Extend Transportation Conformity Requirements to GHGs. In *Massachusetts v. EPA*, the U.S. Supreme Court affirmed the EPA's authority and duty to regulate GHG emissions under the current federal Clean Air Act. The EPA could meet its obligation by adopting national GHG reduction targets, requiring states to develop state implementation plans for meeting these targets, and mandating that state and metropolitan transportation plans and programs conform to state implementation plans.

Use Cap and Trade to Support Smart Growth. Many Congressional proposals for climate stabilization would authorize a national cap-and-trade market system similar to those in use in Europe and under development in several states. The revenues generated from auctioning allowances under these systems could be used to support smart growth. Uses of funds might include providing technical assistance to MPOs and state and local governments, including improved data, models, and scenario planning tools; a "Smart Location Tax Credit" targeted at compact development; and support for travel alternatives such as transit, bicycling, and pedestrian infrastructure that are important complements to compact development. Although land development is unlikely to become a regulated activity (like electrical power generation) under cap-and-trade systems, it may have a role to play in "offset" markets. It could be included as an allowable offset in any cap-and-trade climate legislation.

State Actions

Adopt and Suballocate VMT Reduction Targets. In the absence of federal leadership, many states have adopted goals for GHG reduction. These goals could be translated into VMT reduction targets. The targets could be proportionally allocated to metropolitan regions within a state, and each MPO could be charged with developing a plan for meeting its respective target. VMT targets could even be suballocated to localities.

Align State Spending with Climate and Smart Growth Goals. After adopting targets, states will want to ensure that funding programs—whether carried out directly by the state or executed through grants to local governments—support such targets. States can begin by analyzing the criteria used to distribute all state and federal funds in housing, economic development, water and sewer infrastructure, schools, transportation, and recreation. States could earmark and distribute at least a portion of these funds according to local performance in meeting GHG and VMT reduction targets.

Adopt a Statewide "Complete Streets" Policy and Funding Program. A complete streets policy would require that pedestrian and bicycle facilities be provided on all new and reconstructed streets and highways, and that pedestrian and bicyclists' needs be considered in routine roadway operation and maintenance. To create complete communities, the policy might mandate that new streets

be interconnected and culs-de-sac be discouraged so that travel distances for pedestrians and bicyclists are minimized.

Regional Actions

Give Funding Priority to Compact, Transit-Served Areas. By giving funding priority to compact, transit-served areas, MPOs can help reduce GHG emissions. In concert with local governments, MPOs would designate "priority funding areas" where local governments have planned for compact development. In addition to receiving priority for public funds, areas could qualify for streamlined development approvals and other financial incentives.

Establish a Regional Transfer of Development Rights Program. Transfer of development rights (TDR) programs enable landowners to sell their development rights to other landowners through a market-based system. Effectively crafted, TDR programs can help reduce VMT by directing growth to compact, transit-served areas and away from low-density greenfield sites, thus reducing the need for long-distance travel. While TDR programs typically have been administered by local governments, a regional TDR program likely would encompass more rural and urban areas, thereby providing greater market opportunities for TDR transfers.

Create a Carbon Impact Fee for New Development. Suburban and exurban development has a cost advantage over urban infill development because of low land costs and subsidized infrastructure. Regulatory reforms alone cannot overcome this advantage. For decades, governments have charged impact fees on new development to offset the costs of schools, libraries, sewers, parks, and transportation. Creating and implementing a regional CO_2 emissions impact fee would internalize carbon impacts into development costs, thereby rewarding best development practices and raising the price of carbon-inefficient development. Fee revenues could be used to help fund transit, bicycling facilities, sidewalks and other pedestrian amenities, and similar projects in compact areas.

Local Actions

Change the Development Rules. Local regulations often prohibit the type of climate-friendly, compact development discussed in this book. Outdated land development codes—often from the 1970s or earlier—effectively mandate sprawl by restricting the mix of land uses and requiring large amounts of parking as well as large minimum building setbacks. Many localities have tried to address these issues on a development-by-development basis, granting exceptions to the rules through arduous review and approval processes. Instead, a better approach would be to amend local policies and regulations—including general plans, zoning and subdivision ordinances, parking standards, annexation rules, adequate public facilities requirements, and

design guidelines—to facilitate smart growth through normal approval processes. They also should consider ways that permitting processes might be accelerated for compact development projects that meet specified standards.

