		
a. Establish statewide resources for businesses to support actions. Broker relationships between businesses and transit providers. Provide funding and set work programs for local Transportation Options (TO) Providers ($200K per year) to work directly with businesses to identify and implement effective trip reduction actions.	$200K annually Lead: ODOT 0.50 FTE* Support: DEQ minimal	On-going
b. apply performance measures and accountability mechanisms	Lead: DEQ 0.75 FTE* Support: ODOT minimal	
c. Coordinate with legislature for requests for additional resources, respond to legislative inquiries, etc.	Lead: DEQ minimal Support: ODOT minimal	

**Costs and staff FTE are above and beyond current resources, thus requiring additional funding*

Parking Management Action

Objective

The objective of this task is to reduce vehicle miles traveled by reforming parking regulations. The work task will develop guidance, code language, business case materials, and amend existing rules.

Description

The 2018 STS Monitoring Report found that parking is still being priced at a much lower rate than the STS Vision. Over 96% of car trips end in a place with free car parking. The costs of providing that parking are hidden, resulting in a cross-subsidy of driving. By internalizing the marginal cost of parking to the driver, people will choose to take other modes of transportation.

Opportunities

- Local governments are starting to be more strategic about parking mandates (e.g. Salem, Bend).
- There is widespread interest in making housing more affordable and there are complementary efforts including: the current legislative mandate and associated DLCD housing rulemaking and associated guidance work.
- Innovative technology, dynamic pricing, and other options allow potential parking pricing structures to be adaptable to unique contexts.
- Charging for parking can increase turnover rate of patrons to local businesses, thus increasing the overall number of shoppers and incoming revenue.
- Parking regulations can be designed to include EV charging rules, supporting EV objectives.
- Future shared autonomous vehicles may reduce demand for parking.

Challenges

- Change is hard. Pushback from cities, including elected leaders and businesses is expected.
- There is existing abundant unpriced parking, changing these locations will be challenging.
- The state can provide guidance and model language, but reforms will require local implementation.
- Reforming mandates for new development results in a marginal rate of change.
- Cities mandate oversupply rather than prioritize management to address parking conflicts.

Equity Considerations

More than one-third of Oregonians are too young, old, poor or infirm to drive. These people disproportionately consist of historically marginalized populations, people of modest means, people with disabilities, and racial minorities. Parking reforms can be structured with rates and breaks considerate of income and areas where transportation options are available. Parking revenue can be used to promote more equitable transportation choices.

Roles and Responsibilities

- *Lead Agency*: DLCD will be the lead agency through the Climate Friendly and Equitable Communities (CFEC) rulemaking process. DLCD and ODOT will develop policy guidance, messaging, and research as part of the TGM program.

- *Supporting Agencies*: ODOT will provide support through the rulemaking process and distribution of information. DEQ will support the rulemaking for indirect source emissions.

Scope of Work

- Timeline: 18-24 months
- Cost: $100,000 in consulting work for additional facilitation, outreach and education (Task 2)
- FTE Required: DLCD 1.00 (TGM program staff)

  ODOT 0.25 (TGM program staff)

  The rest of the tasks under this action can be absorbed into larger efforts:

  - DEQ 1.00 FTE (Added to work if DEQ undertakes Indirect Source Rulemaking)
  - DLCD 4.00 FTE (Added to planned work CFEC Rulemaking)
  - ODOT 0.25 FTE (Added to planned work to support CFEC Rulemaking)

The results of this task will be amendments to the TPR as part of the CFEC work, limiting how much parking cities can mandate. The rules will be supported by model development code, educational materials and presentations, and a report on the full cost of providing parking in cities across Oregon. Amendments to the ECO rules will further require more employers to offer parking cash out. These amendments will be supported by materials describing the benefits of parking cash out policies.

Summary of Tasks

Task	Agency Responsibility	Timeline
1. Amend Transportation Planning Rules		
a. DLCD will amend the Transportation Planning Rules (TPR) or other rules to require cities to remove parking minimum mandates in certain areas, allow any mandated parking to be within walking distance instead of on-site, or to count on-street parking towards mandated parking.	(See Climate Friendly and Equitable Communities Action write-up)	
b. Optional: DLCD will amend the TPR to prohibit parking mandates. Cities may only mandate parking if they conduct a comprehensive parking study of demand and demonstrate severe lack of supply within walking distance of new development.		
2. Transportation Growth Management Program Guidance and Outreach		
a. DLCD will update TGM Model Code for Small Cities to reflect current best practices on parking.	Lead: DLCD 1.50 FTE Support: ODOT 0.25 FTE	24 months
b. ODOT and DLCD will develop a publication of case studies and best practices of managing existing on-	Lead: DLCD 1.00 FTE Support: ODOT 0.25 FTE	

Task	Agency Responsibility	Timeline
street parking supply and present a speaking tour about parking reform and how to implement.		
c. ODOT and DLCD will prepare analyses summarizing current data on the widely varying costs of providing off-street parking across the state, including the opportunity cost of the land.		
3. Transportation Options Outreach and Training to Locals		
a. ODOT will work with Transportation Options providers to promote priced daily parking for employees, priced on-street parking, parking cash out, and removal of local parking mandates.	Lead: ODOT 0.25 FTE Support: DLCD min	24 months
4. Update Air Quality Rules as needed to support DLCD Rule Revisions		
a. As part of DEQs amendments to the ECO Rule, DEQ will consider a parking cash out element in the program design.	Lead: DEQ 1.00 FTE Support: DLCD min	12 months
b. DEQ will explore how indirect source rules could be amended to support parking restrictions.	Lead: DEQ 1.00 FTE	
c. DEQ will work with DLCD to prepare guidance and education materials if parking cash out is an element of revised ECO rule compliance.	Lead: DEQ 0.50 FTE Support: DLCD 0.50 FTE	

Interagency Zero Emission Vehicle (ZEV) Action Plan Action

Objective

The objective of this task is to build on the work of the Zero Emission Vehicle Interagency Working Group (ZEVIWG) and support zero emission vehicle adoption in Oregon by developing a statewide interagency Zero Emission Vehicle (ZEV) Action Plan. The plan will describe specific tasks for agencies to collaborate on and achieve in the next 18 months to support increased adoption of zero emission vehicles. Tasks would fall into four general categories: increasing Oregonians' access to ZEVs; increasing Oregonians' access to ZEV charging infrastructure; increasing education and awareness of ZEVs, their operation, and benefits; and increasing Oregon state agency adoption of ZEVs.

