



Land Use & Transportation Potential Actions

List compiled for Panel Review 11/23/09

Scope: Actions in the Land Use and Transportation sectors directly related to mitigating climate change (by reducing greenhouse gas emissions) and adapting to changing climate change and increasing fuel costs (by reducing dependence on nonrenewable fuel sources)

Goal	Objective	Action #	Action
Goal A: Reduce greenhouse gas emissions and dependence on fossil fuels by reducing the demand for single-occupancy trips and, where possible, shifting demand to fuel-less modes of transportation	Objective 1: <b>Create vibrant neighborhoods</b> where 90% of Eugene residents can easily walk or bicycle to meet all basic daily, non-work needs and have safe pedestrian or bicycle access to transit (Portland)	1.0	For each type of urban neighborhood, identify the land use planning changes and infrastructure investments and public-private partnerships needed to achieve a highly walkable and bikeable neighborhood and develop an implementation action plan. (Portland)
		1.1	Make 20-minute complete neighborhoods (places where residents can safely walk a relatively short distance from home to most of the destinations and services they use every day) a core component of the City's strategic plan. (Portland, Seattle)
		1.1a	Identify appropriate "neighborhood centers," such as the Mixed Use Centers identified in the Eugene-Springfield Metro's TransPlan, and implement flexible mixed-use zoning to allow neighborhood-scale retail, professional and civic services in those neighborhoods that do not have these services within walking distance (Portland Peak Oil)
		1.1b	Provide for a continuous pedestrian network with reasonably direct travel routes between destination points (TransPlan)
		1.1c	Construct sidewalks along urban area arterial and collector roadways, except freeways (TransPlan)
		1.1d	In order to improve livability and reduce VMT in existing neighborhoods that are not well served by transit, consider where in-fill neighborhood-serving retail, that is oriented to basic daily needs such as "corner stores" and small markets, may be feasible. (Berkeley)
		1.1e	Develop a rating scale to evaluate each Eugene neighborhood on its degree of accessibility to transportation options and services and use this rating system to encourage the development of more walkable neighborhoods.
		1.2	Advocate for adopting the low end of Urban Reserve Designations to reflect trends in demographics, climate change, energy supply and infrastructure costs. (Portland)
		1.3	Seek funding to accelerate remediation of brownfields in the city and county to accommodate growth within the current Urban Growth Boundary. (Portland)
		1.4	Accommodate all population and business growth within the existing urban growth boundary. (Portland, Portland Peak Oil)
		1.5	Increase and enhance urban green and open space to foster walking and cycling (Berkeley, Seattle)
		1.5a	Require new developments in specified areas to contribute to street-level open space on-site or in the public realm. (Berkeley, Seattle)
		1.5b	Establish an "Open Space Fee" or similar mechanism for the creation of new and enhancement of existing streetscapes, public open space, and community gardens. (Berkeley, Seattle)
		1.5c	Establish a landscape requirement designed to increase the quantity/quality of planted areas in the city (Seattle)
		1.5d	Allow multi-unit residential projects to provide street-level public open space in lieu of some required on-site private open space. (Berkeley)

