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# BAY OF PLENTY REGIONAL LAND TRANSPORT STRATEGY

## **ANNUAL REPORT 2007-08**

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## **Executive Summary**

This is the second annual report on progress in implementing the Bay of Plenty Regional Land Transport Strategy (RLTS) for the 2007/2008 financial year.

#### Performance indicators

A set of performance indicators were included in the RLTS as part of the 2006/2007 review process. The indicators were developed so that measurable targets can be set, and progress towards these targets assessed through the annual reporting process.

Data has been collected on socio-economic indicators, and on performance indicators for the strategic outcomes in the RLTS:

Integration and land use Economic development

Safety and personal security Energy efficiency
Responsiveness Access and mobility

Sustainability Public health

The emphasis this year has been on ensuring consistency with the 2006/2007 RLTS Annual Report to promote validity around the base measures. In many cases there is insufficient longitude to the data to draw any useful conclusions, and in other cases no new data is at hand (especially data based on the 2006 Census).

#### Socio-economic indicators

The socio-economic indicators for the most part display trends that promote travel demand and increased use of the region's land transport system.

#### Integration and land use

A high proportion of residents in the western Bay of Plenty in particular travel outside their district of residence to work. The figures show there is some way to go before Live, Work and Play principles are reflected in more self-contained travel to work patterns.

An initial count of transport interchanges shows a lack of opportunities to transfer between bicycles and other modes. More interchanges are likely to be identified as familiarity with the definition increases.

#### Safety and personal security

The region's crash rate rose again in 2006 following a recent downward trend. This is reflected in an increase in the number of recorded fatalities, serious injuries and minor injuries.

#### Responsiveness

Data on perceptions of public transport has been collected for the past three years only. More information is required to identify any trends.

#### Sustainability

Figures show the increasing dominance of the motor vehicle as a means of travel to work, and negligible gains for public transport in terms of modal split. The proportion of drivers amongst those travelling to work is above 90% and increasing over time, suggesting low and decreasing vehicle occupancy rates.

Modal split for freight to and from the Port of Tauranga is stable, with a significant proportion transported by rail, and an increasing percentage of freight moved by coastal shipping. There is an encouraging growth in the number of containers railed between Port of Tauranga and MetroPort in South Auckland.

There have been steady increases in public transport use in the two major urban centres.

Limited information is currently available on the use of active modes.

#### Economic development

There was evidence of a downward trend in travel delays in Tauranga in 2007. Reports show that the Port of Tauranga has the infrastructural capacity to handle significantly larger export volumes.

#### Energy efficiency

Fuel consumption decreased slightly in 2007/2008 in line with increasing fuel costs. More analysis is needed to understand what this says about the fuel efficiency of the region's vehicle fleet.

#### Access and mobility

Significant proportions of the population in the region's two largest urban centres live within walking distance of bus services. A much lower proportion of residents in areas outside these centres live within walking distance of a bus stop. However, services outside the cities do provide broad geographical coverage, albeit at a lower frequency. A very low proportion of the current bus fleet meets the definition of accessible.

The number of registered users for the region's total mobility scheme continues to grow, but the number of trips taken is steadily decreasing suggesting that service provision is meeting service demand. Other factors may also have contributed to this decrease.

#### Public health

Monitoring shows background carbon monoxide levels as being 'good' to 'excellent' in both Tauranga and Rotorua. There are relatively higher levels of particulate matter, especially in Rotorua. However, there have been improvements in the measurements from both cities in the past two years.

The districts with higher volumes of traffic on unsealed roads are actively reducing the amount of dust generated through seal extension programmes and dust suppression measures.

#### RLTS implementation progress

There has been a noticeable lack of progress in implementing the RLTS actions in 2007/2008. This has been due mostly to limited staff capacity and demands from central government to restructure transport planning and implementation. However we have made some progress on a number of actions by carrying out normal work activity. The focus this

financial year has been on building suitable governance to manage and understand the demands of the amendments to the Land Transport Management Act. Ongoing uncertainty about the cost of strategic roading projects and the implications for the Bay of Plenty transport funding package continue to hinder implementation of 'project' actions.

However, there is value in continuing to collect and analyse data relevant to the RLTS and NZTS as monitoring progress is complex and the more data collected regularly, the more accurate and relevant future analysis will be.

#### Performance assessment

Monitoring timeframes mean there is still very little data to work with around most of the Outcomes. While the 2006/2007 review set the baseline data from which change could be tracked, the data collected in 2007/2008 is only a single step away from baseline, making it difficult to determine trends where no data prior to 2006 was available. Data reliant on census material (including fundamental data such as population) has a five year gap between collect points.

The table following shows there is clearly a need for more resources to be put to collecting data as several areas had no new data available, although some of this was reliant on other agencies and both their interest and ability to deliver cannot be the responsibility of Environment Bay of Plenty.

Another "pass mark" is a realistic rating for the Councils performance. In some areas of work (such as access and mobility and improvements to the Rotorua Bus infrastructure and services) the Council's performance could be said to be either very good or excellent. However there has been little if any progress on items like sustainability and safety. Unfortunately some of these items are beyond the councils control so while they can take all practical steps to reducing such undesirable events as road fatalities the public must also play its part. Programmes such the Rotorua Air Quality Action Plan (draft) will dramatically improve measurements on airborne particles, demonstrating that not all the issues that transport contributes to are solely the responsibility of the transport sector.

The following table provides a performance assessment of the region's land transport system in 2007/2008:

Key							
	significant progress towards outcomes		some progress towards outcomes	Ţ	some regression from outcomes	99	significant regression from outcomes
	No	change, or t	there is currently	/ insufficient	information to m	ake an asse	ssment

Strategic Outcome	Assessment
Integration and land use	
Safety and personal security	(F)
Responsiveness	
Sustainability	
Economic Development	
Energy Efficiency	
Access and Mobility	
Public Health	

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## **Chapter 1: Introduction**

This is an annual report on progress in implementing the Bay of Plenty Regional Land Transport Strategy for the 2007/2008 financial year.

#### 1.1 Statutory context

The Land Transport Act 1998<sup>1</sup> (LTA) requires every regional council to prepare a Regional Land Transport Strategy (RLTS). An RLTS must contribute to the overall aim of achieving an integrated, safe, responsive, and sustainable land transport system. An RLTS generally identifies the region's future transport needs and how they might be met.

The Land Transport Management Amendment Act (LTMA Act) 2008 requires every regional council to establish a Regional Transport Committee (RTC) for its region. One of the main functions of the RTC is to prepare the RLTS for approval by the regional council.

The LTMA 2003 requires the preparation of an annual report on progress in implementing the RLTS (this report). Copies of the report must be forwarded to Land Transport New Zealand, Transit New Zealand, the Commissioner of Police and the Secretary for Transport by the 30 September each year. The annual report must also be made available to territorial authorities in the region, and to the public. The Amendment Act (LTMA 2008) requires RLTS progress reports to be produced every three financial years.

Both implementation and collection of data for 2007/2008 has been overshadowed by the introduction of the Land Transport Management Bill introduced in November 2007, which was adopted as the Land Transport Amendment Act in August 2008. This has provided uncertainty for the RLTC and for the Regional Council's role in transport. Coupled with this, the process of restructure which the Council has been undertaking has made a consistent approach to RLTS in this reporting period difficult. This is not to say that RLTS has become any less of a priority to the Council.

## 1.2 The Bay of Plenty Regional Land Transport Strategy

The Bay of Plenty RLTS was reviewed during the 2006/2007 year and the new strategy was adopted in June 2007. The RLTS was developed by the RLTC, made up of representatives from Environment Bay of Plenty, the region's territorial authorities, Transit New Zealand, Land Transport New Zealand, New Zealand Police, Ontrack and special interest groups.

As amended by the Land Transport Management Act (2003).

The RLTS has a vision of:

An integrated, safe, responsive and sustainable land transport system that meets the needs of the people of a vibrant and growing region.

Underpinning the vision is a set of strategic outcomes or 'desired states' arranged under the following headings:

Integration and land use Economic development

Safety and personal security Energy efficiency

Responsiveness Access and mobility

Sustainability Public health

These strategic outcomes provide the framework for all policy principles, actions and performance indicators in the RLTS.

#### 1.3 Performance indicators

A set of performance indicators were included in the RLTS 2007 as part of the review process. The performance indicators are based around the eight key strategic outcomes in the strategy. The indicators were developed so that measurable targets can be set and progress towards these targets assessed through the annual reporting process. Performance indicators provide a quantitative measure of performance and useful information on the effectiveness of the strategy.

This is the second Bay of Plenty Regional Land Transport Strategy Annual Report containing the eight performance indicators. The emphasis last year was on collecting data for each indicator to provide a baseline for setting targets in future annual reports. Having collected baseline data the RLTC is now in a position to begin to map changes in the indicators. However in many aspects of this study the data is still insufficient to discern patterns of change. More data needs to be collected regularly over future years to allow that to happen.

## 1.4 Information in the report

The information in this report was collected from a range of different sources. Environment Bay of Plenty would like to thank the region's territorial authorities (Tauranga City Council, Western Bay of Plenty District Council, Rotorua District Council, Whakatane District Council, Kawerau District Council and Opotiki District Council), Transit, the Port of Tauranga, Land Transport New Zealand and Statistics New Zealand for their assistance in compiling the data.

In the 2006/2007 report there were some data gaps, as data was unable to be collected. This means that some of the data in this years report form baseline data and there is no movement to analyse. The intention is to fill these information gaps in subsequent years to provide a more complete picture of the region's land transport system. The current set of performance indicators may need to be refined as part of this process.

Data coverage varies in the report. Data has been collected regionally for some indicators, while data is more relevant at the district or city specific level for others. Much of the data has been collated at the territorial authority level. This data covers

the six main territorial authorities in the region (Tauranga, Western Bay of Plenty, Rotorua, Whakatane, Kawerau and Opotiki). The territorial authority boundaries do not provide an exact fit with the regional boundary. A small part of Taupo district lies within the Bay of Plenty, and small area of Rotorua district is outside the region. The populations of these two areas are relatively small and their effect on regional figures is considered to be negligible.

In some cases, the data collected does not align with either regional or territorial authority boundaries. In these cases, the statistical boundaries are noted in the performance indicator definition.

#### 1.5 **Report structure**

**Chapter 2** measures trends in a set of socio-economic indicators that influence travel demand. A definition is provided for each indicator. The data is then presented, interpreted and analysed in terms of its implications for the region's land transport system.

**Chapters 3 – 10** cover the performance indicators for each strategic outcome in the RLTS.

Chapter 11 reports on RLTS implementation progress for the 2007/2008 year.

**Chapter 12** provides an overall conclusion of the region's land transport system performance in 2007/2008 when measured against the strategic outcomes in the RLTS.

## **Chapter 2: Socio-economic indicators**

This chapter measures trends in socio-economic indicators that influence travel demand. The following indicators were reported on in the 2006/2007 Annual Report:

Population: resident population

Households: number of households

average size of households

Regional economic activity: new dwellings authorised

Vehicle ownership: households without vehicle access

number of licensed vehicles

Because this data was based on the Statistics New Zealand 2006 census of population and dwellings there is no further information to add to socio economic indicators for the 2007/2008 financial year. As such chapters 2.1 to 2.2 are reproduced from the Regional Land Transport Strategy 2006/2007 Annual Report.

#### 2.1 **Population**

#### 2.1.1 Resident population

**Definition:** Actual and projected 'usually resident' populations for each sub-region and the region. Source: Census 1991-2006; Sub-national Population Projections: 2006 (base) – 2031. Bay of Plenty Demographic Forecast 2031 'modified medium variant' projections.

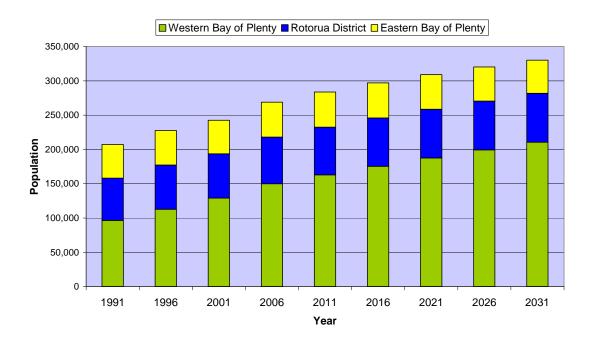


Figure 1 Resident population, actual and projected, by sub-region

*Interpretation:* The regional population was 260,811 in 2006. Fifty-seven percent of the region's population currently lives in the western Bay of Plenty sub-region, with 25% in Rotorua and 19% in the eastern Bay of Plenty sub-region.

While the population of Rotorua and the eastern Bay of Plenty appears almost static, the western Bay of Plenty is experiencing strong population growth. The population has grown by 51% in the last 15 years. This is projected to increase by another 34% in the next 15 years. The population of Rotorua is slowly increasing, while the eastern Bay of Plenty population is static. The steady population increase of 7-10% for the whole region is driven by growth in the western Bay of Plenty.

**Analysis:** Based on these projections there is clearly going to be an increase in demand for transport and thus the need for a transport infrastructure that will service a growing population. The bulk of this demand is expected to fall in the western Bay of Plenty.

#### 2.2 Households

#### 2.2.1 Number of households

**Definition:** Number of households by sub-region (population living in private dwellings). Source: Census 1996-2006; Bay of Plenty Demographic Forecast 2021 'modified medium variant' projection.

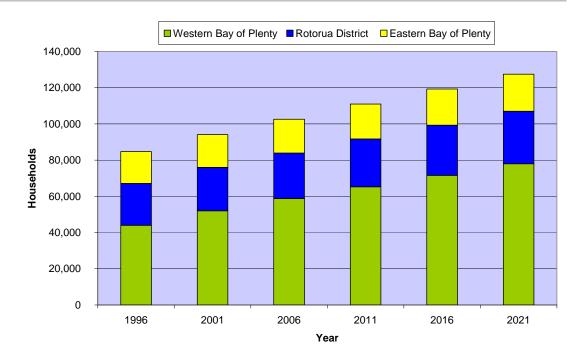


Figure 2 Number of households, actual and projected, by sub-region

Interpretation: There were slightly over 100,000 households in the region in 2006. This is forecast to increase to 125,000 households in 2021, representing a 25% increase in dwellings. The recent growth in households is overwhelmingly due to population growth in the western Bay of Plenty. The number of households in the western Bay of Plenty sub-region is expected to increase by 43% in the next 15 years. This compares with growth of 16% in Rotorua and 9% in the eastern Bay of Plenty.

**Analysis:** Growth in the number of households is forecast to outstrip population growth in all three sub-regions. Across the region population is expected to increase by 11% in the decade to 2016 while dwellings are expected to increase by 16% in the same time. Based on general demographic data this can be seen to be driven by two factors; the movement of 'baby boomers' into retirement and thus increasing the demand for small dwellings, and the increase in the number of couples choosing to have no children. The first factor is particularly pertinent to the Bay of Plenty which, by enjoying a pleasant climate, is attractive as a retirement destination.

