

Department of Transportation | Department of Environmental Quality Department of Land Conservation & Development | Department of Energy

EVERY MILE COUNTS

Statewide Transportation Strategy Multi-Agency Implementation Work Plan

2020-2022 draft

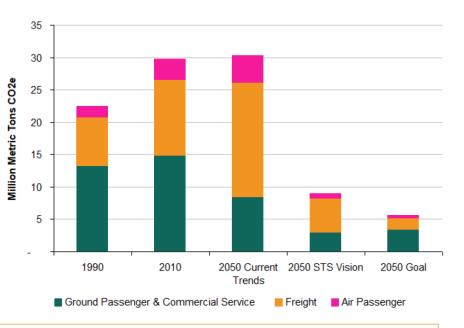




EXECUTIVE SUMMARY

Statewide Transportation Strategy Multi-Agency Implementation Work Plan

One of the best ways to reduce the carbon emissions that cause climate change is to **modify the way we travel**. Oregon is developing strategies and designs to encourage cleaner ways of getting from Point A to Point B, including increasing public transit options, promoting land use that encourages walking and biking, and supporting cleaner fuel options for driving.



KEY OBJECTIVES

Reduce Vehicle Miles Traveled Per Capita Support Use of Cleaner Vehicles and Fuels Consider Greenhouse Gas Emissions in Decision-Making

PRIORITY ACTIONS

Transportation electrification. Expand electric vehicle rebate program, identify needed charging infrastructure.

Cleaner fuels. Expand market-based Clean Fuels Program, providing data and information on the use of cleaner alternative fuels for freight trucks, and developing a roadmap and strategy to support alternative fuel adoption.

Transportation options. Explore employer options to reduce driving, such as telecommuting, parking regulations, and employee incentives.

Local greenhouse gas reduction planning. Plan and build cities where Oregonians can walk, bike, and take transit to get where they need to go.



Background

In 2013, Oregon's *Statewide Transportation Strategy: A 2050 Vision for Greenhouse Gas Reduction* outlined ways to fight climate change by reducing transportation-related greenhouse gas emissions in the state. Oregon's statutory goal is to reduce overall emissions to at least 75 percent below 1990 levels. The Strategy, if fully implemented, would get us nearly there. While Oregon has increased investments and support for transportation options and systems, strong land use planning, and more, the state is far from meeting our goals.

Renewing Efforts

In 2019, Governor Brown directed the Oregon Department of Transportation, Department of Land Conservation and Development, Department of Environmental Quality, and Department of Energy to collaborate and identify specific actions to help the state get back on track with the Strategy's vision. In 2020, the Governor boosted Oregon's goals in her Executive Order 20-04 to reduce pollution to at least 45 percent below 1990 emissions levels by 2035 and to at least 80 percent below 1990 emissions by 2050.

The four agencies worked together to develop a two-year Multi-Agency Implementation Work Plan to make progress toward the Strategy's vision. The plan focuses on initial objectives and priority actions that can benefit from collaborative relationships and programs already established among the agencies. This Work Plan does not replace but rather complements existing agency efforts to reduce greenhouse gas emissions and, because the Strategy is not enough to reach the goals in Executive Order 20-04, the four agencies recognize that more must be done.

What's Next?

Actions over the next 18 months (and beyond) will involve rulemaking, studies, public outreach and engagement, and more. Details are available in the Work Plan and on the project's web page:

www.oregon.gov/odot/Programs/Pages/Every-Mile-Counts.aspx

Get Involved

The public will have ample opportunity to learn about and comment on the elements of the plan as it moves forward. Opportunities for public involvement will be highlighted on the project's web page, and interested stakeholders can also sign up to receive email updates.



Oregon Department of Transportation | Oregon Department of Environmental Quality Department of Land Conservation & Development | Oregon Department of Energy



Statewide Transportation Strategy: A 2050 Vision for Greenhouse Gas Reduction



DRAFT 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

PURPOSE

This document represents a collaborative work plan to reduce greenhouse gas (GHG) emissions from transportation. Oregon Governor Kate Brown called for the agencies of Oregon Department of Transportation (ODOT), Department of Land Conservation and Development (DLCD), Department of Environmental Quality (DEQ), and Department of Energy (DOE) to identify implementation actions to reduce GHG emissions. The basis for the work plan is the *Statewide Transportation Strategy: A 2050 Vision for Greenhouse Gas Reduction* (STS). The STS is Oregon's carbon reduction roadmap for transportation and includes strategies for substantially reducing GHG emissions. More information on the STS is provided in the Background section below.

