

Annual Report 2001/2002

















Principal photographer: Terry Hann. Cover: Composite photo of SH25 Coromandel

## CONTENTS





The Challenge of Sustainable Development	ı
Chairperson's Report	3
Authority Profiles	5
Chief Executive's Report	6
Management Team	9
Transit New Zealand Structure	10
Transit Today	11
Performance Measures	12
Social Report	14
Environmental Report	18
Economic Report	21
Financial Statements	23
Highlights / Events	38
State Highway Network	41
Statement of Objectives and Service Performance	42
Output Class I	45
Output Class 2	53
Auditor's Report	57



Transit New Zealand is the Crown agency responsible for planning, maintaining and building the nation's state highways.

58

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Glossary

## THE CHALLENGE OF SUSTAINABLE DEVELOPMENT

## Delivering to New Zealand today... and tomorrow

For Transit, our contribution to the lives of New Zealanders revolves around providing a state highway network that facilitates the activities of daily life. Our contribution to sustainable development lies in ensuring we support this activity effectively while at the same time meeting wider social expectations, all within the capacity of our environment.

Adherence to sustainable development principles is challenging. The correlation between the state highway network and New Zealand's economic wealth is clear. But how should this be measured and what level of investment is justified? Accounting for social and environmental aspects is no less testing. Access and mobility, injuries and fatalities and the impacts of roads and vehicles on people and communities – such social impacts need to be qualified and quantified. So too environmental impacts: effects on water sources and habitats, emissions to air and such seemingly simple issues as the visual impact of roads.

The balancing of economic, social and environmental effects is at the heart of Transit's business. Transit's projects have always involved pro-active assessment of social and environmental impacts, encompassing the views of local communities as key stakeholders. Since 1998 surveys of road users have added new dimensions to Transit's approach and the way it measures its performance. In the past year, a survey of key stakeholders has added a yet wider perspective.

This year we are beginning the journey of introducing triple bottom line reporting. Such reporting increases the scrutiny on our decisions and approaches and may prompt better methods or greater understanding of issues. It offers us the opportunity to move beyond simple compliance with government direction and regulation.

Sustainable development is that which meets the 'needs of the present generation without compromising the ability of future generations to meet their own needs' (New Zealand Cabinet, January 2000). This involves thinking broadly about costs and benefits and considering long-term effects as well as short-term ones. It involves assessing indirect effects as well as the direct, and taking extra care when developments might be irreversible. It draws social and environmental, as well as economic, aspects into consideration.



While this new format report encompasses the traditional range of Transit's operations and impacts, in this first year we have confined the triple bottom line reporting focus to our own activities. Transit's work on the state highway network is physically realised by many consultants and contractors procured on a competitive basis. Over time we plan to extend our performance measurement to cover this outsourced work as well.

The measures for the year ahead together with the triple bottom line category or categories into which they fit are shown on page 12. While we have already determined how we will report on some of these measures, for others there is much work to be done during the 2002/03 year to refine, and in some cases develop, reporting procedures. By next year's annual report we will aim to communicate more fully to you on wider parameters than has been possible this year. As tentative as the measures and the reporting system are, they do provide a visible marker for the development of even better measures and reporting as we grow and evolve on this journey.

These efforts are a key, but not sole, part of Transit's drive to ensure its management of New Zealand's state highway is about more than asphalt and concrete. In concert with our core values of integrity, innovation, customer focus, excellence and stewardship, our concern with the needs and wants of future generations is reshaping our meaning of what it is to be a world leader in roading solutions and our strivings to achieve this.



Waterfall chute with rock shelter in the background at Candy's Bend to Starvation Point on SH73.

## CHAIRPERSON'S REPORT

The 2001/02 year cemented a significant shift in the way Transit conducts its business. Though the practical effect of this shift will become more visible in the years ahead, we have made sound progress in laying a foundation for the achievement of the Government's vision for transport in New Zealand.

## A positive result

Transit has applied dedication and commitment to reflecting the significant change in direction within the transport sector as outlined in the Government's draft New Zealand Transport Strategy. While roading will continue to be a major focus of transport agencies, the strategy requires a broader approach, recognising a more holistic development of land transport. The strategy has five key objectives: economic development, safety and personal security, improved access and mobility, health and environmental sustainability. The Government has further reinforced these objectives, establishing a number of funding priorities:

- reducing severe congestion
- improving the funding and delivery of passenger transport
- promoting walking and cycling
- assisting local authorities with regional development needs
- improving road safety in order to achieve a substantial reduction in the road toll by 2010.

The *Moving Forward* policy package announced in February 2002 by the Minister of Transport, Hon Mark Gosche, added further impetus supporting these funding priorities with an additional allocation of funds.

While roading will continue to be a major focus of transport agencies, the strategy requires a broader approach, recognising a more holistic development of land transport.

In our 2001 strategic plan we had signalled a move away from a total reliance on economic evaluation in determining which projects are submitted for funding. We were acknowledging the need to take a broader perspective, recognising as well the often-conflicting demands of the social and environmental aspects.

We advanced this further this year by developing a better decision-making process, and the clear articulation of the Government's goals has confirmed this direction for us. Under this new decision-making approach the wider strategic issues are considered in establishing project priorities. In this project prioritisation process we have established six broadly-focused benefit categories for the evaluation of projects. These cover:

- · meeting a statutory responsibility
- providing congestion relief
- enhancing safety
- addressing environment and community concerns
- protecting against catastrophic events
- reducing travel times or driver frustration, or increasing travel comfort.

Under this new decision-making approach the wider strategic issues are considered in establishing project priorities.

We are currently reviewing all Transit projects in light of these priorities and the Authority will robustly scrutinize future project proposals to ensure they comply with our change in focus. We have especially undertaken to identify to the Minister of Transport projects that further the Government's policy on walking and cycling, and to actively seek opportunities where Transit's investment in infrastructure will directly contribute to improving regional development.

#### Auckland a prime focus

Congestion is a major issue in Auckland and that is why we have placed a greater focus on solutions for this region. We are well underway on the projects outlined in our *Auckland State Highway Strategy* released in late 2000. Progress in 2001/02 sees us well out of the starting gate on a number of projects, especially Grafton Gully, and the Puhinui Interchange and the very complex Central Motorway Junction have started or are close to commencement. Along with the opening of the Esmonde Road busway and the planned improvements to the Western Ring route and Upper Harbour highway, all these projects will significantly

contribute to an easing of congestion. Even so, territorial authorities need to be cognizant that Transit's activities alone will not solve Auckland's transport problems. Our time travel surveys indicate there are significant congestion issues on some local roads. It will, therefore, take action by all the region's road controlling authorities, together with improvements to passenger transport services, before the Auckland motorist will enjoy better travel conditions.

# Congestion is a major issue in Auckland and that is why we have placed a greater focus on solutions for this region.

We have recently received the results from the first travel time surveys in Auckland and Wellington. We are able to measure congestion by comparing actual speed with free flowing conditions. Not surprisingly, the Auckland survey is showing a severe level of congestion, particularly on the Northern and Southern motorways. Motorists are experiencing delays of four minutes per kilometre in some sections at peak times. The Wellington survey has identified lengths of roads experiencing moderate levels of congestion. Further surveys in late 2002 will provide data to begin to build a picture of the congestion trends over time.

## Defining the network

The Transit Authority reviews the state highway network every five years. This is an 18-month long consultative process involving input from a national advisory group of stakeholders, regional land transport committees and consultation with potentially affected iwi or hapu. We began the consultation exercise in August 2001 and expect to make our preliminary decisions early in the new financial year.

### Facing the elements

There are many events Transit can reasonably anticipate and plan for in any given year. Weather, however, is one variable that defies the best forecasting endeavours. While we expect weather-related impacts on Transit's annual work programme, when and where they strike and the degree of impact are not predictable. While unavoidable, the real significance of these events is the resulting effect on Transit's budget and work progress.

The bad weather the country experienced during 2001/02 placed an additional burden on our maintenance budget as urgent works were needed to clear roads and rectify damage. But the main impact was the delay to a number of capital projects. Despite the weather, we managed to remain inside the budgeted allocation for maintenance and ensured capital works projects progressed to the point where we spent an additional \$16.5 million and completed a number of major projects. Improvements to State Highway 1 between

Pukerua Bay and Plimmerton in Wellington opened in late 2001. Dunedin's Fairfield Motorway opened in December and Route J of Tauranga's triple expressway project - a \$91 million joint venture project with the Tauranga District Council - opened in April. Safety improvements were also completed on a 10.5 kilometre stretch of State Highway 6 between Glenhope and Kawatiri, south of Nelson.

That we achieved such a positive outcome at year's end is directly attributable to the skill and dedication of Transit's staff. An experienced and equally committed stable of consultants and contractors support these efforts.

## A pleasing start

I am pleased with Transit's progress over the last 12 months. The organisation has successfully bedded in a fundamental change in how it operates. This has only been possible because of the willingness of Transit's management and staff. On behalf of the Authority I congratulate them for their achievements and look forward to further developing this new direction with them. The high calibre of our people continues to be recognised as Transit again received a number of awards both in and outside the industry. Transit's skills are recognised internationally too and it was very pleasing to learn that Chief Executive Dr Robin Dunlop was voted the International Road Federation 'Man of the Year'. This is a significant and well-deserved honour for Robin personally but is also one that both lifts Transit's profile in the world arena and further fuels our journey of striving to be a "world leader in roading solutions".

# I am pleased with Transit's progress over the last 12 months. The organisation has successfully bedded in a fundamental change in how it operates.

My thanks are due to my Authority colleagues. I have enjoyed chairing this team of dedicated and professional members. This year we welcomed John Shaw as a new member, and Dr Janice Wright was reappointed for another three years.

In the year ahead, the Authority will guide Transit's steps as we focus on ensuring our change in policy direction takes practical effect. This is a task we approach with energy and enthusiasm.

Alan Bickers JP Chairperson

hian bickens.

## AUTHORITY PROFILES

The Transit New Zealand Authority guides the organisation's policy direction in the management of New Zealand's state highway network. The Authority, which fulfils the function of a commercial board, is appointed by government and meets monthly from February through December.

## Alan Bickers

## Chair person

Tauranga

Management consultant and company director. A member of the Authority since 1997. Formerly chief executive of Tauranga District Council and past president of the Institution of Professional Engineers NZ.

## Sir Tipene O'Regan

Deputy Chairperson Wellington

Professional company director.
Formerly chairperson of Ngai Tahu
Holdings Corporation Ltd and
the Treaty of Waitangi Fisheries
Commission. Chairperson of
Sealord Group Ltd and The Escorial
Co Ltd. Director of Whale Watch
Kaikoura Ltd and Meridian Energy
Ltd. Senior Research Fellow
University of Canterbury.

### **David Stubbs**

Whitianga
Formerly worked for the
Auckland City Council,
where he held positions
as Director of Works,
Director of Planning and
Development Services.
Member of the Transfund
Board. Now retired.

# **Dr Robin Dunlop**Chief Executive







## Mike Williams

Auckland

President of the NZ Labour Party. Company director, information technology analyst, and Director of the Institute of Geological and Nuclear Sciences Ltd.

# Dr Janice Wright

Wellington

Independent policy adviser and analyst. Member of the Transit Board from 1989 to 1991. Doctorate in Public Policy (Harvard University). Member of the Transfund Board.



## John Shaw

Auckland

Civil engineer who immigrated to New Zealand in 1996 from the UK. Extensive knowledge of the design and supervision of construction of highway improvements, in particular route location schemes.

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## CHIEF EXECUTIVE'S REPORT

Judicious financial management by Transit in 2001/02 bolstered the \$548.9 million received from Transfund New Zealand to facilitate an active maintenance and capital works programme. Investing over \$562 million in New Zealand's land transport infrastructure, we have been able to complete a number of major projects and begin others. However, rather than 'business as usual', the year has furthered the change in focus that will see Transit's activities play a more proactive role in ensuring sustainable development.

## A redefinition of priorities

Over the last 18 months the Transit Authority and management have developed a revised strategic plan. The impetus behind this work was a growing desire to provide a more balanced approach to our activities. This change in direction for Transit's management means that to be realised a capital project no longer just needs to meet a cut-off benefit-to-cost ratio, but requires a formulated, strategic, top-down and systematic evaluation of its place in the total highway network, and the wider environment.

With the release by the Minister of Transport this year of the *Moving Forward* policy package and the draft New Zealand Transport Strategy, this has further confirmed we are on the right path.

Deriving the greatest benefit from each dollar invested in the state highway network and ensuring our network is reliable and durable are key deliverables. Over the last decade though, we have begun balancing a concentration on physical condition as the determinant for works with the wishes of stakeholders and road users. An example of this is the demand from road users (identified in surveys) for more passing lanes. For Transit too, passing lanes are a long-held priority. We have now developed a strategy that formalises their importance in our work programme. It targets 2,000 kilometres of the state highway network with more than 4,000 vehicles per day. Over time we would like these stretches of highway to have passing lanes every five kilometres.

We have begun balancing a concentration on physical condition as the determinant for works with the wishes of stakeholders and road users.

## Heightened environmental focus

Environmental issues such as air-quality, water-quality, greenhouse gas emissions, biodiversity and noise are

becoming more important, nationally and internationally. Transit has committed to doing more than simply comply with regulations and legislation. We are taking an indepth look at our business so that we can be more proactive about environmental matters that are increasingly likely to impact on our future operations. To encapsulate our aims we are currently developing a national environmental strategy. Other initiatives involve finalising and implementing Transit's environmental management system, performing strategic environmental assessments of all our contracts and policies, updating our recycling policy, and increasing the level of environmental reporting.

One direct environmental impact we are currently reviewing is the control of roadside vegetation. Until now we have required road edge markers to be free of weeds and grass to ensure their visibility. The weed-free policy leaves contractors with only one control option – chemical spraying. We are in the process of amending our specifications to be more performance based so contractors themselves can choose which control method they use. At the same time we are relaxing the desired outcome to permit the growth of grass or weeds to a particular height, which allows contractors to choose mowing over spraying or using alternative ground cover to smother grass growth.

# Commitment to sustainable management

To reinforce the shift to a broader view of our business we are in the process of adopting triple bottom line reporting, sometimes referred to as sustainable development reporting. In adopting this reporting method, we are acknowledging that the impact of our business is wider than simply economic effects. We recognise that the highway network facilitates the coming together of people in all facets of daily life.

This annual report includes for the first time the elements of broader measurement – social and environmental

considerations as well as the economic. However, because the Statement of Intent we are reporting against is of an economic-only focus, this reporting is limited. The Statement of Intent for the 2002/03 year, just released, incorporates a more indepth economic, social and environmental reporting structure, against which we will measure ourselves in the coming year. It is early days for us in this evolving process and we have much yet to learn and achieve, but we are making ground.