This trend will exacerbate the increased transport demand already driven by strong population growth in the western Bay of Plenty. This is almost certainly likely to lead to both building new transport infrastructure (i.e. new subdivisions) and developing existing infrastructure to cope with increased demand and usage. As this change is predicted to fall mostly into the Western Bay of Plenty region a disproportionate amount of resources will be required to be focused on those issues.

#### 2.2.2 Household size

Because this data is based on the Statistics New Zealand 2006 census of population and dwellings, there is no further information to add to household size analysis. Figure 3 is reproduced from the Regional Land Transport Strategy 2006/2007 Annual Report.

**Definition:** Average number of people per household. Source: Census 1991-2006, Statistics NZ.

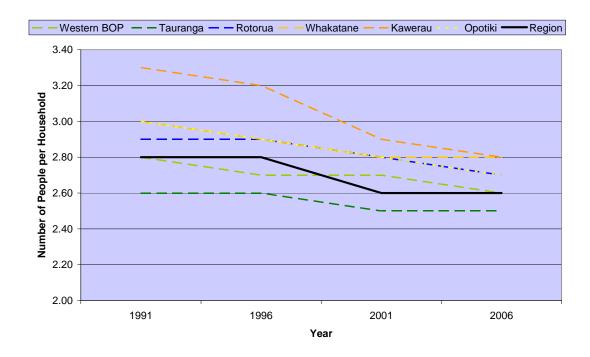


Figure 3 Average household size by district/city

**Interpretation:** All districts in the region display a trend of decreasing household size over the past 15 years. The regional average has reduced from 2.8 in 1991 to 2.6 in 2006.

**Analysis:** Decreasing household size explains the trend of household numbers increasing at a higher rate than population growth in the Bay of Plenty.

Without a definite picture of why household sizes are dwindling it is difficult to make an accurate assessment of the impact of this trend on transport in the region. It is clear that in no place in the region is the average over three (the traditional 'nuclear' family), and in no place is there an increase in household size. A 'nuclear' family suggests one or two parents travelling to and from work, children travelling to and from school and then assorted after school activities, while possibly quieter weekend activity. It is difficult to link vehicles per unit to household size.

The data we are seeing could be coming from an increase in a retired population with a propensity for infrequent travel during peak hour periods and predominately shorter journeys, or childless workers generating more peak hour travel and possible higher disposable income suggesting more weekend and evening travel related activity, or even from an influx of solo parents, who are often attracted to a town or region based on schools, cost of housing or other factors. As a group they have little disposable income so are less likely to have access to vehicles than other groups.

#### 2.3 Regional economic activity

#### 2.3.1 New dwelling units

**Definition:** Number of new dwelling units authorised in the Bay of Plenty (building consents issued). Source: Statistics New Zealand. Baseline measure for regional economic activity. The construction industry also generates demand for transport.

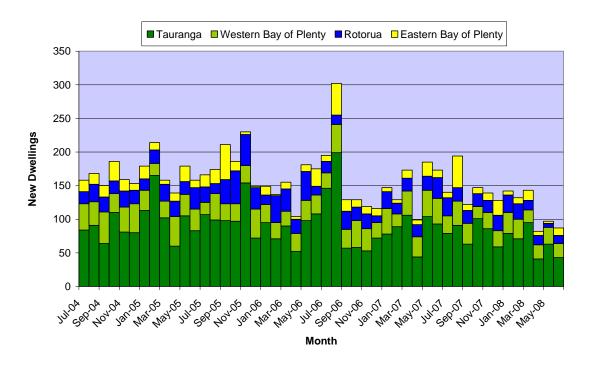


Figure 4 Number of new dwelling units authorised

*Interpretation:* Data for the period July 2004 – June 2008 shows fluctuations in the number of new dwelling units authorised, with significant outliers in August 2006. The regional average in the four year period was 176 new dwelling units. The data shows a general easing of activity from August 2006, although the number of new units authorised has returned to be close to the average in recent months. The figures show that regional trends are largely driven by activity in Tauranga city.

There has clearly been a reduction in the number of new dwellings being built across the entire region in the past two years. Outside of four discrete months, there were predominately over 150 new dwellings authorised each month for the period July 2004 - August 2006, whereas for the period September 2006 – June 2008 we see the reverse with only four months having more than 150 authorisations.

Tauranga is clearly driving the oscillations in this data although eastern Bay also shows a significant variance from month to month (e.g. July and August 2007). Rotorua and Western Bay are the most consistent in their issuing of authorisations for new dwelling units.

**Analysis:** While the figures are subject to significant fluctuations, the data shows a trending decline in the number of new units authorised over the four year period, and a noticeable slump (approximately 40%) since March 2008. This is unsurprising given the fiscal mechanism implemented by central Government around that time and the general economic predictions. This trend may have a dampening effect on the rate that transport demand increases, particularly in Tauranga where the

majority of new dwelling units are authorised. Conversely, if people can not afford to build their dream home they may take an interim measure of purchasing/renting properties that are further away from their work/school hub to meet their lifestyle needs, leading to more travel.

#### 2.4 Vehicle ownership

#### 2.4.1 Motor vehicle access

Because this data was based on the Statistics New Zealand 2006 census of population and dwellings there is no further information to add to vehicle ownership analysis. Figure 5 is reproduced from the Regional Land Transport Strategy 2006/2007 Annual Report.

**Definition:** Percentage of households without access to a motor vehicle by district/city. Source: Census 1996-2006, Statistics NZ. Baseline measure of travel demand (growth in car ownership increases travel demand).

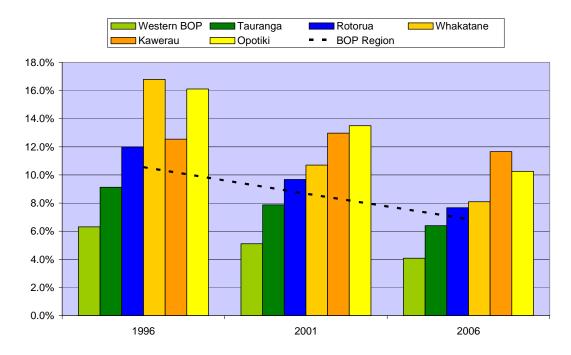


Figure 5 Percentage of households without access to a motor vehicle

*Interpretation:* In the past decade there has been a substantial decrease in the proportion of households without access to a motor vehicle. While across the region this shift has been approximately 40% there has been significant variance in each district. Whakatane, for instance has recorded a 50% drop, while western Bay has recorded only 30%.

**Analysis:** The figures show that access to motor vehicles is continuing to increase across the region, and that vehicle ownership is still seen to be desirable. This is noteworthy given that in the period 2001 – 2006 fuel costs have increased significantly. The fact that even more of the population want to own cars demonstrates its status as a fundamental human experience. Increased access is likely to induce greater demand for travel by private car, with a likely consequent movement away from public transport and alternatives like walking or cycling, unless mechanisms are put in place to change what has become a habit of several generations.

It should be noted that the district/city wide figures do not provide the full picture in terms of household access to motor vehicles. In the past, figures have displayed a significant variation in levels of access within each city or district. More detailed mapping of motor vehicle access will be required to highlight 'pockets' within the region for which lack of access to a motor vehicle remains a significant issue. The key issue around this is to ensure those households have a viable public transport option.

Not having access to a car does not necessarily mean that a household is transport disadvantaged. It may be that they have chosen not to have a car, or do not need one because they are close to local services, or because there is a reliable bus service they can use. However, it is important to recognise that these households may have difficulty accessing certain services, for example, health services.

Similarly, having access to a vehicle does not mean that people no longer need, want or use public transport, walk and cycle ways etc. People own cars primarily for convenience and, particularly in cities where there are issues of peak hour congestion, parking costs and availability, choose public transport for their daily routine transport e.g. – to work or school, and reserve their car for recreation, or such things as shopping, where the car is valued because it can carry their purchases more easily.

#### 2.4.2 Number of licensed vehicles

**Definition:** Number of licensed vehicles in the Bay of Plenty (Tauranga and Rotorua postal districts). Source: Land Transport NZ: Motor Vehicle Registration Statistics 2007. The number of licensed vehicles is a baseline measure of travel demand (growth in licensed vehicles means increased travel demand).

Note: Rotorua postal district extends south towards Waiouru and includes Tokoroa, Taupo and Turangi. 'Cars' includes vans, taxis, utilities and rentals; 'motorcycles' includes mopeds; 'other' includes trailers, tractors, exempt vehicles and miscellaneous.

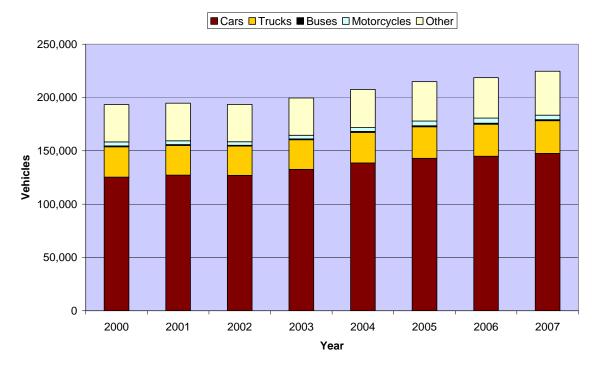


Figure 6 Number of licensed vehicles in the region

Interpretation: Overall, the figures show steady growth in the size of the region's vehicle fleet, with the strongest growth of approximately 3% per year sustained between 2002 and 2005. Car ownership has increased 17% between 2000 and 2007, and cars numbers now comprise 66% of the vehicle fleet. The number of trucks increased sharply over between 2006 and 2007. In comparison, the number of registered motorcycles decreased between 2006 and 2007. The increase in Cars registered is consistent with the increase in population and decrease in number of households without access to a motor vehicle, meaning there is no measurable shift in the number of vehicles per person.

The largest growth rates have occurred in the smallest categories. There were 1,025 registered buses in 2007, compared with 766 in 2000. Motorcycles (including mopeds) reduced in number between 2000 and 2003, but have recorded significant growth from 2004 until 2006.

Analysis: The growth trend in car numbers shows no signs of tailing off. The increase in registered buses may reflect the increased emphasis on bus based passenger transport in recent years, although similarly it may simply be a consequence of affordable second hand imports allowing more people the option of purchasing a bus for conversion to a campervan. The trend of increase in registered motorcycles and mopeds is indicative of a trend towards more fuel efficient modes, which is also reflected in a very slight flattening off of in the increase in demands for cars. This is reflected against the period 2001-2006 where there was a slight acceleration in the rate of car ownership over population increase, possibly due to the reduction of numbers of households without access to a motor vehicle.

## **Chapter 3: Integration and Land Use**

This chapter measures trends in integration and land use indicators. The following indicators are reported on:

Integration of land use and transport: travel to work outside district/city

Integration between modes: number of transport interchanges

Integration of public transport services: percentage of integrated tickets sold

#### 3.1 Integration of land use and transport

#### 3.1.1 Travel to work outside district/city

Because this data was based on the Statistics New Zealand 2006 census of population and dwellings there is no further information to add to vehicle ownership analysis. Figure 7 is reproduced from the Regional Land Transport Strategy 2006/2007 Annual Report.

**Definition:** Number of employed people who travelled to work outside the district/city in which they are usually resident on census day 2006. Measures travel to work trends as an indicator of 'Live, Work and Play' and related principles. Source: Census 2006, Statistics New Zealand.

Note: Figures exclude those who worked at home or did not go to work on census day.

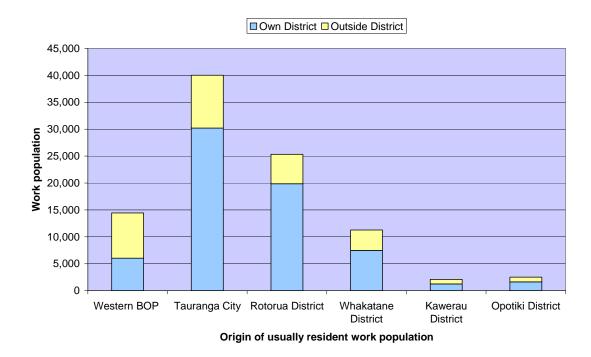


Figure 7 Proportion of work population travelling outside district/city to work

Interpretation: Western Bay of Plenty had the highest proportion of people travelling outside the district to work (58%). Of these, 55% (4593 people) travelled to work in Tauranga City. Tauranga and Rotorua, the two largest urban centres in the region, had the lowest proportion of residents travelling beyond their boundaries to work. The Waikato region attracted the highest proportion of Rotorua residents (25%) who worked outside the district on census day, with fewer Rotorua residents travelling through to Tauranga or the western Bay of Plenty district.

**Analysis:** This travel to work data has been collected to provide a baseline measure as concepts such as 'Live, Work and Play' are implemented. Unsurprisingly, Western Bay of Plenty district displays the highest proportion of residents travelling outside the district to work. This figure may change over time as more locally based employment opportunities are provided within the western Bay of Plenty district.

The Rotorua figures indicate a relatively self-contained workplace-residence relationship, but Rotorua has stronger workplace ties to the Waikato than other districts within the Bay of Plenty region have with the Waikato region. Whakatane and Kawerau also display strong interdependencies, with 37% of those working outside Kawerau travelling to Whakatane and 27% in the opposite direction. This demonstrates that despite significant employment opportunities being provided in both districts, a sizeable proportion of the workforce chooses to travel between districts to work.

## 3.2 Integration between modes

#### 3.2.1 Number of transport interchanges

**Definition:** To transfer between different transport modes to complete a single journey. Transport interchanges are places where the change between modes of travel is easy. For the purposes of this definition, transport interchanges must be accessible to the general public.

Potential transport interchanges in the Bay of Plenty:

- bus station (a terminus or a significant stop allowing transfer between routes).
- car park (significant continuous area of public parking with some level of restriction; park and ride facility).
- taxi rank (designated area where taxis are parked).
- airport (with connections to other modes).
- bicycle racks (secure parking for significant numbers of cycles, or cycles available for hire).
- ferry terminal.

Table 1 Bay of Plenty transport interchanges (2007)

District/City	Number of interchanges <sup>2</sup>	Interchange	Mode transfer
Western BOP	7	Commerce Lane, Te Puke	Bus - pedestrian
		Commerce Lane, Te Puke	Car – bus (park & ride)
		Just off SH, Omokoroa	Car - bus
		Talisman Drive, Katikati	Car - bus
		Talisman Drive, Katikati	Bus - pedestrian
		Seaforth Road, Waihi Beach	Car - bus
		Seaforth Road, Waihi Beach	Bus - pedestrian
Tauranga	16	Wharf street bus terminus	Bus - pedestrian
		Wharf street bus terminus	Bus - bus
		Bayfair	Bus - pedestrian
		Wharf street bus terminus	Bus - bus
		Salisbury Wharf	Ferry - Bus
		Spring Street car park	Car - pedestrian
		Elizabeth Street car park	Car - pedestrian
		Harington Street car park	Car - pedestrian
		Strand car park	Car - pedestrian
		Durham Street car park	Car - pedestrian
		Willow Street car park	Car - pedestrian
		Willow Street car park	Bike - pedestrian
		Willow Street car park	Car - bike
		Tauranga Airport	Air - taxi
		Tauranga Airport	Air - shuttle
		Tauranga Airport	Air - car
Rotorua	16 <sup>3</sup>	Airport	Air - bus
		Airport	Air - shuttle

Each example of transfer between modes was counted as an individual interchange. Therefore, one location may have multiple transport interchanges.

