## Transport - Waka

We maximise the use of our transport network

## This chapter will be introduced with a double page graphic, including the following information:

A busy road in the city such as Jervois Quay will handle around 50,000 vehicle movements per day, much of it in heavy loads. A suburban driveway might deal with fewer than 10.

Roads deteriorate over time due to the impact of traffic, particularly heavy vehicles, and environmental factors. Preventative resealing of the pavement is the most cost effective method of maintaining good road condition.

Most roads in the city flex under heavy loads. Chipseal is a flexible surface making it less likely to crack under these loads.

Road surfaces also waterproof a road, keeping the underlying material relatively dry and therefore stable.

Utilities (such as electricity and telecommunications companies) have the right under legislation to use the roadway to deliver services. We work closely with these parties to minimise roadworks and disruptions.

Traffic counters are able to tell how many and what type of vehicles use a road. Traffic counts inform the basis of road design, our resealing programme and transport planning.

## These 'did you know' facts will be used in the body of the chapter:

- There are 3 main choices for road surfacing:
  - o Chip seal: Good skid resistance and waterproofing, but relatively rough
  - o Slurry: Smoother than chipseal but more expensive and brittle
  - Asphalt: Good for high-traffic roads or where smoothness or quietness is required, but is the most expensive choice.
- Bus journey times have improved throughout the city. This is due to a number of priority bus
  lanes and other bus priority measures being installed in the Golden Mile and elsewhere. The
  Golden Mile project has led to journey time savings of around 14% and reduced variability in
  service times during the evening peak.

- Highly trafficked routes need to be able to carry high traffic volumes over long periods. Their strength generally comes from a layer of carefully graded and compacted stone immediately below the surface, called the 'base course layer'. This layer is supported by varying thicknesses of compacted gravel on top of the natural ground.
- We've been working to make infrastructure more resilient in an earthquake. Over the last 10 years the Council has been strengthening roads and bridges on critical routes throughout the city. We've also built new retaining walls designed to perform well in earthquakes.

# 7.1 TRANSPORT PLANNING

We plan for an efficient transport system that allows people and goods to move freely with and through the city.

#### What we do:

- We develop policies and plans for the management of the transport network. This includes developing and implementing initiatives to ease congestion, making the transport network more efficient, and undertaking detailed traffic modelling and planning work.
- We support a range of transport options, encouraging more sustainable alternatives to private cars such as walking, cycling and public transport.
- We work closely with the Greater Wellington Regional Council (GWRC), which has overall
  responsibility for regional land transport planning, and with the New Zealand Transport Agency
  (NZTA), which funds transport projects using revenue from fuel taxes and other transport-related
  levies.

## This activity contributes towards us being:

**More liveable:** The transport system influences where people choose to live, how easily they can get to and from places, and how easily they can enjoy what the city has to offer.

Better connected: A well-planned transport system allows for faster movement of people and goods.

**More competitive:** A network that allows easy movement of people and goods is vital for business and a significant competitive advantage.

## **Key projects**

#### During the year:

- We continued to work with NZTA on Roads of National Significance projects including Transmission Gully, Basin Reserve/Memorial Park and central business district (CBD) network optimisation planning.
- We worked with the Ministry of Transport on the draft national policy for red light cameras.
- We provided advice to the National Road Safety Committee on development of the second Safer Journeys Action Plan.
- We implemented further bus lanes in Courtenay Place, Kent Terrace, Cambridge Terrace and Adelaide Road to virtually complete the bus priority route through the city.
- We worked closely with GWRC and NZTA on the Public Transport Spine Study, due for completion March 2013, which is looking at a high quality public transport route from the Railway Station to the Wellington Hospital.
- We provided input to GWRC on their Wellington Bus Review which proposes major changes to bus service levels and routes throughout the city.

#### What it cost

Operating Expenditure (\$000)	Actual 2012	Budget 2012	Variance 2012	Actual 2011
7.1.1 Transport Planning <sup>1</sup>				
Expenditure	871	1,308	437	751
Revenue	(192)	(517)	(325)	(131)
Net Expenditure	679	791	112	620

<sup>&</sup>lt;sup>1</sup> Under spend due to additional funding from other territorial local authorities associated with the Cycle Skill training programme and savings achieved by utilising available internal resources instead of external labour resources.

