Regional Travel Demand Management Plan

October 2009

Why manage travel demand?

Transport is about access. It makes sense to look for ways that people can access what they need as efficiently as possible, in a way that is economically, environmentally and socially sustainable for our region's communities. This is consistent with the direction provided by the New Zealand Transport Strategy and the current Government Policy Statement[1].

By **access** we mean the ability for people to obtain the goods, services and facilities that they require including shopping, employment, education, health services, recreation, leisure, and social interaction.

By **efficient** and **sustainable** we mean minimising the use of energy and land, cost and time, impact on the environment; and having a positive impact on economic growth, personal affordability and peoples health.

What is travel demand management?

Travel demand management (TDM) is a collection of measures used to make best use of the existing network and reduce the demand for travel, particularly by single occupancy vehicles. TDM measures also seek to modify travel behaviour and mode choice decisions so as to reduce the negative impacts of car use. Measures include road network management tools, land use policies, behaviour change tools, economic pricing measures and new technology. By optimising the use of the existing network, demand management measures can also defer or remove the need for expensive new capacity improvement projects.

Relationship with the Regional Land Transport Strategy

The Wellington Regional Land Transport Strategy (RLTS) sets out the strategic direction for the region's land transport network. This TDM Plan is one of several plans that set out projects and actions to implement that strategic direction and to contribute to the strategy's key outcomes.

The vision of the Wellington RLTS is for *an integrated land transport system that supports the region's people and prosperity in a way that is economically, environmentally and socially sustainable*.

The RLTS outcomes of particular relevance to TDM are:

- Improved transport efficiency
- Improved land use and transport integration
- Improved integration between transport modes
- Increased peak period passenger transport mode share
- Increased mode share for pedestrians and cyclists
- Reduced private car mode share
- Increased private vehicle occupancy
- Reduced greenhouse gas emissions
- Reduced fuel consumption
- Reduced severe road congestion
- Maintained vehicle travel times between communities and regional destinations
- Sustainable economic development supported.

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[1] Government Policy Statement on Land Transport Funding. 19 May 2009.

Relationship of this TDM Plan with other regional plans

There are both demand side and supply side measures that contribute towards an efficient and sustainable transport system.

For demand side measures to be successful, particularly those aimed at encouraging a mode shift, the availability of high quality alternatives to travel by single occupant cars are vital. The regional plans for walking, cycling, and public transport sit alongside and integrate with this TDM plan. They focus on the supply side through provision of good quality infrastructure and services for these other modes to ensure they are as easy, safe and attractive to use. Regional plans for road safety and freight have also been developed to allow focus on addressing the relevant issues.

These plans all play an important complementary role to the TDM Plan as shown in the diagram below.
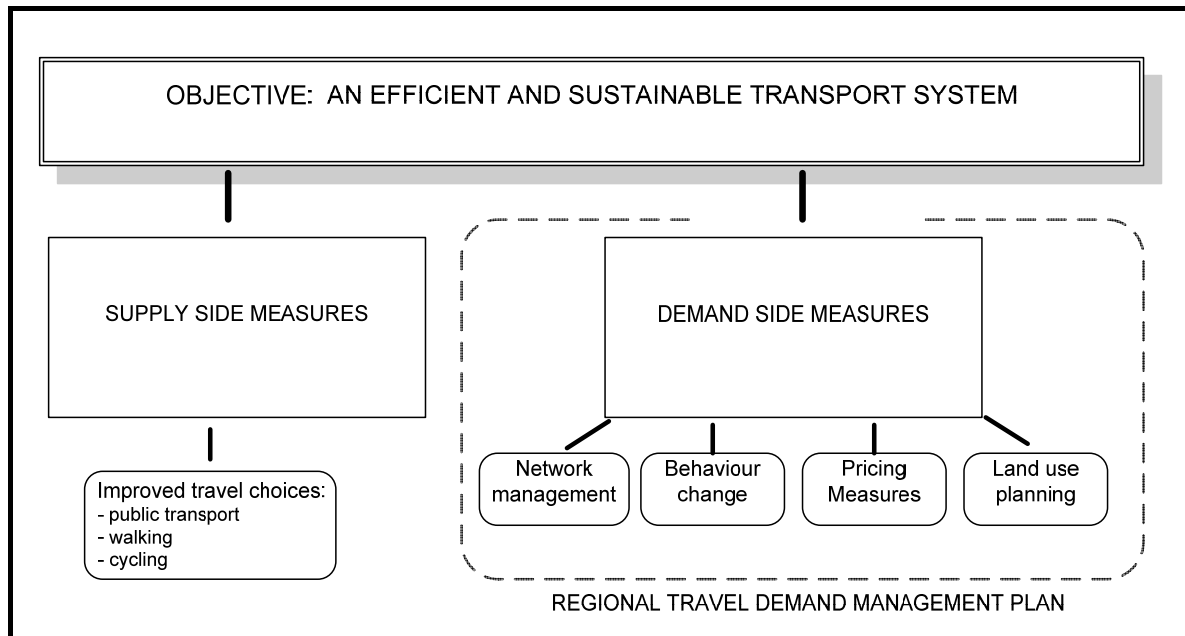

