



Win-Win Emission Reductions



*Innovative Management
Strategies for More Sustainable
Mobility*

Todd Litman

Victoria Transport Policy Institute

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Earth In Balance

Sustainability emphasizes the integrated nature of human activities and therefore the need for coordinated planning among different sectors, jurisdictions and groups.



Paradigm Shifts

- **Growth** - expanding, doing more.
- **Development** - improving, doing better.



- **Mobility** - physical movement.
- **Accessibility** - obtaining desired goods, services and activities.

Current Transport Planning

Current planning tends to be reductionist: each problem is assigned to a single agency with narrowly defined responsibilities. For example:

- Transport agencies deal with congestion.
- Environmental agencies deal with pollution.
- Welfare agencies deal with the needs of disadvantaged people.
- Public health agencies are concerned with community fitness.
- Etc.

Reductionist Decision-Making

Reductionist planning can result in public agencies implementing solutions to one problem that exacerbate other problems facing society, and tends to undervalue strategies that provide multiple but modest benefits.



Win-Win Solutions

Put another way, more comprehensive planning helps identify “Win-Win” strategies: solutions to one problem that also help solve other problems facing society.

Ask:

“Which congestion-reduction strategy also reduces parking costs, saves consumers money, and improves mobility options for non-drivers.”

What is Sustainable Transport?

Would shifting to solar powered automobiles create a sustainable transport system?