Channel Growth into Compact Development Areas. With surprising regularity, MPOs and localities have settled on a common approach to VMT reduction—channeling growth into dense, walkable areas that can be efficiently served by transit, and giving these areas priority for infrastructure funding. This is the idea behind "smart growth areas" in the San Diego region, "urban development areas" in Virginia, and "metropolitan activity centers" in Orlando. Public infrastructure, amenities, and good urban design will guarantee that such areas are attractive places to live, work, and shop.

Provide for Workforce Housing near Jobs. In most metropolitan areas, the cost of housing declines with distance from job centers and other desired destinations, while the cost of transportation increases. With gasoline costs rising, the financial tradeoff between a longer commute and less-expensive housing is changing, and the potential savings from living in a convenient location with transportation choices is becoming a more important aspect of affordability. Local governments could make the provision of affordable "workforce" housing a condition of approval for large-scale residential and commercial developments. In addition, localities could give priority to transit accessibility when allocating housing assistance funds.

The Organization of this Book

Chapter by chapter, this book addresses the impacts of the following:

- emerging market and policy trends on urban development;
- vehicular travel on GHG emissions;
- urban development on vehicular travel;
- residential preferences on urban development and travel;
- highway building on urban development and travel;
- urban development on residential energy use;
- the combination of urban development, transit enhancements, and roadway pricing on vehicular travel; and, finally
- policy options to encourage compact development and reduce vehicular travel.

ATTACHMENT D
Letter from Bob Stacey et al, to LCDC, OTC and the Global Warming Commission

March 14, 2008

Gail Achterman, Chair
Oregon Transportation Commission
355 Capitol Street NE
Salem, Oregon 97301

Angus Duncan, Chair
Oregon Global Warming Commission
900 Court Street NE
Salem, Oregon 97301

John VanLandingham, Chair
Oregon Land Conservation and Development Commission
635 Capitol Street NE, #150
Salem, Oregon 97301

Re: Coordinated Program to Reduce Global Warming Pollution from Transportation and Land Use

Dear Chairs Achterman, Duncan, and VanLandingham:

We write to request that your respective commissions act collaboratively to establish a planning framework and specific policies to reduce greenhouse gas emissions caused by Oregon cars and trucks by developing and adopting several key approaches and measures, including reducing growth in vehicle miles traveled. We anticipate these would be implemented through a combination of administrative rules and legislative proposals both for funding and for new programs.

A. SUMMARY OF PROPOSALS

In summary form, we propose that:

1. The Transportation Commission and LCDC, with the advice and guidance of the Global Warming Commission, determine what reductions in vehicle miles traveled will be needed by 2020, 2050, and intervening years, as a component of the total reductions in transportation-based greenhouse gases (including reductions resulting from vehicle and fuel improvements) necessary to achieve the goals established in 2007 HB 3543. Based on this determination, the commissions should set a statewide VMT reduction target for each benchmark year.

2. The Land Conservation and Development Commission and Transportation Commission engage in coordinated rulemaking designed to achieve the VMT reduction targets by:

   a. Allocating the statewide VMT reduction target between the state's six metropolitan planning organizations and the balance of the state, with a reduction target for each MPO;

   b. Establishing, in coordination with MPOs, a transportation and land use planning model that is capable of identifying alternative land use patterns and transportation system investments that will achieve the VMT reduction targets in each region of the state; requiring that each region use the model to adopt a plan meeting its target; and requiring that all transportation investments and land uses be consistent with the applicable regional plan; and

   c. Setting town and neighborhood planning and design requirements for large and growing communities that will enable more Oregonians to conveniently travel on foot, by bicycle or transit, or with shorter driving trips.