This STS Multi-Agency Implementation Work Plan covers a two year period, from June 2020-June 2022. The four agencies are committed to undertaking the actions and tasks described herein in support of reducing statewide GHG emissions from transportation. The agencies will continue to meet regularly and will revisit the work plan as needed to address unforeseen opportunities and challenges and make necessary adjustments to this document. At the end of the two year period, the agencies will develop a new work plan which is likely to include a continuation of some of the actions but also new and additional actions to reduce transportation's carbon footprint and to demonstrate an ongoing and long-term commitment to addressing Oregon's climate crisis.

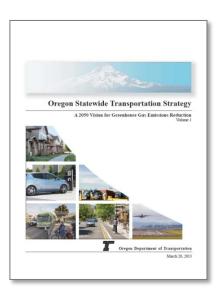
BACKGROUND

The *Statewide Transportation Strategy: A 2050 Vision for Greenhouse Gas Reduction* was completed in 2013, following Legislative direction to identify ways to reduce transportation-related GHG emissions. It was developed over a three-year period with extensive stakeholder engagement and technical analysis. Throughout the development process ODOT worked in close collaboration with sister agencies including: DLCD, DEQ, and DOE. This collaboration was essential to identifying actions that cross agency authorities. In addition, actions were identified that fall under the authority of local jurisdictions, businesses, and the

public to implement and resulted in a comprehensive approach to GHG emission reduction for transportation.

Six categories of strategies and 133 elements were identified in the STS. The categories included:

- Vehicle and Engine Technology Advancements Strategies in this category focus on a transition to more fuel-efficient vehicles, improvements in engine technologies, and other technological advancements. Example elements include Zero Emission Vehicle (ZEV) programs, electric vehicle charging infrastructure, and fleet turnover to a greater share of electric or low carbon fuel vehicles.
- **Fuel Technology Advancements** This category focuses on cleaner and less carbon-intensive fuels.
- Systems and Operations Performance Strategies in this category focus on reducing stops, starts and idling through technology, infrastructure investment, and operations management. Example elements include in-car displays that notify the driver of their fuel efficiency as they travel, providing real time information on crashes and delays, promoting vehicle-to-vehicle communications, and supporting autonomous vehicles.
- Transportation Options Strategies in this category focus on managing travel demand and encouraging a shift to transportation modes that produce fewer emissions and provide for the more efficient movement of people and goods. Example elements include providing park-andride facilities, promoting ride-matching services, adding biking and walking infrastructure, enhancing passenger rail services, and a significant growth in public transportation service.
- Efficient Land Use Strategies in this category focus on infill and mixed-use development in urban areas to reduce demand for vehicle travel, expand non-auto travel mode choices for Oregonians, and enhance the effectiveness of public transportation and other modal options. Example elements include supporting mixed-use development, limited expansion of urban growth boundaries, and development of urban consolidation centers for freight.
- Pricing Funding and Markets This category addresses the true costs of using the transportation system and pricing mechanisms for incentivizing less travel or travel on more energy efficient modes. Example elements include transitioning to a user or mileage based fee, adding a carbon fee, promoting pay-as-you-drive insurance programs, and diversification of Oregon's economy.



Together, the strategies contained in the STS aid the state in achieving its GHG emission reduction goal. The state goal is to reduce overall emissions by 75 percent below 1990 levels by 2050. The STS vision achieves a 60 percent total reduction by 2050, which equates to around 80 percent per capita (Figure 1).

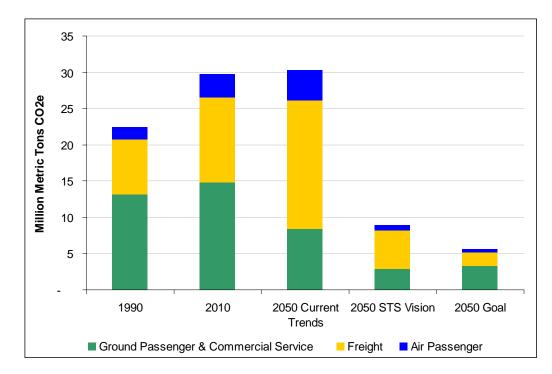
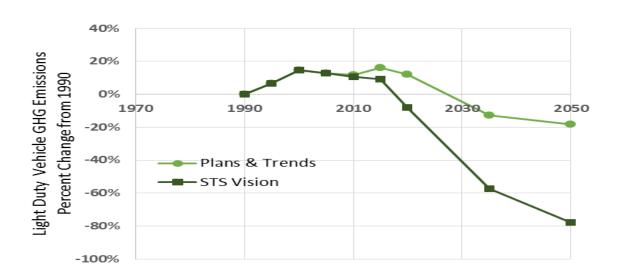


