



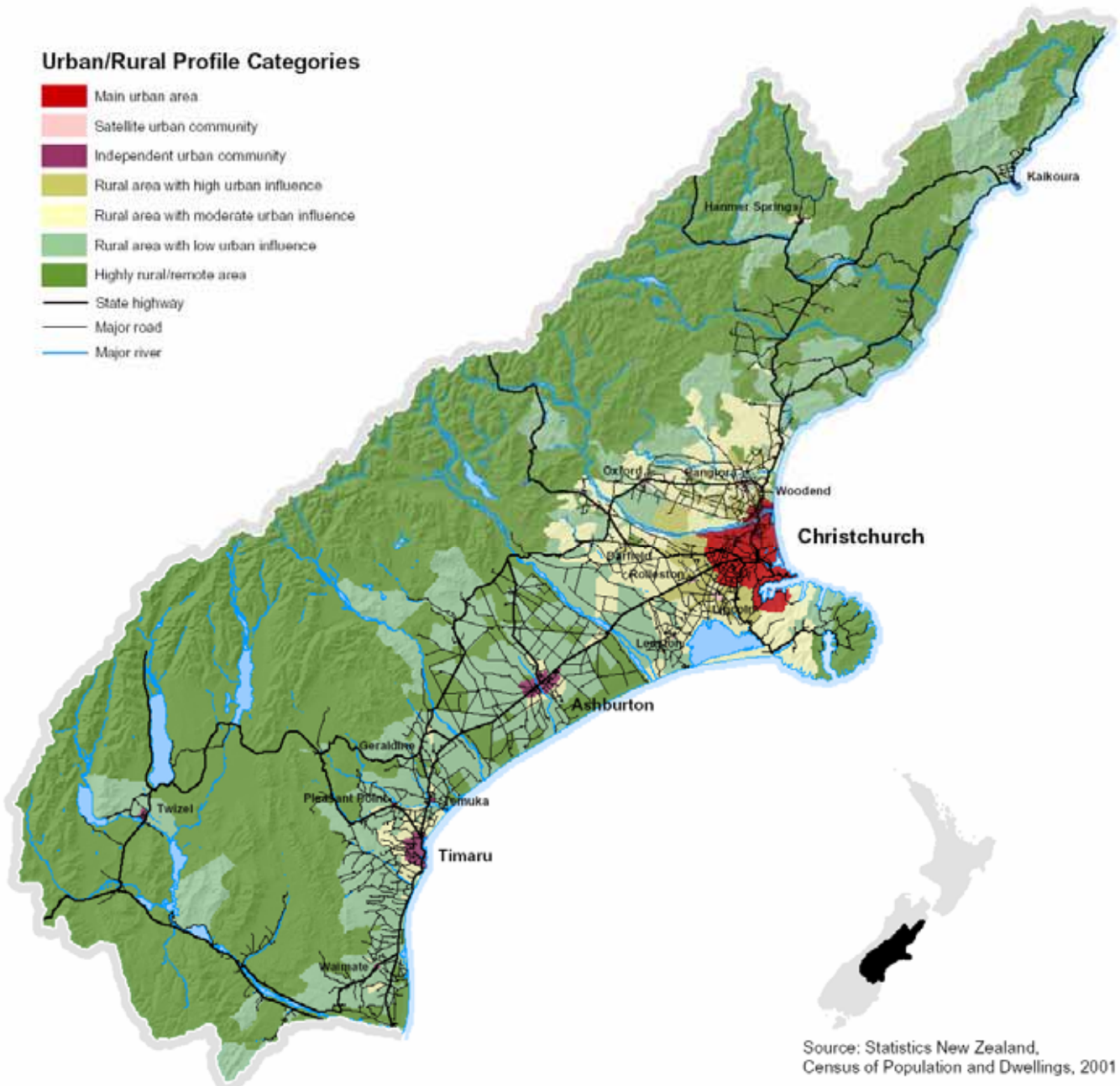
# land transport at a glance

## Mackenzie District

### Map of the Canterbury Region

#### Urban/Rural Profile Categories

- Main urban area
- Satellite urban community
- Independent urban community
- Rural area with high urban influence
- Rural area with moderate urban influence
- Rural area with low urban influence
- Highly rural/remote area
- State highway
- Major road
- Major river



Source: Statistics New Zealand, Census of Population and Dwellings, 2001

## What is *Land Transport At A Glance*?

*Land Transport At A Glance* provides a brief overview of the state of the land transport system.

## What does *Land Transport At A Glance* contain?

It contains key data that describes the contribution that land transport makes to the government's economic, social and environmental objectives for transport.

## What is its purpose?

*Land Transport At A Glance* provides all approved organisations with an evidence base for decision-making.

## Why do this?

The key strategic driver for providing data is the government's requirement that we be evidence-based and outcomes focused.

## Timing

The release of *Land Transport At A Glance* coincides with the publication of the *National Land Transport Programme* (NLTP) by Land Transport NZ on 28 June 2006.

