

TRAVEL DEMAND MANAGEMENT GUIDE

1. PURPOSE

The purpose of the Travel Demand Management (TDM) guidelines is to provide a mechanism to ensure that TDM is considered in NZ Transport Agency's professional services contracts for existing and new state highways and within the scope of strategic studies.

The PSG provides advice to Transport Agency project managers and Consultants on the various types of TDM measures that may be appropriate for consideration during the investigation and design of a state highway scheme. This guideline should also be taken into consideration when undertaking transportation studies. It also provides a brief indication of the main factors to take into account in considering each of these TDM measures. This will not form detailed information as full TDM Guidelines are available in the *Travel Demand Management Manual*. Any queries concerning this guideline should be referred to the Transport Agency's Outcome Planning Manager.

2. WHAT IS TRAVEL DEMAND MANAGEMENT?

Put simply, TDM is anything which influences how, when, where or even if, we travel. The Transport Agency's role in promoting TDM is to proactively manage the level of traffic growth on the state highway network to improve accessibility and journey time reliability and reduce congestion. The Transport Agency seeks to do this by ensuring the highway schemes implemented operate to:

- Improve the efficiency and integration of the transport network but necessarily focusing on the state highway network;
- Enable unsustainable travel to be avoided;
- Encourage use of non-car and high-occupancy car modes of travel in appropriate circumstances; and,
- Encourage and assist the most effective, cost efficient and sustainable means of transporting freight.

3. WHY DO WE NEED TO CONSIDER TRAVEL DEMAND MANAGEMENT?

Under the *Land Transport Management Act 2003* the Transport Agency is required to operate the State highway system in a way "that contributes to an integrated, safe, responsive, and sustainable land transport system." In doing so, the Transport Agency must exhibit "a sense of social and environmental responsibility which includes avoiding.....adverse effect on the environment and..... giving early and full consideration to land transport options and alternatives...." These legislative requirements have led the Transport Agency to incorporate Travel Demand Management as part of its core business.

4. NZTA'S APPROACH IN APPLYING TDM

4.1 Public Transport Priority and Roadspace Management

Public transport will always be a central part of any transport policy that seeks to maximise accessibility and efficiency of investment through reducing the negative impacts of vehicle travel such as congestion and pollution. The state highway network, particularly in urban and peri-urban areas, has an important role to play in facilitating and promoting public transport. Some of the measures available for use enable public transport to bypass congestion whilst others operate to give a clear message on the priority of public transport.

Actively allocating roadspace to certain categories of vehicle can be an effective way of achieving a number of transport objectives. The exclusion of certain types of vehicles (eg from specific lanes on a state highway) gives priority vehicles (eg high occupancy vehicles) the benefit of a quicker and more reliable journey time and a clear message to the public of how the Transport Agency is seeking to influence travel behaviour.

4.2 Cycling

As a bicycle is legally defined as a vehicle the cyclist has the same right to use the state highway network as any other user, with the exception of motorways (unless such operation is approved), and due to its comprehensive nature, the existing road network will always form the backbone of cycling infrastructure. Whilst the majority of cyclists would normally choose to avoid heavily trafficked roads, and therefore lower speed and volume roads would be favoured (a factor which should be recognised in the provision of facilities), for many urban and inter-urban trips there may be no feasible alternative. This means the state highway network needs to provide appropriate facilities for cyclists where non-state highway alternatives are not available.

The basis of planning and provision of cycle facilities on state highways should focus on the removal or mitigation of cycling blackspots, the provision of suitable shoulders on state highways where appropriate and the provision of separate cycle paths in particular cases in agreement with the relevant local authority. Further detail is provided on the Transport Agency's website (<http://www.nzta.govt.nz/planning/process/walking-cycling.html>).

For the state highway network there is likely to be two fairly distinct approaches to cycling provision: according to whether the route is located in an urban and peri-urban area or whether it is located in a rural area. The issues for consideration under both these locations are set out in *Checklist of TDM Measures to be Considered for Inclusion in State Highway Schemes* (PSF/14).

