

# Explanatory notes for non-financial performance measures

## For the Waka Kotahi NZ Transport Agency annual report 2021/22

### System outcome measures

#### Safe

*SAFE1 Number of deaths and serious injuries* counts the number of road deaths and road serious injuries with data from the Crash Analysis System, which is administered by Waka Kotahi. A road death is defined as the instance where an injury or multiple injuries resulted in death within 30 days of when the crash happened. Road serious injuries include fractures, concussions, internal injuries, crushings, severe cuts, lacerations, severe general shock necessitating medical treatment, and any other injury requiring hospital detention or admission.

To be classified as a road death or serious injury, the incident must have occurred on a public road and must be related to vehicle, road, or driver capability issues. Deaths occurring as a result of other issues, eg the death of a driver from a heart attack, are not classified as road deaths. Pedestrians are only included where a motor vehicle was involved. Deaths caused by suicide or murder are not classified as road deaths.

*SAFE2 Significant incident frequency rate* is the rate of incidents that result in significant injury reportable to a regulator or which have a high potential for impact/injury eg serious near misses that could have resulted in serious or life-threatening injuries. Significant injuries are those injuries which result in medical treatment, restricted work, lost time and/or fatality. The figure is expressed as a ratio of incidents per million hours worked and includes both staff and contractor incidents. This data is captured through Waka Kotahi internal health and safety systems and processes.

#### Safer travel and infrastructure

*ST1 Number of deaths and serious injuries where the speed limit does not align with the safe and appropriate speed* is a subset of SAFE1. This measure counts the number of deaths and serious injuries that occur on roads

where the posted speed limit does not align with the safe and appropriate speed for that road. The safe and appropriate speed has been calculated for all roads based on their function, safety and use.

*ST2 Number of head-on, run-off-road and intersection deaths and serious injuries* is a subset of SAFE1. This measure counts the number of deaths and serious injuries to all road users from head-on, run-off-road and intersection crashes. Where the death or serious injury is attributed to more than one road or roadside cause eg intersection (side impact) and run-off-road (side impact with a rigid object), this is counted once in the reported figure.

#### Safer vehicles

*SV1 Number of deaths and serious injuries involving a vehicle with a low safety rating* is a subset of SAFE1. It counts the number of deaths and serious injuries associated with vehicles that have a low safety rating.

For new vehicles, safety is assessed by the Australasian New Car Assessment Program (ANCAP). The program assigns ratings from 1 to 5 stars to indicate how well a vehicle is likely to perform in a crash, with 4 and 5 stars being safest. For used vehicles, the Used Car Safety Ratings (UCSR) system is applied.<sup>1</sup> UCSR is a 1- to 5- star rating system based on real-world crash data, where fewer stars indicate less protection from a crash (greater rate of injury to vehicle occupants as a result of the crash).

Some cars will not have an ANCAP or UCSR rating due to there not being enough crash information about a specific make and model. For these cars, New Zealand applies a Vehicle Safety Risk Rating which approximates the crash results of similar vehicles across safety features, occupant protection, and harm caused to third parties.

For more information on vehicle safety ratings see [www.rightcar.govt.nz/safety-ratings](http://www.rightcar.govt.nz/safety-ratings)

<sup>1</sup> UCRS ratings are calculated by Monash University and are based on real-world crash data about how well a specific vehicle protects the occupants in the event of a crash, based on driver safety scores.

## Safer road user choices

*SRUB1 Number of deaths and serious injuries associated with behavioural risk factors* is a subset of SAFE1. This measure counts the number of deaths and serious injuries associated with the use of alcohol and other drugs, and the impact of fatigue and distraction while driving. Where the death or serious injury is attributed to multiple behavioural risk factors eg both the use of alcohol and a distraction, this is counted only once in the reported figure.

## Environmentally sustainable

*ENV1 Greenhouse gas emissions from the land transport system* is the kilo-tonnes of carbon dioxide (CO<sub>2</sub>) emissions from road transport, as derived from the Waka Kotahi National Vehicle Emission Database. The database estimates emissions for each calendar year based on the length of the road transport network travelled together with expected emissions as predicted by the New Zealand Vehicle Emission Prediction Model. The model predicts emissions from the New Zealand vehicle fleet under typical road, traffic and operating conditions. In 2021/22, the model was updated to include calculation of carbon dioxide equivalent (CO<sub>2</sub>-e) emission factors.<sup>2</sup>

The Ministry for the Environment uses a different calculation method for the New Zealand Greenhouse Gas Inventory, which means the emissions figures from the two methods are not directly comparable. The method used by Waka Kotahi has the advantage of providing both national and regional estimates. Work is being undertaken to update the baseline and target to align with the first Emissions Reduction Plan.

