

INVESTMENT SUMMARY



RESPONDING TO THE GOVERNMENT POLICY STATEMENT 2018/19 – 2027/28

The Government Policy Statement on Land Transport 2018/19 – 2027/28 sets a new strategic direction for land transport in New Zealand. It places a greater focus on making the biggest difference by supporting projects that:

- create a safe and resilient transport system
- improve access to economic and social opportunities for all New Zealanders
- move people more efficiently around our towns and cities
- enable urban development in high-growth areas
- make our public spaces safer and more attractive
- provide people with transport choices
- promote greater use of public transport and active choices
- help people and goods to move efficiently between regions.

In this policy statement, the government has increased investment in land transport through the National Land Transport Fund from \$3.6 billion in 2017/18 to a record \$4 billion in 2018/19, rising to \$4.7 billion a year by 2027/28. There is additional investment of \$1 billion a year from our co-investment partners, local government and the Crown for specific projects.

The development of the 2018–21 National Land Transport Programme was deferred to align with the new policy statement's priorities.

In preparing the 2018–21 programme, we worked closely with local, regional and unitary authorities and other approved organisations, the Department of Conservation and the Waitangi Trust to develop a programme of national and regional activities that responds to the policy statement and ensures our transport system meets the needs of all New Zealanders now and in the future.

All activities proposed for inclusion in the National Land Transport Programme are assessed and prioritised through the Transport Agency's Investment Assessment Framework. This framework was revised in June 2018 to align with the new policy statement, and the 2018–21 National Land Transport Programme was published on 31 August 2018. A total of \$16.9 billion will be invested through the 2018–21 programme – the largest amount on record – including \$12.9 billion from the National Land Transport Fund, \$3.4 billion from local authorities, and \$547 million in additional Crown funding to deliver specific programmes.

The redesigned Investment Assessment Framework strengthens:

- the transparency within investment assessments of the alignment to the Government Policy Statement outcomes
- the role of the benefit and cost appraisal within investment assessments
- integration with the business case approach so a wider range of options and interventions are considered, including non-transport interventions.

DELIVERING ON THE GOVERNMENT POLICY STATEMENT 2015/16 – 2024/25

When developing the 2015–18 National Land Transport Programme, the Transport Agency estimated the proportion of planned total expenditure (from the National Land Transport Fund, local government and the Crown) allocated across three groups of outcomes that support the direction in the Government Policy Statement on Land Transport 2015/16 – 2024/25. These groups are:

- economic growth and productivity
- road safety
- travel choice, health, environment and resilience.

At the same time value for money was an overarching priority for delivering the best outcomes for New Zealand.

At the end of the third year of the 2015–18 National Land Transport Programme, the overall spend (\$10.4 billion) from the National Land Transport Fund was 1 percent below the planned amount when the programme was adopted in June 2015. Of this investment, 48 percent went towards economic growth and productivity, 23 percent towards safety outcomes and 29 percent towards travel choice, health, environment and resilience outcomes (see figure 3).

Revenue for the National Land Transport Fund during 2015/16 – 2017/18 was \$373 million higher than forecast in the published National Land Transport Programme. This was mostly due to increases in travel demand and freight movements, which have provided enough revenue to achieve the forecast investment levels and offset the decision to not adjust the fuel excise duty and road user charges rates in the final two years of the 2015–18 National Land Transport Programme.

The proportion of outcomes invested in during 2017/18 remains close to the published 2015–18 National Land Transport Programme, despite National Land Transport Fund expenditure variations. More detail on investments that have contributed to these outcomes is provided and in the regional highlights (see pages 213–228).

FIGURE 3 – 2015-18 NATIONAL LAND TRANSPORT PROGRAMME PLANNED INVESTMENT AND 2016/17 ACTUAL INVESTMENT IN TARGETED OUTCOMES

	2015-18 PLANNED INVESTMENT (%)	2015/16 ACTUAL INVESTMENT (%)	2016/17 ACTUAL INVESTMENT (%)	2017/18 ACTUAL INVESTMENT (%)	2015-18 ACTUAL INVESTMENT (%)
Economic growth and productivity	55	53	50	48	50
Road safety	23	22	24	23	23
Travel choice, health, environment and resilience	22	25	26	29	27

ECONOMIC GROWTH AND PRODUCTIVITY

The Government Policy Statement on Land Transport identifies the following long-term results for this strategic priority:

1. Support economic growth and productivity through the provision of better access to markets, employment and business areas.
2. Support economic growth of regional New Zealand through provision of better access to markets.

Expenditure on economic growth and productivity outcomes during 2015-18

Approximately 50 percent of National Land Transport Programme expenditure at the end of 2015-18 (48 percent for 2017/18) contributed to economic growth and productivity outcomes, lower than the planned 55 percent. A wide variety of transport activities support New Zealand's economic growth and productivity, in particular state highways and local roads, by providing access to markets, employment and business areas.

Performance results on economic growth and productivity at the end of 2015-18

Investments in state highways and local roads improve safety and travel on the network. Such investment contributes to reducing congestion, enabling more efficient freight supply chains, and creating a safer, more resilient transport system.

Despite an increase in the number of vehicle kilometres travelled, travel times on key state highways and local roads serving Auckland, Wellington and Christchurch remained largely unchanged.

Since baselines were set in March 2016, travel-time predictability in Auckland has improved by 4 percent and remained stable in Wellington. In Christchurch, predictability decreased from 74 percent to 71 percent. However, this is a significant recovery from 65 percent following the Kaikōura earthquake in November 2016.

Productivity on state highways (that is, how much of the capacity of the urban road network is being used) declined overall, primarily due to road works. It remained steady in Auckland, improved by 1 percent in Christchurch and dropped by 3 percent in Wellington.

On key interregional routes, productivity decreased due to substantial road repairs on the Kaikōura coastal route following the 2016 earthquake, which slowed traffic and reduced utilisation.

The total length of state highways available to high productivity motor vehicles (HPMV) is now 7,221km which equates to 62 percent of the total state highway network. This figure is expected to increase next year as more HPMV tranche 2 projects reach completion.

Expenditure on economic growth and productivity by activity class

Of those investments identified as having economic growth and productivity as a priority, most were in state highway improvements and in state highway, local road maintenance and public transport. State highway improvements expenditure at the end of 2017/18 was 8 percent below the published 2015-18 National Land Transport Programme.

ACTIVITY CLASS	2017/18 ECONOMIC GROWTH AND PRODUCTIVITY EXPENDITURE	2015-18 ECONOMIC GROWTH AND PRODUCTIVITY EXPENDITURE
State highway improvements	34.2%	39.2%
State highway maintenance	14.0%	12.4%
Local road improvements	9.9%	7.7%
Local road maintenance	19.9%	21.4%
Regional improvements	1.9%	1.3%
Public transport	16.5%	15.7%
Road safety promotion	0.2%	0.2%
Road policing	1.4%	1.0%
Walking and cycling improvements	2.0%	1.1%

Highlights of investment in economic growth and productivity during 2015-18

The highlights of investment in road safety during 2015-18 include:

- major progress towards completing improvement to Auckland's motorway and strategic roading network including the State Highway 20A link (which makes it easier to travel around Kirkbride and Māngere) and improved access to Auckland International Airport
- completing the 2.4km Waterview Tunnel, which is a significant step in transforming the way people and freight move around Auckland and provides greater reliability for travellers and was opened between Pt Chevalier and Mt Roskill in July 2017
- continuing construction on the Transmission Gully section and starting construction on the Peka Peka to Ōtaki section of the Wellington Northern Corridor to separate local and state highway traffic to enable safer, shorter and more reliable journeys along the Kapiti Coast
- continuing construction on the Christchurch Southern Motorway and Northern Corridor projects, which form part of the Christchurch Roads of National Significance programme and aim to ease congestion, reduce travel times and improve safety on critical motorway routes
- starting construction on the Pūhoi to Warkworth section of Pūhoi to Wellsford
- making good progress on the construction of the Lincoln to Westgate section of the Western Ring Route
- opening the Rangiriri section of the Waikato Expressway while continuing construction on the Huntly and Hamilton sections and the final section (Longswamp)
- regional improvements such as upgrades along State Highway 2 Watchman Road intersection and the Hawke's Bay Airport, and the substantial completion of the new two-lane Taramakau Bridge on the West Coast.

CASE STUDY

ECONOMIC GROWTH AND PRODUCTIVITY BENEFITS ACHIEVED FROM INVESTMENT IN THE BAY OF PLENTY

Every year, the Transport Agency conducts post-implementation reviews on a sample of completed projects or packages that received National Land Transport Fund investment. These reviews give the Transport Agency insight into the actual outcomes that National Land Transport Fund investments are achieving for New Zealand.

In 2017, the Transport Agency reviewed the outcomes from the \$390 million Tauranga Eastern Link. This 21km road of national significance is a main part of an eastern corridor in the Bay of Plenty to the Port of Tauranga and Tauranga central business district. The review found that the investment delivered significant performance improvements related to economic growth and productivity, including improved journey-time reliability and average travel times along the whole Tauranga Eastern Link was 13 minutes compared with 22 minutes along the previous route through Te Puke.

