

Catalog of State Actions Transportation Working Group

A catalog of state-level, GHG-reducing actions and policy options based on actions undertaken or considered by state, local and private actors.

Key to Future Rankings of Options in the Tables that Follow:

Potential GHG Emission Reductions <u>1/</u>	Potential Cost or Cost Savings <u>1/ 2/</u>
High (H): At least 1.0 million metric tons (MMt) carbon dioxide equivalent (CO ₂ e) per year by 2020 (~1% of current WA emissions)	High (H): \$50 per metric ton CO ₂ e (tCO ₂ e) or above
Medium (M): From 0.1 to 1.0 MMtCO ₂ e per year by 2020	Medium (M): \$5-50/tCO ₂ e
Low (L): Less than 0.1 MMtCO ₂ e per year by 2020, or 1 MMtCO ₂ e by 2050	Low (L): Less than \$5/tCO ₂ e
Uncertain (U): Not able to estimate at this time	Negative (Neg): Net cost savings
	Uncertain (U): Not able to estimate at this time
<p><u>1/</u> Several measures may overlap in terms of emissions reductions and/or cost impacts. Estimates assume measures would be implemented independently from other measures.</p> <p><u>2/</u> Costs are denoted by a positive number. Cost savings (i.e., “negative costs”) are denoted by a negative number.</p>	

Definition of “Priorities for Analysis”:

- **High:** High priority options will be analyzed first.
- **Medium:** Medium priority options will be analyzed next, time and resources permitting.
- **Low:** Low priority options will be analyzed last, time and resources permitting.

Table-3 Transportation (T)

Option No.	GHG Reduction Policy Option	Potential GHG Emissions Reduction	Cost per Ton	Other Considerations: Contribution to 2035/2050 goals, Job Creation, Fuel Imports, Externalities, Feasibility	Priority for Analysis	Notes / Related Actions in WA State
T-1 VEHICLE TECHNOLOGY						
1.1	Clean Car Program (“Pavley” GHG standards for autos)					Beginning January 1, 2009, new cars and light trucks sold in the State must meet the California Clean Car vehicle emissions standards.
1.2	Fuel-Efficient Tires					
1.3	Freight Vehicle Fuel Efficiency Improvements					
1.4	Black Carbon Control for Freight Vehicles (e.g., particulate traps)			New EPA emission standards for truck engines take effect in 2007		In 2005, Legislature authorized \$2 million (and an additional \$2.3 million in 2007) to retrofit 20% diesel engines owned by public entities. Prior funding can also be used to retrofit privately-owned diesel vehicles.
1.5	Vehicle Purchase or Registration Incentives (registration fees, tax credits, feebates, etc.)			Federal Tax Code provides tax credits for alternative fuel vehicles		Clean alternative fueled vehicles and hybrid passenger vehicles with a fuel economy of at least 40 mpg on the highway are exempted from state sales and use taxes starting in 2009. HB 1303 supports the use of plug-in hybrid vehicles by the state and provision of plug-in capability at state locations. Tax and fee incentives can be provided to encourage individual and fleet purchases of plug-in hybrid vehicles.
1.6	Operational Incentives for Low-GHG Vehicles (preferential parking, use of HOV lanes, etc.)					

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1.7	Incentives to Retire or Improve Older High-GHG Vehicles (passenger or freight)					
1.8	Incentives for Low Emission Transit Vehicles					
T-2 VEHICLE OPERATION						
2.1	Lower and/or Enforce Speed Limits					
2.2	Driver and Alternative Transportation Education					The state considered legislation in 2007 (HB 1588) that would have launched programs in cooperation with drivers' training to teach the public about multimodal mobility options, including how to bicycle safely, how to use a trip planner to take transit from one destination to another, etc.
2.3	Heavy-duty Vehicle Idling Regulations and/or Alternatives (e.g., electrification)					A business and occupation state tax deduction is provided from the sale, lease, or rental of auxiliary power to heavy duty diesel vehicles through on-board or stand-alone electrification systems. HB 1303 supports the provision of incentives to encourage the use of plug-in truck auxiliary power units and truck stop electrification.

