

# ICLEI Oceania - Submission to the Senate Inquiry into the investment of Commonwealth and State funds in public passenger transport infrastructure and services February 27, 2009

#### **Terms of Reference**

- 1. An audit of the state of public passenger transport in Australia
- 2. Current and historical levels of public investment in private vehicle and public passenger transport services and infrastructure
- 3. An assessment of the benefits of public passenger transport, including integration with bicycle and pedestrian initiatives
- 4. Measures by which the Commonwealth Government could facilitate improvement in public passenger transport services and infrastructure
- 5. The role of Commonwealth Government legislation, taxation, subsidies, policies and other mechanisms that either discourage or encourage public passenger transport
- 6. Best practice international examples of public passenger transport services and infrastructure.

## **Background**

ICLEI Oceania delivers a range of projects and services to local governments across Australia and New Zealand. In Australia, these fall within five main programs - the Cities for Climate Protection (CCP) program, the Adaptation Initiative, the Water Campaign, Integrated Sustainability Services (ISS), and Cities for Safe and Healthy Communities.

With the participation of over 230 local governments across Australia in the CCP program alone, representing over 84% of the population, ICLEI Oceania has made a commitment to these councils to assist them in achieving their CCP goals for emissions reductions.

Under the CCP program, and supported through funding from the Department of Environment, Water, Heritage and the Arts (DEWHA), councils have, since 2002/03, had the opportunity to participate in the Sustainable Transport Project. This project aims to:

- Identify synergies between councils' strategic planning policies, frameworks and processes, and their relation to sustainable transport
- Engage the transport representative within each council to build their capacity in sustainable transport, and identify links between transport and greenhouse gas reduction within council operations and the community
- Deliver greenhouse gas abatement in the transport sector
- Quantify environmental, economic and social benefits as appropriate

These aims are achieved through the supported implementation of a structured project framework that assists councils to develop an Action Plan, based on identified gaps and opportunities, and implement that plan within the context of council-endorsed goals for transport emissions reductions.

## **Terms of Reference**

- 1. An audit of the state of public passenger transport in Australia
- 2. Current and historical levels of public investment in private vehicle and public passenger transport services and infrastructure

Based on the scope of ICLEI Oceania's activities in sustainable transport, the first two terms of reference are not applicable.

3. An assessment of the benefits of public passenger transport, including integration with bicycle and pedestrian initiatives

Based on ICLEI Oceania's research and experience of working with Australian local governments and their communities for over 10 years, the benefits of a comprehensive public transport system include:

- Increased transport options (and associated benefits such as improved health and well-being, increased social connectivity, social inclusion and social equity).
- Cost savings
- · Reduced energy use

## **Increased Options**

Local governments are limited in their capacity to effect change in their communities' travel behaviour by the current lack of integration between transport modes.

Efforts to provide convenient, safe and attractive options for cycling and walking are hampered by the lack, or inadequacy of connections that would make longer trips viable. Options for the carriage of bikes on public transport, as occurs in many towns and cities in Europe, the USA and Canada, would bring cycling within the reach of many more commuters, day-trippers and leisure cyclists.

The health benefits to be derived from encouraging more people to switch from using their car to active and public transport are invaluable, especially considering Australia's current position amongst the developed world's most obese nations.

VicHealth has a range of resources highlighting the critical role that public transport plays in creating active, safe, cohesive and inclusive communities<sup>1</sup>.

Currently, the potential advantages of public and active transport, e.g. convenience, health, cost, comfort, well-being, social connectivity, are more often outweighed by factors such as:

- Unsafe and inconvenient routes
- Unattractive routes
- Lack of adequate priorities
- Unreliable services
- Insufficient services, leading to overcrowding and/or delay
- Lack of services, especially in rural and regional areas
- Unattractive public transport environments, including the buses, trains and trams themselves
- Public transport infrastructure, including shelters, unsuited to all types of weather
- Inconvenient ticketing regulations (Melbourne trams)

Until the benefits of public and active transport start to outweigh the real, and perceived benefits of car use, i.e. convenience, reliability, comfort, speed, Australia will continue to

¹ www.vichealth.vic.gov.au/en/Resource-Centre/Publications-and-Resources/Planning-Healthy-Environments.aspx

favour car-users and face the associated social, economic and environmental costs of a persistent, and increasing dependence on car use.