The Tauranga Eastern Link also provides a more direct freight route to the Port of Tauranga, so is popular with truck drivers.








Safety was also an expected benefit that was used to support funding. Early signs indicate the toll motorway is a very safe road. All 17 crashes between the highway opening in August 2015 and the end of 2016 were non-injury crashes. Only one crash was recorded on the motorway over that period, with the rest occurring on or leading into the roundabout at the eastern end of the link.

DETAILED INVESTMENT PERFORMANCE RESULTS

The following activity classes have a primary link to economic growth and productivity outcomes.

State highway improvements

Four out of seven investment measures matched the desired trend or met target.

INVESTMENT PERFORMANCE	ACTUAL 2016/17	ACTUAL 2017/18	DESIRED TREND/ TARGET 2017/18	VARIANCE	RESULT
Average travel times on key state highways serving major metropolitan areas		Maintained ¹	Maintaining ²		
Auckland	1.1 min/km	1.1 min/km	1.1 min/km	-	 ACHIEVED
Wellington	1.2 min/km	1.2 min/km	1.2 min/km	-	 ACHIEVED
Christchurch	1.4 min/km	1.3 min/km	1.4 min/km	-0.1 min/km	 ACHIEVED
Productivity of the state highway network in major metropolitan areas (morning peak)		Decreased	Maintaining		
Auckland	59%	59%	≥ 62%	-3%	 NOT ACHIEVED
Wellington	63%	60%	≥ 63%	-3%	 NOT ACHIEVED
Christchurch	33%	34%	≥ 35%	-1%	 NOT ACHIEVED
% of state highways available to high productivity motor vehicles	49%	62% ³	≥ 45%	-	 ACHIEVED

Productivity measures how much of the capacity of the urban road network is being used by comparing the actual speed and flow of traffic with the optimal speed and flow of traffic. Overall, targets in Auckland, Wellington and Christchurch were not met.

Productivity in Auckland remained at 59 percent. In Wellington, productivity decreased due to increased traffic leading to the Basin Reserve and Mt Victoria Tunnel and through Ngāūranga Gorge due to roadworks. Productivity also decreased between Paekakariki and Pukerua Bay and on State Highway 2 in Upper Hutt around Moonshine Road. In Christchurch, while productivity was slightly below target, travel speed in several locations increased, particularly along State Highways 1 and 74 in the vicinity of the new Belfast bypass and north of the Lyttelton Tunnel.





¹ The measure represents change in travel time per kilometre travelled. For example, a change of 0.1 between years would represent an increase of 6 seconds per kilometre travelled.

² The targets for Wellington and Christchurch were interchanged in the NZ Transport Agency *Statement of performance expectations 2017/18*. We are reporting against the correct targets here.

³ Note that due to a change in data source this result is not comparable to the previous year.

Local road improvements

Four out of five investment measures match the desired trend and one was not available.

INVESTMENT PERFORMANCE	ACTUAL 2016/17	ACTUAL 2017/18	DESIRED TREND/TARGET 2017/18	VARIANCE	RESULT
Average travel times on key local roads serving major metropolitan areas Auckland, Wellington and Christchurch, reported for a year until March ¹	Maintained overall	Maintained overall	Maintaining ²		
Auckland	2.5 min/km	2.3 min/km	2.5 min/km	-0.2	 ACHIEVED
Wellington	2.3 min/km	2.4 min/km	2.7 min/km	-0.3	 ACHIEVED
Christchurch	1.8 min/km	1.8 min/km	1.9 min/km	-0.1	 ACHIEVED
Productivity of the local road network in major metropolitan areas	Not available	Not available ³	Increasing	-	NOT AVAILABLE
% of approved organisations signed up to the 5OMAX network ⁴	95%	95%	≥ 90%	+5%	 ACHIEVED

¹ This measure represents the average travel time per kilometre travelled. For example a change of 0.1 between years would represent an increase of 6 seconds per kilometre travelled.




² The targets for Wellington and Christchurch were interchanged in the NZ Transport Agency's *Statement of performance expectations 2017/18*. We are reporting against the correct targets here.

³ The coverage of local roads in the productivity model is too small to provide a representative sample.

⁴ This is a proxy measure. It is not possible to report on the Government Policy Statement on Land Transport measure of % of local roads that are made available to high productivity motor vehicles, because roads are made available on the basis of individual journey permits. The sign-up to 5OMAX signals intent to make the network available to 5OMAX complying vehicles.

Regional improvements

Two out of three investment measures achieved the desired trend or target.

INVESTMENT PERFORMANCE	ACTUAL 2016/17	ACTUAL 2017/18	DESIRED TREND/ TARGET 2017/18	VARIANCE	RESULT
Kilometres of improved regional roading	16km	9.38km	Increasing	-	 ACHIEVED
Six projects were completed, of which three were intersections and one was a roundabout. While these four projects have contributed to improved safety on our regional roads, they have not contributed any kilometres of improved regional roading.					
Kilometres available to high productivity motor vehicles on key regional routes	5,392km	7,221km ¹	Increasing	-	 ACHIEVED
% of activities delivered to agreed standards and timeframes	-	87%	≥ 90%	-3%	 NOT ACHIEVED

All three of the large (over \$5 million) projects planned for completion in 2017/18 were completed (State Highway 14 Hospital Road intersection improvement (Northland), State Highway 3: Ohaupo to Te Awamutu (Waikato), and high productivity motor vehicle tranche 2: State Highway 24 Matamata to State Highway 29 intersection (Waikato)).

However, of the 11 small (under \$5 million) projects planned for completion in 2017/18, only three were completed (State Highway 11: Airfield to Lily Pond (Northland), high productivity motor vehicle tranche 2: State Highway 24 Matamata to State Highway 29 intersection (Waikato), and State Highway 1 State Highway 62 Spring Creek intersection roundabout (Marlborough)).



Several projects will be completed during the first few months of 2018/19, including high productivity motor vehicle tranche 2: State Highway 26/SH2 Hamilton to Paeroa (Waikato) and State Highway 6 High St/Marlborough St intersection (West Coast).

Some projects were delayed following input from stakeholders and Safe System experts, which identified that scope changes (for example State Highway 1B: Taupiri to Gordonton) or more investigation of the public transport components (for example Grant Rd to Kawarau Falls Bridge Improvements) was needed.

¹ The data source changed so this result is not comparable to the previous year.

State highway maintenance

One out of three investment measures for state highway maintenance achieved target and one was not available this year.

INVESTMENT PERFORMANCE	ACTUAL 2016/17	ACTUAL 2017/18	DESIRED TREND/ TARGET 2017/18	VARIANCE	RESULT
Surface condition of the sealed network	Not available	Not available	Not available	-	-
Smooth ride: % of travel on smooth roads	99%	99%	≥ 98%	+1%	 ACHIEVED
State highway maintenance cost per lane kilometre expenditure ¹	\$19,284	\$24,705 ²	≤ \$21,400	+\$3,305	 NOT ACHIEVED

This measure is calculated by dividing the amount spent on the maintenance of state highways by the total number of kilometres in the network. Because we worked on more kilometres of maintenance this year, the total cost and the cost per lane kilometre are higher. Increased renewals accounts for \$2,800 of the increased cost per kilometre. A further \$1,800 per kilometre arose from work on the alternative and inland route required as a result of the Kaikōura earthquake. The first full year of maintenance costs for the Waterview Tunnel accounts for \$400 per kilometre.





Costs per lane kilometre are above target largely due to higher than expected maintenance and operations required in response to the Kaikōura earthquake.

¹ This measure aspires to capture cost per lane kilometre expenditure by road classification. However, it has not been possible to assess cost by road classification. The cost of maintenance is recorded through 23 work categories. While some of the work categories can readily be assigned to sections of road, many types of work do not readily link to road class. For example, costs such as lighting or measuring road roughness are managed at a network level. While there is a long-term intention to assess cost by road class, several changes to management processes and accounting systems are needed before the long-term intention can be met. We will continue reporting road maintenance costs on an aggregated kilometre cost basis until data becomes available on a functional classification basis.

² This figure has been adjusted for inflation based on the network outcomes index.

Local road maintenance

Three out of our four investment measures achieved target.

INVESTMENT PERFORMANCE	ACTUAL 2016/17	ACTUAL 2017/18	DESIRED TREND/ TARGET 2017/18	VARIANCE	RESULT
Pavement integrity of the sealed network	94	94	≥ 94	-	 ACHIEVED
Surface condition of the sealed network	98	98	≥ 97	1	 ACHIEVED
Smooth ride: % of travel on smooth roads	88%	87%	≥ 86%	+1%	 ACHIEVED
Local road maintenance cost per lane kilometre expenditure ¹	\$2,910	\$3,095 ²	≤ \$3,000	+\$95	 NOT ACHIEVED

This measure is calculated by dividing the amount spent on the maintenance of local roads by the total number of kilometres in the network. Many local authorities completed more maintenance work this year, because they delivered less than planned last year and because of wet weather, increasing the total cost and the cost per lane kilometre.