Figure 1: Relationship of this TDM Plan with other regional transport plans.

Development of local TDM plans are not a requirement of this regional TDM plan, as it is currently a regionally driven initiative. However, if local plans or programmes are developed it is expected that these would align with, and seek to implement the initiatives in the regional plan relevant at the local level.

Objective of this Travel Demand Management Plan

To identify the key travel demand management actions for the region that will contribute towards the Regional Land Transport Strategy outcomes and help us to optimise the use of our region's transport network and encourage sustainable transport choices.

What effect can Travel Demand Management measures have?

TDM measures can have a wide range of benefits relating to transport efficiency, economic growth, relief of severe traffic congestion, journey time reliability, travel choices, environmental sustainability, public health, and improved road safety.

The effect of some TDM initiatives, particularly network management and pricing tools, can be measured by improvements in journey times or vehicle occupancy levels, for example. However it can be difficult to isolate the effect of any single TDM measure from other factors that may be influencing these indicators, such as fuel price.

There are also a number of issues that make it difficult to comprehensively evaluate and collect data on the effect of travel behaviour change measures. Consequently there is little available evidence to date in New Zealand to clearly show the benefits or cost savings to individuals and communities as a result of those measures (such as School Travel Plans) that have already shown good uptake and small positive behaviour change in the short term.

Evidence from the United Kingdom suggests modal shifts of 10 – 20% are possible as a result of travel plans[2]. Research into 20 travel plan best practice case studies by the Department for Transport indicated that on average there was a reduction of at least 18% in the proportion of commuter journeys being made as a car driver.

Travel demand management methods

Behaviour change tools

A number of interventions are available to influence travel behaviour. A key method is through the use of school, workplace and community travel plans. A regional programme to coordinate travel plans has been in place since late 2006.

Greater Wellington will continue its role coordinating the Wellington region's school travel plan programme in partnership with all local council's to encourage the uptake of school travel plans throughout the region. This coordination involves providing training and resources, and carrying out regional data collection and monitoring. Local councils are expected to have an increasing role in leading and supporting the uptake of school travel plans in their local area. This will involve identifying schools to participate, providing local resources and advice, and resourcing a local School Travel Plan Coordinator. Local councils also have a key role in implementing infrastructure improvements that are identified through the school travel plans.

While the workplace travel plan programme has achieved some successful results in the first three years, a number of issues specific to this region are expected to affect the programme going forward. Consistent with overseas experience, workplace travel plans appear to be most effective when implemented in a large institution or workplace which makes a significant long term commitment in time and resources to the travel plan. The travel plan programme already works with three of the largest employers in the region and there are relatively few remaining employers at this scale. The significant commitment needed for a successful workplace travel plan is best secured at a time when an organisation is relocating, seeking resource consent, or looking to resolve parking issues – such timing cannot be influenced by the workplace programme. While recent improvements have been made to simplify the workplace travel plan and monitoring process, it can still be onerous for small and medium sized workplaces. Some workplaces end up using their limited time and resources largely on monitoring requirements with little left for implementation of initiatives.

