

The Role of the Modes

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1. Introduction

This chapter describes the role of each mode within the greater Wellington region and meets the requirement of section 175(2)(j) of the Land Transport Act 1998. The modes are private transport, passenger transport, freight traffic, walking and cycling.

The land transport system is made up of various modes, all with separate roles and characteristics. Journey by private car remains the dominant mode choice for our region comprising nearly three quarters of all trips during the peak period and accounting for almost two thirds of our journeys to work. However, the RLTS recognises the importance of improving the provision and uptake of other modes in achieving a sustainable land transport system.

2. The Role of Private Vehicles

Trips by private car are the dominant mode choice and account for around 72% of trips undertaken in the greater Wellington region per day¹. Even with rising petrol prices, it is anticipated that the private car will be the dominant mode choice for the foreseeable future.

The flexibility and convenience a car provides in terms of trip origin and destination, time of travel, and trip distance means it is often the most attractive mode choice. Even with a passenger transport system which serves the strategic network relatively well, there are a proportion of car trips which are not able to be transferred to other modes.

Many businesses rely on the private vehicle for many trips during the working day which by their nature cannot be served by passenger transport or other modes. This mode is often crucial to the operation of such businesses and therefore to the region's economy. In addition, the private vehicle is relied on to access a range social, cultural, and recreational opportunities. The RLTS therefore seeks to provide for such high value trips on the road network, while encouraging the use of other modes and more efficient use of the road network where appropriate.

Increasing demand for travel by private vehicle is resulting in an unacceptable level of adverse affect on environmental quality, the region's health and economic efficiency. Increasing reliance on car use has an impact on CO₂ levels, regional air quality, and people's health and fitness levels. It also results in worsening congestion and level of service on our roads which can affect the efficiency of our regional economy.

This RLTS includes a Regional Travel Demand Management Strategy, which is included under Chapter 7 - Implementation. The strategy seeks to mitigate the affects of the car by reducing the demand for travel while maintaining access. Methods of managing travel demand include promoting greater use other modes, reducing the number of trips, increasing car occupancy, shifting the time of

¹ Source: Wellington Transport Strategic Model (WTSM)

travel during peak periods. An important component of travel demand management is encouraging the intensification of land use development where it can be best served by the passenger transport network.

3. The Role of Passenger Transport

Passenger transport (PT) is another important component of a sustainable land transport system, accounting for around 7% of the region's daily trips² and 30% mode share along the strategic corridors during the AM peak, which compares very well against the New Zealand average. We will need to continue investing in our PT network to ensure it provides a good level of service and to encourage increased patronage.

This mode includes the region's trains, buses, ferries and taxis. PT has an important role in providing an alternative to the private car, particularly for longer journeys where active modes are less attractive. It also has a vital role in providing people who do not own a private vehicle, are unable to drive, or cannot use active modes to access the goods or services they need. Compared to single occupant private car journeys, passenger transport trips are generally more energy efficient, generate fewer emissions and result in less congestion, particularly where those trips are well patronised and the vehicles are well maintained and tuned. Passenger transport also has safety benefits over the private car.

There is an important relationship between urban form and the PT network. The intensification of development around passenger transport nodes is recognised in the regional growth strategy as an important element in allowing people to lead a lifestyle that is not dependent on the private car.

The different types of PT modes have different characteristics and roles to play in the provision of an efficient and effective PT network. These are described below.

Passenger Rail provides key services along two main arterial corridors to and from the Wellington CBD. Commuter services are provided from as far as Palmerston North and Masterton, with more frequent electrified services from Paraparaumu, Upper Hutt, Johnsonville and Melling. Passenger rail primarily provides access to the CBD by carrying large numbers³ of people along these critical corridors, particularly during peak periods when the roads along these routes are severely congested. In Wellington, the average trip length by rail is around 25 km, compared with 7 km by bus.

Buses account for almost two thirds of passenger transport trips during the peak periods. In addition to services along the strategic corridors, buses provide comprehensive network of routes to and from the Wellington CBD and between urban and suburban areas within the region. Buses also play an important supporting role for rail as a local connector network. The integration between bus and rail services in the region is therefore essential.

