

Catalog of States Climate Mitigation Actions, ©EESI/CCS, 2007

Prepared by The Center for Climate Strategies (CCS) based on actions undertaken or considered by US states.

Tables of State Level Climate Mitigation Actions:

Table	Sectors Covered
3	Transportation and Land Use (TLU)

Note: Highlighted options are additional ideas for action provided by Iowa DNR but are not officially endorsed.

Table 3 - Transportation and Land Use (TLU)

Option No.	GHG Reduction Policy Option	Priority for Analysis	Potential GHG Emissions Reduction	Potential Cost or Cost Savings	Ancillary Impacts, Feasibility Considerations	Notes
TLU-1	PASSENGER VEHICLE GHG EMISSION RATES					
TLU-1.1	VEHICLE TECHNOLOGY					
1.1.1	Tailpipe GHG Emission Standards: California Clean Car					Often called “Pavley” after the California legislative sponsor.
1.1.2	ZEV/LEV-2 Implementation					
1.1.3	R&D on Low-GHG Vehicle Technology (e.g., fuel cell)					
1.1.4	Add-on Technologies (Low Friction Oil, Low-Rolling Resistance Tires)					
1.1.5	Hybrid Buses					
1.1.6	Support new CAFÉ standards					
1.1.7	Require GHG emission stickers on new cars					
TLU-1.2	VEHICLE OPERATION					
1.2.1	Enforce Speed Limits					
1.2.2	Vehicle Maintenance, Driver Training					
1.2.3	Transportation System Management (Intelligent Transportation Systems)					

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1.2.4	Driver Feedback Technology with Pay-as-you-drive Insurance					Provides feedback on driving habits.
1.2.5	Adopt a statewide per-capita VMT goal					
1.2.6	Require "Tune Up services to include tire pressure checks"					
1.2.7	School Bus idling restrictions					
1.2.8	School Education Programs					
1.2.9	Enforcement of auto anti-idling reduction requirements					
TLU-1.3	INCENTIVES & DISINCENTIVES					
1.3.1	Procurement of Efficient Fleet Vehicles					
1.3.2	Feebates (state-specific or regional)					
1.3.3	CO ₂ -based registration fees					
1.3.4	Tax Credits for Efficient Vehicles (vouchers for these vehicles were also suggested as an option)					
1.3.5	Vehicle Scrappage					
1.3.6	Emission-Based Tolling (discount for clean vehicles)					This is an incentive to replace light-duty vehicles sooner

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1.3.7	Establish a carbon emission tax ala. The Clean Air Discount Bill introduced in California.					
1.3.8	Establish a fleet replacement grant program, ala. Los Angeles					
1.3.9	Provide tax incentives for adult bicycles					
1.3.10	Push alternative travel into the advertising mainstream					
TLU-2 LAND USE AND LOCATION EFFICIENCY						
TLU-2.1 GENERAL						
2.1.1	Adopt statewide growth management plan & GHG cap guiding conforming regional transportation & land use plans/programs that meet state-determined GHG budgets and VMT per capita targets					
2.1.2	Ensure state policies and capital funding programs evaluate GHG implications to be a model for climate-friendly and energy efficient development patterns					

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2.1.3	Shape public and private investiment to maximize GHG reductions and growth management, including Indirect Source Rule to hold development accountable for GHGs, Transfer of Development Rights, Open Space Protection, Coastal Zone Management, Adequate Public Facilities initiatives (Impose transportation impact fees on developments to fund public transit service)					
2.1.4	Provide technical/financial support to local/regional agencies, enhancing technical tools, capacity, and fund Blueprint Planning Grant program					
2.1.5	Modify & fund reforms of state and local tax and zoning/building codes and policies to support GHG reductions and implementation of State growth plans					

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2.1.6	Ensure State Congressional delegation works for Federal highway, transportation and land use related legislation/programs supporting timely climate change action					
TLU-2.2 INCREASING LOW-GHG TRAVEL OPTIONS						
2.2.1	Make full use of CMAQ funds—with application reviews considering GHG reductions					
2.2.2	Improve Transit Service (frequency, convenience, quality)					
2.2.3	Transit Marketing and Promotion, (including individualized transit marketing)					
2.2.4	Bike and Pedestrian Infrastructure					
2.2.5	Expand Transit Infrastructure (rail, bus, BRT) (more emphasis on retail destinations)					
2.2.6	Take a lead in promoting the Midwest Regional High Speed Rail Network					

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2.2.7	Establish Omaha / Des Moines / Iowa City / Davenport leg of Midwest Regional High Speed Rail Network. Include Ankeny / Ames and Waterloo / Cedar Rapids / Iowa City legs to the system					
2.2.8	Routinely run significant number of game trains to Iowa City and Ames in cooperative venture with scenic railroads to provide engines. Expand to include concerts and other events.					
2.2.9	Establish high frequency "trolley" system for Des Moines downtown attractions and satellite areas.					
2.2.10	HOV lanes					
2.2.11	Enhance Current "Fix-it-First" Policy					Repair before expansion
2.2.12	Transit Prioritization (signal prioritization, HOV lanes)					
2.2.13	Telecommute, Live-Near-Your-Work and Tele-education					
2.2.14	Require that government use telecommuting					

