

Municipal Association of Victoria

Submission to the Senate Rural and Regional Affairs and Transport References Committee

Inquiry into future oil supply and alternative transport fuels

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Introduction

Local government in Victoria has a significant interest in transport through its direct provision of transport assets, such as roads, and its statutory and strategic land use planning responsibilities. In addition, local government is also concerned about the long-term economic, health and environmental consequences of a reliance on petroleum fuelled vehicles, and has accordingly advocated for an increased use of alternative transport modes such as walking, bicycling and public transport.

The Municipal Association of Victoria (MAV) is the peak body for local government in Victoria, with responsibility to represent the interests of the State's 79 democratically elected councils. All councils are currently financial members of the MAV.

In developing this paper, the MAV consulted with its member councils and received a number of submissions from rural and metropolitan councils.

The MAV welcomes the opportunity of providing a submission to the Senate Rural and Regional Affairs and Transport References Committee Inquiry into future oil supply and alternative transport fuels. The Terms of Reference to the Inquiry sought submissions from interested parties with particular reference to the following:

- Projections of oil production and demand in Australia and globally;
- Potential new sources of oil and alternative transport fuels to meet a significant share of Australia's fuel demands:
- Flow-on economic and social impacts in Australia from continuing rises in the price of transport fuel and potential reductions in oil supply; and
- Options for reducing Australia's transport fuel demands.

This submission has focussed on alternative transport fuels and options for reducing Australia's transport fuel demands. Councils have increasingly advocated for greater use of alternative transport modes, and have been directly involved in transport policy issues through their land use planning responsibilities, the provision of recreation facilities and integrated transport options.

This submission will discuss two main themes: firstly, the available options to reduce demand for petroleum products and; secondly, the options available for alternative fuel sources.

Local Government Context

Councils in Victoria vary in population from approximately 3,000 to over 210,000. Each local government has a wide range of responsibilities in providing essential services and infrastructure to their communities. Amongst these responsibilities include land use planning (statutory and strategic) and direct asset provision.

Local government in Victoria has a statutory responsibility for the management of over \$34 billion of assets, of which almost three-quarters are local roads. The limited capacity to maintain the local road infrastructure is of particular concern to rural municipalities which are often responsible for much larger sections of the road network per resident than their metropolitan counterparts, and have a more limited capacity to raise local government revenue through rates.



Traditionally, councils have also been involved in local area traffic management, including parking enforcement and truck access to local roads. Many councils have undertaken sophisticated integrated transport planning, with some involved in the delivery of transport services to meet community needs. Others have tackled transport issues through regional planning and cooperate actively with other councils. Some are involved in initiatives that promote alternative transport modes, and have developed cycle plans and walking strategies. Some use their organisation to promote best-practice, such as running car-free days for their staff.

Whilst roads have long been the primary focus of the transport agenda for local government, there are current and future drivers that are encouraging councils to consider a broader approach to transport. Concerns regarding social exclusion and transport affordability have become very real in the face of increasing fuel prices and demographic predictions that estimate a significant growth in Victoria's aged population. The adverse environmental effects from motor vehicle travel and the negative amenity implications of ever increasing volumes of traffic, pollution and noise in their local neighbourhoods have pushed calls for more sustainable transport options for Victorians. Local government is ultimately concerned about the well-being of its communities, both residents and their environments. Transport is central to well-being as, at its heart, it connects people with their friends and families, communities, resources, employment and services.

Options for Reducing Transport Fuel Demand

The MAV believes that the most viable option available to insulate the community from the negative social, environmental and economic consequences of petroleum fuel is to reduce demand for these services. This can be accomplished through a reduction in the level of private car use and maximising passenger numbers using private cars.

Encouragement of Alternative Transport Options

Local government believes it is a critical partner in transport planning and coordination at local and regional levels. If adequate resources and funds are in place, councils are well placed to play an important role in driving better coordinated and integrated transport infrastructure and service provision for its communities, and act as a planner, facilitator, advocate, and in some limited cases, the funding agency and provider of transport solutions. Encouraging greater use of public transport facilities is one of the best options available for local government, additionally, walking and bicycling are also viable alternatives to car use, particularly for short trips. These alternatives also have health and amenity benefits.