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T-3 ALTERNATIVE FUELS						
3.1	Low Carbon Fuel Standard					
3.2	Renewable Fuel Standard (ethanol and/or biodiesel)					Beginning in November 30, 2008, fuel suppliers must ensure a minimum of 2% of total annual diesel and 2% of total annual gasoline sold in the State must be biodiesel or ethanol.
3.3	Alternative Fuel Mandates for State/Local Fleets					An Executive Order directs agencies to reduce 20% petroleum use in the operation of state vehicles and privately-owned vehicles used for state business, by September 1, 2009. By that date, standard diesel must be replaced with 20% biodiesel blend, and as soon as practical, agencies must begin using a minimum 5% biodiesel blend.
3.4	Alternative Fuel Production Incentives (reduced fuel taxes, production tax credits, loans, etc.)					Legislature passed four bills which provide various tax and use incentives to encourage the development, distribution, and sale of biodiesel and ethanol fuels.
3.5	Alternative Fuel Infrastructure Development					2006 Legislature appropriated \$17 million for the Energy Freedom Loan Program to develop a viable bioenergy industry, promote research, and develop bioenergy sources and markets to support growth of bioenergy crops. 2007 Legislature authorized a bill to create a vehicle electrification grant program. The bill also authorizes state agencies to provide electricity at state facilities for operation of state electric vehicles and privately-owned electric vehicles used for state business.

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T-4 SMART GROWTH						
4.1	Promote Infill and Brownfield Development					Washington’s Brownfield Coalition offers low-interest loans to local governments and property owners to clean up Brownfields through the Brownfield Loan Fund.
4.2	Increase Residential Densities within Urban Areas					
4.3	Promote Transit-Oriented Development					
4.4	Designate Employment and Housing Centers for Investment Planning					Washington adopted the Growth Management Act in 1990 that requires state and local governments to manage the state’s growth by protecting critical and natural resource areas and designating urban growth areas.
4.5	Targeted Open Space and Rural Land Protection					
4.6	VMT/GHG Mitigation Requirements for Large Developments					
4.7	Multimodal Concurrency					The State Growth Management Act requires that adequate street capacity is provided concurrently with development to handle the projected increased traffic.

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T-5 SYSTEM EFFICIENCY AND DEMAND MANAGEMENT						
5.1	Transportation System Management (signal timing, HOV lanes, intelligent transportation systems, etc.)					
5.2	Ridesharing (carpool and vanpool programs, park-and-ride, etc.)					The Legislature passed SB 5412 in 2007, requiring Washington to develop a plan to reduce per capita vehicle miles traveled. The State must commit to a series of aggressive VMT reduction goals.
5.3	Expand Transit Infrastructure (rail, BRT) and/or Improve Existing Service (frequency, quality, etc.)					
5.4	Transit Marketing, Promotion, and Pricing Incentives					
5.5	Bike and Pedestrian Infrastructure Improvements					Seattle’s and Kirkland’s “Complete Streets” ordinances establishes principals for street design to support and encourage walking, bicycling, and transit use while promoting safe operations for all users.
5.6	Additional Financing Tools to Invest in Local Transportation Infrastructure					
5.7	Commuter Choice Programs (pre-tax transit, telecommute, parking cash-out, etc.)					Legislature passed the Commute Trip Reduction Efficiency Act that uses partnerships among employers, local jurisdictions, transit systems, and the State to discourage traveling by single-occupant vehicles to the work place.

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5.8	Expand Roadway Pricing (e.g., tolling)					PSRC recently conducted a pilot test of an in-vehicle taxi-like metering device to assess roadway user charges. This Traffic Choices Study involved 500 vehicles from more than 300 households. The Legislature passed SB 5412 in 2007, which requires WSDOT to consider efficiency tools including system-wide pricing. The Washington State Transportation Commission also conducted a thorough tolling study which outlines their vision for the role of tolling and pricing in the near future.
5.9	Increase Motor Fuel Taxes					
5.10	Parking Management					
5.11	VMT Reduction Goals					The Legislature passed SB 5412 in 2007, which would commit the state to development of a plan to gradually reduce per capita vehicle miles traveled.
5.12	Quantification of GHG Impacts of Transportation Plans and Programs					

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T-6	NON-ROAD OPTIONS					
6.1	Intermodal Rail Improvements for Freight					
6.2	Intercity Rail or High-Speed Rail Corridors					
6.3	Aircraft GHG Reductions					
6.4	Airport Operations and Ground Equipment					
6.5	Harbor Craft GHG Reductions (ferries, tugs, etc.)					
6.6	Port Electrification					HB 1303 supports port electrification through the use of plug-in shore power and cargo and cruise ship terminals, shipside technology, and use of electric power alternatives for port-related operations and equipment.
6.7	Off-Road Vehicle GHG Reductions (construction, recreational, etc.)					