Figure 1: Projected Statewide Transportation Sector GHG Emissions (STS 2013)

Following completion of the STS, ODOT developed a Short-Term Implementation Plan (2014), detailing actions in the first five years that ODOT would undertake. In 2018 ODOT documented its progress in implementing the actions and in achieving the STS overall. Although progress was made on several of the actions, overall GHG emissions from transportation have increased in recent years. Longer term, emissions are expected to reduce but there is a significant gap between today's plans and trends and the STS vision in 2050. Thus Oregon is not on the right path to meet the STS vision (Figure 2).





Although the plans and trends of today do not meet the STS vision, some progress has been made and the gap is achievable. The 2018 STS Monitoring Report found that the STS strategies are still the right actions to help meet Oregon's GHG reduction goals but more work is needed. With continued strong land use policies as well as increased investments and supporting policies in pricing, transportation options, systems and operations, and fuels and vehicles, Oregon can close the gap to meet the STS vision. Figure 3 shows the relative gap for each strategy group. Vehicles and Fuels is around half of the solution, but many other actions are needed to get back on track with the STS vision.

While ODOT, other state agencies, local jurisdictions and more are individually looking at ways to enhance STS implementation efforts, the Governor asked the state agencies of ODOT, DLCD, DEQ, and DOE to identify collaborative STS implementation actions to help get the state back on track with the STS vision. In accordance the four state agencies met and identified actions requiring collaboration of two or more agencies. The actions selected were targeted at meeting the objectives listed below and that were thought to help move the GHG reduction needle, be cost-effective, and support equity and other state goals.

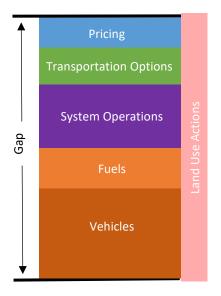


Figure 3: Needed Policies and Investments to Close the Gap between Plans and Trends and the STS Vision

Some of the recommended actions are also included in Governor Brown's *Executive Order 20-04: Directing State Agencies to Take Actions to Reduce and Regulate Greenhouse Gas Emissions*. Also of note, the Executive Order increases the GHG emission reduction goal for 2050 from 75% to 80% below 1990 levels. It also establishes an interim goal of 45% below 1990 GHG emission levels by 2035. In general, the Executive Order covers agencies beyond ODOT, DLCD, DOE, and DEQ, and has actions in addition to those in the STS. Therefore, this document does not reference all requirements in the Executive Order but instead highlights any that relate to the STS and the collaborative work of the four agencies.

OBJECTIVES

The overall objective of the STS multi-agency implementation effort and this work program is for the four state agencies to support realization of the STS vision and to work together cooperatively to help reduce Oregon's GHG emissions from transportation. State agencies can only support a fraction of the work needed to realize the STS vision but can implement key enabling strategies that support broader electrification of vehicles in the state, transition to cleaner fuels, and transportation demand management, to name a few. Thus, the actions identified in this document will not significantly reduce emissions by themselves but are the foundational elements to moving in the right direction.

To move in the right direction of the STS vision, actions should be responsive to achieving the following sub-objectives:

• Reduce Vehicle Miles Traveled Per Capita



The predominant mode of transportation in Oregon, like elsewhere in the United States, is driving a vehicle. Vehicle miles traveled (VMT) has increased in recent years with more people moving to the state, but statewide per capita VMT has flattened. This trend varies by geographic area. The current mix of vehicles on Oregon's roadways is fairly dirty, making the emission profile of VMT a significant factor. Strategies that help to reduce VMT will help to in-turn reduce GHG emission, especially in the short-term. VMT can be reduced by strategies that reduce drive-alone trips and support people telecommuting, taking the bus, biking, walking, or similar modes of travel. Supportive land use efforts are needed to develop our urban and suburban communities so that homes, jobs, services and shopping are in close proximity and therefore can be easily accessed on foot, bike, or bus. Carpooling, transit, biking and walking all help reduce emissions by transitioning trips to higher capacity, lower emitting modes.