*ENV2 Proportion of the light vehicle fleet that are low or no carbon vehicles* is the number of light electric vehicles (EVs) and hybrid EVs as a proportion of the total light vehicle fleet. This includes battery electric vehicles (BEV) and plug-in hybrid electric vehicles (PHEV). Data for this measure is derived from monthly BEV and PHEV electric and hybrid light vehicle registrations supplied from the Motor Vehicle Register by Waka Kotahi. Work is being undertaken to update the baseline and target to align with the first Emissions Reduction Plan.

## Increased protection of the environment

*IPOE1 Forecast ISC-IS rating scheme points for applicable projects* relates to the Infrastructure Sustainability Council (ISC) rating scheme. Under the Waka Kotahi Sustainability Rating Scheme Policy, projects

between \$15m-100m shall consider the merits of ISC certification and projects over \$100m are required to complete ISC certification.

ISC certification is awarded upon build completion. As the next applicable Waka Kotahi build completion isn't expected until three to five years from now, this measure is based on forecast credit totals.

A minimum point total of 25 (commended rating) at project completion is required for ISC certification. At the initiation of an ISC applicable project, the project team will produce an IS management plan detailing the credits they aim to achieve and how. The plan will be updated annually with quarterly progress reports on the updated expected credit score at the time of rating (project completion). This provides an up-to-date, quantifiable measure of sustainability outcomes being achieved throughout the project lifetime. For more information on the ISC-IS Rating Scheme see [www.iscouncil.org/is-ratings](http://www.iscouncil.org/is-ratings)

*IPOE2 Waka Kotahi corporate carbon footprint* calculates Waka Kotahi emissions from our corporate activities, to meet the requirements of ISO 14064-1:2018. Currently, this includes direct greenhouse gas (GHG) emissions and removals eg fuel from our leased vehicles; indirect GHG emissions from imported energy eg energy for our corporate offices; indirect GHG emissions from transportation eg business related travel, freight and mail; and indirect GHG emissions from products we use eg working from home, water supply, waste. Our emissions are calculated using supplier and financial data. The results will be audited and verified as part of the Toitū Envirocare Toitū carbonreduce® certification programme annually. The calculation will be revised each year to reflect any updates to the requirements.

## Effectively and efficiently moving people and freight

*MOVE1 Light vehicle kilometres travelled in main urban areas* estimates the kilometres travelled in Auckland, Christchurch, Dunedin, Hamilton, Lower Hutt, Tauranga and Wellington based on the New Zealand Vehicle Emission Prediction Model. The main urban areas used for this measure are based on continuous boundaries of population density and uses a geographical filter based on Statistics NZ categorisation. Work is being undertaken to update the baseline and target, in response to the outcomes of the first Emissions Reduction Plan.

<sup>2</sup> The current data provides CO<sub>2</sub> emission outputs only. CO<sub>2</sub> equivalent is a measure for comparing greenhouse gases based on their heating effect over a period of time (global warming potential), compared to that of an equivalent amount of carbon dioxide as the reference.

*MOVE2 User experience of transport network by mode* uses data from the Waka Kotahi Journey Experience Monitor Survey, which tells us about users' overall experience of their most recent journey, disaggregated by main transport mode. This measure is reported as the percentage of survey respondents who gave a positive score (8-10 out of 10) for their overall journey experience, with a focus on public transport and active modes. Scores are reported over a rolling 12-month period. Active modes include the aggregate responses for cycling and walking. Walking also includes wheelchair, mobility scooter, skateboard, scooter and electric scooter.

*MOVE3 Freight mode share of road and rail* is a new measure. The measure will examine the share of freight tonne-km of goods travelled by road and by rail. The road calculation is based upon an analysis of road user classification information calibrated by weigh-in-motion data. The rail calculation is based upon information supplied by KiwiRail.

### **Improved resilience to disruptive events**

*RES1 Proportion of unplanned road closures resolved within standard timeframes* is the sum of all unscheduled road closure incidences with significant impact on road users that are addressed within standard protocol and timeframes, divided by the total number of road closure incidences. Standard protocol and timeframes mean that road closures are addressed within two hours on urban roads and within 12 hours on rural roads.

Urban roads are roads within the boundary of either a major or medium urban area (areas with a population of 30,000 people or greater). All other roads outside this definition are rural roads.

Performance against this measure is influenced by the frequency and severity of weather events. Reporting is split between road closures caused by weather events and those caused by other events (such as vehicle crashes, fire, obstruction, road works, spillage and public events).

This is also an output class measure for state highway maintenance (SHM4).

### **More reliable freight network**

*MRFN1 Interpeak predictability of travel times on priority freight routes* is the percentage of interpeak trips (travel undertaken between 10:00am and 2:00pm) completed within the expected timeframes for key interregional freight routes. This measure captures the predictability of travel for customers by assessing the consistency of travel time along a journey.

