

The term 'urban environment' refers to environmental aspects that are significant to living in cities, such as noise, water quality, access to facilities, and transport. The quality of the urban environment is directly related to quality of life. This chapter presents data related to several aspects of urban environment in the six largest cities.

Why this is important...

The physical environment is an important contributor to the way people feel about where they live. Growth, especially at the rate anticipated in the Auckland Region, puts pressure on environmental elements such as air and water and increases noise levels.

Housing density, quality of construction and urban design, and the way transport systems work all impact on liveability and social cohesion, and on overall quality of life.

What's in this chapter?

- Satisfaction with the way the city looks and feels
- Air quality
- Quality of beach water
- Complaints about noise
- Complaints about graffiti
- Open space
- Access to leisure and recreation opportunities
- Mode of travel to work
- Public transport

Impacts and relationships with other areas in this report

The urban environment impacts on many factors, including citizen's health, their sense of safety and community and wellbeing.

Key points

Over half the citizens in New Zealand's six largest cities were satisfied with the look and feel of their city according to a citizens perception survey (2000). Satisfaction levels were highest in Wellington and Christchurch. Beach water quality levels in North Shore and air quality levels in Christchurch are key issues. The majority of complaints about noise in urban areas are about stereos, parties and events such as rock bands and concerts.

Ratios of public open space to population show that all cities have a ratio of open space greater than 4 ha per 1,000 people. Wellington City has the greatest proportion of open space per capita at 17.3 ha per 1,000 people and Christchurch City the lowest at 4.5 ha.

Among the six largest cities, Wellington and Auckland City residents are the highest daily users of public transport. More than half of the respondents to citizen surveys in Manukau, North Shore and Waitakere Cities indicated they never use public transport. In these cases, car based travel was generally preferred. Overall, perceptions of public transport were more favourable in Wellington and Christchurch Cities than in the Auckland Region.



Satisfaction with the Way the City Looks and Feels

What this is about...

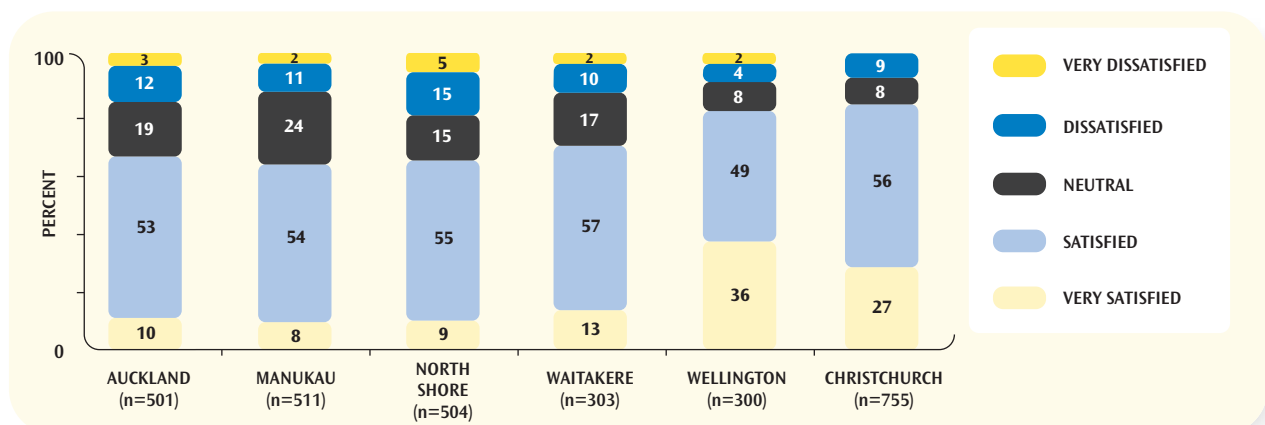
Ideally, citizens of a city feel a sense of pride and enjoyment about the area in which they live. It is very difficult, however, to measure citizen satisfaction with their city, as there will be many aspects of how people experience and feel.

This indicator provides a broad overview of general satisfaction levels among residents of the six largest cities, as a starting point for further consideration. Respondents to citizens' surveys undertaken in the six largest cities were asked to rate how satisfied they were overall with the 'look and feel' of their city.