This annual report includes for the first time the elements of broader measurement — social and environmental considerations as well as the economic.

## Alliancing

#### **Industry alliances**

The cost estimate is vital in the management of the state highway network. Selecting a preferred design solution, ensuring projects are completed at the optimum time and securing funding, all hinge on an accurate cost estimate.

In last year's report I expressed frustration with the inconsistent standard of cost estimation within the industry. I am, therefore, very pleased to report that a partnership initiative of Transit, Transfund and the Association of Consulting Engineers New Zealand is addressing this issue under the *Better Estimates* project. Highly skilled teams have revised the definition of estimate types, which now include added emphasis on strong and consistent risk management. We have defined what we expect in terms of estimate confidence. The way we use these estimates will help to make clearer the role they play in the programming and funding of projects.

The *Better Estimates* project focuses on the efforts of all segments of the industry working together. A training programme begins early next year, following the release of Transit's *Cost Estimation Manual*.

#### **Funding alliances**

A potentially natural extension of the alliance configuration is that of partnership for funding. Within its draft *New Zealand Transport Strategy*, the Government has signalled increased flexibility in how infrastructure projects may be funded. This acknowledges that infrastructure development has for many years been inadequate for the growth in New Zealand's population and usage. This flexibility extends to opening the way for the initiation of public/private partnerships whereby funding can be sought from the private sector. Funding will in essence be secured through a combination of funding options which could include public/private partnerships, and developer contributions. We are working closely with the Ministry of Transport and

Transfund New Zealand on turning this policy direction into reality once the legislation is enacted.

#### Operational alliances

We recognise our activities can have significant impacts on communities. Consequently, we engage in frequent and extensive consultation with communities and local government. Increasingly, this consultation is deepening into more formal and more productive working relationships. Joint ventures and strategic alliances between Transit and local authorities result in greater coordination of projects with more complete and cost-effective roading solutions delivered to road users. The completion and opening of Route J in Tauranga this year is a positive result of such an alliance with the Tauranga and Western Bay of Plenty district councils. Jointly, we have taken a strategic approach to managing the area's local roads and state highways. In some cases these alliances extend further: in Marlborough, we manage the local roading network on behalf of the Marlborough District Council, along with the state highways. With other councils we enter Heads of Agreement to outline our respective roles to achieve mutually agreed outcomes. We are in the process of signing such an agreement with the Franklin District Council. Currently, we are also negotiating a joint 10-year maintenance contract with the Western Bay of Plenty District Council, where we expect to deliver \$30 million in savings to the council.

Joint ventures and strategic alliances between Transit and local authorities result in greater coordination of projects with more complete and cost-effective roading solutions delivered to road users.

In 2001 Transit formed what is a unique partnership relationship for us, one that extends our role as infrastructure provider for New Zealand's valuable tourism industry. We signed a contract with a tourist operator Auckland Bridge Climb Ltd to offer climbing tours on the Auckland Harbour Bridge.

#### International alliances

Strong international relationships are key to Transit's achievement of our goal of being 'a world leader in roading solutions'. Our success in this area has seen Transit recognised as an innovator in state road management and we are actively engaged in the co-operation and exchange of information and technical expertise worldwide. Not surprisingly, our relationship with Australia and Austroads—the association of Australian and New Zealand state road transport and traffic authorities—provides our closest international links.

Harsh geography and a small, dispersed and highly mobile population are the facets confronting New Zealand's land transport agencies. Transit's preserve is ensuring road users enjoy a quality experience on New Zealand's state highways. To allow evaluation of our success in this task, it is incumbent on us to offer sound and accepted standards for performance measurement. Identifying workable international benchmarks is no easy task. Our close proximity to Australia – in culture and in latitude – provides our best opportunity for reference and collaboration on what constitutes quality on the road. In working jointly with both countries' standards associations, we have developed common roadrelated technical standards. Differences are acknowledged and accounted for but the developed benchmarks provide robust, credible standards. We now have common standards for road signage, lighting, crash railings, bitumen quality and geographical information systems. Transit compares very favourably with the Australian states for road condition and performance.

As the recently voted chairman of Austroads I am keenly aware of the value this relationship affords New Zealand given its size and limited funding base. At the same time the involvement of Transit staff is ensuring the benefits of the relationship are mutual.

## Transit compares very favourably with the Australian states for road condition and performance.

We have extended our relationship with the World Roading Organisation (PIARC) with representation on seven of PIARC's 20 international technical committees. Work with PIARC often involves the sharing of the New Zealand experience particularly with developing countries. My role as Director of the International Road Federation Washington Program Centre ensures a particularly close relationship with this organisation. I am also the current convenor of the International Committee of the Road Engineering Association of Asia and Australasia.

## Continuing innovation

Procurement is a core business activity for Transit. At inception 12 years ago, Transit was charged with introducing competitive pricing principles to the sector. Since then we have significantly advanced our methodologies. Our innovative contracting developments of the last few years have introduced a suite of contract models that we can now use to suit particular capital or maintenance projects. Innovations include an interactive tendering process, which results in the submission of only those tenders consistent with our requirements; outcome based contracts, which provide contractors room for innovation; and design and construct contracts which place risk with those best able to manage it.

Another contract innovation involves selecting contractors based on quality. This method is useful for physical works where projects require fast tracking and where strong risk

management is necessary. The \$68 million Grafton Gully project in central Auckland is the first of these quality-based contracts we have awarded. An 'alliance' grouping of contractors will deliver the project and we have selected the joint venture parties on the basis of quality alone. We later negotiated the price, which was then independently reviewed to ensure competitiveness. The parties work under an incentive system that rewards innovation and cost optimisation as well as enhanced environmental and social performance.

The increasing application of information and communications technology in transport promises to deliver greater efficiencies and cost effectiveness. We have already evidenced the benefits of Intelligent Transport Systems (ITS) in our network with variable electronic message signs, motorway monitoring, computerised traffic signals and public transport fleet tracking. On Wellington's Ngauranga Gorge, a stretch of expressway with a significantly higher rate of crashes than typical motorways and urban arterial routes, a \$5.1M advanced traffic management system is helping to bring down the crash rate. Response to accidents is quicker and incidents are identified sooner. However, we consider that to capture the greatest benefits of such technologies, they need to be developed and applied in a deliberate and coordinated manner. This year we launched the National State Highway Intelligent Transport Systems Strategy. This strategy will ensure that we develop cost effective and efficient ITS projects that provide a platform for integration with ITS systems of local authorities and other organisations.

## The challenge of change

Transit has grown and developed considerably over its 12 years of existence. We operate in an environment of constant flux. This is perhaps why Transit management and staff continue to perform well in meeting the challenge of change. The new policy direction signalled by the Government has been welcomed by staff and the year ahead will likewise present us with further challenges as we give greater practical effect to it. We look forward to this challenge: it is new territory but, with the continued support of Transit's highly skilled people and clear direction from our Authority it is one I am confident we will navigate with success.

J. J. Denbl. Robin Dunlop

Chief Executive

# MANAGEMENT TEAM

The Transit New Zealand corporate management group comprises senior managers responsible for ensuring the delivery of the Transit New Zealand Authority's directives. There are four regional managers in this group.

Dr Robin Dunlop

Chief Executive





Rick van Barneveld National Highway Manager

**Neil Carr** 

National Property and **Business Manager Robin Odams** 



Regional Manager,





**Brian Hasell** 

Wellington

Regional Manager,

Corporate Strategy and Communications Manager

Pat Lakeman

**Garry Butler** Assurance and Compliance Manager







Standards Manager

Colin Knaggs Regional Manager, Hamilton

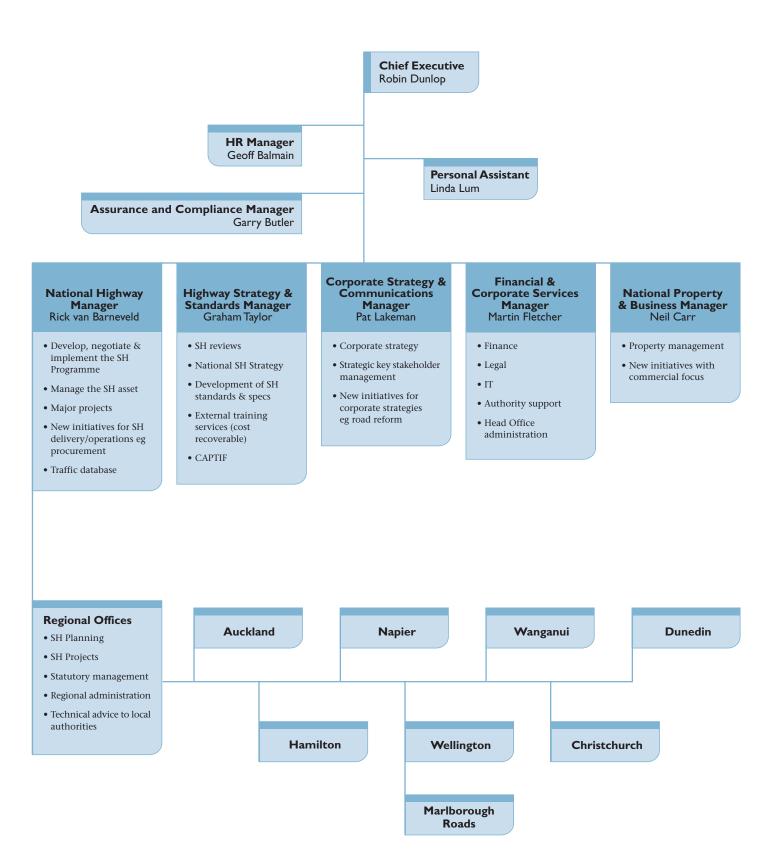
Wayne McDonald

Regional Manager,

Auckland

Martin Fletcher Financial and Corporate Services Manager

## TRANSIT NEW ZEALAND STRUCTURE · OCTOBER 2002



## TRANSIT TODAY · A PROFILE

Transit New Zealand is one of the suite of Crown entities in the transport sector reporting to the Minister of Transport. Established in 1989, it is governed by the Transit New Zealand Authority which operates like a commercial board of directors. The Government appoints the Authority members.

Transit believes it is important to have engineers with an intimate knowledge of the local highways based throughout the country. Management is organised through a head office and seven regions plus an arrangement known as Marlborough Roads, a partnership with Marlborough District Council under which Transit manages the local roads together with the area's state highways.

With only 236 permanent staff plus a number on fixed-term contracts, Transit's role is that of 'manager' of the 10,783 kilometres of the state highway network. All physical works and professional consultancy services for state highways are contracted out on a competitive basis. Transit is a world leader in innovative procurement and has in place a diverse range of contracts. They extend from the standard three-year network maintenance management contract for a section of highway through hybrid contracts to performance specified 10-year contracts. There is also a range of capital projects from the traditional method of separate professional consultancy packages and a works contract, through design-construct and full-delivery to alternative financing and payment models.

Currently, funding comes almost exclusively through Transfund New Zealand where it is competitively assessed against applications for transport funding from the nation's 74 territorial authorities. Funding for the 2000/01 year was \$562.7 million. Work is underway exploring alternative sources of funding for future roading developments.

During this year a new decision-making process has been adopted for the current year for ranking projects. It moves away from the total reliance on economic evaluation to addressing the key issues that the Government has deemed important. Extensive consultation with local authorities and alignment with regional transport strategies occurs prior to Transit's final decisions on capital works' priorities.

Concurrently, extensive work has been underway to develop new performance measures with a specific social, environmental and economic focus. This was a tough exercise but we are committed to reporting against these measures in 2003 and improving them over time. At this stage we are demonstrating that commitment by publishing the set of measures against which we will report fully next year.

Over the page we have set out the 34 measures and identified the triple bottom line category into which they fit through the use of symbols. The symbols highlighted with each measure show the category fit.

## Stakeholder engagement

Transit's key stakeholders have been identified in the Communications Strategy and are listed below. Transit communicates with its stakeholders by various means such as the monthly newsletter, *Intransit* and with certain stakeholder groups such as network management consultants and local authorities, it has continuous direct contact. Feedback, therefore, from such groups is regularly forthcoming. However, to engage more closely with all stakeholders Transit has this year undertaken a survey to gather feedback on the impact of Transit's activities on stakeholder groups and assess the quality of the working relationship. This is in addition to the regular road user surveys in which road users are asked to assess the quality of the state highways.

### Stakeholder groups

Road Users -

- private motorists
- commercial drivers
- cyclists
- pedestrians

Minister of Transport, MPs

Transport and other government organisations

Territorial authorities and regional councils

Consultants, contractors

Industry organisations

Media - general and industry publications

Iwi.

# PERFORMANCE MEASURES Economic







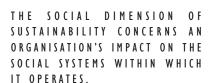
	Change (due to investment, revocation or depreciation) in the dollar value of the state highway asset
	The percentage change in returns from state highway property rentals
	The percentage of properties in the tenantable portfolio that have been vacant for 6 months or more
	Rate of surplus property disposal from projects completed in the previous financial year
<u> </u>	Percentage change in maintenance costs cost per 100km travelled
<b>*************************************</b>	Forecast annual dollar benefits from annual project programme
	Actual project dollar benefits compared to the forecast benefits
	Dollars spent on environmental issues
	Transfund New Zealand's satisfaction with Transit's performance
<b>** *** **</b>	Local and Regional Authority satisfaction rating for the quality of the relationship with Transit
<b>** *** **</b>	Local and Regional Authority satisfaction with the national state highway network
<b>*  <b>*   <b> </b></b></b>	lwi and recognised social and environmental interest groups satisfaction rating for the quality of the relationship with Transit
<b>** *** **</b>	lwi, and recognised social and environmental interest group satisfaction with the national state highway network
	Road user satisfaction rating for the quality of the relationship with Transit
<b></b>	Road user satisfaction with the national state highway network
<b></b>	The social costs of road accidents
<b>*</b>	Congestion through travel time delays

<u></u>	()	 Percentage forecast and actual annual dollar variance against State Highway Maintenance and Improvement programme
<u></u>		 The variance between the funding allocation for state highways in the current year and the 10-year forecast for the asset management and capital forward works programmes.
		 The number of capital projects halted or delayed during the design or construction phases of a project as a result of decreased benefit and/or increased cost at review
<u></u>	(	 The percentage of capital projects delivered on time, within budget
<u></u>	<b>***</b> **	 Percentage of state highway complying with agreed levels of service and standards for road condition and geometry (ie up to design standards)
<u></u>	· <b>***</b>	 The percentage of emergencies on highways having single-lane access restored within 12 hours after the substantial end of the event
<b>P</b>	****	 Description of significant social and environmental achievements
<b>P</b>	·· <b>***</b>	 The proportion of the assessed media coverage that is positive
	·· <b>***</b>	 The percentage of projects where design commenced in the current financial year that considered, as part of their design brief, the provision of walking and cycling features
<b>(</b> **)	· <b>***</b>	 Compliance with legislation, legislative instruments and external policy requirements
<u></u>	·· <b>***</b> •	 The percentage of the state highway network with a current state highway plan
<b>P</b>		 Dollars invested in research and development
<u></u>		 Peer and industry perception of Transit's leadership in the New Zealand transport industry
		 Total dollar spend on achievement of Strategic Training Plan as a percentage of payroll
<u></u>	<b>****</b> ***	 Achievement of the Strategic Training Plan measured through the implementation of individual employee-agreed training plans
<u></u>	·· <b>***</b>	 Staff satisfaction rating with Transit as an innovator and good employer
<b>P</b>	<b>***</b> **	 Staff satisfaction with Transit as a fiscally, socially and environmentally responsible organisation



SHI running through Blenheim.