Ferries account for a very minor share of passenger transport trips in the region. The existing Days Bay ferry provides direct access from Eastbourne across the harbour to the Wellington CBD with significant time savings compared to the same trip by bus or car. A new ferry providing an

² Source: Wellington Transport Strategic Model (WTSM)

³ Around 11746 people arrive at Wellington Station during the AM peak. Source: GWRC AM Peak Cordon Surveys, March 2004.

additional service has recently been set up between Petone Wharf and Queens Wharf, to cater for commuters travelling from the Petone/Hutt City areas into the Wellington CBD.

Taxis are an important part of the PT network as they provide the system with flexibility where scheduled services or routes do not provide adequately for a particular trip. Taxis also provide a crucial door to door service for those with limited mobility. The region's Total Mobility scheme utilises taxis for this purpose.

Chapter 5 of the strategy sets out the policies relating to passenger transport. The Regional Passenger Transport Plan (RPTP) forms a section under Chapter 7 – Implementation, setting out the vision, goals and objectives for PT within the region, including the proposed funding objectives.

Ongoing improvements to the PT network are needed to ensure it provides a viable and attractive alternative to the private car. Planned improvements to the PT network are detailed in the RPTP which supports and is complimentary to the Regional Travel Demand Management Strategy.

4. The Role of Walking

Walking⁴ forms an essential element of a sustainable transport system and comprises around 14% of the region's daily trips⁵. It is a particularly important mode for short⁶ local trips, but also has a vital role in providing connections at the ends of longer journeys. Walking has important health, fitness, social and environmental benefits. It is also often the most energy and time efficient means of transport for short trips.

Walking as a mode of journey to work to and from the Wellington CBD is increasing. This is largely influenced by intensification of residential development in and around the Wellington CBD, meaning more people live within an easy walking distance of their destination. Most people consider walking to be an easy way of getting around the region⁷. However, we do not walk for as many short trips as we could⁸ and the use of walking as a mode for trips between 1km and 2km could be increased⁹.

The RLTS seeks to encourage the use of walking as a transport mode through provision of a safe and convenient pedestrian environment, and by increasing people's awareness of the benefits of walking as a mode choice. This will involve advocating for new development and urban form which supports walking as a transport mode. In addition, the close link between walking and passenger transport for longer journeys is recognised and this strategy seeks to ensure pedestrian access to passenger transport nodes is easy, safe, and pleasant.

Chapter 5 of the strategy sets out the policies relating to walking. The Regional Pedestrian Strategy forms a section under Chapter 7 – Implementation, setting out the proposed actions for pedestrian improvements within the region, including the proposed funding and responsibilities for those

⁴ Walking and pedestrians in this strategy are defined as any person on foot on a road, and includes any person in or on any contrivance equipped with wheels or revolving runners which is not a vehicle (Land Transport Act 1998)

⁵ Source: Wellington Transport Strategic Model (WTSM)

⁶ Short trips are defined as being those less than 2km in length

⁷ Source: GWRC perception survey 2004

⁸ Source: GWRC perception survey 2004

⁹ Source: GWRC active mode survey 2004

actions. Improvements to walking infrastructure is also an important component of travel demand management, therefore the Regional Pedestrian Strategy supports and is complimentary to the Regional Travel Demand Management Strategy.

5. The Role of Freight

The ability of the regions transport system to ensure freight movement is both efficient and reliable is vital to the prosperity of the regional economy. The close relationship between freight movements and regional economic growth is demonstrated by the elasticity model which shows that a 1% change in Wellington's Regional GDP results in 1.3% change in Regional Road Freight VKT.

Freight traffic refers to the movement of goods, both heavy and light, transported by road, rail, ferry, or air. Freight includes everything from small parcels or documents to large shipping containers transported as part of a commercial arrangement.

Inter-regional freight movement by ferry has been steadily increasing since 2000. Conversely, rail freight has shown a continual decline since 2000. Freight movement through the port and by road has also shown a steady growth since 2002. Overall there is a positive trend in inter-regional freight traffic movement¹⁰. The majority of freight journeys within the greater Wellington region tend to be relatively short (less than 20km). The majority of these freight movements are carried out by trucks and other commercial vehicles and are not easily transferred to rail (BERL, 2004).

Freight trips by road comprise around 6% of our region's trips per day¹¹ and depend on the strategic road network, which is subject to congestion and unreliable journey times. Congestion effects on freight are already a problem for the region, and with growth of freight movement volumes this problem is expected to increase. The present freight movements tend to be evenly spread throughout the day (7am – 6pm), so there is limited opportunity for re-timing of freight trips (BERL, 2004).