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Rotorua also has 24 cycle racks. However, these have not been included in the final count as it is unclear which racks provide secure parking for significant numbers of cycles.

District/City	Number of interchanges <sup>2</sup>	Interchange	Mode transfer
		Airport	Air - taxi
		Airport	Air - car
		Pukuatua Street	Bus - bus
		Pukuatua Street	Bus - pedestrian
		Information Centre	Bus - bus
		Information Centre	Bus - pedestrian
		Information Centre	Bus - car
		Carpark building	Car - pedestrian
		Taxi stands (x 6)	Pedestrian - taxi
Whakatane	5	Information centre	Bus - pedestrian
		Information centre	Bus - bus
		Boon Street	Bus - taxi
		Boon Street	Bus – pedestrian
		Whakatane Airport	Air - taxi
Kawerau	1	Plunket Street	Bus - pedestrian
Opotiki	1	Elliot Street	Bus – pedestrian
Region	46		

Interpretation: A total of 46 transport interchanges have been identified in the region to date. Together, the two large urban centres of Tauranga and Rotorua account for two-thirds of the interchanges. The bus-pedestrian category recorded the highest count (11), followed by car-pedestrian (7), bus-bus (5) and car-bus transfers (4).

Analysis: The transport interchanges count has been included in the report to provide baseline data on integration between modes in the region. This is by no means a definitive number and it is likely to increase as more transport interchanges are identified or created. The objective is to grow the number of transport interchanges over time to promote the efficient and easy transfer between modes in line with strategic outcomes in the RLTS. The lack of interchanges allowing transfer between bicycles and other modes is one gap that is evident in the current count (although this may be an identification issue rather than a lack of appropriate facilities).

## 3.3 Integration of public transport services

#### 3.3.1 Percentage of integrated tickets sold

While this is a performance indicator in the RLTS, there is currently no data available on the proportion of integrated tickets sold, as this initiative has not yet been implemented.

## **Chapter 4: Safety and personal security**

This chapter measures trends in safety and personal security indicators. The following indicators are reported on:

Crashes: crash rates

Casualties: number of casualties

#### 4.1 Crashes

#### 4.1.1 Crash rates

Note: while reducing injuries and fatalities on the region's roads remains a goal under the RLTS, the Council's ability to monitor performance is reliant on data collected by outside agencies, notably the Ministry of Transport. As the Ministry is not in a position to provide updated data at this point we are unable to report on progress towards that goal. Chapter Four is reproduced from the Regional Land Transport Strategy 2006/2007 Annual Report.

**Definition:** Crash rate per 10,000 population for the Bay of Plenty region (compared with New Zealand average). Crash rates are for reported fatal and injury crashes. Crash rates provide an overall measure of the safety of the road network. Source: Motor Vehicle Crashes in New Zealand 2001-2006, Ministry of Transport.

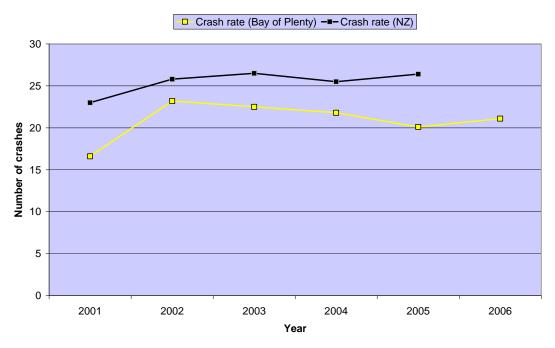


Figure 8 Crashes per 10 000 population in the Bay of Plenty

Interpretation: Bay of Plenty crash rates trended downwards between 2002 and 2005, before increasing by one additional crash per 10,000 people in 2006. This represented an improvement on the New Zealand crash trend over the 2002-2005 period. No comparison could be made with the national crash rate for 2006 because no New Zealand-wide figures were available at the time the Motor Vehicle Crashes in New Zealand 2001-2006 report was compiled.

**Analysis:** It is good to report that the regional crash rate is substantially lower than the national average rate, and that the regional rate has been trending downwards at a much faster rate than the national average. The makes the 2006 reporting figure difficult to assess as being significant or an anomaly year caused by a few incidents that were out of character. Because of the smaller numbers involved at a regional level each extra incident has a much great impact on regional reporting.

#### 4.2 Casualties

#### 4.2.1 Number of casualties

**Definition:** Total number of casualties on Bay of Plenty roads per year. Provides a measure of the overall safety of the road network and the severity of injuries. Source: Motor Vehicle Crashes in New Zealand 2001-2006, Ministry of Transport.

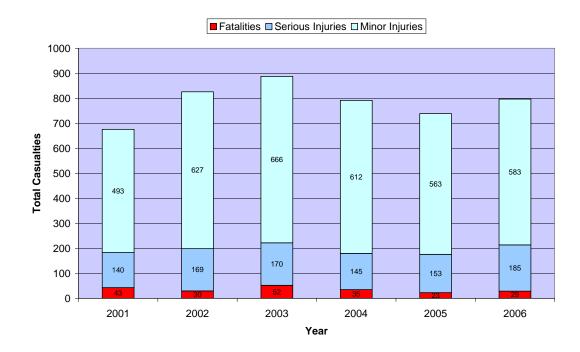


Figure 9 Number of casualties on Bay of Plenty roads

*Interpretation:* Bay of Plenty casualty figures have fluctuated over the past six years. After peaking in 2003, fatalities, minor injuries and total figures trended downwards for two consecutive years. However in 2006 casualty figures increased across all three categories.

Analysis: The figures show no discernable trend, meaning that no firm conclusions can be drawn on the overall safety of the road network. While the proportions of each casualty type generally tend to be similar, there was a marked increase in the number of serious injuries in 2006 (up 21%) while minor injuries only rose by a little (3%). It is worth reflecting this figure against fatalities because while the serious

injuries in 2006 were greater than those in the years 2001-04, the number of fatalities in 2006 was lower than all those years and the number of minor injuries lower than three of those years. It is also interesting to note that the Bay of Plenty crash rate actually decreased between 2002 and 2003, indicating that 2003 was a particularly bad year for multiple casualty crashes.

Given that there were no transport infrastructural changes that this sudden increase can be ascribed to, nor any significant shift in population numbers, other social causes may be the core of the increase, such as an increased use of narcotics or immunity to advertising campaigns. Without further research it is impossible to make any conclusions. Future data will determine if this is an anomaly or the start of an unwelcome trend that requires a refocus of road safety resources.

## **Chapter 5: Responsiveness**

This chapter measures trends in responsiveness indicators. The following indicator is reported on:

Perceptions of public transport: percentage of bus users who rate services as excellent

### 5.1 Perceptions of public transport

#### 5.1.1 Percentage of bus users who rate services as excellent

**Definition:** Percentage of usually resident bus users in Tauranga and Rotorua who rate Environment Bay of Plenty contracted bus services as 'excellent' in annual bus satisfaction survey. Source: Environment Bay of Plenty Annual Bus Satisfaction Survey.

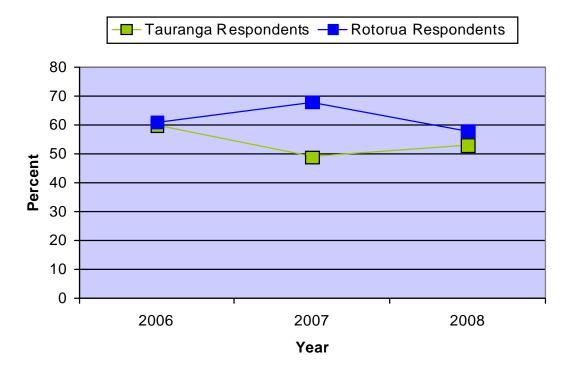


Figure 10 Percentage of users who rate bus services as excellent

Attribute	Tauranga respondents			Rotorua respondents		
Attribute	2006	2007	2008	2006	2007	2008
Overall bus service	60%	49%	53%	61%	68%	58%
Service reliability	45%	32%	35%	55%	45%	56%
Service frequency	41%	34%	45%	64%	66%	67%
Vehicle quality/comfort	53%	37%	38%	56%	61%	55%
Journey time	49%	32%	46%	64%	58%	66%
Service availability	51%	34%	49%	64%	61%	67%
Safety and personal security at the stops	74%	34%	48%	63%	54%	57%
Value for money	69%	55%	65%	66%	68%	70%
Safety and personal security during the trip	78%	39%	56%	72%	61%	61%

Table 2 Percentage of users who rate bus service attributes as excellent

Interpretation: Bus users were asked to state their perceptions of bus service performance levels in Tauranga and Rotorua on a scale from 'dreadful' to 'excellent'. In 2006, Tauranga (60%) and Rotorua (61%) generated almost identical figures for 'excellent' ratings. Results for 2007 show some diversion between the two centres, with significantly higher proportions of Rotorua users being inclined to rate their bus service as excellent. Tauranga, on the other hand, recorded a marked decrease in its 'excellent' rating. In 2008, both these trends reversed. Tauranga respondents were more likely to rate their bus service as excellent, and Rotorua respondents were less likely to rate their bus service as excellent.

Table 2 shows the percentage of users who rated various bus service attributes as 'excellent'. The figures show the most significant decreases in safety and personal security attributes in Rotorua and Tauranga. Tauranga users also showed a negative response towards the service reliability and availability. Anomalies like the 50% drop from 2006 to 2007 in Tauranga passengers feeling safe and secure are difficult to explain and may come down to a single incident being widely reported in the media which may lead to an increase in general anxiety. This is a problematic factor associated with soliciting perceptions and opinions (qualitative data) rather than objective data.

**Analysis:** The figures for both Tauranga and Rotorua show that significant proportions of users perceive their bus services to be excellent, and that that opinion is relatively steady. While Tauranga ratings decreased between 2006 and 2008, the bus satisfaction survey has only been held for the past three years. Therefore, it would be prudent not to draw too many conclusions from the initial results. The figures do provide some baseline data from which targets for perceptions of public transport can be drawn in the future.

It should also be noted that as bus service levels increase, so do users expectations. Similarly, both services are relatively new in the context of public transport provision and still in a developmental phase. This is likely to be reflected in strong initial ratings as users respond to substantial improvements on previous levels of service.

This may be the case in the Rotorua service where respondents reported identical or increased approval ratings on every factor except vehicle quality. If the eight individual attributes are averaged, in 2007 the figure is 59%, while in 2008 it is 62%.

## **Chapter 6: Sustainability**

This chapter measures trends in sustainability indicators. The following indicators are reported on:

Mode share: modal split for travel to work

modal split for freight

Vehicle occupancy: proportion of people who drove to work

Public transport use: annual bus trips per person

Number of cyclists: cyclist counts on key routes

Number of pedestrians: pedestrian counts on key routes

#### 6.1 **Mode share**

#### 6.1.1 Modal split for travel to work

Because this data was based on the Statistics New Zealand 2006 census of population and dwellings there is no further information to add to modal split for travel to work analysis. Figure 11 is reproduced from the Regional Land Transport Strategy 2006/2007 Annual Report.

**Definition:** Main means of travel to work for people aged 15 years and over on Census day (1996, 2001, 2006). Note: figures exclude those who worked at home, did not go to work or did not state their travel mode. Motor vehicle includes drivers and passengers. Source: Census 1996-2006, Statistics New Zealand.

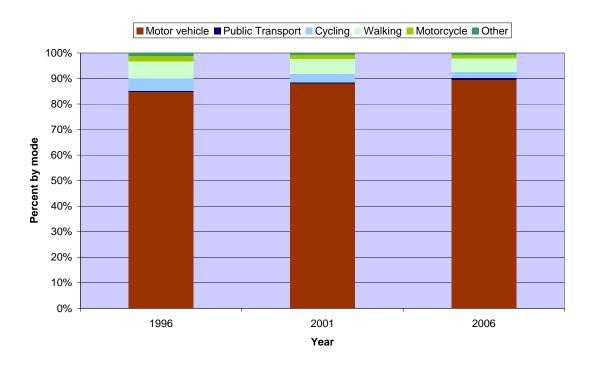


Figure 11 Bay of Plenty mode split for travel to work

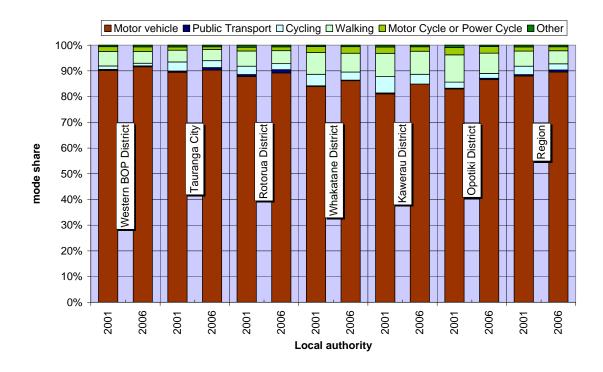


Figure 11a Bay of Plenty mode split for travel to work by district

Local authority	Mode					
	Motor vehicle	Public Transport	Cycling	Walking	Motor cycle	Other
Western BOP	91.6%	0.4%	1.0%	4.5%	1.8%	0.7%
Tauranga	90.3%	1.0%	2.6%	4.3%	1.1%	0.6%
Rotorua	89.2%	1.3%	2.3%	5.1%	1.5%	0.6%
Whakatane	86.2%	0.2%	3.2%	7.3%	2.6%	0.6%
Kawerau	84.9%	0.0%	3.8%	9.0%	1.7%	0.6%
Opotiki	86.6%	0.5%	1.9%	7.9%	2.6%	0.5%
Region	89.5%	0.8%	2.4%	5.1%	1.5%	0.6%

Table 3 Mode split for travel to work in 2006, by district/city

Interpretation: Figure 11 shows the increasing predominance of the private motor vehicle as a means of travelling to work over the past ten years. The regional motor vehicle mode share increased from 84.8% in 1996 to 89.5% in 2006. All other modes, with the exception of public transport, experienced a decline in mode share over the same period. Public transport doubled in absolute terms and experienced a slight increase in mode share between 2001 and 2006. However, public transport mode share remains well below that of modes such as walking and cycling, and is negligible when compared with use of the private motor vehicle. It should be noted that public transport is an issue of availability and, given the Council's recent commitment to this, discernable shift should begin to be seen as habits begin to change to meet availability.

