

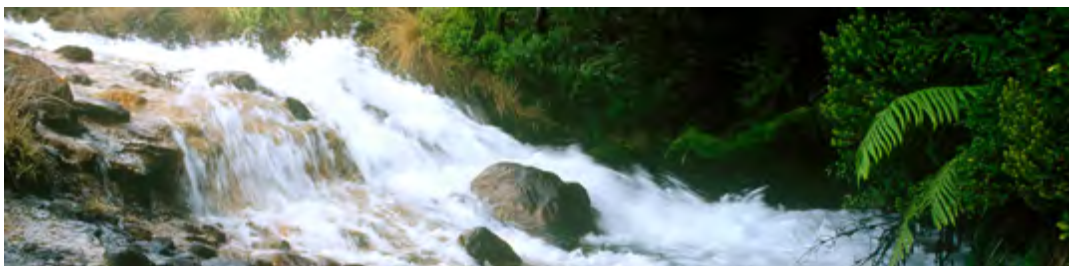


# THE TOURISM FLOWS MODEL SUMMARY DOCUMENT

## **SUMMARY DOCUMENT**

AUGUST 2007 | [www.tourismresearch.govt.nz](http://www.tourismresearch.govt.nz)

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# Introduction

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## *Background*

The Tourism Flows Model (TFM), funded by the Ministry of Tourism, is a spatial analysis tool that helps tourism stakeholders understand the impact of tourism growth on publicly provided infrastructure.

The purpose of the TFM is to represent the dynamics of tourism spatially and to facilitate informed decision-making on where to invest and where to adopt pro-active policy, planning and resource allocation practices. This will ensure that future growth in tourism results in optimum outcomes for New Zealand.

The TFM takes information from the core tourism dataset and brings it together with other relevant datasets to build a picture of current and future tourism flows in New Zealand. The TFM has two main components:

- The *dynamic* tourism flows component which provides past, present and future estimates of tourist *movements* in New Zealand; and
- The *static* tourism activity component which provides past, present and future estimates of tourism activity *within* specific areas of New Zealand.

## *Definitions and Coverage*

The TFM recognises 3 distinct traveller types:

- International visitors – people who visit New Zealand from a foreign country and stay for a continuous period of less than 365 nights.
- Domestic overnight travellers – residents who travel outside their usual environment within New Zealand for between one and 365 nights.
- Domestic day travellers - residents who travel at least 40 km from home within New Zealand and return within the same day.

The TFM allows the behaviour of these traveller types to be segmented based on origin. The origins that are available in the TFM are:

<b>International Origins</b>	<b>Domestic Origins</b>
Australia	Northland
Americas	Auckland
Japan	Waikato
North-East Asia	Bay of Plenty
Rest of Asia	Gisborne/Hawke's Bay
UK/Nordic/Ireland	Taranaki/Manawatu
Rest of Europe	Wellington
Rest of World	Tasman/Nelson/Marlborough/West Coast
	Canterbury
	Otago/Southland

### *Data Sources*

The main data sources are the International Visitor Survey (IVS) and the Domestic Travel Survey (DTS) which are both collected and administered by the Ministry of Tourism. Other sources of data include the Ministry of Tourism's tourism forecasting programme, Statistics New Zealand, Transit New Zealand, Air New Zealand and the Department of Conservation.

### *Approach*

The TFM tries to simulate the outputs of the decision making behaviour of tourists. The decision making process considered in the TFM can be summarised as:

#### **Where do you want/need to go?**

This is influenced most significantly by where you usually live and what season you are travelling in. The data indicates that the *origins* of tourists have a large bearing on the *destination(s)* they visit and that most destinations are highly seasonal. Purpose of travel is the other major determinant but the data does not currently support that level of segmentation.

#### **How will I get there?**

This question relates not only to the mode of transport used but also to the physical route taken. Transport modes and routes generally depend on travel distance, availability of transport modes and duration of trip.

#### **What will I do when I get there?**

This question relates to the things that people do once they reach their destination. This includes the consumption of goods and services which results in direct tourism expenditure (e.g. spend on accommodation, food, transport, commercial attractions and retail) as well as the non-commercial activities they engage in.

### *Caveats*

The TFM draws on data from a wide variety of sources. Much of these data are sample based and will therefore be subject to statistical error. Please view low flows and activity data with extreme caution as these are likely to be based on very small and statistically unreliable sample sizes.

The DTS data is currently under review; it is possible that flows will change in the next release of the TFM.

# Modelling Tourism Flows

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## *Introduction*

This section presents key outputs from the *dynamic* component of the TFM. The purpose of this component is to estimate past, present and future flows of tourists down major transportation networks in New Zealand.

More detail on the method underlying the dynamic component of the TFM can be found in the document entitled “Tourism Flows Methodology” which is available at [www.tourismresearch.govt.nz](http://www.tourismresearch.govt.nz).

## *Approach*

The TFM recognises three broad transport modes:

Road – all fuel powered road going vehicles including cars, buses, campervans, taxis and motorcycles.

Air – all forms of air transport including scheduled and chartered flights in planes and helicopters.

Other – all other forms of transport not included elsewhere including ferries, cruise ships, trains, walking/tramping, cycling and hitchhiking.

The TFM focuses primarily on road and air transport because these modes account for the vast majority of tourist movements in New Zealand and operate within well defined networks.

The smallest spatial units in the TFM are Tourism Flows Areas (TFAs). These areas are spatially consistent with the core tourism surveys and have been designed to concord with Territorial Local Authority (TLA) and Regional Tourism Organisation (RTO) boundaries.

Data is sourced from the IVS and DTS that estimates the number of tourist movements between each pairing of TFAs, segmented by type of traveller, origin of traveller, mode of transport and quarter. New Zealand is divided into 128 TFAs which equates to 16,384 possible trip segments, although the number of actual trips segments recorded in the data is much less than this.

The TFM uses *conversion rates* to translate past, present and future trip numbers to estimates of tourist movements along trip segments. Historical conversion rates are derived for each combination of traveller type, origin and transport mode by dividing the number of observed tourist movements (or flows) by the total number of trips initiated.

The process used to *forecast* tourist flows is the same – projected trip numbers are multiplied by projected conversion rates. The forecasts of trip numbers are an extension of the Ministry of Tourism forecasting programme and are readily available.

Due to data constraints it is assumed that the conversion rates remain unchanged over the forecast period. This implicitly assumes that the travel patterns of each *market segment* remain unchanged over time but it does not mean that aggregate travel patterns will remain unchanged over time because market segments are expected to grow at different rates. Changes in travel patterns are therefore driven by changes in *market composition* over time and not by changes in travel patterns *within* market segments.

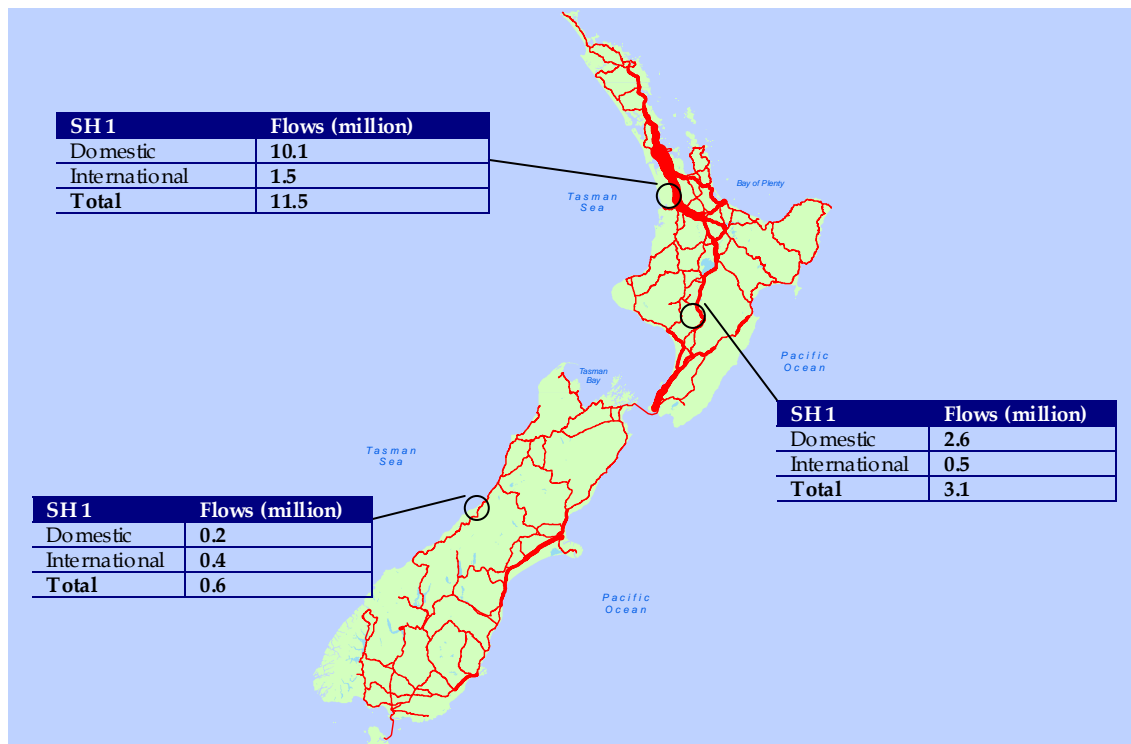
The final step in the process is to assign tourist flows down trip segments to specific transport routes. The road network includes all state highways as well as roads that are likely to be attractive to tourists (e.g. established tourist routes). The air network includes all sectors served by Air New Zealand and Qantas as well as tourist sectors served by other airlines. The 'other' transport category does not have a specific network to flow tourists though.

In the absence of actual data we have developed a spatial algorithm that assigns road tourist flows to specific routes based on travel time and 'tourist value' (represented by the attractiveness of popular tourist routes). The routing of air tourist flows is based on detailed route information provided by Air New Zealand.

#### *Caveats*

Please view low flows with extreme caution as these are likely to be based on very small and statistically unreliable sample sizes.