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		1.5e	Consider the feasibility of establishing policies that would discourage the removal of usable open space in private lots unless such open space would be provided elsewhere on site or the property owner agrees to pay an "Open Space Fee" or similar mechanism which would be used to fund the maintenance of existing or the creation of new public open space (Berkeley)
		1.5f	Promote tree planting, landscaping, and the creation of green and open space that is safe and attractive. (Berkeley, Seattle)
	Objective 2: Increase density along transit corridors (Berkeley, Seattle)	2.0	Conduct a "land use scenario study" in order to help visualize, quantify, and compare the impacts on VMT (and the associated GHG and local air pollutant emissions) of various land use scenarios. (Berkeley)
	2.1	Implement zoning adjustments to facilitate a mix of housing (including affordable housing), retail services, and employment centers in the areas of Eugene best served by transit. (Berkeley, Seattle, Portland Peak Oil, Fort Collins)	
	2.1a	Adjust zoning to allow for greater residential density and specified commercial uses along certain transit corridors and in proximity to the downtown station (Berkeley)	
	2.1b	Establish minimum building heights in certain transit-rich areas in order to prevent under-utilization of transit-served areas (Berkeley)	
	2.1c	Ensure that dense transit-served corridors transition well into surrounding lower density residential zones in order to preserve neighborhood character (Berkeley)	
	2.2	Encourage or require all new developments to have less travel demand than comparable existing developments (Fort Collins)	
	2.3	Expand transportation impact fee assessment (San Francisco)	
	2.4	Make parking requirements more flexible for developers that site near transit and that provide services, infrastructure, and/or mitigation payments to reduce parking demand (e.g. car share or bicycle parking, indoor showers and changing facilities, dedicated parking for electric/hybrid vehicles, implement an employee transit pass program, mitigation payments to be allocated to transportation demand projects). (Berkeley)	
	2.5	Establish parking maximums in specific transit-rich areas of the city	
	2.6	Partner with the U of O and Bethel and Eugene 4J School Districts to identify opportunities to site affordable housing near transit for faculty, students/families, and staff. (Berkeley)	
	2.7	Provide enhanced assistance during the permit process for transit-oriented development projects.	
	Objective 3: Continue to expand and improve Eugene's bicycle and pedestrian infrastructure and connectivity (Berkeley, San Francisco, Seattle)	3.0	Identify mobility gaps that could be addressed through additional bicycle/pedestrian infrastructure and create an implementation strategy (Berkeley)
	3.0a	Improve cross-jurisdictional bicycle route connections through signage, bikeway route modification where warranted, and physical improvements.	
	3.0b	Identify opportunities to modify City streets to better serve the safety and needs of pedestrians and cyclists. (Berkeley)	
	3.0c	Identify and implement opportunities to improve the flow of cycling along bicycle boulevards, consistent with public safety, including consideration of replacing stop signs with yield signs at traffic circles on bicycle boulevards. (Berkeley)	
	3.0d	Improve bicycle access to transit (San Francisco, Berkeley)	
	3.0e	Ensure bicycle parking is available at major City and community events	

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		3.0f	Develop a city-wide directional bike signage system that includes times, distances and destinations
		3.0g	Create additional bicycle parking throughout the community, including near transit centers and other key destinations and as part of any new development projects. (Berkeley, San Francisco)
		3.0h	Continue to improve access and safe passage on pedestrian walkways (San Francisco), for example by installing additional street lighting and ensuring sidewalk curb ramps
		3.0i	Increase the City standard bike lane width
		3.1	Require bikeways along new and reconstructed arterial and major collector streets (Eugene-Springfield Metro TransPlan)
		3.2	Require bikeways to connect new development with nearby neighborhood activity centers and major destinations (Eugene-Springfield Metro TransPlan)
		3.3	Provide adequate sidewalk width, pedestrian crossing time, audible crosswalk signals, and universal access features at all signalized crosswalks. (Berkeley, Eugene Ped & Bike Plan)
		3.4	Evaluate the need for new mid-block pedestrian crosswalks where there are high volumes of pedestrians and a long distance between intersections. (Berkeley)
		3.5	Develop, or collaborate with existing efforts, to create city Bicycle and Pedestrian Master plans (Seattle, Chicago, Fort Collins)
		3.5a	Adopt the recommendations of the Eugene Pedestrian and Bicycle Strategic Plan
		3.5b	Develop and staff an advisory committee that regularly monitors, updates, advocates for, assists with the implementation of the master Eugene Bicycle and Pedestrian Plan (Eugene Ped & Bike Plan)
		3.5c	Develop benchmarks and collect associated data to determine the impact of plan implementation and publish an annual report (Eugene Ped & Bike Plan)
		3.6	Facilitate walking and bicycle use through improved, and new, programs and services that make alternate modes more convenient, faster, and safer.
		3.6a	Establish a network of bicycle rental stations. As a first step, conduct a feasibility analysis to help identify program design, costs and funding options. (Berkeley)
		3.6b	Establish a bike-transit center, or multiple centers (such as the bikestation model used in Berkeley, Long Beach, Seattle, Washington D.C.), that provide such services as free parking, free 24-hour access/parking for paid memberships, shared-use bicycle rentals, access to public transportation, bike commuter travel information, repair services, sales, maintenance/charging, repair services (Seattle, Chicago)
		3.6c	Create a working group to develop a plan for reducing bicycle theft
		3.6d	Keep pedestrian and bicycle ways clear of leaves, signs, and other obstructions, and enforce sidewalk maintenance requirements
		3.6e	Create a process for the community to identify unsafe locations and suggest site-specific improvements
		3.7	Identify new, and utilize known, public and private funding sources for walkability/bikeability improvement projects
		3.8	Give funding priority to stand-alone bikeway projects that are included in the definition of "Priority Bikeway Miles" and that increase the use of alternative modes (Eugene Springfield Metro TransPlan)