## SOCIAL REPORT



Transit is responsible for the operation, maintenance and development of a highway network that links communities, gives access to services and goods and helps maintain a healthy, equitable and free society in New Zealand. The social bottom line includes processes to enhance social and cultural enrichment and in the New Zealand context, the Treaty of Waitangi. Transit also has a role to play in global sustainable development, being active in teaching and promoting the efficient building and maintenance of road networks in other countries. Therefore, Transit has a significant and widespread impact on New Zealand society and beyond. There is the impact of the state highways themselves - the way they

both join and dissect our communities and of the negative impact they have on people's lives when crashes occur.

We are dependent on all our stakeholders, from road users and local communities to government agencies and suppliers, to give us feedback on how we perform and impact on them. In addition to the extensive consultation completed for new and improved highway projects, Transit has this year begun a more formal stakeholder consultation process by surveying identified stakeholder groups. Transit at this stage is interpreting its social impact reporting in a limited way. We are reporting on labour and human resource aspects as they impact on our own staff - in future annual reports this could extend to our major suppliers. Some other social impact issues are briefly outlined in the following pages.

## **Road Safety**

Transit believes it should provide a consistent, safe and "forgiving" environment with no surprises for road users. The state highways can't be made risk-free but they should provide road users with a realistic perception of danger. Currently, 48 percent of the 36 billion vehicle kilometres travelled are on state highways.

Most serious crashes occur on open roads. Thus even when crash numbers are reducing, a high proportion of serious crashes happen on state highways. During 2001, 60 percent of the 455 deaths occurred on state highways, down from 63 percent in 2000. This leaves no room for complacency, and Transit's ongoing programme of activities to improve safety on state highways includes:

#### Safety audits

Transit's safety management system is subject to internal audit and ongoing improvement. Safety audits and routine inspections identify roadside hazards and maintain hazard registers. Progress in dealing with these issues however, continues to be constrained by the availability of funding.

#### Crash reduction studies

Crash reduction studies involve a team approach using staff from LTSA, Police, local authorities, and others to produce low cost and effective remedial measures.

#### Safety campaigns

In Auckland Transit launched its 'Don't be a Domino' campaign to coincide with the annual peak in motorway crashes. Statistics reveal that over the last five years 44 percent of all crashes on Auckland motorways were nose-to-tail collisions so educating drivers to take responsibility and "manage the space in front of them" was a key message. Road safety billboards along the highways were supported by radio advertisements, messages on Auckland's ATMS Variable Message Signs and stickers.

#### Special safety awareness zones

Some areas or sites have a spate of fatal crashes. Transit has responded to one such area, the coastal strip of Centennial Highway on SH1, north of Wellington leading to the township of Paekakariki. Transit has installed special safety features such as cats eyes, pavement markers, double yellow profile line markings that provide an auditory warning system if a driver is drifting over them, improved edge marking, additional warning signs and improved safety barriers to reduce the crash rate.

## Brighter, safer roadmarkings

From next year all road marking on state highways will be in reflectorised paint to make driving safer, especially in wet conditions. They will also benefit cyclists because the reflectorised paint contains beads that improve skid resistance. The programme of improving the visibility of roadmarkings will cost up to \$2.3 million.

## Safety at roadworks

State highways should be a safe working environment for roadworking and construction activities. Accidents at roadwork sites have been a major concern and Transit has worked very closely with the industry to finalise the Code of Practice for Temporary Traffic Management to ensure the safety of motorists and road workers. Transit has been instrumental in offering training on the new code. As at 30 June 2002, 12,000 people, 7,000 during the year, have been trained to the various levels required to implement the code. A key aspect is an enforcement system that validates that the work site is under the control of a trained operator. The code has also now been adopted in whole or in part by half of New Zealand's local authorities.

#### Our staff

### Social responsibility

Transit takes its role as a good employer seriously and is aware of its social responsibility, not only in its core business but also for its own staff. Transit has a range of policies and strategies in place to assist staff in balancing work and their private life including:

#### Remote working policy

This enables staff to work from home as well as from other Transit locations.

#### Part-time work

Part-time work or job-sharing is positively considered to meet the demands of individual employees.

## Employee assistance programmes

Transit assists staff through funding of counselling and support programmes.

#### Staff support for community activity

Staff are encouraged to be involved in social activities and offer their support and expertise to the community. Support to the Volunteer Wellington programme is one example of this.

#### Health and safety

Transit is conscious of its obligations in ensuring that staff have a safe working environment. Where individual workplaces are seen as posing a risk, they are reviewed by professional consultants and corrective action taken.

#### Improved systems

The implementation of a new Human Resource Payroll and Information system has seen an increase in efficiency in payroll and management information. All annual leave is electronically approved through Transit's Intranet connection enabling staff to have direct access to their personal information.



(14

### Staff surveys

Transit gauges its performance as a good employer through staff surveys. The latest survey, while yielding positive results, will be developed further in the areas of "rewarding innovation" and "celebrating success".

#### **Transit Staff Survey: Summary**



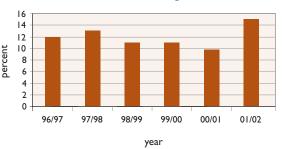
The categories in the graph above aim to measure:

- The Organisation whether a positive atmosphere and culture exists within the organisation
- My Job if staff are clear about their roles and accountabilities and satisfied with the opportunities offered
- Communication and Team Work if communication between staff and management is honest and open
- Recognition and Reward whether staff understand how performance is measured and if they think their contribution is valued and they are fairly rewarded
- Leadership whether staff have confidence in and respect for the leadership, and their opinion of the quality of overall management.

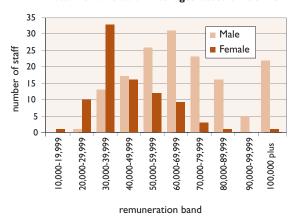
## Attracting and keeping staff

Transit continues to operate in a competitive market for scarce, qualified resources. Specialist skills particularly in policy and transportation planning have been difficult to find and that has led to a number of vacancies taking up to six months to fill. The increase in turnover reflects a greater number of opportunities arising both within New Zealand and overseas. Despite these difficulties, Transit has been able to recruit experienced staff.

Staff Turnover as a Percentage of Establishment



#### Total Remuneration Packages based on Gender



Note: All part time staff have been shown with full time equivalent salaries. The professional engineering, planning and information technology groups account for the higher remuneration levels and have traditionally attracted a higher number of males

## **Graduate recruitment**

Transit recognises the need to develop engineers within the industry and is committed to developing and encouraging the professionalism of engineering and planning in New Zealand. As part of this, Transit continues to recruit graduates each year and supports them to become registered engineers and planners. Recognising that it cannot provide all the training required for a graduate to gain registration, Transit arranges for them to be seconded to the private sector for design and practical experience. Transit appreciates this shared commitment and support from the industry.

### Industrial relations

Transit maintains a very good relationship with the Public Service Association and has successfully negotiated a new Collective Employment Agreement which will carry through to June 2004. The agreement covers 39 percent of Transit staff.

#### **Training**

As a professional organisation, Transit is committed to providing training opportunities for staff development. As well as the expected job/work related training, Transit continues to support academic study for master and MBA level qualifications where it is seen to benefit both the employee and Transit.

The overall expenditure per person on training reduced this year, however, the average number of days of training increased. This is due to a number of corporate initiatives such as using more in-house training and negotiating for preferred suppliers of corporate training needs.

# Average Training Days taken per as a Percentage of of days

**Training Expenditure** 

00/01 01/02

year

## State highway impact on communities

By the very nature of its business Transit will impact on communities, sometimes significantly.

#### Visual

Transit works hard to do more than just 'mitigate' the visual impact of a new highway or highway improvement. We have tried to keep abreast, if not ahead, of the community demand for more consideration of the aesthetic rather than just the utilitarian. As twice winner of the environmental section of the Global Road Achievement Awards, Transit has demonstrated on the international stage its standing in this area. Both awards were won for work in particularly sensitive environments of native bush in national parks where the visual impact was as important as the protection of habitat. This year's award is shown on page 40.

## **Dividing communities**

Re-routing a state highway has many impacts. For some it frees up the local streets, enhances safety by removing busy traffic, and returns small towns and communities to their citizens. For others the removal of the state highway brings economic downturn and the resultant search for new jobs and new commercial endeavours. While yet for others, a new highway divides the community and brings busy traffic to a previously quiet area. Transit is very aware of the impact its decisions can have and works closely with local authorities and community groups, usually many years ahead of any final action. The opening of the Fairfield Motorway in Dunedin in December 2001 was one example where the new route through farmland took some 20,000 vehicles per day away from local streets.

## Noise

Noise is an issue confronting all development proposals not least in our cities as more people chose the inner-city lifestyle. It is an ongoing issue for Transit and one in which the challenges will become greater. Transit must meet current noise guidelines and standards but where the impact exceeds standards remedies have to found. One by-product of the opening of the very welcome Route J in Tauranga was unacceptable noise for a home-owner near the Route J, and PJ Link. A solution was found by purchasing the dwelling.

## Cycling

Transit is developing a specific cycling policy for state highways and a New Zealand-specific guide to traffic engineering practice for cycling. Transit already takes cycling into account in the design and maintenance of state highways and has "cycling champions" in each office whose job it is to ensure that cycling issues are considered in all roading projects. Roads with high traffic volumes are designed and built with wider lanes and with 1.5m shoulders that are used by cyclists. In some cases, Transit also designs and builds specific cycleways such as next to the Taupo Swamp, part of the improvements to SH1 north of Wellington (see below).



## Community work /support

#### **Volunteering**

Transit's contribution to Volunteer Wellington involved staff planting trees and shrubs along the roadside in Porirua and cutting carpet squares to suppress weeds.

## **Education support**

Transit sponsors the Planning and Decision Making Inquiry Competition of the New Zealand Board of Geography Teachers. With each year there have been increasing numbers of enquiries about Transit projects from these Year 13 students. The most popular topics have been the Waikato Expressway and the Inner City Bypass in Wellington.

## Awards

### IRF Award - Man of the Year

Transit's chief executive Dr Robin Dunlop was named Man of the Year by the International Road Federation. The citation reads in part: "...for his pioneering activities and achievements in the realm of asset management and road funding, which have contributed to the advancement of road sector development in his country and throughout the world." Dr Dunlop said his award was in recognition of the high regard that Transit was held in worldwide for its innovative road management practices. The International Road Federation is a non-government, not-for-profit organisation with public and private sector members in 70 countries.







# ENVIRONMENTAL REPORT

THE ENVIRONMENTAL DIMENSION 40 percent are identified as OF SUSTAINABILITY CONCERNS environmental indicators. Under the AN ORGANISATION'S IMPACT ON Resource Management Act Transit ECOSYSTEMS, LAND, AIR AND is responsible for ensuring any water.

In providing measurements of impact the ideal is to present figures and reports which show a sense of scale or magnitude in terms of impact. This allows for comparison among organisations. At this stage Transit does not have such measures. Such reporting will come. Below we report on some examples of environmental impact work undertaken during the year. Reporting on environmental effects is not new for Transit. It has been a feature of the business from day one. Of the 34 performance measures outlined on page 12 some

environmental indicators. Under the Resource Management Act Transit adverse environmental effects of constructing and maintaining the highway network are minimised. Transit consistently meets these environmental obligations. However, because by its very nature road development does impact significantly on the physical environment, compromises inevitably are made. Once such outlined (see over) is the rubble house in Auckland. A balance was required between very expensive preservation of an old unique house and the economic demands of improved access for a significant section of the population.

## Land use and biodiversity

Transit routinely makes provision in its designs for the biodiversity of areas through which it build state highways. Four recent examples are given below.

## **Wetlands protection**

Taupo Swamp on SH1 north of Porirua managed by the Queen Elizabeth II National Trust, is home to a range of ecologically significant birds, fish and plants. Transit planted some 20,000 native plants to enhance the habitat and provide a buffer between the cycleway/pathway, the highway and the swamp. Concrete baffles in culverts provide a passage for giant kokopu, inanga and eels, and fabric silt fences act as filters to stop silt-laden material going into the swamp. Transit worked with the Trust and the Department of Conservation (DoC) during construction to ensure that the delicate swamp environment was protected and improved.

## **Species relocation**

Geckoes in the path of the new Upper Harbour Corridor (SH18) motorway in Auckland will be relocated to appropriate habitats nearby.

Four breeding pairs of the rare New Zealand Dotterel will be moved to a new purpose-built nesting ground. This will enable upgrading of the Esmonde Road Interchange on Auckland's North Shore.

### **Nelson daisy**

Part of SH6 runs through Kahurangi National Park, and extensive improvements to the Glenhope to Karawiti stretch included managing environmental issues. Transit worked with DoC to provide optimal conditions for the natural regeneration of native bush, protect a rare native daisy tree, *Olearia polita*, as well as ensuring all historical railway features were preserved.



New Zealand Dotterel (Charadrius obscurus).

## Transmission Gully planting

Transit is planting 44 hectares bordering streams and on steep hillsides along the motorway corridor in anticipation of construction of the Transmission Gully route. This will lessen the adverse environmental effects of large earthworks such as soil erosion and sediment runoff, and will enhance the environment along the route.

## Water

## Water quality and PJK

Transit and partner Tauranga District Council have adhered to strict environmental standards in constructing the \$91 million PJK project. Stormwater runoff in all earthworks areas has been contained on-site and directed into eight siltation ponds, and during construction, silt fences prevented runoff. The water quality of the Kopurererua Stream that runs through the heart of the site was monitored, and proved the sediment retention system was effective. Additional water monitoring was also carried out in minor watercourses and high water quality standards achieved.

