Moving People, Not Just Cars:

"Careful, you may run out of planet."
—ad for a sport-utility vehicle

Pity the politician who promises to fix the urban transportation problem. Traffic congestion may be a constituent's No. I frustration, but given the resources and policy levers available to local government, there's only so much that can be done, and it's not nearly enough.

—Gordon Price, City Councillor, Vancouver, British Columbia

The Fannie Mae Foundation – the largest foundation in the country devoted to affordable housing issues – released a study in November 1999 that identified the 1956 Highway Act and the dominance of the automobile as the #1 influence on American cities in the last fifty years.

49,368 more passenger vehicles were registered in Oregon in 1998 than in 1997—135 more cars each day, or 5.6 per hour. If the average car is 15 feet long, we need 140 more miles of asphalt just to park a year's worth of additional cars, and 840 lane-miles if they are all to drive safely at 50 mph (with five car-lengths between them).

The State of Oregon's legendary former governor and co-founder of 1000 Friends of Oregon, Tom McCall, once said: "Heroes are not giant statues set against a red sky. They are people who say, 'This is my community and it's my responsibility to make it better."

The environmental movement in the 1970s in the United States began when citizens across the nation began to see the impacts of federal, state, and local laws affecting the health of their family and friends. Children were becoming sick due to increases in air and water pollution. Our groundwater and soil were becoming saturated with lethal chemicals resulting in outbreaks of cancer. And finally, our cities were beginning to spread and build on our farms, our forests, and our open space.

Individuals began to speak out. They formed organizations, with hundreds then thousands of members, to stop illegal chemical dumping, stop automobiles from spewing harmful emissions and to stop cities from inefficiently using land.

Not for profit organizations are founded by citizens to represent citizen interests. They range in size from one or two staff persons to hundreds. Staff is usually funded from member dues, membership donations, local and national foundations awarding grants, or grants from governmental agencies. The type of work carried out can range from organizing citizens for protests or rallys to convincing government officials to make or keep laws that benefit the members of the organization to education of citizens on the issues.

In the United States, environmental not for profit groups carry out the same objectives from varying perspectives. Groups such as Greenpeace, use eco-terrorism tactics to keep whalers from whaling or to keep old growth forests from being felled. Other groups such as Sierra Club attempt to get better federal laws written and adopted to protect certain wilderness areas/habitats or species of animals.

1000 Friends of Oregon

1000 Friends of Oregon is a not for profit organization, founded in 1975 by Governor Tom McCall and Henry Richmond as the citizens' voice for land use planning that protects Oregon's quality of life from the effects of ill-conceived development.

1000 Friends of Oregon works to:

- Conserve Oregon's productive farm, forest and range lands,
- Promote compact, livable cities with affordable housing, green spaces and transportation alternatives,
- Protect natural resource and scenic areas along the Coast and across Oregon, and
- Defend the opportunities for citizens to participate in the planning decisions affecting
 Oregon and their communities

These objectives are achieved through Oregon's pioneering statewide program, adopted in 1973. The program plans for Oregon's growth in conjunction with other state, local and regional land use planning efforts.

Much of our work is carried out in partnership with local land use not for profit groups around the state. These groups focus on the decisions made by their city or county from the boundary with California on the south to the Columbia River on the North, from the high desert of central Oregon to the coast. We also work with local, regional, and state public agencies.

Our mission is carried out through a combination of advocacy, education and research.

- Advocacy We help develop and advance new policies and programs that will help Oregonians manage growth at the state, regional and local level. In addition, our organization litigates government decisions to establish legal precedents and to enforce existing laws.
- Educational activities Each year 1000 Friends of Oregon holds a land use conference for members and concerned citizens. We provide technical and legal skills training programs provided on a variety of topics around the state.
- Research Our research activities include analyzing how well Oregon and various local governments have done in protecting farm and forest lands and assuring adequate land supplies for the full spectrum of needed housing types. We have researched and developed a land use alternative to a proposed bypass highway and digitized mapping of rural development patterns.

Making the Land Use, Transportation, Air Quality Connection

Rare indeed is the automobile advertisement that depicts a congested highway. The myth of the open road feeds an assumption by many that as more people buy more cars, we will build more roads. Traffic engineers are still being trained to respond to the increasing numbers of cars on the roads by adding more lanes to meet demand.

In the late 1980s the Portland Metro region government officials began discussing the need for another new highway. This highway would have run through rural farmland west of the Portland Metro region, outside the Urban Growth Boundary, and was called the "Western Bypass".

People were saying:

"We need the Bypass for people passing through the region."

"We need the Bypass for economic development of the region"

"Growth at the fringes of the region is inevitable"

"We have no control to change local land use patterns--they're all controlled by the market"

"There is no way to serve suburban growth with transit--it just doesn't work"

Were any of the statements true? As it turns out, not one of the statements were true. According to the Oregon Department of Transportation's data, the overwhelming majority of the vehicles that would use the Bypass (about 90%) where not through trips but were intra-regional in nature.

The claim that the Bypass would foster economic growth was also not true. The analysis showed that the Bypass would merely steal jobs from other parts of the region--from places in the center of the region with under-utilized infrastructure already in place and adjacent to neighborhoods with high unemployment.