The existing levels of congestion costs on freight movement can be expected to increase unless the issue of congestion on the regions strategic road network is addressed. The Regional Travel Demand Management Strategy supports the improved efficiency and reliability of freight movement. The strategy seeks to reduce inefficient or low value vehicle trips, therefore allowing higher value trips, such as movement of freight, to benefit from less congested road conditions.

A significant component of freight movement within the region is the strong interdependent relationship between urban centres and industrial areas, which form part of a supply chain for our regionally produced goods. Efficient and effective linkages between freight transport and industrial land use are therefore critical to the well being of the regions industrial and manufacturing base. The key road freight priorities are Seaview/Gracefield to Petone, Petone to the port, Porirua/Tawa to the port, and Porirua/Tawa to Petone. These freight movements would not be viable on rail and development of a Petone to Grenada link, a Cross Valley Link, improvement of the Petone Esplanade Route, and the efficient operations of SH1 and SH2 for freight in these locations are vital.

¹⁰ GWRC AMR 2004/2005

¹¹ Source: Wellington Transport Strategic Model (WTSM)

The Wellington port (Centreport) is located adjacent to the Wellington CBD. It is the only major port in New Zealand with direct access to westward routes from New Zealand and has seen increasing freight volumes each year since 1997 (WRS, 2005). A key element of the port's freight traffic relates to the core operations of logs and containers. The potential harm to Wairarapa forestry, and hence the regional economy, would be significant should the port cease to operate.

Freight movement via the airport is a relatively minor component of the region's freight traffic, largely due to the restriction in aircraft size that can be accommodated by Wellington Airport. A future increase in freight movement via the airport is expected as a result of improvements to accommodate containerised airfreight and potentially through the introduction of the new Boeing 787, however as yet it is unknown how significant such growth is likely to be.

Chapter 5 of the strategy sets out the policies relating to freight traffic. A draft Regional Freight Strategy is currently under development. The strategy will cover road, rail and sea freight and seeks to enable efficient freight movement to support economic development goals for the region.

6. The Role of Cycling

Cycling is an important mode of transport for short and medium length trips. While comprising a relatively minor 2%¹² of the region's trips over an average day, cycling contributes positively towards a sustainable transport system as it is energy efficient, has minimal environmental impacts, is affordable, and has associated health and fitness benefits. Cycling also contributes to reduced congestion as cycles require less road space and parking space than cars.

In the greater Wellington region, the majority of residents do not believe that getting around the region by cycle is easy¹³. The hilly terrain and windy climate in many parts of the region may contribute much to this. However, most residents also believe cycling in the region to be unsafe¹⁴. Therefore perceptions of cycling safety, along with the provision and quality of cycling facilities also have a part to play. These will need to be addressed if cycling is to become a recognised and valued transport mode.

Chapter 5 of the strategy sets out the policies relating to cycling. The Regional Cycling Strategy forms a section under Chapter 7 – Implementation, setting out the proposed actions for cycling improvements within the region, including the proposed funding and responsibilities for those actions. The Regional Cycling Strategy seeks 'the evolution of a cycling culture where cycling is a recognised and valued transport mode that is safe, accessible and pleasant throughout the region'. The outcomes sought in relation to cycling are:

- an improved level of service for cycling
- increased proportion of all trips cycled
- a perception of cycling safety, convenience and ease
- reduced relative risk of cycling as a transport mode

¹² Source: Wellington Transport Strategic Model (WTSM)

¹³ GWRC perception survey 2004

¹⁴ GWRC perception survey 2004

In order to achieve an increase in the uptake of this transport mode it will be necessary to improve the level of service for cycling throughout the region. A key action within the strategy is the identification and development of a regional cycling network, to ensure a consistent and strategic approach between the various road controlling authorities.

It is important to ensure that new development and urban form supports cycling as a viable transport mode, particularly for shorter journeys. The importance of being able to cycle part of a longer journey combined with passenger transport also needs to be recognised and adequately provided for within our region. Improvements to cycling infrastructure are an important component of travel demand management therefore the Regional Cycling Strategy supports and is complimentary to the Regional Travel Demand Management Strategy.

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