



Tackling those traffic jams - win-win transportation solutions

Vancouver, Canada

RLD URBAN FORUI

AN INTERNATIONAL UN-HABITAT EVENT ON URBAN SUSTAINABILITY

As more and more people around the world are able to afford their own cars, and daily traffic jams and pollution get worse in cities rich and poor, how do we find an easier way through the urban sprawl? Here the Victoria Transport Policy Institute in Vancouver, Canada, presents some of the latest thinking, and fresh ideas in urban transport planning.

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Sustainability in urban transport is sometimes defined narrowly, focusing on a few impacts such as fossil fuel depletion and air pollution. But it is increasingly defined more broadly to include a variety of economic, social and environmental issues. For example, narrowly defined sustainability implies that sustainable transportation can be achieved by simply shifting to solar or nuclear-powered vehicles. But broadly defined sustainability requires additional transportation system changes and better planning, both to reduce accidents and provide non-drivers with improved transport options.

Conventional transport planning leaves specific problems assigned to agencies with narrowly defined responsibilities: Transportation agencies are primarily responsible for reducing traffic congestion problems, social agencies are responsible for helping disadvantaged people, and environmental agencies are responsible for reducing energy consumption and pollution.

This type of planning tends to be inefficient, because individual agencies often implement solutions to their problems which exacerbate other problems facing society. It also tends to undervalue solutions that provide modest but multiple benefits. For example, roadway widening may help reduce traffic congestion – but it indirectly increases vehicle travel, parking costs, consumer costs, accidents, fuel consumption and pollution emissions. Conversely, some energy conservation strategies, such as incentives for motorists to choose more fuel-efficient vehicles, may reduce total energy consumption, but because this reduces the per-kilometre cost of driving, it tends to increase per vehicle annual mileage, and so increases traffic congestion, parking costs, consumer costs and accidents.

In Victoria, we have identified a number of transportation planning reforms that help create more diverse and efficient transportation systems, which we call "Win-Win Transportation Solutions" because of their multiple benefits. These are cost-effective, technically feasible reforms that help solve transport problems by correcting existing market distortions that result in economically excessive vehicle travel. As a result, they help achieve a combination of economic, social and environmental planning objectives, including reduced traffic congestion, road and parking facility savings, consumer savings and choice, equity, safety and environmental protection.

A major barrier to more sustainable transportation is the perception that economic and environmental goals conflict. Some people oppose climate change emission reduction programmes on the grounds that they reduce economic development. But *win-win solutions* can provide a combination of economic, social and environmental benefits.

Although individually their impacts may appear modest, typically affecting a small portion of total travel, their effects are cumulative. When all benefits and costs are considered, the solutions outlined here often turn out to be most cost effective solutions overall.

- Least Cost Planning: Least-cost planning, or Integrated Planning considers demand management solutions. It involves the public in developing and evaluating alternatives, such as using roadway expansion funding for transit improvements, rideshare programmes or mobility management programmes.
- Parking Management: Parking Management entails more efficient use of existing parking facilities -shared
- parking, flexible minimum parking requirements, and more direct user charges.

Sustainable Cities

Commute Trip Reduction: Commute Trip Reduction programmes encourage people to reduce car trips. Typically they use a variety of incentives and support to reduce peak-period driving, including better cycling facilities and flexible working hours.

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Turning Ideas into Action

- *Transit Improvements:* There are many ways to improve public transit, including better vehicles and stations, more frequent service, reduced crowding, improved walking conditions to transit stations, and *HOV Priority* for High Occupant Vehicles (buses, vanpools and carpools) priority over general traffic, so public transit travel is faster and more efficient.
- *Walking and Cycling Improvements:* Walking and cycling travel can substitute for some motor vehicle trips. Communities with good walking and cycling conditions drive less and use transit more.
- Smart Growth Land Use Policies: "Smart Growth" land use policies encourage the development of more compact, mixed, walkable, transit-oriented communities, where residents drive less and rely more on alternative modes.
- Traffic Calming and Management: Traffic calming reduces speeds and volumes on specific roads. Typical
 strategies include traffic circles at intersections, raised crosswalks, and partial street closures to discourage
 short-cut traffic through residential neighbourhoods. This reduces car use, and increases road safety and
 creates a more pedestrian- and bicycle-friendly environment.
- Road Pricing: Road Pricing means that motorists pay directly for driving on a particular roadway or in a
 particular area. Transportation economists have long advocated road pricing as a way to fund transportation
 improvements and to reduce congestion problems.
- *Pay-As-You-Drive Pricing:* Pay-As-You-Drive (PAYD) pricing means that vehicle insurance premiums and other fees are based directly on how much it the vehicle is driven. This provides a significant financial incentive to reduce driving, while making these charges more fair and affordable.

Many transportation problems are virtually unsolvable without such reforms. Many transportation planners recognize the potential benefits of these reforms, but they often treat them as measures of last resort, to be used to address specific congestion and air pollution problems where conventional solutions prove to be ineffective. Win-win solutions use the opposite approach – they apply market reforms whenever they are cost effective overall, taking into account all costs and benefits, and consider capacity expansion as a fallback if management strategies fail.

Most individual win-win strategies provide modest benefits, and so are not considered the best way to solve any particular problem. As a result, they are often overlooked, even if they are cost effective and could provide large benefits if implemented together.

This article is written by Todd Litman the Victoria Transport Policy Institute in Vancouver, Canada for the Habitat Debate. Please feel free to publish or quote from this article provided UN-HABITAT Features is given credit¹. Suitable photographs are available on our website. For further information, please contact: Mr. Sharad Shankardass, Spokesperson, Ms. Zahra Hassan, Press & Media Liaison, Tel: (254 20) 7623153/7623151/7623136, Mobile: 254 733 760332: Fax: 254 20 7624060, E-mail: habitat.press@unhabitat.org, Website: www.unhabitat.org