3. The Transportation and Land Conservation and Development commissions develop 2009 legislative proposals to:

   a. Adopt and apply a greenhouse gas reduction planning tool for transportation and land use decision making to meet the state's greenhouse gas reduction goals;

   b. Ensure that resources for transportation system expansion are expended in accordance with the planning process for greenhouse gas reduction described above;

   c. Commit to spending resources raised for roads to be directed towards the maintenance of the existing system;

   d. Increase the level of funding for transit, intercity rail, and pedestrian and bicycling facilities;

   e. Authorize local and regional excise taxes on customer, employee, and commercial parking spaces, with the revenue allocated to providing transportation choices;

   f. Refer to the voters a constitutional amendment allowing revenue from newly-developed taxes on motor vehicle operation or emissions to be used to fund transportation options other than highways; and

   g. Provide grants and technical assistance to metropolitan planning organizations and communities that are required to undertake measures to reduce VMT.

B. REASONS FOR THE PROPOSALS

1. The Need for Action to Reduce Transportation-Caused Global Warming Pollution

In 2007, the Oregon legislature passed HB 3543, which requires that Oregon's greenhouse gas emissions be reduced to 10 percent below 1990 levels by 2020 and to 75 percent below 1990 levels by 2050. In Oregon, carbon dioxide comprises 86% of our total greenhouse gas output and transportation accounts for about 40% of the total carbon dioxide emissions. The result is that one-third of the state's overall greenhouse gas emissions are generated by the transportation sector.[1] Any effort to achieve Oregon's greenhouse gas reductions requires strong action to reduce transportation emissions.

As the Urban Land Institute and Smart Growth America put it in their ground-breaking report *Growing Cooler*, sources of transportation emissions represent a "three-legged stool, with one leg related to vehicle fuel efficiency, a second to the carbon content of the fuel itself, and a third to the amount of driving or vehicle miles traveled (VMT)."[2] Most of the attention to date in the transportation sector has been on increases in fuel efficiency standards of motor vehicles or proposals for lower carbon fuels. New technology, in the form of more fuel-efficient vehicles, new propulsion systems, and reduced-carbon fuels, are critically important to reducing transportation greenhouse gas emissions. However, they will not be enough.

They will not be enough because we drive more every year. Since 1980, the amount Americans drive has increased three times faster than the US population and about twice as fast as new vehicle registrations.[3] Moreover, Oregon's population will nearly double by 2050. It is this third leg - the growth in how much we drive and how many of us are driving - that will become the dominant uncontrolled source of emissions unless we invest now in creating desirable land use and transportation alternatives for Oregonians.

Effective land use planning and investments in transportation choices reduce the amount of time commuters spend in traffic, improve our health, reduce the portion of household budgets spent on gasoline, and protect our envied quality of life. These tools are proven and they are cost-effective. They benefit all Oregonians.

2. Oregonians Deserve Transportation Choices that Provide Economic and Energy Security

Changes in transportation investments and land use patterns may not be the only means available to reduce vehicle miles traveled. Sharp increases in the cost of driving, through steep charges on carbon emissions from tailpipes, might also discourage driving. However, simply increasing the

---

[1] Governor's Advisory Group on Global Warming, *Oregon Strategy for Greenhouse Gas Reductions* (State of Oregon, 2004), Appendix B with updated data from "Oregon Greenhouse Gas Inventory," presentation by Bill Drumheller, ODOE, November 1, 2007, available from www.deq.state.or.us/aq/climate/meeting.htm

[2] Urban Land Institute and Smart Growth America, *Growing Cooler: The Evidence on Urban Development and Climate Change* (Washington, D.C.: ULI, 2007).

[3] Ibid.

cost of driving alone does not provide Oregonians with alternatives to driving. If significant numbers of Oregonians are stuck in automobile-dependent development, with widely separated low-density land uses, raising the cost of driving simply forces people to pay more to get to work, school, shopping or other destinations, and to continue to drive.

With or without carbon pricing strategies, the cost of petroleum will continue to rise sharply in the years ahead. Energy independence for Oregon, the United States, and for individuals, is an economic and security imperative. Increasing the transportation choices available to Oregonians and Oregon businesses, and reducing our need to drive, will make Oregon and its communities more competitive and more secure in the face of scarcer and more expensive petroleum.