#### How we performed

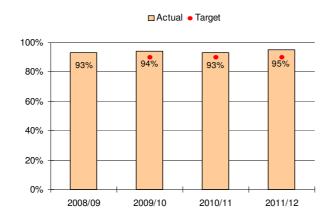
We aim for a sustainable, safe and efficient transport system. We assess efficiency and sustainability by measuring the proportion of residents who walk, cycle or use buses for transport; and by measuring resident satisfaction with the city as a place to move around on foot and in cars. We assess safety by asking for residents' views of common transport safety issues (road casualties are covered in section 7.2).

## Residents' (%) agreement that the city allows easy movement for vehicles

Result: 62% (target: 70%; 2010/11: 60%).

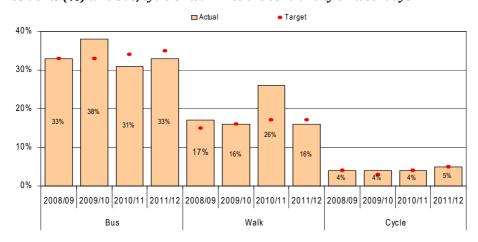
Source: WCC Residents' Monitoring Survey 2012

## Residents' (%) agreement that the city allows easy movement for pedestrians



Source: WCC Residents' Monitoring Survey 2012

## Residents (%) who bus, cycle or walk into the central city on weekdays



Note: The above chart presents residents' **main** modes of travel into the central city. The large change in number walking into the city is likely due to as statistical anomaly in 2010/11.

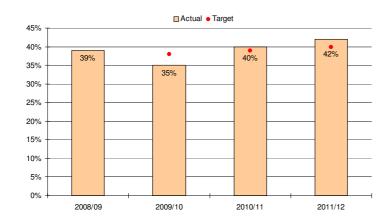
## Cyclists and pedestrians entering the CBD (weekdays)

Result: 864 cyclists (target: 700); 5,237 pedestrians (target: 4,470).

Surveys were undertaken over a single week in late summer 2012, between 7am and 9am. The results are based on the average number of pedestrians and cyclists entering the city per hour.

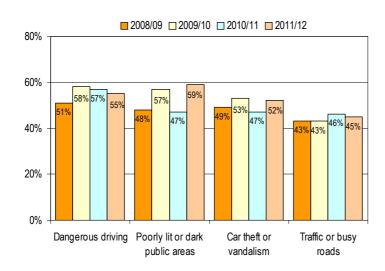
Source: WCC Infrastructure

## School children (%) who walk to and from school daily



Source: WCC Residents' Monitoring Survey 2012

## Residents' (%) perceptions of transport safety issues



## 7.2 TRANSPORT NETWORKS

We manage and maintain the city's transport network so it is safe, efficient and sustainable.

#### What we do:

- We manage a network that includes more than 670km of urban and rural roads, as well as 88 bridges, four tunnels, and more than 2,400 retaining walls and sea walls.
- We provide bus stops and bus shelters throughout the city and park-and-ride areas. We also support public transport through bus priority measures such as bus lanes and traffic signals that allow buses to go first.
- We run a traffic control system that includes over 100 sets of traffic lights, 16 closed circuit television camera systems, and a central traffic computer system. The system is run with the aim of ensuring smooth traffic flows.
- We manage the city's 26km network of cycleways, about half of which is dedicated cycleways and the
  rest is shared pedestrian/cycle paths. We also manage over 980km of footpaths, as well as steps,
  accessways, subways, and pedestrian malls.
- We work with communities to improve road safety through education, enforcement, and installing physical controls such as roundabouts, traffic islands, pedestrian crossings, and other features such as speed limits that slow traffic or protect pedestrians.

#### This activity contributes towards us being:

**Better connected:** We work to enhance the public transport network through implementing bus priority measures. These make the network more efficient and helps reduce congestion.