Journey times are extracted from TomTom for a basket of key journeys defined nationally by Waka Kotahi. Travel times are extracted at one-hour intervals for interregional journeys. This measure requires a two-year history of travel time data (current financial year and previous financial year). The previous financial year is used to establish a target travel time for a particular journey and time-of-day interval, which is then compared to the equivalent travel time in the current financial year. A journey is deemed predictable if it is within five percent of the target travel time.

### **Increased share of travel by public transport, walking and cycling**

*SHARE1 Mode share of public transport and active modes in urban areas* calculates the proportion of trips on public transport and active modes in high-growth urban areas. This measure uses data from the Ministry of Transport's New Zealand Household Travel Survey.

For this measure, high-growth urban are those urban areas forecasted to grow by 10% or more between 2013-2023, taken from the National Policy on Urban Development Capacity 2016. These urban areas are Hamilton, Christchurch, Tauranga, Auckland, Queenstown Lakes District Council (special; includes Wanaka), and Wellington (special; as a whole urban area Wellington does not meet the 10% threshold but some specific areas do ie city central and Kāpiti).

For more information on the New Zealand Household Travel Survey see [www.transport.govt.nz/area-of-interest/public-transport/new-zealand-household-travel-survey](http://www.transport.govt.nz/area-of-interest/public-transport/new-zealand-household-travel-survey)

### **Improved connections to key destinations**

*ACCESS1 Access to social and economic opportunities by mode*

Access to social opportunities is the percentage of the population within 15-minute access to the nearest school, general practitioner and supermarket during morning peak (7:00am to 9:00am on a non-holiday). It is a snapshot of the land transport system taken in early March each year.

To calculate the results for this measure, a whole-of-network analysis is used integrating multiple sources (General Transit Feed Specification files, Open Street Maps, and TomTom networked travel-times). For public transport, only include cities where electronic schedules can be obtained from regional transport authorities are included.

Population data is based on the 2018 Census. Data on the location of social opportunities is sourced as follows: general practitioners - Ministry of Health;

supermarkets - store maps on the websites of New World, Pak'nSave, Fresh Choice, Four Square, Countdown, SuperValue; schools - Education Counts facilities dataset (note that this included state schools but excluded private schools and state integrated schools; see [www.educationcounts.govt.nz/home](http://www.educationcounts.govt.nz/home)).

Access to economic opportunities is the percentage of jobs that can be reached within 45 minutes during morning peak (7:00am to 9:00am on a non-holiday) in early March each year. This measure is calculated by aggregating the measure results for each region, using regional job totals as a weighting factor. It is a snapshot of the land transport system taken in early March.

The timeframe of 45 minutes is defined as follows for the different modes:

- walking - 45 minutes
- cycling - 45 minutes door-to-door cycle time for a confident cyclist who is willing to cycle on the road
- public transport - 45 minutes and includes walking to/from the stop and both transfers and transit time
- driving - a 45-minute drive time including approximately 15 minutes to find a carpark and get to/from parked car to final destination.

*ACCESS2 Proportion of recently built residential dwellings in major urban areas with access to frequent public transport services* is calculated using data from the 2021 MRCagney analysis of morning peak frequent public transport in March 2021 and data on building consents issued between July 2020 to February 2021. Major urban areas cover the following: Auckland, Blenheim, Christchurch, Dunedin, Hamilton, Hastings, Invercargill, Napier, Nelson, Palmerston North, Queenstown, Rotorua, and Tauranga, Wellington and Whangārei.

## Meeting current and future needs

*MEET1 Funding sustainability* is a new measure. The development of this measure is deferred pending the conclusion of the revenue sustainability review.

*MEET2 Proportion of the state highway network that meets minimum asset condition requirements* assesses the length of the state highway network that meets minimum asset condition requirements against the total length of the state highway network. Currently, the measurement is limited to the surface pavement condition, with anticipation of expansion to include all state highway assets in the future.

Every state highway in New Zealand has a pavement condition survey completed annually to record and report on the skid resistance, rutting and roughness on any section, to measure changes and identify

any section that has reached its minimum condition standard. The minimum condition standards are: skid resistance (anything below 0.15 investigatory level is unacceptable), rutting (anything more than 20mm is unacceptable) and roughness (anything more than 150N is unacceptable). The annual results of skid resistance, rutting and roughness are combined into a single asset condition measure for state highway performance.

This is also an output class measure for state highway maintenance (SHM2).

## Effective delivery

*DEL1 Staff engagement* is the overall engagement score from the results of Tapatahi, the Waka Kotahi staff engagement survey which is run every 6 weeks. The engagement score is the organisation's overall score using the Peakon methodology, with scores using a range from 0-10: The engagement score is the organisation's overall score using the Peakon methodology, with scores using a range from 0-10:

- The system identifies each employee's latest score per engagement question
- It averages those scores to get an overall engagement score per employee
- The employee overall scores are averaged to get the overall score for Waka Kotahi.