Table 3 and Figure 11a indicates that there is some variation within the region in the most recent mode share figures (2006). Travel by motor vehicle was most dominant in the two largest urban centres (Tauranga and Rotorua) and particularly in the Western Bay of Plenty district, which is adjacent to the largest city in the region. Tauranga and Rotorua also recorded the highest proportions of public transport use, although mode share was still only just reaching 1% of total journeys. The table also shows that the 'active modes' (walking and cycling) retained the largest mode share in the eastern Bay of Plenty districts with smaller urban or rural based populations (Whakatane, Kawerau, Opotiki). There has been an increase in the use of motor vehicles for journey to work across the region.

Analysis: Census based travel to work figures show an increasingly unsustainable travel profile as the more sustainable modes are being replaced by use of the private motor vehicle. This is not surprising as the socio-economic indicators show motor vehicles are becoming increasingly accessible to a greater proportion of the population, and the regional fleet vehicle fleet is growing on a yearly basis. The figures also show that the Western Bay of Plenty is the most heavily reliant on the private motor vehicle. Again, this is not surprising given the high proportion of workers from this district who travel to Tauranga to work, and the low level of public transport for this district.

What is the main					% of Respondents				
purpose of your travel on the bus	Tauranga Respondents		Rotorua Respondents			Total Respondents			
service?	2006	2007	2008	2006	2007	2008	2006	2007	2008
Shopping	28	38	43	38	40	38	35	39	41
Work	21	18	22	29	22	34	23	20	28
Recreation	13	17	21	9	13	16	11	15	19
School	6	2	1	3	3	2	5	2	1
Study (non school)	5	2	2	1	2	2	2	2	2
Doctor/Hospital	7	5	6	1	4	4	4	5	5
Visit friends	3	4	2	3	4	3	4	4	2
Sport	-	1	1	-	-	-	-	1	-
Other	16	13	2	17	12	2	16	12	2
Total	100	100	100	100	100	100	100	100	100

Table 4 Main purpose of travel on Tauranga and Rotorua bus services

Given that the commitment to a substantial public transport system is a new initiative these figures suggest a good and strengthening uptake of using bus services to travel to work (table 4). Public commuter systems are very cultural in nature. Wellington, for instance has a long running, well developed system and there is an expectation that it is for everyone. Over time, and driven by a range of initiatives and economic and social changes we can expect the uptake of using public transport to get to work to increase. Lower mode share for cycling and walking in the main urban centres (and adjacent areas) suggests the barriers to using these modes are greater here than in the smaller urban settings. Another factor may be the higher proportions of households without access to motor vehicles in the districts displaying higher cycling and walking mode shares.

### 6.1.2 Modal split for freight

**Definition:** Modal split for freight loaded at Port of Tauranga. Figures are for total throughput. Source: Port of Tauranga

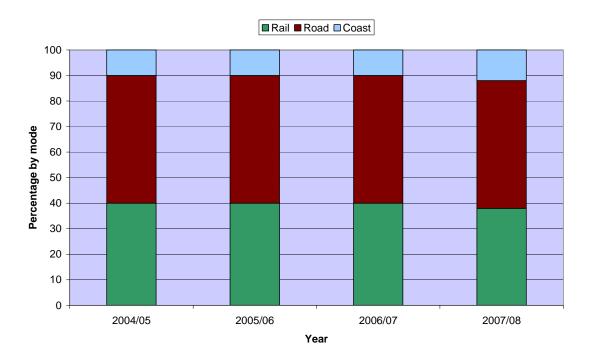


Figure 12 Modal split for freight loaded at Port of Tauranga

*Interpretation:* Overall modal split figures have remained constant over the past three years with approximately 40% volume transported by rail, 50% by road and the remaining 10% by coast. The proportion transported by rail in 2007/2008 decreased. This is most likely a reflection of the log volume that is railed, which varies depending on whether the forests being harvested have rail access.

Analysis: The figures show a stable modal split for freight loaded at Port of Tauranga. Volumes of logs being railed are subject to some fluctuations depending on forest locations. In recent times this has been offset by increased volumes of containers being transported between Port of Tauranga and MetroPort in South Auckland (Figure 13). Again, these volumes are subject to some variations (the decline in 2006 was due to a reconfiguration of services following the Maersk takeover of P&O Nedlloyd). However, volumes increased again for 2007.

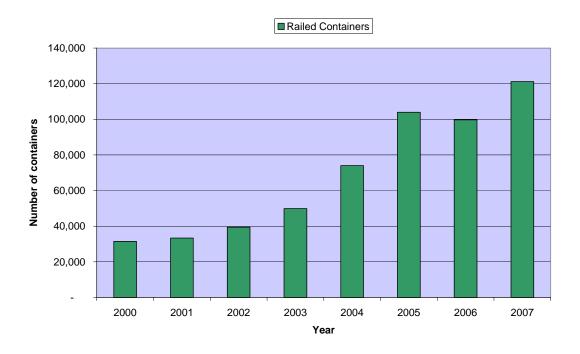


Figure 13 Containers railed between Port of Tauranga and MetroPort (South Auckland)

# 6.2 Vehicle occupancy

### 6.2.1 Proportion of people who drove to work

Because this data was based on the Statistics New Zealand 2006 census of population and dwellings there is no further information to add to travel to work analysis. Figure 14 is reproduced from the Regional Land Transport Strategy 2006/2007 Annual Report.

Definition: Proportion of drivers amongst people who travelled to work by car, truck or van on census day. Measures of vehicle occupancy (a high proportion of drivers implies low vehicle occupancy rates). Source: Census 1996-2006, Statistics New Zealand.

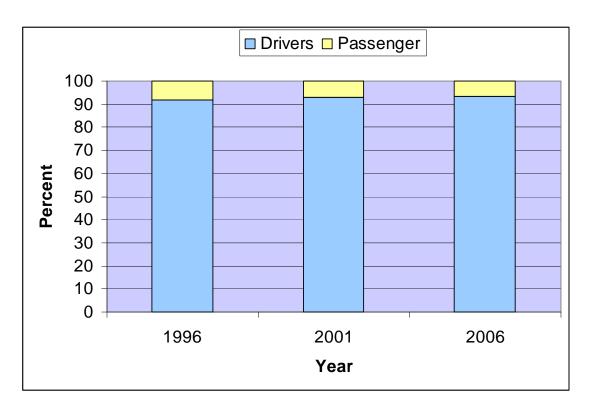


Figure 14 Proportion of drivers for people travelling to work by motor vehicle

Table 5 Proportion of drivers for people travelling to work by motor vehicle (2006), by district/city

Local authority	Driver	Passenger
Kawerau District	90.7%	9.3%
Opotiki District	91.4%	8.6%
Rotorua District	91.8%	8.2%
Whakatane District	92.3%	7.7%
Tauranga City	94.2%	5.8%
Western Bay of Plenty District	94.4%	5.6%
Region	93.3%	6.7%

*Interpretation:* The graph shows that the proportion of drivers amongst people travelling to work by motor vehicle has been consistently above 90% in the past 10 years. Table 5 breaks the 2006 figures down to the district level, showing that Kawerau district had the lowest ratio of drivers to passengers (90.7%) while western Bay of Plenty District had the highest ratio at 94.4%, slightly above that of Tauranga (94.2%).

**Analysis:** Like the mode share figures, the proportion of drivers to passengers displays a highly unsustainable pattern of travel behaviour. The ratio of drivers to passengers is above 9:1, suggesting a very low vehicle occupancy rate. The figures do not account for non-working members of the population who may be sharing journey to work trips e.g. school age children. Regardless, the figures do show a very low level of car sharing between members of the workforce.

Some variation is apparent within the region. The highest proportions of drivers are found in the western Bay of Plenty district. However, there seems to be no differentiation between urban centres and more rural districts, with Rotorua registering the third lowest ratio of drivers to passengers.

### 6.3 **Public transport use**

### 6.3.1 Annual bus trips per person

**Definition:** Annual bus trips per person by district/city (data is currently not available for western Bay of Plenty district services). Comparative measure of public transport use. Figures differentiate between services operating within large urban centres (Tauranga, Rotorua) and in districts with smaller urban centres (Whakatane, Opotiki, Kawerau). Source: Patronage data supplied to Environment Bay of Plenty by operators. Population based on most recent census data for usually resident population by Territorial Authority. Note: Tauranga and Rotorua figures are withheld for one year for commercial reasons.

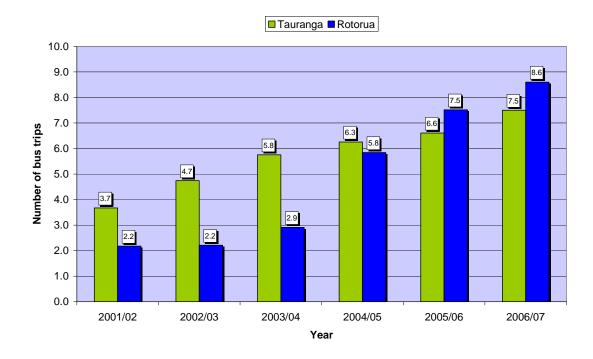


Figure 15 Annual bus trips per person, Tauranga and Rotorua

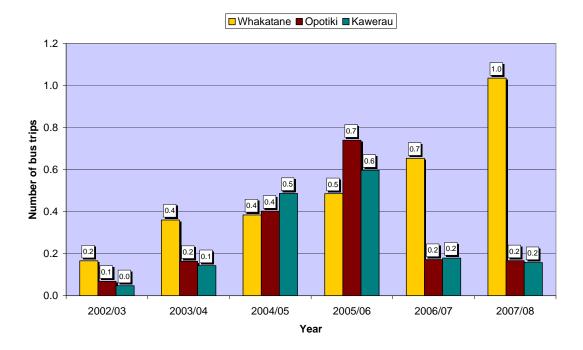


Figure 16 Annual bus trips per person, Whakatane, Opotiki and Kawerau

Interpretation: Trips per capita in Tauranga steadily increased over the recorded period to a high 7.5 trips per person in 2006/2007. In comparison, trips per capita in Rotorua were fairly static before experiencing significant jump in patronage in 2004/2005, followed by a sharply escalated increase each year. Rotorua's patronage has increased from 50% of the Tauranga's patronage in 2003/2004 to 115% in 2006/2007

Whakatane experienced a steady increase in patronage until 2007/2008. Trip numbers rose sharply in 2007/2008, approximately doubling the trend line from previous years. Figures for Opotiki and Kawerau in 2004/2005 and 2005/2006 are skewed by the recording of Whakatane to Tauranga figures in patronage totals. Excluding the aforementioned years, trips per capita for Opotiki and Kawerau have been relatively static over the recorded period.

**Analysis:** The data shows healthy growth in annual bus trips per person in Tauranga and a strong invigoration in Rotoura. However, as the mode share data indicates, public transport use is not yet replacing private motor vehicle use during periods of peak demand e.g. journeys to work.

Whakatane is also experiencing increasingly strong growth in trips per capita, although from a much lower base than Rotorua and Tauranga, a likely consequence of the introduction of services like Beach runner, which connect Ohope to Whakatane. The nature of the smaller communities is that utilising public transport as a means of getting to and from work is not only less realistic but less desirable, as issues of congestion and travel distance are much less than those in main centres. Opotiki and Kawerau trips per capita are relatively static and are likely to remain so unless there is an increase in service frequency.

## 6.4 Number of cyclists

### 6.4.1 Cyclist counts on key routes

**Definition:** Cyclist counts on key routes in Tauranga and Rotorua (conducted at the same sites, at the same time, on the same days each year). Measures use of a sustainable mode. Sources: Tauranga City Council and Rotorua District Council.

Note: This data was not collected by Rotorua District Council in 2007/2008.

Table 6 Cyclists counts on key routes, Tauranga and Rotorua

	Location			
		2006	2008	
Tauranga⁴	Cameron Road	158	172	
Matapihi Bridge		245	265	
	20	004		
Rotorua <sup>5</sup>	Intersection Fairy Springs/Clayton/ Lake/Old Taupo Roads  93			
	Intersection Edmond/Clayton Roads	2	27	



Figure 17 Cyclist and pedestrian count locations, central Tauranga

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The Tauranga counts were conducted 7-9 am (morning peak) and 2-6 pm (evening peak).

<sup>&</sup>lt;sup>5</sup> The Rotorua counts were conducted 7:30-9 am and 3-5:30 pm.



Figure 18 Cyclist and pedestrian count locations, central Rotorua

**Interpretation:** A limited amount of data has been collected, but the results from Tauranga suggest a consistent 8% increase in cycle traffic between the two years of recording. More data needs to be collected to allow any comprehensive analysis.

**Analysis:** Given the limited amount of data available, and the lack of up to date population data (reliant on census) it is difficult to draw any useful conclusions. An 8% increase against a stable population would suggest a credible increase, whereas against a similar rise in population shows "no change". A factor influencing analysis of this figure is also the nature of those people making a lifestyle shift to Tauranga. If they are shifting for a quieter, more healthy lifestyle, opting to cycle may be a natural choice for them meaning that the resident population has made no change. Future data will help clarify this.

# 6.5 Number of pedestrians

### 6.5.1 Pedestrian counts on key routes

**Definition:** Pedestrian counts on key routes in Tauranga and Rotorua (conducted at the same sites, at the same time, on the same days each year). Measures use of a sustainable mode. Sources: Tauranga City Council and Rotorua District Council.

Note: there is no new data from Rotorua.

Location		Pedestrians							
LO	Location		2001	2002	2003	2004	2005	2006	2007
Tauranga	Cameron Rd	-	-	-	-	-	-	115	127
0	Matapihi Bridge	-	-	-	-	-	-	35	37
Rotorua <sup>7</sup>	Central Mall	-	756	795	988	1015	885	900	-
	1289 Tutanekai	353	406	373	446	596	504	508	-
	1183 Hinemoa	514	407	370	368	289	320	270	-

Table 7 Pedestrian counts on key routes, Tauranga and Rotorua

Interpretation: A limited amount of pedestrian count data has been collected in both Tauranga and Rotorua. Data has only been collected for two years in Tauranga so no trends can be identified. This data has been reported to establish a baseline for ongoing data collection. Data has now been collected for several years in a number of locations in central Rotorua. A sample has been reported for three of the locations. The figures show that pedestrian numbers for the Central Mall and Tutanekai Street locations have trended steadily upwards, with some fluctuations. In contrast, pedestrian numbers at the Hinemoa St location have generally trended downwards.

**Analysis:** It is difficult to draw any conclusions across the region as different methodologies were used and the timeframes are different. Without knowing *why* people were walking (i.e. were they replacing another mode of transport with walking, walking for recreation, or walking because it is the easiest method of transport -such as between adjacent shops) it is difficult to discern any changes in behaviour relative to strategic goals. The figures show that there is limited data currently available for Tauranga. A lack of consistent data (differing methods were used) on pedestrian numbers is an issue that has been identified in the regional Walking and Cycling Strategy.

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The Tauranga counts were conducted 7-9 am and 2-6 pm.

The Rotorua counts were conducted 10:30-11 am and 2:30-3 pm.