## What are the limitations of the data?

This package is based on available data. There are gaps, which will be filled as quickly as possible. Where data does not presently exist, we will work with sector partners to obtain the data through research and other means.

## Where does the data come from?

We have compiled data from a wide variety of sources and we will continue to refresh it from these sources. Sources of data have been stated under the graphs.

## Is more data available?

A lot more data is available. A document containing detailed information about land transport is presently being prepared for release in December 2006.

## Moving forward

In the long term the intention is to:

- publish *Land Transport At A Glance* each year in June to coincide with the release of the NLTP
- have land transport data available through Land Transport NZ's website.

## Where can I get more information?

More information is available from the manager of performance information at your local Land Transport NZ office.

## What if I have feedback?

Please contact the manager of performance information at your local Land Transport NZ office. We are keen to receive your feedback so that improvements can be made.

## How do I contact land Transport NZ offices?

Phone	Northern Region	09 969 9800
	Midland Region	07 958 7840
	Central Region	04 931 8900
	Southern Region	03 964 2866

## Mackenzie District Canterbury Region

## Statistics for 2005

	Territorial Authority (TA)	Region	National	TA as % of region	Region as % of nation
Population <sup>D</sup>	3,730	526,400	4,098,900	1%	13%
Land area (km <sup>2</sup> ) <sup>D</sup>	7,442	45,346	275,446	16%	16%
Imports (gross tonne) <sup>1 D</sup>		6,587,000	-		10%
Exports (gross tonne) <sup>1 D</sup>		7,093,000	-		10%
Gross domestic product (GDP) (\$) <sup>M</sup>		21,491,000,000	148,551,000,000		14%
Total TA expenditure on land transport (\$) <sup>T J</sup>	2,314,000	76,690,000	873,924,000	3%	9%
Passenger transport - bus boardings <sup>J</sup>		15,224,000	86,666,000		18%
Passenger transport - rail boardings <sup>J</sup>		-	14,255,000		0%
Passenger transport - ferry boardings <sup>J</sup>		98,000	4,082,000		2%
Motor vehicles <sup>D</sup>	3,423	386,811	2,790,610	1%	14%
VKT (km) <sup>V J</sup>	17,000,000	4,882,000,000	38,874,000,000	0%	13%
Is congestion an issue?	No				
Social cost (\$) <sup>D</sup>	14,000,000	467,500,000	3,554,000,000	3%	13%
Deliveries of petrol & diesel (litres) <sup>D</sup>			6,075,000,000		
Energy use by transport (petrol + diesel) (MJ <sup>2</sup> ) [in 2004] <sup>D</sup>			186,800,000,000		
CO <sub>2</sub> emissions from land transport (tonnes) [in 2004] <sup>D</sup>			12,505,000		
Local roads - all urban (km) <sup>J</sup>	51	2,380	16,820	2%	14%
Local roads - sealed urban (km) <sup>J</sup>	45	2,319	16,423	2%	14%
Local roads - all rural (km) <sup>J</sup>	652	11,712	65,434	6%	18%
Local roads - sealed rural (km) <sup>J</sup>	149	5,507	32,819	3%	17%
State highway - all (km) <sup>4 J</sup>		1,327	10,894		12%
State highway - sealed (km) <sup>4 J</sup>		1,327	10,838		12%
State highway - motorway (km) <sup>J</sup>		19	172		11%

<sup>1</sup> indicative only - based on 2002 data. This includes both inter-national and inter-regional freight movement.

<sup>2</sup> 1 MJ = 1 mega-joule = 10<sup>6</sup> joules

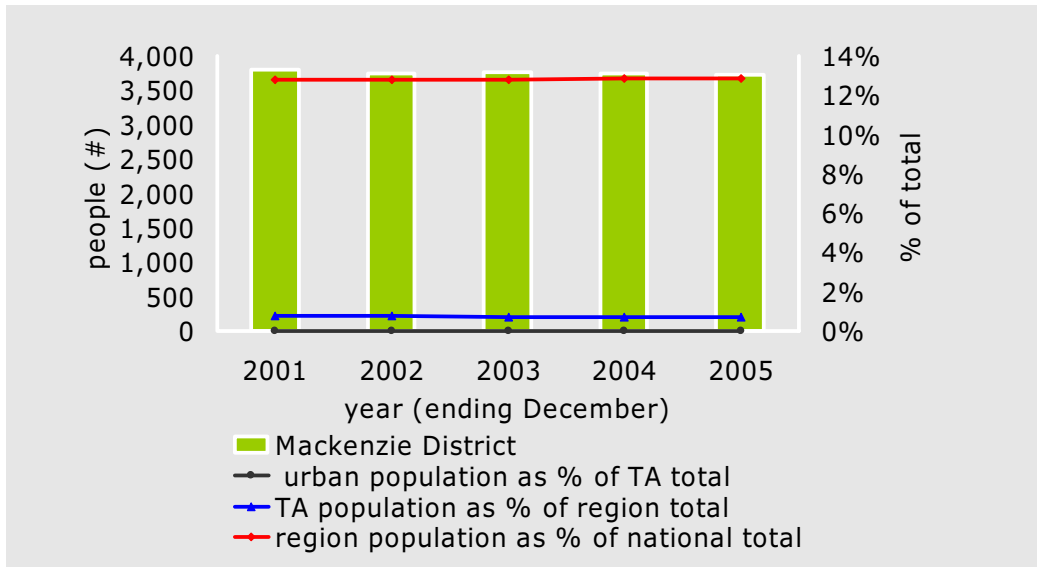
<sup>D</sup> indicates year ending Dec; <sup>J</sup> indicates year ending June; <sup>M</sup> indicates year ending March.