¹ This measure aspires to capture cost per lane kilometre expenditure by road classification. However, it has not been possible to assess cost by road classification. The cost of maintenance is recorded through 23 work categories. While some of the work categories can readily be assigned to sections of road, many types of work do not readily link to road class. For example, costs such as lighting or measuring road roughness are managed at a network level. While there is a long-term intention to assess cost by road class, several changes to management processes and accounting systems are needed before the long-term intention can be met. We will continue reporting road maintenance costs on an aggregated kilometre cost basis until data becomes available on a functional classification basis.

² This figure covers maintenance, operations and renewals (excluding emergency works) by New Zealand total lane kilometres and has been adjusted for inflation based on the network outcomes index.

ROAD SAFETY

The Government Policy Statement on Land Transport identifies the following long-term result for this strategic priority: reduction of deaths and serious injuries.

Expenditure on road safety outcomes during 2015-18

Approximately 23 percent of National Land Transport Programme expenditure at the end of 2015-18 (also 23 percent for 2017/18) contributed to road safety outcomes, in line with planned investment. This proportion is similar to that in the 2012-15 National Land Transport Programme, but the larger amount of funding in the 2015-18 programme means investments to improve road safety outcomes during 2015-18 increased by \$550 million.

Performance results on road safety at the end of 2015-18

In 2017/18, we saw the negative trend of transport-related deaths and serious injuries continue with an 8 percent increase. Our investments in road safety remain critical to addressing this unacceptable level of harm.

Infrastructure improvements delivered by the Transport Agency and local authorities under the Safer Journeys Action Plan 2016-2020 continue to focus on creating safer roads and roadsides. These activities vary from major roading projects such as the Waikato Expressway to urban intersection improvements and low-cost improvements such as rumble strips.

Ongoing maintenance of roads and their safety features is a high priority in state highway and local road maintenance programmes. Investment in cycling also aims to increase the safety of users through improved cycle networks, getting more people to ride bicycles more often and encouraging all road users to share the road.

The Road Policing Programme has been the cornerstone for maintaining and improving road safety. Considerable efforts were made during the development of the 2015-18 National Land Transport Programme to increase the Road Policing Programme's focus on reducing deaths and serious injuries from road crashes in ways that deliver value for money.

The Transport Agency, New Zealand Police and the Ministry of Transport are working together to significantly reduce deaths and serious injuries. The parties agreed to move to an outcomes-based approach with collective responsibility and accountability for delivering the Road Safety Partnership Programme (previously the Road Policing Programme, for more details, see page 197).

By the end of the three years 2015-18, \$99 million was invested to promote road safety through advertising, education and information targeted at road users and contributing to the high and medium priority areas of the Safer Journeys strategy. Of the Transport Agency's road safety advertising campaigns, 87 percent met or exceeded their agreed success criteria.

Expenditure on road safety by activity class

Of investment identified as having safety as the primary driver, most was invested in road policing and local road maintenance.

ACTIVITY CLASS	2017/18 ROAD SAFETY EXPENDITURE	2015-18 ROAD SAFETY EXPENDITURE
State highway improvements	19.3%	21.4%
State highway maintenance	13.2%	12.2%
Local road improvements	8.5%	6.2%
Local road maintenance	20.2%	21.9%
Public transport	3.5%	3.4%
Regional improvements	5.2%	4.1%
Road safety promotion	3.4%	3.7%
Road policing	24.8%	26.0%
Walking and cycling improvements	1.9%	1.1%

Highlights of investment in road safety

The highlights of investment in road safety during 2015-18, include:

- continuing to deliver safety improvements through the Safe Roads and Roadsides Programme, which aims to significantly reduce deaths and serious injuries on rural state highways around the country
- continuing to promote road safety through advertising campaigns highlighting safety priorities such as driving within speed limits and driving sober, free from drug impairment and phone-free
- delivering, with the Accident Compensation Corporation, the BikeReady national cycle education system, which includes resources, tools and cycle skills training accreditation to support young people to bike skilfully and safely and older people to return to cycling safely
- starting construction on the \$8 million one-way system of separated cycle lanes in Dunedin, which will provide safe routes for cyclists to the city centre
- completing the State Highway 3 Vickers to City project in New Plymouth, which improves safety, route security, and journey-time reliability to and from the central business district
- having the Transport Agency's partnership with Clemenger BBDO recognised by the Brand Axis award in March 2018, recognising a successful creative collaboration creating excellent creative brand work for five or more years and acknowledging mutual trust, respect for audience, and firm ambition to make a difference through road safety promotion
- completing the Brynderwyn Hills Safe System, which realigned a section of State Highway 1, widened the road, removed tight corners, and installed median and side wire rope barriers
- completing a roundabout at the intersection of State Highway 3 and State Highway 21 (Airport Road) southwest of Hamilton to address an historical high-risk safety area and enable access to industrial land next to Hamilton International Airport
- delivering over 800 low-cost, low-risk state highway improvement projects, a 30 percent increase from last year, of which more than 75 percent focused on improving safety
- delivering, through the Boost Safety Programme high-benefit, low-cost safety improvements (such as rumble strips, improved signage and road marking, and safety barriers) on selected roads that carry lower volumes of traffic but collectively account for significant number of deaths and serious injuries in Northland, Taranaki, Manawatū-Whanganui, Otago and Southland.

CASE STUDY

SUCCESSFUL SAFETY IMPROVEMENTS IN AUCKLAND

In September 2017, the Transport Agency conducted a post-implementation review to assess how well a \$30.9 million upgrade of the Glenfield Road corridor in Auckland achieved its expected benefits.



The upgrade aimed to improve traffic flows and efficiency, promote alternative transport modes, improve the road environment, and improve safety. Overall, the project has been highly successful with improving safety. Crashes have decreased from an average 23 per year between July 1999 and December 2011 to 9 per year after project completion.

DETAILED INVESTMENT PERFORMANCE RESULTS

The following activity classes have a primary link to road safety outcomes.

Road safety promotion

Both the Transport Agency's service delivery targets for road safety promotion were achieved.

SERVICE DELIVERY	ACTUAL 2016/17	ACTUAL 2017/18	TARGET 2017/18	VARIANCE	RESULT
% of educational activities delivered to agreed standards and timeframes	100%	100%	100%	-	 ACHIEVED
% of road safety advertising campaigns that meet or exceed their agreed success criteria	83%	87%	≥ 75%	+12%	 ACHIEVED

ROAD POLICING

The Road Policing Programme is a special type of National Land Transport Fund investment in the land transport system that is delivered by New Zealand Police and appropriated through Vote Police.

The Transport Agency prepares the Road Policing Programme with New Zealand Police and recommends it to the Minister of Transport for approval in consultation with the Minister of Police. The Transport Agency also monitors and reports to the Minister of Transport on the delivery of the programme against the desired outcomes listed in the Road Policing Programme.

The Road Policing Programme contributes to a reduction in deaths and serious injuries from road crashes and the resulting trauma, by deterring dangerous behaviour by road users through prevention and enforcement activities. The programme also contributes to network management and efficiency through these activities and by increasing compliance with road user charges, commercial vehicle operator rules, and vehicle dimension and mass rules, protecting the roading asset, and supporting the resilience and security of the transport network.

What Road Policing Programme investment covers

Road Policing Programme investment covers the delivery of the activities listed below. The activities align with the Safer Journeys strategy and focus on the following high-priority areas:

- speed, including the use of automated cameras, hand-held cameras, enforcement demerits and driving to the conditions
- distractions and restraints (in-car behaviour), including mobile phones, child car seats, motorcycle helmets and cycle helmets
- impaired driving, which addresses drug- and alcohol-affected driving as well as impairment from fatigue
- vulnerable road users, such as pedestrians, cyclists, elderly people, disabled people, inexperienced drivers, visiting drivers, road workers, skateboarders and motorcyclists
- high-risk behaviour, which addresses dangerous and reckless driving, fleeing drivers, and intersection and centre line offences, as well as high-risk behaviours in commercial vehicles such as dangerous goods, insecure loads and overloading
- network maintenance and efficiency, including crash attendance and event management, driver licence stop orders, road user charges, and vehicle mass and dimension rules.

Achievements

In 2017, the Road Policing Programme was varied by agreement to include an additional \$10 million to support the restoration of the desired service levels, through dedicated road policing constabulary staff. The variation led to a step change in the relationship and the development of the Road Safety Programme.

The partnership is reviewing the operating, investment and delivery models between New Zealand Police and the Transport Agency. This review is highlighting the strengths of each organisation and the challenges they both need to meet to be most effective together.