As to relieving congestion on other routes, the Bypass was shown to have only a negligible effect on congestion. Most Washington County residents have, at some point or another, cause to complain about congestion on Highway 217, a circumferential freeway parallel to, but closer to the region's center than the Bypass. Yet, tests completed by Metro, our regional government, show that the Bypass would reduce congestion on 217 by only 1%, and would actually increase congestion in other parts of the county.

Finally, there were the claims that growth at the fringe is inevitable, that the market, not policy, controls land use patterns, and that it is impossible to serve suburban growth with transit.

Up to this point, we were able to truth-check claims made by Bypass boosters by using data from the state transportation department. To rebut the claims regarding growth, land use, and transit, we had to engage in our own research. The name for that research effort was *Making the Land Use, Transportation, Air Quality Connection*, better known by the acronym LUTRAQ.

LUTRAQ

LUTRAQ began with the observation that when it comes to public policy on transportation, there are four major forces that affect the behavior of the traveling public. Those forces include what type of infrastructure is provided, how we price the system, how we sell or market the system, and how we build places to live and work.

Provision of Infrastructure

The decision of what type of infrastructure should be provided leads to a statement of values. If we build wide roads with no bike lanes or sidewalks, we are saying that the only way to move around in our society is in a car. If we provide a myriad of possible forms of transportation in a transportation corridor we may find that the total person capacity of that system is equal to the wide road and allows for all types of people to use the system.

Pricing the Transportation System

In America, there are hidden costs to using the transportation system. While it is a well known fact that almost all transit systems in the U.S. require subsidization, it is a little know fact that roads and highways do not pay for themselves either. In fact, the gas tax charged for roads does not cover the full cost. Property taxes and sales taxes are other revenue sources but they are hidden to the user. If we were to charge the full price up front in the form of a toll or charge more during the rush-hour commute, some drivers may not drive for that trip or they may change the time of day that they travel.

Marketing

Anyone watching American T.V. for more than 15 minutes will see 1 or more advertisements for cars. And they are all on open roads with no congestion. You could watch T.V. all day and never see an advertisement for the bus system or walking. It is part of our culture to work to be able to own your own car. It is equated with freedom. If we were to market the use of the bus or walking at the same level as cars, we could change the culture over time.

Land Use

Land use may be the one tool that has been over looked for the past 50 years as the way to deal with transportation issues. There are 3 main principles that equate transportation and land use; density, diversity and design.

There are some quasi-natural laws that you can experience in your own travels. First, as density increases, trips by transit increase, trips by autos decreased. If density decreases, the reverse is true. Second, the higher the degree to which homes, offices, and retail shops are mixed, the diversity of an area, the use of non-auto modes also increases. As the number of uses in a development decreases, the use of the auto tends to increase. Lastly, if the design of a development accommodates pedestrian and bicycle travel (e.g., sidewalks, bike lanes, connecting streets, pleasant environment) people will walk and bike. Design a development to provide only for automobiles, and people will drive.

Learning from the Past

Where did we get these principles? We borrowed them from the development patterns of the past and lessons learned along the way.

It doesn't take a planning degree to know that where roads are built, development follows. The same is true for light rail lines and other fixed transportation facilities. Sound transportation planning can help communities ensure that the right kind of development occurs in the right place.

The deification of the car has changed the design and development of our communities in countless ways, mostly for the worse. Consider these developments: Communities without sidewalks. Cul-de-sac subdivisions where nothing is within walking distance. Houses whose main feature is the garage. Big box stores surrounded by acres of parking. Neon-blighted commercial strips that suck the life out of less auto-dominated traditional downtowns. Farmland destroyed to build bedroom communities on the urban fringe.

The importance of integrating transportation planning with land use is most apparent where failure to do so has resulted both in sprawl-damaged landscapes and continuing transportation nightmares. In contrast, good planning improves a community's economic vitality as well as quality of life.

It is instructive to remember what our neighborhoods looked like before the triumph of the private automobile. A few examples:

People could walk to the store and kids could ride their bikes to school because city streets were connected, usually on a grid with rectangular blocks. Cul de sacs were unknown.

Streets were narrow because no one expected to travel more than 15 mph in a horse and buggy or on a bike.

"Pedestrian-friendly" streets had wide sidewalks with trees separating pedestrians from the road. These sidewalks were almost uninterrupted by driveways; horse and buggy access was through alleys behind houses.

Neighborhoods were built within easy walking distance from shopping and businesses—or featured a mix of residential and commercial uses.

Commercial main streets also had sidewalks; businesses were located on the street rather than stranded behind a sea of parking.

Portland had applied these ideas in the past. In the mid 1970s, Portland was slated to be the recipient of another highway, called the Mt. Hood Highway, running from downtown Portland, through the inner-city neighborhoods to Mt. Hood Recreational Area.

At the time, businesses and residents were fleeing to the suburbs and much of the older buildings were being torn down to make room for surface parking for the automobiles. The rationale for this highway was the same as for the Western Bypass and that was to reduce congestion and increase economic development. Instead, the Portland City Council changed its mind at the last minute and took another, multi-faceted approach.