#### Stormwater runoff

Transit has a well-established system of SQIDS (stormwater quality improvement devices) to deal with the treatment of stormwater runoff from motorways and state highways. The largest, and most recent SQID has just been completed as part of the Grafton Gully Project. An 85metre x10metre x2metre treatment tank (the size of three tennis courts) has been built to protect the harbour by removing up to 75 percent of break-lining oil, fuels and other impurities and pollutants, As the stormwater passes through a series of chambers in the tank the pollutants settle. The tank will be cleaned out regularly.



Treatment tank at Grafton Gully under construction.

## Heritage protection

The "Rubble House" in Sinton Road, Auckland, thought to be one of the first 'concrete' constructions (broken pottery was used as fill) in the country presented Transit with a dilemma. Although its precise age was hard to determine, it was thought worthy of preservation. To retain it at its present site would have meant alteration to the route of the planned highway at a cost of \$3 million. The house was to be moved at a very significant cost, but structural engineering reports revealed it was too fragile. The solution was a Transit contribution of \$400,000 towards heritage projects in the Hobsonville area, once the cradle of West Auckland's pottery industry. Parts of the rubble house will be preserved in the area. Wooden cottages in Clark's Lane, once the homes of pottery workers, will be moved, possibly to an historic precinct that 'tells the story' of the area's past.



The Rubble House

## ${\bf Environmentally-friendly\ solutions}$

## Water blasting for safety

Transit is reducing its reliance on road-seal burning, traditionally used to maintain skid resistance and safety on state highways. Transit now uses, where possible, alternative, environmentally friendly, but more expensive treatments. High-pressure water-blasting is an innovative solution to road burning and reflects Transit's commitment to sound environmental outcomes.

## **Reduction of chemical sprays**

The size of the sprayed area around edge marker posts has been reduced by 30 percent and sprays eliminated from sensitive areas, including rest areas. Currently, there are trials into the use of low-growth vegetation as a long-term and economic method for reducing the use of chemical sprays. There are high set-up costs, but in the long term the practice is economic in many situations.

## Recycling

## **Specifying recycled products**

Transit is encouraging suppliers to work with recycled products especially those that are cost effective. The focus has been on performance-based specifications, aimed at encouraging contractors to be innovative with new products. Research is being carried out on the recycling of tyres and plastic edge marker posts, and specifications are being developed to allow and promote recycled asphalt pavement and other materials in hot mix asphalt design.

## **Recycling tyres**

Transit is working on an initiative dealing with discarded tyres. An earlier report on crumb rubber has flagged its usefulness, and more attention is being given to the most cost-effective process to produce a quality product. If only 10 percent of current asphalt mix production contained crumb rubber this would consume about 25 percent of waste tyres produced annually. Research is also being done into recycling tyres as components of the road sub-base.

## **Energy Use**

## **Resource substitution**

Efforts are being made to conserve premium materials and reduce haul distances by using locally available materials and adapting pavement design to incorporate these materials. Transit has been trialling a performance-based specification over three contracts for the design and construction of aggregate road pavement layers.

In one contract alone some 30,000 cubic metres of premium material were saved and a haul distance of some 85km was averted by focussing the design on what was available within 8km of the site. Local pit-run aggregate was found suitable and excavated and blended with other crushed material to meet the design requirements, resulting in significant environmental and economic benefits.

## Transit electricity usage

Transit used 743,808 units of electricity in its offices during the year, at a cost of \$95,200.



## ECONOMIC REPORT

THE ECONOMIC DIMENSION OF SUSTAINABILITY CONCERNS AN ORGANISATION'S IMPACT ON THE ECONOMIC CIRCUMSTANCES OF ITS STAKEHOLDERS AND ON THE ECONOMY IN GENERAL — LOCALLY, NATIONALLY AND GLOBALLY.

Transit and its national state highway network have a very significant economic impact. The national network links communities and is the backbone of the economy. It forms a major component of New Zealand's total transport infrastructure with 80 percent of freight being carried on the roads, especially state highways. As well, the efficiency of the state highway network directly impacts on communities, manufacturers and

exporters and provides the conduit for economic activity and hence employment security in New Zealand's dispersed regions. Therefore, the stakeholders directly impacted form a very broad group. Transit works alongside local authorities, sometimes in formal arrangements, to find ever more efficient ways of maintaining, managing and developing the state highways. Transit also supports this key stakeholder group with technical and management knowledge. At this stage of our adoption of the triple bottom line approach, actual measurement of these economic impacts is embryonic. Some examples are shown in the following pages, and the traditional financial report ends this section.

One of the seven bridges on Route J (Project PJK, Tauranga) under construction.



# STATEMENT OF FINANCIAL PERFORMANCE for the year ended 30 June 2002

## **Commercial Vehicles**

#### **Heavier trucks**

Following the completion of eight years of detailed research, Transit presented a submission through the Land Transport Safety's Rules system suggesting that New Zealand's economy could benefit from introducing heavier vehicles. The Minister of Transport responded by asking for the proposals to be publicly debated, and for three months in 2001/2002 Transit assisted. The result was a record number of wide ranging submissions covering the entire spectrum of views. The government has reserved its opinion on the proposals, and asked the Ministry of Transport to address these concerns and advise whether heavier and longer trucks should be permitted.

## Giving trucks a better ride

Transit's spent \$3.75 million on its award-winning Truck Ride project under which sections of the highway are smoothed that gave a rough ride to trucks. In addition to a smoother, more comfortable ride, there are economic gains of reduced wear; less maintenance, braking, and damage; and reduced time lost. Other gains are reduced CO<sup>2</sup> emissions and less driver fatigue.

## Congestion

Travel time surveys have been undertaken in Wellington and Auckland with significant congestion recorded in Auckland. Further surveys are required to track the trends in congestion, and the effect of transport projects. The survey will also provide environmental information because vehicles operating below an optimal travel speed generate additional pollution.

## Incident clearance

Transit is working with the New Zealand Police, emergency services and the Ministry of Civil Defence and Emergency Management to more quickly clear incidents. The aim is to significantly reduce delays while maintaining statutory and emergency responsibilities for all the agencies.

## **Emergencies**

Weather emergencies this year included the phenomenon of the "weather bomb". It wreaked havoc in the central North Island while snowstorms closed the Desert Road and highways around Dunedin and, unusually, SH1 in South Canterbury.

## Reducing the cost of tendering

A pre-qualification system has been agreed between Transit and the New Zealand Contractors Federation and the New Zealand Pavement and Bitumen Contractors Association. Prequalification will reduce tendering costs, simplify and ensure consistency in tendering procedures, and improve

the quality of tenders. Contractors will be assessed under several different work categories, and a range of preset quality standards will be set for each category of work. Low cost and low complexity projects will be let to the eligible tenderer with the lowest price, but contractors tendering for more complex, high risk and high cost projects will be subjected to more evaluation of contract specific attributes.

## Efficient cost estimation

Design project managers and their staff are the focus of a new education drive to get cost estimating right. Transit New Zealand, Transfund New Zealand and the Association of Consulting Engineers of New Zealand (ACENZ) are joining forces to improve the reliability and accuracy of estimates for state highway projects. Stage One of the project is an approved alignment with Transfund on cost estimation policy and performance and an industry best-practice manual on cost estimating. This manual will standardise procedures and will be the basis for training.

## IT Efficiencies

### Information system accessibility

Transit recognises that a combination of people, process and technology builds effective information systems and services. Transit has adopted a business model enabling its partners (consultants and contractors) to access its systems. They include project management and monitoring, and property management systems. While keeping this principle to the fore, Transit is enhancing its internal administration with the adoption of knowledge management systems, such as an Intranet.

## **Intelligent Traffic Systems**

Transit has completed its national ITS strategy for state highways, aimed at co-ordinating Transit's ITS initiatives and providing strategic direction for them. This will help to generate synergies between Transit systems and those of other organisations. The strategy was launched at New Zealand's first ITS conference which provided an opportunity for industry networking and the demonstration of current state-of-the-art technologies in ITS.

## Alliancing

Having first established an MOU with the Western Bay of Plenty District Council, Transit and the council have now let a 10-year joint maintenance contract known as "Bay Roads" for the local roads and immediate state highways. Transit is also in preliminary discussions with the Thames-Coromandel District Council about a similar joint venture. A proposal along the lines of the Marlborough Roads arrangement whereby Transit manages the local roads for the local authority, is under discussion with Franklin District Council.

Previous Year	Note	:S	Actual	Budget
(\$000)			(\$000)	(\$000)
525 755	OPERATING REVENUE		F 40 000	525 700
535,755	Transfund New Zealand		548,888	535,700
225	Overweight Permit Fees		210	250
1,020	Investment Interest		815	1,000
11,962	Rents & Leases From Property		12,701	12,000
169	Miscellaneous Receipts		144	200
336		I	476	0
549,467	TOTAL OPERATING REVENUE		563,234	549,150
	OPERATING EXPENDITURE			
	MAINTENANCE			
147,728	Structural Maintenance		105,624	103,100
33,861	Corridor Maintenance		72,982	70,400
61.259	Resurfacing		68,932	76,900
20,489	Emergency Work		18,276	16,800
4,684	Preventive Maintenance		4.269	5,800
7,187	Property Management		8,232	8,200
275,208	Total		278,315	281,200
273,200	Iocal		270,313	201,200
	REPLACEMENT AND IMPROVEMENT			
4,448	Pavement Smoothing		8,760	10,500
9,112	Minor Safety Projects		9,824	9,800
193,013	Construction		181,433	182,100
65,609	Property Purchase		80,943	63,000
1,399	Passenger Transport Roading Infrastructures		3,434	2,100
273,581	Total		284,394	267,500
548,789	TOTAL OPERATING EXPENDITURE 2, 3 &	4	562,709	548,700
678	NET SURPLUS FOR THE YEAR		525	450

The accompanying accounting policies and notes form part of these financial statements.

 $\widehat{22}$ 

# STATEMENT OF MOVEMENTS IN EQUITY as at 30 June 2002

Previous Year	Not	tes	Actual	Budget
(\$000)			(\$000)	(\$000)
5,900	BALANCE AS AT I JULY		6,578	6,578
678	Net Surplus For The Year		525	450
	TOTAL RECOGNISED REVENUES			
	TOTAL RECOGNISED REVENUES			
678	AND EXPENSES FOR THE YEAR		525	450
6,578	BALANCE AS AT 30 JUNE		7,103	7,028

## The accompanying accounting policies and notes form part of these financial statements.

# STATEMENT OF FINANCIAL POSITION as at 30 June 2002

Previous Year		Notes	Actual	Budget
(\$000)			(\$000)	(\$000)
6,578	EQUITY		7,103	7,028
	CURRENT ASSETS			
1,827	Cash in Bank		1,732	1,000
18,600	Investments	5	30,000	12,000
5,949	Accounts Receivable	6	5,361	2,063
86,740	Receivable from Transfund New Zealand		91,664	90,576
113,116	TOTAL CURRENT ASSETS		128,757	105,639
	LESS CURRENT LIABILITIES			
110,736	Accounts Payable	7	123,744	103,088
1,217	Employee Entitlements	8	1,507	1,350
111,953	TOTAL CURRENT LIABILITIES		125,251	104,438
1,163	NET CURRENT ASSETS		3,506	1,201
	PLUS NON CURRENT ASSETS			
5,526	Fixed Assets	9	4,188	5,977
5,526	TOTAL NON CURRENT ASSETS		4,188	5,977
	LESS NON CURRENT LIABILITIES			
	Employee Entitlements	8	591	150
111	TOTAL NON CURRENT LIABILITIES		591	150
6,578	NET FUNDS EMPLOYED		7,103	7,028



FINANCIAL AND CORPORATE SERVICES MANAGER

8 October 2002

The accompanying accounting policies and notes form part of these financial statements.

## STATEMENT OF CASH FLOW for the year ended 30 June 2002

Previous Year	Notes	Actual	Budget
(\$000)		(\$000)	(\$000)
	CASH FLOW FROM OPERATING ACTIVITIES		
	Cash was provided from:		
550,637	Transfund New Zealand	543,964	529,852
1,011	Investment Interest	790	1,000
11,938	Property Rental	12,790	11,864
678	Other Receipts	830	450
6,823	Net GST Received	(498)	(160)
571,087	Total	557,876	543,006
	Cash was disbursed to:		
562,072		545,352	547,738
562,072	Payments to Suppliers and Employees  Total	545,352	547,738
	Iotai	343,332	347,730
9,015	Net Cash Flow from Operating Activities 10	12,524	(4,732)
	CASH FLOW FROM INVESTING ACTIVITIES		
	Cash was provided from:		
328	Sale of Fixed Assets	121	111
	Cash was disbursed to:		
2,870	Purchase of Fixed Assets	1,340	2,806
(2,542)	Net Cash Flow from Investing Activities	(1,219)	(2,695)
	N. (1)	11.205	(7.427)
6,473	Net Increase/(Decrease) in Cash	11,305	(7,427)
13,954	Add Opening Cash Brought Forward	20,427	20,427
20,427	Ending Cash Carried Forward	31,732	13,000
	-		
	Ending Cash Represented By:		
1,827	Cash in Bank	1,732	1,000
18,600	Investments	30,000	12,000
20,427		31,732	13,000

The accompanying accounting policies and notes form part of these financial statements.

# STATEMENT OF ACCOUNTING POLICIES for the year ended 30 June 2002

#### **Reporting Entity**

These are the Financial Statements of Transit New Zealand, a Crown Entity in terms of the Public Finance Act 1989.

These Financial Statements have been prepared in accordance with section 41 of the Public Finance Act 1989.

#### Measurement System

The Financial Statements have been prepared on a historical cost basis.

#### Accounting Policie

The following accounting policies which materially affect the measurement of financial performance and financial position have been applied:

#### **Budget Figures**

The budget figures are those included in the Statement of Intent, approved by the Authority at the beginning of the financial year. No account has been taken of the additional funding approved by Transfund New Zealand during the financial year.

The budget figures have been prepared in accordance with generally accepted accounting practice and are consistent with the accounting policies adopted by the Authority for the preparation of the financial statements.

#### **Revenue Recognition**

Revenue from Transfund New Zealand is equal to the total cost of services delivered in accordance with the approved National Roading Programme less revenue from property rents and leases and investment interest.

Income from property rents and leases, investment interest and other sources are recognised when earned and are reported in the financial period to which they relate.

#### **Fixed Assets**

Fixed Assets are stated at cost and are depreciated on a straight line basis over their estimated lives.

These are as follows

	Oseiui	Depreciation
	Life	Rate
Assets	(Years)	(Percent)
Buildings	50	2
Computer Equipment	4	25
Office Furniture	8	12.5
Office Equipment	4	25
Motor Vehicles	4	25
Technical Equipment	8	12.5
Plant	10	10

The State Highway Network and Land and Buildings held for future state highways are owned by the Crown and Local Authorities, not Transit New Zealand. As a result, these assets are excluded from the Statement of Financial Position and included in the Statement of Resources.