# **Chapter 7: Economic Development**

This chapter measures trends in economic development indicators. The following indicators are reported on:

Traffic volumes: morning and evening peak flows on key congested routes

Travel times: travel delay on key congested routes

Freight movements: volume of exports loaded at Port of Tauranga

### 7.1 Traffic volumes

### 7.1.1 Morning and evening peak flows on key congested routes

**Definition:** Morning and evening peak traffic flows per hour on key congested routes in Tauranga and Rotorua. Measures vehicle numbers on the region's roads. The traffic volumes are typically averaged from daily counts over one week intervals. Data was not collected on the same week and peak times varied slightly depending on location. The duration (1 hour) remained constant. Source: Transit New Zealand peak traffic flow reports.

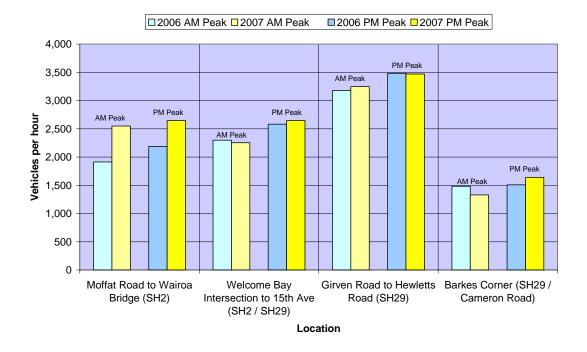


Figure 19 Morning and evening peak traffic flows on key routes, Tauranga (2006 and 2007)

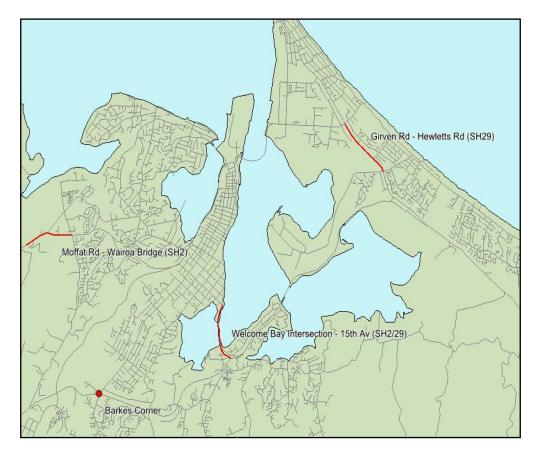


Figure 20 Peak traffic flow locations, Tauranga

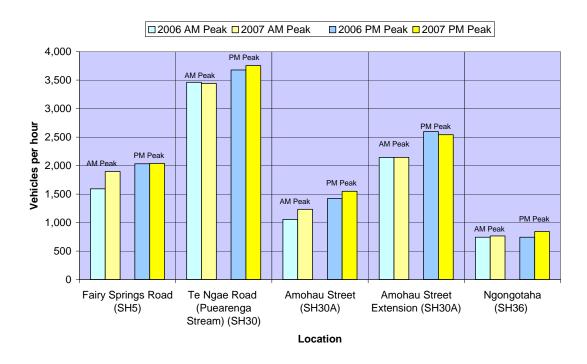


Figure 21 Morning and evening peak traffic flows on key routes, Rotorua (2006 and 2007)



Figure 22 Peak traffic flow locations, Rotorua

Interpretation: While there is still only a two year reporting timeframe there is already some interesting data coming through. Rotorua shows a mostly static traffic flow, with noticeable increases (slightly under 20%) across the two years in morning peak hour flows on Fairy Springs Road and Amohau Street in morning peaks hour traffic. There is no significant increase or decrease in peak hour flow along major routes.

Tauranga shows a similar result with the exception of traffic entering Tauranga from the west, via Moffat road. This route showed a 34% increase in peak hour morning traffic and a 22% increase in peak hour afternoon traffic.

**Analysis:** There are places in both centres which show noticeable increases in traffic flows which is only to be expected with increased population, although it must be observed that the measurements far outstrip population rise. Five of the 16 measurements taken reveal a reduction in flows over the two years, albeit a modest reduction. Three of those 5 measurements are morning so no discernable pattern is emerging yet. Increased traffic flow does not necessarily mean increased congestion as that is relative to a routes capacity, although with inner city increased flows there is undoubtedly likely to be an increase in congestion.

#### 7.2 Travel times

### 7.2.1 Travel delay on key congested routes

**Definition:** Travel delay on key congested routes in Tauranga (minutes delay per km). Provides a measure of congestion using travel time delays as an indicator.

**Start times**: AM Peak 7:30 am to 9:30 pm, PM Peak 4:00 pm to 6:00 pm. **Routes**: Route 1 – State Highway 2 and State Highway 33, Route 2 – State Highway 29 and the Harbour Bridge, Route 3 – Cameron Road and Marsh Street, Route 4 – Cambridge Road, Route 5 – Takitimu Drive, Route 6 - Fraser Street, 11th Avenue, Devonport Road, The Strand, and Dive Crescent, Route 7 - Maunganui Road, Rata Street and Totara Street, Route 8 - Domain Road, Papamoa Beach Road, Maranui Street and Girven Road. Source Transit New Zealand Travel Time Performance Indicators Report.

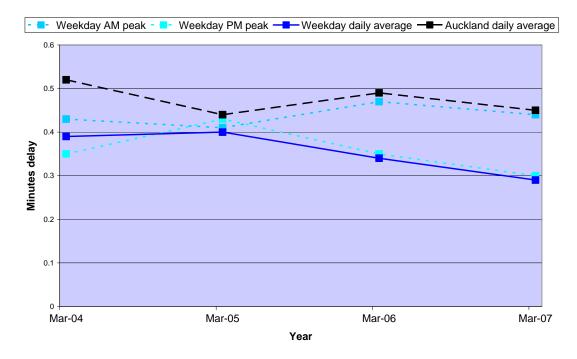


Figure 23 Minutes delay per km on key congested routes in Tauranga

Interpretation: Travel time delays in Tauranga increased at a steady rate from March 2004, peaking at approximately 0.4 minutes delay per km in March 2005. Average time delays have reduced for two consecutive surveys since March 2005. Auckland data has been included for the purposes of comparison. Figures show that average travel time delays in Tauranga are consistently below those of Auckland, although the difference was only 0.04 minutes in November 2005.

**Analysis:** Given that we have seen two subsequent years of a reduction in travel times it would not be out of place to say that this is trend and that congestion is easing on key routes. Notable within this is the issue of morning peak hour congestion and that remains an area of interest for the Councils involved.

# 7.3 Freight movements

### 7.3.1 Volume of exports loaded at Port of Tauranga

**Definition:** Gross weight of overseas cargo loaded at Port of Tauranga (million tonnes). Provides an indicator of infrastructural capacity in terms of the movement of goods. Sources: Overseas Cargo Statistics, Statistics New Zealand.

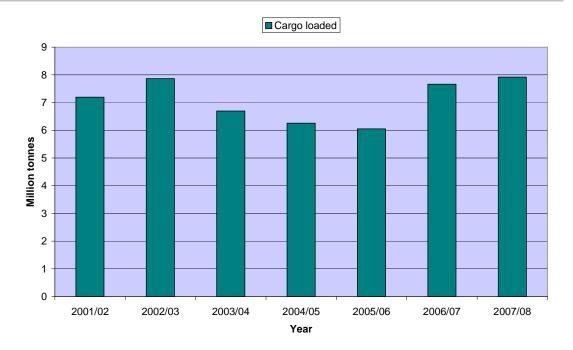


Figure 24 Volume of exports loaded at Port of Tauranga (tonnes)

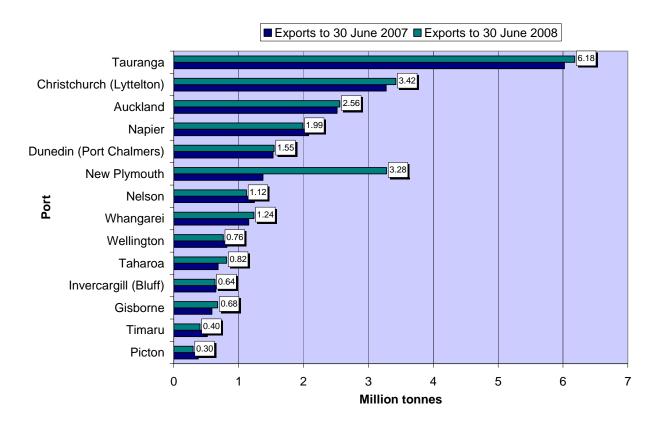


Figure 25 Volume of exports loaded at New Zealand ports 2007/2007(tonnes)

Interpretation: Figure 26 shows that the annual volume of exports loaded at the Port of Tauranga has been consistently above the 6 million tonnes mark over the past few years. Results for 2007/2008 show a new peak, above the 7.87 million tonnes in 2002/2003. Tauranga ranks as New Zealand's most significant port by volume exported, accounting for almost twice the volume of the next ranked port (Figure 27).

Analysis: Clearly the Port of Tauaranga is New's Zealand's most important port for exporters, handling almost twice the volume of its closest rival, and its trend upwards from 2006 cements that position. Even at its lowest point this decade it surpassed all others by a long way. The volume of exports passing through it is clearly increasing and is anticipated to continue to do so. While this increase has important benefits for the economy of the region it clearly has impacts on the regions transport system and these need to be given due consideration both to ensure efficient and reliable access to and from the Port and to ensure other traffic flows are minimally disrupted by increasing volume to the port.

# **Chapter 8: Energy efficiency**

This chapter measures trends in energy efficiency indicators. The following indicator is reported on:

Fuel consumption: quantity of fuel sold

### 8.1 Fuel consumption

### 8.1.1 Quantity of fuel sold

**Definition:** Quantity of petrol and diesel sold in the Bay of Plenty (local authority fuel tax boundaries). Provides a measure of fuel use in the region. Source: Sales figures collected by Rotorua District Council for taxation purposes.

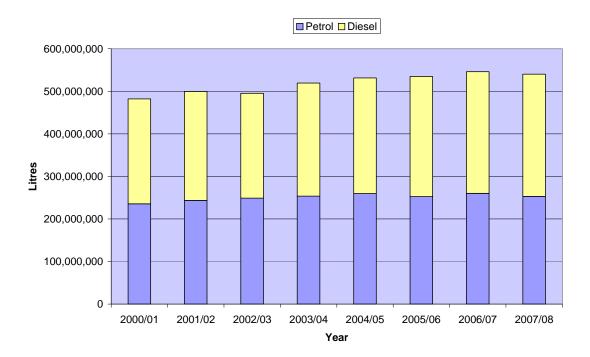


Figure 26 Quantity of fuel sold in the Bay of Plenty (litres)

Interpretation: The graph shows a steady upwards trend in overall fuel sales, with a slight easing in 2007/2008. In general, diesel sales have increased at a faster rate than petrol sales. In the 2006/2007 year, diesel accounted for 52% of sales by volume. For the purposes of comparison, the Wellington region recorded overall fuel sales of 464 million litres in 2005, somewhat less than the Bay of Plenty despite having a significantly larger population base. The two regions also display different

fuel sales profiles, with diesel making up less than a third of Wellington fuel sales, compared with over half in the Bay of Plenty.

Analysis: In recent years, fuel sales in the Bay of Plenty have generally kept apace with the changes in the region's vehicle fleet (see Figure 6) and rising population. For example, a decrease in registered vehicles between 2001 and 2002 was reflected in a dip in fuel sales in the 2001/2002 financial year. Fuel sales increased by 2.1% in 2006/2007, while the number of registered vehicles grew by 1.7%, suggesting little improvement in fuel efficiency is being achieved at the macro-scale. However, between the 2001 census and the 2006 census the region has had an (approximate) 11% rise in population while fuel consumption has gone up by approximately 15%. This can be understood by the increase in wealth of the region reflected in such thing as a 30% reduction in the number of households without access to cars over the same period.

# **Chapter 9: Access and Mobility**

This chapter measures trends in access and mobility indicators. The following indicators are reported on:

Public transport coverage: access to bus services

Accessible buses: percentage of accessible buses

Total mobility: registered users and number of trips

### 9.1 Public transport coverage

### 9.1.1 Access to bus services

**Definition**: Percentage of usually resident population living within 500 m of a bus stop, Tauranga, Rotorua and services within the eastern Bay of Plenty. Tauranga and Rotorua figure is for population within city boundaries as the services primarily cater for urban residents. Eastern Bay of Plenty is the percentage of usually resident population (within Whakatane, Opotiki or Kawerau District Councils) who live within 500 m of a bus stop within the sub-region. Calculation assumes the population is evenly distributed over a meshblock. Sources: Environment Bay of Plenty, Tauranga City Council and Statistics New Zealand (Census 2006).

Table 8 Percentage of population living within 500 m of a bus stop

Sub-region	2006/07	2007/08
Tauranga urban area	85.0%	86.9%
Rotorua <sup>8</sup> urban area	-	95.2%
Eastern Bay of Plenty	15.1%	28.03%

**Interpretation:** Data on public transport coverage was collected for the first time in the 2006/2007 year to provide a baseline figure for future reporting. The two subregions that show two years worth of data both show increased access for their populations. Levels of public transport accessibility are depicted in the maps on the following pages (Figures 29 - 34).

*Analysis:* Initial data shows that a high proportion of the Tauranga city population lives within 500 m of a bus stop. While just over 15% of the eastern Bay of Plenty population lives within 500 m of a bus stop, comparisons should not be made with

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Although current data for the Rotorua service is not available, earlier work based on Census 2001 data found that 91.1% of the Rotorua population lived within 400 m of a bus route.

the Tauranga service given the much smaller and more dispersed population in the eastern Bay of Plenty. The maps show that eastern Bay of Plenty services do achieve a broad geographical coverage, albeit at a lower frequency.

While some of the following pictures appear to show oddities (e.g. the single bus stops in Te Puke and Murupara), it is not viable to expect much change to that picture as these are not local services but inter-city services and the nature of their usage is different to local services. By and large the public transport offers realistic coverage of the area.

The challenge for the council is to encourage greater use of the system particularly in the major centres and especially as a replacement to smaller motor vehicles as a commuter (travel to and from work) option. There are a number of factors influencing resistance to this, foremost being personal habit. However, having a comprehensive bus network on hand is the first step to meeting that challenge.