Description

Recognizing that multiple agencies have programs and activities that affect ZEV adoption, the Governor tasked the ZEVIWG to work collaboratively in implementing the EO directives and identify opportunities and barriers to EV adoption. The ZEVIWG consists of ODOE, ODOT and DEQ as well as the Department of Administrative Services and the Oregon Public Utility Commission. Having completed most tasks set in the EO and finding value in the ZEVIWG process and interactions, the members of the ZEVIWG have begun discussing potential new action items the agencies can collaborate on to continue to accelerate EV adoption. In order to facilitate a comprehensive and transparent plan for this work, ODOE, ODOT, and DEQ in coordination with DAS, PUC, and other agencies will develop a statewide ZEV Action Plan. Using the ZEVIWG, team members will identify state agency activities that can help support and accelerate ZEV adoption. The Interagency ZEV Action Plan will serve as the guidance document for all interagency work, including the other ZEV-focused interagency STS tasks: expanding the EV rebate program and developing a transportation electrification infrastructure needs analysis.

In 2019, the Oregon Legislature passed SB 1044, which identified ZEV adoption as a primary driver to reduce greenhouse gas emissions in the light-duty vehicle sector and set ZEV adoption targets for the state. In addition to the targets the bill ramps up ZEV adoption goals for the state fleet and expands the Schools' designated portion of the Public Purpose Charge to include procurements of ZEVs and ZEV chargers. The new law also required ODOE to produce a biennial Zero Emission Vehicle report to the Legislature, with the inaugural report due on September 15, 2021. The report will include information on state of ZEV adoption and the impacts on state activities. The report also requires ODOE to produce a list of recommendations to the Legislature if the state is not on track to achieve the ZEV adoption targets established.

Opportunities

- Provides a single EV planning process to facilitate state agency activities that are coordinated and efficient, with the goal of higher ZEV adoption rates, including the e-mobility gap analysis and expanding the EV rebate program.
- As an established working group, the ZEVIWG can serve as the mechanism for coordination of this work.

- Electric bicycle technology has greatly improved recently, leading to increased interest and purchasing of electric bicycles.

Challenges

- Requires collaborative efforts from agencies outside the STS group, including, but not limited to DAS, PUC, Oregon Health Authority, and the Oregon Department of Education.
- Requires significant outreach and engagement from stakeholders that may not always be in alignment on their positions on the actions the state should be taking.

Equity Considerations

Equity is central to the discussion of ZEV adoption, with several areas of focus where increasing ZEV adoption is more challenging:

- Multi-unit dwellings that often lack access to chargers due to the costs involved to add charging in established parking areas.
- Rural areas where the available ZEV vehicle platforms do not include the types of vehicles that are currently in use in these areas, including pickup trucks and SUVs.
- Underserved communities, where EV adoption is not a primary concern or need for the community, and where the upfront costs of ZEVs are a significant barrier to adoption.

Addressing these equity concerns should be included in the development of the action plan, including robust stakeholder outreach and identification of potential solutions to address the individual barriers, up to and including recommending legislative concepts to agency leadership.

Roles and Responsibilities

- *Lead Agency*: ODOE lead the ZEVIWG discussion of the Interagency ZEV Action Plan. ODOT will oversee implementation. All agencies identified with tasks in the plan will be leads for those tasks.
- *Supporting Agencies*: DEQ, coordinating with other agencies including PUC, DAS, DLCD, ODE, and OHA.

Scope of Work

- Timeline:
  Action Plan- 3 months
  Implementation- 18 months
- Cost: Staff time only
- FTE Required: ODOE – 0.30 FTE
  DEQ, ODOT – 0.20 FTE

The scope of this task will involve coordination of multiple agencies to develop a statewide ZEV Action Plan. The Interagency ZEV Action Plan will include activities that individual state agencies can lead or support that will address one or more of four areas:

- increasing Oregonians' access to ZEVs, including the specific task of expanding the EV rebate program
- increasing Oregonians' access to charging infrastructure, including conducting a statewide transportation electrification infrastructure needs analysis
- increasing Oregonians' awareness of ZEVs and their benefits

- increasing adoption and use of ZEVs at state agencies

All tasks identified in the plan will fall under agencies' current authorities, and all tasks must be approved and supported by the lead and supporting agencies' directors.

Summary of Tasks

Task	Agency Responsibility	Timeline
1. ZEV State Interagency Action Plan Development		
a. ZEV State Interagency Action Plan Draft – development of a draft plan with specific tasks for agencies	Lead: ODOE 0.30 FTE Support: minimal	2 months (Due by June 30, 2020)
b. ZEV State Interagency Action Plan Finalization- finalize action plan and agency tasks	Lead: minimal Support: minimal	
2. ZEV State Interagency Action Plan Implementation		
a. Individual Agency Implementation Actions	Lead: ODOT 0.30 FTE Support: ODOE 0.30 and 0.10 FTE per agency for the others	18 months (Complete by December 31, 2021)
b. ZEVIWG Meeting Participation		
c. ZEV Action Plan Communications		
3. State Action Plan Final Report		
a. Development of ZEV Interagency State Action Plan Summary Report – ODOT and ODOE will draft a final report summarizing the activities of the ZEV State Interagency Action Plan, including recommendations to develop a new action plan for 2022 – 2023	Lead: ODOT and ODOE 0.10 FTE Support: minimal	2 months (Complete by January 31, 2022)
b. Review and Approval of ZEV State Interagency Action Plan Summary Report – All state agencies involved in implementing the action plan will review, provide feedback, and approve the final report.	Lead: minimal Support: minimal	
c. Submission of ZEV State Interagency Action Plan Summary Report to State Agency Directors – ODOT and ODOE will provide electronic copies of the final report to the Directors of all state agencies who implemented the ZEV State Interagency Action Plan and post the report on its webpage.	Lead: minimal Support: minimal	

Transportation Electrification Infrastructure Needs Analysis Action

Objective

The objective of this task is to assess transportation electrification charging infrastructure needs and gaps throughout Oregon, in order to support the light-duty zero emission vehicle (ZEV) adoption goals established in SB 1044 (2019), and STS Goal *Support Use of Cleaner Vehicles and Fuels*. Access to EV charging infrastructure is cited as one of the key barriers to EV adoption. This study will illuminate specific needs for future ZEV charging infrastructure, paving the way for support from utilities, the private sector, and government.

Description

One key element spurring Oregonian's ZEV adoption is the availability and accessibility of convenient, reliable ZEV charging infrastructure. While today's ZEV drivers with single-family homes charge mostly at home, supplemental charging infrastructure is critical to achieve Oregon's robust ZEV adoption goals. To enable all Oregonians to travel throughout the state, and to ensure ZEV access for Oregonians living in multi-unit dwellings (MUDs) or other venues without convenient access to home charging, a network of public and workplace ZEV charging stations, and access for those living in MUDs, is critical. Additionally special attention will be placed to the charging needs in rural areas. Currently, large charging gaps exist throughout the state, which likely discourages ZEV adoption.