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[2] Department for Transport (July 2002) *Using the planning process to secure travel plans – Best Practice Guidance for local authorities, developers and occupiers.*

In light of this experience, the focus going forward is for Greater Wellington to coordinate a Workplace and Business Travel Tool Box to encourage the uptake of sustainable commute and business travel practices to a wider audience throughout the region. This will include maintaining the workplace travel plan programme and continuing to promote and encourage this option to suitable large (500 plus) workplaces. But it will also involve promoting the use of a range of tools in workplaces, whether part of a travel plan process or not, such as carpool programmes, flexible work policies, tele-working, video conferencing and guaranteed ride home which can encourage more efficient and sustainable commuting choices.

Behaviour change tools need ongoing support and promotion. In the short term to ensure that a critical mass is reached so that the tools are effective and longer term to ensure that behaviours change is sustained over time. Community-wide travel awareness communications can be used for ongoing promotion of these tools, one off or regular events, new technology and innovations with the potential to reduce travel demand.

Land use policies

Optimal transport systems result in each mode being used for what it does best, from both the individual and community perspective[3]. Land use patterns and integration with transport networks have a significant influence on the availability of mode choice. For example urban sprawl is not easily served by public transport and associated travel distances limit opportunities to make trips by walking or cycling. Higher densities in or around city centres and along transport corridors support public transport services and encourage walking and cycling. Mixed use developments allow people to find local employment and access leisure activities, goods and services closer to home, thus reducing travel distances and making active modes more feasible.

Appropriate policies in local and regional land use documents such as the Regional Policy Statement and District Plans to direct new growth, land uses and development densities in appropriate locations are crucial to achieve an efficient and sustainable transport network. Structure plans are increasingly being used to encourage comprehensive and integrated new developments, rather than ad hoc urban sprawl. Ensuring the design and layout of new developments provide for a range of travel options is also important.

Economic pricing measures

Pricing measures are economic tools that can be used to optimise use of the existing transport system and influence travel choices. The sorts of pricing methods currently used overseas include congestion or cordon charging, parking pricing, fuel levies, and distance based charges.

Pricing tools can involve network wide charging for use of the private car (such as fuel levies or distance based charges) or can target certain types of private car use, for example by placing a charge on using the road network at peak times and at certain locations (congestion or cordon charges). Targeted pricing is most likely to be successful where good alternatives are available, and where the revenue generated by pricing schemes is fed back into the alternative modes to make them more attractive.

A change would be required to the legislation in New Zealand before any road pricing scheme could be considered. This plan identifies continuing advocacy for road pricing enabling legislation to be introduced. A detailed study on how a road pricing scheme might

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[3] Via Strada Ltd (July 2008) *Transport Network Optimisation – Think-piece document prepared for Land Transport NZ.*

be applied in the Wellington region was completed in March 2007 under the previous TDM Plan. Given that a road pricing scheme cannot be implemented under the current legislation further actions in the plan around this are not considered warranted at this time.

Road Network Efficiency

Technology-based and traffic management tools can have a significant influence on traffic congestion, road safety and optimal use of the transport network.

Measures can include individual intersection design through to system wide traffic signal phasing, including priority phasing for pedestrians in some locations. Intelligent transport systems (ITS) can provide various ways of improving the transport network's operation through use of technology. For example, technology that assists drivers and provides real time information, or tools such as 'ramp metering' which control the flow of traffic entering the motorway or designated road from its on-ramps to ensure more efficient merging.

Identifying opportunities for tidal flow traffic lanes or high occupancy vehicle lanes at appropriate locations is another network management tool that can be used to encourage more efficient use of the road network. These may be priority lanes for buses, multiple occupancy vehicles, freight vehicles, or a combination of these.

This TDM Plan seeks proactive consideration of network optimisation measures by the road controlling authorities who manage the strategic network and adjacent local networks. In particular, consideration of how priority might be given to optimising the Wellington 'Road of National Significance' (RoNS) - SH1 between Levin and Wellington.