#### **Accounts Receivable**

Accounts Receivable are stated at their estimated realisable value after providing for doubtful and uncollectable debts.

#### Investments

Investments are stated at the lower of cost and net realisable value.

#### **Employee Leave Entitlements**

Provision is made in respect of Transit New Zealand's liability for annual, long service and retirement leave. Entitlements that are expected to be settled within 1 year of reporting date, are measured at nominal values on an actual entitlement basis at current salary levels.

Entitlements that are payable beyond 1 year, such as long service and retirement leave, have been calculated on an actuarial basis based on the present value of expected future entitlements.

# STATEMENT OF ACCOUNTING POLICIES for the year ended 30 June 2002

#### Goods and Services Tax (GST)

The Financial Statements are prepared on a GST exclusive basis, with the exception of Accounts Receivable and Accounts Payable which are stated with GST included. Where GST is irrecoverable as an input tax, then it is recognised as part of the related asset or expense.

#### **Taxation**

Transit New Zealand is a Public Authority in terms of the Income Tax Act 1994 and consequently is exempt from income tax.

#### **Operating Leases**

Operating Lease payments, where the lessor effectively retains substantially all the risks and benefits of ownership of the leased items, are charged as expenses in the periods in which they are incurred.

#### **Financial Instruments**

Transit New Zealand is party to financial instruments as part of its normal operations. These financial instruments include bank accounts, debtors, creditors and investments. All financial instruments are recognised in the Statement of Financial Position and all revenues and expenses in relation to financial instruments are recognised in the Statement of Financial Performance.

#### **Commitments**

Future payments are disclosed as commitments at the point a contractual obligation arises. To the extent that they are equally unperformed obligations, commitments relating to employment contracts are not disclosed.

#### **Statement of Cash Flows**

Cash means cash balances on hand, held in bank accounts, demand deposits and other highly liquid investments in which Transit New Zealand invests as part of its day-to-day cash management.

Operating Activities include cash received from all income sources of the Crown Entity and records the cash payments made for the supply of goods and services.

Investing Activities are those activities relating to the acquisition and disposal of Non Current Assets.

Financing Activities comprise the change in Equity of Transit New Zealand.

#### **Cost of Service Statements**

The Statement of Objectives and Service Performance reports the net cost of services for the outputs of Transit New Zealand and are represented by the costs of providing the output less all the revenue that can be allocated to these activities.

## **Cost Allocation**

Transit New Zealand has derived the net cost of service for each significant activity using the cost allocation system outlined below:

#### **Cost Allocation Policy**

Direct costs are those costs directly attributable to a significant activity.

Indirect costs are those costs, which cannot be identified in an economically feasible manner with a specific significant activity. Transit New Zealand has two types of indirect costs - Professional Services and Administration costs.

#### Cost Drivers for Allocation of Indirect Costs

Professional Services are allocated 72% to Structural Maintenance and Resurfacing, on a pro-rata basis and 28% to Corridor Maintenance. This is in accordance with the NRP Agreement.

Administration costs are allocated across all NRP outputs on a pro-rata basis.

For the year ended 30 June 2002, Professional Services accounted for 7% of Transit New Zealand's total operating expenditure. These costs were not allocated in the previous year, but they would have accounted for 7% of Transit New Zealand's total operating expenditure.

For the year ended 30 June 2002, Administration costs accounted for 4.8% of Transit New Zealand's total operating expenditure (2001: 4.4%).

# STATEMENT OF ACCOUNTING POLICIES for the year ended 30 June 2002

#### **Changes to Comparative Figures**

Where necessary, comparative figures have been adjusted to conform with changes in presentation and classification adopted in the current period. The exception is that for 2002, the split between Structural Maintenance and Corridor Maintenance has been revised in accordance with the NRP Agreement. However, it is not practical to amend the prior year figures for this revision.

#### **Changes in Accounting Policies**

Transit New Zealand has changed its accounting policies in relation to the provision of retirement leave and the allocation of indirect costs.

Retirement leave is now provided on an actuarial basis based on the present value of expected future entitlements. This change was made to comply with Generally Accepted Accounting Practice (GAAP). The previous policy had retirement leave being paid as the entitlement fell due.

Professional Services are now allocated across Structural Maintenance, Resurfacing and Corridor Maintenance. This change is in accordance with the NRP Agreement. The previous policy had Professional Services included in Structural Maintenance only.

I. Self Funding Units	Actual (\$000)	Previous Year (\$000)
Bailey Bridging:		
Revenue	331	556
Less Expenditure	180	429
Net Gain	151	127
CAPTIF:		
Revenue	346	545
Less Expenditure	256	388
Net Gain	90	157
Training and Education:		
Revenue	517	292
Less Expenditure	282	240
Net Gain	235	52
Total Self Funding Units	476	336

#### 2. Total Operating Expenditure

2. Iotal Operating Expenditure		
Includes:		
Fees Paid to Financial Statement Auditors		
<ul> <li>financial audit</li> </ul>	70	68
<ul><li>other services</li></ul>	45	65
Authority Members Fees	119	119
Depreciation:		
- Buildings	2	2
<ul> <li>Computer Equipment</li> </ul>	1,670	1,613
- Office Furniture	258	236
Office Equipment	146	153
- Motor Vehicles	149	204
- Technical Equipment	122	121
- Plant	4	76
Total Depreciation for the year	2,351	2,405
(Gain)/Loss on Disposal of Fixed Assets	(78)	(17)
Write Off of Fixed Assets	284	0
Rental Expenses	1,177	968
Superannuation Payments	270	255
Bad Debts Written Off	28	7
Increase/(Decrease) in Provision for Doubtful Debts	89	(20)

Bad Debts Written Off totalled \$78,596 (2001: \$60,954). Of this amount \$50,955 (2001: \$53,815) had been previously provided for.

# NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS for the year ended 30 June 2002

#### 3. Employee Remuneration

During the year the number of employees or former employees who received remuneration and other benefits in their capacity as employees of Transit New Zealand, the value of which was or exceeded \$100,000 per annum was as follows:

Remuneration Ranges	Number of Employees	Previous Year
\$100.000 to \$109.999	8	3
\$110,000 to \$119,999	3	3
\$120,000 to \$129,999	4	2
\$130,000 to \$139,999	1	4
\$140,000 to \$149,999	2	0
\$150,000 to \$159,999	1	2
\$160,000 to \$169,999	2	1
\$180,000 to \$189,999	1	0
\$230,000 to \$239,999	0	1
\$250,000 to \$259,999	1	0

The Chief Executive's remuneration and benefits is in the \$250,000 to \$259,999 band (2001: \$230,000 to \$239,999 band).

4. Authority Members' Fees	Actual (\$000)	Previous Year (\$000)
The following Authority members earned the following:		
Mr A Bickers (Chairperson)	34	29
Sir T O'Regan (Deputy Chairperson)	21	14
Mr D Stubbs	17	11
Mr M Williams	17	11
Dr J Wright	17	11
Mr J Shaw (appointed September 2001)	13	0
Mr R Ayling (deceased)	0	6
Mr R Browne (former Chairperson)	0	12
Mr R Thompson (former Deputy Chairperson)	0	7
Mr D Dew	0	6
Mrs N Shadbolt	0	6
Mr W Taylor	0	6
Total Authority Members Fees	119	119

Authority members remuneration through fees is all-inclusive and no consultancy or ex gratia payments or benefits have been provided to Authority members other than fees (2001: Nil).

There have been no severance payments to Authority members during the year (2001: Nil).

## 5. Investments

Short-term deposits totalling \$30.0M (2001: \$18.6M) with a maturity date of 5 July 2002, were invested at interest rates ranging from 5.50% to 5.60% (2001: 5.75% to 5.77%).

6. Accounts Receivable	Actual (\$000)	Previous Year (\$000)
Accounts Receivable comprise:		
Sundry Receivables	4,225	5,257
Less Provision for Doubtful Debts	112	69
	4,113	5,188
Interest Accrued	36	12
Prepayments	11	46
GST Owed by the Inland Revenue Department	1,201	703
Total Accounts Receivable	5,361	5,949
7. Accounts Payable		
Accounts Payable comprise:		
Contractors, Consultants and Others	94,653	99,962
Accrued Expenses	29,091	10,774
Total Accounts Payable	123,744	110,736
8. Employee Entitlements		
Current Liabilities:		
Annual Leave	1,022	1,146
Long Service Leave	67	71
Retirement Leave	418	0
Total current portion	1,507	1,217
Non Current Liabilities:		
Long Service Leave	123	111
Retirement Leave	468	0
Total non current portion	591	111

2,098

1,328

	Actual			Previous Year			
Assets	Historical Cost (\$000)	Accumulated Depreciation (\$000)	Net Book Value (NBV) (\$000)	Historical Cost (\$000)	Accumulated Depreciation (\$000)	Net Book Value (NBV) (\$000)	
Buildings	88	14	74	88	12	76	
Computer Equipment	9,048	6,506	2,542	9,567	6,240	3,327	
Office Furniture	2,577	1,745	832	3,479	2,228	1,251	
Office Equipment	1,116	910	206	1,116	845	271	
Motor Vehicles	943	599	344	991	661	330	
Technical Equipment	3,485	3,315	170	3,556	3,308	248	
Plant	1,774	1,754	20	1,774	1,751	23	
Total	19,031	14,843	4,188	20,571	15,045	5,526	

NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS for the year ended 30 June 2002

10. Reconciliation of Cash with Reported Operating Surplus	Actual (\$000)	Previous Year (\$000)
Reported Operating Surplus	525	678
Add Non-Cash Items		
Depreciation	2,351	2,405
Write off of Fixed Assets	284	0
Increase in Non Current Employee Entitlements	480	19
	3,115	2,424
Add (Less) Movements in Working Capital Items		
Accounts Payable	13,008	(12,663)
Accounts Receivable	(4,336)	18,393
Employee Entitlements	290	200
	8,962	5,930
Less Items Classified as Investing Activities		
Net Gain on Sale of Fixed Assets	(78)	(17)
	(78)	(17)
Net Cash Flow from Operating Activities	12,524	9,015

#### 11. Transactions with Related Parties

Transit New Zealand undertakes transactions with Government Departments, Crown Agencies, State Owned Enterprises and Transfund New Zealand. These transactions are carried out on a commercial arms length basis and it is considered that these do not fall within the intended scope of related party disclosures.

**Total Employee Entitlements** 

## NOTES TO AND FORMING PART OF THE FINANCIAL STATEMENTS for the year ended 30 June 2002

#### 12. Financial Instruments

Transit New Zealand is party to financial instrument arrangements as part of its everyday operations. These financial instruments include Bank accounts, Accounts Receivable and Accounts Payable.

#### **Currency Risk**

Transit New Zealand has no currency risk as all financial instruments are in New Zealand dollars.

#### **Interest Rate Risk**

As Transit New Zealand has no borrowings and has adopted the policy of holding short term investments until maturity, the interest rate risk is minimal.

#### Credit Risk

In the normal course of its business, Transit New Zealand incurs credit risk from Receivables and Financial Institutions. There are no significant concentrations of credit risk. Receivables are unsecured, but subject to credit control.

#### **Fair Values**

The fair values of Transit New Zealand's Financial Assets and Liabilities are considered to approximate their carrying value.

## STATEMENT OF RESOURCES as at 30 June 2002

The main assets relating to the Authority's activities are:

#### I. The State Highway Network

The Authority administers, maintains and constructs State Highways on behalf of the Crown. Currently, there are 10,783 kilometres (km) of State Highways (2001: 10,774 km). Of this length 5,884 km are in the North Island (2001: 5,874 km) and the remaining 4,899 km are in the South Island (2001: 4,900 km). In addition, as a result of New Zealand's relatively hilly terrain, there are 3,643 bridges and large culverts (2001: 3,643) which represents a bridge every 3.0 km (2001: 3.0 km).

The Replacement Cost of the State Highway Network controlled by Transit New Zealand, as compared to owned by the Crown, has been assessed independently by Opus International Consultants Limited at \$14,782M (2001: \$13,769M) with a Depreciated Replacement Cost of \$11,946M (2001: \$11,056M)

	Actual			Previous Year			
Description	Replacement Cost (\$M)	Accumulated Depreciation (\$M)	Depreciated Replacement Cost (\$M)	Replacement Cost (\$M)	Accumulated Depreciation (\$M)	Depreciated Replacement Cost (\$M)	
Roads	11,145	1,463	9,682	10,320	1,418	8,902	
Bridges	2,831	1,187	1,644	2,692	1,122	1,570	
Other	806	186	620	757	173	584	
Total	14,782	2,836	11,946	13,769	2,713	11,056	

## 2. Land Holdings for Future Road Construction

The Authority holds on behalf of the Crown approximately \$334M of freehold land and buildings and further Leasehold Interests on a small amount of property (2001: \$337M). These property holdings are held for the purpose of future State Highway improvements and are included in the State Highway Network valuation above.

The valuation of these property holdings was managed by Knight Frank (NZ) Limited using a mix of special and indexed valuations as at 30 June 2002.

The accompanying accounting policies and notes form part of these financial statements

## STATEMENT OF COMMITMENTS as at 30 June 2002

As a result of the 2002/2003 State Highway Programme's approval a high proportion of that Programme forms a definite commitment for the next year or further.

Commitments include for example:

- Agreements entered into prior to 30 June 2002, to undertake the maintenance requirements of the State Highway Network;
- Construction contracts commenced but not completed in the period ending 30 June 2002. Some of these contracts are not due for completion until the 2002/2003 financial year; and
- Lease agreements.

The value of Commitments are:

	Year	Actual (\$M)	Previous Year (\$M)
	2001/2002	_	302.00
	2002/2003	306.23	139.06
	2003/2004	157.31	60.98
	2004/2005	92.69	16.52
	2005/2006	43.00	16.49
	2006/2007	23.29	16.36
	2007/2008	16.82	16.15
	2008/2009	12.54	15.00
	2009/2010+	10.50	22.88
Total Commitments		662.37	605.44

# STATEMENT OF CONTINGENCIES as at 30 June 2002

Transit New Zealand and its predecessor, the former National Roads Board, received a number of claims for contract and land settlement disputes. While not accepting liability for any of the outstanding claims which are pending arbitration or legal action, it is estimated that a maximum of \$5.9M (2001: \$17.2M) may be payable should the claimants be successful.

Guarantees by Transit New Zealand in favour of third parties, totalled \$1.15M (2001: \$1.15M) at year end.

