Ngā tāpiritanga
Appendices

Appendix 1: Climate-related disclosures

The Task Force on Climate-related Financial Disclosures (TCFD) has developed a framework of disclosure recommendations designed to solicit consistent, decision-useful, forward-looking information on the material financial impacts of climate-related risks and opportunities. This is our first disclosure against the TCFD recommendations and describes the progress that we have made to date. It also signals opportunities to support fuller disclosure during 2021-22 and beyond.

Waka Kotahi has a unique and critical role to play in supporting the government's response to climate change. Together with our local partners, we are both a nationwide investor in New Zealand's land transport system and a deliverer of transport infrastructure and services. Our activities have a wide-ranging impact on the land transport system, particularly the state highway network, one of New Zealand's largest physical assets.

The role of Waka Kotahi includes shaping the future land transport system; managing investment of the National Land Transport Fund (NLTF) to deliver on government and regional priorities; maintaining, renewing and operating the state highway network; and influencing the way people use the land transport system.

Waka Kotahi is currently required to give effect to a Climate Change strategic priority under the Government Policy Statement on Land Transport 2021, which includes an outcome of giving effect to the emissions reduction target the Climate Change Commission recommended to Cabinet until emissions budgets are released. In future, the government's Emissions Reduction Programme (ERP) and the requirements of the Carbon Neutral Government Programme will influence our assessment of climate-related risks and opportunities and our reporting obligations. The government's ERP, and in particular the transport chapter, will have significant implications for our climate change mitigation and adaptation work.

Funding for government objectives related to transport emissions over the medium to long-term (in particular funding outside the NLTF) is yet to be determined. One of the most significant risks to achieving the government's objectives is that the technological, behavioural and policy changes required for Aotearoa to meet emissions reduction targets are expected to create significant challenges for how land transport is currently funded. Funding sources for the NLTF include fuel excise duty, road user charges and tolls, and vehicle and driver registration and licensing. Thus, a shift to lower carbon modes of transport (for passengers and freight), reducing travel demand, and accelerating the uptake of electric vehicles will negatively impact on revenue flow into the NLTF. In order to achieve the proposed emissions reduction outlined in the Ministry of Transport's (MoT) Hīkina te kohupara, significant investment in addition to the NLTF for public transport and active modes will be required. This would need to be complemented by supportive regulatory and planning settings for transport and the built environment, and pricing mechanisms that encourage behaviour change.

In line with recommendations from He Pou a Rangi Climate Change Commission (CCC) and the government's draft ERP, we are evolving and adapting our existing work, which includes:

- Arataki – our 10-year view of what is needed to deliver on the government's current priorities and long-term outcomes for the land transport system[1]
- Te kāpehu – our new strategic direction and performance framework, reflected in our statement of intent[2] and annual statement of performance expectations

1 www.nzta.govt.nz/planning-and-investment/planning/arataki/arataki-version-2
2 www.nzta.govt.nz/resources/nz-transport-agency-statement-of-intent-main-index/soi-2021-2026

- Toitū te taiao – our sustainability action plan (2020)[3] and Tiakina te taiao – our sustainability monitoring report (2020)[4]
- Part 1 Tiro rangi – our adaptation action plan 2021
- Keeping cities moving – our national mode shift plan (2019)
- our resilience framework (2018)
- our investment decision-making and delivery approaches through the National Land Transport Programme (NLTP), where appropriate.

The following sections summarise the progress of Waka Kotahi to date with respect to each of the TCFD themes of governance, strategy, risk management and metrics and targets.

Governance

The governance of our response to climate change is evolving. We've established a new focussed Executive Leadership team (ELT) subcommittee to provide direction and oversight for climate-related matters and support a more systematic work programme.

Disclosures	Future opportunities
Board oversight of climate-related risks and opportunities • On a monthly basis, the Board reviews a data dashboard including country-wide and internal organisation electric vehicle uptake, and new cycleway delivery. Approximately every quarter the Board reviews a more detailed environment and sustainability section with climate-related metrics. • The Board has annual oversight of progress against climate metrics defined in Toitū te taiao – our sustainability action plan. • Other climate-related matters are taken to the Board on an adhoc basis. For example the Board met with the CCC to discuss its draft advice to the government, and subsequently wrote to the CCC to more formally outline its views. • The Board has given a strong signal on the importance of climate change by requesting our early commitment to and disclosure against the recommendations of the TCFD.	• Define processes and frequency by which the Board is informed about material climate-related issues, including NLTF planning and investment decisions. • Provide ongoing briefings and workshop education sessions with the Board on climate risk. • Formally review the benefits of introducing climate-related performance objectives.

3 www.nzta.govt.nz/assets/About-us/docs/sustainability-action-plan-april-2020.pdf
4 www.nzta.govt.nz/tiakina-te-taiao-our-sustainability-monitoring-report

Disclosures	Future opportunities
Management's role in assessing and managing climate-related risks and opportunities • Responsibility for delivering on climate-related actions is allocated across Waka Kotahi. The strategic direction for climate change mitigation is set by our Safety, health and environment group, which also maintains oversight of progress on key actions and monitors performance against indicators and reports directly to the ELT and Board. • System policy, planning and design is overseen by the Transport services group, which also partners with local government to deliver climate-related activities in relation to adaptation and resilience as well as mitigation (including public transport, walking and cycling). For example, commentary on public transport patronage and decarbonisation of the public transport fleet has been included in the group's monthly report to the Board. • Investment decision-making tools and policies for valuing, assessing, prioritising and funding programmes and activities (including with regard to climate change objectives) are overseen by our Corporate support group. • Roles and responsibilities may be adjusted in future by the new Climate change and sustainability ELT subcommittee (CC ESC). • The CC ESC will provide direction and oversight of matters including climate change, and will meet and report monthly into the Board Risk and Assurance subcommittee.	• Define the organisational management and oversight of climate change risks and issues. • Continue to define the scope of how the CC ESC will operate and influence the organisation's approach to climate-related risks and opportunities, including planning and investment decisions.

Strategy

Waka Kotahi currently approaches our response to climate change through two areas of focus: adaptation (reflected in Part 1 Tiro rangi our adaptation action plan 2021) and mitigation (reflected in Toitū te taiao, our sustainability action plan and Keeping cities moving, our national mode shift plan). These areas are interdependent and will further integrate as we evolve our oversight of and response to climate-related issues. Central to our response is the avoid-shift-improve framework embedded in Toitū te taiao, which has also been adopted by the Ministry of Transport and the CCC to inform transport elements of the government's emerging ERP and the climate change strategic priority in the GPS. Our role in planning and delivering transport investments through the NLTP is central to achieving our strategic direction. Investment policies are reviewed every three years or when a new Government Policy Statement (GPS) on land transport is released.