In Victoria, the State Government has introduced a number of policy measures that aim to address future challenges and ensure a more sustainable future for Victoria by improving transport links. Melbourne 2030 integrates sustainable transport planning for a more compact and better-connected city and sets two principal targets: the 20 per cent increase in public transport use within Melbourne by 2020 and the increase from 10 per cent to 30 per cent of freight transport to and from ports by 2010. As the centrepiece of the State Government's transport policy, the Linking Victoria Program endeavours to link communities and foster economic development and jobs by improving road, rail and port networks across the state. Whilst these policy



statements set out desirable targets, there is no systematic approach or plan for the implementation and delivery.

It is critical to recognise that the process of planning and delivery should be designed to optimise the transport infrastructure and service provision overall to enable the efficient movement of people and goods across the state, around urban and regional centres and between suburbs and localities. Given the variety of issues across the different geographical areas in Victoria, different local approaches and solutions are required to maximise mobility and access. Whilst more sustainable modes of travel should be actively promoted, it must be recognised that in some areas the car will continue to play an important role in facilitating the mobility of people and transfer of goods, in particular when few alternative transport modes are on offer.

Land Use Planning and Transport Options

Travel behaviour and transport demand are directly linked to land use. Those planning for land use must consider how people using a particular space will travel around and through that space, as those decisions will affect how people choose to travel in future. Sustainable urban forms should serve the efficient movement of people and goods, reduce the need for travel, and improve access to services and employment.

Ideally, the integration of the transport system and land use planning would serve to identify the most appropriate transport solutions to match land use requirements, and ensure that transport links are created in the areas of residential and industrial growth. To this end, urban development needs to be supported by a fully funded and integrated planning approach that involves the key agencies, including councils and the State Government.

State Framework

The State Government's policy and strategic plans are generally high level documents and of limited use in detailed local and regional area planning. As a prerequisite, the State Government needs to provide sufficient detail in its long-term transport planning and delivery, including plans for rail and road reservations, to inform local planning.

The State Government should define the principal routes and service levels for different types of development and commit to their delivery. This is particularly critical in the outer metropolitan fringe where large developments and new subdivisions are built with little transport infrastructure, poor connectivity, and limited services and employment.

There is also a need for an ongoing planning of long-term transport requirements and review of existing services to meet future needs (e.g. for new residential developments and activity centres) and changing urban areas (e.g. Docklands). Clarity and direction is needed to ensure that the requirement for land reservations in future infrastructure developments is embedded in the relevant legislative provisions and reflected in the Victorian Planning Provisions (VPP).

The State Government has recently prepared draft residential subdivision provisions to update clause 56 of the Victorian Planning Provisions. These Sustainable



Neighbourhood Provisions aim to promote the Neighbourhood Principles set out in Melbourne 2030 that provide a strategic framework for planning residential subdivisions, including compact walkable and accessible neighbourhoods, reduced car dependency, safe operation of transport systems and integrated provision of walking, cycling, public transport and motor vehicle travel.

The Department of Infrastructure (DOI), which acts as a Referral Authority for new proposals, needs to protect against permit applications that reduce the efficiency of public transport and develop detailed strategic plans to support this new role.

Structure Planning Process

Local government as a planning authority can contribute to improved transport outcomes and encourage high density housing around key destinations and transport hubs in line with Melbourne 2030. The structure planning process, particularly for Transit Cities and Principal Activity Centres, should incorporate transport planning at the front end, and be informed by advice from the relevant government departments, including the DOI, at its various stages.

Developers should be required to provide services and facilities to support transport access through development permits and developer contributions. Local government can set requirements on development permits to limit parking provision and provide integrated travel plans to accommodate all site users, including pedestrians and cyclists. Developers can also be required to contribute to future infrastructure requirements through developer contributions. There is also a need to influence site locations as currently developers tend to seek areas of cheap land, with little consideration for the distance to employment, services and transport access.

A more desirable approach would be to identify the likely development capacity in an area and assess the expected travel demands and patterns to determine the future alignments and reservation needs.

The State Government has recently released a plan to manage the development of five growth areas of Melbourne: Casey-Cardinia, Hume, Melton-Caroline Springs, Whittlesea and Wyndham. This initiative proposes a new partnership approach to infrastructure provision, and the establishment of a Growth Areas Authority to support government agencies, councils and developers in growth area planning. The purpose is to streamline the practices and approaches to infrastructure provision and contribution, including for arterial road and public transport infrastructure, through Development Contribution Plans (DCP).