Road policing special projects delivery

Over the 2015–18 National Land Transport Programme, \$26 million was allocated for the delivery of projects to reduce death and serious injuries on the roads and to operate an efficient network. All projects were successfully implemented, with highlights described below.

Static Camera Expansion Programme

By the end of June 2018, 48 safe speed cameras and three red light cameras had been installed and were operating across New Zealand. This work was completed in three tranches, and was done in tandem with a project to implement a modem-based download process that would allow the Police Infringement Bureau to download camera images remotely, thereby avoiding the need to disrupt traffic movement by manually downloading data at the camera site. Early results of the programme indicate that the average speed around cameras has decreased substantially since installation.

Radar and Laser Device Refresh project

New Zealand Police has refreshed its fleet of radar and lasers that officers use to detect speeding offences, reducing crashes caused by speed. The old fleet was reaching the end of its life and was causing safety issues, such as the frequency used by the devices interfering with police radios. The refreshed fleet should result in more effective speed detection activities across all police districts.

OnDuty mobile phone application
















The OnDuty mobile application is a world-leading iOS-based application that allows officers to issue infringement offence notices and written traffic warnings, and to complete traffic crash reports and commercial vehicle inspection reports from their mobile device. The application provides officers with easy access to intelligence at the roadside, keeping them safe and allowing them to make informed decisions about the right intervention to take to influence driver behaviour.

Alcohol breath testing

The old fleet of hand-held alcohol breath testing devices (Dräger 6510s) has been discontinued and will no longer be supported by the provider. A new hand-held alcohol breath testing device, the Dräger 7510s, has been introduced to add roadside evidential capability to the testing functionality. This improved functionality means officers no longer have to return to the station to complete the evidential portion of the testing process, making them available for more road safety activities and reducing the impact on the public.

How the investment performed

Overall, the Road Policing Programme continues to provide a positive return on National Land Transport Fund investment, with 80 percent of the Road Policing Programme results that New Zealand Police contributes to matching the desired trend.

AREA OF CONCERN	ROAD POLICING PROGRAMME RESULTS WHERE NZ POLICE MAKES A SIGNIFICANT CONTRIBUTION	DESIRED TREND	ASSESSMENT AGAINST DESIRED TREND
Vehicle dimension and mass (VDAM)	Number of VDAM offences detected	Decrease	 INCREASE
Commercial vehicle operators	% of overweight heavy vehicles	Decrease	 INCREASE
	Percentage of local authorities, Transport Agency and ACC injury prevention consultants satisfied that NZ Police heavy vehicle activities addressed risk	Increase	 DECREASE
High risk drivers	Number of disqualified driving offences	Decrease	 DECREASE
	Number of disqualified or unlicensed drivers involved in fatal/serious crashes	Decrease	 DECREASE
Traffic management	Time to reinstate traffic flow after road or carriageway closure or crash	Decrease	 DECREASE
	% of local authorities, Transport Agency and ACC injury prevention consultants satisfied that NZ Police delivery of traffic management activities has addressed risk	Increase	 DECREASE
Speed	% of vehicles complying with open road 100km/h speed limits	Increase	 INCREASE
	% of vehicles complying with urban road 50km/h speed limits	Increase	 INCREASE
	% of heavy vehicles complying with open road 90km/h speed limits	Increase	 INCREASE
	% of heavy vehicles complying with urban road 50km/h speed limits	Increase	 INCREASE
	% of vehicles exceeding speed limits by 1-10km/h	Decrease	 INCREASE
	% of respondents who agree that enforcing the speed limit lowers the road toll	Increase	 DECREASE
Young drivers	% of youth (15-24 years) with the expectation that the risk of being caught drink driving is small	Decrease	 DECREASE
	% of youth (15-24 years) with the expectation that the risk of being caught speeding is small	Decrease	 DECREASE

Alcohol	Number of fatal and serious injuries in alcohol/drug crashes per 100,000 population	Decrease	 DECREASE
	% of respondents who agree there is a good chance of being stopped at an alcohol checkpoint if driving late at night	Increase	 INCREASE
Walking and cycling	% of vehicles complying with urban road (50km/h) speed limits	Increase	 INCREASE
	Number per 100,000 population of pedestrians and cyclists killed or seriously injured enough to be hospitalised for longer than one day	Decrease	 DECREASE
Motorcycles	% of motorcycles in crashes with a non-current warrant of fitness	Decrease	 DECREASE
Light vehicles	% of light vehicles in crashes with a non-current warrant of fitness	Decrease	 DECREASE
Restraints	% of adults wearing safety belts in front seats	Increase	 INCREASE
	% of adults wearing safety belts in rear seats	Increase	 INCREASE
	% of children aged 5-9 using restraints (including booster seats, child seats and child harnesses)	Increase	 INCREASE
	% of children aged 0-5 using child restraints	Increase	 INCREASE
Older road users	Fatal and serious injuries to older road users per 100,000 population	Decrease	 INCREASE
Crash reporting	% of fatal traffic crash reports received within 10 weeks	Increase	 INCREASE
	% of serious injury traffic crash reports received within 10 weeks	Increase	 INCREASE
	% of minor injury traffic crash reports received within 10 weeks	Increase	 INCREASE
	% of non-injury traffic crash reports received within 10 weeks	Increase	 INCREASE

Note: As at 30 June 2018, 16 of the 30 intermediate outcomes above are no longer being measured by the relevant organisation. Of these 16 measures, 13 (81%) were meeting desired trends at their last date of capture. Of the remaining 14 intermediate outcomes, 11 (79%) are meeting desired trends. The intermediate outcomes and wider performance framework are under review and will be refreshed, with the Road Safety Partnership team, as part of the new Road Safety Strategy.

What New Zealand Police delivers

Full details of New Zealand Police's service performance are in *New Zealand Police Annual Report 2017/18* at www.police.govt.nz.

TRAVEL CHOICE, HEALTH, ENVIRONMENT AND RESILIENCE

The Government Policy Statement on Land Transport identifies the following long-term results for these objectives:

1. Provide appropriate travel choices, particularly for people with limited access to a private vehicle
2. Increased safe cycling through improvement of cycle networks
3. Improved network resilience at the most critical points
4. Mitigation of adverse environmental effects

Expenditure on travel choice, health, environment and resilience during 2015-18

Approximately 27 percent of National Land Transport Programme expenditure at the end of 2015-18 (29 percent for 2017/18) contributed to travel choice, health, environment and resilience outcomes. This was more than the planned 22 percent for the three years of the 2015-18 National Land Transport Programme.

Performance results on travel choice, health, environment and resilience at the end of 2015-18

Projects delivered under the walking and cycling improvements activity class support healthy travel choices in urban areas by increasing and improving the number and safety of walking and cycling facilities. Walking and cycling expenditure continued to grow and was 31 percent above the published National Land Transport Programme at the end of 2017/18, largely due to the growing impact of the Urban Cycleways Programme, which accelerated the delivery of new cycling infrastructure with the addition of Crown funding. New and improved walking and cycling infrastructure resulted in 79.3km new cycle lanes in 2017/18 with 61.8km delivered as part of the Urban Cycleways Programme.

Investment in public transport aims to provide people with more ways to travel, easing urban congestion and making better use of the existing transport system capacity.

Five million more people (7 percent) used urban transport services (bus, train and ferry) during 2017/18 compared with the previous year. The increase was largely driven by growth in Auckland. However, the greatest change was in the Otago region following road improvements in Dunedin and the Wakatipu Basin.

Bus and ferry services and associated costs increased at a faster rate than patronage and passenger kilometres travelled, causing measures of productivity (costs per passenger km and costs per passenger boarding) to increase.

The SuperGold cardholders' scheme provides more transport choices for older people and improves the use of public transport during off-peak hours. This year, we supported 13.7 million SuperGold trips, an increase of 6 percent (773,000 trips) from 2016/17.

The Transport Agency's focus area *Keep people safe* aims to prevent or reduce environmental harms across all land transport modes. The energy efficiency of the nation's vehicle fleet improved from 6.88km travelled per litre of fuel to 7.05km in 2017/18.

Severe weather events in the past year affected measures of resilience, which focus on the duration of road closures. Sixty-four percent of the road closures on the state highway network that were unresolved after 12 hours were due to avalanche risk, flooding, slips, snow, ice and strong winds.