Disclosures	Future opportunities
Identification of climate-related risks and opportunities over the short, medium and long-term • As we develop Tiro rangi, we have identified certain priority climate risks - mainly physical risks - and have begun identifying transitional risks. Physical risks include coastal erosion, heat stress for materials, changes to maintenance routines and seasons, and thermal expansion of structures. • We have undertaken an initial assessment on certain aspects of our operational resilience, for example a coastal inundation assessment identifying state highway hazards from sea level rise and storm surge. • In 2020, through Toitū te taiao, we adopted the avoid-shift-improve framework focused on sustainable transport and carbon reduction. The framework is primarily focused on the opportunities and activities in the short, medium and longer terms required to reduce transport emissions. • Keeping cities moving identifies priority actions for reducing reliance on cars and accelerating uptake of low-emissions transport modes. We have also partnered with councils to develop mode shift plans for the six high-growth urban areas (Auckland, Tauranga, Hamilton, Wellington, Christchurch, Queenstown) to inform future city-based approaches. • To inform our future climate-related disclosures we have undertaken a gap analysis between our current processes and disclosures and the TCFD recommendations.	• Undertake a systematic exercise across the organisation to identify our material adaptation and mitigation risks and opportunities over the short, medium and long term.

Disclosures	Future opportunities
Impact of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning • The climate mitigation aspects of Toitū te taiao have informed Te kāpehu and Arataki, both of which recognise the need for key shifts throughout the transport system in response to climate change. • Te kāpehu describes how we'll realise our vision for the next five years and reflects the system changes we need to see to deliver on the government's long-term strategic direction for the land transport system. Environmental sustainability – reducing harm to and improving the environment with a focus on reducing greenhouse gas emissions – is one of four system outcomes of Te kāpehu, with detailed operational delivery measures and milestones to ensure we can track progress. • Arataki provides our ten-year view of what is needed to deliver the land transport system that the government and communities want. It identifies five step changes, including 'tackling climate change', to deliver long-term outcomes for the land transport system. In relation to climate change adaptation, Arataki indicates that our initial efforts will focus on areas most likely to face disruption from coastal and inland flooding and intense storms. Early intervention is key to plan for the longer-term effects of sea-level rise. Toitū te taiao provides the framework for achieving the climate change mitigation step changes; Keeping cities moving provides the national and city-based action plan, for mode shift as a key contribution to the mitigation step change; and Tiro rangi, our adaptation action plan will provide the framework for achieving the climate change adaptation step change. • The GPS also has a statutory role to provide direction for land transport investment over a 10-year period but with three-yearly reviews. When making investment decisions using the NLTF, Waka Kotahi must give effect to the GPS and its strategic priorities. The GPS 2021 identifies climate change as one of four strategic priorities, and investment according to the NLTP 2021-24 will advance that priority within the GPS/NLTP framework, including through investment supporting emissions reduction and increased resilience of the transport system. However significant additional funding will be needed to deliver the transformative changes signalled in the CCC's report and in the draft ERP.	• Incorporate climate risks and opportunities into our long-term planning and investment framework and functions, guided by Toitū te taiao GPS and parts 1 and 2 of our adaptation action plan. This will enable us to deepen our understanding of impacts on our business and financial planning.
Use of climate-related scenarios to understand the resilience of the organisation's strategy • The resilience of our operating model to extreme situations has been given a clear test during the COVID 19 pandemic. This required us to be agile, utilising collaborative technology and enabling remote working. We worked with contractors to rapidly close down and secure construction projects, and maintain essential public transport services. • We are using scenario modelling from local councils, NIWA and others to assist with risk identification. We will apply the best practice Adaptive pathway model (initially developed by Hawke's Bay Regional Council) to the highest-risk locations. This involves consideration of options to defend, accommodate and/or retreat from climate-related hazards, and the thresholds for moving between these options. • For certain capital projects since 2018, we have been assessing the future projected changes to sea levels, river flows and storm water under different greenhouse gas scenarios. These projects have considered thresholds for design and future adaptation, primarily taking the form of ensuring foundations will support raising surface levels of pavements in future.	• Using the output from a systematic risk and opportunity identification exercise (discussed below), define how scenario analysis can be used to deepen our understanding of the resilience of our strategy. • Understand the impact the government's ERP, and in particular the transport chapter, will have on how we use scenarios, and implications for both climate mitigation and adaptation work.

Risk management

We are aware of the complexity involved in identifying and managing our climate-related risks, which are longer-term, uncertain, dynamic, interdependent and cumulative. For example, COVID-19 has had a lasting impact on how and when people travel, which has impacted on our revenue. Consequently, ensuring there is sufficient funding (including, where appropriate, from our local government investment partners) to deliver a net zero emissions future is a known major strategic risk to be managed. Investment will be successful only if complemented by other levers such as planning and regulation (for example, road pricing). A key next step is to take an integrated view of climate adaptation and mitigation, and apply our existing risk framework to climate risk and opportunities.

Disclosures	Future opportunities
Identifying and assessing climate-related risks • For some time, we have been identifying climate-related risks, including a qualitative assessment of physical and transition risks. • The national resilience programme business case also identifies and rates nationally important risks from natural hazards (including climate-related) in the Aotearoa land transport system, and addresses a range of system-wide resilience process issues. • Our existing risk management framework is based on the ISO 13000 standard for risk management and comprises five key steps including risk identification. Climate-related risk identification, assessment and management will be undertaken using our existing risk management framework.	• Undertake a systematic climate-related risk (and opportunity) identification exercise to highlight the most material physical and transition risks that the organisation faces. This includes assessing the impact, including likelihood of occurrence and time horizon and moving towards quantification of risks.
Managing climate-related risk • In response to adaptation risks, we are developing a climate change adaptation action plan (due by end of 2021) that will describe how Waka Kotahi will adapt to the fundamental shifts needed through the development, management, and operation of the land transport system. It will enable us to meet climate change challenges with resilience and take advantage of opportunities arising in future.	• Review our existing risk management framework to understand fully how effective it will be to manage climate-related risk, and update where required.
Integrating climate related risks into risk management • Waka Kotahi worked with the MoT, the Ministry for the Environment (MfE) and the CCC to inform the Commission's advice to the government on emission budgets and policy pathways, and to inform the MoT's discussion paper on reducing transport emissions. This paper is likely to form the basis of the transport chapter in the government's ERP due by the end of 2021. Our input to these processes has been guided by Toitū te taiao, our sustainability action plan. • Waka Kotahi has also worked closely with MfE through development of the national climate change risk assessment 2020. • The new adaptation legislation (one of three acts to replace the Resource Management Act) will provide a framework for future engagement and planning with councils and communities on adaptation for example, managed retreat from flood- or slip-prone areas, and from coastal areas that may be at risk from sea-level rise. This will inform our ongoing investment plans for maintenance and renewal of strategic assets – including where we stop investing in assets that are not 'future-proof'. Using a 'whole of life' model presents important questions to be answered, such as understanding minimum levels of asset utilisation needed to be confident there is a net carbon benefit, and what exceptions might need to be made to proceed with certain projects with anticipated lower use.	• Review Toitū te taiao against the final ERP when it is available to determine how this plan may need to evolve. • Confirm how our adaptation action plan (Part 2) can address prioritisation and management of adaptation risks within our existing risk management framework, applying ISO-14091:2021 on adaptation to climate change where relevant.

Metrics and targets

Our metrics and targets are evolving in line with our strategic direction and the government's priorities. Our new performance framework[5] acknowledges the need to tackle climate change and emissions reduction through multiple interventions and aligns with the avoid-shift-improve framework embedded in Toitū te taiao.