# Road Flows – All Tourist Segments 2005

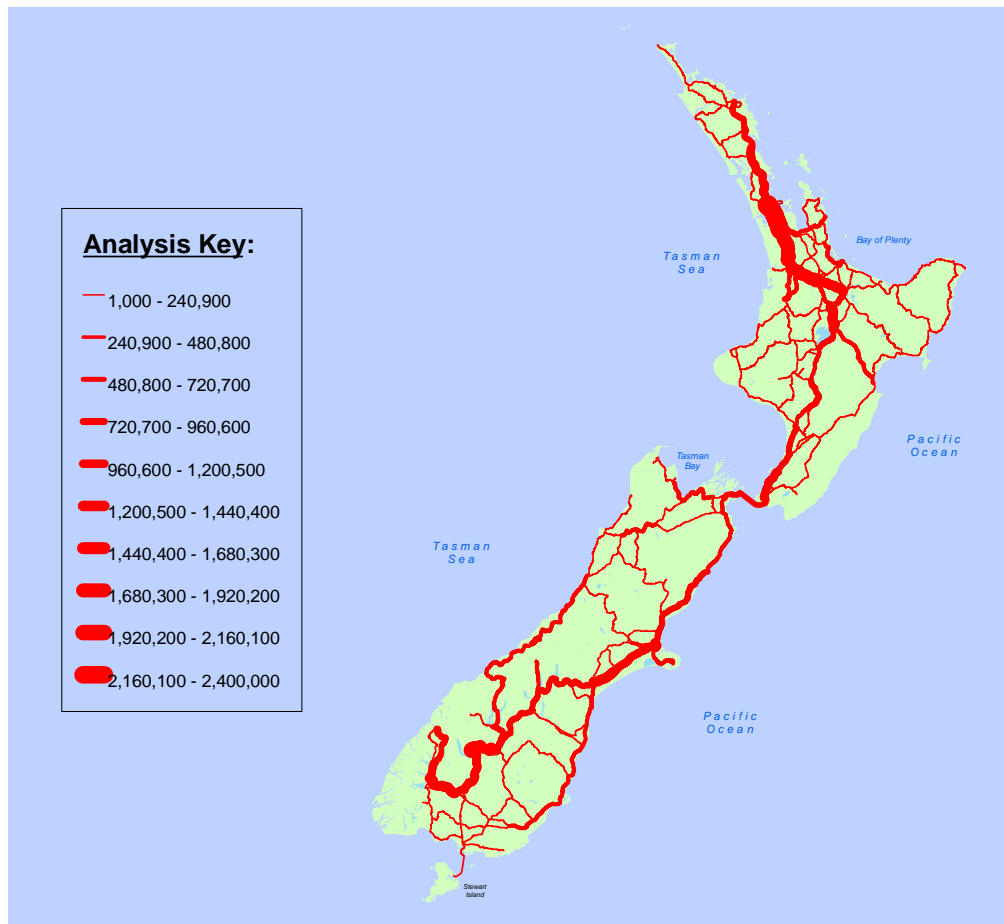


**Figure 1** Road Flows by All Tourist Segments in 2005

Tourist road flows are heavily concentrated around the main trunk (primarily state highway 1) and the main metropolitan centres of Auckland, Wellington, and Christchurch and to a lesser extent Hamilton and Dunedin. The heaviest flows occur in and around Auckland for two reasons: over 75% of international visitors start and/or finish their trip at Auckland International Airport; and almost one third of New Zealand’s population is in Auckland. Auckland’s southern motorway carries the largest number of tourists per year – an estimated 18 million passenger movements in 2005 divided fairly evenly between northbound and southbound. This represents around 14% of all passenger movements on the southern motorway. Over 90% of the tourist road flow in and around Auckland is generated by domestic travellers.

The main highway north of Wellington carries over 9 million tourists per annum – around half the number travelling on the southern motorway in Auckland. The vast majority (98%) are domestic tourists. The flows into and out of Queenstown (from the North) are much lower at 2.7 million per annum, but the international share of flows is much higher at almost 65%.

## Road Flows – International Visitors

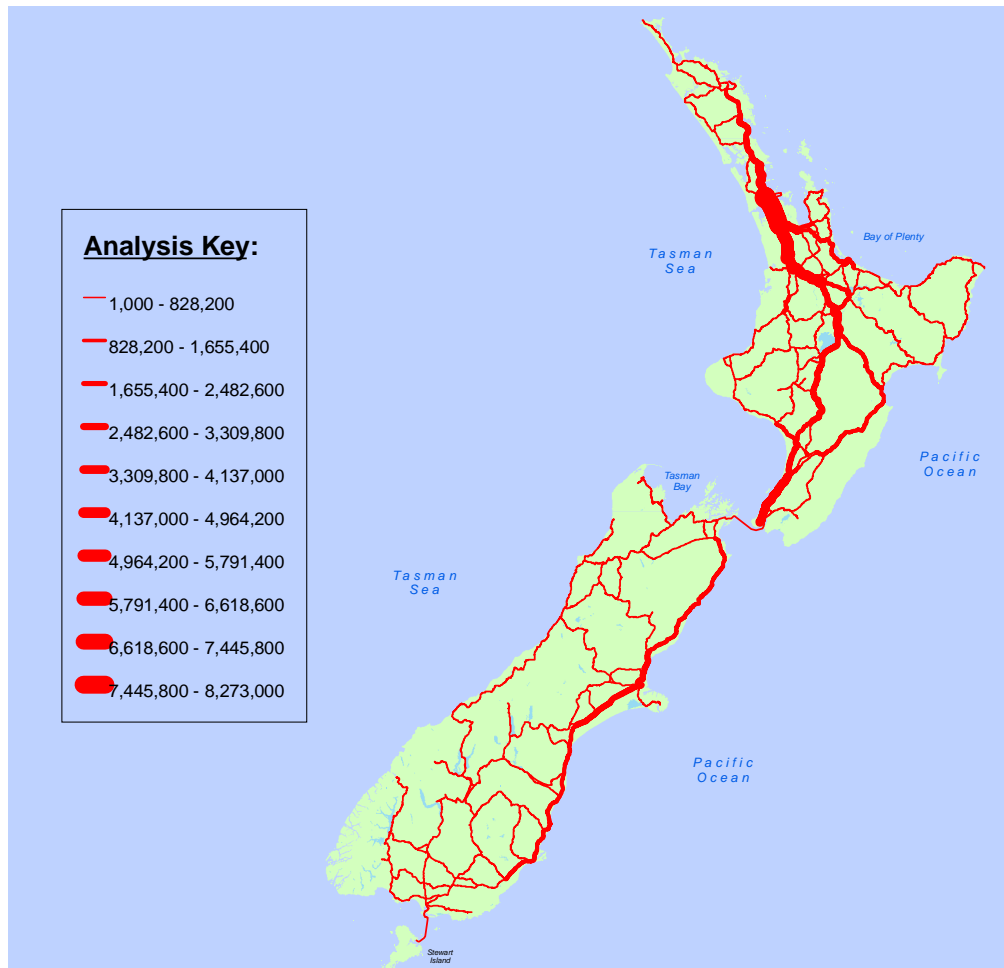


**Figure 2** Road Flows by International Visitors in 2005

The heaviest international visitor road flows are observed on the main trunk, with particularly heavy flows originating and terminating in Auckland. This is because more than 75% of international visitors arrive and/or depart through Auckland International Airport. The heaviest national road flows are observed on Auckland's southern motorway with over 1.1 million international visitors travelling south on this route in 2005 and over 943,000 travelling north. This represents a significant proportion of the 2.2 million international visitor arrivals to New Zealand in 2005. The roads immediately north of Taupo and Rotorua each carry almost 1 million international visitors. The southbound flows into each centre are heavier than the northbound flows out of each centre, reflecting the fact that some international visitors travel down the country by road and either return to Auckland by air or exit the country from somewhere other than Auckland. The heaviest South Island road flows occur around Queenstown, with around 900,000 international visitors travelling in and out by road in 2005.



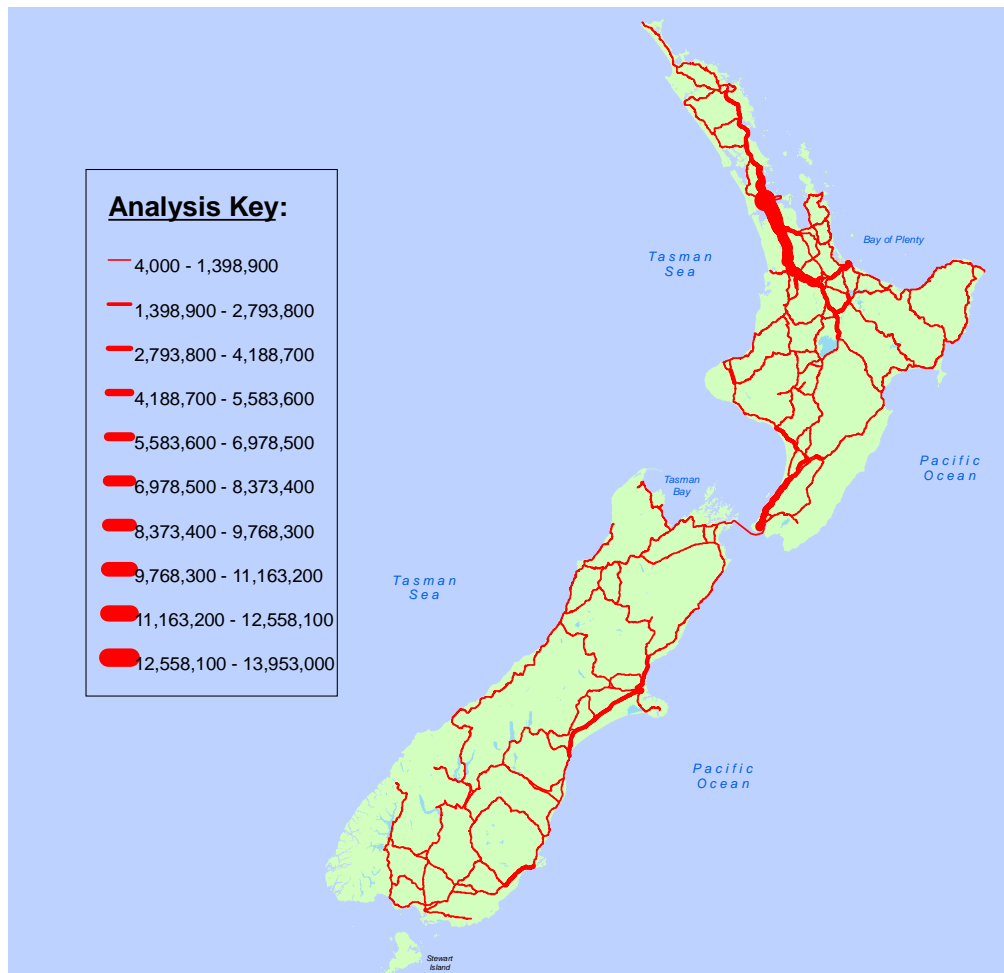
# Road Flows – Domestic Overnight Travellers



**Figure 3** Road Flows by Domestic Overnight Travellers in 2005

The road flows generated by domestic overnight visitors are heavily concentrated around the main trunk and the metropolitan centres of Auckland, Wellington and Christchurch. A significant proportion of domestic overnight trips originate from and terminate in these three centres, which collectively account for more than half of New Zealand's population. The heaviest national road flows are observed on Auckland's southern motorway with over 6.7 million domestic overnight visitors travelling into and out of Auckland on state highway 1 south (5% of all traffic). Sixty-five percent of these flows are generated by Auckland residents. The flows into and out of Wellington are lower but still significant at around 2.8 million each way, with around 60% of this activity generated by residents of the Wellington region. The main northbound and southbound roads into Christchurch are both heavily utilised by domestic overnight travellers with around 1.7 million road passengers entering and exiting the city using the northern route in 2005, and 1.8 million using the southern route. Around 61% of these southern flows are generated by residents of the Canterbury region.