Expenditure on travel choice, health, environment and resilience by activity class

ACTIVITY CLASS	2017/18 TRAVEL CHOICE, HEALTH, ENVIRONMENT AND RESILIENCE EXPENDITURE	2015-18 TRAVEL CHOICE, HEALTH, ENVIRONMENT AND RESILIENCE EXPENDITURE
State highway improvements	10.4%	11.1%
State highway maintenance	18.9%	17.2%
Local road improvements	6.4%	4.9%
Local road maintenance	32.2%	32.8%
Public transport	25.7%	25.2%
Regional improvements	2.8%	1.1%
Road safety promotion	0.2%	0.2%
Road policing	1.4%	4.0%
Walking and cycling improvements	2.1%	3.5%

Highlights of investment in travel choice, health, environment and resilience:

The highlights of investment in travel choice, health, environment and resilience during 2015-18 include:

- increasing investment to improve alternative routes following the closure of State Highway 1 after the November 2016 Kaikōura earthquake with an investment of \$23.7 million to make sections of the Picton to Christchurch alternate route in the Marlborough and Tasman regions safer and more resilient for road users
- responding to the Kaikōura earthquake through North Canterbury Transport Infrastructure Recovery with more than \$100 million directed to repairing and reinstating roads damaged by the earthquake
- co-investing \$82 million with Auckland Council to significantly improve roads, public transport services, public transport stations, transport interchanges, walking routes and cycleways in the region
- implementing the Public Transport Operating Model in Auckland and Wellington in 2017 to enable regional councils and operators to partner and deliver affordable urban public transport services such as new services and timetables in Auckland that operate in all areas except Waiheke Island (from September 2018)
- using a targeted enhanced funding assistance rate¹ to accelerate the LED street-lighting programme, investing \$106 million across 53 programmes to upgrade to energy-efficient LED lights across the country
- investing \$6 million to build 1km of noise barriers to reduce the impact on local residents of road traffic noise from the Southern Motorway in Ellerslie in Auckland
- working in partnership with councils, the Department of Conservation, and iwi to minimise negative impacts on plants and wildlife from roading construction and maintenance works in pristine environments such as the Kaikōura coastline, Waipoua Forest in Northland and the Desert Road on the Central Plateau of the North Island
- working with industry and government stakeholders to deliver the vision for public charging infrastructure coverage on state highways (close to 80 percent of state highways have rapid DC chargers at 75km intervals) and maintaining close ties with the energy and automotive industries through a regular forum, resulting in a nationwide network of public charging infrastructure.

¹ Targeted enhanced rates are time-limited, specified funding assistance rates (FARs) that are higher than normal FARs and applied in exceptional circumstances and time-limited periods to either:

- facilitate an activity that is particularly important from a national land transport perspective, where it is highly likely that it would not proceed within an appropriate timeframe if additional funding assistance were not provided
- give a kick start to encourage and enable an approved organisation to make a step change.

Mitigating adverse environmental effects from transport

The Transport Agency has a responsibility to exhibit environmental responsibility. Improvements to New Zealand's land transport networks can have positive, as well as negative, effects on the environment. The Transport Agency minimises environmental harm in a variety of ways, including by making robust, evidence-based decisions that take account of environmental costs and benefits. It continually builds on its evidence base to understand the impact of the transport network on the environment and mitigate the negative effects.

The Transport Agency works alongside suppliers, customers and other stakeholders to provide strategic advice, research and support for transport-related natural environment, social, culture and heritage, public health and urban design issues.

While all land transport activities are planned and delivered in a way that considers the surrounding environment and to mitigate adverse effects, improved environmental outcomes can also result from:

- investment in public transport
- freight productivity
- easing congestion and improving journey-time predictability
- making cycling a safer and more attractive transport choice
- transport projects that make cities more accessible, safe and easy to live in.

The Transport Agency mitigates the effects of climate change by investing in urban cycleways, the electrification of rail lines and efforts to facilitate the uptake of electric vehicles. The Transport Agency also requires high-value state highway projects to complete a carbon footprint analysis in their design phase and provides an online tool so planners can estimate the carbon footprint of their project and identify methods to reduce emissions.

The Transport Agency commissioned research projects and tools to, among other things, better understand the community impact of noise from road and rail, assess 'real-world' exhaust emissions from vehicles on roads compared with laboratory tests, to capture the full range of costs and benefits arising from transport sector investments mitigating negative environmental impacts, and improve understanding of visitor expectations on key journeys to grow landmark tourism destinations for regional economic benefit.

The Transport Agency is working with local government to better understand the impact of dust from unsealed roads on communities and the environment and to explore how best to reduce adverse effects through the use of suppressants, seal extensions and improved asset management practices.

Each year, the Transport Agency holds more than 3,000 environmental permits related to operating and improving state highways, including for discharges to air, water and land. More than 50 live environmental management plans are in place at any given time.

Improving resilience

Resilience is the transport system's ability to enable communities to withstand and absorb impacts of unplanned disruptive events, perform effectively during a disruption, and respond and recover functionality quickly. It requires minimising and managing the risk and consequences of small-scale and large-scale, frequent and infrequent, sudden and slow-onset disruptive events whether caused by natural or human-made hazards.

Resilience is about being prepared and being able to preserve and quickly restore access to the transport network for Transport Agency customers, including lifeline utilities, in the face of unplanned events.

The Transport Agency re-opened State Highway 1 from Picton to Christchurch as part of its Kaikōura earthquake response work and in time for the Christmas holiday traffic in December 2017. This follows the reinstatement of the rail line in September 2017. Restoring these coastal highway and rail links was a huge job that re-established vital connections for Kaikōura and other affected communities and supported local and national businesses, freight and tourism. The highway reinstatement work continued into 2018, with safety a top priority. The Transport Agency also responded during the year to damage caused by severe weather events. For example, following significant storm damage to State Highway 25 Thames Coast Road in January 2018, it worked closely with the local community and other stakeholders to quickly rebuild and strengthen the coast road.

² Immediate response, through emergency works that restore basic usability and access, is one of the key components to resilience in the Government Policy Statement on Land Transport 2015/16 - 2024/25.

In the Tararua district, the Transport Agency continued to improve Saddle Road and work continues on the Manawatū Gorge Alternative Route to provide a safe and secure alternative route for network resilience for State Highway 3 (\$15.5 million over five years).

The Transport Agency Resilience Framework was developed in 2018. The resilience framework responds to the increased focus on improving resilience for the transport system in the latest Government Policy Statement on Land Transport. It sets out a new approach to resilience that will take the Transport Agency from a risk-based approach that targeted specific assets to a system-based approach that is:

- **comprehensive** (across a variety of hazards, risks and responses), but targeted to address priority risks, challenges and opportunities
- **community focused** and based on a robust understanding of different communities' tolerances and acceptance of risk and of how their access to economic and social needs can be sustained
- **collaborative** so the Transport Agency is playing an effective role as part of a comprehensive sectoral response to resilience
- **proactive** so the Transport Agency is more active and present across all aspects of emergency management, engaging in a wider variety of approaches to resilience and risks, rather than being solely reactive after an event.

Implementation of the framework, through collaboration with key partners, will provide a shared understanding of communities' acceptance of risk and tolerance of system disruptions. Measures will be put in place to enable communities to become less exposed to and better prepared to deal with, the economic, physical, social, cultural and environmental impacts of risks and shocks from natural hazards and other disruptive events.

We can gain some insight into resilience performance by looking at National Land Transport Fund expenditure on emergency works.² Emergency works expenditure for the three years of the 2015–18 National Land Transport Programme position was 17 percent above the published amount. This reflects the response to the 2015 Whanganui–Taranaki floods, the 2016 Kaikōura earthquake and heavy rain events in 2016/17 and 2017/18 across local roads and state highways.

CASE STUDY

INCREASE IN PUBLIC TRANSPORT AFTER PANMURE STATION UPGRADE

Phase 1 (stage 1) of the Auckland Manukau Eastern Transport Initiative was part of the wider Eastern Busway project. It involved a major upgrade of Panmure Station, a new road link from Morrin Road to Mt Wellington Highway, the reconstruction of the Ellerslie Panmure Highway, a new bridge next to Ellerslie Panmure Highway and a bridge for pedestrians.

These improvements have led to higher than expected increases in public transport journeys starting and ending at Panmure Station. Ticket sales and HOP card tag-on data (for trains) quantify a 270 percent increase in public transport patronage from December 2013 to March 2016.









The project resulted in an initial journey-time saving of almost 3 minutes, especially for those travelling between Mt Wellington and Glen Innes (via the new Te Horeta Road). This saving is now starting to diminish.

DETAILED INVESTMENT PERFORMANCE RESULTS

The following activity classes have a primary link to travel choice, health, environment and resilience outcomes.

Public transport


Three out of eight investment measures achieved target.