What did we find ?

- Overall, over one half of respondents to the citizens' surveys indicated that they were 'satisfied' with the way their city looks and feels.
- Wellington and Christchurch Cities had relatively high proportions of citizens who were 'very satisfied' with the way their city looks and feels (36% and 27% respectively) when compared with the four Auckland cities. This may well be related to the relative size of the urban areas in which the six cities sit - that is, the four Auckland cities are part of a much larger urban area with inherent transport, congestion and pollution problems.
- Considerable proportions of respondents were neutral on the subject, especially in Manukau City where one in four were neither satisfied nor dissatisfied.
- Reasons given for dissatisfaction with cities varied slightly, however the most common reasons given by those who were dissatisfied included:
 - city dirty and polluted
 - too much rubbish on the streets
 - too much graffiti
 - did not like pace or look of 'urban sprawl' and new housing developments
 - traffic congestion.

CITIZENS' SATISFACTION WITH THE LOOK AND FEEL OF THEIR CITY AS A WHOLE (2000)



Data Source: Citizens' surveys

These findings will be linked to many other indicators in this report, such as access to leisure and recreation, noise levels, air quality, quality of bathing water at beaches, graffiti levels, employment, community safety, community cohesion, health, housing, and educational opportunities.

Air Quality

What this is about...

High levels of suspended particulate (fine dust) can directly impact on the health and wellbeing of citizens. The main causes of high levels of suspended particulate are fires and industrial emissions from smoke stacks. Levels are generally higher in winter than in summer as wood fires are used to heat homes.

It is very important that air quality is monitored and managed. Recently, the NZ Automobile Association reported that “(a)ir quality monitored from different sites by the Auckland Regional Council shows toxic pollutants going into the air weigh more than half the solid waste going into landfills in the area. The amount of fine particulate pollution, caused mainly by diesel vehicles, amounts to 500 bags of cement being shaken out into the air every day”.¹⁶¹

Each of the six cities records the number of times the level of suspended particulate exceeds Ministry for the Environment (MfE) standards (exceeds 50 mgm³) in a year at selected sites. It is difficult to compare results for each city as there are a number of factors that can affect readings.¹⁶² However, the data presented here provides an indication of air quality problems where remedial action is required.

What did we find ?

The main finding was that there are very high levels of suspended particulate in Christchurch City compared to the five other largest cities. This is affected by the city’s location with the Port Hills to the south and the sea to the east, which creates the effect of an inversion layer. By contrast, the prevailing winds in Auckland and Wellington Cities disperse air pollution relatively quickly.

**NUMBER OF EXCEEDANCES OF AIR QUALITY STANDARD
AT THE WORST SITES IN EACH CITY (1997 TO 1999)**

	1997	1998	1999
Auckland - Penrose	3	0	2
Manukau - East Tamaki	4	1	2
North Shore - Takapuna	1	0	0
Waitakere - Henderson	n/a	0	1
Wellington	n/a	0	0
Christchurch - St. Albans	33	27	35

Data Source: Data supplied by each Council

There are other ways to measure air quality such as carbon monoxide levels. Carbon monoxide is mainly caused by vehicle emissions. The Auckland Regional Council recently ran a campaign encouraging vehicle emission testing in an effort to reduce carbon monoxide levels in the Auckland Region. (It is estimated that a well-tuned vehicle can reduce emissions by up to 25%.) It focused on motor vehicles as the main cause of air pollution stating “Over 80% of the air pollution in the Auckland Region is the result of vehicle emissions” and “Carbon monoxide levels in Auckland are higher than London”.

161 NZ Automobile Association. Directions. August 2000.

162 Because there are a different number of sites for each city, one site per city has been selected for this report, where there was more than one site, the results from the worst site are highlighted.

Quality of Beach Water

What this is about...