• Support Use of Cleaner Vehicles and Fuels



Even as per capita VMT has flattened out, it should be recognized that those trips need to be made in cleaner vehicles using cleaner fuels. Thus strategies that target lower emissions of vehicles and fuels are essential. This fact is evidenced by the 2018 STS Monitoring Report, which found that over half of the effort needed to achieve the STS vision is under vehicles and fuels. A holistic de-carbonization approach will not be a one-size-fitsall, but rather a combination of a greater proliferation of electric vehicles, hybrids, and low-carbon fuels across all modes of transportation.

• Consider GHG Emissions in Decision-Making



The Governor's Executive Order directs State Agencies to consider and integrate climate change impacts and GHG emissions reduction goals into their planning, budgets, investments, and policy making decisions. Accordingly, the four agencies will strive to consider GHG in their decision-making, and strategies selected for the multi-agency STS implementation effort should support efforts that result in more informed decision-making and solidified actions that help to reduce GHG emissions. This extends to supporting GHG in decisions that the agencies influence as well, such as DLCD and ODOT over local planning and implementation.

All of these sub-objectives will need to be balanced with other goals such as economic development and equity. Some in fact promote these goals, such as increased multi-modal options for all Oregonians, which has particular benefit to the one-third of Oregonians who are too young, old, infirmed, disabled or cannot

afford to drive a car. Many of the actions identified in this document will have co-benefits far beyond GHG emission reduction, such as improved health, and reduced traffic congestion.

PRIORITY EFFORTS

All six categories of the STS were reviewed by the four state agencies when identifying actions. Categories requiring cross-agency collaboration were favored and were further narrowed based on the objectives described above, effectiveness in reducing emissions, and ability to implement within five years. Actions were also identified to demonstrate state agency leadership on issues and "walk our talk." Based on these factors and agency's abilities to influence, the following four priority efforts were identified:

• Transportation Electrification

To help achieve the *Support Use of Clean Vehicles and Fuels* objective, transportation electrification was chosen as a focus area for the multi-agency work. Each of the four agencies have a part in supporting electric vehicle (EV) implementation. DOE has been charged with EV tracking and actions to enable electrification; DEQ implements the Zero Emission Vehicle (ZEV) program and the Clean Vehicle Rebate program that support EV adoption; ODOT manages and leads state conversations around electrification, designates EV corridors, and upgrades the West Coast Electric Highway; and DLCD supports transportation electrification through land use provisions and model code on charging infrastructure. Combining and aligning efforts should help to better focus implementation and achieve additional results. Three actions are recommended under this category including: expanding EV incentive programs, developing an interagency ZEV action plan, and developing a transportation electrification infrastructure needs analysis. The latter of the three actions (needs analysis) is now a requirement according to the Governors Executive Order.

Cleaner Fuels

Also furthering the objective of *Support Use of Clean Vehicles and Fuels*, the agencies are looking at additional de-carbonization strategies that support increased use of lower-carbon fuels. The Clean Fuels program and most actions fall primarily within the organizational responsibility of DEQ. DOE has definite supporting roles, and ODOT and DLCD can provide ancillary support to most actions. The actions recommended for cleaner fuels include: expanding the Clean Fuels program, developing an alternative fuels roadmap for state agencies, alignment of state agency policies to promote alternative fuels, truck alternative fuels study, and emission standards and requirements for medium- and heavy-duty trucks. Adjustments to the Clean Fuels Program is now a requirement according to the Governor's Executive Order.

• Transportation Options

To directly *Reduce Vehicle Miles Traveled Per Capita* and promote alternative modes, transportation option strategies, also known as Transportation Demand Management strategies were selected. Although there are many potential demand management strategies, the four agencies narrowed in on two that require cross-agency collaboration. The first is a statewide trip reduction ordinance. This would require collaboration mostly between DEQ and ODOT, with support from the other two agencies. The other action encapsulates a body of work around

parking management, primarily led by DLCD through integration in the Transportation Planning Rule (TPR) and through guidance, with support from ODOT and some engagement by DOE and DEQ.

• Local GHG Reduction Planning

While agencies need to *Consider GHG Emissions in Decision-Making*, it is also important for others to as well. Accordingly, the Governor's Executive Order explicitly directs DLCD to amend the Transportation Planning Rules (TPR) to require local governments and metropolitan areas to meet GHG reduction targets in their plans. The Executive Order also specifies that ODOT and DLCD must identify and provide technical and financial support.

To ensure this work is effective over time in achieving GHG reductions and the objectives described in this document, **performance measures** will also need to be developed.

WORK PROGRAM

Staff developed a work program to detail the actions within each priority effort, including scope, timing, and roles and responsibilities. The work program covers a two-year period, from June 2020 to June 2022.