*DEL2 Investment performance* reports the Investor Confidence Rating (ICR) assessment result for Waka Kotahi. The ICR is a three-yearly assessment undertaken by Treasury of the performance of investment-intensive agencies in managing investments and assets. The rating scale is from A to E, with an 'A' signalling high performance. For more information on the ICR see [www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/review-investment-reviews/investor-confidence-rating-icr](http://www.treasury.govt.nz/information-and-services/state-sector-leadership/investment-management/review-investment-reviews/investor-confidence-rating-icr)

*DEL3 Service quality (ease of transacting with us)* is derived from the data collected via the Waka Kotahi Journey Experience Monitor Survey. It is reported as the percentage of respondents who provided a rating of little/no effort required (1-2) for the question on customer effort required for service touchpoints. The rating scale is from 'little/no effort' (1-2) to 'some/a lot of effort' (4-5). The results are reported as a 12-month aggregate of ratings for service experiences including: book a driver's license practical test; renew a driver's license; relicense a motor vehicle; get a warrant of fitness for a motor vehicle; pay a road toll; buy road user charges; and contact someone about a problem or question relating to a state highway.

*DEL4 Regulatory performance* is the assessment of our regulatory function and progress that has been made since the regulatory review was completed.

## Effective collaboration

*COL1 Partnership and engagement with Māori* is a new measure which takes the average performance score (% that agree) of key strategic relationship drivers of Māori partnerships.

The seven key relationship drivers that make up this measure are that Waka Kotahi (1) see Māori as an equal partner, (2) are culturally aware and competent, (3) look to understand and meet your needs as Māori, (4) provide sufficient time, funding and resource to help foster the relationship, (5) are delivering effective outcomes for Māori, (6) take Māori expertise into account when making decisions in your area, and (7) can be relied on to deliver what they say they will.

*COL2 Partnership and engagement with stakeholders* is the percentage of external stakeholders and partners who are satisfied with the current relationship their organisation has with Waka Kotahi. It is derived from the results of the annual stakeholder satisfaction survey undertaken by Waka Kotahi every year in June. Stakeholders and partners surveyed include regional councils, central government, emergency services, corporate suppliers, industry groups and advocacy groups.

## Output class measures

### State highway improvements

*SHI1 Proportion of state highway improvement activities funded by the National Land Transport Fund delivered to agreed standards and timeframes* assesses the delivery of state highway improvement programmes and projects that are funded by the National Land Transport Fund against milestones and budget. It also assesses the delivery of property acquisition programmes against time, budget and quality standards.

For each programme, delivery to milestones and delivery to budget are equally weighted. Each programme result is further weighted based on the weight of the programme budget for the year compared to the total budget of all programmes in the same year. The overall result is the sum of these weighted programme results.

Delivery to quality standards is tested using cost as a proxy through the different gateways in the project management process; ie the project should meet the

quality control requirements of Waka Kotahi for that stage before a progress payment is made or before it can be considered complete.

*SHI2 Proportion of state highway improvement activities funded by the Crown delivered to agreed standards and timeframes* assesses the delivery of state highway improvement programmes and projects that are funded by the Crown against milestones and budget. It also assesses the delivery of property acquisition programmes against time, budget and quality standards.

For each programme, delivery to milestones and delivery to budget are equally weighted. Each programme result is further weighted based on the weight of the programme budget for the year compared to the total budget of all programmes in the same year. The overall result is the sum of these weighted programme results.

Delivery to quality standards is tested using cost as a proxy through the different gateways in the project management process; ie the project should meet the quality control requirements of Waka Kotahi for that stage before a progress payment is made or before it can be considered complete.

### Local road improvements

*LR11 Proportion of local road improvement activities funded by the National Land Transport Fund delivered to agreed standards and timeframes* assesses the delivery of local road improvement activities by approved organisations that are funded by the National Land Transport Fund against milestones and budget. Through the annual achievements return process in Transport Investment Online, approved organisations review and confirm the succeeding year's annual milestones and budget agreed at the beginning of the three-year National Land Transport Programme. This information is the basis of reporting for the incoming year.

The same annual achievements return process also collects information on activities delivered in the financial year that has passed. These are assessed against milestones and budget confirmed at the beginning of the year. Delivery to milestones and budget are equally weighted. Each result is further weighted based on the weight of the activity's expenditure compared to the total expenditure of all activities in the year. The overall result is the sum of these weighted activity results.

## Walking and cycling improvements

*WCI1 Proportion of cycleways, pathways and shared paths delivered against plan* assesses the total length of new or improved cycleways, shared user paths and low traffic streets delivered by Waka Kotahi and approved organisations during the financial year, divided by total length planned to be delivered in the same financial year. It includes walking and cycling facilities (also measured in kilometres). 'Delivered against plan' refers to improvements that were scheduled to become available to the public during the financial year that were actually opened to the public by the end of the financial year. It can include sections of a bigger project.