Increasing Oregonian's access to ZEV charging will be one of the aims of the Interagency ZEV Action Plan, spearheaded by the ODOE and the Zero Emission Vehicle Interagency Working Group (ZEVIWG). The Transportation Electrification Infrastructure Needs analysis will fulfill this goal, examining the existing status of light-duty ZEV transportation charging infrastructure in Oregon, identifying needs and gaps in charging along travel corridors and for ZEV daily use, with a keen eye to access in rural areas and equity concerns. Analyses will pinpoint needs and gaps in the context of future vehicle trends and charging technology, travel patterns, population density, and other contextual factors. The study will emphasize access to light-duty ZEV charging infrastructure, while providing an overview of opportunities and charging infrastructure needs in transportation electrification sectors beyond light-duty ZEVs. ODOT will collaborate with ODOE and other agencies to develop the ZEV Action Plan, which will include the Transportation Electrification Infrastructure Needs analysis. ODOT will work closely with ODOE to conduct the Transportation Electrification Infrastructure Needs analysis, leveraging its expertise, as well as that of the ZEVIWG, and consult with other agencies, NGOs and public utilities. Coordination is critical, to avoid duplication of effort.

Opportunities

- Creating a common understanding of Oregon's light-duty ZEV charging infrastructure needs can lead to a statewide ZEV charging infrastructure plan. This plan can help guide investment by utilities, the private sector, and government, ensuring focus on rural areas and equity concerns.
- By identifying and addressing gaps, Oregon can reduce potential ZEV drivers' "range anxiety", encouraging greater ZEV adoption.

- Insight about other modes of transportation electrification and their potential future charging needs, such as electric transit, delivery, freight, and e-mobility, will enable Oregon to adopt policies increasing the pace of multiple modes of transportation electrification, accelerating GHG reductions.

Challenges

- The number of variables involved in transportation electrification, rapid pace of change, and potential gaps or inaccessibility in existing data.
- Potential pushback from other alternative fuels, as the study will lightly touch on transportation electrification charging needs of non-light-duty vehicles, such as transit, medium-duty delivery and heavy-duty freight transport.
- Time constraints. There is no room to slip timelines on this project, which are tight. Additionally, study results would ideally be available in time for the 2021 Legislative Session. Interim results may be available by March 2021.

Equity Considerations

In order to achieve light-duty ZEV adoption goals, and reduce GHGs among multiple transportation modes, it is critical to ensure that charging infrastructure is convenient and accessible for frontline communities and those who may live in multi-unit dwellings, or other areas where access to home charging is unavailable. Different socio-economic groups may seek to procure used ZEVs or shorter-range / less expensive new ZEVs, requiring more frequent access to charging. Geographic balance will be achieved by ensuring a focus on rural areas.

Roles and Responsibilities

- *Lead Agency*: ODOT will lead the Transportation Electrification Infrastructure Needs analysis and work closely with the Oregon Department of Energy on this assessment.
- *Supporting Agency:* ODOE will support the needs assessment; the ZEVIWG agencies and other state agencies, public utilities and NGOs will have a consultative role.

Scope of Work

- Timeline: 12-18 months, Report due to Legislature June 30, 2021
- Cost: $250,000 consultant study effort(s)
- FTE Required: ODOT 1.00 FTE
  ODOE 0.50 FTE

The scope of the Transportation Electrification Infrastructure Needs analysis will be to identify the status, needs and gaps in the availability of reliable, easily accessible light-duty ZEV charging infrastructure in Oregon. The study will examine existing conditions, determine data sources, identify trends in vehicle charging technology, travel patterns and demographics, and model a range of scenarios to contrast near term charging infrastructure needs. An advisory group, consisting of other state agencies, public utilities, and NGOs will ensure the voices of multiple stakeholders inform the analysis, and equity and geographic balance are appropriately reflected in the work.

Although the focus of the study will be on charging gaps for light-duty ZEVs, and meeting state ZEV adoption targets outlined in SB 1044, opportunities and charging needs of other transportation electrification modes will also be considered. ODOT will lead, in consultation with ODOE and others, an overview assessment that will develop insight into the vehicles, market status, charging infrastructure needs, likely timing of commercial or near-commercial availability of Medium/Heavy-duty electric vehicle classes, and other transportation electrification modes, such as:

- Buses (Transit, School)
- Delivery trucks and long-haul freight movement
- Garbage trucks, street sweepers, construction equipment
- Warehouse operations
- Micro-mobility (e.g., e-scooters, e-bikes)

The work will be informed through literature review, multi-state and national studies (including several public-private collaborations that Oregon state agencies have participated in, as well as collaborative efforts by electric utilities across Western states), local policies, and experts. A high-level overview of charging infrastructure needs for these transportation electrification sectors will be portrayed, along with avenues for Oregon to facilitate charging infrastructure installations for these other transportation electrification modes.

Summary of Tasks

Task	Agency Responsibility	Timeline
1. Form and Manage a Project Management Team and Stakeholder Engagement Plan		
a. Project Management; Form the Project Management Team (PMT) and craft the Work Plan for use by consultants and agency staff. Manage the PMT, which includes ODOT and DOE.	Lead: ODOT 1.00 FTE Support: ODOE 0.50 FTE	3 months
b. Form an advisory group with DEQ, DLCD, other state agencies, public utilities, NGOs. Manage advisory groups and outreach.		
2. Determine Existing Conditions		
a. Research and describe transportation electrification use types and vehicle classes	Lead: ODOT 1.00 FTE Support: ODOE 0.50 FTE	3 months
b. Gather data: travel statistics, EV adoption rates by geography, populations density, mix of housing types, local policies, etc.		
c. Evaluate electric transportation charging infrastructure: existing network, mix of charging venues, etc.		
3. Identify future trends and opportunities		
a. Identify future trend and opportunities across electric transportation use types and vehicle classes	Lead: ODOT 1.00 FTE Support: ODOE 0.50 FTE	3 months
b. Assess changes in travel patterns and demographics		

Task	Agency Responsibility	Timeline
c. Project electric transportation charging and vehicle technology		
4. Outline Future Scenarios depicting EV Charging Needs, Gaps		
a. Describe methodology and scenario assumptions, including charging needs and gaps in Corridor, ZEV daily use. Model near term scenarios (focusing on light-duty ZEVs) and narratively describe long-term scenarios and implications	Lead: ODOT 1.00 FTE Support: ODOE 0.50 FTE	3 months
b. Compare and Contrast Scenarios		
c. Find commonalities in barriers and opportunities		
5. Prepare Report and Identify Short Term Actions		
a. Prepare Report and lay out options for meeting short term SB 1044 goals	Lead: ODOT 1.00 FTE Support: ODOE 0.50 FTE	3 months

Expand the Clean Fuels Program Action

Objective

The objective of this task is to expand the Clean Fuels Program (CFP) to reduce transportation-related greenhouse gas emissions through a market-based program. Success in the CFP can also decrease criteria and toxic air pollution and their negative health effects, increase Oregon's energy independence, promote local economic development, and create clean energy jobs.