Beach water quality is measured to ensure that the water is safe for human recreational use. Each city records the number of times the level of enterococci exceeds Ministry for the Environment and Ministry of Health guidelines in a summer bathing season at selected beaches and also monitors the seasonal median. Enterococci are bacteria that occur in the gut of humans and animals and indicate the presence of pathogens (illness-causing bugs). Usually, testing is done at selected sites over the summer months only.¹⁶³ If the guideline level of enterococci is exceeded two days in a row, warning signs should be posted.

The quality of beach water around the major cities is mainly affected by discharges from land, rather than discharges at sea. Probably the most important factors are the quality of a city's stormwater and sewage systems. Variables that can affect a single result include bacterial resuspension, dogs, birds, or even seaweed. Other variables that can affect test results are current flows, rainfall, tides and temperature.

The indicator highlights the frequency of serious water quality problems where remedial action is required. New Ministry for the Environment guidelines were introduced in 1999, including the requirement to erect warning signs when two consecutive samples show levels of enterococci greater than 277 per 100 ml. The sign remains until the level returns to below 277 (by comparison, raw sewage could be expected to have millions of enterococci per 100 ml).

At a level of 277 per 100 ml, the guidelines indicate that 19 people out of 1,000 may experience some illness. Pathogens in water used for recreation can cause stomach and intestinal illness (gastrointestinal illness), colds and flu (respiratory illness) and skin, eye and ear infections. The most common risks are of getting a mild diarrhoeal illness or a slight respiratory infection.

This is an important driver of local authorities' stormwater and sewage infrastructure improvement programmes, although it effectively cannot measure the success of them with such a small and occasional grab sample.

What did we find ?

- There have been a number of instances when the guideline level has been exceeded at several beaches throughout the six cities over the last two years.
- Although there are many causes of exceedance, beach water quality is largely affected by sewage overflows, infiltration of water into the sewage system and exfiltration from leaky pipes.

RATE OF EXCEEDANCE AT MONITORED SITES (NO. OF EXCEEDANCES ÷ TOTAL NO. OF SAMPLES)

	1998 / 99	1999 / 00
Auckland	n/m	2.5
Manukau	12.8	7.9
North Shore	2.7	3.2
Waitakere	n/m	4.0
Wellington	n/m	n/m
Christchurch	0.7	1.1

Data Source: Data supplied by each Council
N/m: not measured

Public health can be affected if people swim at beaches where the warning signs are posted. Affected beaches, due to poor water quality, can affect people's satisfaction with and perception of the way the city looks and feels, house prices and leisure activity options.

¹⁶³ Samples of beach water were taken at those sites on a weekly basis (and if required on a daily basis). Sometimes water quality is tested year round, such as in North Shore City. Data prior to 1999 was analysed in accordance with previous guidelines. The water samples are sometimes analysed for other data besides enterococci, including salinity, turbidity (NTU), BODs, dissolved oxygen (% saturation), phosphate, inorganic nitrogen, free ammonia, and faecal coliforms. The regulatory or health section of each Council holds this information. Data prior to 1999 was analysed in accordance with previous regulations and standards. Councils often also undertake water samples at estuaries, rivers, and lakes. There are separate guidelines for fresh water.

Complaints about Noise

What this is about...

Loud noise can affect the way people feel about the area in which they live and can have a negative impact on their overall wellbeing. Higher population and higher density living tend to highlight the issue of noise.

The six city councils record the number of complaints received about noise and all provide a noise control service to residents. It must be noted however, that local authorities do not have a uniform approach to recording numbers of complaints. Complaints are recorded about excessive noise and the local authorities' response to complaints. There can be more than one complaint per site.

The number of noise complaints can be affected by factors such as:

- citizen behaviour and sensitivity to noise
- proximity to other people or causes of noise and protection from noise
- how easy the procedure is for residents to lodge a complaint
- how much residents believe that the problem can be remedied by contacting Council.

What did we find ?

- For some cities the number of complaints has increased as the service to customers has improved, for example with the introduction of a call centre.
- With more in-fill housing, it would be expected that the number of noise complaints would increase.
- The majority of complaints about noise are about stereos, parties or events such as rock bands.¹⁶⁴
- It is possible that complaints are not made because of a perception that the local authority can do nothing about it.