Assessment will include only projects with funding approvals at the beginning of the financial year. Information on projects delivered by approved organisations is collected through the annual achievements return process in Transport Investment Online. Approved organisations review and confirm the succeeding year's annual milestones agreed at the beginning of the three-year National Land Transport Programme. This information is the basis of reporting for the incoming year. The same annual achievements return process also collects information on projects delivered in the financial year that has passed. These are assessed against the milestones confirmed at the beginning of the year.

*WCI2 Cycling count in main urban areas* assesses the uptake of cycling using cycle counts collected by automated continuous counters in main urban areas (Auckland, Tauranga, Hamilton, Wellington, Christchurch and Queenstown).

*WCI3 Walking count in main urban areas* assesses the uptake of walking using walking counts collected by automated continuous counters in main urban areas (Auckland, Tauranga, Hamilton, Wellington, Christchurch and Queenstown).

## State highway maintenance

*SHM1 Proportion of state highway maintenance activities delivered to agreed programme* compares delivery of pavement and surfacing renewals and maintenance activities against schedule and budget for the financial year. Delivered activities include emergency works. Achievement of these activities is measured in trackers (lane kilometres or sites) and assessed against programme baseline. Each result is weighted based on the weight of the expenditure on each asset type compared to the total expenditure across the entire programme in the year. The overall result is the sum of these weighted asset type results.

*SHM2 Proportion of the state highway network that meets minimum asset condition requirements* is also a system outcome measure. Refer to MEET2 for details.

*SHM3 State highway maintenance cost per lane kilometre delivered* is calculated by dividing the amount spent on maintenance activities on the state highway network during the financial year by the total number of lane-kilometres in the network at the end of the financial year. This excludes emergency works.

*SHM4 Proportion of unplanned road closures resolved within standard timeframes* is also a system outcome measure. Refer to RES1 for details.

## Local road maintenance

*LRM1 Proportion of local road maintenance activities funded by the National Land Transport Fund delivered to plan* compares the delivery of sealed pavement and resurfacing and rehabilitation, unsealed road metalling and rehabilitation and drainage renewals by approved organisations against forecast works and budget. Achievement of these activities is measured in trackers (kilometres or lane kilometres) and assessed against the programme baseline at the beginning of each financial year. It excludes emergency works and other maintenance, operations and renewal work categories not mentioned above.

Through the annual achievements return process in Transport Investment Online, approved organisations review and confirm the succeeding year's programme against the forecast submitted at the beginning of the three-year National Land Transport Programme. This information is the basis of reporting for the incoming year. The same annual achievements return process also collects information on activities delivered in the financial year that has passed. Each result is weighted based on the weight of the expenditure on each asset type compared to the total expenditure across the entire programme in the year. The overall result is the sum of these weighted asset type results.

*LRM2 Proportion of travel on smooth roads* is the percentage of vehicle kilometres travelled on sealed roads with roughness below a defined upper threshold level (that is, smoother than a nominated surface texture standard). The threshold varies depending on the traffic volume band and urban or rural environment of the road and the result represents the aggregated total on all roads. This measure is also called 'smooth ride' or 'smooth travel exposure' and is a customer outcome measure indicating ride quality. This information is reported by local authorities through the annual achievements return process in Transport Investment Online.

*LRM3 Local road maintenance cost per lane kilometre delivered is calculated by dividing the National Land Transport Fund amount spent on maintenance activities on the local road network during the financial year by the total number of lane-kilometres in the network at the beginning of the financial year. This excludes emergency works.*

## **Public transport services and public transport infrastructure**

*PTS1 Number of boardings on urban public transport services (bus, train and ferry) is the sum of all public transport passenger boardings by bus, train and ferry across all regions. It includes boardings using SuperGold card concessions. A boarding is a single trip made on public transport, for example from when a person boards a bus to when they get off. This is different to a journey, which is travel from origin to the final destination. A journey may involve more than one public transport boarding and/or travel by different modes. This information is reported by local authorities through the annual achievements return process in Transport Investment Online.*

*PTS2 Reliability of rail, bus and ferry services is the proportion of scheduled services that were completed to destination. Only services that left the origin stop within 59 seconds early or four minutes 59 seconds late that also completed the trip to destination (did not break down) are included. An increase in services completed represents an improvement in reliability performance. This information is reported by local authorities through the annual achievements return process in Transport Investment Online.*

*PTI1 Punctuality of metro rail services is the proportion of scheduled trips that should have left the origin stop between 59 seconds before and four minutes 59 seconds of scheduled departure time and are within 59 seconds before and four minutes 59 seconds after the scheduled departure time at all timing points such as bus stops. A decline in punctuality is an indication of increasing infrastructure failures. This information is reported by Auckland Transport and Greater Wellington Regional Council through the annual achievements return process in Transport Investment Online.*