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		3.9	Work with local retailers to implement point-of-sale bicycle registration and explore options for online registration methods (Eugene Ped & Bike Plan)
	Objective 4: Consider the impacts of peak oil when developing capital construction plans (Portland Peak Oil)	4.0	Identify, and resist, plans that would not be prudent in the event of fuel shortages and high fuel costs (Portland Peak Oil)
		4.1	Identify, and invest in, infrastructure that meets access and mobility needs with less fuel (Portland Peak Oil)
		4.2	Continue to identify and promote the use of recycled paving materials and other methods that require less petroleum. (Portland Peak Oil)
	Objective 5: Increase the supply of frequent, reliable, integrated and convenient public transit (Berkeley, Seattle, San Francisco, Vancouver)	5.0	Integrate bus routes into broader alternative transportation system, identify gaps in bus service routes and potential scenarios for addressing such gaps, and improve frequency and reliability of bus service where required. (Berkeley)
		5.1	Examine and improve the interface between transit, pedestrians, and cyclists
		5.1a	Ensure adequate bicycle parking facilities, on-board bike storage, transit stop design, and compatibility with the surrounding streetscape
		5.1b	Ensure "universal access" level boarding (e.g., roll-on/roll-off boarding for wheelchairs) on buses and shuttles that easily accommodate wheelchairs, walkers, and other individuals with mobility impairments. (Berkeley)
		5.1.c	Create and implement a plan to improve the pedestrian, cyclist and transit connectivity at the Downtown station
		5.1d	Install real-time transit signage and maintain safe, well-lit shelters and benches at bus stations and stops. (Berkeley)
		5.2	Expand and improve metro and regional service and connections (San Francisco)
		5.2a	Develop a regional transit pass system (San Francisco)
		5.2b	Partner with local transit organizations and other community stakeholders to consider opportunities for Bus Rapid Transit, light rail, and streetcar systems along certain major transportation corridors (Berkeley, Portland Peak Oil).
		5.2c	Continue timely assessment and development of proposed EmX extensions
		5.3	Improve efficiency and ease of transit fare collection
		5.3a	Partner with LTD and local employers to provide subsidized transit passes and fare-free zones (Berkeley)
		5.3b	Encourage more efficient payment systems such as "proof of payment" and level boarding to speed bus transit service.
		5.3c	Improve the convenience of transit fare cards. Evaluate different fare card options to make access to regional transit more convenient for all potential users. (Chicago)
		5.4	Ensure that transit buses are fuel-efficient, utilize alternative fuels, and are appropriately sized. (Berkeley)
	5.5	Improve bus flow by removing certain stop signs and on-street parking spaces, by timing signals, and by creating "queue-jumper" lanes where delay occurs regularly. (Berkeley, Seattle)	