The work program includes actions above and beyond work underway or planned by the agencies and represents a substantial effort toward reducing GHG emissions from transportation. Staff and financial resources will be redirected as needed to prioritize implementation actions herein. Any funding or staffing needs above and beyond what can reasonably be made available are later in this document. The actions identified were selected cooperatively among ODOT, DLCD, DEQ, and DOE and the agencies agree that the work program is achievable.

ACTIONS

Each of the actions identified further the objectives set by the group and are thus organized under the primary objective they serve. More information on each action, including more detailed scopes, task descriptions, roles and responsibilities, level of effort, and timing can be found in Appendix A.

Objective: Reduce Vehicle Miles Traveled Per Capita

Although actions that further consideration of GHG emissions in decision-making are also likely to result in reduced VMT, two actions have been identified under "*Transportation Options*" that directly target people to driving alone less.

Transportation Options

Action: Statewide Trip Reduction Policy

A state trip reduction policy would require certain-sized businesses in certain geographic areas of the state to plan for and implement techniques to reduce employees' vehicle miles traveled. Techniques may include telecommuting, flexible work schedules (to shift travel out of peak hours), free transit passes, parking cash-out programs, encouraging bike and pedestrian options, etc. This work would be led by DEQ, who would amend their Employee Commute Options (ECO) Rule. The rule currently only applies to Portland Metro and would need to be expanded to other areas and strengthened. In order to develop a Statewide Trip Reduction Policy, the following tasks

are needed: research similar programs in other states and jurisdictions, engage stakeholders, and conduct a rulemaking process. The rulemaking effort is likely to be time and staff intensive, and is likely to be controversial. Once the rule is completed and a program developed, there would be a need for ongoing resources to implement the statewide trip reduction program including DEQ program management personnel, and funding for ODOT to provide technical support directly and through local transportation option providers.

Phase / Tasks	Timeline	Cost	Role	Staff
Background,	12-18 months	N/A	DEQ - Lead	1.00 FTE
Communications,			ODOT - Support	0.25 FTE
Rulemaking				
Implementation	Ongoing	\$200,000	DEQ - Compliance	0.75 FTE*
		annually*	ODOT – Tech Support	0.50 FTE*

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

Action: Parking Management

Parking management is a multi-faceted action that supports limiting the growth of parking spaces, more pay-to-park locations, higher parking rates, and other strategies that incentivize people not to drive to their destinations. It also provides important co-benefits such as reducing the number of parking spaces allowing for building more units on the same amount of land. Parking management strategies need to be carefully managed so not to disadvantage certain populations, and therefore the work will include mitigation strategies to support equity concerns. This action will be primarily led by DLCD, with support from ODOT and DEQ, and engagement is through the

update of the Transportation Planning Rules (TPR). An update for the TPR is required by the Governor for regulating GHG emissions in local planning (described below). The other mechanisms for implementation include the development of guidance and information. ODOT and DLCD will create informational materials and work with locals on parking management programs. This will primarily be done through the Transportation Growth Management (TGM) program. Because the TPR rule amendment process can be leveraged and the TGM program is already set up to support creation and dissemination of guidance materials, the overall level of effort for this action is projected as low.



Phase / Tasks	Timeline	Cost	Role	Staff
TPR Rulemaking –	18 months	Included in	DLCD - Lead	Included in
adding parking		TPR Action	ODOT - Support	TPR Action
Outreach and	24 months	\$100,000	DEQ - Compliance	1.00 FTE
Guidance			ODOT – Tech Support	0.25 FTE
Indirect Source	12 months	Included in	DEQ - Lead	Included in
Rulemaking –		DEQ		DEQ
adding parking		rulemaking		rulemaking

Objective: Support Use of Cleaner Vehicles and Fuels

Two of the priority efforts, "Transportation Electrification" and "Cleaner Fuels," are designed to achieve a mix of cleaner vehicles and fuels on Oregon's roads. Most of these efforts involve better understanding barriers and opportunities to converting the fleet through research and studies. These will help agencies identify and pursue the most effective actions. Some rulemaking and legislative support is also required.