If Oregonians are to have choices that permit them to reduce their dependence on the car, two steps are needed. First, there must be public investment in transportation facilities for pedestrians, bicycles, and both intercity and local transit. Second, public planning is needed to ensure that the market can provide Oregonians with places to live that are close to work, shopping and services. Through planning, those destinations are connected by sidewalks, bike routes, transit service, and a network of streets that makes travel by all those modes, *and* by short driving trips, possible and convenient.

3. Role of the Commissions

On February 29, 2008 the Governor's Climate Change Integration Group (CCIG) issued its final report and recommendations. The report, *A Framework for Addressing Rapid Climate Change*, urges prompt action to implement the greenhouse gas reduction targets established by the Legislative Assembly, warning: "Given the rapid rate at which climate change may affect the state, Oregon's existing governance systems . . . will likely need to consider ways to speed up the rate at which information is considered and decisions are made." *Framework*, p. 22.

CCIG recommends that particular attention be paid to land use and transportation changes to reduce growth in vehicle travel, because transportation is one of the largest sources of Oregon greenhouse gas emissions and "rising population [and] vehicle use" will otherwise overwhelm the benefits Oregon will gain from adopting the California vehicle efficiency standards. *Framework*, p. 35. CCIG's report devotes an entire chapter to discussion of the opportunities for emissions reductions from transportation and land use changes.

CCIG's report advises the Governor to designate Transportation and Land Conservation and Development as the "lead agencies" for reducing greenhouse gases in the transportation and land use sectors, respectively. It proposes that the agencies cooperatively establish baseline inventories of emissions in their sectors and identify strategies for reducing emissions to 10 percent below 1990 levels by 2010 and 75 percent below 1990 by 2050. *Framework,* p. 41-42. Accordingly, we address our recommendations to your commissions.

CCIG also recommends "that the 'Big Look' Task Force explicitly address climate change as a core issue in land-use planning." *Framework*, p. 10. We are providing a copy of this letter to Mike Thorne, Chair of the Oregon Task Force on Land Use Planning.

C. DISCUSSION OF THE PROPOSALS

1. Establishing VMT Reduction Targets

The Oregon Legislature has enacted overall targets for greenhouse gas emissions for 2020 (10 percent below 1990 emission levels) and 2050 (75 percent below 1990 levels). To begin planning for reductions in transportation GHG, the Transportation Commission and Land Conservation and Development Commission will need to know:

- First, what percentage reduction in GHGs will be required by 2020 and 2050 from the transportation sector (i.e., will the reductions be proportional by sector, or greater in some sectors)?
- Second, of the reductions needed from the transportation sector, how much is predicted to be accomplished through more efficient vehicles and lower-carbon fuels, and thus how much will be left to reduce through reductions in VMT?

Guidance in addressing these questions could be provided by the Global Warming Commission. In answering the second question, the commissions should establish an initial estimate for both 2020 and for 2050, and preferably for intervening benchmark years as well (at least every decade). As the vehicle fleet and propulsion systems change over the next 40 years, each vehicle mile traveled will likely produce fewer GHG emissions than today. To properly calibrate VMT planning, it will be important to have estimates of the likely average emissions per mile in future target years.

It is critically important to achieve greenhouse gas reductions from vehicle and fuel improvements, because such improvements enable Oregonians to reduce their expenditures for ever-more-expensive petroleum and allow Oregon to avoid more drastic reductions in vehicle miles traveled. Our organizations support measures to accelerate the "turnover" of Oregon's private vehicle fleet to more efficient low-emission vehicles and putting the right incentives in place for fuel providers to reduce the carbon content of their fuels. Of course, as noted above, VMT reductions will be needed as well.

2 a. and b. Regional Planning Models for Land Use and Transportation

Once the Land Conservation and Development and Transportation commissions establish VMT reduction targets for the next forty years, calibrated as described above, the Transportation Commission, in consultation with LCDC, Metro, the MPOs, and others, should allocate VMT for each target year between the six metropolitan areas (Portland, Salem, Corvallis, Eugene, Bend and Medford) and the balance of the state. The allocation should take into consideration each region's share of current population and VMT, and its projected share of future state population. Greater reductions in VMT should be expected from the six metropolitan areas than from the balance of the state for several reasons:

- The metropolitan areas will experience the greatest amount of new population and development and therefore will have greater opportunity to shift land use and travel choices.

