

Global Vision and Local Action for Energy Security, Climate Change, Land Use and Transportation

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by the Land Use and Transportation Sub-Committee (LUTSCO) of Eugene's Sustainability Commission

Overview: The twin challenges of global climate change and long-term energy security come together in land use and transportation. Our policies and investments in the next few years have great potential to start reshaping these essential systems by which we meet our needs. This short memo lays out a vision rethinking our priorities and guiding our decisions.

Integrated Challenges of Energy and Climate...

Scientific consensus on global climate change has generated action among policy makers at all scales in virtually every nation. City governments are at the forefront of climate action planning – and rightfully so, as a carbon-constrained economy and increasingly costly climate events will come home to roost at the municipal level.

At the same time, energy experts see global energy supply and demand on a collision course, with some predicting a repeat of 2008's price spikes coming to world oil markets as soon as the economy recovers. Indeed, many observers believe we are entering a new and volatile time in energy markets, suggesting an urgent need to revisit business models and consumption patterns.

Our economy's greenhouse gas emissions result overwhelmingly from our dependence on fossil fuels, so these challenges are inextricably intertwined. Specifically, it is buildings and transportation – our roads, homes and commercial buildings, and our patterns of land use, land development and construction – that together make up more than half of our energy demand, determining much of our "carbon footprint".

...Demand Integrated Decision Making – and New Thinking

These challenges are too big and too connected to address separately. In order to frame our policy discussions and make informed decisions for our community's future, we must acknowledge, understand and address the connections between land use and transportation.

Our processes of planning and analysis for transportation and the built environment are sophisticated and deep, but they neither integrate well nor fully address the concerns of energy security and climate change. We have robust discussions of livability, affordability and economic development – but rarely by explicitly considering land use and transportation together, even less often with a forward-looking sense of energy markets, and almost never with an eye to our carbon footprint.

We can no longer afford to make decisions so separately. We need new language to describe these concerns and their integrated nature. Most important at the municipal scale, we need new decision making processes to ensure that we examine land-use/transportation concerns through a twin energy/climate lens.

To be sure, some benefits of new policies and investments will be spread unevenly among various groups – property owners, businesses, residents. Even so, if we are to succeed as a community, we must take a holistic and long-term view. Our social, economic and environmental fabric will be better for our efforts.

Existing Efforts Address Many Related Issues...

The City of Eugene and many local entities are taking on many crucially important issues in land use, transportation and the nexus of the two. Many of these efforts – individually or in consort – will lower greenhouse gas emissions from buildings and vehicles, leave more energy dollars in our pockets, and create a more livable community.

(We provide a list of these efforts and decisions at the end of the document.)

...But Lack Points of Contact and a Shared Language

But these current efforts to address individual facets of land use or transportation are surprisingly separate from each other. Some are led by advocacy organizations, others are organized by city staff. Some are grassroots and focused on behavior change, others are focused on improving formal institutions and codes. In too many cases, they have overlapping aspirations, but lack any way to reinforce each other.

Even more striking, these efforts too rarely perceive that they hold common goals with so many others. We have an opportunity to articulate those shared goals that sit above the efforts, and thereby increase everyone's understanding of the common direction in which so many of us would like the City to go.

We need diverse efforts in these arenas, but without shared language and understanding, our work is vulnerable. Narrow short-term concerns can often pull us off the long path to realizing a different vision. To stay on that path, we have to see the many puzzle pieces and speak in common terms.

Implications for Local Action: Seek Out the Win-Win Options...

There are many ways to improve livability, achieve energy savings and lower carbon emissions, and serve the ends of public health and well being. However, we will see those strategies clearly only when we keep larger objectives in mind, and we have at times failed because we focused on narrow views, overly favoring particular perspectives, short-term concerns or single issues.

Success comes when we can identify what we can agree on as a community. We're more likely to reach that common vision when we engage each other with terms and examples that everyone understands. Currently, we do not have – as a part of regular, official discourse – a clear discussion about the coming volatility in energy prices, especially related to transportation. We do not yet have a clear understanding of – much less the language to describe – how local decisions impact our individual and collective carbon footprints. Fortunately, the evidence suggests that we can solve these and many other problems in tandem, if we acquire the tools.

We will still have to make some short-term sacrifices and endure some change, not all of which will be entirely comfortable. But as a community, we know how to make strategic investments in our future. These emerging challenges that we identify will often mean new kinds of investments. The good news is that we will come out ahead.

...and Stick to Our Principles *in all Decisions*

In reviewing a number of recent decisions and current or emerging policies, the memo authors found a distinct challenge. In individual instances, there are often strong stakeholder pressures to diverge from plans and policies. We believe that Council and staff would be well served by being better versed in articulating reasons for decisions in spite of their apparent inequity in the short-term. Occasionally, this will mean delivering tough news to individuals and interest groups who perceive harm from certain decisions.