<sup>T</sup> Total expenditure covers local and national contributions to territorial authority expenditure. Regional Council and Transit NZ costs are excluded.

<sup>V</sup> TA VKT = local roads. Regional and national VKT includes local roads and state highways

## Population

### Population estimates for Mackenzie District



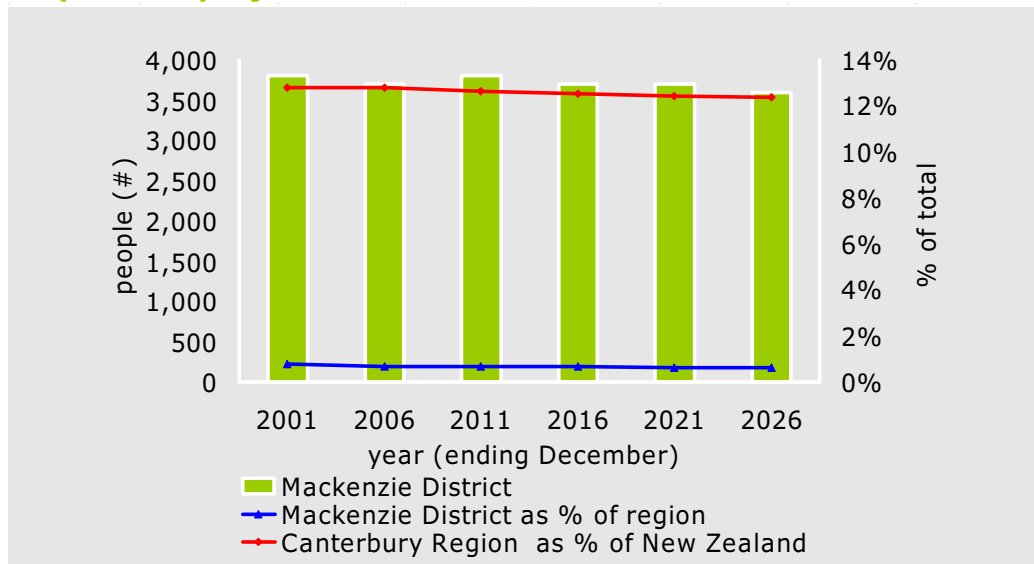
Source: Statistics NZ

Note: Statistics NZ has no 'urban area' count available

**Growth rates:** (average per annum for years shown)

<b>Mackenzie District</b>	<b>-0.40%</b>
<b>Canterbury Region</b>	<b>1.49%</b>
<b>New Zealand</b>	<b>1.41%</b>

### Population projections for Mackenzie District



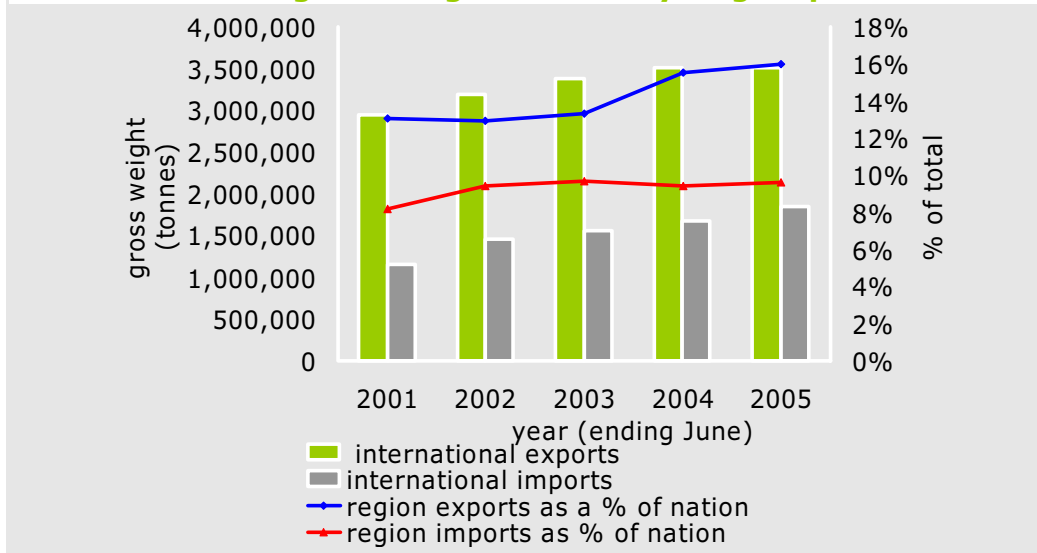
Source: Statistics NZ

**Growth rates:** (average per annum for years shown)

<b>Mackenzie District</b>	<b>-0.21%</b>
<b>Canterbury Region</b>	<b>0.71%</b>
<b>New Zealand</b>	<b>0.88%</b>