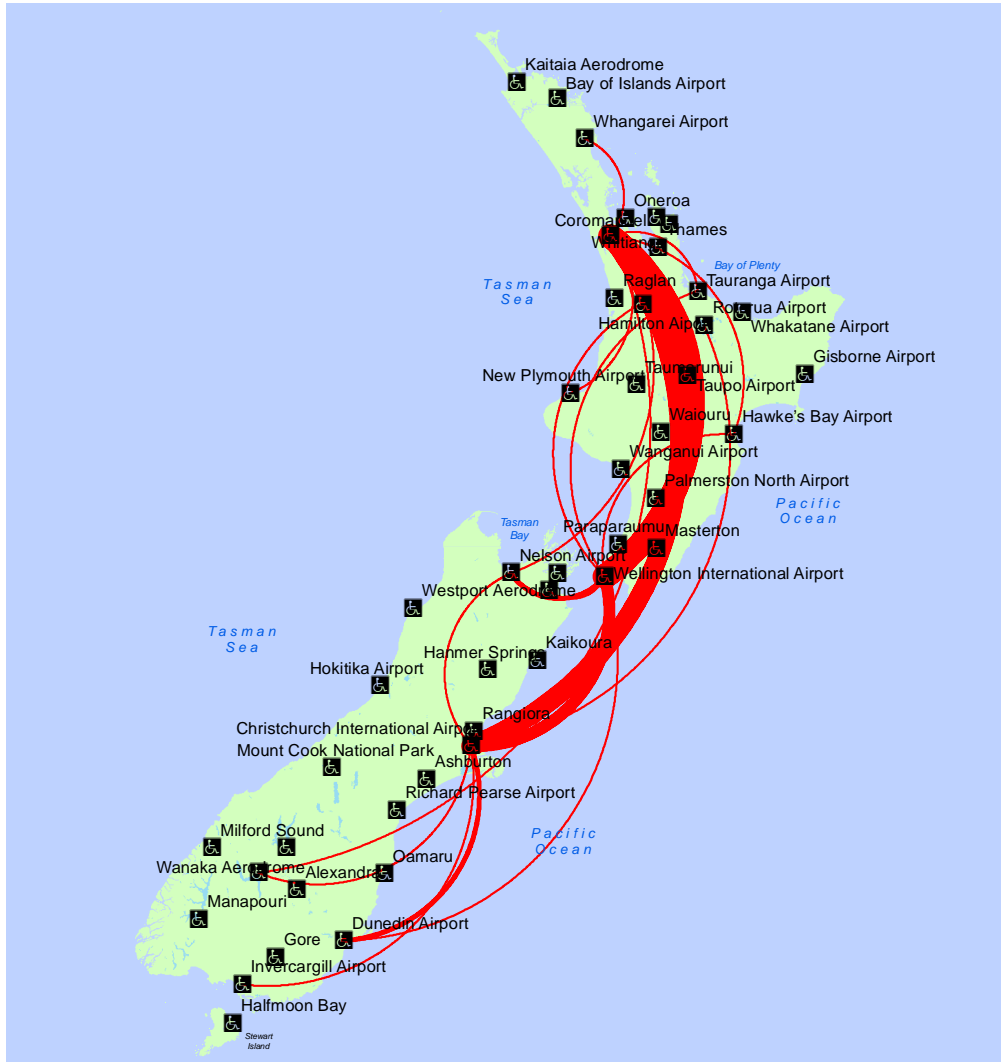
## Road Flows – Domestic Day Travellers



**Figure 4** Road Flows by Domestic Day Travellers in 2005

The flows generated by domestic day travellers are heavily concentrated around the main metropolitan centres of Auckland, Wellington and Christchurch, and to a lesser extent Hamilton and Dunedin. Domestic day traveller flows are more localised than overnight flows, with much less activity generated on the main trunk routes *between* main centres. The day trip flows on Auckland's southern motorway are slightly higher than the overnight flows at about 4.6 million each way, with almost 70% being generated by residents of the Auckland region. The day trip flows into Wellington are significantly higher than the overnight flows at about 2.6 million each way, with around 81% being generated by residents of the Wellington region. Around 2.2 million day trippers used the northern route to enter and exit Christchurch with around 2.4 million using the southern route (16% of all traffic). Almost all of the day trip activity around Christchurch was generated by residents of the Canterbury region.

# Air Flows – All Tourist Segments



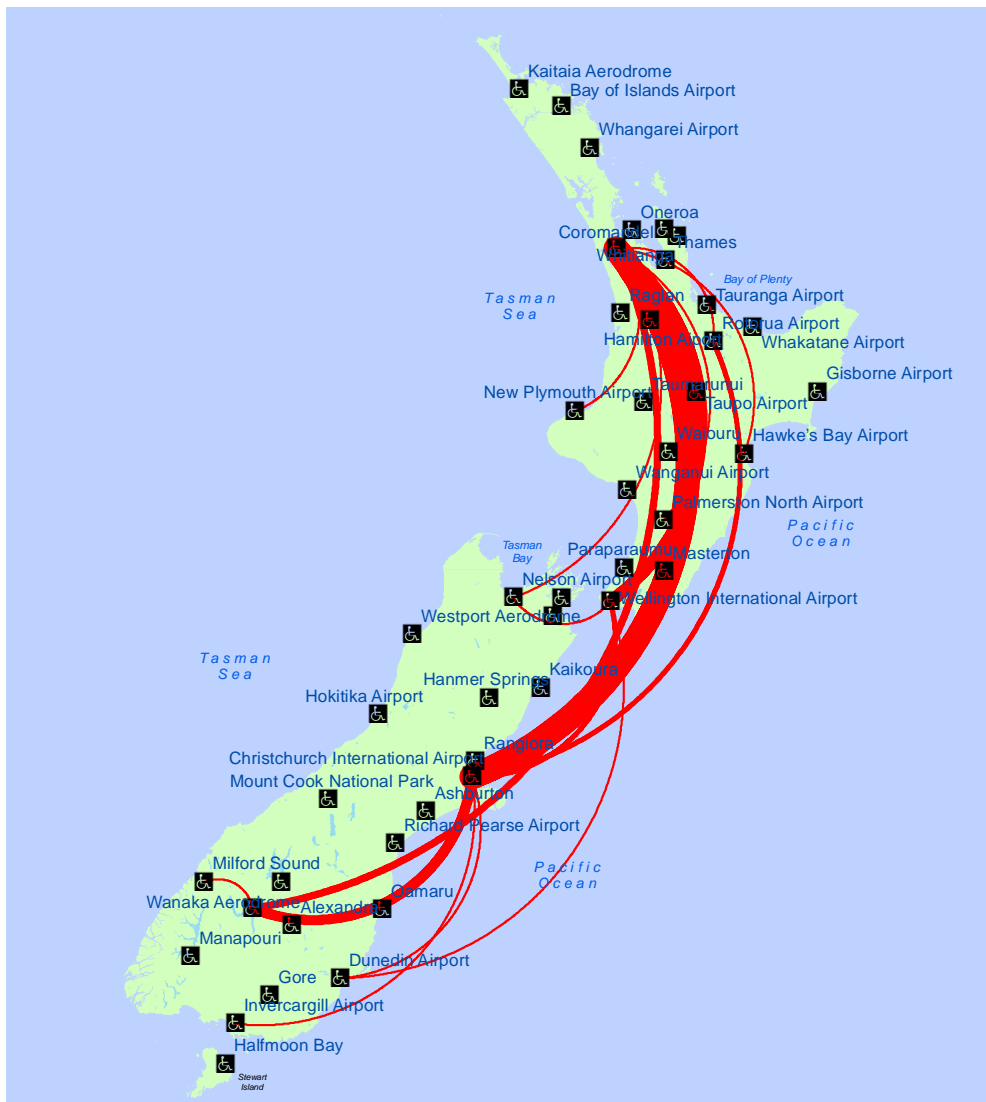
**Figure 5** Air Flows by All Tourist Segments in 2005 (minor air flows have been omitted for presentation purposes)

Tourist air flows are heavily concentrated around the main trunk sectors of Auckland-Wellington, Auckland-Christchurch and Wellington-Christchurch. The Auckland-Wellington route generates the largest flow, carrying an estimated 1.7 million passengers in 2005. The Auckland-Christchurch route generates the next largest flow at 1.3 million passengers followed by the Wellington-Christchurch route at 863,000 passengers. The flows on the Auckland-Wellington and Wellington-Christchurch routes are predominantly domestic (10% of movements on each route are by international visitors). This reflects the high proportion of domestic business travel to and from Wellington. On the Auckland-Christchurch route, 28% of passengers are international travellers, with a greater proportion travelling north than south. This is consistent with the road flow data which suggests that international visitors tend to drive south and fly back north to Auckland International Airport.

## Air Flows

## Air Flows – International Visitors

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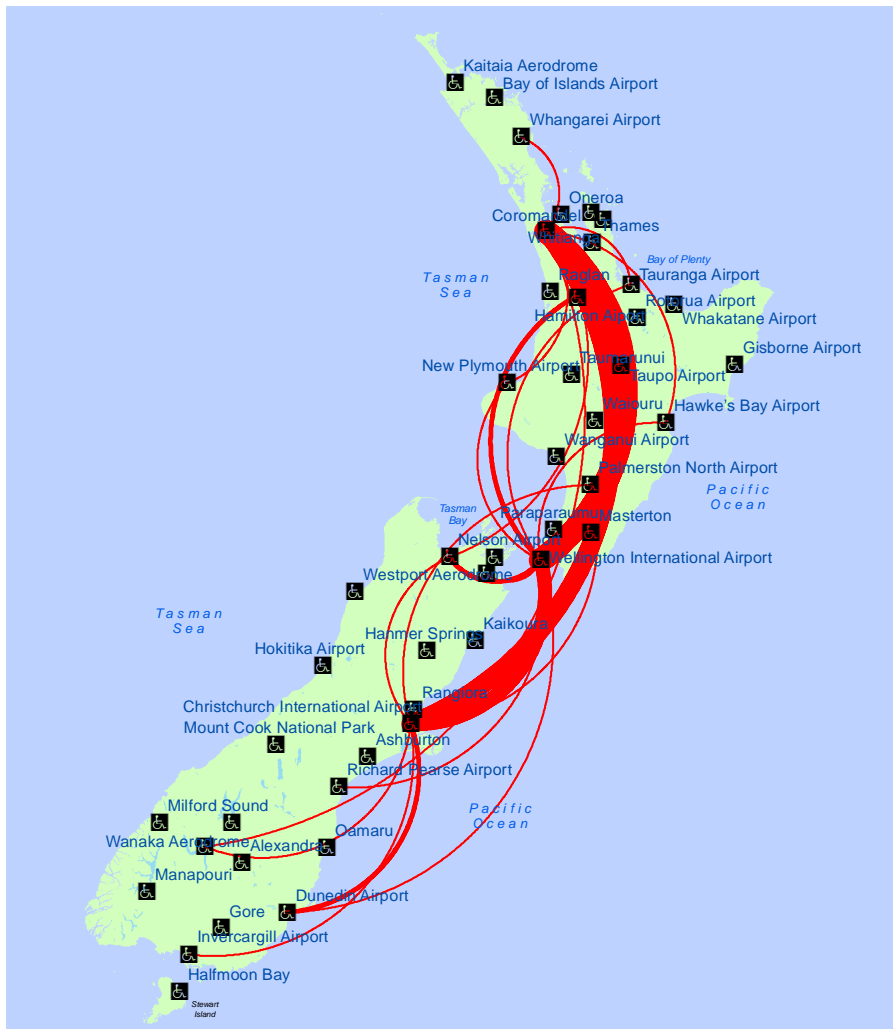


**Figure 6** Air Flows by International Visitors in 2005 (minor air flows have been omitted for presentation purposes)

The heaviest international visitor air flows are observed on the Auckland-Christchurch route with 369,000 international movements in 2005. Around 159,000 international visitors flew north to south on this route with the remaining 210,000 flying south to north. The main international users of this route are Americans (20%) and Japanese (16%) and visitors from North East Asia (15%). Visitors from Australia generate around 48,000 movements. Australians are the largest market on the Christchurch-Queenstown route with 40,000 passenger movements in 2005 out of a total of 127,000.