Disclosures	Future opportunities
Metrics used to assess climate-related risks and opportunities • In 2021, we released our first sustainability monitoring report – Tiakina te taiao, which sets out the metrics we monitor to assess progress on land transport emissions reduction, including: - New Zealanders' greenhouse gas emissions from land transport - social and economic implications by mode of transport such as the proximity to home of New Zealanders' jobs - proportion of trips taken by mode of transport - proportion of vehicles by fuel type - vehicle kilometres travelled - the carbon footprint of materials used in construction and maintenance projects via the ISCA-IS Rating Scheme for projects over $15m.	• Once we have obtained a systematic view of the most material climate-related risks and opportunities across the organisation, we will ensure metrics remain materially relevant and appropriate and their reporting and monitoring is driving real year-on-year change.
Scope 1, 2 and 3 greenhouse gas emissions • We are tracking our scope 1, 2 and 3 emissions through the Toitū Carbonreduce certification programme[6]. Total gross emissions from 1 July 2019 to 30 June 2020 were 3,809.77 tonnes of carbon dioxide equivalent. • This data has a number of uses including as an input to the Carbon Neutral Government Programme, which requires the public sector to achieve carbon neutrality by 2025.	• Fully disclose Scope 1, 2 and 3 emissions including year-on-year trends on our website.
Targets used to manage climate-related risks and opportunities • In 2021, we set SMART (specific, measurable, achievable, realistic, and time-constrained) reduction targets for our corporate emissions. These targets are in line with New Zealand's commitment of achieving net zero by 2050. • At a strategic level, in our annual statement of performance expectations we have set medium-term targets for reducing land transport greenhouse gas emissions, including reducing light vehicle travel in major urban areas, increasing the share of travel on public transport and active modes (walking and cycling), increasing the uptake of electric vehicles, and improving access to key destinations via public transport and active modes. • These targets will be aligned to the transport chapter in the government's ERP during 2021/22 as appropriate (including to give effect to the climate change strategic priority in GPS 2021).	• Continue to disclose and expand our year-on-year performance against our climate-related targets to better demonstrate trends and progress towards our goals.

Next steps

We have completed a maturity assessment against the TCFD's recommended disclosures. This assessment will inform the development of a roadmap outlining opportunities and actions to improve our disclosures in coming years.

5 www.nzta.govt.nz/resources/nz-transport-agency-statement-of-intent-main-index/soi-2021-2026
6 www.toitu.co.nz/what-we-offer/carbon-management

Appendix 2:
Asset performance

Under Cabinet Office Circular CO (19)6, all government agencies, including Waka Kotahi, are required to report on the performance of their assets in their annual reports . It requires agencies to capture and use in internal management and decision-making processes, relevant indicators of past and projected asset performance, such as asset utilisation, asset condition, and fitness for purpose.

Performance of state highway assets

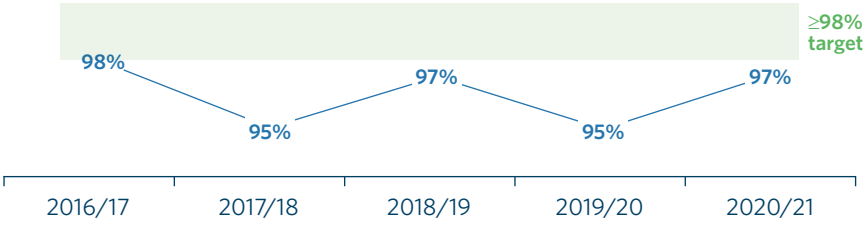
Our state highway assets were assessed this year using performance measures from our state highway maintenance output class and from our annual national pavement conditions results.

We are working on developing a new set of measures in the next financial year to better demonstrate the performance of our state highway assets.

The explanatory notes of the output class non-financial performance measures can be found in appendix 4, from page 190[7].

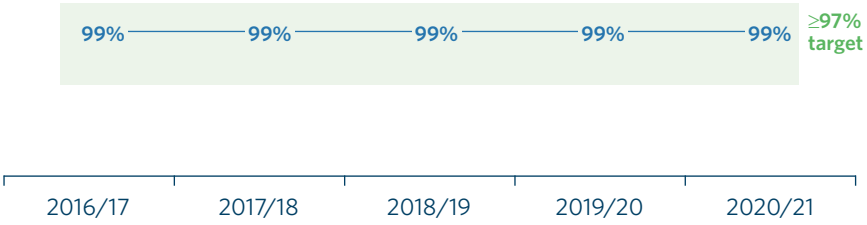
Proportion of the network above skid threshold

This is also an output class measure for state highway maintenance. Refer to page 192 for details on this measure.



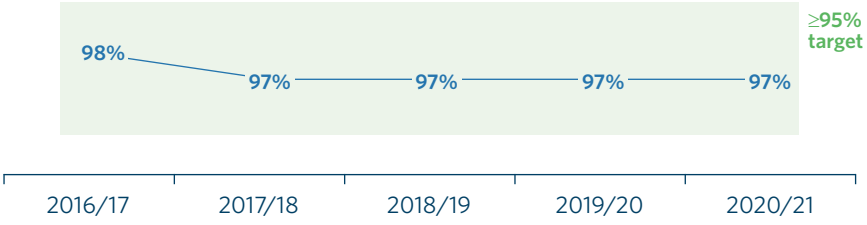
Proportion of the state highway network with rutting ≤20mm in depth.

For explanatory notes refer to appendix 4 – asset performance measures on page 195.



Proportion of the state highway network with roughness ≤150 NAASRA score

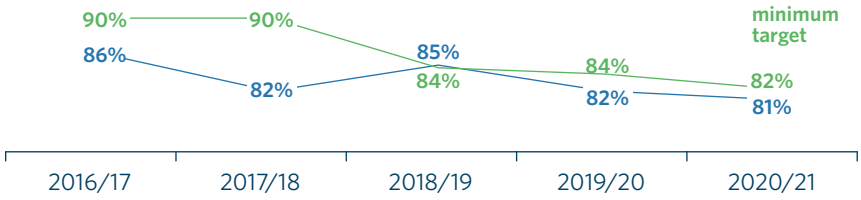
For explanatory notes refer to appendix 2 – asset performance measures on page 195.



7 Cabinet Office Circular CO (19) 6 Investment Management and Asset Performance in the State Services superseded Cabinet Office Circular CO (15) 5. More information can be found on: https://dpmc.govt.nz/sites/default/files/2019-10/co-19-6-investment-management-and-asset-performance-state-services.pdf.

Proportion of unplanned road closures resolved within standard timeframes[8]

This is also an output class measure for state highway maintenance. Refer to page 192 for details on this measure.



Performance of information and communication technology assets

This section provides information on the performance of our information asset management systems, including our critical information and communications technology (ICT) systems. We've identified these systems as critical based on the potential impacts on operational and business delivery resulting from any system failure or malfunctioning.