The accompanying accounting policies and notes form part of these financial statements.

# STATEMENT OF RESPONSIBILITY for the year ended 30 June 2002

The Authority and Management of Transit New Zealand acknowledges responsibility for the preparation of the Statements of Account and the judgements made therein.

In the opinion of the Authority and Management of Transit New Zealand:

- The Internal control procedures are considered to be sufficient to provide a reasonable assurance as to the integrity and reliability of the Statements of Account; and
- The Statements of Account have been prepared in accordance with generally accepted accounting practices and fairly reflect the financial position and operations of Transit New Zealand for the year ended 30 June 2002.

A N Bickers Chairperson 8 October 2002

kian bickens.

R J Dunlop Chief Executive 8 October 2002

R.J. Denbl

The accompanying accounting policies and notes form part of these financial statements

## HIGHLIGHTS · EVENTS



## SHI Fairfield Motorway

At midnight on 9 December traffic was diverted onto the Fairfield Motorway for the first time, but not before local people had a chance to walk the new highway (see photo). The 4.7 kilometre-long section of four-lane motorway divided by a median barrier runs in part over a disused coalfield. It is one of the largest roading projects built in the Dunedin area, and was completed a year ahead of schedule. Its completion has relieved the suburban streets of Fairfield and Sunnyvale of most of the 21,000 vehicles that traversed the area.



## SH25 Opening of seal extension, Coromandel

The people of Coromandel are expecting more tourists "doing the circuit" of the peninsula after the completion of SH25 sealing works, celebrated here by Transit Authority Chairperson Alan Bickers (centre) and Thames Coromandel Mayor Chris Lux (left) and Chairperson of Environment Waikato, Neil Clarke. This \$6million contract completes the sealing of the entire Pacific Coast Highway from Auckland to Napier. Environmental issues were key, with 16 Hochstetter frogs relocated for their protection.



## Opening of Route J, PJK Route

Route J is part of New Zealand's largest-ever, single roading contract. Routes P and J are the first of a series of projects worth \$91million, that will provide a ring road serving Tauranga and Mount Maunganui, as well as the surrounding Western Bay of Plenty district. A trolley derby (above) was one of the activities on the opening day.

Transit worked in partnership with the Tauranga District Council, and the Western Bay of Plenty District Council is a strategic partner and a minor funder.



## SH6 Glenhope-Kawatiri

Transit has improved safety on this stretch of highway where there was a high crash rate. Several tight bends have been eased, the road and three bridges widened, two passing lanes added, and a single-lane bridge has been replaced. There were many environmental challenges during this project, because the road runs either near or through the Kahurangi National Park. Environmental protection work was carried out to divert the Hope River, which runs alongside the road, and Transit helped protect a rare native daisy tree, *Olearia polita*, during construction, and promoted regeneration of native forest.



## **Grafton Gully**

The then, Minister of Transport Mark Gosche marked the start of work by turning the first sod for the Grafton Gully Project.

The \$68million project will be completed in 2004. The project will help improve the strategic link between Auckland lower CBD, the port area and the motorway.

An underground tank (pictured) the size of three tennis courts will improve the quality of stormwater discharged to Waitemata Harbour by reducing contaminants from stormwater and from runoff from the motorway in Grafton Gully. It is the first of its kind in New Zealand.

An information centre allows the public to view posters and drawings of the project, and some of the artefacts unearthed during excavation works through the gully.

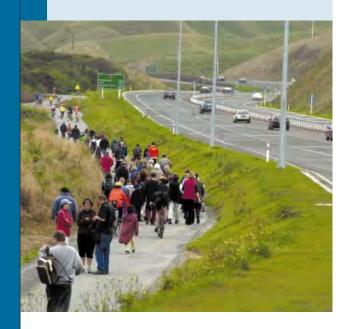
## SH6A Frankton Road Upgrade Project

Queenstown is experiencing the biggest growth rate in New Zealand, so \$7million worth of improvements to the entrance of this major tourist destination have been welcomed. Special attention has been paid to the visual environment, particularly the large gabion walls supporting sections of hillside above the road. The widened road accommodates a central flush median and a combined footpath and cycleway. Queenstown Lakes District Council and other utility suppliers took the opportunity to place amenities underground.

# SHI Pukerua Bay to Paekakariki safety improvements

Safer turning facilities, a wider road, traffic islands, more signs and brighter and noisier road markings are all helping to make this section of SH1 safer and reduce the number of crashes after a spate of fatal accidents.

Safety improvements have been carried out further north near Raumati, including a median barrier, more lighting, turning bays and a wider road. The road is over a peat bog up to four metres deep, and innovative techniques have been used to drain the area and landscape the surrounds.



## Opening of Plimmerton to Pukerua Bay

Transit has completed a \$9.3million project to improve safety on SH1 between Plimmerton and Pukerua Bay, north of Wellington including the Ara Harakeke (Flax Pathway) alongside the highway, enjoyed by walkers and cyclists (as above).

The Taupo Swamp, next to the highway, is an important wetlands area, managed by the Queen Elizabeth II National Trust. Important species of native flora and fauna, including sedgeland, flax tussock, fern and grass, are found there. The waters of the Taupo Stream are home to giant kokopu, inanga and long and short-finned eels. Transit created fish passages for these species by installing concrete block baffles in some of the culverts. These help fish swimming against the water flow. Several native bird species are found in the swamp including pukeko, New Zealand kingfisher, and spotless crake.



## Transit head is 'Man of the Year'

Transit New Zealand's chief executive Dr Robin Dunlop is the International Road Federations's Man of the Year. The award was presented "In merited recognition for his pioneering activities and achievements in the realm of asset management and road funding, which have contributed to the advancement of road sector development in his country and throughout the world. His vision and dedication are an inspiration to all involved in the future of roads and road transport." Above, Dr Dunlop is flanked (left) by Wim Westerhuis and Ian Heggie.

#### **Transit Honoured in IPENZ Awards**

The Institution of Professional Engineers New Zealand honoured the chairperson of the Transit New Zealand Authority, Mr Alan Bickers. Mr Bickers was elected by members as a Distinguished Fellow of their Institution.

Transit also won the IPENZ Engineering Communications Award, which was presented to Andrew Scott, the project manager for Project PJK in Tauranga. This \$91million project includes seven new bridges, and 8.5km of new road. A sense of community ownership for the project was achieved with a multi-faceted communications strategy including open days, bus tours, a website, newsletters and media releases.

The IPENZ Environmental Award sponsored by BP New Zealand went to another Transit project, the White Pine Bush SH2 realignment. The award is made for an engineering work that best exemplifies care and consideration of environmental values. The White Pine Bush section of the highway runs through a scenic reserve, and key environmental issues were identified to minimise the impact of the realignment on the area. Ecological, geological and visual concerns were addressed throughout the investigation, design and construction process.

#### InnovateNZ - ACENZ Award

The SH73 Candy's Bend to Starvation Point and White Bridge project won the Gold Award for Excellence. This was one of the most technically difficult engineering projects ever undertaken in New Zealand. The 850metrelong site was previously single lane for much of its length with steep grades, tight curves and limited visibility and vulnerable to rock falls.

#### **NZ Road Innovation Award**

Winners of the inaugural New Zealand Road Innovation Awards were Michelle McCormick, Transit, but later Ministry of Transport, Rochelle Bowler, Transit and Mike Dunne from ACNielsen. The three presented a paper to the Australasian Transport Research Forum in Hobart, entitled Survey of Commercial Truck Drivers: Valuing their Priorities for Improving New Zealand's State Highways.

The initial State Highway Road User Satisfaction Survey showed that commercial truck drivers were significantly less satisfied with New Zealand's state highways than other road users, so an additional survey was undertaken. That survey's results led to an additional \$3m of funding for a programme of smoothing the worst parts of the highways for truckies who found the undulations wearing on themselves and their vehicles.

This project also won three trophies (see above) in the New Zealand Market Research Effectiveness Awards – the Supreme Award, the Innovation Award and the Platinum Award for the Social and Community Category.



# Transit wins international environmental award

For the second time in three years Transit has been awarded the International Road Federation Global Road Achievement Award for Environmental Mitigation, this time for work on SH73 through Arthur's Pass National Park. The award recognises "outstanding progress in protecting and enhancing the natural environment in the planning, design and construction of a road development project".

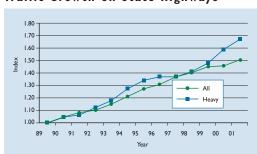
The project, Securing the link – a highway project in a National Park detailed the work on the Otira Viaduct and approaches, and the highway from Candy's Bend to Starvation Point including White Bridge. This included the building of the viaduct, a rock shelter over the highway and the Reid's Falls chute, which diverts a waterfall over the road, as well as significant upgrading of the road. These awards have greatly enhanced New Zealand's reputation for expertise in building roads in environmentally sensitive areas.

## STATE HIGHWAY NETWORK

## Total Asset Value

Year	1999/00	2000/01	2001/02
Depreciated Replacement Cost (\$M)	10,560	11,056	11,946

## Traffic Growth on State Highways



## Strategic Hierarchy Classes: Vehicles per day (vpd)

Class	Definition	
Class	Definition	
M/U	Motorway/Expressway & Urban	
RI	Rural, >10,000 vpd	
R2	Rural, 4,000 to 10,000 vpd	
R3	Rural, 1,000 to 4,000 vpd	
R4	Rural, < 1,000 vpd	

## Vehicle Kilometres Travelled (VKT)

		, ,	
Region	Network Length (km) 2001/02	VKT in 2000/01 (Million)	VKT in 2001/02 (Million)
Northland	710.5	790	810
Auckland	323.9	3,792	3,933
Waikato	1,711.4	2,731	2,884
Bay of Plenty	714.1	1,266	1,303
Gisborne	330.9	153	149
Hawke's Bay	510.4	547	605
Taranaki	386.5	557	597
Manawatu/Wanganui	959.6	1,301	1,385
Wellington	236.3	1,594	1,606
Nelson/Marlborough	639.9	653	671
Canterbury <sup>1</sup>	1,333.9	1,819	1,745
West Coast	872.9	316	301
Otago <sup>1</sup>	1,294.9	990	1,081
Southland	757.7	468	499
Total	10,782.9	16,977	17,571

 $<sup>^{\</sup>rm I}$  Some of the data in 2000/01 was suspect and hence VKT cannot be accurately compared with 2001/02, particularly for Canterbury and Otago.

## Strategic Hierarchy Classes

Christchurch

Length and VKT by State Highway Strategic Hierarchy. All State Highways							
	Class						
	М	RI	R2	R3	R4	U	Total
2001/02 Highway Length (km)	179.4	234.9	1,881.5	4,361.5	3,221.0	904.6	10,782.9
2001/02 VKT (M)	3,797	1,382	4,476	3,720	966	3,230	17,571

(40)

## STATEMENT OF SERVICE PERFORMANCE for the year ended 30 June 2002

Transit New Zealand operates and improves the 10,783kms of state highways in New Zealand. These highways form the strategic route network that meets the national needs of commerce, tourism and recreation. The activities of Transit are funded 100% from the National Land Transport Fund through Transfund New Zealand. Operation of the network is funded from Transfund's Output Class 1 (State Highway Maintenance), while improvements to the network are funded from Output Class 2 (State Highway Replacement and Improvement). Transit's Statement of Projected Performance contained in the 2001/2002 Statement of Intent detailed Transit's targets and performance measures against each of these classes.

## Summary of Output Class Expenditure

Output Classes	1999/00 Actual \$M	2000/01 Actual \$M	2001/02 Target \$M	2001/02 Actual \$M
I. Maintenance	275.51	275.21	281.20	278.32
2. Replacement and Improvement	317.62	273.58	267.50	284.39
Total (GST exclusive)	593.13	548.79	548.70	562.71
Total (GST inclusive)	667.27	617.39	617.29	633.05

## Transit Comment

## Output Class I - Maintenance

In common with most highway networks around the world, the capacity of the network has only marginally increased over the last decade, whereas traffic growth has stayed positive and constant. In the past year, a 3.5% increase in the vehicle kilometres travelled (traffic growth), has been recorded. Of more significance however, is the 5% increase in heavy commercial traffic over the past year. Some of this may be due to our improved calibration and traffic counting ability correcting previous under-reporting. But whatever the exact level, this increase will inevitably lead to additional expenditure on pavement maintenance, since deterioration is primarily linked to the amount of heavy commercial traffic on the network.

A further consequence of the traffic growth outstripping capacity increases, is that the maximum potential must be extracted from the present network in terms of traffic management. Two areas of development are emerging. There is increasing use of intelligent traffic management systems (particularly in Auckland and Wellington) to promote both coordination of traffic systems and route information to road users. When things go awry, and the highway is blocked or restricted by such events as crashes, smarter ways of reopening the highway more quickly are being developed, and are continuing to evolve. While each of these initiatives has a huge payback to the community in terms of reduced congestion and quicker travel times, they do come with a much higher agency (Transit) cost than in previous years.

Offsetting the increasing costs of operating the network has been the savings that Transit has achieved by structuring maintenance contracts in different ways to allow maximum flexibility, risk management and innovation. New 10-year Performance Specified Maintenance Contracts (PSMCs) have continued to show costs less than previously estimated, and the performance measures specified for those networks have for the most part been met. Further such contracts will be entered into in 2002/03. In line with Transit's Long Term Procurement Strategy, a further five-year term, so called Hybrid contract, was concluded in the Wellington area during the year.

The year's expenditure, at \$278.32M, was just \$2.88M less than the target. While the structural and corridor maintenance components exceeded the target by \$5.1M, the resurfacing component was below target by some \$8M. The reasons for overspend in the first two components relate to the estimation of the network deterioration. This was due to estimates of increased traffic being conservative, and the costs of traffic and incident management being somewhat more than was envisaged when the programme was conceived in 2000. On the other hand, the unit cost of resurfacing was significantly less than originally envisaged, and although there was a small slippage in achievement length (1%), the overall cost was less. Further, a \$4M contingency held for dealing with skid resistance problems was not required and was returned to Transfund. It is interesting to note that although Transfund changed the definitions of maintenance types to structural and corridor in 2001/02 from the old routine and safety maintenance categories, the combined totals for the years 1999/00, 2000/01 and 2001/02 show a continuing downward trend. This translates as reducing cost/km to maintain the level of service on the network in the face of continuing traffic growth. In the main this is a

direct consequence of Transit's continued progress with oppportunities for innovation and improved efficiency.

The level of expenditure on resurfacing increased by some 2% over the previous year. Two trends are at work. The cyclic nature of resurfacing tends to result in some years having more work than the average, and others less. Superimposed on this is the demand for improved road surfaces with reduced noise and rolling resistance, and longer life in high traffic urban areas. Such higher level of service treatment, inevitably costs 3-5 times more than conventional chip seals.