Safer: A safe vehicle network is important for residents' quality of life.

**Healthier and more liveable:** Cycleways and pedestrian routes enhance the city's 'liveability' by reducing traffic congestion and making travel a form of recreation. It's also good for the health of individual cyclists and walkers.

**More sustainable:** We provide cycling and walking networks to encourage sustainable alternative options to the private motor vehicle for commuting.

More competitive: The quick and efficient movement of goods reduces costs to business.

#### **Key projects**

#### During the year:

- The major upgrade of Willis Street from Boulcott Street to Lambton Quay commenced during 2012. These improvements will complete the high quality streetscape and traffic improvements on the Golden Mile between Bowen Street and Courtenay Place with additional safety measures including a new signalised pedestrian crossing at Chews Lane and driver speed feedback signs.
- The planned Adelaide Road improvements project commenced at the busy intersection of Adelaide Road/Riddiford Street/John Street with an additional traffic lane for south bound traffic and localised road widening on Adelaide Road. This work will improve traffic capacity and safety and link with improvements on John Street to be carried out to facilitate access to the new Countdown supermarket which is under construction and due to open by Christmas 2012.
- The major Westchester Drive extension project which will provide direct access between Churton Park and the motorway interchange at Glenside is under construction and due for completion by December 2012.
- We completed the upgrade of Waterloo Quay. The section of road between Kings Wharf and Aotea Quay has been improved as the main access to the city and port. The railway realignment has been completed so that the railway lines are now further away from the road and closer to CentrePort, with safety features added to the rails to improve cyclist safety. A new footpath with pedestrian canopies has been constructed from the overseas passenger terminal into the city past the log yard. The road past the Westpac Stadium was resealed.
- We completed building eight new walls, and renewed 14. We began the process of strengthening two walls on Churchill Drive to ensure that the route is less prone to earthquake risk. We also completed the construction of retaining walls on three pedestrian accessways.
- We upgraded the lighting network within the Hataitai Bus Tunnel.
- We replaced a number of support joints on Aotea Quay bridge (northbound) and completed bridge repairs. We widened the concrete deck for Linden Bridge and completed the planned maintenance of three other bridges.
- We completed seven flood mitigation projects and investigated an additional five sites.

- We started working on the seismic strengthening of Karori Tunnel Portals including the construction of the Glenmore Street soil nail wall to prevent slips in the vicinity of the tunnel.
- We completed a total of 63km of road resurfacing, consisting of 20km of asphalt seal smoothing, eight km of thin asphalting, and 35km of chip sealing. We reconstructed Murphy Street in Thorndon and Monorgan Road in Strathmore including kerb and channels, and footpaths. We also renewed 26km of footpaths, and 12km of kerb and channels.
- We continued construction of the five km Tawa shared path.
- We lowered the speed limit on Oriental Parade and around the northern section of the Miramar Peninsula to 40km/hr to assist safe cycling.
- We replaced a large number of drainage sump grates with cycle friendly grates.
- We introduced safer 30km/hr speed limits in Kelburn, Brooklyn, Miramar, Strathmore Park and Seatoun shopping areas.
- We completed the Te Aro Safer Roads project including intersection upgrades for Taranaki/Wakefield, Taranaki/Cable and Cable/Tory.
- We installed a new roundabout at the intersection of Upland Road and Glasgow Street in Kelburn.
- We installed new pedestrian crossings in Pirie Street Mt Victoria, Newland Road Newlands and a crossing facility for the new Amesbury School in Churton Park.
- We also successfully managed the introduction of the new giveway rules.