We are addressing some of our technology system risks through our Technology Risk Mitigation Programme to ensure the systems are up to date, supported, secure, and have redundancy in place to continue to deliver Waka Kotahi core services. This is a risk-based view to ensure that critical services are addressed first.

We have five ICT asset performance measures across the categories of availability, condition and fit for purpose, which align with the expectations for asset performance assessment as described in CO (19) 6. In 2020/21 we aimed to set a baseline for our asset performance measures (see the following table for our 2020/21 baseline).

See the explanatory notes in appendix 4 (pages 196 - 197) for additional information on our ICT asset performance measures, including a description of each measure, the matrix we use to determine incident priority and a glossary describing our critical ICT systems.

8 Note that the change in target across the years reflects the impacts of weather events on the results of the measure in the previous reporting year. This variability in target-setting will be addressed from 2021/22 as we begin assessing performance separately for closures caused by weather events and those caused by other incidents. This will allow us to understand better the dependencies within the measure and get more consistent results. There has also been a slight scope change in the measure from 2019/20 due to the change in the definition of the urban and rural roads. We have included historical results on the graph because the recalculated 2019/20 data did not change the result significantly, that is, from 81% to 81.8%.

Asset performance baseline – June 2020 to June 2021

System name	Availability	Condition			Fit for purpose
	Percentage uptime [A]	Priority 1 outage time [B]	Number of priority 1 incidents	Number of priority 2 incidents	Business assessment [C]
ITS Network	99.84%	13 hours 44 mins	6	4	A project is under way to address identified risks.
DYNAC	99.93%	5 hours 55 mins	5	5	A project is under way to upgrade the system to mitigate identified risks.
SCATS	99.98%	1 hour 50 mins	1	1	Currently fit for purpose
Driver Licensing Register (DLR) Landata, consisting of: 1. Motor vehicle register (MVR) 2. LATIS – Vehicle inspection service 3. RUC – Road user charges	99.421%	50 hours 46 min	2	5	Currently fit for purpose.
FLIR Latitude network video management	99.97%	2 hours 26 mins	1	6	Currently fit for purpose.
AIP – Automated invoice processing	99.73%	24 hours	1	0	Currently meets business needs. Work is underway to identify future requirements.
NIEMS	99.98%	1 hour 22 mins	2	4	Currently meets core requirements for WTOC and Christchurch City Council but unable to deliver an integrated national event and incident management solution for Waka Kotahi. A review is planned for 2024 to determine future direction.
TRIES	99.89%	9 hours 35 mins	3	3	This is a legacy bespoke system currently the centralised system for incidents managed by Waka Kotahi. A review is planned for 2024 to determine future direction.

[A] The percentage of time the system is available for use.

[B] Average time for resolving a priority 1 incidents.

[C] To measure whether as system is fit for purpose, a business assessment is completed to determine whether the system still fulfils the business requirements.

Appendix 3:
Significant capital projects performance against milestones

Kaikōura recovery, Manawatū Gorge replacement and Te Ore Ore reinstatement

Project	2020/21 milestone	2020/21 result	Commentary
Kaikōura earthquake recovery	Practical completion.	Achieved	Physical works of all projects were completed by June 2021, but, practical completion was not achieved until July 2021.
Te Ahu a Turanga, Manawatū Tararua highway (Manawatū Gorge replacement)	Regional consents granted, land acquisition completed, management plans/outline plan of works approved, detailed design completed, enabling works completed and main construction works commenced.	Achieved	All milestones were achieved and the project is ahead of its earthworks programme. There is strong community, council and iwi support for the project. Broader outcomes are being implemented – the project is well known for its approach to health, safety and wellbeing, and won a national planning award.
SH4 Te Ore Ore reinstatement	Regional consents granted, land acquisition completed, alteration to designation accepted, detailed design completed, and main construction works completed. Practical completion.	Progress made, but not achieved	The milestones were not achieved because the cultural impact assessment, consent lodgement and property acquisition were delayed. We are increasing our focus on building iwi relationships in parallel with property and cultural mitigation negotiations. Construction is now programmed for 2022/23.

Significant state highways

Project	2020/21 Milestone	2020/21 Result	Commentary
Pūhoi–Wellsford: Pūhoi–Warkworth	All concrete and steel structures completed. Earthworks completed in all areas except Northern Zone. Pavements completed in Central South and South Zones.	Good progress made, but not achieved	Structures are substantially complete, but, there were some delays due to COVID-19 disruptions and in getting an endorsement from the joint venture on a compliant design for pavements. Opening date is now programmed for May 2022.
Pūhoi–Wellsford: Warkworth–Wellsford	Route protection application (designation and consents) decisions announced.	Achieved	A decision on the resource consents and notice of requirement was received in March 2021.
Waikato Expressway: Hamilton section	Open to traffic.	Good progress made, but not achieved	The programme was reset due to the delays and impacts of COVID-19. Road opening is now expected in mid-2022.
Waikato Expressway: Cambridge to Piarere	Detailed business case completed and approved by Waka Kotahi Board. Pre-implementation phase commenced.	Achieved	The detailed business case was approved in May 2021. Pre-implementation has commenced with property negotiations underway.
Wellington Northern Corridor: Transmission Gully	Open to traffic.	Good progress made, but not achieved	The milestone was not achieved because the programme was reset due to COVID-19. A new road opening completion date of 27 September 2021 was agreed during the COVID-19 claim negotiations, with a final completion date of 27 March 2022. There were delays under the new construction programme due partly to poorer than average weather through spring and summer. Reasonable progress was made in recent months, but it is unlikely that road opening will occur in September 2021.
Wellington Northern Corridor: Peka Peka to Ōtaki	Asphalt plant consented and construction of structural asphaltic pavement underway.	Achieved	Structural pavement construction has commenced and earthworks and bridges are almost completed. However, the road opening date was pushed out to late 2022 due to the impact of COVID-19 and lack of grade 40/50 binder material to complete the works.
Christchurch Motorways: Christchurch Northern Arterial Rural with QEII Drive	Practical completion.	Achieved	Practical completion was achieved in December 2020. The road has been opened.
Christchurch Motorways: Christchurch Southern Motorway (Stage 2)	Practical completion.	Achieved	Practical completion was achieved in December 2020. The road has been opened.

Significant investments in Auckland

Project	2020/21 Milestone	2020/21 Result	Commentary
Northern Corridor Improvements	Resource Management Act consent for Rosedale bus station approved. SH1 central median temporary traffic management plan switch implemented.	Achieved	All milestones were achieved on or ahead of schedule. We expect the project will be completed in September 2022.
Additional Waitematā Harbour Connections	Rapid transit connection across the Waitemata Harbour business case commenced.	Progress made, but not achieved	Some progress was made on the Additional Waitemata Harbour Connections (AWHC), but, the project has slowed down because of its strong interdependency with the City Centre to Māngere light rail project. The mode and alignment of the light rail project will inform the future pathway for AWHC. Investigations are expected to commence in 2021/22.
Supporting Growth Alliance	North strategic detailed business case completed.	Not achieved	The milestone was not achieved due to financial constraints caused by COVID-19 requiring some changes to the programme timeline.