## Economic impacts

### International freight through Canterbury Region ports

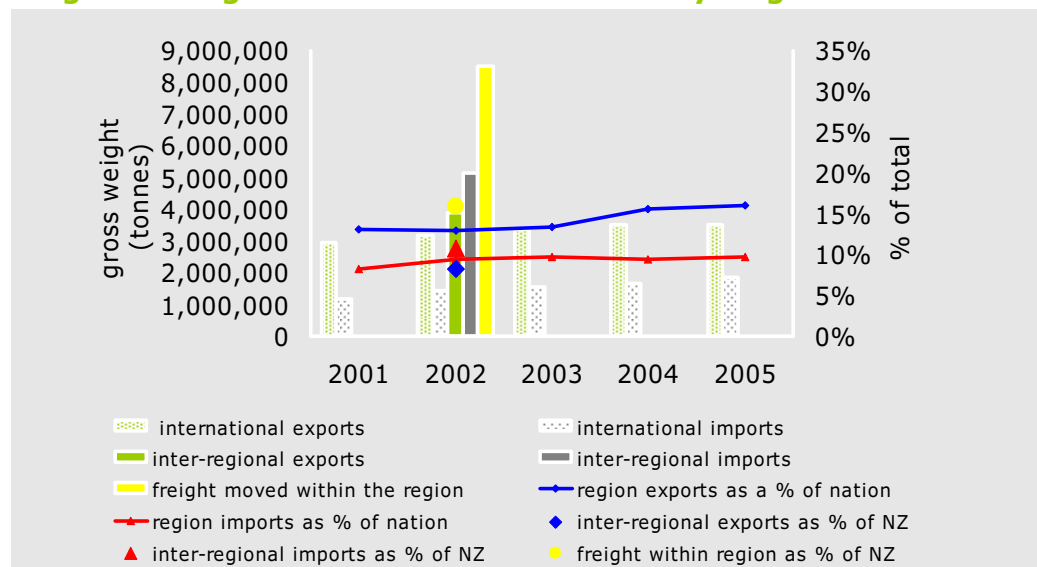


Source: Statistics NZ

**Airport(s):** Christchurch Airport

**Seaport(s):** Christchurch + Timaru

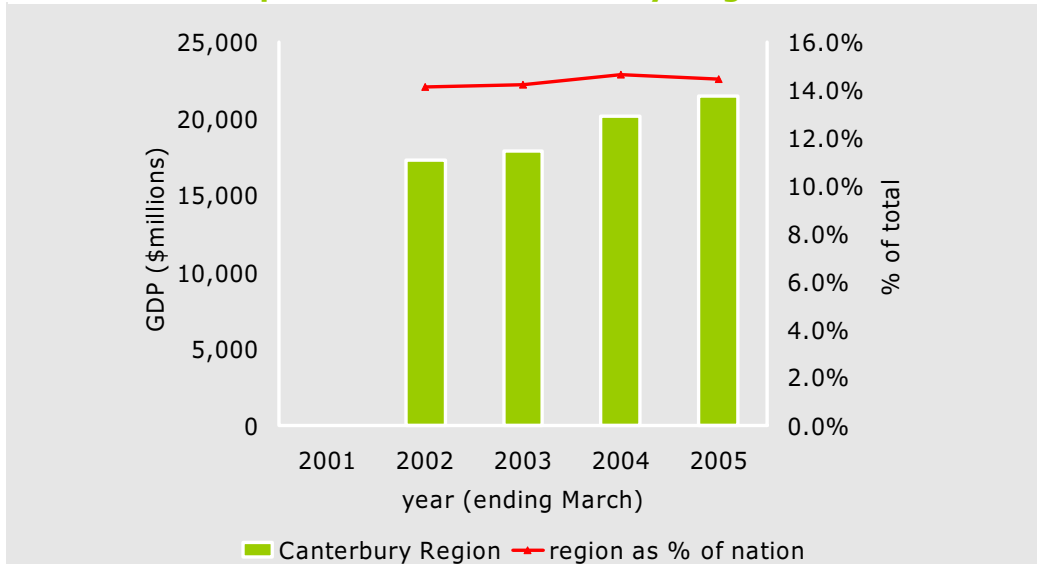
### Regional freight movement for Canterbury Region



Source: Booz Allen Hamilton (NZ) Ltd, 2005, *Development of a New Zealand National Freight Matrix*