Over time, Council and staff must go even farther by *enhancing* these plans and policies to integrate energy and climate concerns. Indeed, the current challenge is that many ad hoc decisions move us in the wrong direction – toward sprawl, auto-dependence, decreased long-term livability and less economic security. We have the opportunity to create instead a web of self-reinforcing investments to move in the other direction.

Next Stop: A Detailed Vision, with Overarching Goals

Fortunately, our review of local efforts, national reports and regional analyses brought to the surface a fairly small number of common themes that together constitute a high-level vision for Eugene and other communities taking on these challenges. They aren't always easy to implement, but the ideas represent the long-term win-win-win opportunities that we must move toward in all of our decisions.

Elements of vision that must inform our strategies and tactics, and of which we need far greater understanding among elected officials and the public:

- Decreased reliance on energy from outside the community, energy sources with increasing and volatile prices, and carbon-intensive energy sources
- Lower greenhouse gas emissions from businesses, households and therefore from all economic activity
- Patterns of land use and modes of transportation must further these energy and climate goals
- Policies, plans and Council-level decision making must explicitly incorporate this general sense of direction

Specific strategies that together advance this vision:

- Facilitate compact residential development that fits with and even enhances neighborhood character
- Increase the mix of integrated community uses — housing, shops, workplaces, schools, parks, civic facilities — within walking or bicycling distance
- Better integrate non-auto transportation corridors with commercial activity
- Foster a vibrant downtown that includes housing options
- Ensure access to open space by transit and non-motorized modes
- Increase bicycle and pedestrian connectivity, especially linking residential and commercial centers (remove physical and psychological barriers)
- For motorized passenger transportation, position the community to adopt forms that lower economic dependence on outside energy sources and reduce carbon emissions

Specific policy realignments to pursue to facilitate the preceding strategies:

- Reprioritize local transportation spending to serve these goals, and leverage state and federal transportation funding to the fullest extent possible
- Codes, incentives and zoning to smooth the integration of new and on-going development with transit and other alternative modes
- Promote and give priority to green building, including building-level design and technology, site selection that reinforces other tactics listed here, and more efficient use of existing urban land
- Ensure that policy revisions — for example, to TransPlan and Urban Growth Boundary — take the maximum allowable action inside the constraints of state law; where state law fails to incorporate energy and climate concerns, seek to incorporate those concerns to avoid biased outcomes focused on the short run

Finally, we must be nimble and humble. An ambitious journey into the distant future requires openness and learning. The strategies mentioned here — and the current efforts listed on the next page — are only our current attempt to make sense of tumultuous times. We must be prepared to shift our tactics and even our strategies as we go. We may even want to take risks, or what seem like risks — indeed, doing too little is the risk of our current path.

List of Existing Efforts

The Land Use and Transportation Subcommittee (LUTSCO) spoke with representatives of the following efforts, either before the Subcommittee or in other forums:

- Opportunity Siting and Infill Compatibility Standards
- Bicycle and Pedestrian Action Committee (B-PAC)
- West Eugene Collaborative (WEC)
- EmX (Lane Transit District's Emerald Express)
- Local efforts to prepare for the deployment of electric vehicles
- Eugene Comprehensive Lands Assessment (ECLA)
- Green building strategies currently being advanced by City of Eugene staff
- Energy and climate action planning by City of Eugene staff

Resources

Pathways to a low-carbon economy, McKinsey & Company (2009). Available at www.mckinsey.com/client/service/ccsi/pathways_low_carbon_economy.asp.

Averting the next energy crisis, McKinsey & Company (2009). Available at www.mckinsey.com/mgi/publications/next_energy_crisis.

Descending the Oil Peak: Navigating the Transition from Oil and Natural Gas, Portland Peak Oil Task Force (2007). Available at www.portlandonline.com/osd/index.cfm?c=42894.

Moving Cooler: An Analysis of Transportation Strategies for Reducing Greenhouse Gas Emissions, Cambridge Systematics, Inc. (2009). The Urban Land Institute, Washington, D.C. Available at <http://www.movingcooler.info/>.

Driving and the Built Environment: The Effects of Compact Development on Motorized Travel, Energy Use, and CO2 Emissions -- Special Report 298 (2009). Available at http://www.nap.edu/catalog.php?record_id=12747.

Opportunities to Reduce Greenhouse Gas Emissions through Materials and Land Management Practices, U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response (2009). Available at <http://www.epa.gov/oswer/publication.htm>.

Authorship and Contact Information

This memo was prepared for the Sustainability Commission by the Land Use and Transportation Sub-Committee. If you have questions, please contact the City of Eugene City Manager's Office and ask for staff support to the Sustainability Commission.

For more information, please visit the Commission's web site:
www.eugene-or.gov/sustainabilitycommission