Significant investments in Wellington (Let's Get Wellington Moving)

Although significant work was delivered in 2020/21, Let's Get Wellington Moving (LGWM) has been subject to delays as a result of three key factors.

- The most significant delay occurred as a result of the programme health check commissioned on behalf of the LGWM Partnership Board and LGWM Governance Reference Group early in 2020/21. Detail of the check's findings emerged in the early part of quarter three, resulting in significant shifts within the programme, across both scope and resource (including programme and governance structure).
- The impacts of COVID-19 affected the ability to commission certain resources (specifically overseas resources). It also created work inefficiencies and made engaging with the public and stakeholder groups challenging.
- Public reaction and partner response to the Early Delivery Golden Mile Project resulted in concerns over their commitment to the programme vision and objectives, along with associated delays for this project and the wider programme.

Project	2020/21 Milestone	2020/21 Result	Commentary
Early Delivery Central City and SH1 walking and cycling speed	Central city safer speeds and pedestrian intersection improvements completed. Cobham Crossing and safer speeds east of Mt Victoria Tunnel completed.	Good progress made, but not achieved	The milestones were not achieved due to the impacts of COVID-19 on access to specialist international resources and delays resulting from the actioning of the programme health check recommendations. This included the review and reset of programme objectives to reflect the current economic, climate and policy conditions. We expect that the single stage business case, design and construction will be completed by June 2022.
Early Delivery Golden Mile	Early improvements for bus priority and pedestrian amenity completed. Single stage business case for Golden Mile approved. Pre-implementation commenced.	Good progress made, but not achieved	Early improvements trials were cancelled due to COVID-19. We've substantially completed the single stage business case and expect it to be approved in early 2021/22, with pre-implementation to commence in August 2021.
Early Delivery Thorndon Quay & Hutt Road	Single stage business case approved. Pre-implementation commenced.	Good progress made, but not achieved	The milestones were not achieved due to delays resulting from the actioning of the programme health check recommendations. Public consultation was completed and we expect the single stage business case to be approved in December 2021.
Mass Rapid Transit	Indicative business case completed.	Good progress made, but not achieved	The milestones were not achieved due to the impacts of COVID-19 on access to specialist international resources and delays resulting from the actioning of the programme health check recommendations. This included the review and reset of programme objectives to reflect the current economic, climate and policy conditions. We've combined the indicative business case for this project with the Strategic Highway Improvements indicative business case. We expect the combined business case to be completed by June 2022.

Project	2020/21 Milestone	2020/21 Result	Commentary
Strategic Highway Improvements	Indicative business case completed.	Good progress made, but not achieved	The milestones were not achieved due to the impacts of COVID-19 on access to specialist international resources and delays resulting from the actioning of the programme health check recommendations. This included the review and reset of programme objectives to reflect the current economic, climate and policy conditions We've combined the indicative business case for this project with the Mass Rapid Transit indicative business case. We expect the combined business case to be completed by June 2022.
Travel Demand Management	Indicative business case completed.	Good progress made, but not achieved	We've delivered an advanced draft of the travel behaviour change single stage business case, which will be finalised but completion of the broader programme public engagement scheduled for December 2021.
City Streets	Indicative business case completed. First wave of early works identified and implemented.	Good progress made, but not achieved	The milestones were not achieved due to delays resulting from the actioning of the programme health check recommendations, including the review and reset of programme objectives to reflect the current economic, climate and policy conditions. Approval of the indicative business case is planned for September 2021.

Investments in regional connections

Project	2020/21 Milestone	2020/21 Result	Commentary
New Ōpaoa River Bridge (formerly Opawa Bridge Replacement)	Practical completion.	Achieved	Practical completion was achieved in October 2020.
Loop Road North to Smeatons Hill safety improvements	Practical completion.	Good progress made, but not achieved	The project was delayed because the project scope was extended to allow for the dual lane design to be revised. The bridge location and alignment south of the roundabout does not match the preferred alignment for the future SH1 Whangārei to Port Marsden Highway project, which meant design works for that section could not begin. Project delays were also exacerbated by COVID-19 alert level changes that disrupted construction works.
SH3 Awakino Tunnel Bypass	Practical completion of Separable Portion 1 roadworks.	Good progress made, but not achieved	Road and new bridges were opened to traffic in May 2021. We expect remaining works to be completed mid-2021.
Mt Messenger and Awakino Gorge Corridor	Rapanui Passing Lane and Tongaporutu Intersections – consents gained, land acquisition completed, and construction commenced.	Good progress made, but not achieved	All milestones for Rapanui Passing Lane were achieved. Tongaporutu Intersection milestones were substantially achieved with the commencement of enabling works for construction.
Mt Messenger Bypass	Construction site established and major construction works commenced.	Progress made, but not achieved	The milestones were not achieved because of delays in getting resource consent and designation. This, along with prolonged property acquisition, delayed commencement of construction. High Court appeals are ongoing while other works are progressed where possible.
Napier Port Access Package: Hawke's Bay Expressway Safety Treatments	Additional works completed.	Good progress made, but not achieved	Additional works were completed except for the pou carving, which is expected to be completed in 2021/22. Local iwi requested the opening and blessing be held in June 2022 on the celebration of Matariki.
Napier Port Access Package: Prebensen Hyderabad Intersection upgrade	Physical works awarded and completed.	Progress made, but not achieved	We're tendering for physical works with awarding expected shortly after scheduled tender close on 31 July 2021. Construction works are due to be completed by the end of December 2021.
Nelson Future Access[9]	Detailed business case completed to inform development of Nelson Regional Land Transport Plan.	Progress made, but not achieved	While the detailed business case has been developed, the programme was reset to allow Nelson City Council to endorse the business case, which will enable community engagement. We expect the detailed business case to be completed in December 2021.

9 Formerly the Nelson Southern Link.

New Zealand Upgrade Programme – Transport

When the government initiated the New Zealand Upgrade Programme (NZUP) transport package, some projects were still in early stages of development with detailed project information still being established. Several significant changes have occurred since then including impacts of COVID-19, increases in construction costs, and release of the Climate Change Commission's recommendation that transport emissions need to be halved by 2035.

Following initiation of the programme, Waka Kotahi did significant work to gain a better understanding of project risks, scope, costs and timeframes. As a result, there were some changes to project timeframes and an increase in cost estimates due to a range of factors, including significant cost increases in property, construction materials and resources, better scope definition and more detailed investigations.

In June 2021, the government increased investment to support delivery of the programme, which allows Waka Kotahi to fully deliver 16 significant projects across the country that have confirmed scopes, costs and timeframes and are designed to respond better to climate change and housing needs.

The government also decided to make changes to a small number of projects. Papakura to Drury South stage 2 will no longer be progressed through NZUP and Takitimu North Link Stage 2 will be funded for route protection only. Waka Kotahi was also asked to carry out more work to re-scope Whangārei to Port Marsden Highway and Mill Road.