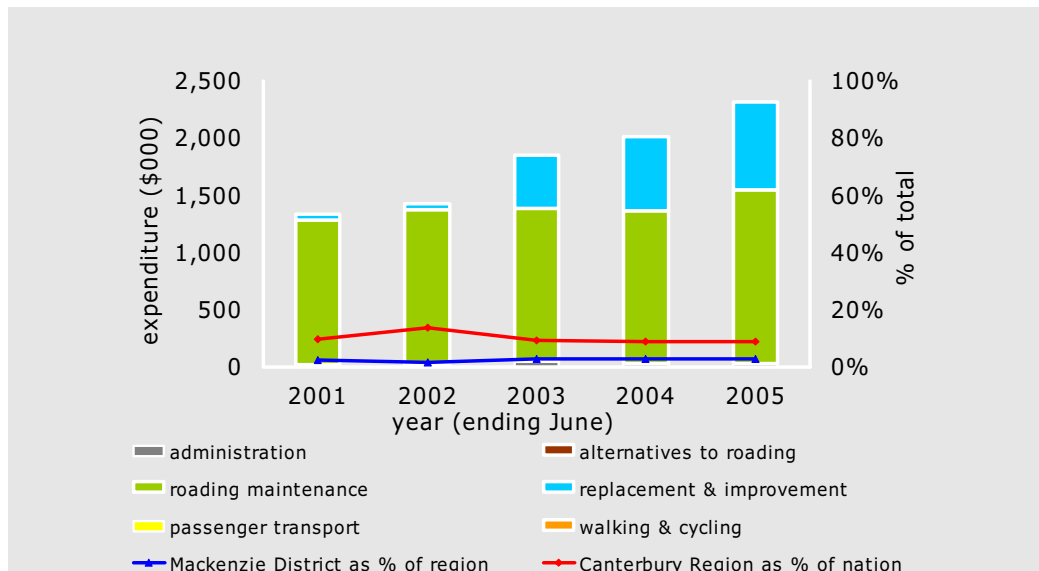
## Economic impacts (continued)

### GDP in current prices for the Canterbury Region



Sources: NZIER & Statistics NZ

### Total territorial authority expenditure on land transport for Mackenzie District

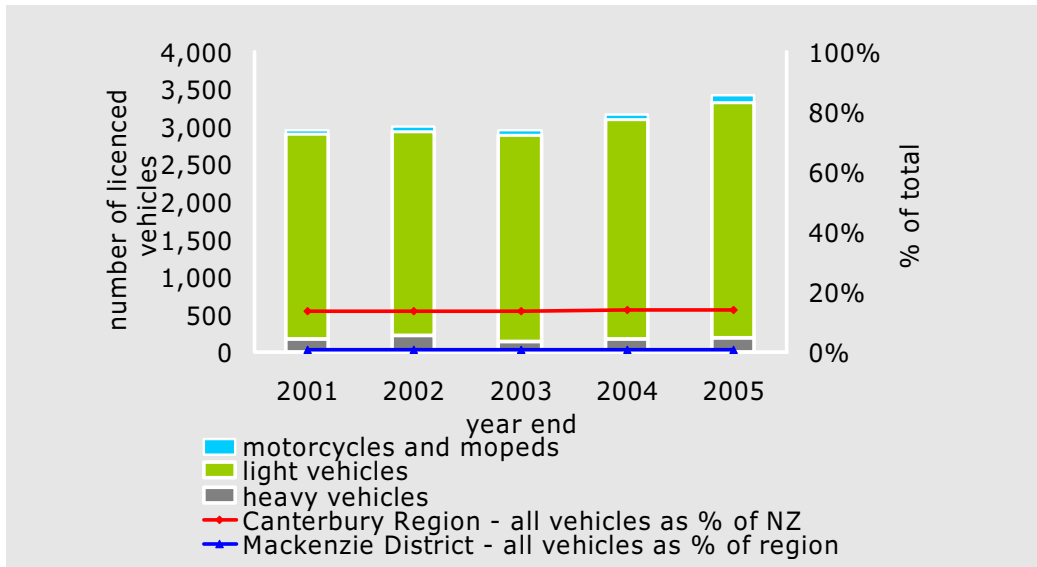


Source: Land Transport NZ

Total expenditure covers local and national contributions to territorial authority expenditure. Regional Council and Transit NZ costs are excluded