Parking

Parking supply, management and cost can have a significant influence on reducing car use, and therefore reducing congestion. However, there needs to be a balance between adequate supply of parking to support a competitive economy, and encouraging the use of alternative modes where available.

An efficiently managed supply of short stay parking (for shoppers or visitors) is important to support the economy of businesses and centres. The supply and management of commuter parking can be used to influence mode choice for journeys to work, particularly where good alternatives are available. Most commuter or long stay parking, particularly in Wellington CBD, is privately owned making the supply and cost a very difficult area for local authorities to significantly influence. Commuter parking supply is best addressed through workplace travel plans, with organisations encouraged to consider charging for car parks, reducing the number of staff car parks or providing incentives for staff to give up their park.

The allocation of on-street parking and the potential for parking to be removed to provide road space for bus priority lanes, cycle lanes or wider footpaths are important aspects of network management.

Wellington City Council adopted a comprehensive Parking Policy in September 2007. Its purpose is to provide a direction for how the Council can manage the limited resource of on-street parking and looks at how the Council could influence public off-street parking. The policy enables the priorities for use of the public road space to be determined in a balanced and consistent manner, so that Council's strategic outcomes can be achieved. It sets out a number of over-arching principles and a series of location-specific policies. Hutt City

Council has a short but useful Central Area Parking Policy which sets out a hierarchy for the use of kerbside carriageway space. For parking purposes, it places kerbside space for disabled parking and public transport stops at the top of the hierarchy, and long stay parking for more than two hours at the bottom. The policy also notes that it may be appropriate to remove on street parking altogether at certain locations in the Hutt CBD to allow for wider footpaths to accommodate pedestrian activity and environmental enhancements. This TDM Plan encourages all local councils to develop a parking policy appropriate for their local area, or to review any existing policies, to contribute to the principles of an efficient and sustainable transport network and to discourage over supply of cheap or free long stay commuter parking.

The Regional Cycling Plan includes an action 'improve the cycle network' which covers best practice guidance for allocation of road side space and the design of road side parking to safely accommodate passing cyclists.

Maximum parking standards for cars (and minimum parking standards for bicycles) in District Plans, particularly for mixed use or high density residential new developments close to local centres or public transport, are an important consideration. All local Councils are encouraged to review their District Plan parking standards to ensure they support good urban design and sustainability objectives.

Technology and innovation

There are a number of ways in which technology and innovation can contribute to travel demand management outcomes.

New vehicle technologies can improve both safety and reduce fuel use and emissions associated with private vehicle use. Incentives can be used to encourage faster take up of these technologies. One initiative might be to reduce the relatively high cost of new vehicles by reducing taxes associated with new vehicle purchases and offsetting this by increased running costs - the idea being there is no additional overall cost to households on average. Such a scheme would make it easier for people to purchase newer vehicles but at the same time encourage people to think more about their trip options and how often they used their cars.

Other technologies can reduce the need to travel and often result in cost savings to individuals and businesses. Examples include broadband access, teleconferencing facilities, and home deliveries. Schemes that provide for car sharing can reduce the need to own a car, again with significant cost savings to those involved. This plan includes actions to advocate for and promote these types of initiatives.

Travel Demand Management Action Programme

The measures to be progressed under this plan over the next 3 years are set out in the action tables on the subsequent pages. Actions are grouped under the following headings:

- Optimise use of the existing road network

- Encourage sustainable and efficient travel choices

- Promote land use that supports sustainable and efficient travel options

- Advocate for measures to improve transport network efficiency and sustainability