## What it cost

	Actual	Budget	Variance	Actual
Operating Expenditure (\$000)	2012	2012	2012	2011
7.2.2 Vehicle Network <sup>1</sup>				
Expenditure	19,694	22,480	2,786	20,620
Revenue	(1,284)	(1,024)	260	(3,190)
Net Expenditure	18,410	21,456	3,046	17,430
7.2.3 Passenger Transport Network <sup>2</sup>				
Expenditure	1,397	1,381	(16)	1,110
Revenue	(984)	(853)	131	(874)
Net Expenditure	413	528	115	236
7.2.4 Network-Wide Control and Management				
Expenditure	5,903	6,049	146	5,560
Revenue	(1,748)	(1,862)	(114)	(1,730)
Net Expenditure	4,155	4,187	32	3,830
7.2.5 Cycle Network <sup>3</sup>				
Expenditure	135	64	(71)	52
Revenue	(1)	(13)	(12)	(3)
Net Expenditure	134	51	(83)	49
7.2.6 Pedestrian Network <sup>4</sup>				
Expenditure	5,760	5,558	(202)	4,893
Revenue	(34)	(38)	(4)	(37)
Net Expenditure	5,726	5,520	(206)	4,856
7.2.7 Road Safety				
Expenditure	5,391	5,418	27	4,827
Revenue	(1,548)	(1,582)	(34)	(1,410)
Net Expenditure	3,843	3,836	(7)	3,417
	Actual	Budget	Variance	Actual
Capital Expenditure (\$000)	2012	2012	2012	2011
7.2.1 Ports access				
Expenditure	0	0	0	5,036
7.2.2 Vehicle Network <sup>5</sup>				
Expenditure	24,459	23,943	(516)	20,332
Unspent portion of budget to be carried forward	N/A	7,192		N/A
7.2.3 Passenger Transport Network <sup>6</sup>				
Expenditure	558	1,652	1,094	4,837
Unspent portion of budget to be carried forward	N/A	913		N/A
7.2.4 Network-Wide Control and Management				
Expenditure	2,324	2,312	(12)	2,499
7.2.5 Cycle Network 7				
Expenditure	1,127	1,126	(1)	727
Unspent portion of budget to be carried forward	N/A	243		N/A

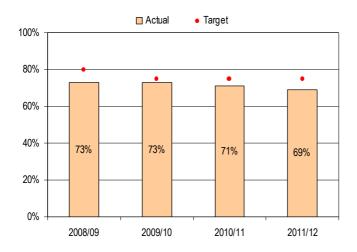
7.2.6 Pedestrian Network				
Expenditure	4,940	5,006	66	4,491
7.2.7 Road Safety				
Expenditure	2,542	2,507	(35)	2,781
Unspent portion of budget to be carried forward	N/A	125		N/A

<sup>&</sup>lt;sup>1</sup> Under budget due to lower depreciation costs as a result the revaluation of assets 30 June 2011 and lower interest allocation.

## How we performed

We want to ensure Wellington's transport network is efficient, convenient, reliable and safe. We assess performance by recording the rate of road casualties occurring on Wellington and by measuring: residents' satisfaction with our transport infrastructure/services, performance against international standards, service provision, asset condition and peak travel times.

## Residents' (%) condition rating of roads (good and very good)



<sup>&</sup>lt;sup>2</sup> Under budget due to higher than budgeted income from Adshel bus shelter advertising.

<sup>&</sup>lt;sup>3</sup> Over budget due to higher depreciation costs as a result of the revaluation of assets 30 June 2011.

<sup>&</sup>lt;sup>4</sup> Over budget due to higher depreciation costs as a result of the revaluation of assets 30 June 2011.

<sup>&</sup>lt;sup>5</sup> Under budget with Karori Strengthening works due to be completed November 2012, Westchester Drive link project to be completed in December 2012 and Adelaide Road widening project delayed as a result of property negotiations with completion due November 2012.

<sup>&</sup>lt;sup>6</sup> Under budget with the installation of new bus shelters delayed longer than planned by the consenting process.

<sup>&</sup>lt;sup>7</sup> Tawa cycling/walkway project delayed due to railway crossing works by Kiwirail.

#### Residents' (%) condition rating of footpaths

Result: 75% rate footpaths as good or very good (target: 75%; 2010/11: 76%).