Description

The 2019 Oregon Legislature passed HB 2186 to adopt a low carbon fuel standard to reduce the carbon intensity, or lifecycle GHGs per unit of energy, of transportation fuels. This means that all parts of a fuel's lifecycle – extracting/growing, transporting, bio/refining, distributing, and combusting – are accounted for in a fuel's carbon score and therefore becomes an opportunity to reduce emissions. Common strategies to lower the carbon intensity of a fuel include: developing new feedstocks and technologies to make fuels, making existing technologies more efficient, and increasing the number of alternative fuel vehicles available to increase consumption of the lower carbon fuels. ODEQ began implementing the policy as the Oregon Clean Fuels Program (CFP) in 2016 and by 2025, the carbon intensity of Oregon's transportation fuels are required to be 10% below 2015 levels.

Executive Order 20-04 further directs DEQ to expand the CFP to achieve 25% carbon intensity reductions by 2035. In order to meet this goal, DEQ must ensure that both sufficient supply and demand of low carbon fuels in the Oregon market along with the vehicles to consume them and the infrastructure to fuel them. Having all of Oregon's state agencies collaborate in this effort will demonstrate its leadership by setting an example for other local jurisdictions and large businesses to commit to lower carbon fuels.

Opportunities

- Early data shows that the program can lower fuel prices to all consumers.
- The program is fuel-neutral and technology-neutral which means that there is a solution for all different uses.
- By design, the policy creates financial incentives for providers of lower carbon fuels that are paid by providers of higher carbon fuels – public funds are not necessary.

Challenges

- Pushback from fuel providers to make the necessary investments to bring the lower carbon fuels to Oregon.
- Pushback from fleets to convert to alternative fuel vehicles which limits demand.
- Pushback from the legislature that leads to long-term regulatory uncertainty.

Equity Considerations

Equity is considered for this task by ensuring that opportunities are created that benefit low income households. Generally speaking, the CFP lowers the cost of lower carbon fuels and lowers tailpipe emissions. Because of this, it is ideal for transit agencies, school districts, local governments, and fleets of all sizes to take advantage of this opportunity. Ethanol, biodiesel, renewable diesel, renewable

natural gas, renewable propane and electricity pollute less and are lower in cost compared to gasoline and diesel. Traditional environmental justice communities are often located nearest to roadways, distribution centers, bus barns, and multi-modal facilities and a switch to lower carbon fuels can benefit those communities.

Roles and Responsibilities

- *Lead Agency*: DEQ will lead the rulemaking process, oversee the implementation of the regulation, and guide the outreach effort.
- *Supporting Agency:* ODOE will provide support in all aspects of outreach and communication.

Scope of Work

Phase 1: Amend Low Carbon Fuel Standards

- Timeline: 27-33 months (through 2022)
- Cost: $200,000 to contract for technical analysis (already budgeted)
- FTE Required: DEQ 1.00 FTE

Phase 2: State Agency Clean Fuel Use

- Timeline: 24 months (through 2021)
- Cost: N/A
- FTE Required: DEQ 0.25 FTE
  ODOE 0.25 FTE

Phase 1 of this task will involve amending the Low Carbon Fuel Standards by: 1) contracting for technical analysis; 2) conducting formal program review; and 3) formal rulemaking. There will be multiple opportunities for stakeholder input throughout the process. The Environmental Quality Commission will need to adopt the program to be effective.

Phase 2 of this task will focus on state agencies using cleaner fuels. This will include assessing all state agencies to determine how they fit into the following categories: 1) own or manage their own fleet; 2) manage a contract or procurement process that can require or incent lower carbon fuels or alternative fuel vehicles; or 3) implement a program or policy that complements the CFP. For category 1, DEQ will develop a guidebook that outline how to plan for fleet conversion. For category 2, DEQ will develop a guidebook that includes recommendations to maximize procurement opportunities. For category 3, DEQ will conduct one-on-one assessments with each applicable agency to identify the opportunities for collaboration. Common strategies to lower the carbon intensity of a fuel include: developing new feedstocks and technologies to make fuels, making existing technologies more efficient, increasing the number of alternative fuel vehicles available to increase consumption of the lower carbon fuels. State government provides unique opportunities to leverage these strategies through procurement, programs, and policies.

Summary of Tasks

Task	Agency Responsibility	Timeline
1. Implement EO 20-04 (for more detail, see DEQ's detailed work plan)		
a. May 15, 2015 report to Governor	Lead: DEQ 1.00 FTE	27-33 months
b. Contract for technical analysis		
c. Conduct formal program review		
d. Convene formal rulemaking		
2. Outreach to state agencies		
a. Survey agencies to see what categories they fall into	Lead: DEQ 0.25 FTE Support: DOE 0.25 FTE	24 months
b. Convene Alternative Fuels Interagency Working Group		
c. Develop guidebooks for Categories #1 and #2		
d. Outreach to Category #1 and #2 agencies		
e. Implement Category #1 and #2 strategies		
f. Outreach to Category #3 agencies		
g. Customize strategies for Category #3 agencies		
h. Implement Category #1 strategies		

Truck Alternative Fuels Study and Implementation Action

Objective

The objective of this task is to reduce emissions from medium and heavy duty trucks by exploring opportunities to switch to alternative fuels. Along with reducing greenhouse gas emissions, switching to an alternative fuel in this sector will reduce nitrogen oxides, a precursor to ground-level ozone, and diesel particulate matter, which is a potent air toxic. These emissions impact both climate change and human health, particularly for the most vulnerable populations.

Description

Medium and heavy duty trucks come in many different forms and serve many different functions. Duty cycles (how heavy, how far, how long, etc.) for these vehicles are the central issue when it comes to determining what alternatives make sense for fleet owners. There are many different applications for medium and heavy duty trucks and as many solutions to match. Questions about costs are critical – since the alternative fuel versions often have higher up-front price tags but lower maintenance and fuel costs. The full spectrum of options must be studied to determine the lifecycle costs and feasibility for adopting alternative fuels from biofuels, natural gas, propane, electricity or hydrogen. Once the study is completed, an action plan will be developed to encourage adoption of alternative fuels.

Opportunities

- The state administers multiple grant programs that can be used towards these projects, such as the Environmental Mitigation funds, Diesel Emissions Reduction Act, and Congestion Mitigation and Air Quality (CMAQ) funds.
- Oregon is part of the West Coast Collaborative that partners government agencies with private fleets to promote alternative fuels in medium and heavy duty vehicles including studies evaluating Oregon's fleet and infrastructure.
- The increased use of alternative fuels complements the expansion of the Clean Fuels Program.

Challenges

- There needs to be sufficient fueling infrastructure in place to support conversions to alternative fuels.
- Fleet manager's ability to front capital costs for fleet conversions.

Equity Considerations

Equity is considered for this task by providing opportunities to reduce dirty diesel emissions. Medium and heavy duty trucks impact the entire economic system and are present throughout neighborhoods and communities. Often times, the largest impacts are in frontline communities (lower income, communities of color, and disadvantaged communities) with the most vulnerable populations. Strategies in this task must address the impact of emissions in these communities.

Roles and Responsibilities

- *Lead Agency*: DEQ will lead the scoping study and strategy development.