#### Costs

The social and financial costs of dependence on private vehicle transport are felt most by those sectors of society that can least afford it. As urban growth shifts affordable housing to the urban fringes, and growth boundary regions, provisions are often made for the storage of up to three cars. Investments in roads, with no associated investment in public transport, ensure that these areas become entirely car-dependent, with no alternative options available.

Under the proposed structure of the CPRS, motorists will receive a 'cent for cent' reduction in fuel tax linked to rising fuel costs. This in effect cushions motorists from the intended outcome of the CPRS, which is to decrease energy use and emissions, and reduces the perceived need to provide alternative transport options. There is, under this scheme, no financial incentive for motorists to reduce their fuel use or demand more transport choices, and less likelihood of deriving the environmental, health and social benefits that reduced car use could deliver.

The effect of this support for motorists under the CPRS is to detract from other imperatives for reducing motor vehicle use. These so called 'market failures' include:

- 1. Air quality and particulate emissions<sup>2</sup>
- 2. Economic and social impacts of congestion
- 3. Social and health impacts of car-centric transport management (covered above)
- 1. Air quality and particulate emissions

In Melbourne, over half of the city's summer air pollution is due to motor vehicle emissions and these vehicles are also the biggest overall polluter, above industry<sup>3</sup>. EPA Victoria states that transport accounts for the following percentages of Melbourne's major air pollutants:

- 80 per cent of carbon monoxide (CO)
- 60 per cent of nitrogen oxides (NOx)
- 40 percent of volatile organic compounds (VOC's)
- 30 per cent of particulate matter (PM) resulting in winter smog.

Carbon monoxide, nitrogen oxides and VOC's combine to form ozone in the lower atmosphere, which we experience as summer smog. According to the EPA, "smog affects the linings of the throat and lungs, restricting the air passages and makes breathing difficult. It also increases the risk of respiratory infections. Other substances in the oxidant mix increase the effect of ozone and produce eye irritation."

Significant financial savings can be made in terms of avoided health costs from per tonne reductions in NOx, HC and especially PM, from reduced private vehicle use. According to the Australian Greenhouse Office submission to the Fuel Taxation Inquiry (2005), the avoided health costs, per tonne, of emissions of oxides of nitrogen (NOx), hydrocarbons (HC) and particulate matter (PM) are as follows:

NOx \$1385 HC \$1440 PM \$17,600

\_

<sup>&</sup>lt;sup>2</sup> Environmental Protection Authority (EPA), Motor Vehicle Emissions and Air Quality <a href="https://www.epa.vic.gov.au/air/vehicles/vehicle-emissions.asp">www.epa.vic.gov.au/air/vehicles/vehicle-emissions.asp</a>, and, Chapter 2..3.2. Biodiesel in Australia, ICLEI Oceania, 2007, <a href="https://www.iclei.org/index.php?id=7076">www.iclei.org/index.php?id=7076</a>

<sup>&</sup>lt;sup>3</sup> Environmental Protection Authority (EPA) Victoria, 2007, Melbourne's Air Quality, www.epa.vic.gov.au/air/aga.asp

#### 2. Economic and social impacts of congestion

The Bureau of Transport and Regional Economics (BTRE) estimate the 'avoidable' cost of congestion for all Australian capital cities to be approximately \$9.4 billion for 2005<sup>4</sup>. This includes \$3.6bn in additional business costs, \$1.2bn in extra vehicle operating costs, and \$1.1 billion in extra air pollution costs. These direct costs to the economy are caused by an inefficient use of resources and a lack of support for public transport infrastructure. By 2020, the total 'avoidable' cost of congestion is projected to increase to an estimated \$20.4 billion.

Efficient public transport systems in our capital cities should result in a reduction in the number of passenger vehicles using roads, thereby allowing commercial traffic to move more easily. The BTRE study clearly indicates the economic benefits that this would deliver.