INVESTMENT PERFORMANCE	ACTUAL 2016/17	ACTUAL 2017/18	TARGET 2017/18	VARIANCE	RESULT	
Number of passengers using urban public transport services (bus, train and ferry)	153m	158m	≥ 148m	+10m	 ACHIEVED	
The number of passengers using urban public transport (patronage) increased by approximately 3 percent over the year driven largely by growth in Auckland (approximately 3.5 million more bus boardings). Outside of Auckland, patronage growth was mixed, with some regions declining while others grew. Otago Regional Council recorded the greatest relative growth of 22 percent, driven by improvements to the network in Dunedin and the Wakatipu Basin.						
Fare revenue as a % of total expenditure	47.4%	45.2%	≥ 48%	-2.8%	 NOT ACHIEVED	
Fare revenue as a percentage of total expenditure (the farebox recovery ratio) was lower than expected because total fare revenue remained largely unchanged from last year while total operating costs increased. Fare revenue increased by 3 percent across the Greater Wellington public transport network and 6 percent across small and medium and sized public transport networks, but this was offset by a 1 percent decrease in Auckland and an 11 percent decrease in Christchurch.						
Productivity (costs per passenger km) where available by bus, train and ferry	Bus	0.17 \$/km	0.19 \$/km	≤ \$0.15 \$/km	+0.04 \$/km	 NOT ACHIEVED
	Train	0.16 \$/km	0.16 \$/km	≤ \$0.13 \$/km	+0.03 \$/km	 NOT ACHIEVED
	Ferry	0.06 \$/km	0.06 \$/km	≤ \$0.06 \$/km	-	 ACHIEVED
Costs per passenger kilometre increased for bus and ferry services because services and associated costs increased at a faster rate than patronage and passenger kilometres travelled. The roll-out of the new bus network across eastern parts of Auckland had a significant impact. Bus in-service kilometres increased by 10 percent in Auckland compared with patronage growth of 6 percent and passenger kilometre growth of 2 percent. The remainder of the new bus network will be rolled out across the northern and central parts of the Auckland network in 2018/19.						
Productivity (costs per passenger boarding) ¹	Bus	\$1.25	\$1.38	Decreasing cost	+\$0.13	 NOT ACHIEVED
	Train	\$2.86	\$2.66	Decreasing cost	+\$0.20	 ACHIEVED
	Ferry	\$0.76	\$0.86	Decreasing cost	+\$0.10	 NOT ACHIEVED
Costs per passenger boarding for bus and ferry increased because services and associated costs increased at a faster rate than patronage and fare revenue. Conversely, costs for rail decreased as operating costs were down 1 percent and rail patronage was up 3 percent compared with last year.						
From a National Land Transport Fund perspective, costs decreased further through a planned reduction in the fund's contribution toward rail operating costs from 55 percent in 2016/17 to 54 percent in 2017/18.						

¹ This is a proxy measure. The information available from service providers and regional councils to report on the Government Policy Statement on Land Transport measure, *productivity (costs per passenger kilometre)* where available by peak and off-peak, is not available in sufficient quality to enable accurate and reliable reporting.

Walking and cycling

One investment measure achieved the desired trend, the other was not available.

INVESTMENT PERFORMANCE	ACTUAL 2016/17	ACTUAL 2017/18	DESIRED TREND 2017/18	VARIANCE	RESULT
Network kilometres of cycle lanes	New km	New km			
	91.4km (including 63.6km Urban Cycleways Programme)	79.3km (including 61.8 km Urban Cycleways Programme)	Increasing	-	 ACHIEVED
The target to increase the kilometres of cycle lanes was achieved with 61.8km of new cycling infrastructure delivered as part of the Urban Cycleways Programme. In addition, was another 17.5km of new cycling infrastructure delivered outside the Urban Cycleways Programme.					
% increase in cycling trip legs per person across Auckland, Wellington and Christchurch	Not available	Not available ¹	Increasing		NOT APPLICABLE
While data on the percentage of cycling trips legs per person is not yet available, physical cordon counts, which provide a snapshot of the number of cycling trips in central business districts, increased from 5,413 last year to 5,605 this year. Auckland saw a 3 percent increase (1,944 trips), Wellington a 5 percent increase (2,264 trips) and Christchurch a 1 percent increase (1,397).					

¹ The measure capturing the percentage increase in cycling trip legs per person across Auckland, Wellington and Christchurch is sourced from the Household Travel Survey. Due to methodology changes, results from this survey will not be available until 2019. During 2015/16, physical cordon counts were undertaken to establish baseline trip information.

³ Value-for-money maturity describes how well the systems and processes in each output class are set up to allow a value-for-money assessment.

VALUE FOR MONEY

The Government Policy Statement on Land Transport identifies the following long-term results for this strategic priority:

- Delivery of the right infrastructure and services to the right level
- Improved returns from road maintenance and public transport
- Effective on-road enforcement of the road user charges regime
- Understand the benefits and costs associated with innovation and technology

The Transport Agency is working to better understand the value for money gained from National Land Transport Fund investments. However, insight into value for money can be gained by looking at the expected benefit-cost ratios of National Land Transport Fund investment for new approvals in system improvements. The average benefit-cost ratio across National Land Transport Programme investment by the number of new approvals across the programme remained around four during the three years of the 2015-18 National Land Transport Programme. For 2017/18 investments, investments primarily relating to state highway improvements had the highest benefit-cost ratio.

ACTIVITY CLASS	BENEFIT-COST RATIO 2015/16	BENEFIT-COST RATIO 2016/17	BENEFIT-COST RATIO 2017/18
State highway improvements	3.4	3.7	5.1
Local road improvements	4.9	5.3	3.8
Public transport	7.4	5.8	3.3
Walking and cycling	4.3	4.0	2.3
Regional improvements	2.4	2.9	1.9
Estimated return on investment across all new investment	4.0	4.0	4.2

State highway improvements accounted for the largest proportion (66 percent) of new investment approvals in 2017/18.

ACTIVITY CLASS	TOTAL COST OF NEW APPROVALS 2017/18 (\$)	NUMBER OF NEW APPROVALS 2017/18
Local road improvements	308,019,035	76
Public transport	163,913,081	13
Regional improvements	2,015,064	4
State highway improvements	1,197,712,333	96
Walking and cycling improvements	121,779,972	18
Grand total	1,793,439,485	207

The Transport Agency's approach to value for money

Value for money is about delivering the best outcomes for the amount spent, optimising costs whilst simultaneously improving the efficiency and effectiveness of spending.

The Transport Agency is developing a value-for-money framework. The first step to understand the current value-for-money maturity³ through workshops across the output classes and to provide best practice guidance for assessing value for money. This year, the Transport Agency assessed its maturity through a targeted review of its output classes across the areas of economy, efficiency, effectiveness and equity.

The second step will be to define the framework for the Transport Agency value-for-money measurement, which will involve establishing the value chain of its output classes for customers, identifying the drivers that influence economy, efficiency, effectiveness and equity, and agree metrics to measure the identified drivers.

The Transport Agency plans to make more informed, evidence-based choices as part of its approach to continuous improvement and to maximise the impact of each dollar it spends to improve the lives of New Zealanders.

Physical infrastructure meets the digital world

The future of transport is rapidly changing, and the Transport Agency needs to respond to shifting customer needs and the ever-evolving digital world. The intersection of physical infrastructure and the digital world is opening up exciting opportunities in the transport industry. The Transport Agency's culture of innovation aims to exploit these opportunities and improve outcomes for New Zealanders.

The Transport Agency is aligning its innovation strategies to take advantage of emerging and game-changing technologies to create better transport system outcomes for New Zealand, including great journeys for its customers.

For example, in conjunction with Auckland Transport, the Transport Agency agreed to establish the Auckland Technology Transformation Group. This group aims to improve customer experiences by enabling Auckland's transport system to use advances in digital technology and prepare the city for advances in vehicle technologies. A road map will be developed to guide the delivery of digital transport systems in the regions.

Leading edge research to support planning and investment

Strategic and operational research supports sound system planning and investment and is a key component of the Government Policy Statement's investment management activity class. The Transport Agency conducts leading-edge research that contributes to the breadth and depth of transport sector business and to achieving sector outcomes.

For example, a study sought to understand the value of individual services to the public transport network. This study proposed a framework for appraising the incremental value added to a public transport network by services that, in isolation, might be comparatively inefficient. This report recommends how the study's findings could be built on and implemented, including by developing an assessment tool for practitioners. The aim will be to develop a tool that closely aligns with, and complements existing economic evaluation tools provided by the Transport Agency, to inform assessments of public transport service reviews in the future.

Twenty-five research reports were published during 2017/18, addressing topics including economic analysis, environmental impacts, asset management, technology developments and safety.

CASE STUDY

SUPPORTING ROAD CONTROLLING AUTHORITIES TO IMPROVE EFFICIENCY IN ROAD MAINTENANCE

The Road Efficiency Group⁴ supported road controlling authorities to embed the One Network Road Classification and business case approach into their activity management plans. A co-design, co-delivery model was followed to build a robust evidence base to support business case submissions for the 2018–21 National Land Transport Programme. Major achievements to improve the efficiency of maintenance activities and create consistency across all road controlling authorities included:

- developing 27 performance measures for customer outcomes in the One Network Road Classification to report against
- further developing a web-based monitoring and reporting tool so all authorities can report performance against these measures
- producing a standard report for a subset of the 27 measures to highlight each authority's performance against its peer group
- delivering a sector-wide project to improve data quality
- publishing *Procurement best practice guide* and the Smart Buyer self-assessment tool
- building capability through cross-sector collaborative learning and peer support and publishing guides and case studies to support industry self-learning.