4.3 Walking

The Transport Agency's primary objectives for walking are to work with local and regional authorities and other transport providers to facilitate an integrated network approach to the planning and provision of walking facilities. In doing so the operational requirements of state highways and safety considerations must be taken into account. Further detail is provided on the Transport Agency's website (<http://www.nzta.govt.nz/planning/process/walking-cycling.html>).

4.4 Traffic Management Systems

Traffic management is chiefly concerned with managing the existing network to improve its efficiency, safety and capacity. Many of the initiatives available for the dynamic management of the state highway system are technology based. The Transport Agency is significantly investing in this area. All works on new and existing highway should consider the scope for including traffic management systems.

4.5 Traveller Information Services

The Transport Agency's reason for expanding its role in providing information to travellers is twofold. Firstly, to seek to influence travel behaviour prior to a journey being undertaken and secondly, to enable decisions to be made on the best route after a journey has begun. The provision of traveller information means travellers can make this choice of travel mode and route based on accurate real time information of the status of the network, for example where congestion is occurring and delays are being experienced.

The outcome being sought is to provide people with the opportunity to change mode prior to travelling therefore avoiding further exacerbation of any problems and to allow drivers to avoid congestion on the network once they have started travelling. A range of technology is required to collect the data necessary to provide traveller information and a wide range of mediums for conveying this information to travellers is either currently in use or being trialled. All Transport Agency projects should consider if they can incorporate data collection technology and form part of the traveller information service the Transport Agency provides.

4.6 Parking

The main aspect of parking to be considered through this evaluation process is the question of whether on-street parking on the state highway network is appropriate for the scheme being developed. On-street parking is likely to have implications for highway capacity by occupying potential running carriageway and the ability to allocate roadspace to provide priority for other modes of transport. On-street parking may also have safety implications. However in certain situations, there may be scheme objectives, that mean the provision of parking would be a valid inclusion.

4.7 Park and Ride

The Transport Agency's role for park and ride will primarily be one of supporting and enabling. The main areas of involvement will be working in partnership with local and regional councils and other agencies to enable park and ride facilities to be developed. Provision of bus priority measures on state highway and the opportunity to provide land within the highway corridor, where this would be appropriate and acceptable, for a park and ride site are likely to be the main Transport Agency contributions. In terms of meeting the Transport Agency's objectives for the functioning of the state highway network, park and ride has the potential to make a positive contribution through promotion of public transport and the associated reductions in congestion on the state highway that may result.

4.8 Tolling

Tolling of a state highway is provided for under current legislation subject to a number of criteria. The appropriateness of a road scheme for tolling needs to be considered carefully on

an individual basis in view of the overall scheme objectives. Guidance on the types of issues to be considered is provided in the *Checklist of TDM Measures to be Considered for Inclusion in State Highway Schemes* (PSF/14).

4.9 Management of Freight Movement

The effective movement of freight across the state highway network is crucial to New Zealand's economy. It also has significant implications for the functioning of the state highway network. It is therefore in the Transport Agency's interest in its role of managing state highways, to consider management of the movement of freight in order to minimise the negative impacts it can have such as congestion created from slow moving traffic, particularly on grades or where few overtaking opportunities exist, or noise and vibration as a result of freight travelling through communities. There are a number of approaches the Transport Agency can take to proactively manage the movement of freight on the network. The *Checklist of TDM Measures to be Considered for Inclusion in State Highway Schemes* (PSF/14) details issues for consideration.

4.10 Communication/Education

Raising awareness of the transport issues associated with how and when we travel is central to achieving any kind of success in managing travel demand. Communication of scheme objectives and how they are expected to contribute to wider transport objectives will function to raise awareness of travel and transport issues. Communication and education at the project level via a Communications Plan, as well as the contribution a scheme can make to the wider transport agenda including any regional or national transport marketing campaigns, should be considered as an integral part of all the Transport Agency's work.

4.11 TDM Checklist

The *Checklist of TDM Measures to be Considered for Inclusion in State Highway Schemes* (PSF/14) is to be used as a starting point for deciding which TDM measures are appropriate for inclusion in the scheme being developed.