The condition measure trends show an excellent outcome and are well within the target measures. Given the dynamic nature of the existing network and tolerances in condition measurement, it will be difficult to improve on these results. The roughness measurements suggest that the current low level of expenditure on pavement smoothing is appropriate for maintaining the level of service, but may not be sufficient to ensure that the overall age and structural capacity of the network is maintained. Transit is now into the third year of running the dTIMS pavement deterioration model on the state highway network. The interim outputs from the model suggest that a higher level of pavement rehabilitation will be required over the next 10 years. In order to maintain the current level of service, the validity of the model is being tested by full-scale control sites across the network, and the output will be refined over the next two years. Rutting is now being controlled within normal maintenance activities, and flushing/skid resistance outcomes show improved performance in all areas of the network. This is a reflection of Transit's focus on this critical safety aspect of network operation. Whether it is economically possible to materially improve on the outcomes achieved in 2001/2002, is currently being assessed.

# Output Class 2 – Replacement and Improvement

The 2001/2002 year saw the full implementation of the block-funded projects' allocation system. For the first time, construction projects with a value less then \$3M were brought forward and funded through Transit's own internal management systems. Transfund allocated \$18.8M for these projects, \$3.5M for similarly managed design projects (to a maximum individual project value of \$0.2M), \$5.5M for investigation projects of a similar value and \$3.5M for all strategy studies. The bulk of this allocation addresses safety issues on the network, including passing lanes.

Projects falling outside these parameters were funded individually by Transfund (as they came on stream) as non-block projects. These projects, by definition, formed Transit's major works programme for 2001/2002 and subsequent years. The list of projects, and their priority order, were determined from a strategic top-down perspective, targeting

those parts of the network under most pressure from congestion and safety, rather than predominantly by benefit-cost ratio. The timetable for advancing these projects over the next four years was determined by realistic consideration of environmental, land purchase and consultation constraints and the availability of funding over the same period. The new system eased the administration burden for Transfund, required more detailed reporting and management for Transit, but did speed up the approval of funding, and allowed projects to proceed more quickly.

Project issues, relating to resource planning consents and consultation taking longer than originally estimated, again featured strongly in the reasons why only 79% of the fees projects expected to be completed in 2001/2002 were actually completed. Although significantly better than achieved the previous year, it may be that in today's environment for developing public infrastructure, expectations in relation to timeframes need to be modified. On the other hand, it was pleasing to report that expenditure on fees was right on target, and predominantly reflected excellent progress on some of the bigger projects continuing into 2002/2003. Predominant among these were the following projects:

#### **Auckland**

- Central Motorway Junction (Investigations and Design)
- Mount Roskill Motorway Extension (Investigations and Design)
- Harbour Bridge to City Improvements (Investigation)
- Grafton Gully (Design)
- North Shore Busway (Design)
- Upper Harbour Corridor (Design)

#### Wellington

- Plimmerton to Mana Improvements (Design)
- Inner City Bypass (Design)

#### Christchurch

• Southern Motorway (Investigations)

Construction projects exceeded the target for completion, primarily as a result of a number of smaller projects being completed ahead of time. Construction expenditure was also well within the target. Some of the notable improvements brought to fruition in 2001/2002 included:

- SH2 Commodor Corner, Waihi (\$3.1M)
- SH25 Coromandel Whangapoua Seal Extension (\$7.1M)
- SH1 Fairfield Motorway Extension, Dunedin (\$20.9M)

- SH6 Glenhope Kawatiri Realignment, Nelson (\$6.4M)
- SH6 Jacob's River Bridge Replacement, Westland (\$1.2M)
- SH6 Josephville Hill Realignment, Lumsden (\$2.3M)
- SH 58 Pauatahanui Bridge Replacement, Wellington (\$3.1M)
- SH1 Pukerua Bay Plimmerton 4 laning, Wellington (\$10.5M)
- SH1 Raumati Straight 4 laning, Wellington (\$2.5M)
- SH6 Spooners Range Summit Realignment, Nelson (\$5.9M)
- SH2 Waiwaka Bridge Realignment, Eketahuna (\$2.0M)
- SH2 White Pine Bush South Realignment, Napier (\$2.9M).

Major improvements commenced during the year included:

- SH2 Airport to Taradale Motorway, Napier
- SH1 Advanced Traffic Management System Stage 2, Auckland
- SH16 Grafton Gully Motorway Extension Stages 1 & 2, Auckland
- SH18 Greenhithe Deviation, Auckland
- SH1 Hunterville South Realignment, Wanganui
- SH1 Mercer to Long Swamp 4 laning, Hamilton
- SH1 North Shore Busway, Auckland
- SH1 Plimmerton Mana Improvements, Welllington
- SH1 Rangariri Ohinewai Bypass, Hamilton
- SH6A Queenstown Frankton Improvements, Otago.

These achievements illustrate some of the outcomes from the strategic focus on Auckland that Transit foreshadowed in the last annual report. They also show that major projects are still being constructed in other areas of the network. Another key strategy, that of providing more passing lanes on the 2,000 kilometres of the network carrying more than 4,000 vehicles/day, has resulted in these forming an increasing proportion of the projects under investigation, design and construction.

#### **Performance Measures**

As noted elsewhere, the current performance measures that Transit reports on have been reviewed in the light of the strategic plan, the increased emphasis on triple bottom line reporting and whether the information and trends could be more usefully reported. The suite of new performance measures has been provisionally agreed, and incorporated in the 2002/2003 *Statement of Intent*. While there is some commonality with the measures in this report, and the current Transit / Transfund Agreement, both documents are likely to be noticeably different in the next year.

### **Strategic Hierarchy Classes**

State highways have been classified to ensure standards delivered are consistent with demand. The strategic hierarchy classes are:

- M Motorway/Expressway,
- R1 Rural State Highways traffic volume over 10,000 vehicles per day (vpd),
  - venicles per duy (vpu))
- R2 Rural State Highways traffic volume 4,000 to 10,000 vpd,
- R3 Rural State Highways traffic volume 1,000 to 4,000 vpd, and
- R4 Rural State Highways traffic volume under 1,000 vpd.
- U Urban State Highways. (see map p.41)

Achievements by strategic hierarchy classes against the road condition performance measures are reported.

#### **Technical Terms**

Technical terms are defined in the Glossary provided on page 58.

#### Standards and Criteria

Standards and criteria referred to in this document are as per Transit's *Standards and Guidelines Manual*.

## OUTPUT CLASS 1: State Highway Maintenance & Expensed Construction

## **Description**

The main focus in this output is the safe operation of the state highway network, including traffic management and maintenance of the state highway asset.

## **Output Class Objectives**

The objectives of Output Class 1 are to:

- preserve the state highway asset
- contribute to reductions in the rate and severity of highway crashes
- limit disruption to traffic as far as practicable
- · minimise road agency and road user costs
- limit effects on the environment wherever reasonable and practicable.

## Outputs

The following outputs are included in Output Class 1:

• Structural all maintenance of carriageways and Maintenance: bridges.

Corridor provision and maintenance of delineation
 Maintenance: assets; maintenance of traffic signals,
 street lighting, guardrails and other safety
 facilities; incidence response and
 vegetation, graffiti and litter removal.

• Resurfacing: resurfacing of existing carriageways.

 Property management and maintenance of Crown-Maintenance: owned property held by Transit for future

• Emergency unplanned

unplanned work requiring the urgent reinstatement or provision of a safe trafficable highway, usually due to natural

event

Preventive timely intervention with non-routine

Maintenance maintenance works to protect the

Works: serviceability of the road asset and to minimise the threat of road closure.

## Cost of Outputs

Output <sup>2</sup>	I 999/00 Actual \$M	2000/01 Actual \$M	2001/02 Target \$M	2001/02 Actual \$M
Structural Maintenance	147.55	147.73	103.10	105.62
Corridor Maintenance	40.65	33.86	70.40	72.98
Resurfacing	60.15	61.26	76.90	68.93
Property Maintenance	6.13	7.19	8.20	8.23
Emergency Works (including	21.03	25.17	22.60	22.55
Preventive Maintenance Works)				
Total	275.51	275.21	281.20	278.31

#### Note:

Project Control and Administration costs have been allocated across all outputs. Professional Services have been distributed across Structural Maintenance, Corridor Maintenance and Resurfacing activities.

#### **Management Comment**

Outputs have changed from previous years to reflect Transfund's new output sub-groups. In broad terms 'Structural' corresponds with the previous 'Routine', 'Corridor' with 'Safety' and 'Resurfacing' with 'Reseals'.

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## ACHIEVEMENT AGAINST MANAGEMENT PERFORMANCE MEASURES

## Structural Maintenance

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	147.55	147.73	103.10	105.62
Length <sup>3</sup>	km	10,776	10,774	10,774	10,783
Unit Cost	\$/km	13,692	13,711	9,560	9,795

#### Note

## **Corridor Maintenance**

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	40.65	33.86	70.40	72.98
Length <sup>3</sup>	km	10,776	10,774	10,774	10,783
Unit Cost	\$/km	3,772	3,143	6,524	6,768

## **Management Comment**

With the change in Transfund's maintenance funding outputs from Routine and Safety to Structural and Corridor in 2001/02, unit cost trends in maintenance need to be measured by combining both Structural Maintenance and Corridor Maintenance values. The result is a small reduction in unit costs from 2000/01.

## Resurfacing

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	60.15	61.26	76.90	68.93
Length	km	1,546	1,275	1,312	1,298
Unit Cost	\$/km	38,907	48,046	58,612	53,106

## **Management Comment**

The target cost included provision of a contingency amount for dealing with skid resistance remedial works on the network identified during the year. In the event, it was not necessary to use the entire contingency, and \$4M surplus was given back to Transfund.

## **Property Maintenance**

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	6.13	7.19	8.20	8.23
Asset Value	\$M	Not Reported	334	334	341
Average percentage rate of return on lettable property assets not yet applied to road developments	Percent	4.5	4.6	4.3	3.9

## **Management Comment**

As anticipated, the yield has reduced from previous years, this is attributable in the main to the reduction in income as high value properties were vacated and demolished in anticipation of construction, leaving large parcels of high value land generating little income (particularly in Auckland which has a heavy weighting on the whole portfolio). In addition, we have purchased a number of high value, low income producing properties both in the Auckland and Waikato areas which has had a detrimental impact on overall yield.

## **Emergency Works (including Preventive Works)**

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	21.03	25.17	22.60	22.55
Number of projects completed	Number	88	130	N/A	98
Expected percent of emergencies on highways, having single-lane access restored within 12 hours of the substantial end to the event	Percent	72	77	95	94

## **Management Comment**

The outcome reflects Transit's commitment to maintain maximum availability of the network.

# Comparison of Periodic Maintenance<sup>4</sup> Costs – Actual Versus Planned

Description	Unit	l 999/00 Actual	2000/0 I Actual	2001/02 Target	2001/02 Actual
Percentage completion of National Roading Programme by cost of output <sup>5</sup>	Percent	103.7	99.5	98.5-101.56	99.7

## **Management Comment**

Although length achievement (see next table) was outside the target, expenditure met the target. This occurred because lesser lengths of work were required on some PSMC and hybrid contracts, where payment is by lump sum (irrespective of output) based on achieving performance criteria.

# Comparison of Periodic Maintenance<sup>4</sup> Achievement – Actual Versus Planned

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage achievement of the Annual Plan output <sup>5</sup>	Percent	109.6	100.2	97.5-102.5	96.3

## **Management Comment**

Under-achievement was primarily due to some unusual weather patterns in various parts of the country, and contractors deferring work until after the winter.

#### Notes:

- <sup>4</sup> Periodic Maintenance is defined as Area Wide Pavement Treatment, Maintenance Chip Seals, and Thin Asphaltic Surfacing.
- This measure reflects the actual delivery as at 30 June against revised target lengths/ values as at 28 February as per Transit/Transfund Performance Agreement.
- <sup>6</sup> Target amended to reflect Transit / Transfund NRP Agreement 2001-2006.

<sup>3</sup> Length excludes motorway ramps.

# ACHIEVEMENT AGAINST ROAD CONDITION MEASURES

## **Smooth Travel Exposure**

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage of travel on state highway classified as smooth	Percent	98	98	97	99

Smooth Travel Exposure b All State Highways	y State F	lighway S	trategic l	Hierarchy Class	,		
	М	RI	R2	R3	R4	U	Total
2001/02 Surveyed							
Length (km) <sup>7</sup>	179.3	234.8	1881.0	4353.5	3171.8	898.0	10718.3
2001/02 (%)	99	97	98	99	99	99	99

This table shows the proportion of travel on smooth state highways by strategic hierarchy.

Region	2001/02	1999/00	2000/01	2001/02
	Network Length (km)	Percent	Percent	Percent
Northland	710.5	98	98	98
Auckland	323.9	98	99	99
Waikato	1,711.4	97	97	98
Bay of Plenty	714.1	98	98	98
Gisborne	330.9	96	96	97
Hawke's Bay	510.4	98	99	99
Taranaki	386.5	98	99	99
Manawatu/Wanganui	959.6	98	99	99
Wellington	236.3	98	99	99
Nelson/Marlborough	639.9	99	99	98
Canterbury	1,333.9	99	99	100
West Coast	872.9	98	99	99
Otago	1,294.9	98	99	99
Southland	757.7	99	100	100
Total	10,782.9	98	99	99

This table shows the proportion of travel on smooth state highways by regional areas.

## **Smoothness**

<sup>7</sup> Length is based on the latest

profile survey. Out of the total

network length of 10,782.9km, the survey was carried out on 10,718.3km of sealed length.

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage of state highway classified as smooth <sup>8</sup>	Percent	98	98	97	99

Smoothness by State High All State Highways	ıway Stra	tegic Hie	rarchy				
	М	RI	R2	Class R3	R4	U	Total
2001/02 Surveyed							
Length (km) <sup>7</sup>	179.3	234.8	1881.0	4353.5	3171.8	898.0	10718.3
2001/02 (%)	99	97	99	98	99	99	99

This table shows the proportion of smoothness achieved on state highways by strategic hierarchy.

Region	2001/02	1999/00	2000/01	2001/02
	Network Length (km)	Percent	Percent	Percent
Northland	710.5	98	98	98
Auckland	323.9	98	98	99
Waikato	1,711.4	96	97	98
Bay of Plenty	714.1	98	98	98
Gisborne	330.9	96	95	96
Hawke's Bay	510.4	99	99	99
Taranaki	386.5	98	98	98
Manawatu/Wanganui	959.6	97	98	98
Wellington	236.3	98	99	99
Nelson/Marlborough	639.9	99	99	99
Canterbury	1,333.9	99	99	99
West Coast	872.9	98	99	99
Otago	1,294.9	99	99	99
Southland	757.7	100	100	100
Total	10,782.9	98	98	99

This table shows the proportion of smoothness achieved on state highways by regional areas.