⁴ The Road Efficiency Group is a collaboration between local government and the Transport Agency. It aims to create and embed a new national funding and activity management structure for roads (the One Network Road Classification) for improving value for money, focusing on customer outcomes, consistency and collaboration.

USE OF THE NATIONAL LAND TRANSPORT FUND

SUMMARY OF THE NATIONAL LAND TRANSPORT FUND FOR 2015-18

At the end of the third year of the 2015-18 National Land Transport Programme, the overall investment of \$10.4 billion from the National Land Transport Fund was 1 percent below the planned amount when the programme was adopted in June 2015. Expenditure for the 2015-18 National Land Transport Programme, which included local and Crown funding, was slightly lower at \$13.7 billion than the \$13.9 billion in the published programme.

Use of funds for **state highway improvements** during 2015-18 were 8 percent below the planned amount after three years, largely due to lower tender prices for large projects and delays to some projects

Expenditure for **state highway maintenance** was 3 percent above the planned amount after three years. This was due to a push to increase the percentage of the network undergoing renewal during 2017/18, following lower than planned levels in the previous two years.

Regional improvements was a new activity class for the 2015-18 National Land Transport Programme. It aims to progress regionally important transport infrastructure outside metropolitan areas. Expenditure was slow to start up, being at 47 percent below the planned amount after two years. Construction increased significantly in 2017/18 and final expenditure was 1 percent above the published plan.

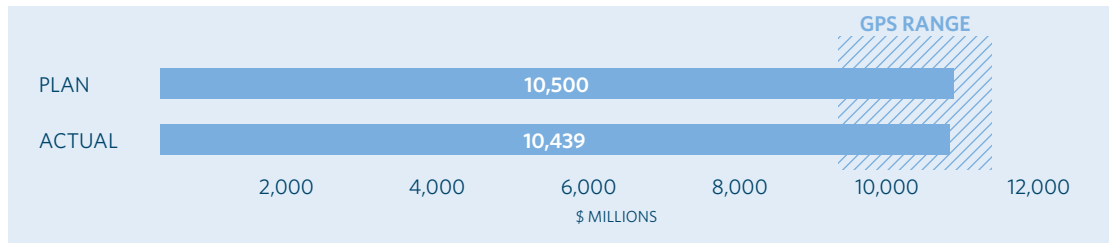
Local road improvements expenditure at the end of 2017/18 was 5 percent above the published amount in the 2015-18 National Land Transport Programme. The increase in spend was driven by the use of a targeted enhanced funding assistance rate to accelerate the LED street-lighting programme, the decision to change the minor improvements threshold from \$300,000 to \$1 million, reduced compliance effort for approved organisations, and a catch-up funding claim from Tauranga City Council for eligible work completed earlier in 2015-18.

The Minister of Transport adjusted the funding range in the Government Policy Statement on Land Transport 2015/16 – 2024/25 funding range for the **walking and cycling** activity class to accommodate an increase in expenditure driven by the Urban Cycleways Programme. Walking and cycling expenditure continued its strong performance at 31 percent above the published 2015-18 National Land Transport Programme. This was largely due to the impact of the Urban Cycleways Programme, where the Crown supplied additional funding.

Final expenditure on emergency works was 17 percent above the published amount in the 2015-18 National Land Transport Programme. Some of this was due to the response to the Whanganui-Taranaki floods in 2015. The Kaikōura Earthquake in 2016 and severe weather events in 2016/17 and 2017/18 also pushed up expenditure further across local and state highway networks.

The actual investments made from the 2015-18 National Land Transport Fund for the planned level of funds allocated in the 2015-18 National Land Transport Programme are shown below. The figures do not account for National Land Transport Programme funds contributed by local authorities or other sources, including Crown grants and loans. However, repayment of Crown loans is included. Additionally, the figures take a cash perspective on the use of funds and exclude non-cash items such as depreciation and book-value movements.

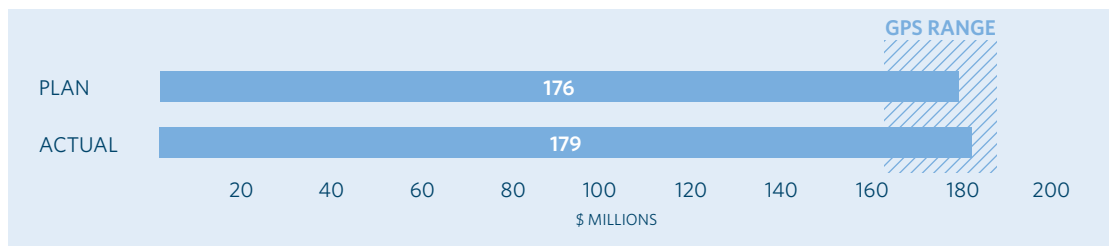
OVERALL USE OF THE NATIONAL LAND TRANSPORT FUND



Overall expenditure at the end of 2015-18 sits at 99 percent of the published National Land Transport Programme. The underspend in state highway improvements was mostly offset by increased spend in local road improvements, walking and cycling, and emergency works.

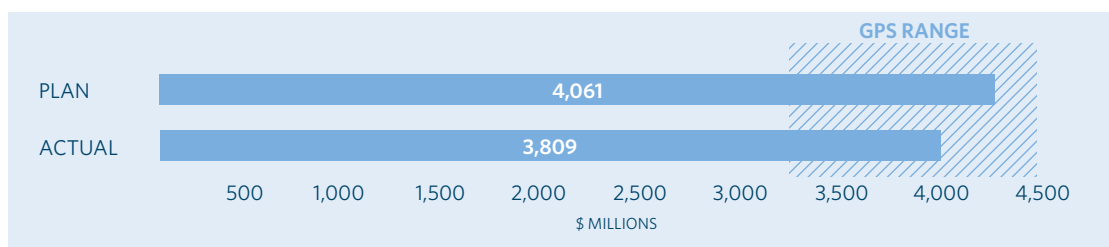
USE OF THE FUND BY ACTIVITY CLASS

Investment management



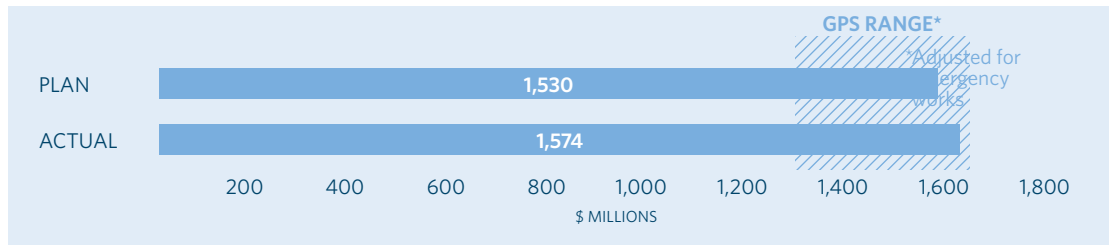
Expenditure in investment management was 2 percent above the published amount at the end of 2015-18. This \$3 million increase was due to increased investment in transport planning to develop programme business cases, additional work to develop regional land transport plans as a result of the new Government Policy Statement on Land Transport and continued Road Efficiency Group work to improve activity management planning. The higher transport planning expenditure was offset by lower spends in sector research and investment in the funding allocation system, which enabled the activity class to remain within the Government Policy Statement funding range.

State highway improvements



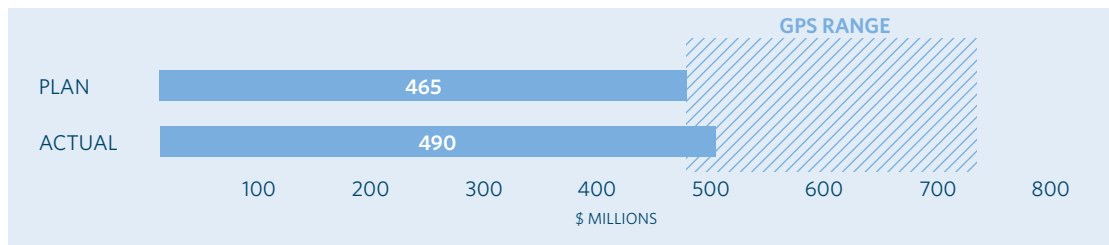
Expenditure on state highway improvements at the end of 2015-18 was 8 percent lower than the published amount. This reflects lower tender prices for some major projects and slower delivery than planned in some cases.

State highway maintenance (excluding emergency works)



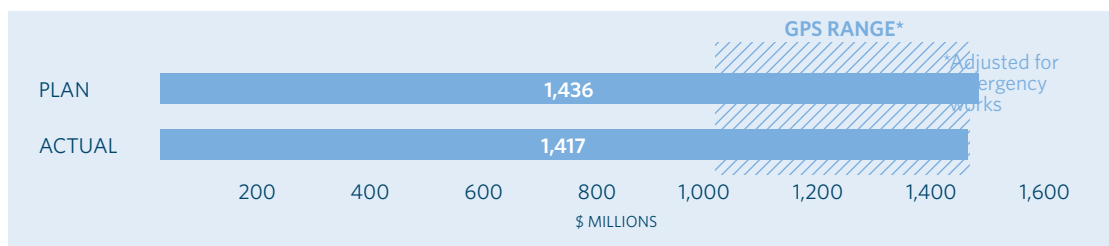
Expenditure on state highway maintenance at the end of 2015–18 was 3 percent above the published amount. This was due to a push to increase the percentage of the network undergoing renewal during 2017/18, following lower than planned levels in the previous two years.