They decided against building a highway. This decision saved many viable and valued neighborhoods from destruction. The money that was to be used for highway construction was used to build the region's first light rail line and downtown bus mall. The city then adopted a plan to regulate the amount of parking allowed downtown. This indirectly increased the price of driving.

At about the same time, the city adopted a new land use plan for the central city, which focused the highest density uses into the transit corridors required residential, office, and retail development in the same area and pedestrian-friendly design of that development.

The result of these actions was economic development and congestion relief. In the last twenty years, the number of jobs in the downtown doubled, private investment along the light rail line topped \$1 billion, the percentage of workers taking transit downtown doubled (from 20% to 40%), and the number of air quality violations dropped from 100/year to zero.

This approach seems to have worked for downtown Portland. Yet, most of the development planned for the edge of the urban area in the late 1980s was low density, residential development, focused on accommodating automobiles. Although the suburbs are quite different from downtown, we had to show that the basic principles would be adaptable to a suburban setting.

To get the new growth to emmulate old development patterns we 1/4

First, we decided to challenge the assumption that development planned for the edge of the urban area would be low density and dispersed. Instead we assumed that there was an opportunity for infill of existing areas in more centralized locations. We conducted a vacant land survey for Washington County and found that there was plenty of land in the center of the county adjacent to existing or planned transit lines that would be able to accommodate the growth.

Second, we challenged the myth that the no one was willing to live in places closer in to the urban area, that had higher density, a mix of uses, and easy access to transit. And we needed to show that developers would be interested in building in these places. We sponsored a market study in collaboration with the regional chapter of the Homebuilders Association which showed a strong market for housing types that support transit, now and in the future.

The study concluded that the market would support transit-friendly densities in a mixed use setting with a pedestrian-friendly design. And with the amount of vacant land available, this transit-oriented development could accommodate 66% of the future households and 75% of the future jobs expected to come to Washington County in the next twenty years. The remaining households and jobs could be accommodated in low-density settings in other parts of the county.

Lastly, we had to prove that the new land use assumptions and transit plan resulted in less traffic congestion. We found, using the Metro travel demand model, that the combined approach of high levels of transit service, transit-supportive land use development, and parking management strategies provided for economic development and congestion relief, all without the sprawl inducing effects of building a new highway.

This combined approach, known as the "LUTRAQ alternative" was included in the environmental impact statement (EIS) process for the Western Bypass and was ultimately responsible for the Bypass' demise.

Implementation

Coming up with an alternative is one thing, implementation is another. Shortly after the LUTRAQ study began, Metro, Portland's regional government, began developing a 50-year land use and transportation plan for the region. At the table for this process were many of the Western Bypass supporters from Washington County. Nevertheless, this process allowed those same people to support the concept of transit-oriented development. In the end, Metro incorporated 90% of the LUTRAQ alternative into the resulting regional plan. As a consequence, LUTRAQ, is now the regional vision and law.

Moreover, the "LUTRAQ alternative" is under construction in Washington County. The proposed light rail line opened in September 1998. Each city through which the line runs has adopted special land use plans for the areas that surround the light rail stations. Through those plans most of the LUTRAQ alternative is now incorporated into local land use law. And the market has responded with 7,000 housing units designed to be transit-oriented development with office and retail space have been constructed around the light rail stations.

When we started the LUTRAQ project, people thought we were crazy. Using land use planning to solve a transportation problem was like using a Tuba to play Mozart--the two things each had to do with a related subject, but were seen to be so far removed from each other that they could not be functionally connected. This, despite the success of using precisely the same approach ten years earlier in downtown Portland.

We also had to fight against the mentality that sprawl is inevitable--it's what people want. That it's somehow part of the inalienable rights that Thomas Jefferson enumerated: life, liberty, and the pursuit of an

open parking spot at the mall the Saturday before Christmas. Yes, there is an American Dream but it should not be equated with sprawl.

In the end, we can have it all. We discovered with LUTRAQ that Americans can have the dream, without having to spoil our landscapes with highways and parking lots and without choking our air with automobile emissions. We can have a suburbia made up of vibrant and vital small cities and towns, while at the same time avoiding the automobile autocracy that is destroying our neighborhoods and our environment. In fact, the two notions are dependent on each other--you can't tame the auto without having pedestrian-friendly communities. What's more, the market supports that type of development.

Public policy can and will encourage the kind of future we want to see. That's where citizens come in to the picture. Government and developers left to their own devices will continue to spew out the same kind of sprawl we've seen for the past half century in America. It is only when concerned citizens become active and organized that change can occur.

An Electronic Resource Guide:

Gordon Price, "A Local Politician's Guide to Urban Transportation": email gordon price@city.vancouver.bc.ca for a fascinating critique of typical responses to congestion.

LUTRAQ materials: see www.friends.org or call (503) 497-1000

Numerous reports and other resources on transportation, congestion, and sprawl can be obtained through the Surface Transportation Policy Project, www.transact.org.

Information on Oregon's Transportation and Growth Management Program:

http://www.lcd.state.or.us/issues/tgmweb/index-f.htm.