- The population level and densities in urban areas make transit feasible.
- Rural areas of the state will have limited opportunities to reduce reliance on the automobile.

The technology already exists to estimate likely changes in VMT from changes in land use and transportation systems. ODOT and the MPOs already employ a "travel demand model" that estimates future travel behavior (and thus VMT) based on population, employment, and changes in the transportation network. In addition, Metro has developed a tool for modeling alternative land use patterns for future population and employment, called "Metroscope." By alternately running its transportation model and Metroscope, Metro is able to refine alternative land use patterns and transportation systems and choose the most desirable combination. It is thus able to more carefully estimate the VMT reduction potential of various combinations of land uses and transportation investments. Metro is currently working with the Salem MPO to make the Metroscope tool available to the Salem-Keizer region; other MPOs could do the same. (Telephone conversation with Andrew Cotugno, Metro Planning Director, February 21, 2008.)

The commissions should provide by rule that the cities and counties of each metropolitan area of the state mutually adopt a land use and transportation plan that, according to the MPO's model, will enable the region to achieve its necessary reductions in VMT for 2020 and 2050, as well as any interim targets. The rules should establish a schedule for periodically revising these land use and transportation plans in light of updated data on VMT in the metropolitan area and revised reductions necessary to meet the targets. The rules should provide that only transportation projects that are identified in the plan may be funded and built and that only the land use patterns depicted in the plan may be allowed by local land use regulations.

2 c. Community Planning and Design for Reduced VMT

Rulemaking by LCDC can further this VMT reduction effort by clarifying and strengthening the land use tools available to communities to provide land use patterns, designs and densities supportive of transit, biking, walking and short driving trips. Building on the Transportation Planning Rule and rules implementing the Housing and Urbanization goals, the Commission can establish base standards for town and neighborhood development that will encourage and facilitate transportation options. These base standards should include:

a. The proportion of mixed-use, higher-intensity areas (such as town centers or main streets) that must be included in communities' plans;
b. Minimum densities for new development, perhaps scaled by the planned population of the community;
c. Street standards, including sidewalk and bicycle route requirements, connectivity, and maximum street spacing standards;
d. Building orientation and surface parking location standards;
e. Limits on off-street surface parking; and elimination of minimum parking requirements for uses in downtowns and other high-intensity mixed use areas; and
f. Thresholds for infill and redevelopment that must be met before urban growth boundaries may be expanded.

These rules could be drafted to focus on communities within metropolitan counties as designated by the Census (Willamette Valley counties plus Deschutes and Jackson), excusing other communities (as well as small communities within the metropolitan counties) unless those communities propose amendments to their urban growth boundaries. As noted in our proposals for legislative action, this rulemaking should be accompanied by a technical assistance grant program for communities to assist them with implementation.

3. The Legislative Proposals

Improving planning and land development alone, without investment in non-highway transportation options, will not be enough to provide Oregonians with transportation choices. Funding for those investments is a legislative responsibility, and the Governor has begun a process to develop a transportation funding "package" for consideration by the 2009 Legislative Assembly. We believe that any such package must ensure that greenhouse gas-reducing transit, pedestrian and bicycle facilities are adequately funded, and that funding for highway expansion is conditioned on compliance with the VMT reduction planning described in this letter. We hope that you and your commissions will support the Governor's efforts to achieve transportation funding in a manner consistent with his goals for greenhouse gas reduction.

We are ready to work with you to ensure that Oregon accomplishes its goal of reducing greenhouse gas pollution while improving our quality of life.

Very truly yours,

Andrea Durbin
Executive Director
Oregon Environmental Council

Jeremiah Baumann
Program Director
Environment Oregon

Bob Stacey
Executive Director
1000 Friends of Oregon

cc: Governor Ted Kulongoski
Mike Thorne, Chair, Task Force on Land Use Planning
Matt Garrett, Director, ODOT
Richard Whitman, Director, DLCD
Andy Cotugno, Metro Planning Director