## Air Flows – Domestic Overnight Travellers

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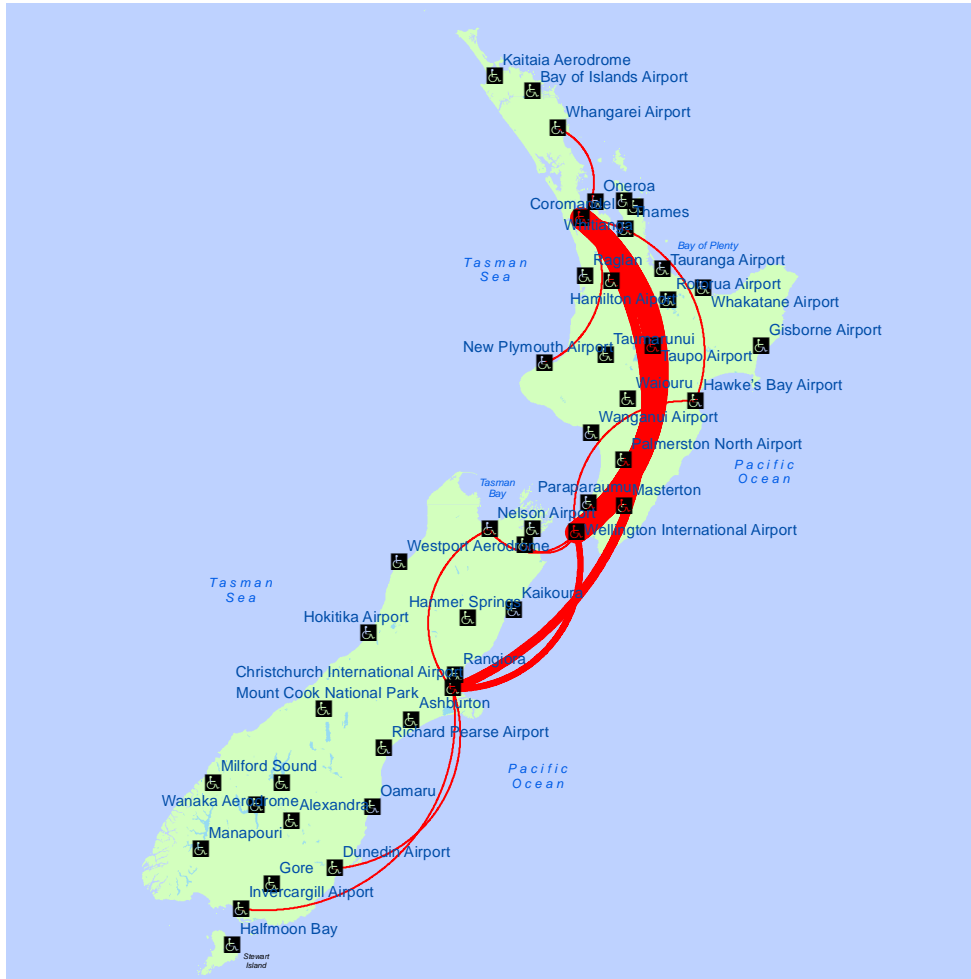


**Figure 7** Air Flows by Domestic Overnight Travellers in 2005 (minor air flows have been omitted for presentation purposes)

The road flows generated by domestic overnight visitors are heavily concentrated around the main trunk routes. The heaviest domestic overnight air flows are observed on the Auckland-Wellington route with around 505,000 travelling south and 482,000 travelling north. Half of these flows are generated by residents of the Auckland region with a further 42% generated by residents of the Wellington region. The Auckland-Christchurch domestic overnight flows are also very significant at around 360,000 in each direction, with around 54% of this activity generated by residents of the Auckland region and a further 30% by residents of the Canterbury region. Around 303,000 domestic overnight passengers fly between Wellington and Christchurch in each direction. About one third of the passengers fly the Wellington-Christchurch sector as the second leg of an air trip from another airport. This may be because there is no direct flight available or because flying two sectors is cheaper than flying direct.

## Air Flows – Domestic Day Travellers

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**Figure 8** Air Flows by Domestic Day Travellers in 2005 (minor air flows have been omitted for presentation purposes)

Auckland-Wellington is the dominant domestic air travel route, carrying an estimated 537,000 passengers in 2005. These flows are largely business related with around 57% of trips originating in Auckland and the remainder in Wellington. The Auckland-Christchurch route carried about 110,000 in each direction and the Wellington-Christchurch routes carried about 90,000 in each direction in 2005. Fifty-eight of domestic day travellers between Auckland and Christchurch reside in Auckland, with a further 40% residing in Canterbury. Around 54% of domestic day travellers between Wellington and Christchurch reside in Wellington, 26% reside in Canterbury and the remaining passengers either fly the Wellington-Christchurch sector as part of a larger air trip or they drive to Wellington or Christchurch and then fly.

## Road Flows – Australia

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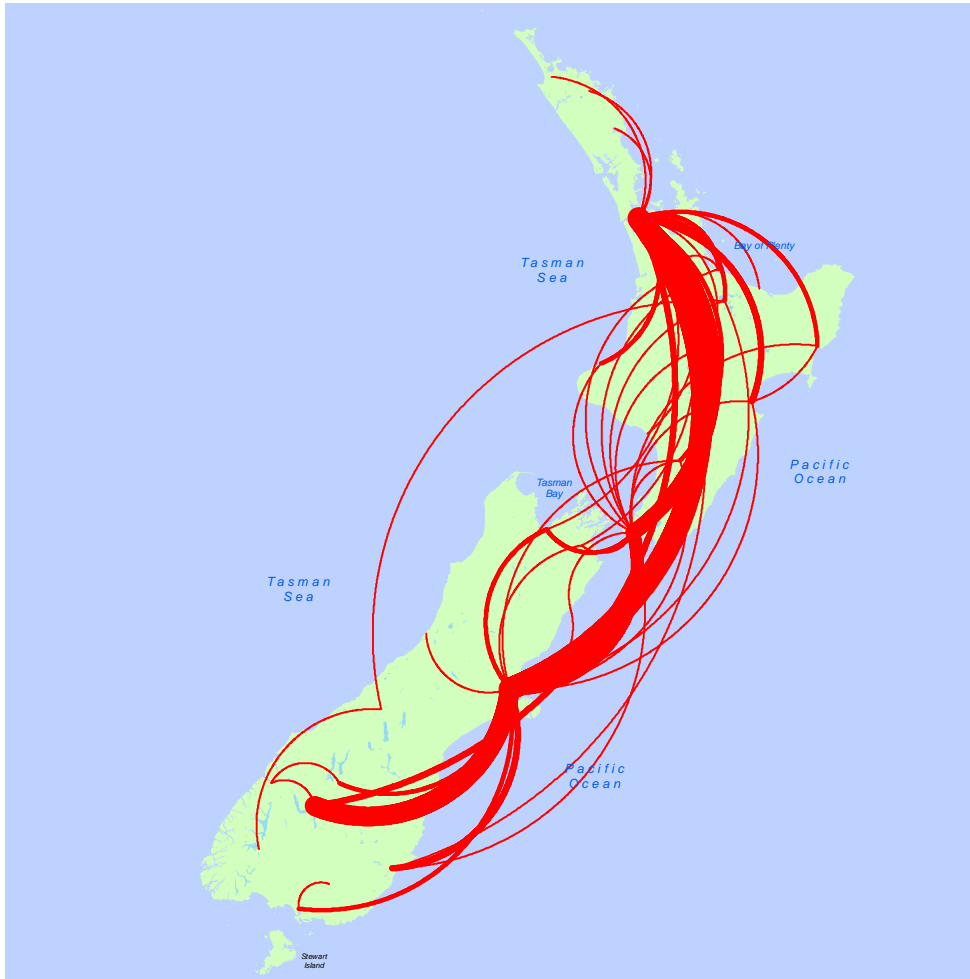
**Figure 9** Road Flows by Visitors from Australia in 2005

Australian road flows are heavily concentrated around the key entry points of Auckland, Wellington, Christchurch and Queenstown. On average Australians spend around 11 nights in New Zealand per visit, which is around half the average length of stay of non-Australians. This short stay behaviour imposes a limit on the geographic area that can be meaningfully covered and as a result Australians tend to limit the extent to which they travel *through* the country, choosing instead to focus on one or a small number of regions. This is reflected in the relatively low flows of Australians on the main trunk routes in the central/lower North Island and upper South Island. The main North Island flows are centred around Auckland which is the gateway for around 57% of Australian visitors. The major flows extend south to Rotorua and Taupo and north to Whangarei and the Bay of Islands. The primary South Island flows are between Christchurch and Queenstown with secondary flows on the east and west coasts and into Milford Sound (153,000). The relatively heavy flows in the South Island are due to the high proportions of Australians that fly directly into Christchurch and Queenstown.

## Flows by Market

## Air Flows – Australia

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**Figure 10** Air Flows by Visitors from Australia in 2005

The main Australian air flows occur on the Auckland-Christchurch, Auckland-Wellington and Christchurch-Queenstown routes. Auckland-Christchurch experiences the heaviest flows with 21,000 Australians travelling south on this route in 2005 and 27,000 Australians travelling north. The larger northbound flow is consistent with other international markets and supports the idea that international visitors tend to drive south and fly north. The strong 'friends and family' link and relatively short stays may also be a catalyst for 'triangular' travel patterns as Australians try to visit multiple regions without back tracking. There is no asymmetry on the Auckland-Wellington route with about 16,000 Australians travelling each way in 2005. The flows into provincial areas are smaller but still quite significant relative to other markets. This is most likely due to the 'friends and family' effect which has the tendency to draw people away from traditional tourism routes.



## Road Flows – Japan

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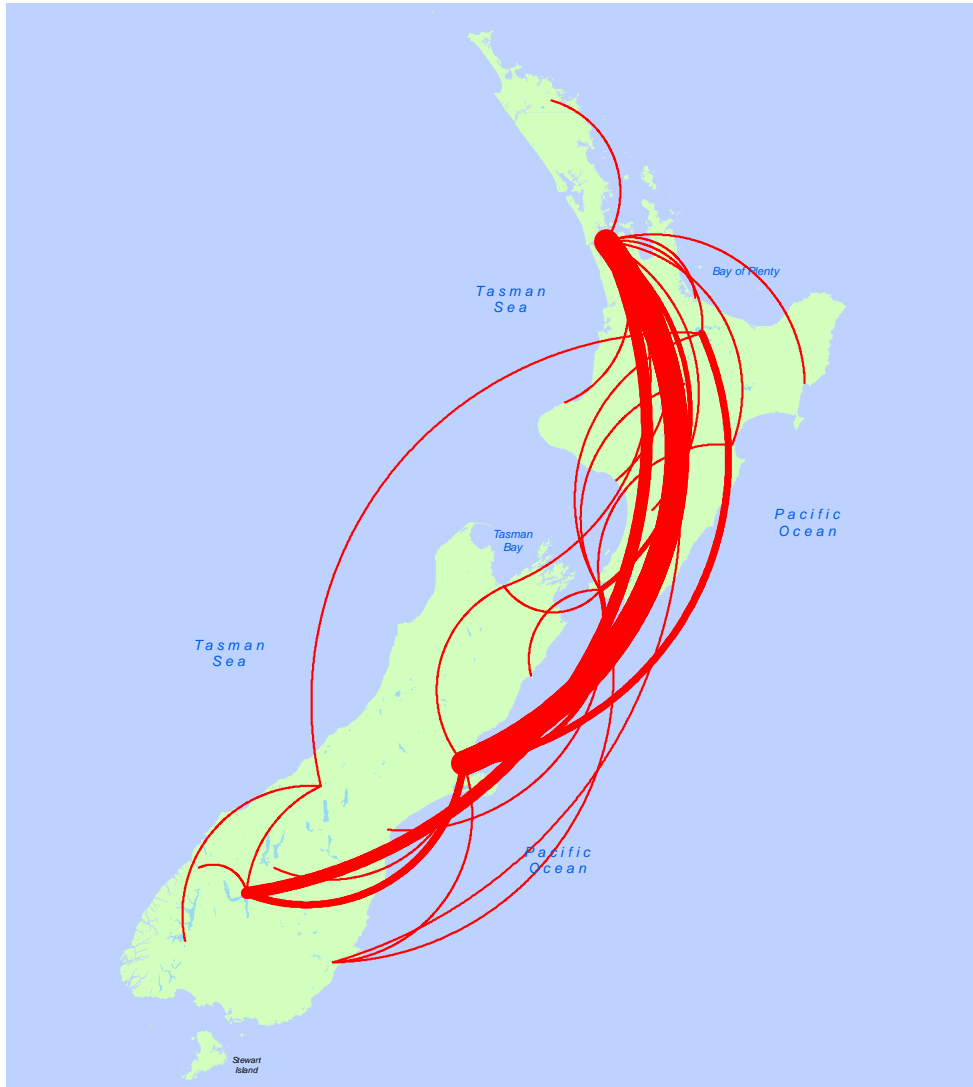


**Figure 11** Road Flows by Visitors from Japan in 2005

Japanese road flow patterns are very distinctive, with heavy North Island flows on the popular Auckland-Rotorua route and around Waitomo. The major South Island flows are between Christchurch, Queenstown, Mount Cook and Milford. For example, 59,000 Japanese visitors travelled to Mt Cook and 50,000 went to Milford Sound. There is very little road flow activity outside these traditional tourism areas which can be explained by the fact that almost half of all Japanese visitors purchase travel packages or guided tours which focus on mainstream destinations and attractions. Around 66% of Japanese visitors arrive through Auckland International Airport.