Transportation Electrification

Action: Interagency Zero Emission Vehicle (ZEV) Action Plan

This action has been started by the Zero Emission Vehicle Interagency Working Group (ZEVIWG) and supports transportation electrification in Oregon by developing a statewide interagency Zero Emission Vehicle (ZEV) Action Plan. The intent of the Action Plan is to create a roadmap for efforts that will increase Oregonian's awareness of and access to ZEVs (such as expanding DEQ's EV incentive program), increasing access to charging infrastructure (including ODOTs task of developing transportation electrification infrastructure needs analysis – described below), and increasing use of ZEVs at state agencies. The Action Plan will be developed by DOE in partnership with ZEVIWG, and implementation will be led by ODOT in close collaboration with DOE and others. Level of effort is anticipated to be low, although subsequent actions identified in the Plan will be require a more substantial level of effort.

Phase / Tasks	Timeline	Cost	Role	Staff
Interagency ZEV	3 months	N/A	DOE - Lead	0.30 FTE
Action Plan			ODOT – Support	Min
			DEQ – Support	
Implementation	Ongoing	TBD	ODOT – Lead	TBD
			DOE – Support	TBD
			DEQ - Support	

Action: Transportation Electrification Infrastructure Needs Analysis

The Interagency ZEV Action Plan will help inform the direction of the Transportation Electrification Infrastructure Needs Analysis, which is called for in Governor's Executive Order. The Executive Order specifies that ODOT must complete a statewide transportation electrification infrastructure needs analysis by June 2021. The study must give consideration to rural needs and focus on helping to meet the goals for light-duty Zero Emission Vehicles set in SB 1044 (2019). Accordingly the study will be led by ODOT with consultant support and in close consultation with DOE. Given the tight timeframes, complexity of data and information, and large number of interested parties and stakeholders, the level of effort on this action will be large, although over a fairly short timeframe. Other agencies beyond ODOT and DOE will need to participate in this effort, in addition to public utilities and others, whose role will be less significant.

Phase / Tasks	Timeline	Cost	Role	Staff
Transportation	12-18 months	\$250,000*	ODOT - Lead	1.00 FTE
Electrification Needs			DOE - Support	0.50 FTE
Analysis				

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

Cleaner Fuels

Action: Expand the Clean Fuels Program

DEQ will enter into a rulemaking process for the Clean Fuels Program, implementing the direction of Governor Brown's Executive Order. The Clean Fuels Program will be extended and the requirements enhanced. Dedicated staff time will be needed for a few years to complete the rulemaking process. Concerted efforts will also be focused on making state agencies aware of the Clean Fuels Program, broaden engagement, and support overall use of lower carbon fuels across state agencies. This work will be led by DEQ with support from DOE.

Phase / Tasks	Timeline	Cost	Role	Staff
Amend Low Carbon	27-33 months	\$200,000	DEQ - Lead	1.00 FTE
Fuel Standards				
State Agency Fuel	24 months	TBD	DEQ – Lead	0.25 FTE
Use			DOE - Support	0.25 FTE



Action: Truck Alternative Fuels Study and Implementation

The freight market has a large GHG emission profile and actions are needed to support reduced emissions. Accordingly, this action will focus on the potential for freight trucks to be powered by electricity, hydrogen, or other lower carbon fuels. Specifically, the study will identify fueling and infrastructure needs and associated approaches agencies may take to enable transition to alternative fuels. Work will be led by DEQ, with ODOT providing technical data and connections to the freight industry. Part of the work will rely on market data, while additional information will be needed from the freight industry directly. The goal of the effort is to support the freight sector, not to regulate fuels and technology. It is recommended that, given other priority efforts in this work plan, this Action not start until mid- to late- 2021.

Phase / Tasks	Timeline	Cost	Role	Staff
Truck Alternative	6 months	N/A	DEQ - Lead	0.25 FTE
Fuels Study			ODOT – Support	0.25 FTE
			DOE – Support	0.10 FTE
Implementation	Ongoing	N/A	DEQ – Lead	0.25 FTE
			ODOT - Support	0.25 FTE

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

This action will propose that the Environmental Quality Commission consider adopting California's emission standards for medium- and heavy- duty trucks and requirements for manufacturers to make zero emission medium- and heavy- duty vehicles available for sale in Oregon. Executive Order 17-21 directs DEQ to maintain consistency with California's zero emission vehicle regulation, including efforts to ramp up regulatory requirements. California is on track to adopt new emission standards for diesel-fired medium- and heavy- duty vehicles as well as a new ZEV standard for medium- and heavy-duty vehicles. DEQ would need to work with partner agencies to adopt regulations quickly and maintain parity with model years being developed by manufactures to meet California's standards.