- Collect and share information to support sustainable transport options

Travel Demand Management Action Programme

Optimise use of the existing road network

Actions	Responsibility	Cost	Funding	Timing	Target/Measure
Road Network Efficiency Give consideration to the use of technology-based tools and other traffic management measures when planning improvements to the road network, to ensure use of the existing network is optimised. Measures might include: • Intersection design • Traffic signal and pedestrian priority phasing • Traffic management and traveller information systems • Variable message signs • Ramp metering • Driver assistance systems • High Occupancy Vehicle lanes In particular, consideration should be given to how network optimisation measures can be implemented along the Wellington Road of National Significance (SH1 between Levin and Wellington) as a matter of priority.	NZ Transport Agency Territorial Authorities	Administrative	Road controlling authorities	Ongoing	All road controlling authorities proactively consider use of measures that optimise the existing road network
Parking Management Develop (or review) a parking policy for each local authority area to ensure that parking supply, cost and management contributes to an efficient and sustainable transport network.	Territorial Authorities	Administrative	Territorial Authorities	Policies developed by June 2012	All Territorial Authorities have a parking policy in place by June 2012
Review District Plan parking standards to consider introduction of maximum parking standards for new developments[4] (particularly mixed use or high density residential developments close to local facilities and public transport nodes).	Territorial Authorities	Administrative	Territorial Authorities	At next scheduled District Plan review or by December 2012	All District Plan parking standards reviewed by December 2012

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[4] Guidance to be prepared and disseminated by Greater Wellington in accordance with Method 9 of the Proposed Regional Policy Statement .
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Travel Demand Management Action Programme

Encourage sustainable and efficient travel choices

Actions	Responsibility	Cost	Funding	Timing	Target/measure
School Travel Plan Programme Coordinate a programme to encourage the uptake of school travel plans throughout the region. This coordination involves: • Providing training and resources • carrying out data collection and monitoring	Greater Wellington	$500,000 per annum	NZ Transport Agency (75%) GW (25%)	Ongoing	94, or 41% of, primary and secondary/intermediate schools and 26,761,or 34% of school children are involved in or exposed to school travel plan activities by June 2013[6]
Lead and support the development of school travel plans within each local authority area. This will involve: • identifying schools to participate • providing local resources and advice • resourcing a School Travel Plan Coordinator • carrying out infrastructure improvements.	Territorial Authorities	To be determined[5]	NZ Transport Agency (75%) TA's (25%)	Ongoing	(24 schools and 7,900 school children were involved by June 2009)
Workplace and Business Travel Tool Box Coordinate a programme to encourage the uptake of sustainable work commute and business travel practices throughout the region. The types of tools to be promoted through this programme include: • workplace travel plan programme • carpool programme • guaranteed ride home • tele-working • flexible work hours • car sharing • active transport initiatives • public transport initiatives and subsidies for commute and business travel • cyclist skills training • cycle friendly employer guide	Greater Wellington	$230,000 per annum	NZ Transport Agency (75%) GW (25%)	Ongoing	Maintain participation in the workplace travel programme At least 3,000 people registered in the regional carpool programme by June 2013 (460 people had registered by June 2009) At least one new sustainable transport initiative per year made available in which a wide number of employees and workplaces can be involved
Facilitate regular workplace travel forums to encourage information sharing within the region.	Greater Wellington	Administrative	NZ Transport Agency (75%) GW (25%)	Quarterly	
Promote and encourage sustainable workplace travel practices in each local authority area.	Territorial Authorities	Administrative	Territorial Authorities	Ongoing	

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[5] Approximately $100,000 per Full Time Equivalent plus infrastructure improvements around schools as needed.
[6] Based on 2008 school roll data.
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Actions	Responsibility	Cost	Funding	Timing	Target/measure
Leading By Example All partner organisations take up sustainable workplace travel initiatives for their particular organisation's offices within the region	Greater Wellington Territorial Authorities NZ Transport Agency Ministry of Transport Ministry for the Environment Regional Public Health	Administrative	Each organisation	Ongoing	Promote and make available to employees at least one new sustainable transport initiative per year
Travel Awareness Develop and implement a Travel Awareness Programme to ensure ongoing promotion and awareness of sustainable transport options and alternatives. This will include: • Ongoing promotion of available tools such as school and workplace travel plans, the regional carpool programme and the online public transport, and walking/cycling journey planners • Promotion of one-off, annual, or more regular sustainable travel events – eg. Feet First, Walk to Work Day, Bikewise Challenge • Promotion of new technology, innovation or schemes that reduce travel demand – eg. broadband, teleconferencing, car sharing, home deliveries • Identifying opportunities to support community based travel behaviour change awareness initiatives. • Identify opportunities to work with other sectors that may be well placed to promote transport choices.	Greater Wellington	$240,000 per annum	NZ Transport Agency (75%) GW (25%)	Ongoing	Travel Awareness Programme in place by December 2009 Contribution towards at least one new community behaviour change awareness initiative per year