- *Supporting Agency:* ODOT will provide technical support throughout and ensure that the strategies are consistent with regional and statewide freight plans.

Scope of Work

Phase 1: Truck Alternatives Fuels Study

- Timeline: 9months starting mid-2021
- Cost: N/A
- FTE Required: DEQ 0.25 FTE
  ODOT 0.25 FTE
  ODOE 0.10 FTE

Phase 2: Implement Strategies

- Timeline: Ongoing, following background
- Cost: N/A
- FTE Required: DEQ 0.25 FTE
  ODOT 0.25 FTE

To understand the gaps and potential solutions, a comprehensive evaluation of Oregon's fleet, fueling infrastructure is required. Phase 1 of this task will involve doing background research by reaching out to existing partners such as the West Coast Collaborative, Clean Cities, and trade organizations. Many case studies exist but they need to be summarized, organized, and prioritized according to their highest impact based on Oregon's fleet.

Phase 2 of this task will involve reaching out to and educating Oregon's freight industry and truck fleet managers, and applying the recommended strategies to priority sectors. Business cases will be developed based on Oregon-specific incentives. In addition, this task will align with and inform numerous other work efforts to decarbonize MHD across Oregon.

Summary of Tasks

Task	Agency Responsibility	Timeline
1. Truck Alternatives Fuels Study		
a. Conduct web based research to identify medium and heavy duty fleets using alternative fuels	Lead: DEQ 0.25 FTE Support: ODOT min	9 months
b. Gather data on Oregon MHD fleets	Lead: ODOT 0.25 FTE Support: DOE 0.10 FTE	
c. Prioritize opportunities for Oregon fleets	Lead: DEQ 0.25 FTE Support: ODOT min DOE min	
2. Implement Strategies from the Truck Alternatives Fuel Study		
a. Develop business cases	Lead: DEQ 0.25 FTE Support: ODOT 0.25 FTE ODOE 0.10 FTE	Ongoing
b. Outreach to priority fleets and agencies		
c. Develop implementation strategies and convey them to stakeholders		

Adopt New Emissions Standards and ZEV Requirements for Medium- and Heavy-Duty Trucks Action

Objective

The objective of this task is to adopt California's more stringent emission standards for new Medium- and Heavy- Duty trucks and requirements for manufacturers to make Zero Emission Medium- and Heavy- Duty vehicles available for sale in Oregon utilizing Oregon's authority under Section 177 of the Clean Air Act. Reductions in diesel exhaust emissions from medium- and heavy-duty trucks will also decrease criteria and toxic air pollution and their negative health effects, reduce black carbon emissions and their associated climate impact, increase Oregon's energy independence, promote local economic development, and create new jobs in the electric vehicle and charging/fueling equipment manufacturing, supply chain and service sectors.

Description

In 2005, DEQ proposed and the EQC adopted more stringent emissions standards for Light-Duty vehicles, known as the Oregon Low Emission Vehicle Program. During that same time, the Environmental Quality Commission also adopted the Oregon Zero Emission Vehicle program which requires manufacturers to make light-duty ZEVs available for sale in Oregon. In combination, these regulations have made significant impacts on emissions from the light duty sector by ensuring these LEV/ZEV vehicles are available for Oregonians to purchase.

Executive Order 17-21 directs DEQ to "work with the Environmental Quality Commission to maintain consistency with California's zero emission vehicle regulation, including efforts to ramp up regulatory requirements". California is on track to adopt new engine emission standards for medium- and heavy-duty diesel vehicles as well as a requirement for medium- and heavy-duty vehicle manufacturers to make ZEVs available for sale. DEQ would need to work with the EQC and partner agencies to adopt regulations quickly to maintain parity with California's standards.

Opportunities

- HB 2007 (2019) requires the phase-out of older vehicles within the Portland-metro area.
- Incentives exist in Oregon to support medium- and heavy-duty fleet owners to transition to cleaner vehicles.
- Transitions to ZEV options for Oregon's medium- and heavy- duty fleets may require different and more infrastructure to support this new technology. Other STS work plan items will address these needs (like the ZEV Gap Analysis).

Challenges

- Pushback from manufacturers on the requirement to meet emissions and ZEV sales requirements.
- Pushback from consumers on increasing costs for these cleaner vehicle options.
- Pushback from fleets to convert to ZEV when limited infrastructure exists to support the shift.

Equity Considerations

Equity is considered for this task by ensuring that opportunities are created that benefit low income, small business, and minority- and women-owned fleets. Medium and heavy duty trucks impact the entire economic system and are present throughout neighborhoods and communities. Often times, the largest impacts are in lower income and disadvantaged communities with the most vulnerable populations because these communities are located near freight corridors, ports and distribution centers. Strategies in this task must address the impact of emissions in these communities.

Roles and Responsibilities

- *Lead Agency*: DEQ will lead the rulemaking process, oversee the implementation of the regulation, and guide the outreach effort.
- *Supporting Agency:* ODOT, and ODOE will provide support in all aspects of outreach and communication and consider connections to other STS Work Plan elements that are under their leadership, such as the ZEV Infrastructure Gap Analysis.

Scope of Work

Phase 1: Support California's Development of New Regulations

- Timeline: 6-8 months (through 2020)
- Cost: N/A
- FTE Required: DEQ 0.20 FTE

Phase 2: Adopt New Regulations

- Timeline: 6-12 months (through 2021)
- Cost: N/A
- FTE Required: DEQ 0.33 FTE
  ODOE 0.25 FTE
  ODOT 0.25 FTE

Phase 1 of this task will involve ongoing support and tracking of California's emissions standards development and rulemakings.

Phase 2 of this task will involve assessing the potential impacts of new emissions standards and ZEV requirements on Oregon, proceeding with rulemaking, and implementing the new standards.

Summary of Tasks

Action	Agency Responsibility	Timeline
1. Support California's Development of New Regulations		
a. May 15, 2020 report to Governor	Lead: DEQ 0.20 FTE	6-8 months
b. Ongoing outreach to CARB		
c. Rulemaking Planning for Oregon		
d. Informational Item for EQC		
2. Adopt New Regulations		
a. Convene Formal Rulemaking	Lead: DEQ 0.33 FTE	6-12 months

Action	Agency Responsibility	Timeline
b. Implementation Planning of New Standards	Support: ODOT 0.25 FTE Support: ODOE 0.25 FTE	
c. Outreach and Technical Assistance with Manufacturers		
d. Implementation of LEV/ZEV for Medium- and Heavy-Duty		

Climate Friendly and Equitable Communities Action [1]

Objective

The objective of this task is to undertake a new suite of rule updates under the project title of Climate-Friendly and Equitable Communities. This project will include a set of rulemaking activities to integrate climate and equity outcomes into a land use and transportation planning administrative rules. The rulemaking effort will include Tribal consultation and broad community engagement. Rules that are likely to be amended include rule updates for Division 12 (Transportation Planning Rules), Division 44 (Metropolitan Greenhouse Gas Reduction Targets), Division 7 (Metropolitan Housing Rules), Division 8 (Interpretation of Goal 10, Housing) and Division 46 (implementing House Bill 2001).