COMPLAINTS ABOUT NOISE, PER LOCAL AUTHORITY (1998 TO 1999)

	Time period	Noise complaints received
Auckland	1999 calendar year	13,608 noise complaints received outside of Council working hours.
Manukau	1998/99 financial year	7,900 total noise complaints
North Shore	1999 calendar year	4,623 attendances to noise complaints
Waitakere	1998/99 financial year	6,434 total noise complaints
Wellington	No data was supplied	-
Christchurch	1999 calendar year	9,133 total noise complaints

Data Source: Data supplied by each Council

Noise complaints can affect people's satisfaction with the way the city looks and feels, and their housing situation. Correspondingly, other indicators such as high density living in urban areas, increasing population, and high use of cars can affect noise complaints.

164 For example, in Manukau City 89% of the complaints received in 1997/98 related to stereos/parties/live bands, 4% related to alarm systems, 1% related to vehicles, and 6% related to other causes.

Complaints about Graffiti

What this is about...

Graffiti is a growing problem in New Zealand urban areas. It has a strong impact on people's experience of the urban environment - it is perceived as an act of vandalism and contributes to people feeling unsafe in their community.

It is very difficult to measure incidences of graffiti in the six largest cities as there is no standard method of recording graffiti and responses to it vary among individuals, neighbourhoods and local authorities. However, the six cities do record the number of complaints received about graffiti, although they do not have a uniform approach to this. For example, some record every complaint per site whereas others record graffiti incidences only on city facilities.

What did we find ?

- The number of complaints about graffiti varies in each city and may be more dependent on the system used to record complaints than the extent of the problem in that city. The number of complaints in 1999 ranged from 303 in Auckland City (council owned property only and excluding parks) to 4,941 in Waitakere City. Each local authority has a different system for registering complaints and whether or not contractors register a complaint when they remove graffiti that they detect.
- The number of complaints is related to the quality of the service provided in terms of a call centre, responsiveness and resources provided. For example, Manukau City received 565 complaints in the 1999 financial year. The number increased to 1,352 in the 2000 financial year when their call centre was established and services were more accessible.
- The number of complaints are also affected by the extent of a routine graffiti removal programme that operates without requiring a complaint, how easy the procedure is for residents to lodge a complaint, and how much residents believe that the problem can be remedied by contacting their local authority.
- The large number of complaints about graffiti in Waitakere City is, in part, due to the provision of resources for removal of graffiti on private property.

The level of graffiti in a city can affect residents' satisfaction with the way the city looks and feels. It can be related to school dropout rates, crime levels, and juvenile offending. Graffiti is a social problem, which affects the entire community. Perpetrators of graffiti are often juveniles.

Open Space

What this is about...

Access to play areas and open space for sport and recreation is an important ingredient in how people feel about where they live, play and enjoy their leisure time. Open space is a contributor to the general health and well-being of a community. Measuring public open space highlights the availability of parks and reserves for the city's population and can indicate how urban sprawl is encroaching on parks and reserves by showing whether the ratio is being maintained as the population increases.

The indicator shows the ratio of public open space per 1,000 residents. Public open space includes neighbourhood and metropolitan parks and reserves, but excludes regional parks and Department of Conservation (DoC) land. The space may be passive or recreational.

Although a standard of four hectares per 1,000 population is often used to provide neighbourhood parks and sports fields in new suburbs, there are no recognised standards for larger district parks, sub-regional or regional park systems, or for other areas like esplanade reserves and ecological corridors which fulfil both conservation and recreational roles.

What did we find ?

- All of the six cities have a ratio of open space greater than four hectare (ha) per 1,000 people.

OPEN SPACE PER 1,000 POPULATION, BY CITY (1999)

	Public open space (ha)	Population	Public open space per 1,000 population (ha)	Regional parks (ha)	DoC land (ha)
Auckland	2,179	354,532	6.2	295	21,864
Manukau	1,557	254,603	6.1	3,780	573
North Shore	1,341	171,494	7.8	113	52
Waitakere	1,089	154,386	7.1	16,259	101
Wellington	2,881	166,800	17.3	289	6
Christchurch	1,459	324,300	4.5	n/a	n/a

Data Sources: Auckland Regional Council State of the Auckland Region Report 1999, Wellington Regional Council State of the Region Report 1999, Christchurch State of the Environment Report 1999. Population figures are estimates from Statistics New Zealand.
n/a - data not available

Large areas of regional parks and Department of Conservation land are available in the Auckland Region.