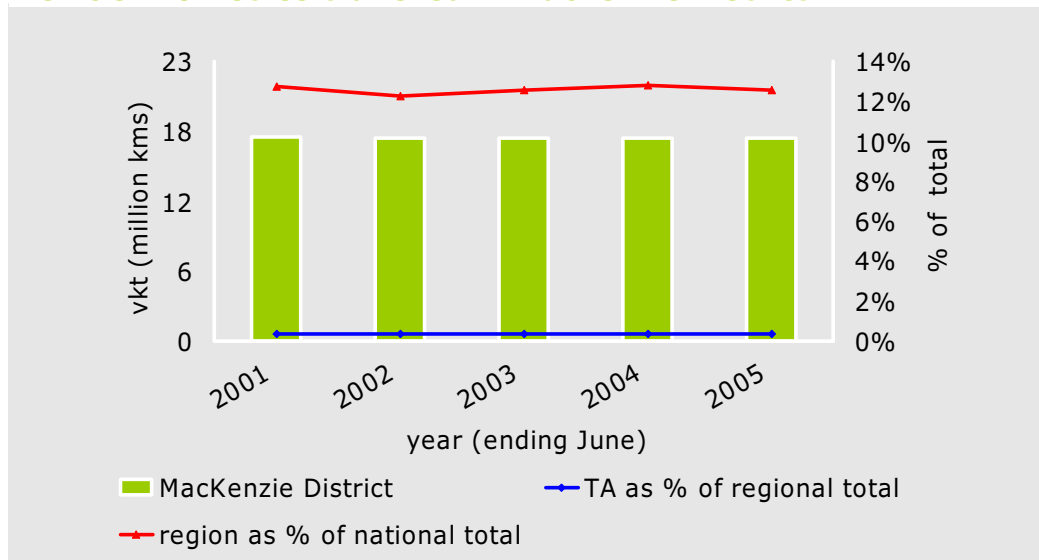
## Use of land transport

### Number of motor vehicles licensed in Mackenzie District



Source: Motor vehicle register

### Vehicle kilometres travelled in Mackenzie District



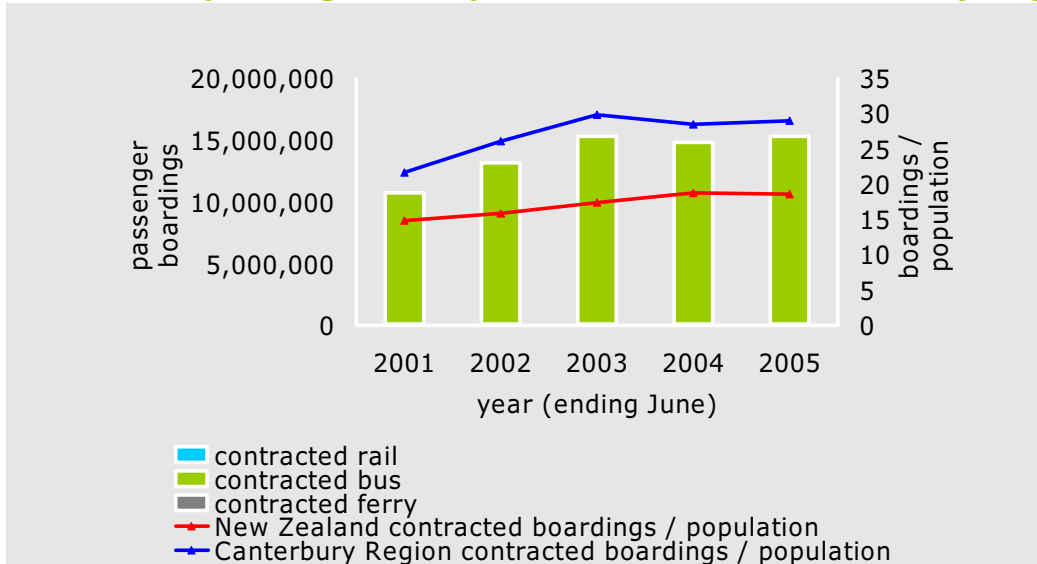
Source: Territorial local authorities

TA VKT = local roads

Regional and national VKT includes local roads and state highways

## Use of land transport (continued)

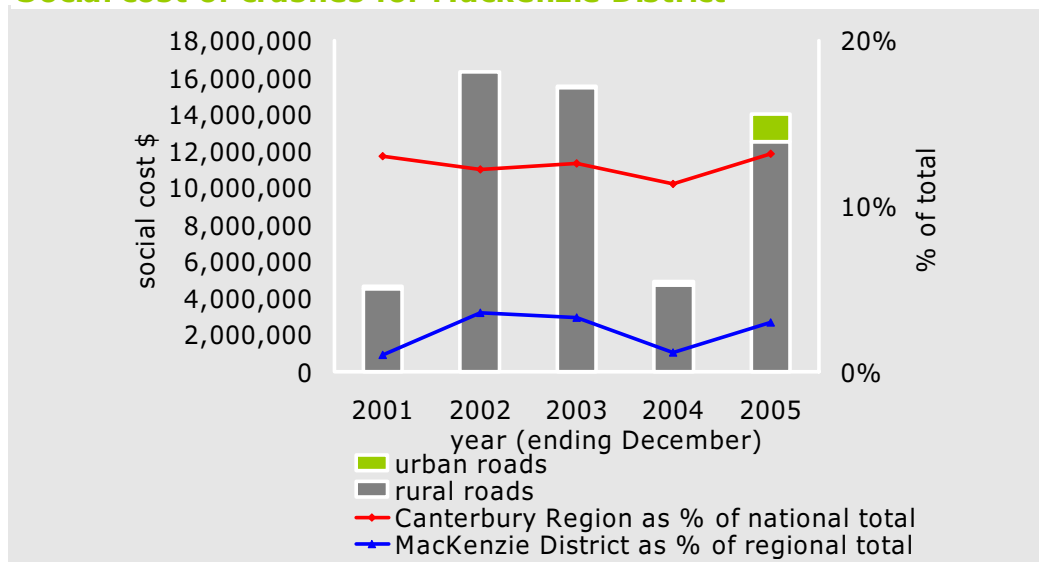
### Contracted passenger transport services in the Canterbury Region