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2.2.15	Car sharing					
2.2.16	E-Commerce					
2.2.17	CO2 conformity type Program capping CO2 emissions in some form of a mobile budget.					If the region/ state doesn't hit the budget then transportation dollars swing from road construction to transit
2.2.18	Park and Ride lots					
2.2.19	Guaranteed Ride Home for transit users					
2.2.20	Telecommuting support and incentives					
2.2.21	Have the State of Iowa adopt "Best Workplace for Commuter" policies (http://www.bwc.gov)					
2.2.22	Provide incentives to communities to become "Best Workplaces for Commuters Districts."					
2.2.23	Provide incentives to employers to become "Best Workplaces for Commuters."					
2.2.24	Issue free bus passes to downtown workers					
2.2.25	Issue free bus passes to students and the retired					

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2.2.26	Create regional transportation centers where various types of public transportation meet.					
TLU-2.3 INCENTIVES & DISINCENTIVES						
2.3.1	Commuter Choice/Parking Cash Out					
2.3.2	VMT Tax					
2.3.3	Pay As You Drive Insurance					
2.3.4	Increased Fuel Tax (w/ targeted use of revenue towards travel alternatives) (it was suggested that this be used to increase the differential between fossil and renewable fuels)					
2.3.5	Location-Efficient Mortgages					
2.3.6	Congestion Pricing (or tolls) (w/ targeted use of revenue towards travel alternatives)					
2.3.7	Parking Pricing, excise tax, and/ or Supply Restrictions					
2.3.8	Provide free downtown parking to carpoolers					
2.3.9	Transit Repositioning					
2.3.10	Transit Pricing Incentives					

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2.3.11	VMT/GHG Offset Requirements for Large Developments					
2.3.12	Benefits for Low GHG Vehicles (preferential parking, use of HOV lanes)					
2.3.13	Reserve parking spaces for high-occupancy vehicles and car-share programs					
TLU-2.4	FUEL MEASURES					
2.4.1	Low-GHG Fuel Standard (e.g., renewable) (it was suggested that this increase over time)					Also known as a low-carbon fuel standard
2.4.2	Low-GHG Fuel for State Fleets (e.g., CNG, biodiesel)					
2.4.3	Biofuel expansion (biodiesel, CNG, LPG, cellulosic ethanol)					
2.4.4	Alternative Fuel Infrastructure Development (Build electric vehicle charging facilities and conveniently located fueling stations.)					
2.4.5	State Government E85 Use Plan					Executive Order 3 (2007)
TLU-3	FREIGHT					
TLU-3.1	VEHICLE TECHNOLOGY					

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3.1.1	Vehicle Technology Improvements (e.g., aerodynamics)					
3.1.2	R&D on Low-GHG Vehicle Technology					
3.1.3	Black carbon control technologies (e.g., use of particulate traps, other complementary technologies)					Black carbon can affect climate by absorbing sunlight, heating the air, and thereby altering large scale atmospheric circulation and the hydrologic cycle.
3.1.5	Facilitate Adoption of New Clean Technologies--Rail and Marine Engines					
TLU-3.2 VEHICLE OPERATION						
3.2.1	Freight Logistics Improvements/GIS					
3.2.2	Enforce Speed Limits					
3.2.3	Improve Traffic Flow					
3.2.4	Increased Size & Weight of Trucks					
3.2.5	Increase the Number of Rest Areas					
3.2.6	Pre-clearance at Scale Houses					
3.2.7	Truck Stop Electrification (suggestion was made to provide alternatives to diesel engine idling at truck stops and terminal sites)					
3.2.8	Enforce Anti-Idling					

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3.2.9	Clean Freight Operating Improvements					Example: particulates from freight, including coal train coal dust.
TLU-3.3	INCREASING LOW-GHG TRAVEL OPTIONS					
3.3.1	Intermodal Freight Initiatives					
3.3.2	Feeder Barge Container Service					
3.3.3	Increase Rail Capacity, and Address Rail Freight System Bottlenecks					
TLU-3.4	INCENTIVES & DISINCENTIVES					
3.4.1	Procurement of Efficient Fleet Vehicles (public, private or other)					
3.4.2	Incentives to Retire or Improve Older Less Efficient Vehicles					
3.4.3	Maintenance and Driver Training					
3.4.4	Increased Emission-Based Truck Tolls or Highway User Fees					
TLU-4	INTERCITY TRAVEL: AVIATION, HIGH SPEED RAIL, BUS					
4.1	High-speed Rail					
4.2	Integrated Aviation, Rail, Bus Networks (planning, governance, and investment)					
4.3	Aircraft emissions					
4.4	Airport Ground Equipment					

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TLU-5 OFF-ROAD VEHICLES (CONSTRUCTION EQUIPMENT, OUT-BOARD MOTORS, ATVS, ETC)						
5.1	Incentives for Purchase of Efficient Vehicles/Equipment					
5.2	Improved Operations, Operator Training					
5.3	Maintenance Improvements					
5.4	Increased Use of Alternative Fuels or Low Sulfur Diesel					
5.5	Adopt Green Port strategy (Port land-side: Clean-up Port Dwelling and Cargo Handling Equipment Operations)					
5.6	Low Carbon fuel (offroad and recreational marine)					
5.7	Locomotive idling reductions					
5.8	Inclusion of Idling reduction requirements					
5.9	Diesel Cranes at the Port – Electrification or other GHG reducing alternatives					
5.10	“Shore Power” at Port sites					