### Energy Use

Notwithstanding that under the CPRS there is no additional incentive for motorists to reduce their fuel use, there is a strong case for acknowledging and supporting the potential reductions associated with a move towards public and active transport.

Firstly, the point of peak oil has, by most accounts, already been reached and passed. The sooner Australia can make the transition to more sustainable, less fuel intensive modes of transport, the more prepared we will be to absorb the impact of serious disruptions to fuel supplies in the future. This is especially pertinent considering that Australia currently relies on imports to meet at least 60% of its fuel demand. This will also ensure that there are adequate supplies to support essential services during any enforced period of transition.

A study by Newman (2000)<sup>5</sup> determined that, per passenger kilometre, a car uses double the energy of a bus, and approximately six times as much as an electric train.

Secondly, it is estimated that the Australian population will increase by 45% between 1990 and 2020, and car traffic is estimated to increase by 21% between 2005 and 2020<sup>6</sup>. Without investment in alternative transport options commensurate with an inevitable increase in transport demand, the implications for Australia's roads, congestion levels, rural and regional environments, health and social well-being are immense.

In recent years, there have been countless initiatives, costing many millions of dollars, aimed at reducing private vehicle travel demand and changing travel behaviour. Without a truly viable alternative to car use, the success of these initiatives can only be selective and short-term.

With the provision of an integrated public transport system that values the needs of all users, the efforts of local governments to provide safe, convenient and attractive active transport infrastructure will be supported and enhanced through the emergence of a well-integrated, multi-modal network. This will deliver a range of benefits, not least in terms of long-term emissions reductions from transport, but also in terms of improvements in air quality, health, social well-being, reduced congestion costs, increased productivity and more inclusive and connected communities.

<sup>&</sup>lt;sup>4</sup> BTRE (2007). Bureau of Transport and Regional Economics [BTRE]. Estimating urban traffic and congestion cost trends for Australian cities, Working paper 71. Canberra ACT.

<sup>&</sup>lt;sup>5</sup> Sustainable Transportation and Global Cities

# 4. Measures by which the Commonwealth Government could facilitate improvement in public passenger transport services and infrastructure

The following measures by the Commonwealth Government would contribute to an improvement in public passenger transport services and infrastructure:

- Financial support for the provision of public transport infrastructure and services in each state
- Mandate for the provision of a minimum level of public transport options to service all new housing developments
- Address and support the transport needs of rural and regional areas
- Consider the needs of all users in the integration of transport modes. This includes
  people of varying physical abilities, the elderly, families, shoppers, and cyclists,
  amongst others.
- Improve the aesthetic quality and experience of public transport services
- Mandate for the consideration of all types of weather conditions in the design of public transport infrastructure
- 5. The role of Commonwealth Government legislation, taxation, subsidies, policies and other mechanisms that either discourage or encourage public passenger transport

This point is not relevant to the scope and content of ICLEI Oceania's work with the local government sector.

In broad terms, any measures to discourage car-use such as access restrictions, congestion taxes, parking restrictions and fuel taxes, need to be accompanied by the provision of alternatives that are available and accessible to all those affected by such measures.

# 6. Best practice international examples of public passenger transport services and infrastructure.

The following cities and countries have been identified as demonstrating leading practice in their public transport systems:

- Vancouver
- USA Philadelphia, Chicago, Boulder bike racks on buses
- · Graz, Austria
- Bogota, Colombia
- Curitiba, Brazil
- The Netherlands
- Germany
- Switzerland

#### Contact

ICLEI Oceania, Tel (03) 9639 8688, Email oceania@iclei.org, Online www.iclei.org/anz

© ICLEI Oceania 2009. ICLEI Oceania is the regional secretariat for ICLEI – Local Governments for Sustainability, which was founded in 1990 as the International Council for Local Environmental Initiatives.

The views expressed in this document are not necessarily the views of the international organisation ICLEI – Local Governments for Sustainability. ICLEI Oceania does not accept liability in respect to any use of information or advice given in relation to, or as a consequence of, anything contained herein.