The indicator doesn't track additions of open space, but instead tracks the net effect of additions and conversions to other uses.

The data doesn't recognise the availability of open space in adjacent territorial authorities, although residents enjoy open space in neighbouring areas. Other factors to consider are the quality of the open space and ease of access, for example whether a quality neighbourhood park is within walking distance.

Results may be skewed at the ward level. The average for a city may be reasonable, but some wards may not have so much open space, for example in Manukau City there is a large area of open space in the rural ward of Clevedon which affects the average for the city.

The availability of open space may affect people's satisfaction with the way the city looks and feels, air quality, access to leisure and recreation. Even if there is no change in the amount of open space, the enjoyment of that open space can be affected by increased numbers using it through changes in population, increased housing density, and the availability of other leisure and recreational opportunities. The use of public open space for leisure or recreation purposes can have positive benefits on the health of a city's residents.

Access to Leisure and Recreation Opportunities

What this is about...

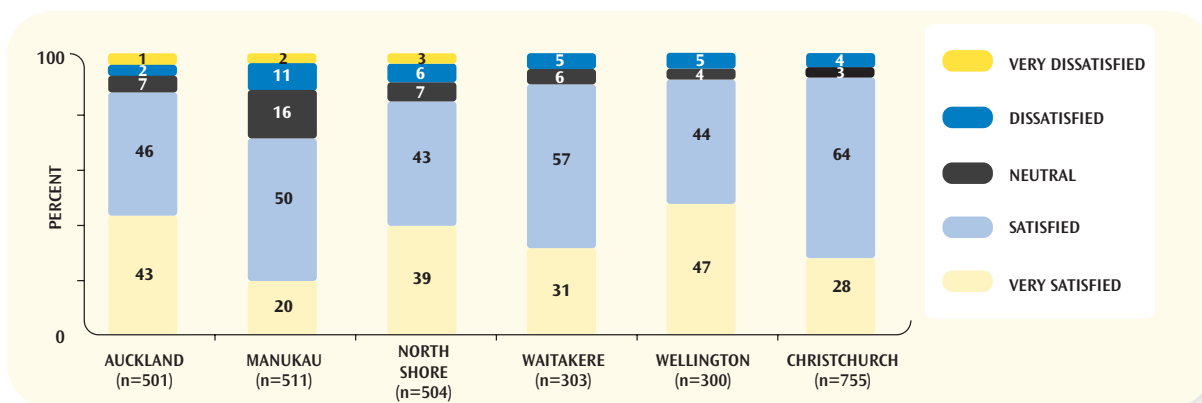
Access to leisure and recreation opportunities such as parks, beaches, clubs, sports, cafes, galleries and any other leisure activities enhances the health and wellbeing of people. These activities also provide opportunities for socialisation and contribute to social cohesion.

Respondents to a citizens' survey conducted in each of the six cities were asked how satisfied they were with access to leisure and recreation opportunities in their city.¹⁶⁵ The data doesn't recognise the availability of leisure and recreation opportunities in adjacent local authority areas, which is significant because residents do enjoy leisure and recreation outside of their city.

What did we find ?

- High proportions of respondents to all surveys were satisfied with their access to leisure and recreation opportunities.
- Relative to the other cities, a larger proportion of respondents to the Manukau City survey indicated that they were dissatisfied.¹⁶⁶
- Reasons given for dissatisfaction in all cities included:
 - issues of availability of recreation opportunities
 - affordability
 - proximity and transport issues
 - safety
 - in addition, several respondents to the North Shore City survey commented that they were dissatisfied as the beaches were polluted or unsafe to swim in.

CITIZENS' SATISFACTION WITH ACCESS TO LEISURE AND RECREATION OPPORTUNITIES (2000)



Data Source: Citizens' surveys.