Project	2020/21 Milestone	2020/21 Result	Commentary
Northland package: SH1 Whangarei to Port Marsden	Detailed business case completed. Design developed. Notice of requirement and consenting strategy developed and lodged.	Progress made, but not achieved	The milestones were not achieved due to the decisions arising from the re-baselining of NZUP. The project has now been rescoped to focus on safety improvements along the existing state highway and a new rail line to Northport. Milestones for 2021/22 are being developed.
Auckland package: Penlink	Intellectual property transferred from Auckland Transport to Waka Kotahi. Design contract tendered.	Achieved	All milestones were achieved and full delivery of the project as a proposed toll, two-lane road with a shared use path for people walking and on bikes has been confirmed under the re-baselined NZUP.
Auckland package: Mill Road Corridor	Design contract tendered.	Not achieved	The milestone was not achieved due to the decisions arising from the re-baselining of NZUP. A review of the scope of the South Auckland package is underway with scope expected to be finalised by December 2021.
Auckland package: SH1 Papakura to Drury South[10]	Construction for Stage 1A commenced. Consents and notice of requirement for stage 1B and 2 lodged.	Achieved	All milestones were achieved except for the lodgement of consents and notice of requirement for stage 2. Stage 2 will no longer progress to implementation due to decisions arising from the re-baselining of NZUP.
Auckland package: Northern Pathway Westhaven to Akoranga[11]	Preferred alliance team selected.	Achieved	The milestone was achieved and full delivery of the project as a walking and cycling link between central Auckland and the North Shore has been confirmed under the re-baselined NZUP.

10 Formerly the Papakura to Bombay project.
11 Formerly the Auckland Harbour Bridge Walking and Cycling Facility and Seapath.

Project	2020/21 Milestone	2020/21 Result	Commentary
Waikato and Bay of Plenty package: SH1/SH29 intersection	Pre-implementation professional services contract awarded. Designation, consents, design and property acquisition commenced.	Achieved	The milestone was achieved and full delivery of the project has been confirmed under the re-baselined NZUP.
Waikato and Bay of Plenty package: Takitimu North Link Stage 1[12]	Design and construct tendered and awarded.	Achieved	The design and construct contract was awarded in May 2021. Full delivery of the project has been confirmed under the re-baselined NZUP, with construction expected to start in 2021/22.
Waikato and Bay of Plenty package: Takitimu North Link Stage 2[13]	Designation, consents, design and property acquisition commenced.	Not achieved	The milestones were not achieved due to decisions arising from the re-baselining of the NZUP. The scope of the project has been confirmed as to route protection only.
Wellington package: SH58 safety improvements - stage 2	Consents gained. Contract awarded. Construction in zones 1 and 3 commenced.	Progress made, but not achieved	The milestones were not achieved because of uncertainties on scope and funding that required confirmation under the single stage business case. Full delivery of the project has been confirmed under the re-baselined NZUP.
Wellington package: SH2 Melling efficiency and safety improvements	Designation and consent application lodged.	Progress made, but not achieved	Designation and consent application lodgement have been delayed to allow for further technical investigation and the assessment of environmental effects. Consents are due to be lodged early in the 2021/22 year. Full delivery of the project has been confirmed under the re-baselined NZUP.
Wellington package: Ōtaki to north of Levin	Detailed business case and preferred alignment finalised. Pre-implementation design contract tendered.	Good progress made, but not achieved	The preferred alignment has informed the draft detailed business case expected to be finalised in October 2021. Tender of the pre-implementation design contract has been slightly delayed.
Canterbury package: Rolleston access improvements	Single stage business case finalised. Pre-implementation commenced.	Progress made, but not achieved	The milestones were not achieved due to delays resulting from the re-baselining of the NZUP. Delivery of the project has been confirmed. The detailed business case will be completed by December 2021. Pre-implementation will follow in early 2022.
Canterbury package: Brougham Street Improvements	Single stage business case finalised. Pre-implementation commenced.	Good progress made, but not achieved	The business case has been finalised and is pending approval. The pre-implementation phase will commence on approval of the business case.
Canterbury package: SH75 Halswell Road Improvements	Professional services contract tendered and awarded.	Achieved	The milestones were achieved. The detailed business case phase is expected to be completed in August 2021.

12 Formerly the Tauranga Northern Link project.
13 Formerly the SH2 Omokoroa to Te Puna project.

Project	2020/21 Milestone	2020/21 Result	Commentary
Canterbury package: West Melton improvements	Design contract tendered.	Achieved	The milestone was achieved, and the design contract has been awarded.
Canterbury package: SH1 Walnut Avenue intersection improvements	Construction contract tendered and awarded.	Good progress made, but not achieved	The construction contract has been tendered but not yet awarded.
Canterbury package: SH1 Tinwald corridor improvements	Preferred option assessed and developed.	Achieved	The milestones were achieved. The preferred option scheme plans have been incorporated in the single stage business case which is scheduled for approval in August.
Queenstown package: SH6A corridor improvements	Detailed business case finalised.	Achieved	The detailed business case was approved in February 2021. Full delivery has been confirmed under the re-baselined NZUP.
Queenstown package: SH6 Grant Road to Kawarau Falls improvements	Detailed business case finalised.	Achieved	The detailed business case was approved in February 2021. Full delivery has been confirmed under the re-baselined NZUP.

Appendix 4:
Explanatory notes for non-financial performance measures

Output class measures

State highway improvements

SHI1 Proportion of state highway improvement activities delivered to agreed standards and timeframes assesses the delivery of state highway improvement programmes and projects against milestones and budget. It also assesses the delivery of property acquisition programmes against budget. For significant capital projects, delivery to milestones is assessed using a 4-point rating based on the extent of achievement against the milestones. All other projects are assessed based on achievement against planned completion schedule. Each programme result is weighted based on the size of the programme budget for the year compared to the total budget of all programmes in the year. The overall delivery to milestones result is the sum of the weighted programme results. Delivery to budget is assessed by comparing expenditure with budget for the year. For the overall result, delivery to milestones and delivery to budget are equally weighted. Delivery to quality standards is tested using cost as a proxy through the different gateways in the project management process; that is, 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. The measure includes only programmes and projects funded by the National Land Transport Fund.

SHI2 Length of the state highway network modified to align with safe and appropriate speed tracks the length of the state highway network that has speed limit reductions or engineering improvements completed during the year to ensure travel speeds are safe at current or higher speed limits where appropriate.

Local road improvements

LRI1 Length of the state highway network aligned with safe and appropriate speed, tracks the length of the local road network that is reviewed and confirmed to have safe and appropriate speed limits during the year.

Road safety promotion and demand management

RSP1 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.

Regional improvements

RI1 Proportion of regional improvement activities delivered to agreed standards and timeframes assesses the delivery of regional improvement programmes and projects against milestones and budget. It also assesses the delivery of property acquisition programmes against budget. For significant capital projects, delivery to milestones is assessed using a 4-point rating based on the extent of achievement against the milestones. All other projects are assessed based on achievement against planned completion schedule. Each programme result is weighted based on the size of the programme budget for the year compared to the total budget of all programmes in the year. The overall delivery to milestones result is the sum of the weighted programme results. Delivery to budget is assessed by comparing expenditure with budget for the year. For the overall result, delivery to milestones and delivery to budget are equally weighted. Delivery to quality standards is tested using cost as a proxy through the different gateways in the project management process; that is, 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. The measure includes only programmes and projects funded by the National Land Transport Fund.