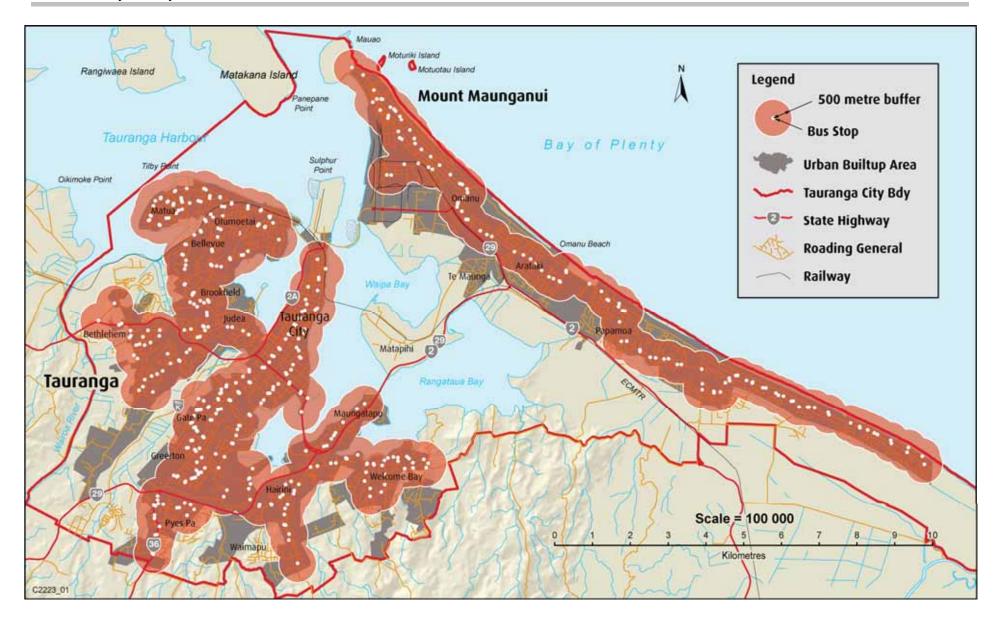


Figure 27 Public Transport Accessibility - Tauranga

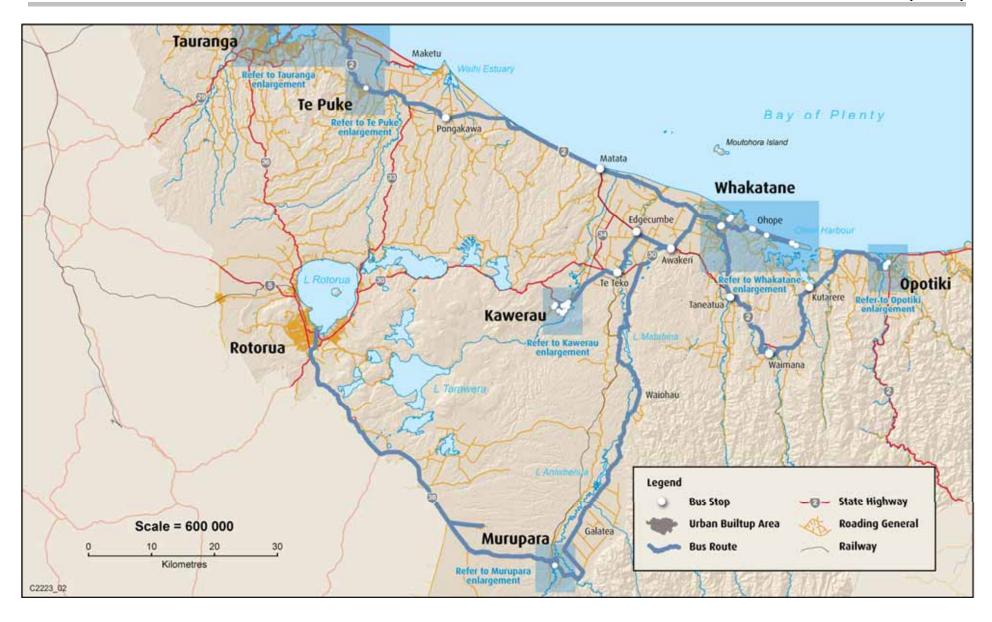


Figure 28 Public Transport Accessibility - Eastern Bay of Plenty

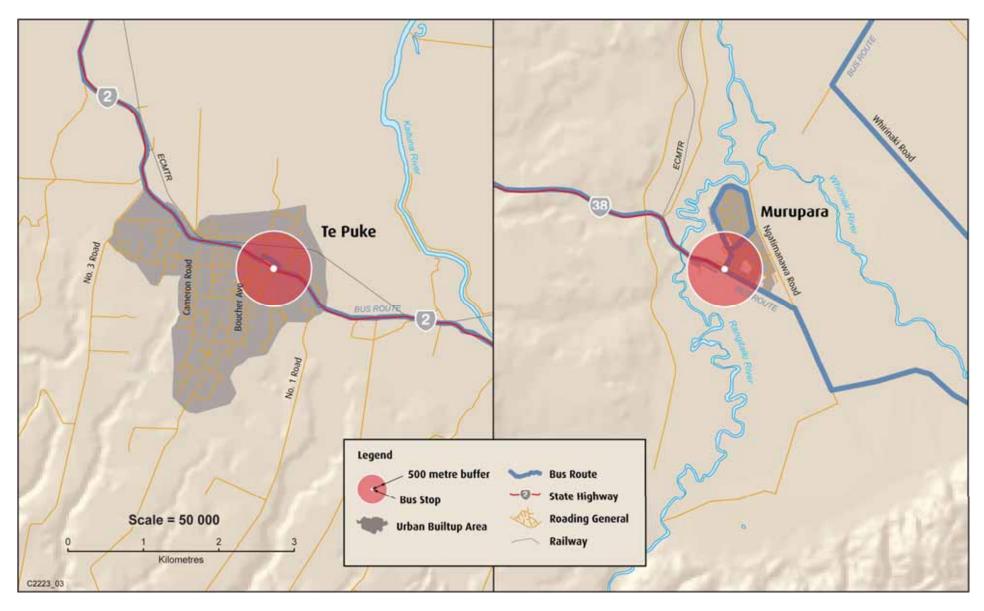


Figure 29 Public Transport Accessibility – Te Puke and Murupara

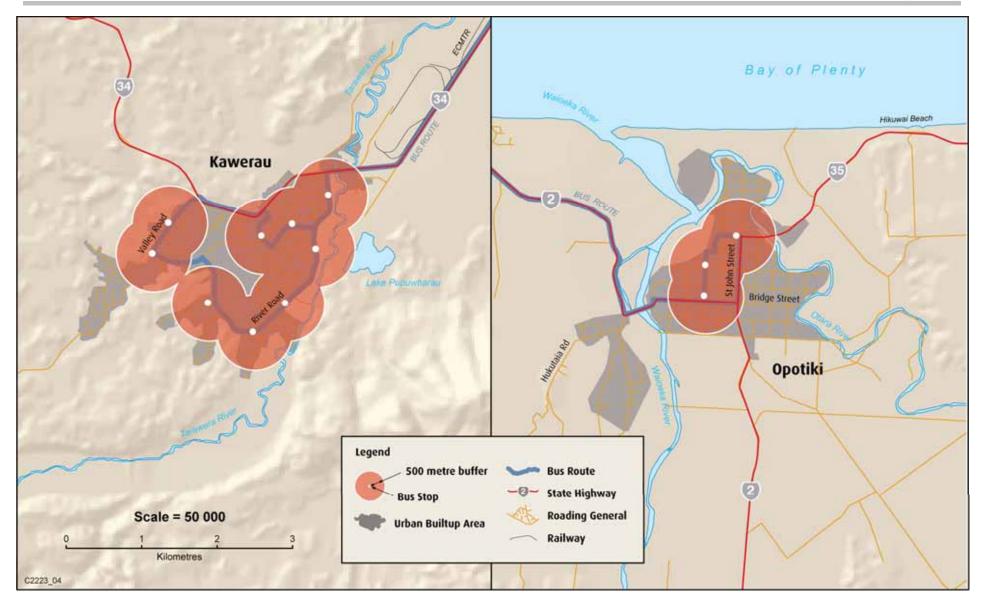


Figure 30 Public Transport Accessibility – Kawerau and Opotiki

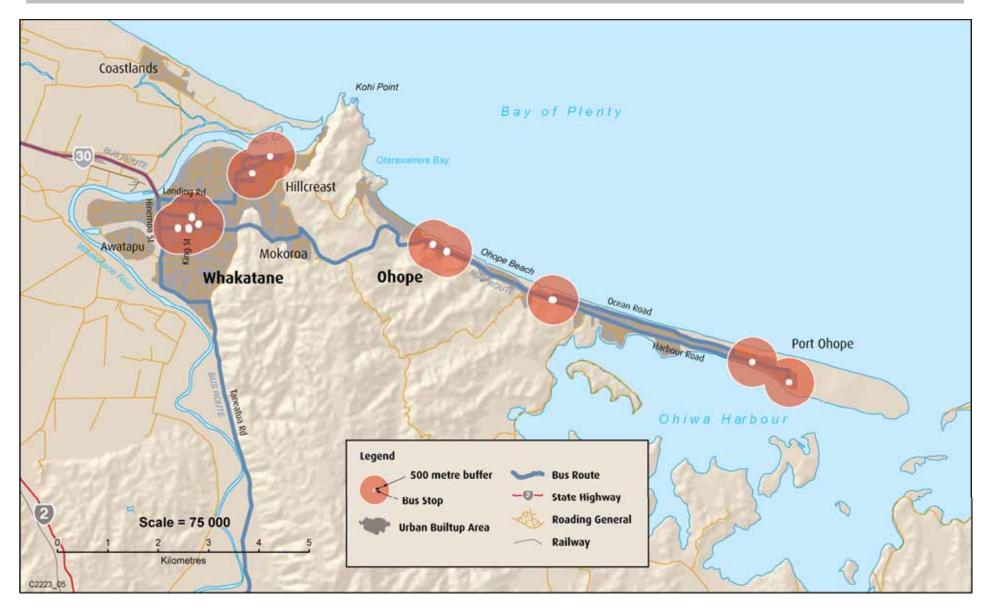


Figure 31 Public Transport Accessibility – Whakatane and Ohope

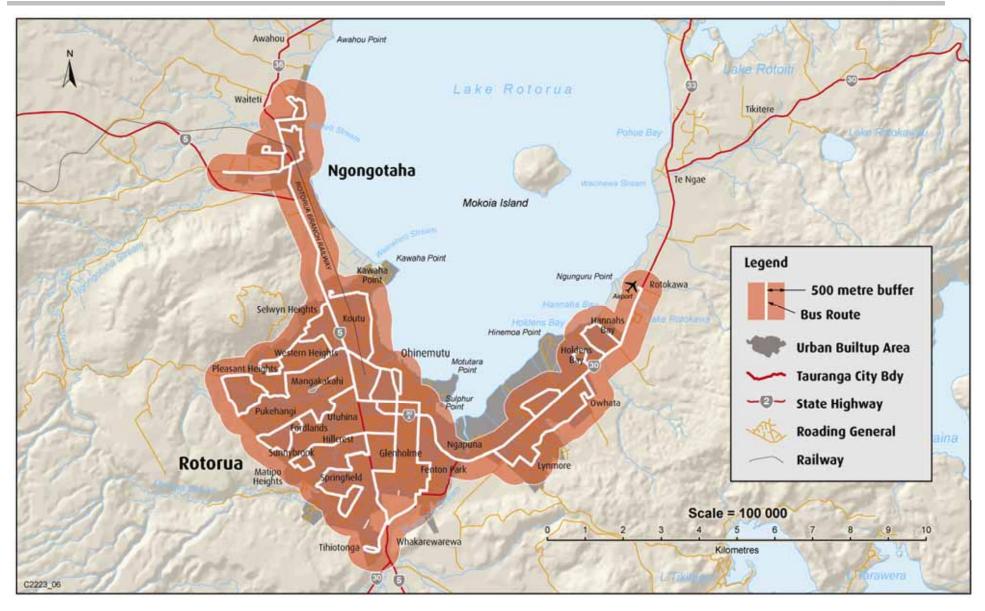


Figure 32 Public Transport Accessibility – Rotorua

### 9.2 Accessible buses

### 9.2.1 Percentage of accessible buses

**Definition:** Percentage of accessible buses in the public transport system. The indicator provides a measure of accessibility for people with impairments. Accessible bus is defined as a two-door wheelchair accessible bus with low entry and exit areas without steps and without internal steps between the front and rear doors. Source: Environment Bay of Plenty.

Table 9 Percentage of accessible buses in the Bay of Plenty public transport system

Region	2006/2007	2007/2008	
Bay of Plenty	<5%	<5%	

**Interpretation:** Data on the percentage of accessible buses has been collected for the first time in 2006/2007 to provide a baseline for future reporting. While the 2007/2008 figures show no movement it should be noted that three new accessible buses have been added to the Rotorua fleet.

**Analysis:** The figure shows that only a very small proportion of the public transport fleet caters for people with impairments.

### 9.3 **Total mobility**

### 9.3.1 Registered users and number of trips

**Definition:** Number of registered users and number of trips taken using the region's total mobility scheme. The scheme provides subsidised fares and adapted vehicles for the mobility impaired, so usage figures are totally generated by demand, rather than supply considerations. The performance indicator provides a measure of access to services for people with impairments. Source: Environment Bay of Plenty.

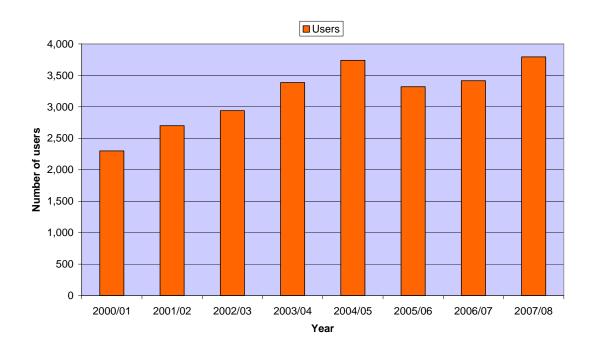


Figure 33 Total mobility scheme – registered users

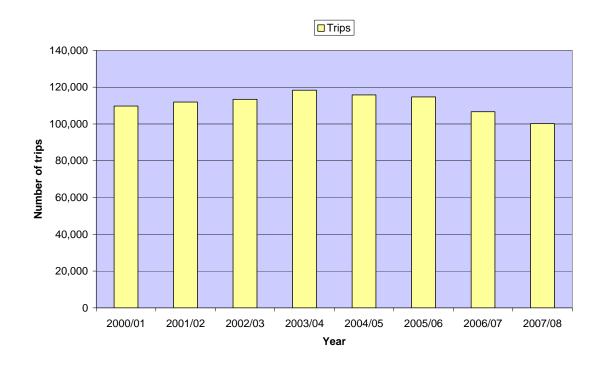


Figure 34 Total mobility scheme – annual number of trips

**Interpretation:** The number of registered users grew steadily to a peak of 3,740 in the 2004/2005 financial year. Numbers have levelled out at just under 3,500 users in the past two years, followed by a steep increase in 2007/2008. The number of trips has remained fairly consistent at around 105,000 – 120 000 over the last seven years. Demand peaked with 118,000 trips taken in 2003/2004, since then there has been a steady decrease in demand.

**Analysis:** The figures indicate that the total mobility scheme has reached the point where service provision is meeting the levels of demand. The measurable decline in usage over the past five years suggests that, while total mobility service is still highly valued as a backstop by users, their transport needs are being better served by an increase in other options, such as public transport.