These findings link in with citizens' satisfaction with the overall look and feel of the city, the availability of open space, and personal income. For example, Wellington City has: the highest level of satisfaction with access to leisure and recreation opportunities; correspondingly high satisfaction with the overall look and feel of the city; the largest available open space; and only 27% of its population with personal income less than \$10,000. Manukau City has the lowest level of satisfaction with access to leisure and recreation opportunities; correspondingly low satisfaction with the overall look and feel of the city; the second lowest available open space; and 34% of its population with personal income less than \$10,000.

165 "Leisure and recreation opportunities" were very broadly defined as access to "parks, beaches, clubs, sports, cafes, galleries and any other leisure activities".

166 This may be a result of difference in wording of the question. The Manukau survey asked respondents "How satisfied are you with your ability to both get to and afford to go to, the leisure and recreational opportunities that you want?" and was the only survey to ask respondents about affordability of recreation and leisure opportunities. It is unclear with which part of this question respondents were dissatisfied - affordability or accessibility.

Mode of Travel to Work

What this is about...

High use of private motor vehicles has a negative impact on the environment and a high human cost in regard to accidents and fatalities. It is therefore important to monitor modes of travel to work to look for trends.

This indicator presents Census data on how residents engaged in full time employment (aged 15 years or over) travelled to work on Census day in 1996. The indicator highlights dependence on the motor vehicle for travel to work and how much other modes of transport are used. It also shows the split between working at home and another location.

What did we find ?

- The motor vehicle is the dominant form of transport to work in all cities, ranging from 60.8% in Wellington City to 82.8% in Manukau City.
- Wellington City has the lowest use of motor vehicles for travel to work and also the lowest number of road traffic fatalities per 100,000 population, compared to the other cities.
- The greatest percentage use of other forms of transport mainly occurred in Wellington City, where 13.7% used the bus system to get to work, 3.1% travelled by train and 12.9% walked to work.
- The highest proportion of bicycle use was in Christchurch City, at 7.8%.
- The highest proportion of those working at home on Census day was in North Shore City, at 7.4%.

MODE OF TRANSPORT TO WORK ON CENSUS DAY, BY CITY (1996)

	Motor Vehicle (%)	Public Bus (%)	Train (%)	Bicycle (%)	Walked or Jogged (%)	Worked at Home (%)	Other (%)
Auckland	74.5	8.0	0.4	1.8	5.7	6.8	2.5
Manukau	82.8	4.6	0.8	1.3	3.2	5.6	1.6
North Shore	77.6	6.0	0.0	1.3	3.7	7.4	2.8
Waitakere	82.6	4.5	0.9	1.3	2.8	6.3	1.7
Wellington	60.8	13.7	3.1	2.2	12.9	4.9	2.5
Christchurch	75.2	3.9	0.0	7.8	4.8	5.8	2.5

Data Source: Statistics New Zealand

There were several changes in mode of travel to work between 1991 and 1996 Censuses. With the exception of Wellington City, there was a decrease in the use of buses and bicycles in all cities. There was also a decrease in the proportion of people who walked to work (with the exception of Christchurch). However, there was an increase in the use of trains (again, with the exception of Wellington City). All cities showed an increase in the use of other forms of transport.

Public Transport

What this is about...

The continued reliance on the motor vehicle in New Zealand's six largest cities has created congestion pressures and affects the ease of travel in a region. Consequences include wasted time in travelling or moving goods, individual stress and frustration and even living and working in a local area because of the problems in getting about the region.

Greater use of public transport can have important effects on citizens' wellbeing, such as:

- a means of travel for those who can't afford a motor vehicle or those families that choose not to have an additional motor vehicle
- minimising the stress of congestion along highways and city roads
- reduced motor vehicle emissions of carbon monoxide
- a safer and cheaper public transport service resulting from economies of scale.

Current strategies, such as the Auckland Regional Growth Strategy, place a high importance on improving passenger transport and improving access by encouraging medium density housing around transport nodes.

This indicator highlights the use of different modes of public transport in each region. Data presented below measures the number of trips made not the number of patrons using public transport. It provides information about passenger preferences and trends. Public transport includes buses, trains and ferries provided by or licensed by regional authorities. This indicator also discusses citizens' perceptions of public transport.