Travel Demand Management Action Programme

Promote land use that supports sustainable travel options

Actions	Responsibility	Cost	Funding	Timing	Target/Measure
Regional Policy Statement Include provisions in the Regional Policy Statement that seek: • a compact, public transport oriented urban form • high density or mixed use development in appropriate locations – with good access to public transport, local jobs and local facilities • a range of housing choices • good provision of high quality walking, cycling and public transport services in new development • walking/cycling routes integrated with, and providing direct access to public transport stops, local facilities and amenities.	Greater Wellington	Administrative	Greater Wellington	As part of current Regional Policy Statement review	Provisions included in the next operative Regional Policy Statement
Advocate for these principles to be included in Regional Policy Statement provisions	All	Administrative	All	Ongoing	
District Plans Include provisions in District Plans to: • identify appropriate locations for higher density and mixed-use developments – these should have good access to high frequency public transport services and/or be within easy walking distance to local centres with a range of facilities and local employment opportunities • encourage a range of housing choices in new developments • good provision of high quality walking, cycling and public transport services in new development • walking/cycling routes integrated with, and providing direct access to public transport stops, local facilities and amenities.	Territorial Authorities	Administrative	Territorial Authorities	At next District Plan review	District Plans include provisions to facilitate land use development that reduces travel demand and increases the feasibility of travelling by more sustainable modes
Advocate for these principles to be included in District Plan provisions	All	Administrative	All	Ongoing	
Structure Plans Promote the use of structure plans for large new growth and development areas to ensure broad issues such as integration of land use and transport, mixed use development, and housing choice are considered[7].	Territorial Authorities Greater Wellington	Administrative	Territorial Authorities Greater Wellington	Ongoing	Structure plans used to guide large new growth and development areas where appropriate

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[7] Consistent with Method 18 of the Proposed Regional Policy Statement.

Travel Demand Management Action Programme

Advocate for measures to improve transport network efficiency and sustainability

Actions	Responsibility	Cost	Funding	Timing	Target/Measure
Advocacy to Government Advocate to central government for the following measures: • Road pricing enabling legislation • Variable school hours • Broadband promotion and investment • Shifting the high capital cost of cars towards the variable costs[8] • Vehicle technologies that improve the safety and efficiency of the transport network • Adequate funding for travel demand management activities and programmes	All	Administrative	Each organisation	Ongoing	Every opportunity taken to advocate

[8] See commentary on page 6 under 'Technology and innovation' for more information.

Travel Demand Management Action Programme

Collect and share information to support sustainable transport options

Actions	Responsibility	Cost	Funding	Timing	Target/Measure
Perception Survey Continue surveys to determine regional perceptions of issues related to travel by all modes – the 'GW Transport Perceptions Survey'	Greater Wellington	$40,000 per survey	GWRC (NZ Transport Agency subsidy)	3 yearly	Survey completed and results reported in Annual Monitoring Report on the Regional Land Transport Strategy
Regional Participation at National Level Actively participate, where appropriate, in national level programmes/strategy development that have regionally significant impacts upon travel demand management	Greater Wellington	Administrative	NZ Transport Agency (75%) GW (25%)	Ongoing	Every opportunity taken to participate in policy development opportunities

How will the actions in this plan be monitored?

A lead agency is identified for each action in this plan. That agency will be responsible for pro-actively progressing the action, in collaboration with other organisations as required. Progress made towards each action will be reported four times a year through the quarterly 'Agency Progress Reports' to the Regional Transport Committee.

In addition, we will report trends in our various system-wide transport indicators, including those which measure outcomes and targets sought by the Regional Land Transport Strategy, through the Annual Monitoring Report.