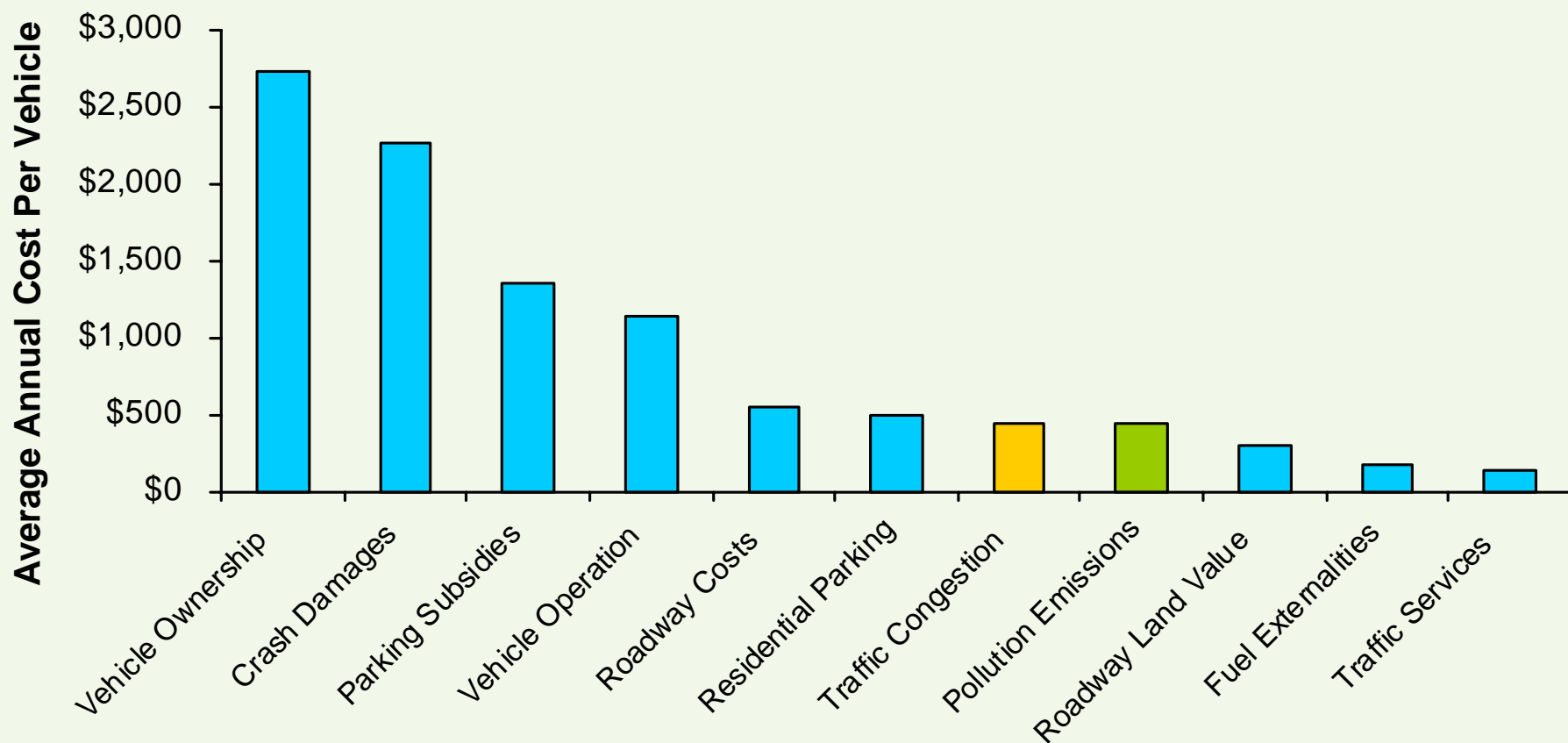
Comparing Benefits

Planning Objectives	Reduce Motor Vehicle Travel		Efficient & Alt. Fuel Vehicles	Widen Roads
Congestion reduction	✓		✗	✓
Roadway cost savings	✓		✗	✗
Parking cost savings	✓		✗	✗
Consumer cost savings	✓			
Better mobility options	✓			
Improved traffic safety	✓		✗	
Reduced pollution	✓		✓	✗
Energy conservation	✓		✓	✗
Land use objectives	✓		✗	✗
Public fitness & health	✓			

✓ = Supports Objective

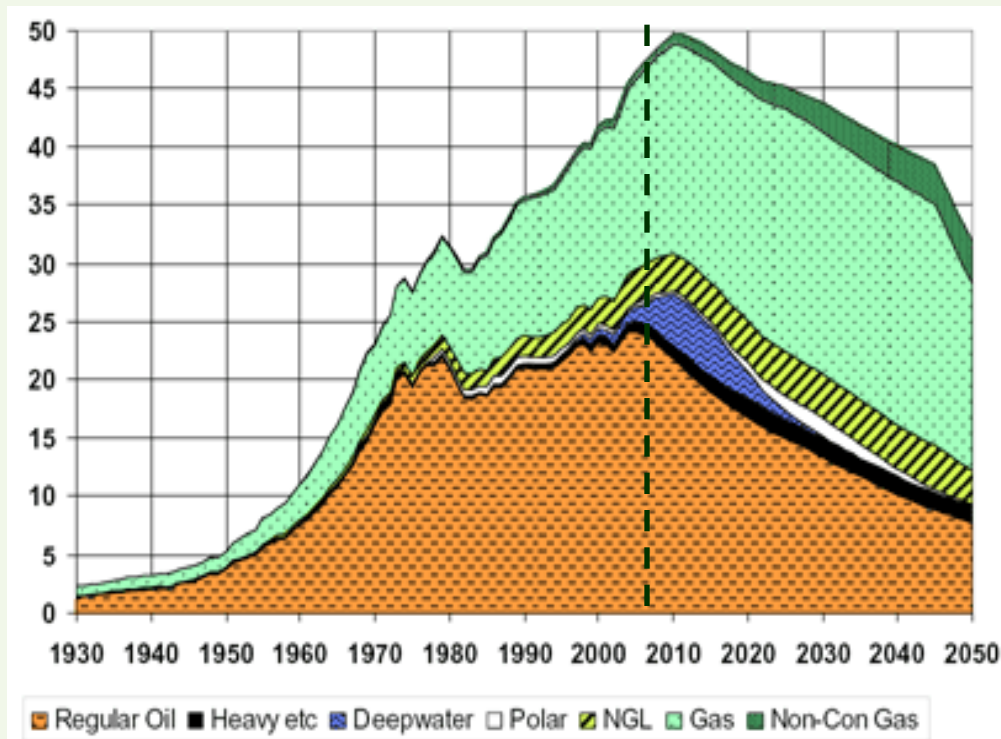
✗ = Contradicts Objective

Comparing Costs



Defining The Problem

Gigabarrels of Oil Equivalent



The age of cheap oil is over. The age of dirty, moderate-priced alternative fuels could begin.

Defining the problem only as an energy shortage justifies costly and harmful energy subsidies.