Phase / Tasks	Timeline	Cost	Role	Staff
Support California's Development of New Regulations	8 months	N/A	DEQ- Lead	1.00 FTE
Adopt New	12 months	N/A	DEQ – Lead	0.50 FTE
Regulations			ODOE- Support	0.25 FTE
			ODOT- Support	0.25 FTE
			DLCD- Support	0.25 FTE

Objective: Consider GHG in Decision-Making

There are several overarching actions that support multiple objectives, but that are foundational to making decisions considerate of GHG emissions. The bulk of that work focuses on "Local GHG Reduction Planning." In addition, an action item is included for "Performance Measures." Performance measures will be needed for all other actions in this document to ensure accountability and overall progress towards the objectives.

Local GHG Reduction Planning

Action: Transportation Planning Rule (TPR)

One of the largest rulemaking efforts will be the update of the Transportation Planning Rules (TPR) and other planning rules. Overall the TPR directs most cities and counties in Oregon to have coordinated land use and transportation plans. Rule amendments will require local governments to plan for transportation systems and land uses to reduce GHG emissions, including requiring transportation plans within metropolitan areas to meet GHG reduction goals. Among the needed amendments, staff have identified the opportunity to strengthen parking management regulations within the TPR, which is described above under the "Parking Management" action. There may also be opportunities within the TPR and in administrative rules implementing Statewide Planning Goal 10 (Housing) to ensure consideration of local electric vehicle charging needs and to address the state's housing crisis by increasing residential units in priority investment areas. The rulemaking effort will include broad stakeholder engagement and may apply to rule updates for Division 12 (Transportation Planning Rule), Division 44 (Greenhouse Gas Reduction Targets), Division 7 (Metropolitan Housing Production Strategies (Division 46). This work

item is anticipated to take a significant level of effort, requiring several DLCD staff and support from ODOT. DLCD will need to continue and perhaps intensify efforts to monitor and enforce local plans. In addition ODOT and DLCD will examine changes needed to state plans, policies, and investments in order to enable implementation.

Phase / Tasks	Timeline	Cost	Role	Staff
Update Rules	18 months	\$275,000*	DLCD – Lead	4.00 FTE
				0.50 FTE*
			ODOT – Support	1.00 FTE
Monitor and Enforce	6 months	N/A	DLCD – Lead	4.00 FTE
Program				
Enable	6 months	N/A	ODOT – Lead	1.00 FTE
Implementation			DLCD – Support	0.50 FTE

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

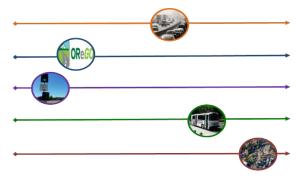
Action: Scenario and GHG Reduction Planning

In order to proceed with any further mandates for scenario and GHG reduction planning, studies will be needed to identify the best approaches for local GHG reduction planning and for associated costs and technical support needs. ODOT and DLCD will engage stakeholders to understand their needs and constraints and rely on lessons learned from the last ten years of scenario planning to complete this work. These efforts will be done prior to or in the early stages of rulemaking in order to appropriately scope the effort and identify policy options that can reasonably be implemented. Once the rulemaking is complete, ODOT and DLCD will need to provide technical and financial support to metropolitan areas in support of their planning. ODOT and DLCD could potentially support scenario planning for up to one metropolitan area at a time within existing resources. However, each effort may take around two years to complete and there are seven metropolitan areas in the state that will require new work. Thus the demand will likely exceed capacity and additional staff FTE and funding is critical.

Phase / Tasks	Timeline	Cost	Role	Staff
Scenario and GHG	6 months	Included in	DLCD – Lead	Included in
Reduction Planning		TPR Action		TPR Action
Feasibility Report			ODOT – Support	0.50 FTE
Scenario and GHG	Ongoing	\$0.5M-\$2M	ODOT – Lead	2 FTE*
Reduction Planning		annually*	DLCD – Support	1 FTE*
Technical Assistance				

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





Performance Measures

Action: GHG Reduction Performance Measures

To ensure that the state agencies and local governments are on track to meet GHG reduction goals and to effectively steer resources towards this effort, the agencies will develop GHG reduction performance measures. Progress will be measured in three ways. First, performance measures and targets will be developed using the trajectory of actions in the STS. Second, local performance measures for GHG reductions actions will be developed, monitored, and enforced. Thirdly, programmatic performance measures will be developed to demonstrate progress towards meeting the goals specific to each action outlined in this work plan. Overall performance tracked by metrics in the STS are unlikely to show large statewide GHG reduction differences in the short term. Performance measures at the local level will help to track small changes in different categories of approaches that will help determine where more effort might be needed to further overall GHG reduction goals. Programmatic performance measures specific to each of the work actions will demonstrate progress and allow agencies to course correct when necessary.