## Air Flows – Japan

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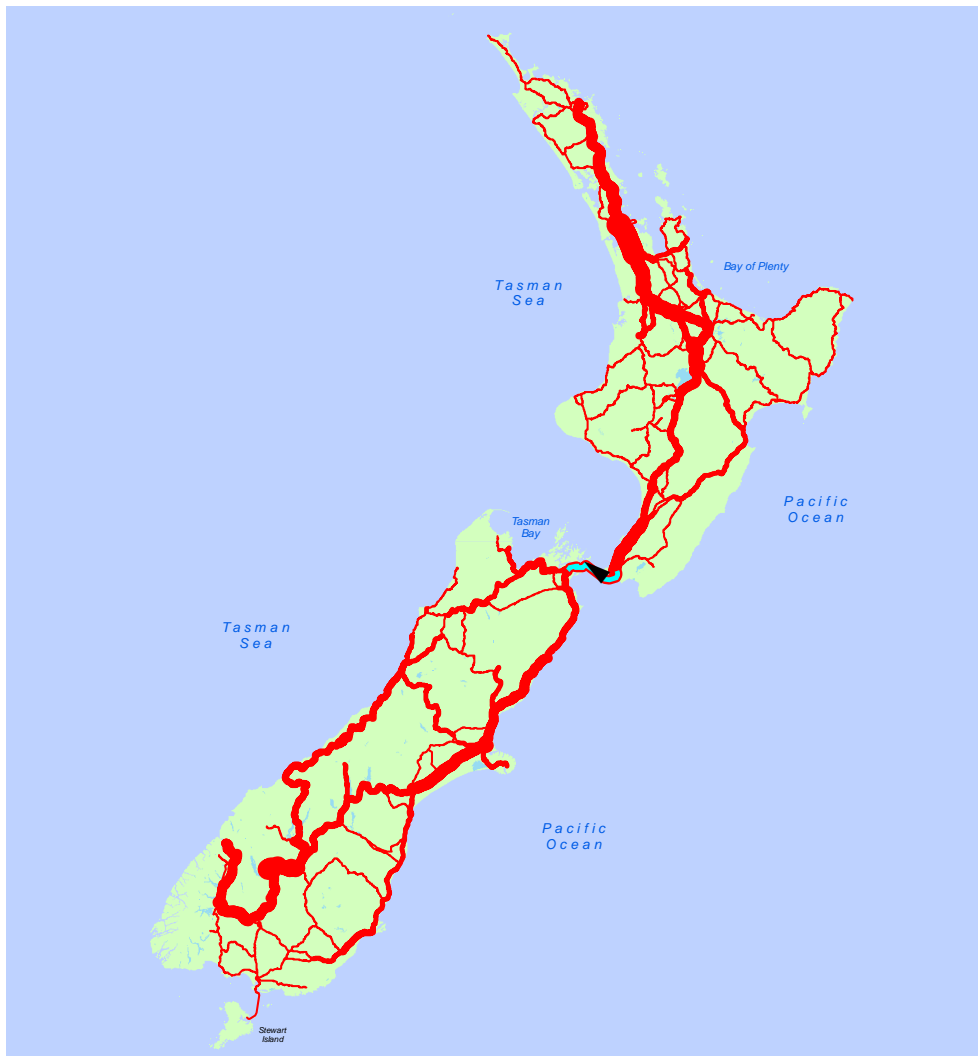
**Figure 12** Air Flows by Visitors from Japan in 2005

Japanese air flows are heavily concentrated on the Auckland-Christchurch route. This is consistent with the Japanese road flow pattern which involves using road transport to travel between the main tourism destinations in each island but not to travel between islands. The typical Japanese travel pattern is therefore one of regional exploration followed by an inter-island air link followed by further regional exploration or immediate departure. The Auckland-Christchurch air route carried 29,000 Japanese passengers each direction in 2005, while the Auckland-Queenstown route carried 24,000 passengers, of which 20,000 travelled north. Auckland International Airport is the only departure point for direct flights to Japan, so Japanese dual-destination visitors flying directly from Australia to the South Island have to fly north to Auckland if New Zealand is their last stop and they wish to return directly to Japan.

## Flows by Market

## Road Flows – UK/Nordic/Ireland

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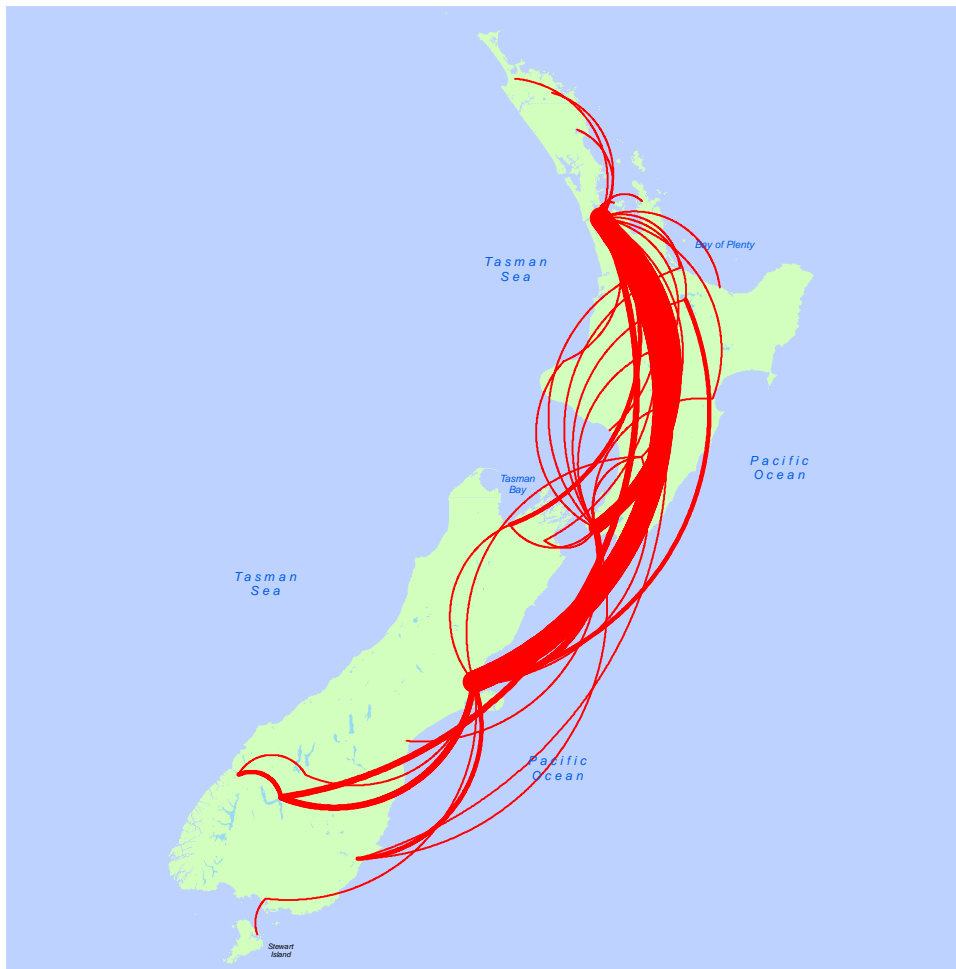


**Figure 13** Road Flows by Visitors from UK/Nordic/Ireland in 2005

The road flows generated by visitors from UK/Nordic/Ireland are extensive and significant. There is a large amount of activity in and around the Auckland region, mainly because 74% of visitors from this region arrive at Auckland International Airport. There are heavy flows north to the Bay of Islands, east to the Coromandel and south to Rotorua, Taupo and the main trunk to Wellington. There is a heavy flow across the Cook Strait (167,000 both directions) and significant activity along the east coast of the South Island (154,000 south of Kaikoura). The Christchurch-Queenstown-Milford trunk is well used and there are significant flows along the West Coast. The pattern of travel tends to be north to south, and within the South Island it runs anticlockwise with a majority of visitors travelling across to and down the West Coast, then on to Queenstown, Milford and Christchurch before heading up the east coast. Visitors from UK/Nordic/Ireland stay an average of 30 days in New Zealand which gives them time to travel reasonably comprehensively *within* the country.

## Air Flows – UK/Nordic/Ireland

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**Figure 14** Air Flows by Visitors from UK/Nordic/Ireland in 2005

The air flows generated by visitors from UK/Nordic/Ireland are heavily concentrated on the Auckland-Christchurch route, with smaller but still significant flows on the Auckland-Wellington and Wellington-Christchurch routes. The Auckland-Christchurch air route carried 22,000 UK/Nordic/Ireland passengers south in 2005 and 33,000 passengers north which suggests that a reasonable proportion of visitors end their South Island road trip in Christchurch and return to Auckland on a plane. The Auckland-Wellington route also carries more UK/Nordic/Ireland visitors north than it does south which suggests that it is also a “fast return” route for some travellers – most likely those who have already travelled down through the North Island and do not wish to cover the same territory on their return trip.

## Regional Analysis – Northland



**Figure 15** Northland Road Flows by All Travellers in 2005

The road flows in Northland get progressively smaller as the distance from Auckland increases. This reflects that fact that a significant proportion of tourism traffic on Northland roads is generated by residents of the Auckland region. The Waipu-Warkworth segment carried a total of 5.4 million passengers in 2005 (36% of all traffic), with most of these movements originating in Auckland (25% day visitors and 24% overnight visitors). A further 17% and 13% were domestic day and overnight visitors, respectively, originating in Northland. Australians were the largest international users, accounting for 5% of all tourism passenger movements. The Whangarei-Waipu segment carried a total of 4.3 million tourism passengers in 2005, with 44% of these movements originating in Auckland and a further 31% in Northland, and the Kawakawa-Whangarei segment carried a total of 3.2 million passengers with 48% originating in Northland and 24% in Auckland. Whangarei is clearly the point at which road flows by Aucklanders cease to dominate. The reason for this is the large drop in Auckland day trips to locations north of Whangarei – there were 934,000 million Auckland day trips to Whangarei, and only 265,000 north of Whangarei.

## Regional Analysis – Central North Island

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**Figure 16** Central North Island Road Flows by All Travellers in 2005

The road flows in the central north island are heavily concentrated on State Highway 1, with secondary flows on State Highways 5 and 30 which connect State Highway 1 with Rotorua. Around 6.4 million tourists travelled along State Highway 1 immediately north of Taupo. Over 84% (5.4 million) of these movements were generated by domestic visitors, with the largest shares generated by overnight travellers from Auckland and travellers from the Waikato region. Turangi is the point on State Highway 1 where Auckland overnight road flows cease to dominate and Wellington overnight road flows become the heaviest. Around 39% of all passenger movements between Taupo and Turangi are tourism related, highlighting the importance of this segment as a main tourist trunk. The heaviest road flows into and out of Rotorua are generated by residents of the Bay of Plenty. A large number of Auckland residents enter and exit Rotorua to the north, but very few travel south of Rotorua. North East Asia is the largest international market on SH5 in and out of Rotorua with 235,000 visitors in 2005.