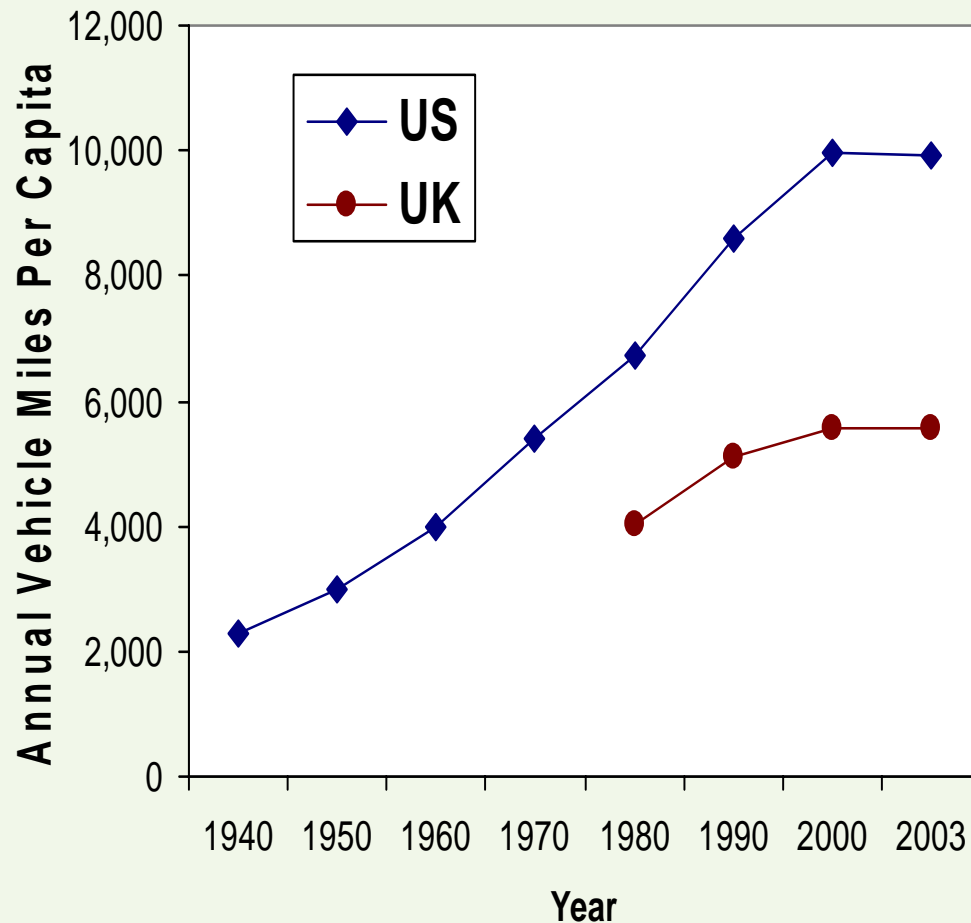
Alternative Fuels

Available at \$40-80 a barrel:

- Tar sands and oil shales.
- Coal gasification.
- Biofuels (ethanol and biodiesel).
- Nuclear- or coal-produced hydrogen.
- ???