The purpose is to ensure coordinated land use and transportation system planning in Oregon works to meet our climate pollution reduction goals by supporting consideration of pollution in decision-making and in turn, working to reduce driving. This work will also avoid disparate impact on disadvantaged communities, and work to repair historic injustice to those communities, including low income people, Black, Indigenous and People of Color, and people with disabilities. The state, metropolitan areas, and local governments will develop, adopt, and implement plans that meet Oregon's equity and climate pollution reduction goals.

Description

It has become clear over the last decade that Oregon's largely voluntary rules are not sufficient to meet our goals for reducing climate pollution in accordance with the state's GHG reductions targets expressed in LCDC's rules for Metropolitan Greenhouse Gas Reduction Targets. In order to reduce climate pollution, local governments need to improve their plans so different land uses are more connected, encouraging a walkable mix of destinations, and accelerating investments in walking, biking and transit. To achieve these objectives, this task will significantly update the state's coordinated land use and transportation planning requirements for local plans and will deliver additional health, equity, safety, and economic benefits to residents of Oregon.

The scope and scale of these requirements will vary by jurisdiction. Some factors that will drive individual community response will likely include population and distance to neighboring metropolitan areas. The amendments will align with other state strategies to reach transportation related greenhouse gas reduction targets, including scenario planning and climate pollution reduction in metropolitan areas. Finally, it is important to note these amendments are intended to support other state priorities such as equity, safety, air and water quality, and housing.

This action consists of rulemaking activities and ongoing programmatic actions to ensure implementation. Amendments to existing rules will result in updated state and local plans that meet the state's climate pollution reduction goals. DLCD will provide multiple services to local governments to help meet greenhouse gas reduction goals, including direct technical assistance, tools, and publications,

[1] Pertains to at least two if not more Oregon Administrative Rule Divisions (12, 44 and possibly 7, 8 and the HPS/46 (HB 2003).

to help local governments adopt plans that meet or exceed the state's climate pollution reduction goals. The state will also implement an ongoing monitoring and reporting program to track the state's progress.

The amended rules will require local governments to:

- Plan for greater development in climate-friendly locations, including city and town centers and transit corridors, where complementary land uses (residential, employment, commercial, public facilities) are located in close enough proximity so that less driving is necessary;
- Prioritize investments for reaching destinations without dependency on single occupancy vehicles, including in walking, bicycling, and transit;
- Prioritize system performance measures that achieve community livability goals;
- Plan for and manage parking to meet demonstrated demand, and avoid over-building of parking in areas that need housing and other services;
- Plan for needed infrastructure for electric vehicle charging; and
- Regularly monitor and report progress.

Equity Considerations

The intention of this task is to create equitable communities and as such the work will be centered on the needs of low income individuals, Black, Indigenous and People of Color, , and disabled people. The rulemaking process will include Tribal consultation and a diverse group of people with lived and professional experience in livable communities. Additional engagement will likely be needed to ensure that the perspectives and desired outcomes of traditionally underrepresented communities are included. Considerations also will include the requirements and staff impact to local jurisdictions of new planning requirements. While larger jurisdictions may have the existing resources to incorporate the new requirements into existing work plans, smaller jurisdictions will have less available resources and will need more assistance from state agency staff to meet the requirements.

Roles and Responsibilities

- *Lead Agency*: DLCD will be the agency to lead the rulemaking process, provide technical assistance and funding to local governments, ensure adopted plans meet state requirements and develop the monitoring and reporting component.
- *Supporting Agency:* ODOT will provide technical support throughout rule development, and support implementation through existing financial support of local plans and through updates to statewide plans.
- *Other Partner Agencies*: This action will touch on work within OHA, ODOE, DEQ, OHCS, DAS, and potentially other agencies.

Scope of Work

Rulemaking

- Timeline: 18 months

- Cost: $275,000 (e.g., policy cost analysis, engagement of representative historically marginalized Oregonians in rulemaking process to help ensure more equitable outcomes, facilitation support)[2]
- FTE Required: DLCD – 4.50 FTE needed; 4.00 across ten existing staff; (4.5 includes 0.5 FTE new Rules Associate to support the full FTE need for this 12-18 months)
  ODOT – 1.00 FTE

**Costs and staff FTE are above and beyond current resources, thus requiring additional funding*

The scope of this task covers amendments to existing rules, resulting in updated state and local plans that meet the state's GHG reduction goals. DLCD will provide multiple services to local governments to help meet climate pollution reduction goals, including direct technical assistance, tools, and publications, to help local governments adopt plans that meet or exceed the state's climate pollution reduction goals. DLCD will create a program that ensures local and regional plans in the state are working in concert with state plans and programs to make meaningful reductions in emissions. The program will update existing rules that require local governments to develop, adopt, and implement coordinated land use and transportation plans, modify existing rules and guidance governing project selection and performance measures, and includes monitoring and enforcement.

Update Rules

Rule amendments will require local land use and transportation plans to prioritize walking, biking and transit investments and encourage compact, mixed-use development to produce needed climate pollution reductions. Local governments will also be required to more closely manage their parking supply. ODOT will then develop updates to the OTP and other modal plans in accordance with updated rules and climate pollution reduction goals.

The task will include updates to rules and guidance documents guiding development that will include requirements to designate priority investment areas where more development, including affordable housing choices, will be required. These areas include downtowns and other centers, as well as along transit corridors. Mixed-use development, denser residential housing, and pedestrian and transit access to services are expected to be prioritized in these areas.

Monitoring and Enforcement

The work task will include developing performance measures for greenhouse gas reductions. The climate pollution reduction performance measures will ensure local and regional governments will prioritize actions necessary to reduce greenhouse gas emissions, and course correct when necessary.

DLCD and ODOT will identify system performance measures for the state and local governments to use in performing transportation impact analysis that capture the environmental effects associated with fuel consumption, emissions, and public health. Specifically, staff will propose updated transportation

[2] Assumes ODOT leading financial feasibility for scenario planning

system performance measures and rules amendments that prohibit using traffic congestion as the primary criterion for transportation planning, including the selection of transportation projects.

The task will develop an ongoing program to monitor the progress of local governments toward meeting greenhouse gas reduction goals and compliance with revised rules. Local governments will be required to regularly report on a series of standard performance measures over time. These will be built on their progress toward their locally-developed greenhouse gas reduction implementation plans. DLCD and ODOT will develop enforcement mechanisms, including STIP eligibility, to ensure compliance toward climate pollution reduction targets and revised rules.

Enable Implementation
DLCD and ODOT will use existing resources to develop ongoing technical assistance programs to assist local governments in implementing new requirements. This assistance will include direct assistance from agency staff, grant funding, tools, and publications. DLCD and ODOT will leverage existing programs such as the joint TGM program, State Planning & Research, and other resources for technical assistance and funding. DLCD and ODOT will also pursue additional resources for technical assistance.