What did we find ?

REGIONAL PUBLIC TRANSPORT USE

A study of transport in New Zealand found that from 1991 to 1996 across Auckland, Wellington and Canterbury Regions:

- the use of buses decreased in each of the regions
- the use of trains reduced in the Wellington Region during that period
- the use of trains increased in the Auckland Region during that period.¹⁶⁷

NUMBER OF TRIPS MADE BY DIFFERENT FORMS OF PUBLIC TRANSPORT, BY REGION (1991 AND 1996)¹⁶⁸

	Auckland		Wellington		Canterbury	
	1991	1996	1991	1996	1991	1996
Buses	33,747,349	31,150,000	16,232,384	12,358,492	9,024,637	8,386,632
Trains	1,052,183	2,065,865	10,840,000	8,561,000	0	0
Ferries	1,238,773	1,580,357	120,000	120,000	28,999	27,226
Total	36,038,305	34,796,222	27,192,384	21,039,492	9,053,636	8,413,858

Data Source: Bachels, Newnam & Kenworthy 1999

¹⁶⁷ Bachels, Newnam and Kenworthy. 1999. Indicators of Urban Transport Efficiency in New Zealand's Main Cities.

¹⁶⁸ Data for Auckland Region is for 1991/92 and 1995/96; whereas data for Wellington and Canterbury regions are 1990/91 and 1995/96.

The table below indicates the total kilometres travelled in each region, by mode. Between 1991 and 1996:

- length of journeys by motor vehicle increased in each of the regions
- length of journeys by bus decreased in each of the regions
- length of journeys by train increased in Auckland, but decreased in Wellington.

KILOMETRES TRAVELLED (MILLION KILOMETRES), BY REGION (1991 AND 1996)

	Auckland		Wellington		Canterbury	
	1991 (km)	1996 (km)	1991 (km)	1996 (km)	1991 (km)	1996 (km)
Motor vehicle	7,450	9,335	2,813	3,106	2,627	3,065
Buses	239	216	91	69	56	52
Trains	17	28	207	196	0	0
Ferries	4	5	1	1	0	0
Total	7,710	9,584	3,112	3,372	2,683	3,117

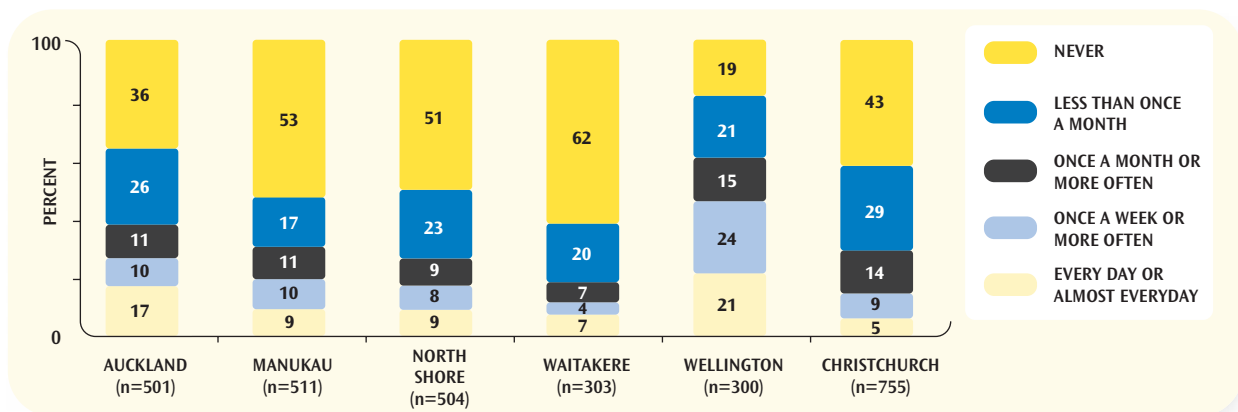
Data Source: Figures are derived from Bachels, Newnam & Kenworthy, 1999

FREQUENCY OF USE

Respondents to citizens' surveys undertaken in the six largest cities were asked to indicate how often they had used public transport in the previous twelve months. Compared with other cities, a high proportion of citizens in Auckland City and Wellington City indicated that they use public transport every day. Relatively low proportions of respondents to the Manukau, North Shore and Waitakere City surveys stated that they use public transport. The relatively higher figures for Auckland and Wellington Cities may be linked to the higher proportion of citizens who use public transport to travel to work in the central business district.