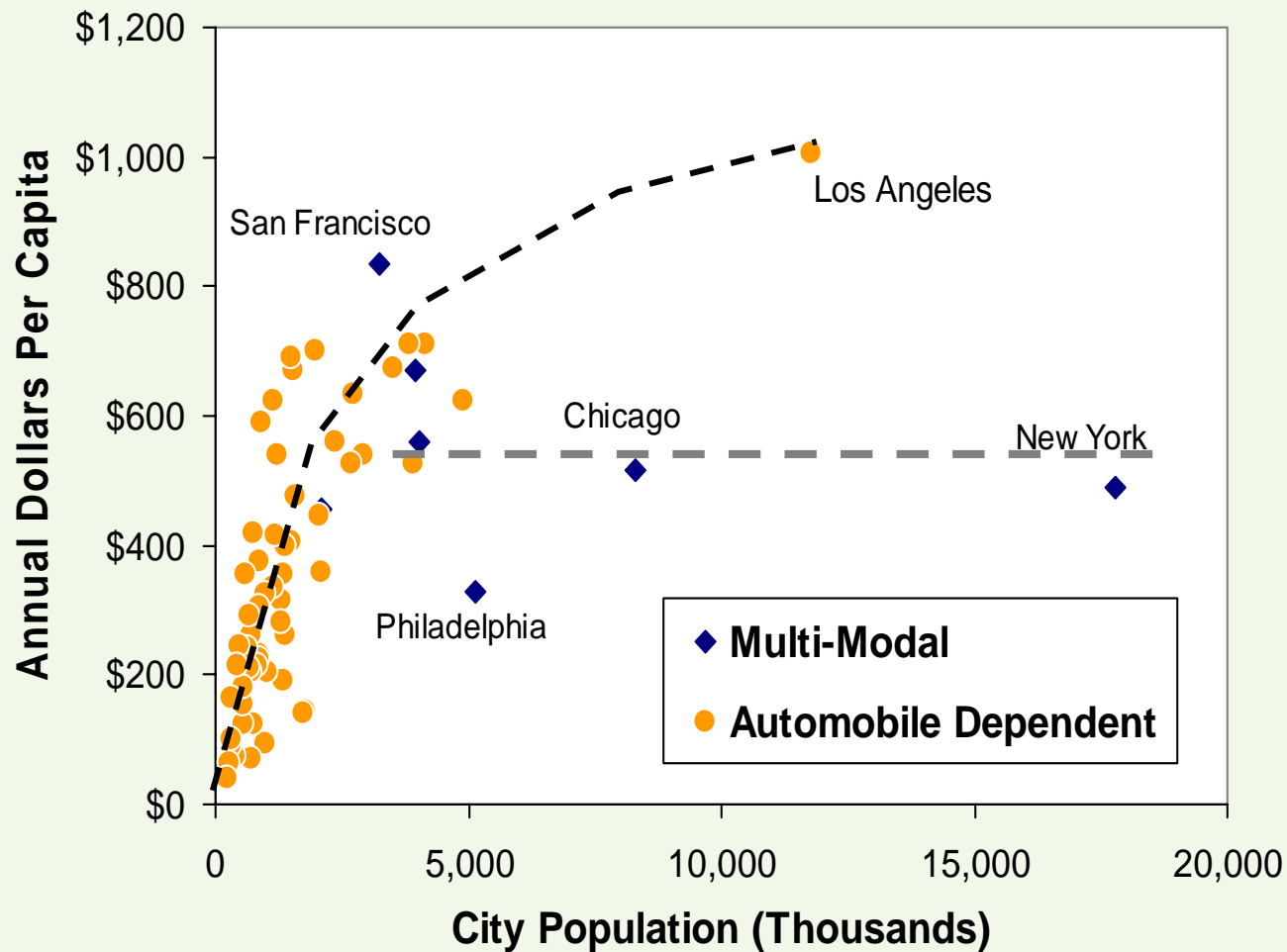


Vehicle Travel Trends

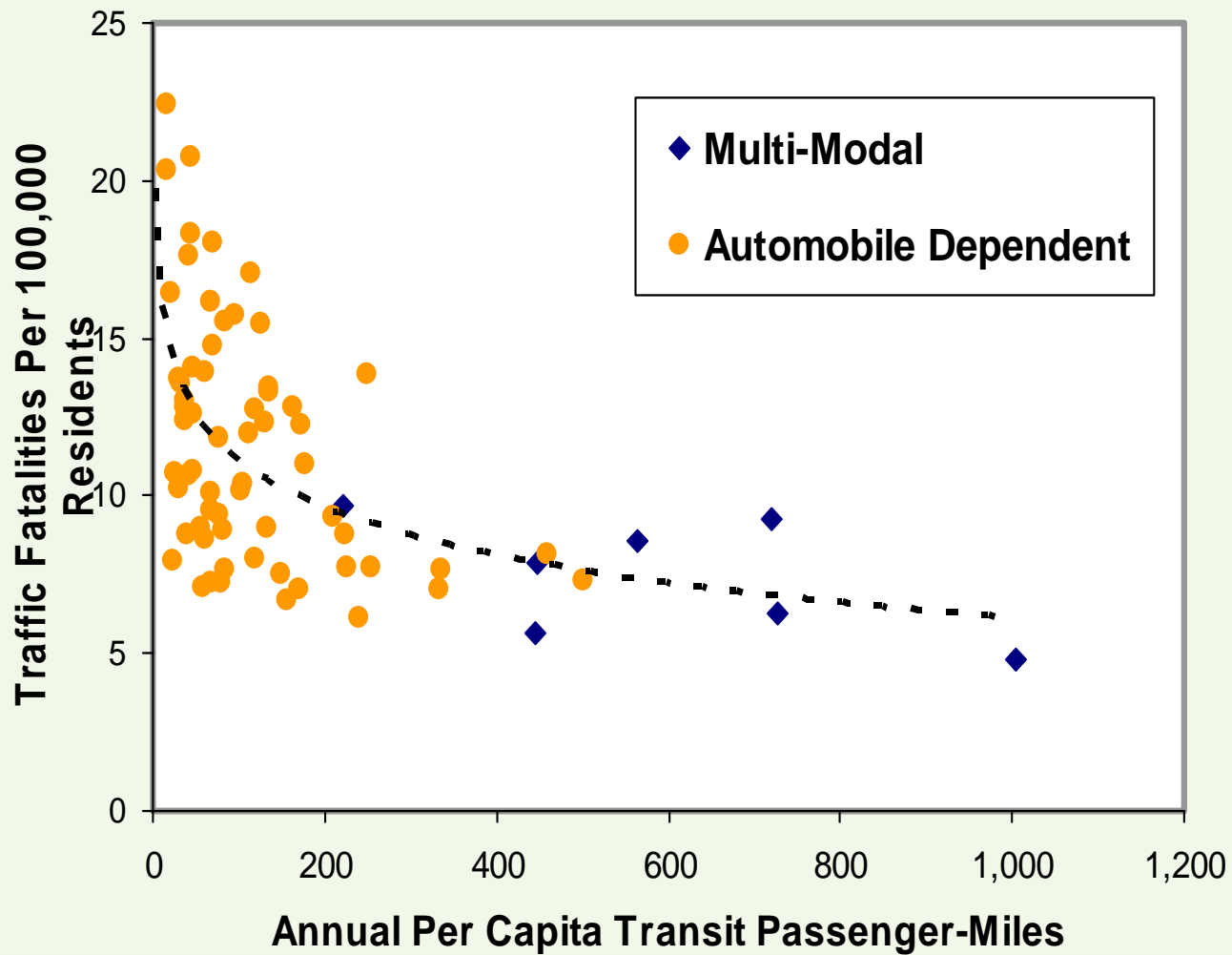


Per capita annual motor vehicle mileage also grew substantially during the last century but has since leveled off in the U.S.