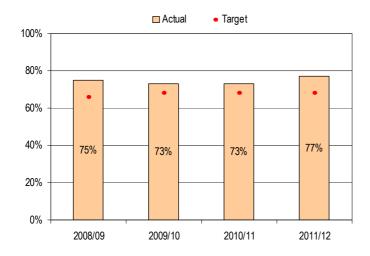
Source: WCC Residents' Monitoring Survey 2012

#### Requests for service

Result: we responded to 97% of urgent requests for service within two hours (target: 100%; 2010/11: 100%) and 97% of non-urgent requests for service within 15 days (target: 100%; 2010/11: 100%).

Source: WCC Infrastructure

#### Smoothness of roads (% of kilometres travelled on smooth roads) - NAASRA standards



Most roads are sealed with chipseal, which is flexible and provides a good quality surface. Asphalt is quieter and smoother but more expensive, and is used in shopping areas and other areas where traffic volumes are heavy. Upgrades that have positively affected road smoothness this year include our resealing of Waterloo Quay and the continued upgrade of the Golden Mile.

Road smoothness is assessed using criteria from the National Association of Australian State Road Authorities (NAASRA).

The above figures include smoothness ratings for both rural and urban roads within Wellington City.

## Street (footpath) pavement condition rating - % compliant with WCC standards

Result: 97% (target 97%; 2010/11: 97%).

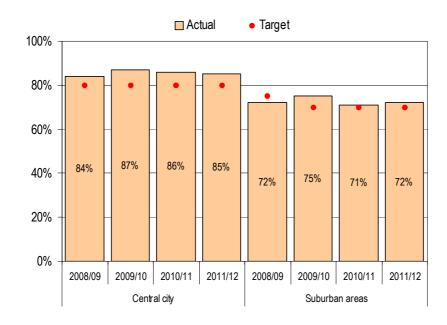
Source: WCC Infrastructure

## Street lighting - % compliant with national standards

Result: 94% of lights comply (target: 100%; 2010/11: 93%).

Source: WCC Infrastructure

## Residents' (%) satisfaction with street lighting in the central city and suburbs



Source: WCC Residents' Monitoring Survey 2012

#### Cycleways - user (%) satisfaction

Result: 60% of users were satisfied with maintenance of cycleways (target: 70%; 2010/11 result: 60%) and 42% were satisfied with safety (target: 50%; 2010/11: 40%).

## Road casualties (per 10,000 population)

	Target	2008/09	2009/10	2010/11	2011/12
Vehicles	Reduction	22.8	19.4	15.2	18.3
Pedestrians	Reduction	4.9	3.5	4	3.9
Cyclists	Reduction	4.8	3.7	3.3	2.6

Source: New Zealand Transport Agency

#### Peak travel times between CBD and suburbs

Target is to maintain or improve on these times.

Location	Peak Travel Time Range (minutes)					
	2007/08	2008/09	2009/10	2010/11	2011/12	
Miramar	7.5–24.5	8.0-28.0	8.5–19.0	9.0–19.0	8.0–20.0	
Karori	9.0–22.0	8.5–22.0	8.0-23.0	8.0–20.0	8.5–27.0	
Island Bay	7.5–14.5	8.0–16.5	8.0–16.5	8.0–16.0	7.0–14.0	
Johnsonville	7.0-16.0	7.0–21.0	6.5–22.0	7.0-24.0	7.0-28.0	

Source: WCC Infrastructure

## Residents' (%) perceptions that WCC transport network provides good value for money

Result: 66% of residents agree the Council transport network provides good value for money (target: 90%; (2010/11: 70%).

Source: WCC Residents' Monitoring Survey 2012

#### Ports access

Result: Further improvements were made on Waterloo Quay between Kings Wharf and Henemoa. Planning and design for the next stage of the project at Aotea Quay is under way (target: make further improvements to Waterloo Quay).

## Walls - condition rating (%)

Result: 95% of walls are rated '3' or better – '1' being very good and '5' very bad (target: 64%; 2010/11: 92%).

This target was based on previous data. Since the target was set, substantial work has been undertaken to raise the standard of several condition '4' walls to condition '3'.

## 7.3 PARKING

The provision of car parks makes the city accessible and helps to keep it vibrant and prosperous.