## **Road to Zero**

*RTZ1 Length of the road network treated with reduced speed limits is the total length of the state highway network where reduced speed limits were applied during the financial year. This includes lengths of road where associated infrastructure to support speed reduction were added or replaced such as road markings, speed bumps and other traffic calming activities.*

*RTZ2 Number of corridor infrastructure safety improvement projects started is the total number of corridor infrastructure safety improvement projects along state highways that commenced construction during the financial year, as evidenced by contract awards. Improvements include median and roadside barriers, wide centrelines and rumble strips. Corridors can be urban or rural roads and do not include intersections.*

*RTZ3 Number of intersections with primary safe system interventions started is the total number of intersections that commenced construction of primary safe system interventions during the financial year, as evidenced by contract awards. Interventions include installation of roundabouts, signalised roundabouts, raised safety platforms, grade-separated interchanges or overpasses and separation of turning facilities.*

*RTZ4 Number of passive breath tests and breath screening tests conducted is total number of breath tests (also called passive breath test or sniffer test) conducted by New Zealand Police under the Road Safety Partnership Programme. A breath test is usually done at police checkpoints or in police testing vehicles using an electronic device that detects the presence of alcohol in the breath. If alcohol is detected, a breath screening test will be required.*

*RTZ5 Number of hours mobile cameras are deployed is the total number of hours mobile speed cameras are in operation while deployed in mobile speed camera vehicles. This is conducted by New Zealand Police under the Road Safety Partnership Programme.*

*RTZ6 Proportion of road safety advertising campaigns that meet or exceed their agreed success criteria assesses the number and breadth of advertising campaigns used, the varied media in which they are presented, and the different aspects of the campaigns that are measured (including likeability, relevance, message takeout, likelihood to change attitude and prompted recall) against success criteria. The success of each individual campaign is assessed using weighted scores based on strategy priority.*

## Rail network

*RN1 Reliability of freight travel time* is the proportion of priority freight service trips that arrive within 30 minutes of scheduled arrival time. Only trips that completed the trip to destination (did not break down) are included. This measure is called 'freight travel time reliability' under the Rail Network Investment Programme and measures 'on time performance' as a percentage. The result of this measure is dependent on the levels of investment made by KiwiRail on locomotives.

## Coastal shipping

*CS1 An investment plan for coastal shipping has been developed and has also been endorsed by the Waka Kotahi Board* is achieved if evidenced by the inclusion of the investment plan for coastal shipping in a Waka Kotahi Board meeting agenda, as well as the minutes from the same meeting reporting the action agreed for that item in the agenda.

## Investment management

*IM1 Proportion of the total cost of managing the investment funding allocation system to National Land Transport Programme expenditure* is the total service cost of managing the Investment Funding Allocation System, divided by total National Land Transport Programme expenditure less local share. Investment Funding Allocation System activities are funded from the National Land Transport Fund, the Crown and loans. National Land Transport Programme expenditure includes loan repayments from the National Land Transport Fund, loan drawdowns from the \$2billion loan and the Seasonal and Shock facilities and includes public-private partnership payments. It excludes local authority funding contributions for investments in local transport and regulatory revenue and expenditure. This measure is reported cumulatively over the three-year period of the National Land Transport Programme.

*IM2 Proportion of stakeholders satisfied with Waka Kotahi engagement and systems that support land transport planning, research funding and investment decision-making* demonstrates the proportion of Waka Kotahi stakeholders (regional, local and unitary authorities, and other organisations) that Waka Kotahi interacts with on land transport planning, research funding and investment decision-making, that were satisfied with the relationship between their organisation and Waka Kotahi. This is measured through two surveys with different sets of respondents; one covering sector research activities and one covering transport planning and investment decision-making that is collected as

part of the annual Waka Kotahi stakeholder survey. Results from the two surveys are combined using the weighted result of each survey based on the level of funding provided to the respective areas.

## Driver licensing and testing

*DLT1 Proportion of non-compliance actions for driver licence course providers and testing officers that are progressed within acceptable timeframes* is the total number of non-compliance actions for driver licence course providers and testing officers that are actively monitored and progressed towards resolution, divided by the total number of non-compliance actions for driver licence course providers and testing officers identified and open, as reported in CASEY (a Waka Kotahi regulatory database). 'Progressed within acceptable timeframes' means non-compliance actions are managed towards resolution in line with the Waka Kotahi regulatory case management guidelines and processes, which provide recommended timeframes and courses of action based on the risk priority of each case.