Total mobility is still being used for longer journeys where door to door service is essential e.g. hospital visits or appointments with health specialists.

# **Chapter 10: Public health**

This chapter measures trends in public health indicators. The following indicators are reported on:

Transport emissions: levels of carbon monoxide and particulate matter

Unsealed roads: length and amount of traffic

## 10.1 Transport emissions

### 10.1.1 Levels of carbon monoxide and particulate matter

**Definition:** An eight hour moving average of carbon monoxide (CO) and 24 hour average data for particulate matter (PM10) measured against the equivalent national environmental standard. The levels of CO and PM10 are recorded at fixed sites (residential) in Tauranga and Rotorua to provide a background measure of transport related emissions. Source: Environment Bay of Plenty.

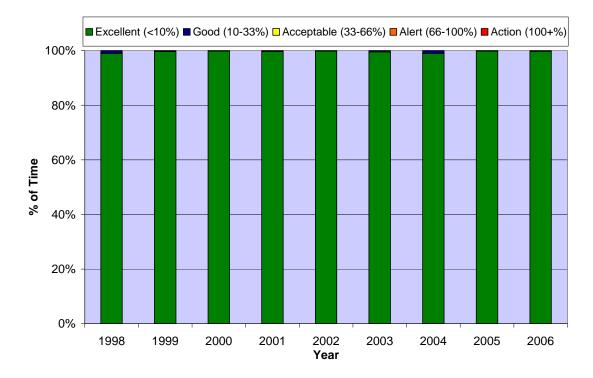


Figure 35 Carbon monoxide levels, Otumoetai Road, Tauranga

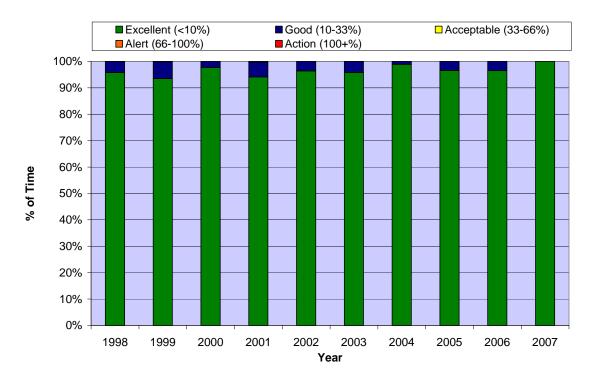


Figure 36 Carbon monoxide levels, Pererika Street, Rotorua

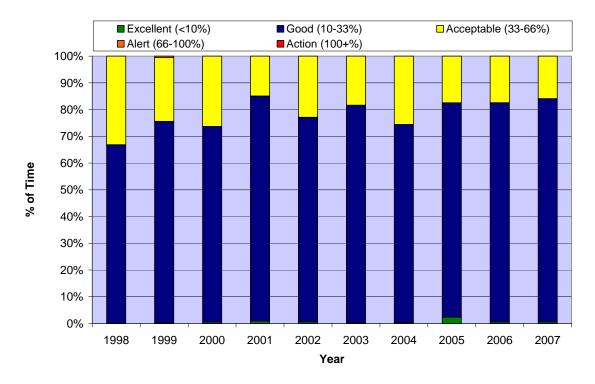


Figure 37 Particulate matter (PM10) levels, Otumoetai Road, Tauranga

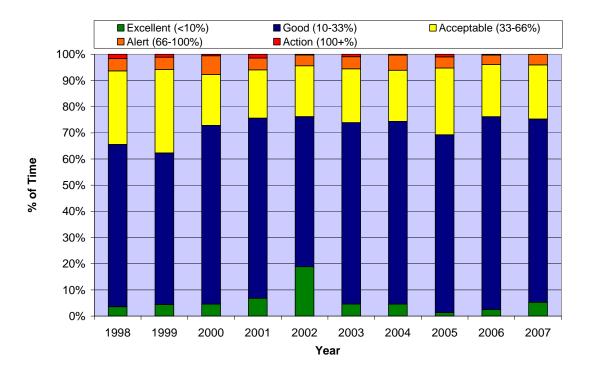


Figure 38 Particulate matter (PM10) levels, Pererika Street, Rotorua

*Interpretation:* The Tauranga and Rotorua sites display similar results for background levels of carbon monoxide. The vast majority of readings show carbon monoxide levels as being 'excellent' (less than 10% of the equivalent national environmental standard). The Rotorua figures show slightly more readings in the 'good' until 2007, when no 'good' readings were recorded.

Both the Tauranga and Rotorua sites show significantly higher levels of particulate matter when measured against the equivalent national environmental standard. The majority of readings in Tauranga register as 'good' or 'acceptable'. 'Alert' levels were reached on two occasions in Tauranga in 1999, but have not been repeated in subsequent years. Readings in Tauranga have shown signs of relative improvement in the past three years. Rotorua readings show that action levels are occurring less frequently.

Figures for the Rotorua sites were somewhat poorer than those for Tauranga. Levels of particulate matter were recorded as being above acceptable levels on numerous occasions between 1998 and 2005. The national environmental standard was also exceeded several times during these years. Like Tauranga, some improvement has been evident, with no breaches of the national environmental standard since 2005.

**Analysis:** Results indicate that background levels of carbon monoxide are not problematic in either of the region's two largest urban centres. Levels of particulate matter associated with diesel combustion appear to be more of an issue, particularly in Rotorua. Levels have exceeded the 'acceptable' threshold numerous times in recent years. While there are some signs of improvement, further evidence is required to establish whether this is a trend reflecting better environmental practices, including the reduction of particulate emissions from heavy vehicles.

Note: Not all carbon monoxide and PM10 is produced by vehicles. In 2008 the Environment Bay of Plenty proposed a collaborative program to reduce wood burning fires in Rotorua, a major source of airborne pollution exacerbated by the local geographies propensity to develop inversions layers (which retain CO and PM10 in the local atmosphere). When this program is ratified the reporting on CO and PM10 levels are expected to drop significantly.

#### 10.2 Unsealed roads

Table 10

### 10.2.1 Length and amount of traffic

**Definition:** Percentage annual reduction in the length of unsealed roads, and the average amount of traffic on unsealed roads, by district/city. The indicators provide a measure of the amount of dust generated by traffic on unsealed roads. Source: district and city councils.

Bay of Plenty local authority seal extension programmes (2007/2008)

		Total length	Total length of	Percentage	Vehicle kms
I	Diotriot/City	of unsealed	seal extensions	reduction in	travelled per km

District/City	Total length of unsealed roads at year end (km)	Total length of seal extensions completed in 2007/08 (km)	Percentage reduction in length of unsealed roads	Vehicle kms travelled per km of unsealed road per day
Western Bay of Plenty	276	12.0	4.2%	75.2
Whakatane	210.3	6.1	2.8%	83.4
Rotorua	176	7.0	3.8%	49.9
Opotiki	190.2	2.56	1.33%	15.2
Tauranga	0.4	0	0	24
Kawerau	09	n/a	n/a	n/a

Interpretation: Four districts within the region currently have over 150 km of unsealed roads (Western Bay of Plenty, Whakatane, Rotorua, Opotiki). The figures show that all four territorial authorities are actively undertaking seal extension programmes. Unsealed roads in the Whakatane and western Bay of Plenty districts carry the most traffic per kilometre.

Analysis: The Whakatane and Western Bay of Plenty stand out as the districts in which unsealed roads are used the most. While population proximity is also a factor in terms of public health impacts, these are parts of the region where dust nuisance may be an issue. The figures demonstrate that both districts are actively reducing the amount of dust generated through seal extension programmes and dust suppression measures.

Aside from examining the negative health impacts of emission from motor vehicles there are also issues around developing initiatives that promote health and wellbeing through transport related activities such as cycling and walking, either as an alternative to regular transport practices or as recreation.

No unsealed roads accessible to the public.

# **Chapter 11: Implementation progress**

# 11.1 **Activity in 2006/2007**

This section summarises RLTS implementation progress to 30 June 2008. The primary focus during the reporting period was the production of the Draft Regional Walking and Cycling Strategy and the development of this document. Limited staff, and changes to legislation meant that progress on the RLTS Actions was hindered. An RLTS implementation plan was developed on completion of the 2007 review of the RLTS, and work commenced on implementing the priority actions in the reviewed strategy. The main areas of work included:

- Ongoing development of the Bay of Plenty transport funding package.
- RLTS performance indicators data collected for 2007/2008.
- RLTS Implementation Plan monitored (date).
- Draft Walking and Cycling Strategy consulted.

The RLTS Implementation Plan was developed in May 2007 to guide implementation over the three year life of the 2007 RLTS. The 66 actions in the strategy were divided into 26 project-based actions and 40 ongoing or process orientated actions. The project actions were then prioritised and programmed for implementation in either year 1 (2007/2008), year 2 (2008/2009) or year 3 (2009/2010). Work then commenced on the year one priority actions prior to the end of the 2006/2007 year. Work also continued on a number of the ongoing actions in the strategy. That means the implementation plan appended to the RLTS 2006/2007 Annual Report included the same Year 1 Activities as this report. The attached tables report on implementation progress to up until 30 June 2008.

#### Conclusion

The first part of the 2007/2008 year was largely devoted to reviewing the RLTS. This process became longer and more complex than anticipated due to ongoing uncertainty about the cost of strategic roading projects and the implications for the Bay of Plenty transport funding package. Implementation proceeded more smoothly once the RLTS had been finalised and an implementation plan developed. An RLTS Implementation Team had been convened and several priority actions were being progressed at the close of the 2006/2007 year.

# 11.2 **Priority project actions**

### 11.2.1 **Year 1 actions**

Implementation Order	Action	Responsibility	Progress
1	4.4 Establish a joint Tauranga City Council (TCC), Environment Bay of Plenty (EBOP) and Land Transport NZ (LTNZ) working group in order to progress and align public transport in Tauranga.	TCC, EBOP, LTNZ.	Following a review of how the Regional Council delivers its land transport functions, EBOP has taken a leadership role with Passenger Transport in Tauranga. The Regional Council has committed to improving passenger transport services in Tauranga.  EBOP and TCC staff continue to meet regularly on matters relating to the Regional Council's Tauranga bus service.  The two organisations also continued developing a Tauranga passenger transport model through Smart Transport and a joint marketing and communications plan for Tauranga buses.
			A network review has been carried out. We have initiated, but not completed a TCC/western Bay funding plan.
2	4.5 Establish a Joint Officials Group to progress the Ministry of Education's (MoE) proposal in relation to school buses in Tauranga.	EBOP, MoE, TCC, Western Bay of Plenty District Council (WBOPDC), LTNZ.	A group including EBOP, LTNZ, MoE and TCC meets regularly. A Memorandum of Understanding between EBOP, TCC and the MoE has been finalised.  We are presently developing a project plan for the next six years.
3	9.4 Establish a priority road route between the western Bay of Plenty sub-region and the Waikato, and into Auckland.	SmartGrowth Implementation Committee, EBOP, in conjunction with Transit, TCC, WBOPDC (also consult with Environment Waikato, Auckland regional authorities).	This action is being addressed in an 'Inter-regional Transportation Study' being led by Environment Waikato.  A 'Project Steering Group' including representatives from Environment Waikato, EBOP, Auckland Regional Council, Taranaki Regional Council, Transit, ONTRACK and LTNZ have finalised Terms of Reference and this has now been released for procurement.

Implementation Order	Action	Responsibility	Progress
4	4.8 Investigate and implement a regional pedestrian and cycling strategy initiative.	EBOP to lead, all implementing agencies to contribute.	A draft strategy was developed by via Strada with the assistance of a regional walking and cycling working group in November 2007. The draft strategy was released for consultation in April 2008. Submissions suggested a lack of strategic direction, and the hearing sub committee decided this document needs to be reworked with the assistance of the technical working group before a final can be released.
5	9.7 Undertake work to ensure that the existing rail corridor between the Bay of Plenty, Waikato and Auckland has the necessary protection and capacity to allow increased use and movement of freight in the long-term.	EBOP to lead, input from ONTRACK, Toll, Port of Tauranga, territorial authorities, Environment Waikato.	Environment Waikato received JOG funding for route security and improvement of the rail line between the Port of Tauranga and Hamilton. EW are looking at spending some of this funding on construction of a passing line near Omokoroa.
6	<ul> <li>1.8 Implement the actions contained in the SmartGrowth/ Smart Transport Tauranga Eastern Corridor Study 2006:</li> <li>RPS Change 2</li> <li>Plan Change 44 (Wairakei)</li> <li>Plan Change 33 (Rangiuru)</li> <li>Agree the most appropriate location/design of Wairakei/ Te Tuma town centre</li> <li>Funding plan for Eastern Corridor</li> <li>Transport network layout for Eastern Corridor</li> <li>Investigate effects of proposed land use on the existing and future transport network</li> <li>Investigate alternative modes for the Eastern Corridor</li> </ul>	Smart Transport, SmartGrowth IMG, TCC, WBOPDC, NZTA, EBOP, key stakeholders.	RPS Change 2 Appeals to Change No.2 (Growth Management) to the Regional Policy Statement (RPS) being resolved. To date 8 of the 15 appeals lodged with the Environment Court have been settled. See SmartGrowth Implementation Monitoring Report - For period 1 June - 30 September 2008 for details on current outstanding appeals.  Judicial pre-hearing conference held with Environment Court on 1 September 2008. Timetable for evidence agreed to for hearing of the remaining appeals by Court in April 2009.  Variation 1 to proposed Change No. 2 to the RPS notified in November 2007. Hearings held 28 April 2008. Decisions due to be released with WBOPDC Plan Change 69 for Omokoroa in October 2008.  Plan Change 44 (Wairakei) and 33 (Rangiuru)  Council decisions released and appeal period closed for plan change 44. Around 6-7 appeals expected. TCC will endeavour to negotiate as many as possible.

Implementation Order	Action	Responsibility	Progress
	Note: SmartGrowth Action 5: Ensure that the relevant land use changes and regulatory processes are implemented to support the		Wairakei and Tauriko plan changes provide more zoned land for business purposes, particularly employment. Plan Change 33 Rangiuru Business Park Appeal resolved.
	Eastern Corridor.		Location/design of Wairakei town centre
			Subject to the outcome of Wairakei Plan Change 44. The Plan Change decision appeals will include this matter and will need to be addressed through the appeal process. Further work will need to be done on the design of the Bell Road interchange interaction with the town centre.
			TCC report on Te Tumu financial impacts did not support extension of Wairakei town centre into Te Tumu in the short term. However, the need to design Bell Road interchange and its lead in roading is acknowledged as important for earlier detailed work.
			Land Transport is working with TCC to investigate transport layout options. TCC are undertaking preliminary work on the opportunities for town centre and interchange.
			See SmartGrowth Action 5 below.
			Funding plan for Eastern Corridor
			Achieved in February 2008 but to be reviewed as part of the three year programme by July 2009.
			Note: Needs to be linked to the RLTS funding plan.
			Transport network layout for Eastern Corridor
			Network layout (i.e. what the motorway may look like and implications for local road network) was considered as part of scoping the potential cost. This is currently being developed by TCC.