RI2 Proportion of Waka Kotahi NZ Transport Agency projects funded by the Provincial Growth Fund delivered to agreed standards and timeframes assesses the delivery of Waka Kotahi transport infrastructure projects funded by the Provincial Growth Fund against agreed milestones and budget. It also assesses the delivery of property acquisition programmes against budget. Delivery to milestones is assessed based on the achievement against planned completion schedule. Delivery to budget is assessed by comparing expenditure with budget for the year. For the overall result, delivery to milestones and delivery to budget are equally weighted. Delivery to quality standards is tested using cost as a proxy through the different gateways in the project management process; that is, 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.

Public transport

PT1 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.

PT2 Proportion of people with access to frequent public transport services at peak times in Auckland, Wellington and Christchurch reflects the number of people that is within 500m walking distance of a frequent bus-stop or ferry terminal, or within 1km of a frequent rapid transit stop (mainly trains, but also includes grade-separated bus ways). This covers public transport services scheduled every 15 minutes (or 30 minutes for ferry) during the morning peak Monday to Friday (7am–9am). The overall result is the weighted average based on population across the three centres.

PT3 Mode share of people into Auckland central business district compares the number of people travelling by bus and car into the Auckland central business district during morning peak Monday to Friday (7am-9am). Data is collected through a combination of sources: HOP card for public transport, vehicle data count and vehicle occupancy surveys for cars.

SuperGold card – administration of the public transport concessions scheme | SuperGold card – public transport concessions for cardholders

SG1 Proportion of bulk funding payments of Crown SuperGold allocation paid to approved organisations within a month from funding amount agreement date is the number of authorised organisations whose bulk payments of SuperGold allocation for the forward year was paid by Waka Kotahi within a calendar month from the date the amount of funding was agreed, divided by the total number of authorised organisations with approved SuperGold allocation for the year.

SG2 Number of boardings using SuperGold concessions is the sum of all public transport passenger boardings across all regions where SuperGold card concessions were used. 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.

Walking and cycling

WC1 Network kilometres of walking and cycling facilities delivered is the total length of new walking and cycling facilities added to the network during the year and includes lengths of existing pathways and cycleways where improvements were made.

WC2 Cycling count in urban areas reflects the number of cyclists counted in the annual cycling cordon count in Auckland, Wellington and Christchurch.

Rapid transit

RPT1 Proportion of rapid transit activities delivered to agreed standards and timeframes assesses the delivery of rapid transit programmes and projects against milestones and budget. It also assesses the delivery of property acquisition programmes against budget. For significant capital projects, delivery to milestones is assessed using a 4-point rating based on the extent of achievement against the milestones. All other projects are assessed based on achievement against planned completion schedule. Delivery to budget is assessed by comparing expenditure with budget for the year. For the overall result, delivery to milestones and delivery to budget are equally weighted. Delivery to quality standards is tested using cost as a proxy through the different gateways in the project management process; that is, 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. The measure includes programmes and projects funded by the National Land Transport Fund.

Transitional rail

TR1 Proportion of transitional rail projects delivered to plan assesses the delivery of transitional rail projects against business case process timelines or project milestones.

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 does not include emergency works. Achievement of these activities is measured in lane kilometres, metres or sites for activities measured in trackers, in percentage for compliance under the network outcomes contracts operational performance measures, or in percentage by comparing expenditure against forecast (financial proxy) for activities where measurement of programme achievement is varied or unavailable. Achievements are 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 Safe stopping: proportion of network above skid threshold reflects efficiency in meeting surface texture standards (to ensure safe stopping) as per sector research. Minimum acceptable levels of skid resistance are set in relation to the road environment. The annual programme of reseals (such as surface renewals) is driven, in part, by the need to improve skid resistance. Data is collected using a Sideway-force Coefficient Routine Investigation Machine (SCRIM) that collects road surface information.

SHM3 Availability of state highway network: Proportion of unplanned road closures resolved within standard timeframes is the percentage of all unscheduled road closure incidences with significant impact on road users that are addressed within standard protocol and timeframes (that is, urban less than 2 hours and rural less than 12 hours), divided by the total number of road closure incidences. Standard protocol and timeframes mean that road closures are addressed within 2 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.

SHM4 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. This is adjusted for inflation based on the network outcomes index.

SHM5 Proportion of restoration and rebuild projects of State Highway 1 between Picton and Christchurch delivered to agreed standards and timeframes compares is the percentage of State Highway 1 between Picton and Christchurch projects delivered against plan across the four-year programme. Delivered projects are the individual projects that are handed over by the North Canterbury Transport Infrastructure Recovery alliance to Waka Kotahi following practical completion. The projects include recovery and resilience activities (restoration), as well as improvements (rebuild) on the corridors. The projects are funded from different sources including Crown funding for the Reinstatement of the South Island Transport Corridors.

Local road maintenance

LRM1 Smooth ride: 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 travel exposure'. 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 NLTF 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. This is adjusted for inflation based on the network outcomes index.

Driver licensing and testing

DLT1 Unit cost of providing user-facing driver licensing and testing services is the sum of expenditure on driver licensing or driver testing transactions, divided by the total transaction volume of these components.

DLT2 Proportion of driver licence tests booked online is the number of practical test bookings and rescheduled test bookings completed through the Waka Kotahi Transact website, divided by the total number of test bookings completed for driver licence tests in the same reporting period.

DLT3 Proportion of practical tests taken within 30 working days of booking is the 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 a practical test in the same reporting period. Data is sourced from the Driver Licence Register.

DLT4 Proportion of audits for driver licence course providers completed against target is the total number of audits for driver licence course providers completed, divided by the total number of planned audits for driver licence course providers for the same reporting period. Data is taken from the Waka Kotahi course provider register where audits are monitored.

DLT5 Proportion of non-compliance actions for driver licence course providers and testing officers that are under active management 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). 'Under active management' 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. Determining appropriate timeframes and courses of action requires considerable judgement, and senior Regulatory Services managers are involved in these case management processes and decisions.

Vehicle safety and certification

VSC1 Unit cost of providing user-facing motor vehicle licencing services is the sum of expenditure on motor vehicle registration transactions, divided by the total volume of motor vehicle registration transactions.

VSC2 Proportion of motor vehicle licensing completed online is the total number of annual motor vehicle licensing (including reversals), new registrations and register maintenance actions (including vehicle licensing exemptions, change of ownership (buyer), change of ownership (seller), change of name or address, registered person name and address) completed on the Waka Kotahi Transact website, via Direct Connect or via an industry agent, divided by the total number of completed motor vehicle transactions that are available online.

VSC3 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.

VSC4 Proportion of audits and reviews for inspecting organisations and vehicle inspectors completed against target is the total number of audits and reviews for inspecting organisations and vehicle inspectors completed, divided by the total number of planned audits and reviews for inspecting organisations and vehicle inspectors for the same reporting period. Data is taken from Scheduler (a Waka Kotahi monitoring database).