*DLT2 Proportion of practical tests taken within 30 working days of booking* is the total number of driver licence applicants who took practical tests within 30 working days of booking, divided by the total number of driver licence applicants who took practical tests in the same period. Data is sourced from the Driver Licence Register.

## Vehicle safety and certification

*VSC1 Proportion of non-compliance actions for vehicle inspecting organisations, vehicle certifiers and vehicle inspectors that are progressed within acceptable timeframes* is the total number of non-compliance actions for vehicle inspecting organisations, vehicle certifiers and vehicle inspectors that are actively monitored and progressed towards resolution, divided by the total number of non-compliance actions for vehicle inspecting organisations, vehicle certifiers and vehicle inspectors identified and open, as reported in CASEY. 'Progressed within acceptable timeframes' means non-compliance actions are managed towards resolution in line with the Waka Kotahi regulatory case management guidelines and processes, which provide recommended timeframes and courses of action based on the risk priority of each case.

*VSC2 Proportion of vehicles relicensed on time* is the proportion of vehicles that have been relicensed on or before the licence expiry date. The measure is calculated as the total number of active or current licences for the period, divided by the total number of vehicles due for relicensing for the same period. Data is sourced from the Motor Vehicle Register.

## Regulation of commercial transport operators

*CTO1 Proportion of non-compliance actions for commercial transport operators that are progressed within acceptable timeframes* is the total number of non-compliance actions for commercial transport operators that are actively monitored and progressed towards resolution, divided by the total number of non-compliance actions for commercial transport operators identified and open, as reported in CASEY. 'Progressed within acceptable timeframes' means non-compliance actions are managed towards resolution in line with the Waka Kotahi regulatory case management guidelines and processes, which provide recommended timeframes and courses of action based on the risk priority of each case.

*CTO2 Proportion of standard permits issued within 10 working days* is the total number of commercial transport operator standard permits issued within ten working days from the date of receipt of application, divided by the total number of commercial transport operator standard permit applications received for the same reporting period. This excludes applications that are on hold, queried and rejected. Data is sourced from the 50MAX Permit Register and the High Productivity Motor Vehicle Permit Register.

## Regulation of the rail transport system

*RTS1 Proportion of non-compliance actions for rail participants that are progressed within acceptable timeframes* is the total number of remedial actions for rail participants progressed by their due date and the total number of overdue remedial actions where the appropriate escalation path is being undertaken in accordance with the Railways Act 2005, divided by the total number of remedial actions for rail participants identified, as recorded in the Rail Information System (a Waka Kotahi regulatory record system). 'Progressed within acceptable timeframes' means remedial actions are managed in line with Waka Kotahi rail safety compliance intervention tools, processes and legislation, which provide recommended timeframes and courses of action based on the risk priority of each case.

## Revenue collection and administration

*REV1 Proportion of unpaid road user charges identified through investigations and assessments that are collected* is the total amount of unpaid road user charges and penalties that are collected, divided by the total amount of unpaid road user charges and penalties that were invoiced for payment in the 12 months ending six months prior to reporting (ie a report ending in June

2022 covers the total amount invoiced from January to December 2021). Amount collected refers to road user charges and penalties paid to Waka Kotahi for invoices related to the relevant 12-month period, as well as road user charges and penalties paid to debt collection agencies during the financial year. Data is sourced from the Motor Vehicle Register and SAP (the Waka Kotahi finance tool).

*REV2 Average number of days to process road user charges, fuel excise duty and regional fuel tax refund applications* is determined by how long it takes, on average, to process road user charges, fuel excise duty and regional fuel tax applications. Days to process refers to the number of working days between the date an application was received and the date when a decision of the application is made. This excludes the time that applications may be queried or audited. Data is sourced from the HEAT (a Waka Kotahi call log support dashboard) and SAP.

## State highway asset performance measures

*Proportion of the state highway network that meets minimum asset condition requirements* assesses the length of the state highway network that meets minimum pavement condition standards against the total length of the network that is assessed for the year. It combines achievements (the proportion of the state highway network that meets minimum pavement condition requirements) under three indicators: skid resistance (that reflects efficiency in meeting surface texture standards), rutting (that measures the depth of rut in the pavement surface underneath vehicle wheel paths) and roughness (that measures against smooth travel standards). This is also a strategic and output class performance measure (MEET2 and SHM2).

*Asset sustainability ratio* assesses the relationship between expenditure on asset renewals relative to depreciation, where depreciation is considered a measure accounting for decrease in the asset condition and monetary value of an asset due to use, wear and tear or obsolescence. It approximates the extent to which existing state highway assets are being renewed/replaced as they reach the end of their useful lives (in other words, the rate that assets are wearing out). It is important to recognise that we are not funded on a depreciation basis, nor do we fund local government on a depreciation basis, however, this form of analysis provides a high-level indication of the sustainability of investment level associated to asset renewal. This measure excludes expenditure on new or additional assets.