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		5.6	Increase the use of ridesharing (San Francisco, Chicago,Portland Peak Oil)
		5.6a	Implement a School Ridesharing Program.
		5.7	Investigate the potential for High Occupancy Vehicle (HOV) Lanes (San Francisco, Portland Peak Oil)
		5.8	Implement HOV requirements for new large developments
		5.9	Implement car-sharing programs (Chicago)
		5.9a	Work with residents, businesses and City Council to encourage designation of car-sharing parking spaces in retail and residential districts (San Francisco, Chicago)
		5.9b	Provide car-share program incentives such as City tax exemptions (Chicago)
	Objective 6: Identify strategies to generate sustained revenue for implementing community transportation demand management programs including "user pays" programs that discourage single-occupancy trips (Berkeley)	6.0	Increase city funding for transit service and identify and implement other funding strategies such as grants and revenues from VMT reduction tax incentives (Seattle, San Francisco)
		6.1	Work with regional partners to analyze and develop road pricing scenarios and address the legal and implementation issues. Report findings and recommendations on pricing options as well as mechanisms for applying part or all of the road-pricing revenues to fund transit and other alternatives to single occupancy vehicles (Seattle)
		6.1a	Raise support for regional road-pricing and address legislative barriers to toll collection on state and federal highways
		6.2	Identify and implement strategic fees/taxes, such as a vehicle-miles traveled tax (Berkeley, Portland Peak Oil)
		6.3	Institute a "Transportation Services Fee" for new development and utilize funds in part for alternative transportation programs that reduce vehicle trips and traffic congestion and direct fee revenue towards alternative transportation programs. (Berkeley)
		6.4	Institute an "In-Lieu Parking Fee" on new development and utilize funds in part for alternative transportation programs that reduce parking demand. (Berkeley)
		6.5	Conduct a feasibility analysis of a City of Eugene "congestion pricing" program. (Berkeley)
		6.5a	Work with Oregon Department of Transportation and Metro to implement a congestion-pricing pilot program that prioritizes movement of freight and non-single-occupancy vehicles. (Portland, San Francisco)
		6.6	Support development of a regional "climate mitigation fee" applied to either fuels or vehicle registration.
		6.7	Increase the Gas Tax (San Francisco)
		6.8	Support the work of the Oregon Department of Transportation to develop a sustainable funding structure for transportation that will eventually replace declining gas tax revenues. (Portland Peak Oil)

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	Objective 7: Implement parking management strategies that discourage driving—especially single-occupancy commuting—and, where possible, to build revenue for transportation services. (Berkeley, Vancouver, Fort Collins, Portland Peak Oil)	7.0	Build partnerships to encourage local organizations to reduce existing plans to build new parking spaces and to also revise parking policies and programs to better encourage, support, and invest in, alternatives to driving. (Berkeley)
		7.1	Identify areas in Eugene in which increased parking rates would effectively discourage driving and generate new revenue while not having a significant negative effect on local businesses. (Berkeley)
		7.2	Identify areas in Eugene in which extending parking meter hours of enforcement would effectively discourage driving and build new revenue while not having a significant negative effect on local businesses. (Berkeley)
		7.3	Consider the establishment of Parking Benefit Districts, which would receive a portion of parking revenues generated in the area (Berkeley, Fort Collins)
		7.4	Cap or reduce the number of parking spaces. (San Francisco)
		7.5	Extend metering for curbside parking to congested retail commercial districts (Portland Peak Oil)
	Objective 8: Ensure per capita VMT reductions meet Eugene's 2030 emissions reduction targets (Portland)	8.0	Establish sustainable funding sources adequate to maintain the existing transportation system and to invest in transportation capital projects and programs that reduce carbon emissions. (Portland)
		8.1	Account for greenhouse gas emissions from investments in, and the performance of, the transportation system. (Portland)
		8.1a	Establish a method for projecting the life cycle carbon footprint of transportation investments, including embodied energy, operations (VMT and flow) and maintenance.
		8.1b	Develop a reporting mechanism for tracking transportation carbon emissions. The report will include key performance measures and will document progress toward emission reduction goals. Key measures include commute mode share, VMT by vehicle type, traffic flow on major arterials and highways, fuel efficiency of vehicles and total carbon emissions from the transportation system.
		8.2	Support investments to provide high-performance broadband connectivity to every business and residence to enable widespread e-commerce, telecommuting and improved emergency response. (Portland)
		8.3	Work with regional partners including the Oregon Department of Transportation and local cities and counties to reduce VMT through strategic investments and policies. (Portland, Berkeley)
		8.3a	Work with metro-area, state, regional, and federal agencies to develop a strategy for inter-urban transit options including commuter rail, for example a high-speed rail from Eugene to Vancouver, B.C. (Portland, Portland Peak Oil)
		8.3b	Participate in developing least-cost planning methodologies to achieve mobility greenhouse gas emission reduction goals. (Portland)
		8.3c	Work with regional transportation agencies to support investments and policies that help the region meet the carbon emission, VMT-reduction and mode-share goals. (Portland)
		8.3d	Revise the system service plan to reflect the mode-share goals of this plan and to develop an investment strategy that includes infrastructure to support connectivity and safe routes to transit (Portland).
		8.3e	Implement a Household Activity Survey in 2010 and beyond. (Portland)
		8.4	Update the Transportation System Plan to incorporate mode-share goals that will result in a 40 percent reduction in transportation-related carbon emissions by 2030. (Portland)