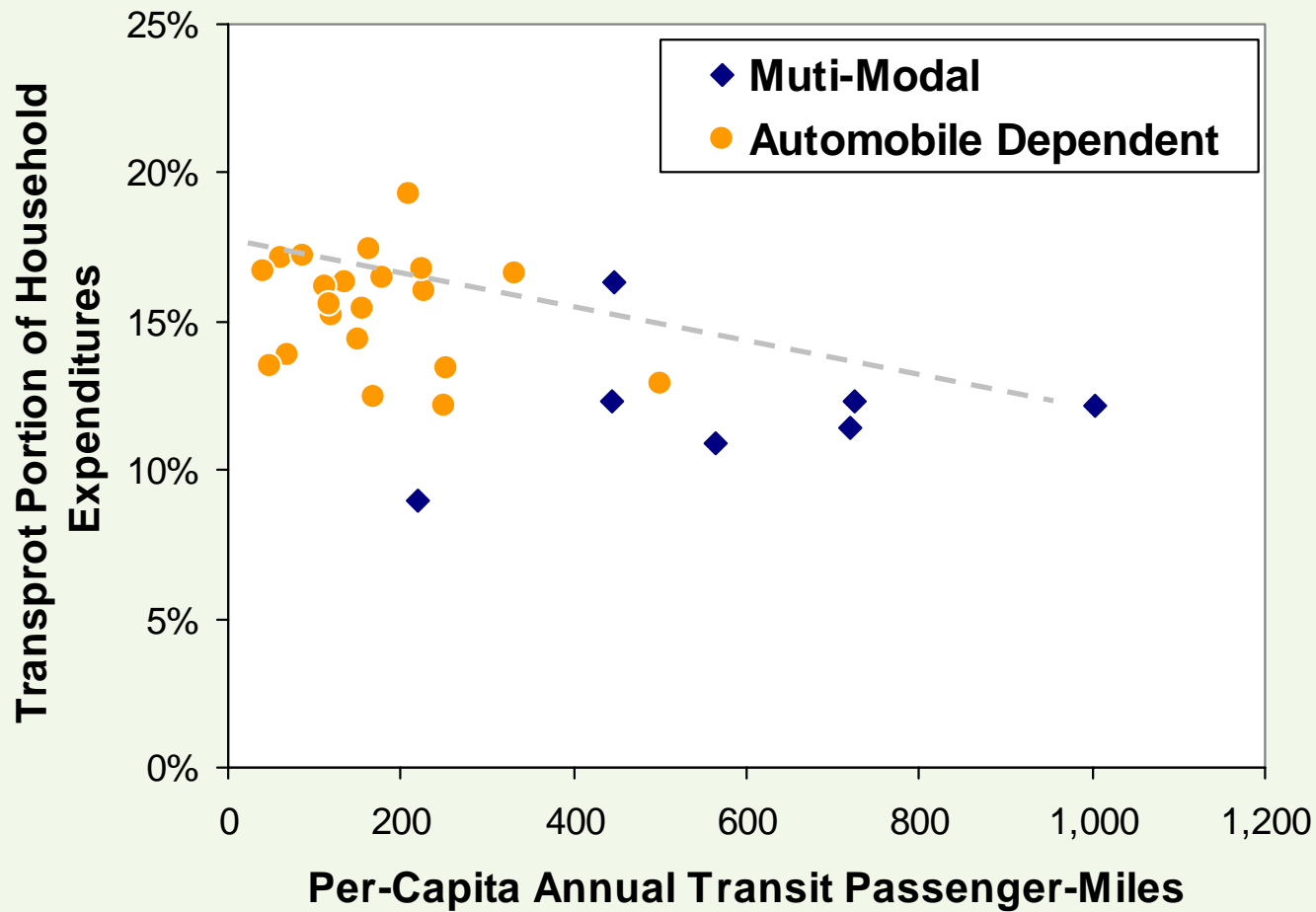
Congestion Costs



Traffic Fatalities



Household Transport Expenditures



What Gets People Moving?

Walking is a natural and essential activity. If you ask sedentary people what physical activity they will most likely to stick with, walking usually ranks first.



Equity



A more diverse transport systems helps achieve equity objectives:

- Financial savings to lower-income people.
- Increased opportunity to physically, socially and economically disadvantaged people.

Win-Win Strategies

Market reforms justified on economic principles that help provide various economic, social and environmental benefits.

- Improved travel options.
- Incentives to use efficient modes.
- Accessible land use.
- Policy and market reforms.



Employee Trip Reduction Programs



Employers encourage employees to walk, bicycle, carpool and ride transit rather than drive to work. For example, offer a tax incentive for businesses that have effective commute trip reduction programs.

Walking and Cycling Improvements



- More investment in sidewalks, crosswalks, paths and bike lanes.
- More traffic calming.
- Bicycle parking and changing facilities.
- Programs to encourage safe walking and cycling.

School & Campus Transport Management



- Programs that encourage parents and students to use alternative modes to travel to schools, colleges and universities.