Local road improvements



Expenditure on local road improvements at the end of 2015–18 was 5 percent above the published amount. The increase in spend was driven by the use of a targeted enhanced funding assistance rate⁵ to accelerate the LED street-lighting programme, the decision to change the minor improvements threshold from \$300,000 to \$1 million, a reduction in compliance effort for approved organisations, and completion of funding claims as the three year period concluded. The net result was that the activity class achieved expenditure within the Government Policy Statement funding range, contrary to earlier expectations that it would fall short of the range.

Local road maintenance (excluding emergency works)

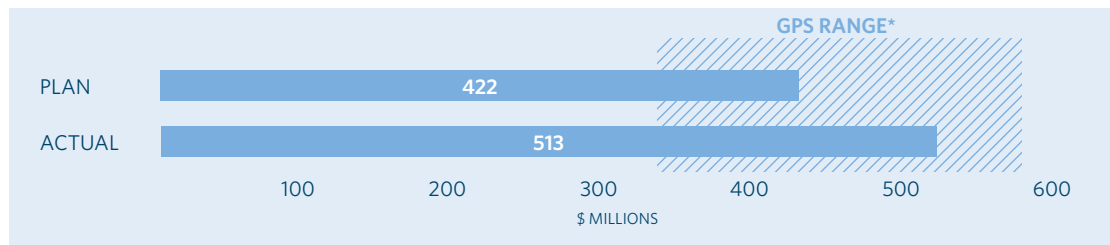


Final expenditure on local road maintenance was 1 percent below the published amount due to lower input costs and programme optimisation by local authorities making decisions around the correct timing of interventions, usually holding off renewals when there is still useful life left in the asset.

⁵ Targeted enhanced rates are time-limited, specified funding assistance rates (FARs) that are higher than normal FARs and applied in exceptional circumstances and time-limited periods to either:

- facilitate an activity that is particularly important from a national land transport perspective, where it is highly likely that it would not proceed within an appropriate timeframe if additional funding assistance was not provided
- give a kick start to encourage and enable an approved organisation to make a step change.

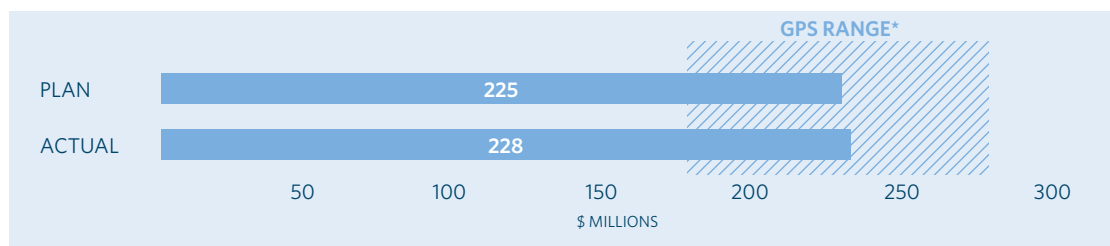
Emergency works on state highways and local roads



*Adjusted for maintenance programmes

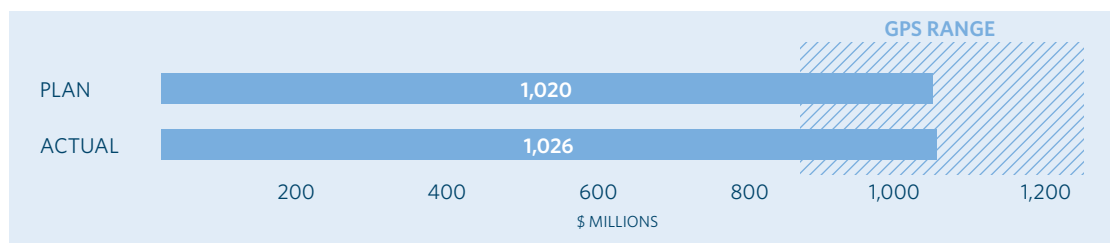
Expenditure on emergency works was 17 percent above the published amount. Some of this was due to the response to the Whanganui-Taranaki floods in 2015. The Kaikōura earthquake in 2016 and severe weather events in 2016/17 and 2017/18 also pushed up expenditure across local and state highway networks. The tail end of expenditure of these events will extend into the 2018–21 National Land Transport Programme.

Regional improvements



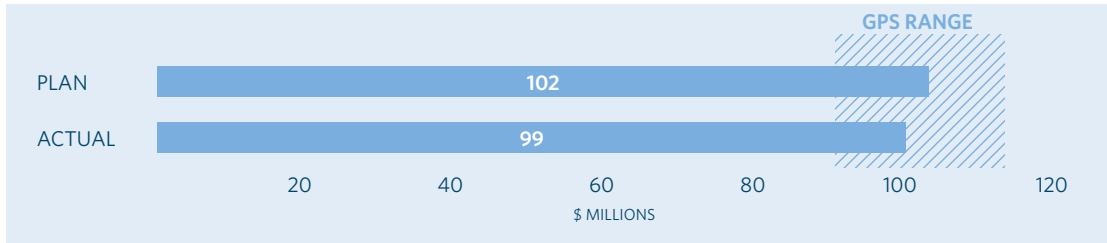
Regional improvements was a new activity class in the 2015–18 National Land Transport Programme, all of which was planned to be delivered on the state highway network, given that for most of the 2015–18 National Land Transport Programme, including during its development, delivery of local road improvements was expected to be below the Government Policy Statement funding range for the activity class. Therefore, only state highway activities were allocated to regional improvements. While delivery got off to a slow start, it accelerated through the latter half of the National Land Transport Programme and final expenditure at the end of 2017/18 was 1 percent above the amount published.

Public transport



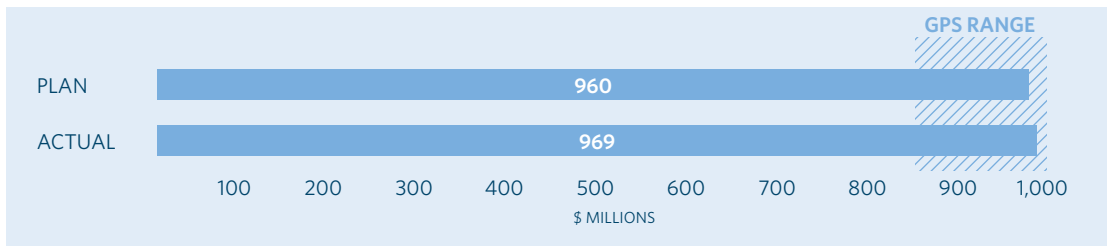
Final expenditure on public transport was 1 percent above the published amount, evenly spread across public transport services, infrastructure and Transport Agency investment. This was largely driven by increased spending on services and infrastructure in Auckland.

Road safety promotion



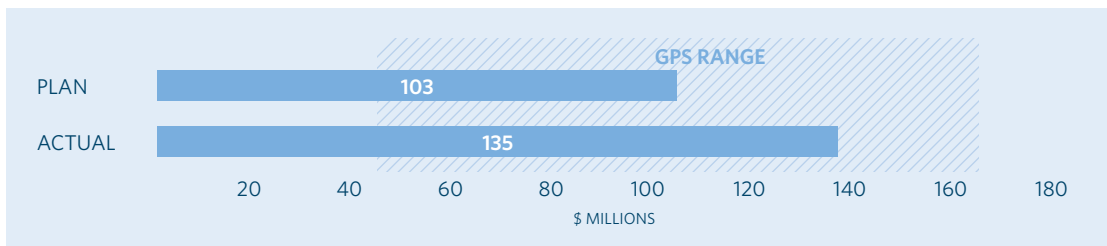
Final expenditure on road safety promotion for 2015-18 was 3 percent below the published amount, tracking closer to the approved funds compared with previous years. The underspend is due to a value-for-money decision to continue a successful advertising campaign and not spend further on a new campaign as well as due to changes in the production timelines for several campaigns in late 2017/18.

Road policing



Expenditure on road policing was, 0.9 percent above the published amount. The increase in funding allocation was approved so commercial vehicle inspections could continue.

Walking and cycling improvements



Expenditure on walking and cycling continued to be high, at 31 percent above the published amount. This was largely due to the impact of the Urban Cycleways Programme, where the Crown supplied additional funding. Part of the way through the 2015-18 National Land Transport Programme, the Minister of Transport adjusted the upper end of the Government Policy Statement funding range to accommodate the expenditure increase.