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		8.5	Prioritize funding for low-carbon transportation and access projects, policies and programs that will achieve emission reduction goals while also balancing safety, maintenance and freight movement. (Portland)
	Objective 9: Expand outreach, marketing and education regarding climate-friendly transportation alternatives (Berkeley, San Francisco, Vancouver)	9.0	Partner with local and regional organizations and agencies to promote and market bicycling, walking, transit, and high occupancy vehicles as attractive alternatives to driving in order to increase the mode share of alternatives to the single occupancy vehicle (Berkeley, San Francisco, Vancouver)
		9.1	Conduct outreach and education to increase safety and awareness for pedestrians, bicyclists, and motorists (examples are Share the Road and "Share the Path" campaigns, providing free or low cost safety equipment and repairs to people in need) (Eugene Pedestrian & Bike Plan)
		9.2	Promote participation in alternative transportation events at the city-wide and neighborhood level, evaluating current permitting processes and identifying methods for encouraging these events (for example a Walk to School Day, Bike to Work Day, annual Transportation Fair, annual Business Commute Challenge) (Eugene Pedestrian & Bike Plan)
		9.3	Seek recognition for Eugene as a walkable and bikeable city and publicize to visitors, new residents and incoming university students (Eugene Ped & Bike Plan)
		9.4	Lead by example and incorporate bicycles into municipal operations. (Berkeley)
		9.4a	Maintain and expand a bicycle fleet pool available for City employees and encourage more City staff persons to take advantage of it.
		9.4b	Continue to provide secure bicycle parking near City Hall and other city employment sites.
		9.4c	Consider other bicycle fleet programs such as electric bicycles, cargo bikes, and mileage reimbursement for employee's personal bicycle use for work trips.
		9.5	Support continuation and expansion on BTA bike education programs in middle schools (Eugene Pedestrian & Bike Plan)
		9.6	Develop ongoing walking and safe cycling education programs for adults and seniors (Eugene Ped & Bike Plan)
		9.7	Support single-occupancy trip reduction through employer-based programs (San Francisco, Fort Collins)
		9.7a	Encourage employers to provide incentives and accommodations (such as showers, changing rooms, and flexible work hours) to employees who walk or bike to work (San Francisco)
		9.7b	Expand employer commute assistance and outreach.
		9.7c	Implement countywide Guaranteed Ride Home Program.
		9.7d	Conduct general marketing and promotion of commuter services.
		9.7e	Expand employer transportation management requirements.
		9.8	Implement a school transport management program such as a Safe Routes to School Program encouraging parents, students, and staff members to reduce vehicle trips and use alternative modes for travel to and from schools (Fort Collins)
		9.9	Expand individualized marketing programs which use personal contacts to identify and support the transportation options people want to use. (These programs have consistently reduced single occupancy vehicle trips by 8 to 10 percent in the four Portland neighborhoods) (Portland Peak Oil)