- Support alternative modes (e.g., bikeways, crosswalks and traffic calming around schools).

Ridesharing: Puget Sound Example

The Puget Sound region has the most successful vanpool program in North America. About 7% of commute trips over 20 miles in length are by vanpooling. A marketing study suggests that this could double or triple. More than a third of suburban automobile commuters would consider vanpooling, if it had:

- More flexibility.
- High Occupant Vehicle priority lanes and parking.
- More financial incentives.
- Integration with public transit.
- Employer support.



Attracting Discretionary Riders

- Quality service (convenient, fast, comfortable).
- Low fares.
- Support (walkable communities, park & ride facilities, commute trip reduction programs).
- Convenient information.
- Parking pricing or “cash out”.
- Integrated with special events.
- Positive Image.



Distance-Based Pricing

Motorists pay insurance, registration and lease fees by the vehicle-mile, so a \$600 annual fees become 5¢/mile and a \$2,000 annual fees become 16¢/mile. This gives motorists a significant financial incentive to drive less, but is not a new fee at all, simply a different way to pay existing fees.



Parking Management

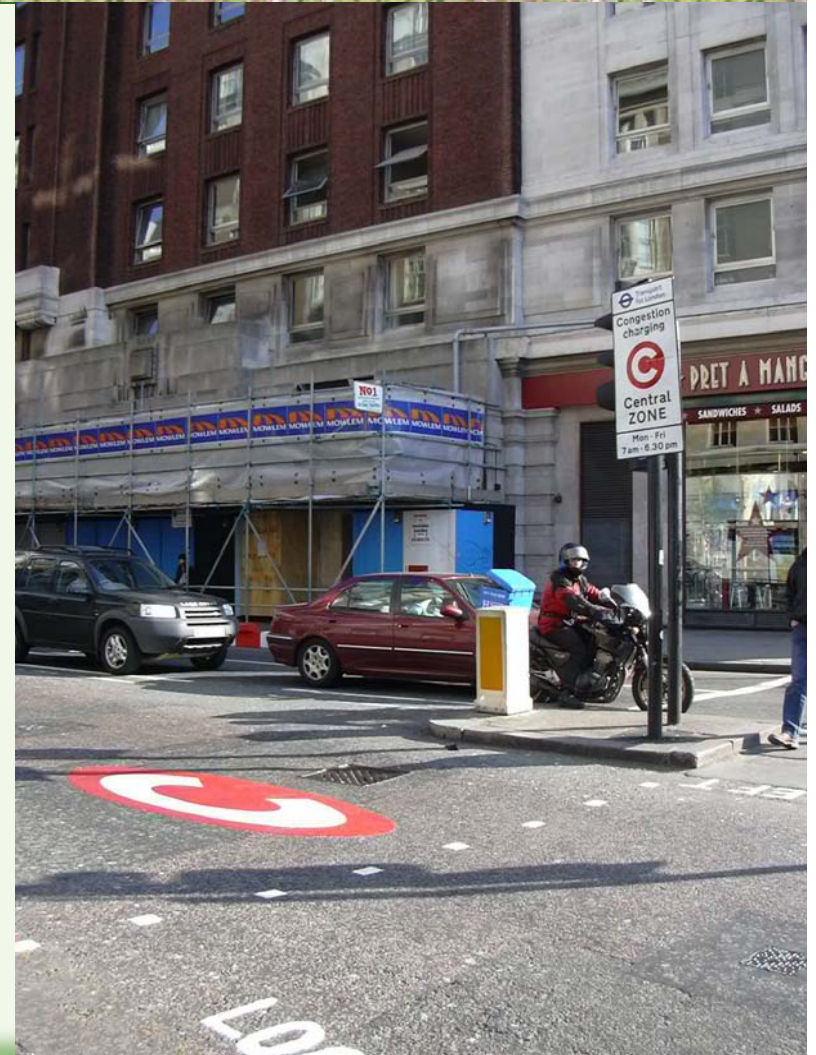
More efficient parking:

- Reduced and more flexible parking requirements.
- Shared parking.
- Charge users directly for parking, rather than indirectly through taxes and rents.
- *Parking Cash Out* (Employees who current receive free parking are able to choose a cash benefit or transit subsidy instead.)

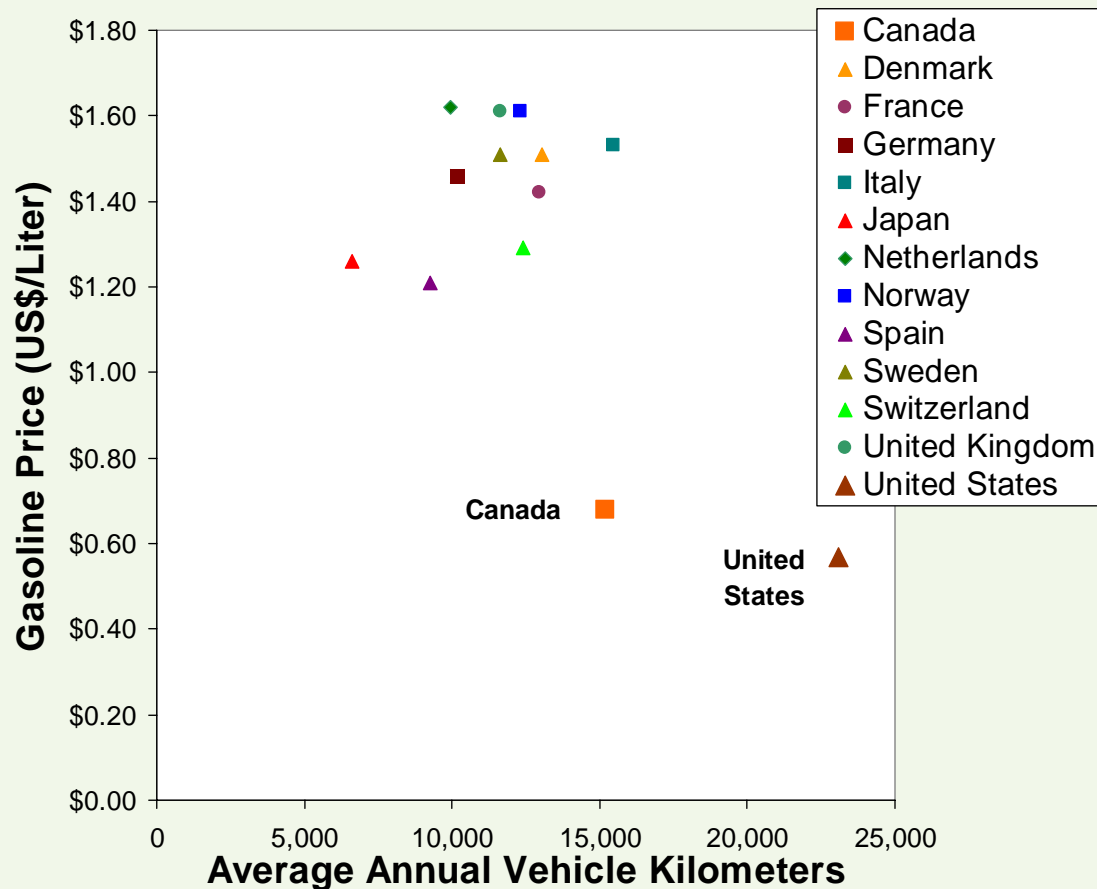


Road Pricing

- Charge motorists directly for using specific roads, based on use.
- Charge tolls, with higher rates during congested periods and lower rates during off-peak.
- Use electronic pricing systems that eliminate the need for tollbooths.