## Regional Analysis – Lower North Island

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**Figure 17** Lower North Island Road Flows by All Travellers in 2005

The heaviest tourism flows occur in and around Wellington, with secondary flows extending north up State Highway 1 as well as west to Wanganui and east to Palmerston North. Wellington day trippers generate almost 40% of the 7.9 million of tourism movements along the Kapiti Coast, with overnight travellers generating an additional 18%. The flows through the lower north island are predominantly domestic, with international flows accounting for less than 7% of all flows through Dannevirke, 16% between Bulls and Levin and 9% between Paraparaumu and Wellington. The northern road flows get progressively smaller as the distance from Wellington increases, reflecting the fact that a significant proportion of tourism traffic in the lower North Island is generated by residents of the Wellington region.

## Regional Analysis – Lower South Island

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**Figure 18** Lower South Island Road Flows by All Travellers in 2005

Tourism flows in the lower South Island are concentrated heavily on State Highway 1 which runs along the east coast, for example 5.2 million tourists between Christchurch and Ashburton. Canterbury residents generate the heaviest flows between Christchurch and Waimate, with day travellers outnumbering overnight travellers. Australians are the largest international market with 262,000 travellers. Residents of Otago and Southland generate the heaviest flows south of Waimate as domestic day trips out of Canterbury diminish. The passenger flows along the east coast of the lower South Island are predominantly domestic, with equal movements in either direction.



## Regional Analysis – West Coast



**Figure 19** West Coast Road Flows by All Travellers in 2005

Around 67% of all passenger movements along the West Coast are generated by international visitors. Visitors from the UK/Ireland/Nordic (19%) and Australians (17%) make up the largest markets. Domestic overnight and day visitors from Tasman/Nelson/Marlborough contribute 15%. The dominance of international tourism applies to the entire West Coast stretch between Hokitika and Haast as well as inland to Wanaka. Travel along the West Coast often forms part of a larger loop that includes Christchurch, Arthur's Pass and Queenstown, particularly for travellers who do not live in the South Island. The flow between Hokitika and Franz Josef is heavier southbound with 387,000 of passengers travelling in this direction. The north-south flow

is evident along the entire West Coast, and the directional split is relatively consistent for both international visitors and domestic travellers. About 606,000 tourists travel across the Haast Pass in either direction. Again, the largest market is UK/Ireland/Nordic with 128,000 movements alone. 47,000 tourists travelled to Karamea.

## Road Usage

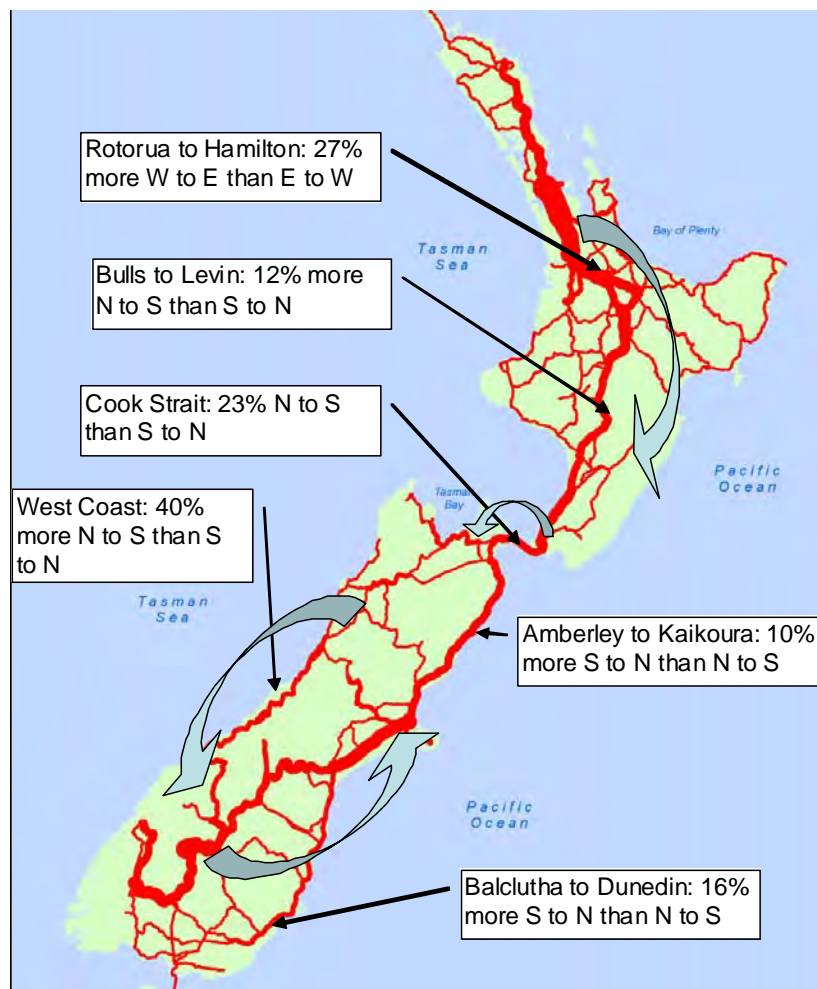


Figure 20 Directionality – Road Flows by International Tourist Segments in 2005

In addition to directionality of tourist traffic, tourist traffic can be compared with non-tourist traffic. Transit New Zealand records total vehicle movements for a number of state highway segments across the country. Tourism flows can therefore be compared against total flows to estimate the percentage of total traffic generated by tourists:

Kawakawa-Whangarei – 31%	Takaka-Abel Tasman - 9%
Warkworth-Orewa – 26%	Blenheim-Kaikoura - 18%
Southern Motorway – 14%	Lewis Pass-Hanmer – 16%
Thames - Whangamata – 27%	Punakaiki-Greymouth – 38%
Taupo-Turangi – 39%	Arthur's Pass – 40%
Opotiki-Gisborne – 14%	Christchurch-Ashburton – 34%
Hawera-Wanganui – 22%	Dunedin-Balclutha – 30%
Levin-Waikanae – 26%	Gore-Invercargill – 13%

# Modelling Tourism Activity

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## *Introduction*

This section presents key outputs from the *static* component of the TFM. The purpose of this component is to estimate past, present and future levels of tourism activity in key tourism areas in New Zealand.

More detail on the method underlying the dynamic component of the TFM can be found in the document entitled “Tourism Flows Methodology” which is available at [www.tourismresearch.govt.nz](http://www.tourismresearch.govt.nz).

## *Approach*

The core activity measures in the TFM are:

Visits – the number of unique visitations to the selected area. One person can generate multiple visits to an area.

Nights – the number of visitor nights spent in the selected area. One person can generate multiple nights in an area across multiple visits.

Expenditure – the modelled amount of money spent by tourists in the selected area, inclusive of GST.

These measures can be compared at a high level across RTOs, segmented *either* by traveller type or purpose of travel, and they can also be examined in more detail *within* each RTO. At the individual RTO level it is also possible to view details about international visitor origins, travel purposes, age groups, accommodation types used, transport types used, travel styles and activities undertaken.

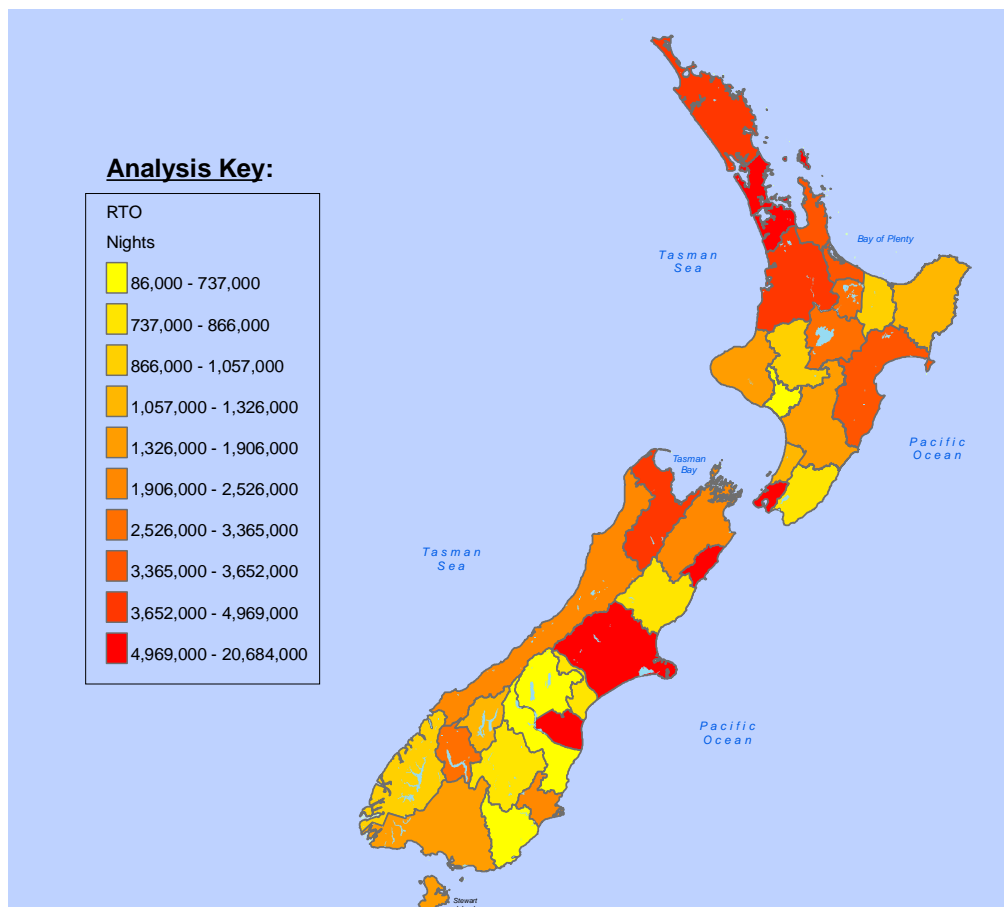
## *Data Sources*

The core activity measures in the TFM (visits, nights and expenditure) have been taken directly from the Ministry of Tourism regional forecasting programme. The regional forecasting methodology was updated in 2005 to ensure that the outputs of the forecasting programme could be fed directly into the TFM.

## *Caveats*

Please view low activity levels with extreme caution as these are likely to be based on very small and statistically unreliable sample sizes.