Goal	Objective	Action #	Action
Goal B: Increase the efficiency of auto transportation	Objective 10: Improve the efficiency of freight movement within Eugene and throughout the surrounding region (Portland)	10.0	Protect existing intermodal freight facilities and support centrally located and regionally significant industrial areas that may provide for future intermodal facilities and provide for efficient local deliveries (Portland)
		10.1	Work with local and regional freight advisory groups to develop a plan for reducing greenhouse gas emissions related to freight movement within and through Eugene and the surrounding region. (Portland, Chicago)
		10.2	Facilitate the aggregation of smaller land parcels which, when combined, provide opportunities for industrial development.
	Objective 11: Encourage the use of low-carbon vehicles and fuels to improve overall city fleet fuel efficiency and reduce vulnerability to fluctuating oil prices (Berkeley, Portland, Seattle, San Francisco)	11.0	Support progressive strengthening of federal fuel efficiency standards. (Portland, San Francisco, Vancouver)
		11.1	Support state-level development of greenhouse gas emissions standards (San Francisco)
		11.2	Accelerate the transition to plug-in hybrids and electric vehicles by supporting the installation of a network of electric car charging stations. (Portland, Portland Peak Oil)
		11.3	Reduce the lifecycle greenhouse gas emissions of transportation fuels by 20 percent. (Portland)
		11.3a	Implement a city renewable fuels standard to require that diesel fuel sold in Eugene include at least 10 percent biodiesel, half of which must be made from sources that can be produced in Oregon. (Portland)
		11.4	Improve city fleet fuel efficiency (Vancouver)
		11.4a	Promote the use of alternative-fuel vehicles in municipal fleets and the establishment of alternative fueling stations (Chicago)
		11.5	Improve average fuel efficiency of vehicles in the metro-area
		11.5a	Implement tiered vehicle registration and/or parking fees based on vehicle size or emissions (San Francisco)
		11.5b	Promote toll/fee reductions or waivers for (AFVs) (San Francisco)
		11.5c	Develop a technical assistance program for commercial fleets regarding biodiesel and fuel efficiency, including cost-benefit case studies of fleets that have converted to more fuel efficient vehicles, reports on fuel saving opportunities for commercial drivers, fuel efficient technologies and any funding assistance that may be available
		11.5d	As part of a comprehensive climate protection action-awareness campaign, include a component devoted to fuel efficiency—what to look for in purchasing a car, alternative fuel technology, maintenance and driving tips to increase mileage, and tips to drive less or not at all (Seattle, Vancouver)
		11.6	Improve air, and related vehicle, travel efficiency (Chicago)
		11.6a	Encourage electric vehicles
		11.6b	Install electric power sources at gates to reduce fuel burned by aircrafts' auxiliary power units
		11.6c	Use biodiesel in parking lot shuttles (Chicago)

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		11.7	Work with Oregon Department of Transportation to identify and fund the system and demand management projects that have the greatest potential to reduce emissions related to congestion, idling, and system performance. (Portland)
		11.8	Market development of innovative vehicle technologies such as natural gas engines, hybrid trucks/busses, and fuel cell vehicles (Vancouver)
		11.9	Identify how biofuels can play a role in decreasing Eugene's vulnerability to energy markets and promote appropriate use and local production of biofuels (Portland, Portland Peak Oil, Vancouver)
		11.9a	Fuel a short- to medium-term market transformation by focusing on renewables that are consistent with existing engine technologies and fuel distribution systems such as biodiesel and ethanol (Vancouver)
		11.9b	Increase the percentage of biodiesel blend used in city vehicles and equipment.
		11.9c	Develop and implement a mechanism to track biofuel sales
		11.9d	Support state legislation that furthers the use and production of biofuels in Oregon (Portland)
		11.9e	Build partnerships to encourage use of biofuels in private operations