Summary of Tasks
DLCD has committed staff availability for the equivalent of 4.5 FTE to lead and support all elements of the Every Mile Counts work Plan. For rulemaking, the core team is 2 FTE not including expenses, above and beyond current rulemaking commitments, thus requiring additional support.

Task	Agency Responsibility	Timeline
1. Update Rules		
a. Rulemaking Administration	Lead: DLCD 4.50 FTE Support: ODOT 1.00 FTE	18 months
b. Land Use Planning Amendments to rules and guidance for development.	Lead: DLCD 4.00 FTE Support: ODOT 1.00 FTE	
c. Multimodal Planning Prepare rule amendments.	Lead: DLCD 4.00 FTE Support: ODOT 1.00 FTE	
d. Greenhouse Gas Reduction Performance Measures Develop greenhouse gas reduction performance measures for local planning.	Lead: DLCD 2.00 FTE Support: ODOT 1.00 FTE	
e. Parking Management Rule amendments requiring cities to manage parking.	Lead: DLCD 4.00 FTE Support: ODOT 1.00 FTE Support: DEQ 0.25 FTE	
f. Electric Vehicle Infrastructure Rule amendments to identify EV charging infrastructure.	Lead: DLCD 4.00 FTE Support: ODOT 1.00 FTE	
2. Monitoring and Enforcement Program		
a. Develop an ongoing program to monitor the progress of local governments toward meeting	Lead: DLCD 4.00 FTE Support: ODOT 1.00 FTE	6 months

Task	Agency Responsibility	Timeline
climate pollution reduction goals and compliance with revised rules.		
3. Enable Implementation		
a. Examine statewide plans, policies, and investments to identify ways to support local implementation of plans. b. Develop ongoing technical assistance programs.	Lead: ODOT 1.00 FTE Support: DLCD 0.50 FTE	6 months

Scenario and Climate Pollution Reduction Planning Action

Objective

The objective of this task is to ensure that coordinated land use and transportation system planning in Oregon, at every level, incorporates climate pollution reduction in decisions, and in turn works to reduce vehicle miles travelled in order to meet climate pollution reduction goals. The state, metropolitan areas, and local governments will develop, adopt, and implement plans that meet climate pollution reduction goals.

Description

Metropolitan transportation planning is important because the most meaningful climate pollution reductions can be made in metropolitan areas due to the densities of population and jobs and levels of transit service. Over 65% of the state's population lives inside one of the state's eight metropolitan areas, and 75% of the state's population works inside one of these areas. Additionally, half of the state's vehicle miles travelled occur within the boundary of a metropolitan area.

The result of this task will be a scenario planning program for greenhouse gas reductions for Oregon's metropolitan areas (Portland Metro, Salem-Keizer, Albany, Corvallis, Bend, Eugene-Springfield, Grants Pass, and Rogue Valley). Because the voluntary approach hasn't meaningfully reduced emissions outside of the Portland Metro area, the program would be mandatory. Also, this program will go beyond current efforts to include more robust monitoring and enforcement in order to ensure progress in climate pollution reductions. This task will be tied closely to other work within the Climate Friendly and Equitable Communities Action to develop and adopt rules to reduce climate pollution through land use and transportation planning. Planning responsibilities will be supported by funding and technical support from the Oregon Sustainable Transportation Initiative (OSTI), led by ODOT and DLCD, in consultation with DEQ, and ODOE.

Opportunities

- Portland Metro has demonstrated that meeting the greenhouse gas targets is feasible.
- The state, led by DLCD, has an existing regulatory framework for scenario planning and greenhouse gas targets.
- ODOT and DLCD have developed models, guidance, and technical support for scenario planning.
- Half of the metropolitan areas in Oregon have undertaken assessments - the first step in scenario planning.
- Scenario planning was recognized in the Cap and Invest legislation as a key part of the state's climate response.

Challenges

- Local implementation is dependent local champions and state technical assistance.
- Lack of dedicated funding to support scenario planning and implementation.
- Regional transportation planning is managed by federally-recognized Metropolitan Planning Organizations (MPOs).

- The STS Vision and Greenhouse Gas Target Rules assume carbon pricing, congestion pricing, dramatic increases transit funding, and other aspirational actions. Assumptions need revisiting.

Equity Considerations

The intention of this task is to create equitable communities and as such the work will be centered on the needs of low income individuals, Black, Indigenous and People of Color, and disabled people. The rulemaking process will include Tribal consultation and a diverse group of people with lived and professional experience in livable communities. Additional engagement will likely be needed to ensure that the perspectives and desired outcomes of traditionally underrepresented communities are included. Considerations also will include the requirements and staff impact to local jurisdictions of the new planning requirements. While larger jurisdictions may have the existing resources to incorporate the new requirements into existing work plans, smaller jurisdictions will have less available resources and will need more assistance from state agency staff to meet the requirements.

Roles and Responsibilities

- *Lead Agency*: DLCD will lead the feasibility report and ODOT will lead the technical assistance task.
- *Supporting Agency*: ODOT will support the feasibility report in an advisory capacity and lead the report writing; DLCD will support the technical assistance work with provision of expertise and resources.

Scope of Work

Phase I – Scenario Planning Policy Options Memo

- Timeline –6 months
- Cost – N/A
- FTE Required – DLCD 1.00 FTE
  ODOT 0.50 FTE

Phase II – Greenhouse Gas Reduction Planning Technical Assistance*

- Timeline – Ongoing
- Cost – $500,000-$2,000,000 annually (TBD based on Phase I)
- FTE Required – ODOT 2.00 FTE
  DLCD 1.00 FTE

**Costs and staff FTE are above and beyond current resources, thus requiring additional funding*

Summary of Tasks

Task	Agency Responsibility	Timeline
1. Scenario Planning Policy Options Memo		
a. DLCD, in consultation with ODOT, will engage local government, regional and social justice stakeholders to understand the local implications of funding, needed authorities, monitoring, and enforcement.	Lead: DLCD 1.00 FTE Support: ODOT 0.05 FTE	6 months

Task	Agency Responsibility	Timeline
b. ODOT, in consultation with DLCD, will prepare a funding report examining the resources necessary to conduct scenario planning in all metropolitan areas. The report will identify existing and potential funding sources and identify funding gaps to conduct scenario planning.	Lead: ODOT 1.00 FTE Support: DLCD 1.00 FTE	
c. DLCD, in consultation with ODOT, will identify policy options for regional scenario planning.	Lead: DLCD .25 FTE Support: ODOT 0.50 FTE	
2. Rulemaking		
a. DLCD will convene a rulemaking advisory committee and technical support structure to develop rules for adoption by LCDC that require cities and counties within metropolitan areas to adopt and implement land use and transportation scenario plans that achieve greenhouse gas reduction targets. The rulemaking will be scoped by the Scenario Planning Policy Options Memo in Task 1 and will be done in concert with rule amendments within the CFEC action..	(See Climate Friendly and Equitable Communities Action write-up)	
3. Greenhouse Gas Reduction Planning Technical Assistance		
a. ODOT and DLCD, working through their technical support structure, will create a technical assistance program for metropolitan cities and counties to respond to the rules adopted in Task 1.2 for greenhouse gas reduction. The technical assistance program will consist of a combination of funding, consulting resources, and staff support to ensure that local plans and implementation strategies meet greenhouse gas reduction goals over time.	Lead: ODOT 2.00 FTE* Support: DLCD 1.00 FTE*	Ongoing