*Number of bridges with restrictions rated as high priority* is the total number of bridges along state highways with restrictions for all heavy motor vehicles that were assessed during the year as high priority (needs to be addressed). Bridge restrictions ('postings') are put in place as required, short- or long-term, as noted on our website (Schedule of posted heavy vehicle limits on state highway bridges, which is currently renewed annually in October). Restrictions include mass (weight) limits, speed limits, or both mass and speed limits, for all heavy motor vehicles. Postings are put in place to prevent bridge failure arising from excessive loads. Any restrictions that can affect network availability are generally considered as high priority and are dealt with as a priority. Restrictions on bridges for higher mass vehicles only (ie 50MAX, high productivity motor vehicles and overweight vehicles) are noted separately and are not considered as part of this data set.

*Proportion of unplanned road closures resolved within standard timeframes* is the sum of all unscheduled road closure incidences with significant impact on road users that are addressed within standard protocol and timeframes, divided by the total number of road closure incidences. Standard protocol and timeframes mean that road closures are addressed within two hours on urban roads and within 12 hours on rural roads. Urban roads are roads within the boundary of either a major or medium urban area (areas with a population of 30,000 people or greater). All other roads outside this definition are rural roads. Performance against this measure is influenced by the frequency and severity of weather events. Reporting is split between road closures caused by weather events (such as snow, flooding, rock falls, slip and fallen trees) and those caused by other events (such as vehicle crashes, fire, obstruction, road works, spillage and public events). This is also a strategic and output class performance measure (RES1 and SHM4).

### Information and communication technology (ICT) asset performance measures

We've identified these systems as critical based on the potential impacts on operational and business delivery resulting from any system failure or malfunctioning.

System name	Details
ITS Network	This is the tele-communications network infrastructure that supports our transport operations and connects our road-side assets to the Transport Operations Centre, for example connecting to cameras or variable message signs.
DYNAC	DYNAC is our advanced traffic management system that controls electronic road-signs, like variable message signs and variable speed signs to manage the road network. DYNAC is also used for managing infrastructure in several tunnels, such as controlling the tunnel safety systems (deluge system, fire panels, lights).
Sydney Coordinated Adaptive Traffic System (SCATS)	SCATS is an intelligent transportation system that manages the traffic signals. It provides the phasing for a traffic situation, for both individual intersections and the whole network.
Driver Licensing Register (DLR)	The system that supports our services in relation to the issuing and management of driver licenses.
Motor Vehicle Register (MVR)	The system that supports our services in relation to the motor vehicles, for example issuing of motor vehicle registrations
FLIR	The FLIR system manages the closed-circuit television cameras used on state highways. This system provides situational awareness to operators in our traffic operation centres to better support the safe operations of the road network.
Automated invoice processing (AIP)	Automated invoice processing system for approval of payment.
National Incident and Event Management System (NIEMS)	NIEMS is a system where incidents like fallen trees or accidents are logged to enable the coordinated management of incidents from start to finish.
Transport Incident and Event Management system (TRIES)	TRIES is our system of record for incidents and events on the road network. This system is also used by our partners to support the road network and provide incident and event information on our website and to other mapping and navigation partners.

This table described the alignment of our ICT measures with the performance indicators prescribed under Cabinet Office Circular CO (19)6.

Measures	Indicator	Description
Percentage uptime (percentage of time the system is available for use)	Availability	Availability is measured as the percentage of time the system is available for use. When there is a system fault, this is logged as an incident and the time that the system is not available is monitored/recorded to calculate availability. This is different from planned outages advertised in advance where the system may not be available in order to perform regular maintenance activities.
Priority 1 outage time (average time for resolving a priority 1 incidents)	Condition	Our condition measures focus on incidents linked to unplanned interruptions, with a focus on priority 1 and priority 2 incidents (lower priority incidents don't have as high an impact on the system availability). An incident's priority is usually determined by assessing its impact and urgency. Urgency is a measure of how quickly a resolution for the incident is required, while impact is a measure of the potential damage caused by the incident before it can be resolved. Our two condition measures relate to: <ul style="list-style-type: none"> <li>incident resolution time - average time for resolving an incident</li> <li>number of incidents - number of incidents registered by the Service Desk</li> </ul> See below for the matrix we use to determine incident priority, target response time and target resolution time.
Number of priority 1 incidents Number of priority 2 incidents		
Business assessment against business requirements	Fit for purpose	To measure whether as system is fit for purpose, a business assessment is completed to determine whether the system still fulfils the business requirements.

This table described the incident priority matrix used to assess performance against the measures.

Priority code	Description	Target response time	Target resolution time
1	Critical	Immediate	1 hour
2	High	10 minutes	4 hours
3	Medium	1 hour	8 hours
4	Low	4 hours	24 hours
5	Very low	1 day	1 week