When asked why they do not use public transport, the most common response citizens gave was that they prefer to use their own car. Other reasons given included inconvenient destinations, inconvenient time tables, feeling that the car is more convenient, and no transport service available.

FREQUENCY OF USE OF PUBLIC TRANSPORT,¹⁶⁹ BY CITY (2000)



Data Source: Citizens' Surveys

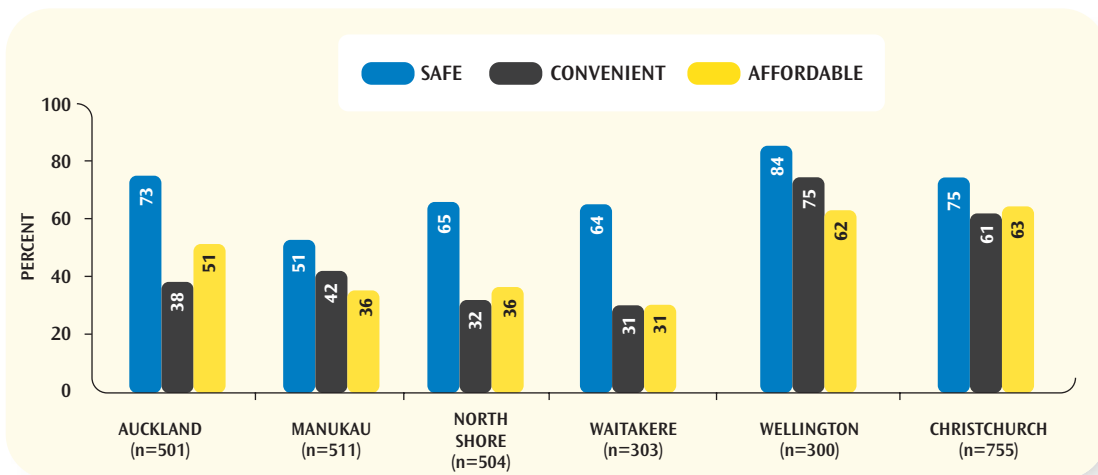
169 Respondents to the Christchurch survey were asked how often they had used public transport in the previous 12 months. Respondents to all other surveys were not provided with a time limit.

PERCEPTIONS OF PUBLIC TRANSPORT

Respondents to the citizens' surveys were asked to indicate whether they agreed or disagreed that public transport is safe, convenient and affordable. All respondents were asked these questions, regardless of whether or not they used public transport.¹⁷⁰

- Overall, relatively high proportions of respondents felt that public transport was safe, especially those in the cities of Auckland and Christchurch. However, respondents to the Manukau survey were less likely to agree with this statement.¹⁷¹
- Respondents from Wellington and Christchurch were more likely than respondents in Auckland cities to agree that public transport was convenient and affordable. In particular, three quarters of respondents from Wellington agreed public transport was convenient.
- Within the Auckland Region, respondents from Auckland City were more likely to agree that public transport is affordable. This result may well be influenced by that city's proximity to the central business district, in which many respondents may work. In line with this, relatively smaller proportions of residents from North Shore and Waitakere Cities agreed that public transport is affordable.
- Key reasons for dissatisfaction with public transport were timing, frequency and destination.

PERCENTAGE OF RESPONDENTS WHO 'STRONGLY AGREE' OR 'AGREE' THAT PUBLIC TRANSPORT IS SAFE, CONVENIENT AND AFFORDABLE, BY CITY (2000)



Data Source: Citizens' Surveys

170 Quite significant proportions of respondents to all surveys indicated a "don't know" response to these three questions.

171 One quarter (27%) of respondents to the Manukau survey indicated a "don't know" response to this question.