Phase / Tasks	Timeline	Cost	Role	Staff
Performance	12 months	N/A	ODOT – Lead	0.50 FTE
Measure			DLCD – Support	0.25 FTE
Development			DEQ – Support	0.25 FTE
			DOE – Support	0.25 FTE
Reporting	Ongoing	N/A	ODOT – Lead	0.50 FTE
			DLCD – Support	0.10 FTE
			DEQ – Support	0.10 FTE
			DOE – Support	0.10 FTE

TIMING

The actions described above will be sequenced over the next five years. Most actions will start in the next six months, while some of the work (e.g. Truck Alternative Fuels Study) is set to start in about a year. The general sequencing of the actions is shown in Figure 4 below.

STS Priority Actions - Actions	Implementation Schedule 6 Months	12 Months	18 Months and Beyond
Electric Vehicle Charging Infrastructure	EV Needs Analysis scoping, Scoping Plan development, Incentive Program scoping	EV Needs Analysis report; EV Scoping Plan Implementation; EV Incentive Program Legislative Concepts	EV Incentive Program Rulemaking
Clean Fuels	Clean Fuels scoping, rulemaking, outreach; Truck Emission Standards scoping	Clean Fuels scoping, rulemaking, outreach; Truck Emission Standards rulemaking	Clean Fuels scoping, rulemaking, outreach; Truck Emission Standards rulemaking; Truck Alternative Fuels
Transportation Options	Trip Reduction scoping, coordination	Trip Reduction Outreach and Rule-making	Trip Reduction Rulemaking
Scenario Planning, Transportation Planning Rule	Scenario Planning Study; Scoping for TPR Rulemaking	TPR Rulemaking, program development	TPR Technical Assistance/Outreach

Figure 4: Timeline and Sequencing of STS Multi-Agency Implementation Actions

RESOURCE NEEDS

As shown in the timeline (Figure 4), much of the work is front loaded in the first two years. Such efforts will require at least 1-2 dedicated staff per agency over this time period. This demonstrates a significant commitment across state agencies towards helping to achieve the STS vision and GHG reductions from transportation.

Timelines may need to adjust as unforeseen circumstances arise or as opportunities or challenges present themselves. The timelines are also contingent of available resources. Some of the actions described above will require additional resources above and beyond what can be made available today. Specifically additional resource needs include:

• Trip Reduction Ordinance

Additional staff are needed at DEQ (0.75 FTE) to implement and enforce the program once it is created and at ODOT (0.50 FTE) to provide statewide technical assistance to businesses. In addition about \$200K annually is needed to pass through ODOT to local transportation options providers to provide location-specific and hands-on technical support.

- Transportation Electrification Infrastructure Needs Analysis To complete the required elements of the Executive Order, ODOT will need to hire a consultant and funding is needed (\$250,000).
- Transportation Planning Rule

Given other high profile rulemaking efforts and limited agency capacity, DLCD will need additional staffing support (for administrative tasks) for the TPR rulemaking (0.50 FTE). In addition, \$275,000 will be needed to support the rulemaking process and equity outcomes.

Implementation of Scenario and GHG Reduction Planning
 To support more than one local GHG reduction planning at a time, staffing to ODOT (2 FTE) and
 DLCD (1 FTE) is needed as well as additional funding to pass through ODOT (\$0.5M-\$2M annually)
 to local areas doing the planning work.

Some of the needs described above are immediate, like the Transportation Electrification Infrastructure Needs Analysis, while others are longer term and support long-term implementation, such as the Trip Reduction Ordinance, Transportation Planning Rules, and GHG Reduction Planning efforts.

Beyond resource needs, all actions will require at least some level of cross-agency coordination. Coordination will be facilitated by the formation of working teams for each action but there will also still be a need for all four agencies to meet regularly. Thus, monthly check-in meetings will be scheduled for STS implementation leads from each agency. These can be complemented by bi-monthly check-ins at the Director level, to ensure accountability to implementation and work through any issues that arise.

In addition to internal inter-agency coordination, there will be a need to communicate this work externally. Accordingly, a draft communications plan has been developed to guide overall engagement. Ongoing information on the work plan will be provided on a website about this interagency effort, hosted by ODOT at: <u>https://www.oregon.gov/odot/Programs/Pages/Every-Mile-Counts.aspx</u>.