## Visitor Nights – All Tourist Segments

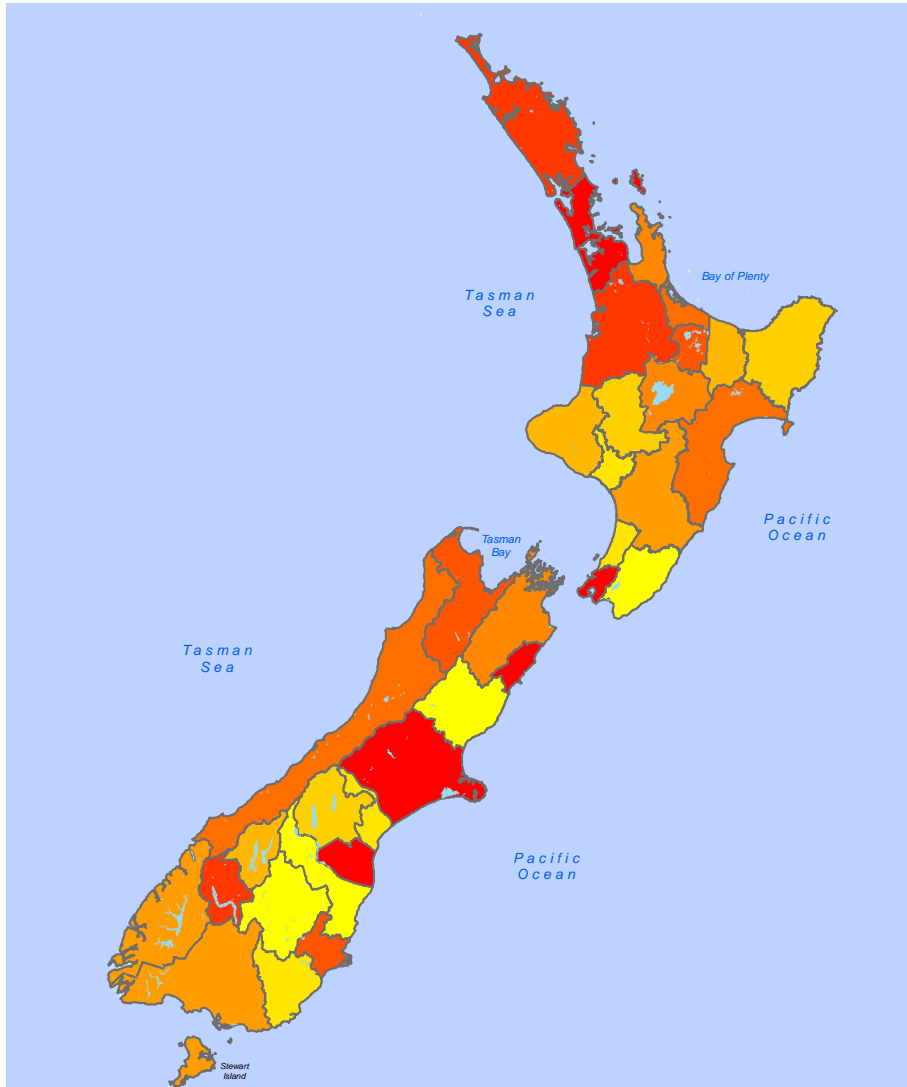


**Figure 21** Visitor Nights by All Tourist Segments in 2005 (the visitor statistics for the Canterbury RTOs of Hurunui, McKenzie and Central South Island are superimposed (in lighter colours) on the data for the whole Canterbury RTO, which itself is characterised by high visitation symbolised in red colour and visible for the areas around Christchurch and Oamaru).

Auckland RTO hosted the largest number of visitor nights in 2005 at 20.7 million which comprised 14.1 million international nights and 6.6 million domestic nights. Around 39% of these nights were spent by visitors whose main purpose of travel was visiting friends and family and only 31% whose main purpose was holiday. The high proportion of nights generated by international visitors is not surprising given Auckland's gateway status and its large population and employment base relative to other New Zealand centres. It is notable that the most important market for Auckland is the Rest of the World (including Pacific Islands) with 2.9 million visitors alone in 2005. Canterbury RTO, also a major international gateway, hosted the next highest number of nights at 12.6 million which included 6.5 million international nights (51%). Forty-four percent of visitors to Canterbury come for holiday. In contrast to the two main gateways, around 71% of Hawke's Bays RTOs 3.6 million visitor nights are generated by domestic travellers, most of which live in the Auckland and Wellington regions. Nights are divided almost evenly between domestic and international travellers in Wellington (7.6 million in total).

## Visitor Nights – International Visitors

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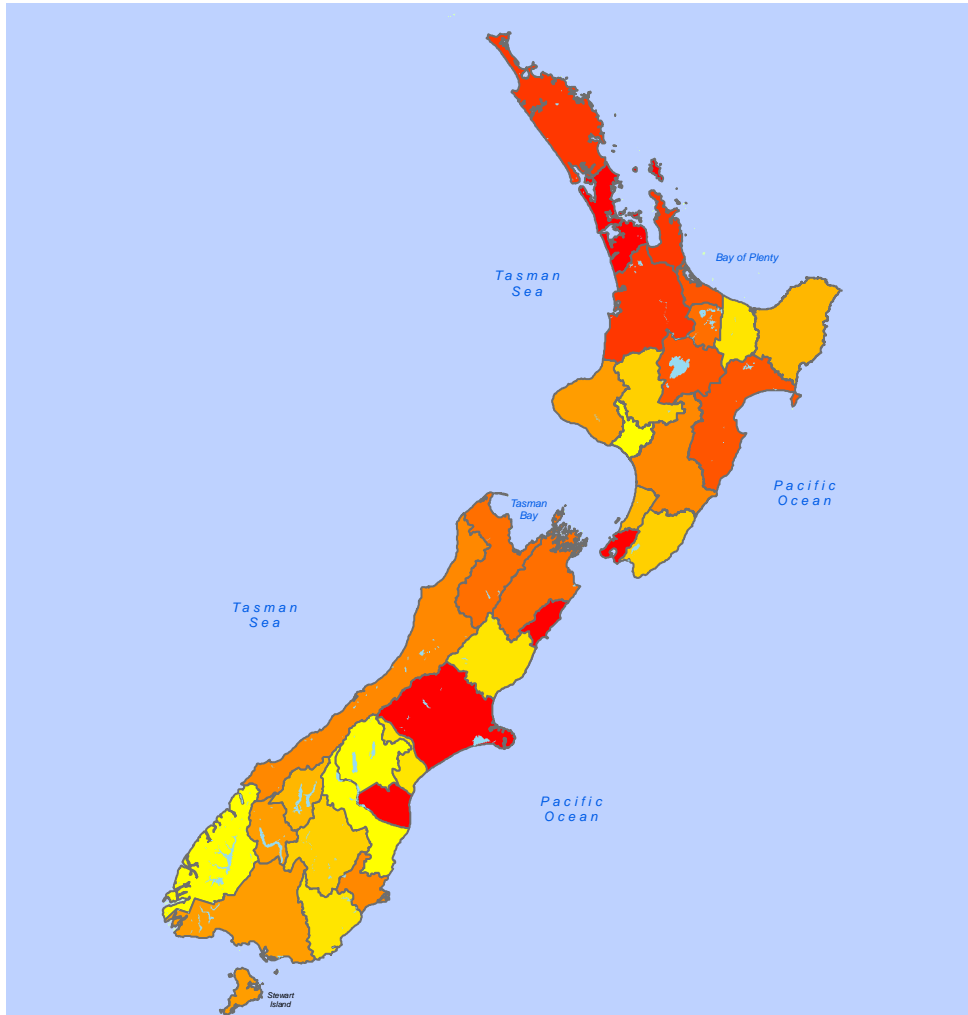


**Figure 22** Visitor Nights by International Travellers 2005 (see earlier comments about Canterbury).

The main urban centres of Auckland, Wellington and Christchurch capture the largest shares of international visitor nights, followed by Queenstown and Rotorua. Around 49% of international visitor nights in Christchurch, 73% in Queenstown and 67% in Rotorua are spent by visitors whose main purpose of travel is holiday, compared with only 29% in Auckland and 30% Wellington. The dominant purpose of travel among travellers staying overnight in Auckland and Wellington is visiting friends and family (VFR). Christchurch has a large population base but it also acts as a gateway to the South Island which is a popular holiday destination among international visitors and therefore hosts a large number of holiday nights. Around 25% of international nights in Christchurch are spent by VFR travellers, plus a significant 14% by educational visitors.

## Visitor Nights – Domestic Travellers

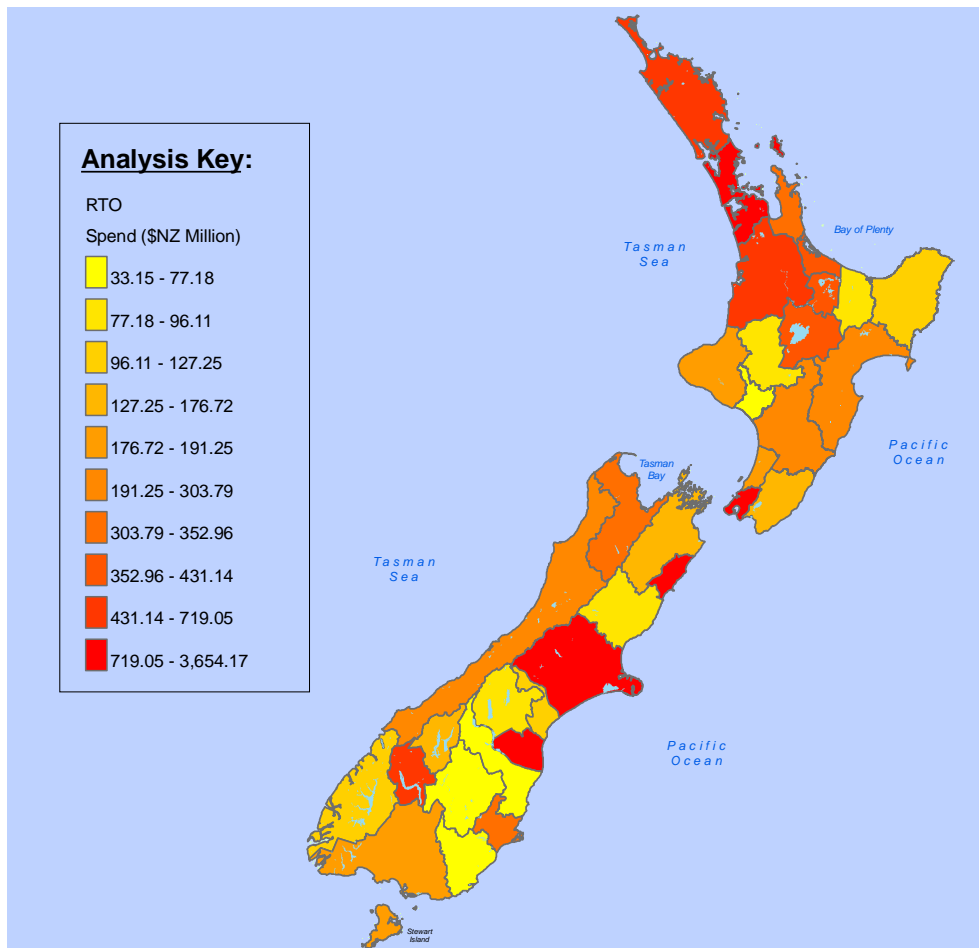
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**Figure 23** Visitor Nights by Domestic Travellers in 2005 (see earlier comments about Canterbury).

A large number of domestic visitor nights originate in the main centres of Auckland, Wellington and Christchurch. Auckland is generally the major source of domestic visitor nights in areas as far south as Turangi and the Hawke's Bay. Wellington is the major source of domestic visitor nights in areas south of Turangi and Hawke's Bay. A similar pattern exists in the South Island with Canterbury residents generating the highest proportion of domestic nights in the upper and central South Island and Otago/Southland residents generating the highest proportion in the lower South Island. Auckland's large population ensures that it is a major contributor to domestic visitor nights throughout the country. In Nelson, most of the 2.3 million domestic visitor nights are generated by Canterbury residents (43%), followed by visitors from Tasman/Nelson/Marlborough/West Coast (23%) and Wellington (10%).