#### What we do:

- We provide on-street parking spaces throughout the central city and some off-street parking.
- We regulate and enforce parking times and impose fees to encourage regular park turnover.
- We also regulate coupon parking zones and resident parking in inner city suburbs.

## This activity contributes towards us being:

**More liveable:** Central city car and motorbike parking is important for shoppers, people working in the city, visitors to the city and people coming in to the city for recreational activities.

**More prosperous:** On street parking is necessary to allow for goods to be picked up and delivered throughout the city.

## **Key projects**

- We upgraded 300 pay and display machines to provide improved customer service. This
  newer technology has cut maintenance costs and customer complaints regarding meter
  faults. Also 100 older pay and display machines were replaced.
- The Council approved a number of new initiatives in the Long Term Plan 2012–22. These
  included fees based on parking occupancy rates (with an expected reduction in hourly
  charges in some areas) and transferability of pay and display tickets within the metered
  zone.
- We disestablished the use of our dash-camera vehicle. The vehicle was introduced in July 2010 with the intention of addressing short-duration offending that adversely impacts on the safety and convenience of other road users. Following the public voicing concerns about the vehicle, its use was disestablished in March 2012.

#### What it cost

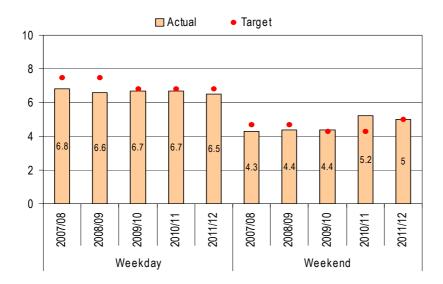
	Actual	Budget	Variance	Actual
Operating Expenditure (\$000)	2012	2012	2012	2011
7.3.1 Car Parking <sup>1</sup>				
Expenditure	10,679	12,043	1,364	10,774
Revenue	(25,629)	(27,541)	(1,912)	(25,798)
Net Expenditure	(14,950)	(15,498)	(548)	(15,024)
	Actual	Budget	Variance	Actual
Capital Expenditure (\$000)	2012	2012	2012	2011
7.3.1 Car Parking <sup>2</sup>				
Expenditure	2,357	1,316	(1,041)	272

<sup>&</sup>lt;sup>1</sup> The net operating variance is due to lower levels of enforcement revenue as a result of higher levels of compliance.

## How we performed:

To ensure people can access the central city and its amenities, we provide convenient on-street parking throughout the central city. We monitor this by measuring daily parking turnover rates and compliance with parking regulations.

## Central city on-street daily parking turnover rates



Since Sunday time restrictions were introduced, weekend turnover rates have increased. This has had the effect of making the central city more accessible to more vehicles in the weekend.

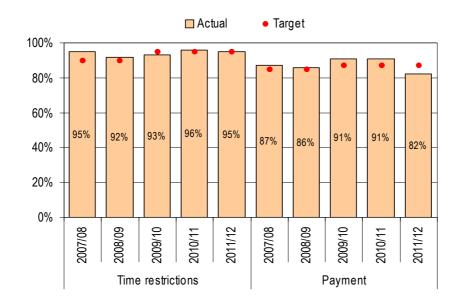
<sup>&</sup>lt;sup>2</sup> Parking meters renewals completed ahead of schedule and funded from passenger network activity now scheduled to be completed in 2012/13.

## On-street car parking - average occupancy (%)

Result: 65% (target: 75%; 2010/11: 76%).

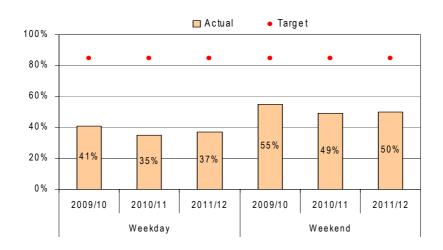
Source: WCC Infrastructure

## Compliance with parking time restrictions and payment



Source: WCC Infrastructure

## Residents' (%) satisfaction with the availability of car parks



Targets have been revised for 2012/13 onwards to reflect historical performance.