Source: Regional Councils

## Social impacts

### Social cost of crashes for Mackenzie District



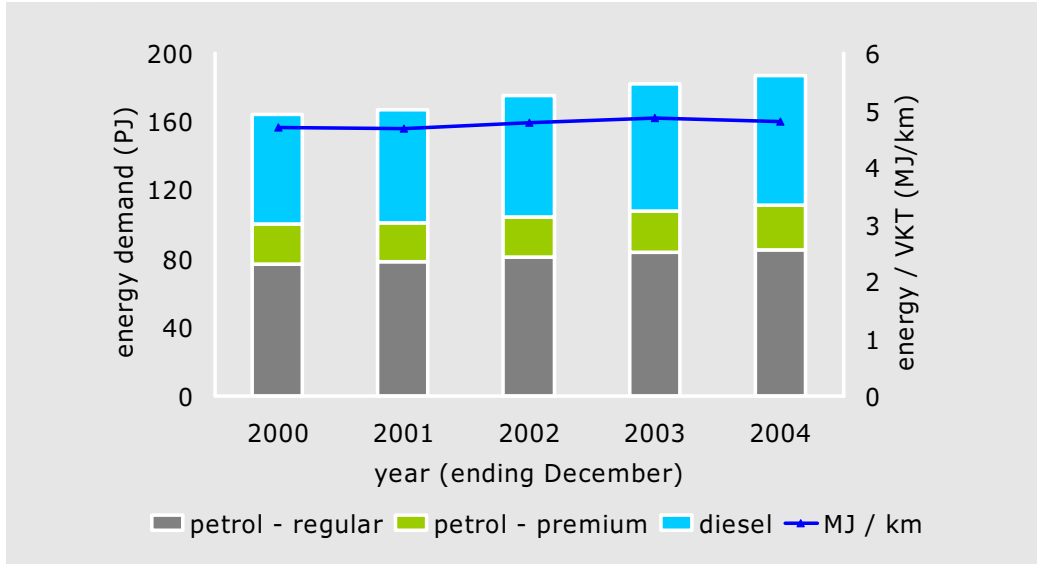
Source: Crash analysis system

For details of road safety, refer to the *Road Safety Issues* report



## Environmental impacts

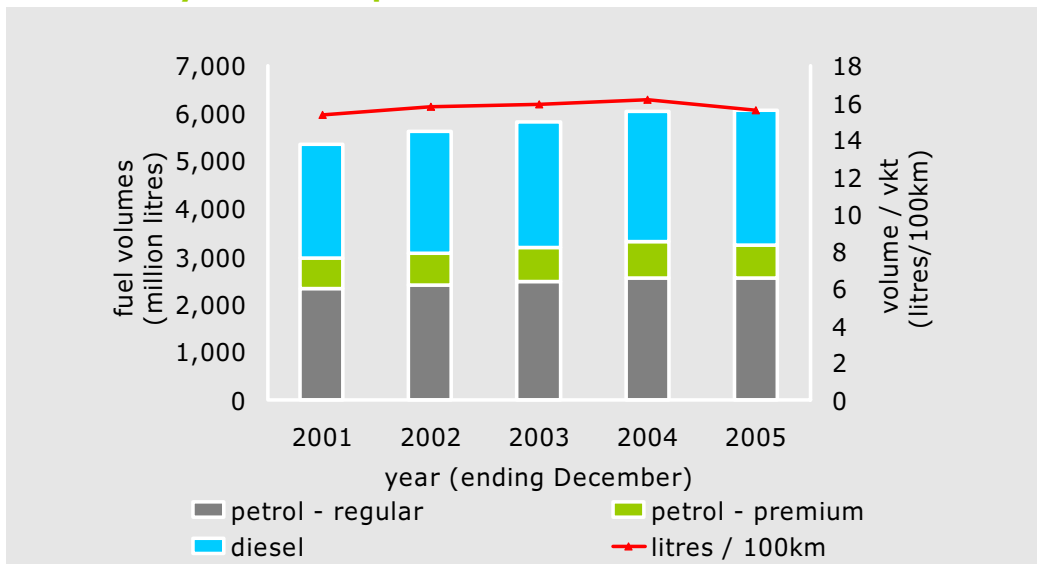
### Energy demand of land transport in New Zealand