**Costs and staff FTE are above and beyond current resources, thus requiring additional funding*

Performance Monitoring Indicators and Analysis Action

Objective

This objective of this task is to determine the appropriate tracking measures and indicators for the STS implementation, which encompasses the objectives of the Governors Executive Order, and the implementation actions of the Multi Agency work group. Measures and indicators will be chosen that best monitor the success of implementing the STS and associated actions in reaching the Governor's EO GHG reduction goals. Tracking data may include historical data, as well as alignment of adopted plans for the future, and may include observed data (defined as "Metrics") where possible, understanding that some indicators (e.g., GHG emissions) will need to be modeled (defined as "Indicators").

Monitoring is anticipated to be accompanied by communication with decision-makers, including background definitions and scales of the metrics and indicators, as well as sharing key messages learned during monitoring cycle and identification of gaps, opportunities, and challenges, reflective of the evolving technologies, mixed authorities, and trends in the market and other outside factors. This communication is anticipated to leverage existing reports by various agencies, where possible, and with a timing that supports decision-making cycles.

Description

The work conducted under this task will identify an overarching program for monitoring metrics (observed) and indicators (modeled) and associated definitions, scales, and timelines for STS implementation to meet the intent of the Governors EO. Metrics and Indicators will be chosen that are able to best demonstrate progress on the multi-agency actions towards overall implementation of the STS, with consideration for equity, as makes sense. To expedite implantation of the reporting framework, Reporting Areas covering ongoing Multi-Agency efforts will be detailed first, with remaining STS Reporting Area gaps, filled in later. In this way ongoing reporting will extend capture both current Actions, and identify gaps for pushes for future multi-agency work. The monitoring will be developed, implemented and communicated across multiple agencies.

Monitoring performance of two types of metrics are anticipated; understanding that the former are actionable but given future uncertainties, the latter is needed to ensure the actions remain able to achieve required GHG reductions given future uncertainties

- Progress on **Planned Actions** deemed necessary to reach the GHG emission targets.
- Progress on **GHG Emission** reduction targets, i.e. initial and periodic reviews to assess the ability of the planned actions to reduce emissions in accordance with GHG reduction goals.

Opportunities

- Leverage existing monitoring and reporting work, i.e.; ODOT STS Monitoring, ODOE Biennial Energy Report, and DLCD reports on housing production.
- Integration into existing planning and reporting requirements and reporting cycles.
- Pull together various existing state agency datasets/programs in ongoing monitoring program.

- Integrate various data sources, leverage them for more complete reporting and with equity lens.

Challenges

- STS trajectories need to be revisited, significant recourse and Multi Agency collaboration needed to update STS Vision scenario and extend beyond ground transport, isolated updates may be possible.
- May lack data for many metrics, and adding metrics to existing data collection may be prudent but politically challenging.
- Distributed Roles and Responsibilities for development and implementation.
- Definitions vary across datasets and tools, may need to live-with these differences to quickly utilize available data.

Equity Considerations

Identification of reporting Metrics and Indicators should apply equity lens as makes sense. For example, tracking pricing policies and vehicle electrification could be stratified by income, place type (e.g., mixed use, suburban, rural), or demographic. Race and ethnicity will be harder metrics to track, but metrics might tracking progress in particular locations with concentrations of communities of concern.

Scope

Phase I: Performance Measure Development

- *Timeline:* 12 months
- *Cost:* N/A
- *FTE Required:* ODOT – 0.50
  DOE, DEQ, DLCD – 0.25 each

Phase II: Reporting

- *Timeline:* Ongoing
- *Cost:* N/A
- *FTE Required:* ODOT – 0.50
  DOE, DEQ, DLCD – 0.10 each

The effort should draw on existing performance metrics, where available and suitable for this statewide look. The STS structure implies a Vision scenario that meets the GHG reduction targets. It in turn sets Planned Actions in each Reporting Area that are tracked over time. The initial Vision scenario is assumed to adopt the STS Vision, but criteria to update this vision scenario over time is part of the framework activity, and potentially an (optional) early implementation effort.

Task 1 will develop a framework for reporting on the Multi-Agency actions and progress towards the STS vision. Phase 1a establishes basic guidelines for individual agencies. Task 2 is structured to develop detail on the Multi-agency efforts, followed by other EO actions and then filling-in any gaps to cover the full set of actions in the STS Vision. Task 1-2 are anticipated to be a series of meetings with some outside preparatory work by each agency. Task 3 involves implementation of the framework and its reporting

cycles. The first action being a multi-agency review of existing STS Vision scenario. This is an optional task, depending upon the criteria for revisiting the STS Vision scenario.

Roles and Responsibilities

- *Lead Agency*: ODOT for performance measure development related to STS and STS Implementation Multi-Agency Objectives. ODOT, DLCD, DOE, or DEQ depending on metric or indicator for individual actions.
- *Supporting Agencies*: DLCD, DOE, DEQ

Summary of Tasks

Task	Agency Responsibility	Timeline
Phase I: Performance Measure Development		
1. Develop a Framework and Basic Definitions		
a. Planned Action Reporting	Lead: ODOT 0.50 FTE Support: 0.25 FTE each (ODOE, DEQ, DLCD)	1-2 months
b. STS Vision scenario Reporting (GHG and VMT)		
2. Establish Measures Against Implementation Objectives		
a. Identify STS measures that align with objectives in this work program	Lead: ODOT 0.50 FTE Support: 0.25 FTE each (ODOE, EQ, DLCD)	6 months
b. Develop additional measures for objectives as needed		
3. Develop specific STS Implementation Action Metrics and Indicators		
a. Form metric and indicator teams, led by the lead agency for each Action	Lead: 0.25 FTE each per Action (ODOT, DLCD, DOE, DEQ)	12 months
b. Identify and develop a process to measure metrics / indicators		
Phase II: Reporting		
4. Reporting		
a. Re-evaluate progress towards the STS Vision Scenario. Report and reevaluate STS Vision as needed.	Lead: ODOT 0.50 FTE Support: 0.10 FTE each (ODOE, EQ, DLCD)	6-12 months
b. Initial, and periodic Reporting (some metrics annually, others on largely biennial cycles of current reporting requirements)	Lead: 0.10 FTE each per Action (ODOT, DLCD, DOE, DEQ)	Ongoing