Commonwealth Government Support of Public Transport

Whilst local government in Victoria strongly encourages alternative transportation modes, questions are increasingly being raised about the appropriate level of government funding for direct service provision. In Australia, the Commonwealth Government has limited involvement in public transport service and infrastructure funding, and mainly provides for interstate transport links through grants to states for rail freight and the Australian National Railways. Other public transport initiatives have been allocated limited funding through specific programs on an ad hoc basis.



The Commonwealth Government is a significant contributor to roads through funds and grants for state and local roads, and has recently renewed its \$250 million Roads to Recovery Program for a further four years. Further, the AusLink National Transport Plan released in 2004 has committed \$1.429 million over the next four years to strategic road projects in Victoria. The role of the Commonwealth Government in direct support of public transport contrasts markedly from the practise of other countries.

Federal and national governments in Europe and other parts of the world provide a contrast in that many play an active role in public transport. As the 'Funding Choices for Sustainable Transport' paper prepared by the Metropolitan Transport Forum (MTF)¹ in 2004 states, the US Federal Government is a significant public transport funder and has recently announced an extension of its National Transportation Funding Program entitled 'Safe, Accountable, Flexible and Efficient Transportation Equity Act of 2003' (SAFETEA). Similarly, Canada has introduced a federal funding program for urban public transport infrastructure and in many parts of Europe (e.g. France and Germany) national governments are major financial contributors to public transport provision.

In Australia, the AusLink National Transport Plan proposed a more comprehensive role for the Australian Federal Government in transport planning and suggested that federal transport funds could be combined into a joint funding of an integrated national land transport network, for example, for east coast road and rail systems. At the same time, no further Commonwealth Government funding was attached to the plan. The funds were mainly allocated to road infrastructure upgrades, with no financial support for other forms of transport.

More recently, the Parliamentary report 'Sustainable Cities' by the House of Representatives Standing Committee on Environment and Heritage, released in August 2005, called for increased Commonwealth funding for public transport systems and infrastructure in major cities and outer fringe areas, as well as the investigation of options to extend the Roads to Recovery program to include other modes of transport.

Overall, the Commonwealth Government needs to take a more active role in transport funding to create a better balance between different transport modes, including public transport. There is a critical need to facilitate a more effective interstate movement of people and goods on rail through investment in infrastructure and services.

Removal of Taxation Incentive to Consume Petroleum

The House of Representatives Standing Committee on Environment and Heritage report also recognises that some Commonwealth Government policies may have an unintended outcome in encouraging car usage through Fringe Benefit Tax (FBT) concessions, including the ability for employees to salary sacrifice for the novated lease of a car. Savings through FBT increase with the distance travelled, and therefore provide a perverse incentive to encourage indiscriminate car usage. As

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¹ MTF is a transport advocacy group comprising members from metropolitan local government, and associate members, including community, environment and local government organisations, transport companies, and the State Government.



similar concessions are not available for other modes of transport, FBT encourages commuting by car. It is estimated that some 30-40 per cent of cars on roads are salary packaged. A significant proportion of those are government vehicles. Refinements to the taxation laws governing FBT to remove this perverse incentive would clearly be beneficial to reducing demand for limited petroleum products.

Alternative Fuel Sources

While incremental reductions in greenhouse gas emissions can be achieved through improved technology, there are opportunities to reduce Australia's reliance on petroleum products by adopting a range of alternative fuels. The recent increase in world crude oil prices has highlighted the centrality of these products to Australia's transport needs, but has also shown the possible economic implications for our reliance of these fuels if the price continues to grow in an unstable world market. The corollary of the price rise is an increasing economic incentive for research into alternative fuel sources.

The benefits of alternative fuels are many and varied according to the fuel type. It is expected that an appropriate alternative fuel would lead to lower greenhouse gas emissions, as well as lower overall exhaust pollutants. Some have particular benefits in relation to some exhaust components but less with others. In almost all cases, the adoption of a wide variety of alternative fuel sources has the capacity to improve economic and environment community outcomes.

Cost benefits of alternative fuels are not easy to assess, because fuels prices often depend on the volume of production. Some alternative fuels such as compressed and liquefied natural gas have very stable pricing structures because of long-term supply contracts, but require expensive modification to vehicle engines to utilise the fuel. Comprehensive cost benefit studies are required to accurately determine economic benefits for alternative fuels.