## Expenditure – All Tourist Segments

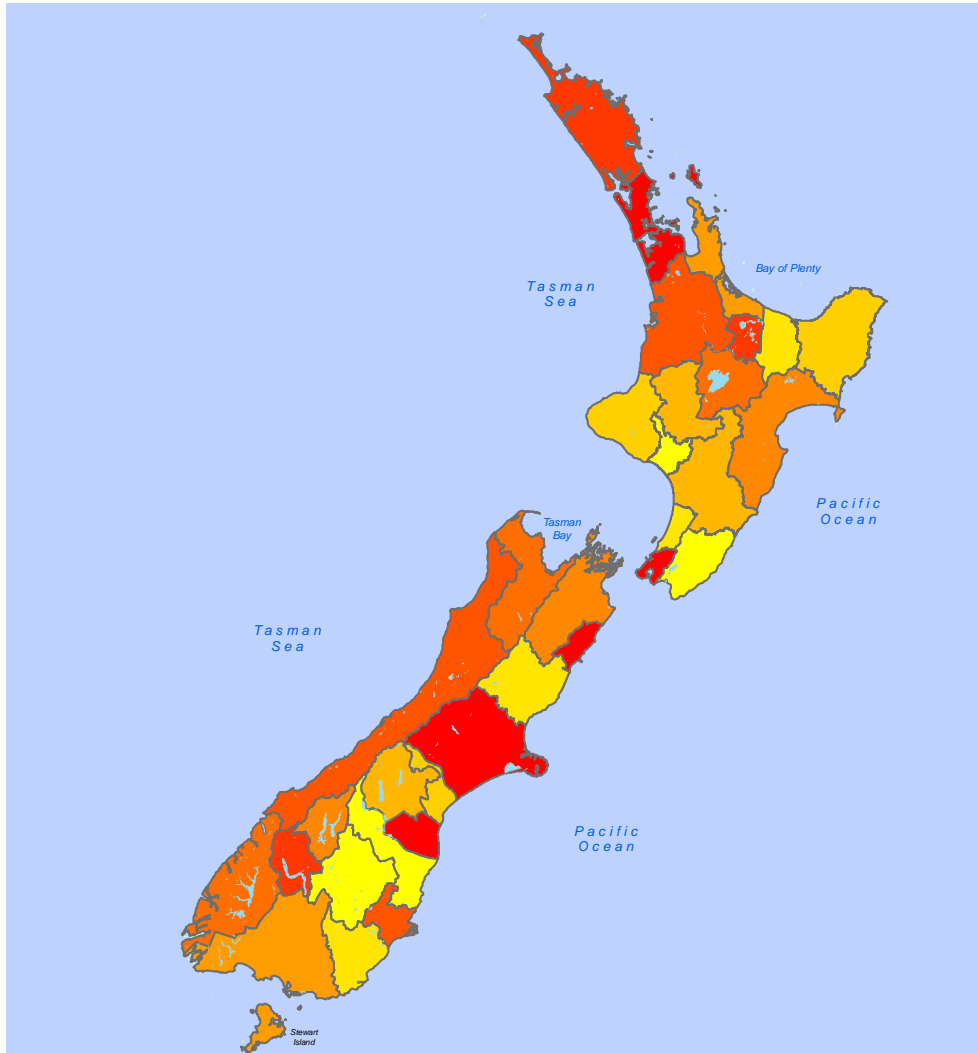


**Figure 24** Visitor Spend by All Tourist Segments in 2005 (see earlier comments about Canterbury).

Tourists spent a total of \$1.04b in Wellington in 2005. Australians accounted for over 15% of this (\$153 million), followed by overnight travellers from Auckland and UK/Nordic/Ireland (11% each). Almost half (\$504 million) of all tourist expenditure in Wellington is generated by domestic travellers. Approximately one third (\$313 million) of tourism expenditure in Wellington is business related, with another 32% generated by VFR travellers. In comparison, business travellers generate 23% of tourism expenditure in Auckland and 17% in Canterbury, highlighting the relative dominance of the business segment in Wellington. Educational visitors in Canterbury contribute 9% to tourist spending. This compares to 14% in the Dunedin RTO (\$47 million) and 3% in Waikato.

## Expenditure – International Visitors

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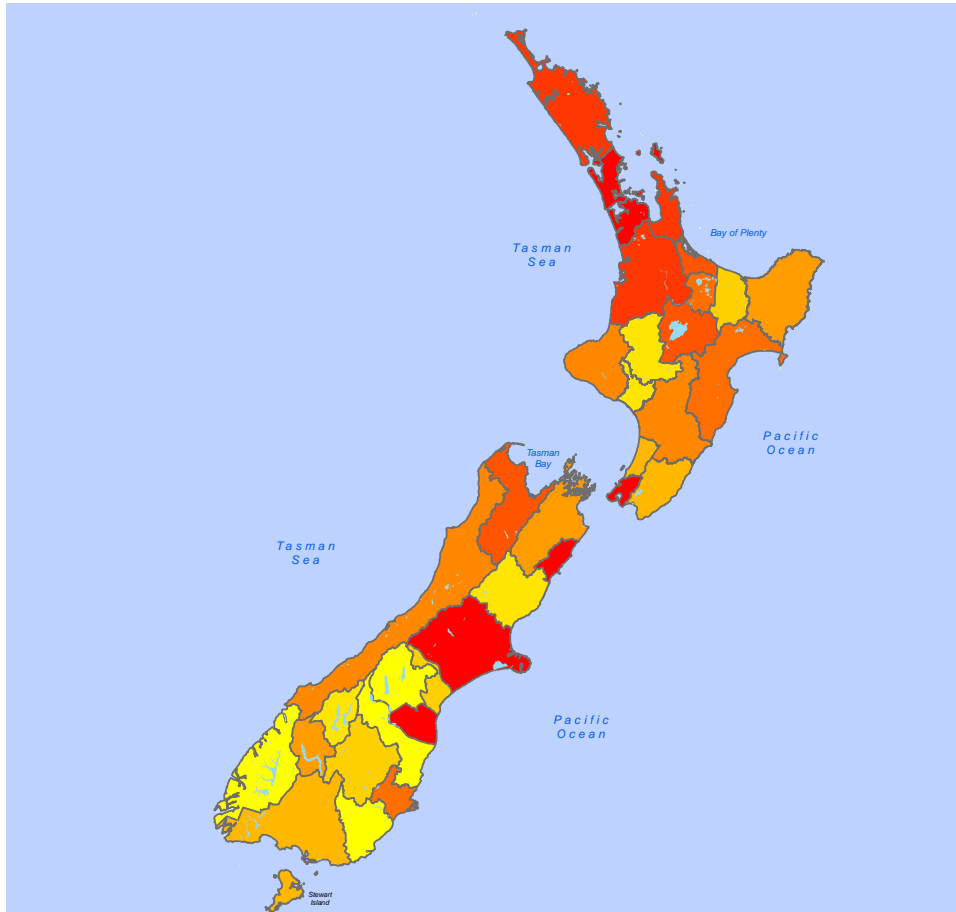
**Figure 25** Visitor Spend by International Travellers in 2005 (see earlier comments about Canterbury).

International visitors spent a total of \$1.08 billion in Christchurch City in 2005. Visitors from the UK/Nordic/Ireland accounted for around 19% (\$203 million), followed by visitors from Australia (\$194 million) and visitors from the Americas (\$161 million). Approximately 62% (\$665 million) of all international tourism spend was generated by holiday travellers. International students spend a considerable amount of money in Christchurch, accounting for around 13% of total international visitor expenditure. This is somewhat higher than the figure of 9% for Auckland, although the Auckland aggregate was higher at \$138 million.



## Expenditure - Domestic Overnight Travellers

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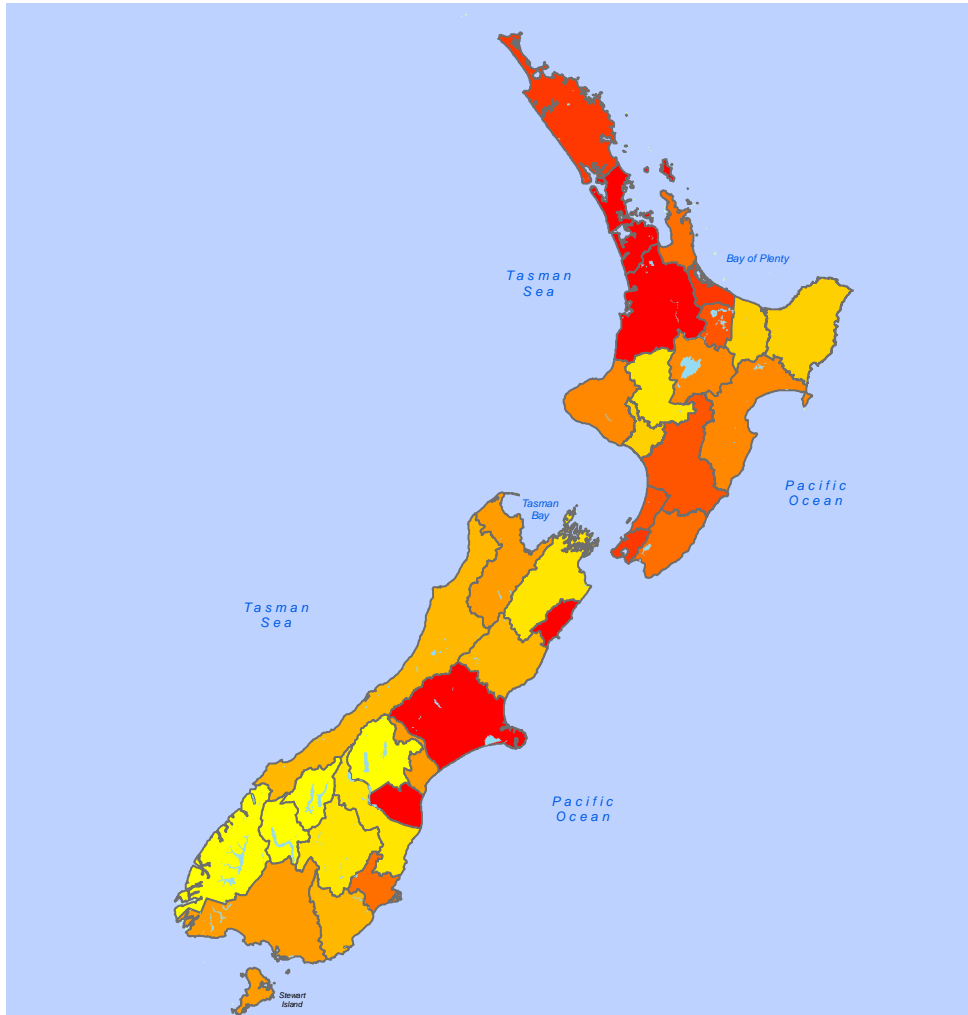


**Figure 26** Visitor Spend by Domestic Overnight Travellers in 2005 (see earlier comments about Canterbury).

Domestic overnight travellers spent a total of \$208 million in the Waikato RTO in 2005. About 33% of this was generated by travellers from the Auckland, and 15% from visitors from Waikato itself. Only 11% (\$22 million) of expenditure generated by overnight visitors from the South Island. In contrast, 32% of the \$68 million spent by domestic overnight visitors in Southland were by visitors from the North Island. Approximately 29% (\$193 million) of the \$665 million spent in Auckland by domestic overnight expenditure was generated by VFR travellers, similar to that by holiday travellers (\$209 million) and business travellers (\$205 million). In contrast over 55% of domestic overnight expenditure in the Lake Taupo RTO is generated by holiday travellers, with only 19% generated by VFR travellers. This reflects Taupo's relatively small population base and its location on the main trunk.

## Expenditure - Domestic Day Travellers

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**Figure 27** Visitor Spend by Domestic Day Travellers in 2005 (see earlier comments about Canterbury).

Day trip expenditure is heavily concentrated in and around the major metropolitan areas of Auckland, Wellington and Christchurch, all of which have significant population bases. These areas are all net importers of day trip activity - they receive less day trip activity from other regions than they generate in other regions. The localised nature of day trip activity is driven by time constraints and travel thresholds – most day trips involve less than 2 hours travel each way, mainly by car. This ensures that the majority of day travel is contained within regions or in adjacent regions. For example, around three quarters of all expenditure on day trips by Northland residents occurs within the Northland region. Most of the remaining 25% occurs within Auckland with a very small share making its way to Waikato. Approximately 85% of the day trip expenditure captured by Taranaki/Manawatu comes from within the Taranaki Manawatu region. The Bay of Plenty expenditure is largely generated by day visitors from within the Bay of Plenty (37% or \$26 million) and the Waikato (36%).