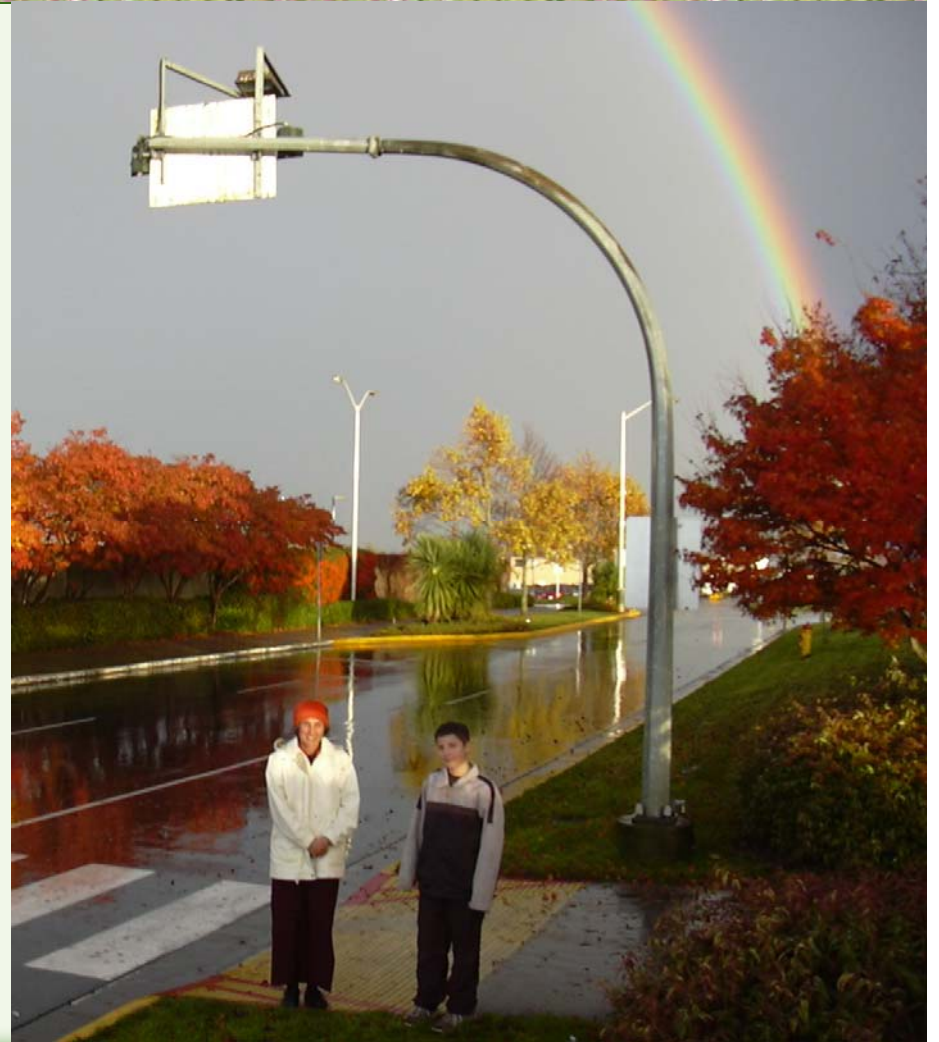
Raise Fuel Taxes



- Increase existing taxes to reflect inflation and cover roadway costs.
- Revenue neutral tax shifts.
- Increases should be gradual and predictable (e.g., 5% annual increase over inflation for a decade).
- Emphasize fuel tax increases as part of a multi-faceted program to achieve economic and environmental objectives.

Reform Planning Practices

- *Least-cost planning:* equal funding for mobility management solutions.
- *Multi-modal planning:* create a diverse and integrated transportation system.



Motorists Benefit Too

Win-Win solutions create more balanced transport systems. It is no more “anti-car” than a healthy diet is anti-food. Motorists have every reason to support these reforms:

- Reduced traffic and parking congestion.
- Improved safety.
- Improved travel options.
- Reduced chauffeuring burden.
- Often the quickest and most cost effective way to improve driving conditions.





www.vtppi.org

“Win-Win Emission Reduction Strategies”
“Appropriate Response To Rising Fuel Prices”
“The Future Isn’t What It Used To Be”
“Online TDM Encyclopedia”
Many Others...