Note:

<sup>8</sup> The smoothness of the highway network is determined by measurement of roughness, defined in terms of international roughness index values, with the percentage less than threshold values classified as 'smooth'. Smoothness targets vary by highway strategy hierarchy.

## Rutting

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage of state highways classified as having potentially hazardous 'ruts'9	Percent	0.02	0.15**	1.010	0.15**

Smooth Travel Exposure by State Highway Strategic Hierarchy All State Highways							
Class							l
	М	RI	R2	R3	R4	U	Total
2001/02 Surveyed							
Length (km) <sup>7</sup>	179.3	234.8	1881.0	4353.5	3171.8	898.0	10718.3
2001/02 (%) **	0.06	0.17	0.20	0.15	0.15	0.12	0.15

This table shows the proportion of state highway lengths by strategic hierarchy, classified as having potentially hazardous ruts.

Rutting by Region				
Region	2001/02	1999/00	2000/01	2001/02
	Network Length (km)	Percent **	Percent	Percent
Northland	710.5	0.25	0.22	0.25
Auckland	323.9	0.19	0.13	0.12
Waikato	1,711.4	0.30	0.33	0.25
Bay of Plenty	714.1	0.16	0.14	0.19
Gisborne	330.9	0.13	0.12	0.19
Hawke's Bay	510.4	0.10	0.06	0.08
Taranaki	386.5	0.22	0.24	0.13
Manawatu/Wanganui	959.6	0.21	0.19	0.16
Wellington	236.3	0.11	0.06	0.09
Nelson/Marlborough	639.9	0.10	0.11	0.15
Canterbury	1,333.9	0.06	0.04	0.05
West Coast	872.9	0.17	0.08	0.10
Otago	1,294.9	0.16	0.12	0.19
Southland	757.7	0.09	0.07	0.09
Total	10,782.9	0.17	0.15	0.15

This table shows the proportion of state highway lengths by regional areas classified as having potentially hazardous ruts.

#### Notes

<sup>9</sup> This measure reflects the proportion of the state highway network that is classified as having potentially hazardous ruts. A depression in the wheel path of a lane is defined as a 'rut'. When the depression exceeds 20mm in depth, it can hold water and cause a vehicle to aquaplane. Previously this measure was 30mm but as the percentages were so small, the last two year's figures have been re-calculated using 20mm rut depth.

<sup>10</sup> The target has not changed despite the change to the rut depth measurement.

## **Flushing**

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage of state highways classified as potentially hazardous 'flushed areas' 11	Percent	0.63**	0.70**	2.0	0.51**

Flushing by State Highway	<b>Strategi</b>	c Hierarc	hy				
All State Highways							
		I	I	Class	I		
	М	RI	R2	R3	R4	U	Total
2001/02 Surveyed							
Length (km) <sup>7</sup>	179.3	234.8	1881.0	4353.5	3171.8	898.0	10718.3
2001/02 (%)**	1.06	0.99	0.37	0.24	0.23	3.37	0.51

This table shows the proportion of state highway lengths by strategic hierarchy, classified as having potentially hazardous flushed areas.

Region	2001/02	1999/00	2000/01	2001/02
	Network Length (km)	Percent	Percent	Percent
Northland	710.5	0.70	0.95	0.60
Auckland	323.9	1.14	1.40	1.18
Waikato	1,711.4	0.71	0.99	0.45
Bay of Plenty	714.1	0.58	1.00	0.63
Gisborne	330.9	0.04	0.11	0.07
Hawke's Bay	510.4	0.48	0.65	0.41
Taranaki	386.5	0.20	0.23	0.22
Manawatu/Wanganui	959.6	0.55	0.55	0.47
Wellington	236.3	2.31	1.53	1.89
Nelson/Marlborough	639.9	0.65	0.71	0.56
Canterbury	1,333.9	0.33	0.38	0.50
West Coast	872.9	0.74	0.39	0.29
Otago	1,294.9	0.34	0.42	0.34
Southland	757.7	1.40	1.13	0.89
Total	10,782.9	0.63	0.70	0.51

This table shows the proportion of state highway lengths by regional areas classified as having potentially hazardous flushed areas.

Note:

When bitumen rises to the top of chips it is defined as 'flushed'. When a highway becomes flushed it can become unsafe as oil, debris and water combine on the surface.

<sup>\*\*</sup> Now being measured at 20mm depth (previously was 30mm depth in 1999/2000).

<sup>\*\*</sup>Now excluding Asphaltic Concrete, Porous Asphalt and Slurry (which equates to approximately 8% of the network).

## **Good Skid Exposure**

Description	Unit	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage of travel on state highway above the threshold level for skid resistance	Percent	99	No Target established	99

## **Management Comment**

This is a new measure of the performance of the state highway network, indicating the percentage of vehicle kilometres travelled on the network that is on a good skid resistance surface. A target of 98% has now been defined in Transit's 2002/2003 SOI and will appear in next year's annual report.

## Audit

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage material compliance with mandatory Transfund standards and criteria as measured by Transfund's audits	Percent	100	100	100	100

## OUTPUT CLASS 2: State Highway Replacement and Improvement

## **Description**

Transit will provide replaced and improved state highway assets under this output class.

## **Output Class Objectives**

The objectives of Output Class 2 are to:

- Minimise the sum of road user and road agency costs
- Respond to the demand for improved strategic roads capacity
- Contribute to reductions in the rate and severity of highway crashes
- Limit disruption to traffic as far as practicable
- Recognise community aspirations through consultation
- Limit effects on the environment wherever reasonable and practicable.

## **Outputs**

The following two groups of outputs are included in Output Class 2:

## Replacement

Pavement the replacement of roads by rehabilitation
 Smoothing: where reconstruction of pavement is required for the benefit of road users.

## **Improvement**

Infrastructure)

• Minor Safety safety improvements of less than Projects: \$75,000 each.

Construction: improvement of existing roads and

bridges; and construction of new roads and bridges including seal extension

 Property: purchase of land needed for road and Purchase bridge improvement projects.

Passenger passenger transport capital improvements
 Transport: including provision of infrastructure.
 (Roading

## **Cost of Outputs**

Output <sup>12</sup>	I 999/00 Actual \$M	2000/01 Actual \$M	2001/02 Target \$M	2001/02 Actual \$M
Pavement Smoothing	13.89	4.45	10.5	8.76
Minor Safety Projects	6.51	9.11	9.8	9.82
Construction	226.98	193.01	182.1	181.43
Property Purchase	70.24	65.61	63.0	80.94
Passenger Transport	N/A	1.40	2.1	3.43
(Roading Infrastructure)				
Total	317.62	273.58	267.5	284.39

#### Note:

<sup>12</sup> Administration costs have been allocated across all outputs.

## **Management Comment on Overall Performance**

Considerable adjustment and reprioritisation took place in the targets during the year to ensure investment was made in the right area of activity at the right time. Additional funding was sought and agreed in the property purchase area during the year, to facilitate advancement of key improvement projects in Auckland.

## ACHIEVEMENT AGAINST PERFORMANCE MEASURES

## **Pavement Smoothing**

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	13.89	4.45	10.5	8.76
Length	km	61	37	35	47.8
Unit Cost	\$/km	228,727	120,216	300,000	183,264

## **Management Comment**

Some 24km of the total length achievement addressed truck ride improvements. The better-than target unit cost reflected the generally lower unit cost of these projects, and the favourable unit rates from the longer-term PSMC maintenance contracts.

## **Minor Safety Projects**

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	6.51	9.11	9.8	9.82

## Construction

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	226.98	193.01	182.1	181.43

## **Property Purchase**

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Cost	\$M	70.24	65.61	63.0	80.94

## **Management Comment**

To ensure that key improvement projects in Auckland remained on programme, an additional \$15M of funding was agreed during the year.

## Passenger Transport

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual	
Cost	\$M	N/A	1.40	2.1	3.43	

## **Management Comment**

The one project covered by this output, the North Shore Busway, incurred additional costs to meet a revised scope.

## **Environment Court**

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Appeals to the Environment Court that overturn requirements for designations placed by Transit for improvement projects	Number	0	0	0	0

## Capital Works Costs

## Fee Costs

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage completion of National Roading Programme by fee costs of capital works	Percent	90.2	85.0	≤103	103

### **Construction Costs**

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage completion of National Roading Programme by construction costs of capital works	Percent	101.5	97.0	≤103	95

## **Capital Works Achievements**

## Fee Component

Description	Unit	l 999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage achievement of fee component of Capital Projects in the National Roading Programme	Percent	95.0	63.0	≥95	79

## **Management Comment**

The year was characterised by a significant number of fee projects again being held up in the final stages, by issues of consents or consultation. The under achievement was 74 projects against a target of 349.

(54)



## **Construction Component**

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage achievement of construction component of Capital Projects in the National Roading Programme	Percent	95.0	98	≥95	107

## **Management Comment**

A number of projects were finished ahead of time, and in some cases under budget. The over-achievement was 10 projects, against a target of 142.

#### Audits

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage of post-construction audits undertaken that prove a good investment was made <sup>13</sup>	Percent	100	100	100	100

Note

13 Good investment is defined

as where the post-construction

audit tangible benefit to cost ratio (BCR) plus the initially

approved ranking component

(if any), is equal to or above the

BCR funding cut-off at the time

the project was approved.

## **Management Comment**

The achievement is based on eight post-construction audits completed during 2001/02.

# Compliance with Manuals

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Percentage material compliance with mandatory Transfund requirement as measured by Transfund audit	Percent	100	100	100	100

## Bridges

Description	Unit	1999/00 Actual	2000/01 Actual	2001/02 Target	2001/02 Actual
Number of bridges nationwide that are posted with weight restriction	Number	6	4	4	4

## **Management Comment**

The remaining structures remain under review but currently do not pose a significant impediment to the transport industry.

Rick van Barneveld

NATIONAL HIGHWAY MANAGER

# FINANCIAL STATEMENTS OF TRANSIT NEW ZEALAND FOR THEYEAR ENDED 30 JUNE 2002

REPORT OF THE AUDITOR-GENERAL TO THE READERS OF THE

We have audited the financial statements on pages 23 to 36 and 42 to 56. The financial statements provide information about the past financial and service performance of Transit New Zealand and its financial position as at 30 June 2002. This information is stated in accordance with the accounting policies set out on pages 27 to 29.

## Responsibilities of the Authority

The Public Finance Act 1989 and the Transit New Zealand Act 1989 require the Authority to prepare financial statements in accordance with generally accepted accounting practice in New Zealand that fairly reflect the financial position of Transit New Zealand as at 30 June 2002, the results of its operations and cash flows and service performance achievements for the year ended on that date.

## Auditor's responsibilities

Section 15 of the Public Audit Act 2001 and Section 43(1) of the Public Finance Act 1989 require the Auditor-General to audit the financial statements presented by the Authority. It is the responsibility of the Auditor-General to express an independent opinion on the financial statements and report that opinion to you.

The Auditor-General has appointed Stephen Lucy, of Audit New Zealand, to undertake the audit.

#### Basis of opinion

An audit includes examining, on a test basis, evidence relevant to the amounts and disclosures in the financial statements. It also includes assessing:

- ▲ the significant estimates and judgements made by the Authority in the preparation of the financial statements; and
- ▲ whether the accounting policies are appropriate to Transit New Zealand's circumstances, consistently applied and adequately disclosed.

We conducted our audit in accordance with the Auditing Standards published by the Auditor-General, which incorporate the Auditing Standards issued by the Institute of Chartered Accountants of New Zealand. We planned and performed our audit so as to obtain all the information and explanations which we considered necessary in order to provide us with sufficient evidence to give reasonable assurance that the financial statements are free from material misstatements, whether caused by fraud or error. In forming our opinion, we also evaluated the overall adequacy of the presentation of information in the financial statements.

We have performed assurance assignments over tendering for Transit New Zealand. Other than these assignments and in our capacity as auditor acting on behalf of the Auditor-General, we have no relationship with or interests in Transit New Zealand.

## **Unqualified opinion**

We have obtained all the information and explanations we have required.

In our opinion the financial statements of Transit New Zealand on pages 23 to 36 and 42 to 56.

- ▲ comply with generally accepted accounting practice in New Zealand; and
- ▲ fairly reflect:
  - Transit New Zealand's financial position as at 30 June 2002;
- the results of its operations and cash flows for the year ended on that date; and
- its service performance achievements in relation to the performance targets and other measures adopted for the year ended on that date.

Our audit was completed on 8 October 2002 and our unqualified opinion is expressed as at that date.

S B Lucy

Audit New Zealand

On behalf of the Auditor-General

Wellington, New Zealand

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## GLOSSARY

#### **Austroads**

The Association of Australian and New Zealand Road Transport and Traffic Authorities comprising a formally constituted consultative entity of which Transit is a full member.

## **BCR**

Also referred to as the 'benefit to cost ratio', is essentially the number of dollars of public benefit gained per dollar of roading authority expenditure, both capital and maintenance, over a 25-year period.

#### **GST**

Goods and Services Tax.

#### **Lane Kilometre**

A measure of length along one lane of a road.

## **Materiality**

Limits of materiality for each of the relevant measures will be determined in consultation with Audit New Zealand.

#### **NAASRA**

Road roughness is measured by a system developed by the former National Association of Australian State Roading Authorities (NAASRA). Values are obtained by a special purpose vehicle travelling down both outside lanes the length of a road. The rougher the road, the higher the NAASRA counts per lane kilometre.

## **NLTP**

For each year a National Land Transport Programme, as approved by the board of Transfund New Zealand, is produced in accordance with the Transit New Zealand Amendment Act, 1995.

#### **NSHP**

The programme of state highway projects approved by Transfund New Zealand.

## Output

The goods and services produced by Transit as a Crown entity and as defined in the Public Finance Act 1989.

#### **Output Class**

A grouping of goods and services produced by Transit as defined in the Transit New Zealand Act 1989.

### **RAMM**

Road Assessment Maintenance Management System.

## SOI

The *Statement of Intent*, comprising the approved objectives and performance targets for that year against which Transit New Zealand is evaluated.

#### STE

Smooth Travel Exposure measures the percentage of vehicle kilometres travelled on highways smoother than the target roughness values.

### **Transfund**

Transfund New Zealand.

#### **Transit**

Transit New Zealand, as established under the Transit New Zealand Act, 1989.

## Triple bottom line (TBL) reporting

Triple bottom line reporting involves reporting that gives consideration to financial outcomes, environmental quality and social equity. These are shown in this report by the following symbols.







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