Source: MED, June 2005, *NZ Greenhouse Gas Emissions 1990 - 2004 and Statistics NZ Deliveries of Petroleum Fuels by Industry*

1 PJ =  $10^{15}$  joules =  $10^9$  MJ

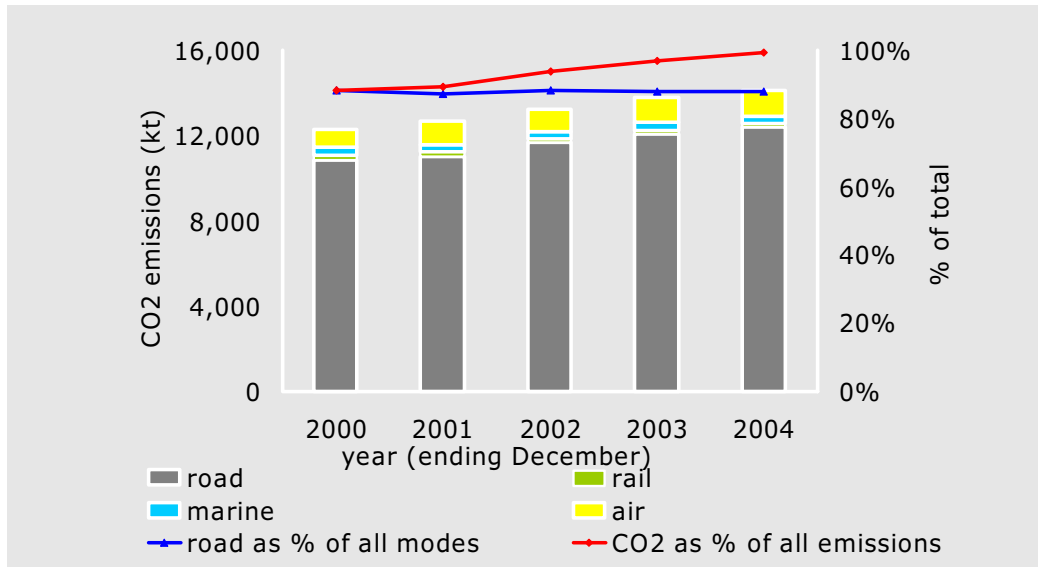
### Fuel use by land transport in New Zealand



Source: Statistics NZ *Deliveries of Petroleum Fuels by Industry*

## Environmental impacts (continued)

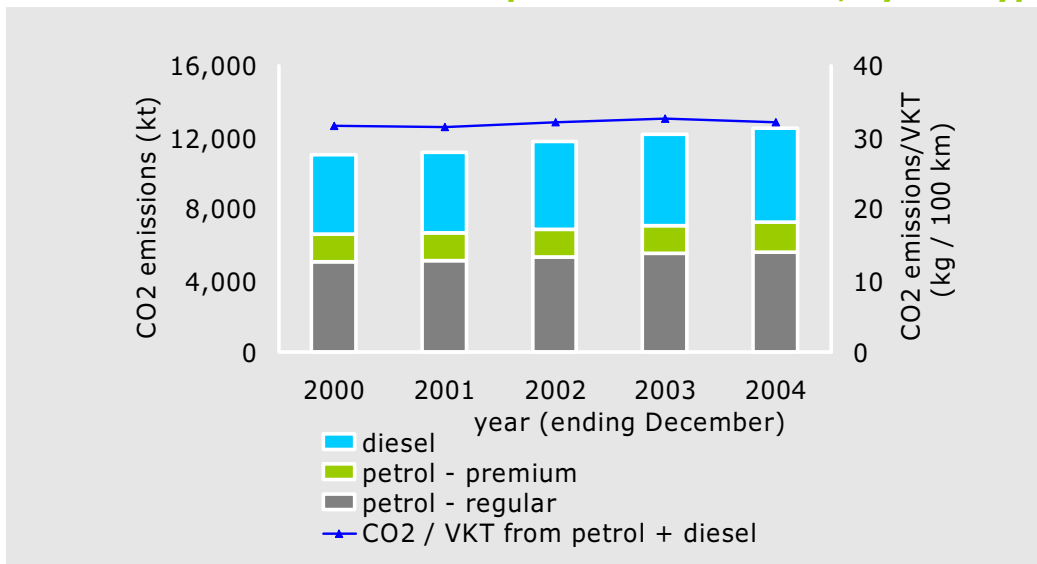
### CO<sub>2</sub> emissions from all transport in New Zealand, by mode



Source: MED, June 2005, *NZ Energy Greenhouse Gas Emissions 1990-2004*

1 kt = 1 kilo tonne = 1000 tonnes

### CO<sub>2</sub> emissions from land transport in New Zealand, by fuel type



Source: MED, June 2005, *NZ Energy Greenhouse Gas Emissions 1990-2004*

1 kt = 1 kilo tonne = 1000 tonnes