Implementation Order	Action	Responsibility	Progress
			Investigate effects of proposed land use changes on transport network  Updated SmartGrowth land use and growth predictions were used for predicting Eastern Corridor road network requirements.  Investigate provision for alternative modes  This has occurred as part of the development of the Eastern Corridor Study and the strategy evaluation for LTNZ. Was also addressed at the WBOP rail workshop in 2006. Some further work needs to be done in terms of PT requirements and funding. EBOP to address Passenger Transport level of service through their Ten Year Plan 2009-2019 processes. EBOP and TCC to lead this action but report progress though SmartTransport. Detailed design is active.  SmartGrowth Action 5:  This is currently occurring with Change 2 – RPS; PC 44; PC 33; PC 25. These all need to be concluded.
7	2.3 Reduce truck volumes in residential, pedestrian and any other inappropriate areas.	All (EBOP to coordinate; NZ Police, Toll Rail, ONTRACK, Port of Tauranga to contribute).	This action is still yet to commence.  Note: What is the objective behind this action? Is it to promote bypasses in satellite towns, promote a focus on trucks in road safety campaigns, or to shift mode share of freight.
8	5.7 Establish a regional business- based transportation stakeholder group.	EBOP.	This action is still yet to commence. A business based transportation group will probably be developed as the RLTP is developed. The focus of this group needs to be clearly defined – is it around carbon reduction, and promotion of sustainable modes of transport, or more about mode share for freight.
9	7.1 Review the Total Mobility Programme as an input to the revised Regional Passenger Transport Plan.	EBPOP, LTNZ.	The Review of the Total Mobility Plan is awaiting review of the Regional Passenger Transport Plan.  Council has implemented Phase 1 of the NZTA Total Mobility Review.

Implementation Order	Action	Responsibility	Progress
			Council is in the process of implementing Phase 2 of the NZTA Total Mobility Review.

## 11.2.2 Year 2 action

Implementation Order	Action	Responsibility	Progress
13	7.3 Investigate any impediments to major access routes for remote areas.		While this is a Year 2 action, the RLTS Implementation Team held initial discussions on the issue to enable funding to be secured for completion next financial year. The project is likely to involve a risk assessment of road and rail routes in the region to establish the priority route security issues and recommend work that needs to be done.

## 11.2.3 **Ongoing actions**

Action	Responsibility	Progress
1.1 Review LTCCP and other stat documents to ensure consistency with RLTS.	All.	Staff have regular input into the development of council statutory documents.
2.4 Regional Council to continue to work with LTNZ (now NZTA) on road safety education initiatives for the region.	EBOP, LTNZ, with territorial authorities and ACC.	Staff meet regularly with NZTA education advisors, and with sub regional road safety committees to address regional road safety issues. In 2007/2008 one road safety campaign was carried out by Beca (Bike Wise Week 2008).
2.5 Investigate and implement various road safety initiatives, particularly to enable cyclists and pedestrians to have safe access along and across roading networks.	EBOP, LTNZ.	Bike Week was run in February 2008. This employed various road safety initiatives to promote safe behaviour around bicycles.

Action	Responsibility	Progress
3.1 Maintain regular contact with central government in order to anticipate and make a contribution	EBOP to lead, all agencies to be involved	Staff regularly attended Passenger Transport Advisory Group and Regional Transport Officer meetings throughout the year.
to national transport policy		Regional comments on NZTS collated and forwarded to Local Government NZ (January).
		Staff attended regular LTNZ/Transit forum in Hamilton to keep up to date with the development of the NZTA under the Land Transport Amendment Act 2008.
		Staff involved with initiating free off peak travel for Super Gold Card Holders at a national level.
4.3 Implement the revised RPTP and progress a full review of the		The RPTP was implemented in 2006.
plan in 2006/2007.		A full review of the plan is overdue, but awaiting approval of the Public Transport Management Bill 2007, and guidance from NZTA. It will continue to be revised every three years.
4.7 Continue with stock truck effluent programmes.	Transit.	Little progress has been made this financial year. Staff continue to attend national working group meetings and promote the issue in any available forum. The SH29 Stock Effluent Disposal Facility has been deferred to 2009/2010.
4.9 Implement local pedestrian and cycling strategies.	Territorial authorities, Transit.	Opotiki District
		The Draft Opotiki Walking and Cycling Strategy is in development.
		Rotorua District
		Rotorua has an existing Bike Rotorua Strategy (3 <sup>rd</sup> year 2007/2008). The network is continually extending with the regular addition of new facilities. Cycling data will be collected in the 2008/2009 financial year.
		Rotorua's Draft Transport Demand Strategy continues to be implemented with a focus on the CBD and modal change.
		A Rotorua cycling map is available free of charge and includes information on infrastructure and tracks (including mountain biking).
		The Rotorua District Council won Bike Wise Week 2008 for companies of its size.

Action	Responsibility	Progress
		Tauranga City
		Implementation of the Integrated Transport Strategy continued in 2006/2007. Progress on pedestrian/cycling elements included:
		<ul> <li>Installation of 4.7 km of walkways/cycle ways and cycle lanes for a city wide total of 54.7 km.</li> </ul>
		Installation of a further 4 km of footpaths as per the agreed LOS in the LTCCP.
		Installation of 15 cycle stands around the city.
		Work was continuing with Transit on SH walking/cycling facilities at the Wairoa Bridge, Poike/SH29 intersection and other sites.
		Working towards the release of a map of walking and cycling facilities around the city.
		The Kids can Ride programme is now in almost every school in Tauranga and a DVD has just been produced to assist with teaching safe cycling in schools.
		Western Bay of Plenty District
		The Draft Western Bay of Plenty Walking and Cycling Strategy continues in development.
		Whakatane District
		The Whakatane Walking and Cycling Strategy was adopted in October 2007. Work is underway to implement the Strategy.
		A cycle and pedestrian network has been identified in Whakatane.
		]

Action	Responsibility	Progress
5.4 Implement the Bay of Plenty Rail Strategy 2005.	EBOP, Toll Rail, ONTRACK, LTNZ, Port of Tauranga, SmartGrowth Implementation Committee, Environment Waikato.	Feasibility reports were programmed for projects in the following areas:  Bethlehem Route J Poike Road Welcome Bay link to BOP Polytechnic Te Maunga (pedestrian link) Mourea Bridge (Okere Falls).  The Rail Strategy was reviewed and updated in August 2007. The purpose of the review was to update the 2005 strategy to:  reflect the outcomes of implementation, particularly the western Bay of Plenty subregion rail workshop;  include the recommendations from a comparative review of rail policy in the RLTS and SmartGrowth Strategy;  incorporate information from other initiatives completed since the Rail Strategy was first produced e.g. Rotorua Strategic Rail Assessment; and  include new information on recent rail trends in the region.  Little has been done to progress the actions in the rail strategy.
6.2 Promote the use of renewable fuels.	EBOP.	The Rotorua bus contract states that all buses must meet the Euro 4 emission standards.
7.4 Maintain and enhance accessible transport links to and from rural and isolated areas.	EBOP with input from Environment Waikato.	All rural bus services continue at the same level of service, except Murupara which has increased in frequency and now runs two times weekly.
8.1 Understand the existing emissions profile.	Environment Bay of Plenty.	The contribution made by transport emissions has been assessed as part of the Rotorua emissions inventory.
8.2 Undertake seal extensions to reduce dust.	Territorial authorities.	The following seal extensions were completed in the 2007/2008 financial year:  Total length of Seal Percentage reduction in length of at year end (km) in 2006/07 (km) of unsealed roads  Western Bay of 276 12.0 4.2%

Action	Responsibility			Pr	ogress	
			Plenty			
			Whakatane	210.3	6.1	2.8%
			Rotorua	176	7.0	3.8%
			Opotiki	190.2	2.56	1.33%
			Tauranga	0.4	0	0%
			Kawerau	O <sup>10</sup>	n/a	n/a
8.5 Actively encourage recreational walking and cycling.	Territorial authorities, Transit	EBOP,	Regional co-ordinatio	n of Bay of Plenty B	ike Wise Week (Februar	y – March 2008).
			Work is underway on	construction of a Re	egional Walking and Cycl	ling Strategy.
9.5 Develop strategic studies for key regional corridors.	Transit to lead, with tauthorities, Environment contributing.	territorial Waikato	strategic studies.		y of Plenty Northern (	Corridor and Rotorua
			An inter regional stud	y is underway – see	Action 9.7 above.	

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<sup>&</sup>lt;sup>10</sup> No unsealed roads available to the public.

## 11.3 **Conclusion**

There has been a noticeable lack of progress on implementing the RLTS actions in 2007/2008. This has been due mostly to limited staff capacity and demands from central government to restructure transport planning and implementation. However we have made some progress on a number of actions by carrying out normal work activity. The focus this financial year has been on building suitable governance to manage and understand the demands of the amendments to the Land Transport Management Act.

Six of the nine priority projects have progressed to some extent. There are a number of ongoing actions in the implementation plan which have not progresses far in 2007/2008, however work has progressed on the majority of these ongoing projects.

Ongoing uncertainty about the cost of strategic roading projects and the implications for the Bay of Plenty transport funding package has hindered development on key 'project' actions.

## **Chapter 12: Conclusions**

The RLTS Annual Report 2007/2008 was the second time data on regional land transport performance indicators has been collected and reported in the Bay of Plenty. The emphasis this year has been on ensuring consistency with the 2006/2007 RLTS Annual Report to promote validity around the base measures. In many cases there is insufficient longitude to the data to draw any useful conclusions, and in other cases no new data was at hand (especially data based on the 2006 Census).

While making some good progress on monitoring and evaluating, the RLTS Annual Report 2007/2008 has highlighted a number of further difficulties in collecting useful data. Reliance on other agencies or census data (which is only collected every five years) reduces the ability to analyse other new data against important basic socio-economic information such as population and household size, wealth and other key data.

This situation has been further exacerbated by issues such as the approval of the Land Transport Management Amendment Act 2008, which requires a different focus and the restructure of the regional councils transport resources.

Over time it is clear that the annual RLTS is going to provide a valuable assessment tool but, for the most part, that is some way off. It is important to continue to gather this data regularly to produce useful data.

Those issues aside, it is obvious that a clearer picture of many aspects of transport infrastructure, habits, and accessibility are emerging, and there are things which Environment Bay of Plenty can begin to focus attention on in order to be more effective in implementing its RLTS.

Clearly getting commuters out of cars and into alternatives, be it public transport, cycling or walking, will be a long term challenge. Despite a significant rise in the price of fuel in recent years, and work done in improving and expanding the public transport infrastructure, fuel consumption levels show no signs of abating. Aligned to this there has been a significant reduction in the number of households who don't have access to private vehicles, suggesting that vehicle ownership is still seen as highly desirable. While car ownership is not necessarily an issue of significance to the region, when and where people choose to use their cars is. Issues of congestion and overuse of vehicles has impacts on the economy and health of the region, as well as forward planning for growth and social cohesion.

Clearly the Port of Tauranga will remain a hub of interest in any strategic transport planning. The benefits to the region of maintaining Tauranga's position of most preferred port in New Zealand needs no explanation. Consideration must be given to the ports infrastructural needs and its integration with the transport networks around it.

Overall, access to public transport is constantly improving, however many people are still not in the habit of using it. It is particularly pleasing to note that those with health issues requiring transport assistance are signing up for the Total Mobility in significant numbers and even more interesting to note that their usage of this support is waning, suggesting they are achieving high levels of satisfaction from the general public transport system.

The table below provides an assessment based on the data collected to date, while acknowledging that further information needs to be collected to provide a more complete picture of the progress against strategic actions in the RLTS.

Key							
	significant progress towards outcome		some progress towards outcome	Ţ	some regression from outcome	99	significant regression from outcome
	No	change, or	there is currently	y insufficient	information to m	ake an asse	ssment

Strategic Outcome	Assessment	
Integration and land use	A high proportion of residents in the western Bay of Plenty in particular travel outside their district of residence to work. The figures show there is some way to go before Live, Work and Play principles are reflected in more self-contained travel to work patterns.	
	An initial count of transport interchanges shows a lack of opportunities to transfer between bicycles and other modes. More interchanges are likely to be identified as familiarity with the definition increases.	
Safety and personal security	The region's crash rate rose again in 2007 following a recent downward trend. This is reflected in an increase in the number of recorded fatalities, serious injuries and minor injuries.	
Responsiveness	Figures on perceptions of public transport have been collected for three years only. More information is required to identify any trends.	
Sustainability	Figures show the increasing dominance of the motor vehicle as a means of travel to work, and negligible gains for public transport in terms of modal split. The proportion of drivers amongst those travelling to work is above 90% and increasing over time, suggesting low and decreasing vehicle occupancy rates.  Modal split for freight transported to and from the Port of Tauranga is relatively stable, with significant proportions transported by rail, and a recent increase in the use of coastal shipping.	

Strategic Outcome	Assessment	
	There have been steady gains in public transport usage in the two major urban centres.  Limited information is available for active modes.	
Economic Development	There was promising evidence of a downward trend in travel delays in Tauranga since 2005. Figures show that the Port of Tauranga has the infrastructural capacity to handle significantly larger export volumes.	
Energy Efficiency	Fuel consumption is generally decreased in 2007/2008 in line with a rise in fuel cost. This cannot be linked to fuel efficiency as many factors could reduce the vehicle kilometres travelled.	
Access and Mobility	Significant, and increasing proportions of the population in the region's two largest urban centres live within walking distance of bus services. A much lower proportion of residents in areas outside these centres live within walking distance of a bus stop. However, services outside the cities do provide broad geographical coverage, albeit at a lower frequency. A very low proportion of the current bus fleet meets the definition of accessible.  The number of registered users and trips taken using the region's total mobility scheme has decreased recently, suggesting that service provision is meeting service demand.	
Public Health	Monitoring shows background carbon monoxide levels as being 'good' to 'excellent' in both Tauranga and Rotorua. There are relatively higher levels of particulate matter, especially in Rotorua. However, there have been signs of slight improvement in the measurements from both cities in the past two years.  The districts with higher volumes of traffic on unsealed roads are actively reducing the amount of dust generated through seal extension programmes and dust suppression measures.	

Figure 39 Bay of Plenty local authority seal extension programmes (2007/2008)

Another "pass mark" is a realistic rating for the Councils performance. In some areas of work (such as access and mobility and improvements to the Rotorua Bus infrastructure and services) the Council's performance could be said to be either very good or excellent. However there has been little if any progress on items like sustainability and safety. Unfortunately some of these items are beyond the councils control so while they can take all practical steps to reducing such undesirable events as road fatalities the public must also play its part. Programmes such the Rotorua Air Quality Action Plan (draft) will dramatically improve measurements on airborne particles, demonstrating that not all the issues that transport contributes to are solely the responsibility of the transport sector.