Apart from cost benefits and emission/health benefits of prospective alternative fuels, an area not often considered is fuel security of supply. An examination and adoption of alternative fuel sources would help to insulate our economy from upheavals due to rising international oil prices.

It is not possible to recommend a single preferred alternative fuel. Some fuels are suited to particular vehicle categories and not others. However, it is worthwhile to identify those fuels which are commercially available now and commonly used worldwide, as distinct from those with theoretical potential. Some distinguishing points are noted below:

1. Diesel-

While diesel fuel is hardly new, automotive technology has advanced to the stage where it can be considered a viable alternative to petrol, particularly for passenger vehicles. New diesel vehicles are cleaner and more fuel efficient than their predecessors and there are major opportunities for introducing more diesel fuelled cars, although fuel prices are still linked to unstable world markets.

2. Natural gas-

There are several thousand natural gas fuelled vehicles in Australia already.



There are major advantages from compressed natural gas (CNG) as it has a largely stable pricing structure and reduced vehicle emissions. The price of CNG is approximately half that of petrol, which means that the up-front costs of vehicle modification can be absorbed through a reduction in operating costs.

3. LPG-

Liquefied petroleum gas is well established as a taxi fuel and retains a variable segment of the passenger car market. While still linked to international prices, LPG has become proportionally cheaper with the increasing petrol prices. This has reinvigorated the LPG conversion market, which had been declining for a number of years.

4. Ethanol-

This fuel is attractive in that it can be considered renewable when derived from sugar cane. Its combustion could also be considered as greenhouse neutral, in that exhaust emissions are releasing carbon dioxide previously captured from plants. While there have been many trials of 100% ethanol, its greatest greenhouse reduction potential probably lies as a blended product with petrol. So called E10 (10% ethanol with petrol is becoming available in Australia and causes no problems for conventional engines).

5. Biodiesel-

This is a diesel substitute made often from recycled vegetable oil or tallow. With increasing use, it would require dedication of oil producing crops such as canola. Blends are being tested in a variety of heavy vehicles, with the City of Newcastle providing particular leadership.

6. Hydrogen-

While trials of hydrogen are taking place around the world, most notably with a small fleet of buses in Perth, the commercial use of hydrogen in vehicles is probably some decades away. While the potential exists for hydrogen to come from the dissociation of water with renewable energy, initial supplies of hydrogen will come from natural gas. The prohibitively high cost of vehicles which can use hydrogen, either in fuel cells or with conventional engines, will be a long-term barrier for the wide spread use of the fuel. However, governments may be able to play a part to encourage commercialisation of the fuel.

Government Policy to Promote Alternative Fuel Sources

All of the above alternative fuels and technologies potentially have a place in a less oil dependent Australia. However, the biggest constraint to implementation is the high cost of providing the necessary infrastructure to support refuelling and the cost of engine and vehicle modifications.

This raises the question of whether it would be appropriate for some kind of government policy that examines the economic, social and environmental merits of alternative fuels, with the view to greater government support.



Government policy is crucial to the development of alternative fuels. In the 1980s, New Zealand lead the world in compressed natural gas (CNG) fuelled vehicles, with a well integrated public refuelling network. Changes to government policy removed the price advantage for natural gas and demand for the fuel declined rapidly.

Conclusion

Australia's current reliance on petroleum based fuel has serious economic, social and environmental implications. The MAV believes that it is in Australia's best interest that this reliance on petroleum fuel is reduced by both reducing demand and providing alternative supply.

Key to reducing demand is the adoption of greater policy and funding programs that encourage public transport, walking and bicycle use. Greater participation from the Commonwealth Government in public transport is considered an essential component to improving this service. The Victorian and local government also have roles in encouraging more sustainable transport options through their land use planning responsibilities and direct infrastructure provisions. Of course, the ability of local government to provide greater assistance is limited by its financial capacity.

On the supply side, this submission has provided an overview of a range of alternative fuels that are available. Some of these fuels can be considered renewable, or through technological advancement, could potentially become renewable.

Taken together, it is the firm view of the MAV that a reduction in the reliance of Australia on petroleum fuel sources would, in the long term, be beneficial and that there is a clear case for greater government support for this reform.