VSC5 Proportion of non-compliance actions for vehicle inspecting organisations, vehicle certifiers and vehicle inspectors that are under active management 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 identified and open for vehicle inspecting organisations, vehicle certifiers and vehicle inspectors, as reported in CASEY (a Waka Kotahi regulatory database). "Under active management" 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. Determining appropriate timeframes and courses of action requires considerable judgement, and senior Regulatory Services managers are involved in these case management processes and decisions.

Regulation of commercial transport operators

CTO1 Proportion of commercial operators reviewed or audited against target is the total number of commercial operators investigated or audited during the reporting period, divided by the total number of planned reviews, audits or investigations for commercial operators for the same reporting period. Data is taken from CASEY (a Waka Kotahi regulatory database).

CTO2 Proportion of non-compliance actions for commercial operators that are under active management 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 identified and open for commercial transport operators, as reported in CASEY (a Waka Kotahi regulatory database). "Under active management" 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. Determining appropriate timeframes and courses of action requires considerable judgement, and senior Regulatory Services managers are involved in these case management processes and decisions.

CTO3 Proportion of standard permits issued within 10 working days is the total number of commercial transport operator standard permits issued within 10 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 HPMV Permit Register.

Regulation of the rail transport system

RTS1 Proportion of rail participants reviewed or audited against target is the total number of assessments or inspections of rail participants completed, divided by the total number of planned assessments or inspections of rail participants for the same reporting period.

RTS2 Proportion of non-compliance actions for rail participants that are under active management 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). 'Under active management' 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 Unit cost of providing user-facing road tolling services is the unit cost of delivering a toll service. Cost excludes write-offs, bad debts and net of administration fees recovered from toll payment notices.

REV2 Tolling revenue written off as proportion of current year revenue is total chargeable toll revenue that is not collected and, so is written off, divided by total chargeable revenue for the year. Chargeable tolling revenue includes administration revenues and revenues for all chargeable toll trips. This excludes exempt trips (for example, emergency services), technical loss (for example, camera fault) and unidentified toll trips. Write offs in any year include revenue from the prior year.

REV3 Proportion of road user charges licences completed online is the number of light and heavy vehicle road user charges licences purchased online, divided by the total number of road user charges licences purchased. Online refers to transactions via industry agents, Direct Connect, Waka Kotahi Transact website, e-RUC and automatic tellers.

REV4 Unit cost of providing user-facing road user charges services is the sum of expenditure of collecting road user charges, divided by the total volume of road user charges.

REV5 Proportion of Transport Service Licence holders that are assessed for road user charges compliance against target is the total number of Transport Service Licence holders (TSL) investigated or audited during the reporting period, divided by the total number of TSL holders profiled as likely to be noncompliant with their road user charges obligations for the same reporting period.

REV6 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 (that is, 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).

REV7 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 (the Waka Kotahi finance tool).

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 (IFAS), divided by total NLTP expenditure less local share. IFAS activities are funded from the NLTF, the Crown and loans. NLTP expenditure includes loan repayments from the NLTF but 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 NLTP.

IM2 Proportion of reviewed Waka Kotahi investment decisions that meet required process standards is the total number of investment decisions made by Waka Kotahi that are reviewed against investment quality assurance guidelines (post approval reviews), divided by the total number of investment decisions made during the reporting period.

IM3 Proportion of sector research activities delivered to agreed standards and timeframes is a measure that compares planned or contracted time, cost and quality of research investment with actual performance. It is a measure of the effectiveness of the Waka Kotahi as a contract manager. Assessment against time and cost standards is based on contracted timeframes and cost. Assessment against quality standards is done through peer review. All aspects contribute equally to the overall result.

IM4 Proportion of investment audit activities delivered to plan is the average of two components: investment audit programme and benefits realisation programme completed on time. Investment audit activities assess the performance of approved organisations in relation to activities approved by Waka Kotahi and the operation of the land transport disbursement accounts of approved organisations under section 95(1)(e) of the Land Transport Management Act 2003. Reporting is based on the latest assurance programme approved by Waka Kotahi's Risk and Assurance Committee.

IM5 Average number of days to action new funding approvals is determined by how long it takes, on average, to process and approve funding of a new NLTP activity. Days to funding approval is defined as the number of working days between the date of receipt and the date the approval was recorded in the Transport Information Online system.

State highway asset performance measures

Proportion of network above skid threshold is also an output class measure for state highway maintenance. Refer to SHM2 on page 64.

Proportion of the state highway network with rutting ≤20mm in depth is the percentage of the state highway network within safe standards of pavement rutting. Rutting greater than 20 mm in depth is more than the acceptable minimum, which has implications for safety.

Proportion of the state highway network with roughness ≤150 NAASRA score is the percentage of the state highway network with roughness of the road within smooth travel standards. Roughness in excess of a score of 150 National Association of Australian State Road Authorities (NAASRA) units mean are deemed unacceptable and, if practicable, requires fixing.

Proportion of unplanned road closures resolved within standard timeframes is also an output class measure for state highway maintenance. Refer to SHM3 on page 65.

Information and communications technology (ICT) asset performance measures

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

Measures	Indicator	
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) Number of priority 1 incidents Number of priority 2 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: • incident resolution time – average time for resolving an incident • number of incidents – number of incidents registered by the Service Desk See below for the matrix we use to determine incident priority, target response time and target resolution time.
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 describes 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

This table describes our ICT assets (systems) that were assessed under the performance measures.

Name	
ITS Network	This is the technology network infrastructure that supports our transport operations and connects our road-side assets to the Transport Operations Centre (TOC), for example connecting cameras or variable message signs to our traffic operation centres.
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, for example, deluge system, fire panels, lights.
SCATS	The Sydney Coordinated Adaptive Traffic System (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 maintenance of driver licences.
Motor Vehicle Register (MVR)	The system that supports our services in relation to the motor vehicles, that is, issuing of motor vehicle registrations
FLIR Latitude Network Video management	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.
AIP - Automated Invoice processing	Automated invoice processing system for approval of payment.
NIEMS	National Incident and Event Management System (NIEMS) is a system where incidents like fallen trees or accidents are logged to enable the coordinated management of incidents from start to finish.
TRIES	Transport Incident and Event Management system (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.

Appendix 5:
Vote transport appropriation measures

Waka Kotahi is required to provide year-end performance information on appropriations that it is funded for. This section delivers against our reporting requirements under Vote Transport Estimates of Appropriations 2020/21 – Economic Development and Infrastructure Sector and Vote Transport Supplementary Estimates of Appropriations 2020/21.

Ref	Appropriation and measure name	Result	2020/21 Budget standard	2020/21 Actual	2019/20 Actual	2018/19 Actual
Crash Analysis						
CAS1	Average number of days taken to enter fatal crash reports into the Crash Analysis System	Achieved	10 working days or less	1 working day	3 working days	10 working days
Licensing Activities						
LIC1	Number of drug or alcohol assessments funded [A]	Not achieved	700-850	628	634	1,051
LIC2	Number of older driver licences subsidised [A]	Not achieved	39,000-41,000	96,833	83,164	Not applicable
Ministerial servicing by Waka Kotahi NZ Transport Agency						
MIN1	Proportion of requests completed within specified timeframes - ministerial correspondence	Not achieved	100%	99%	100%	90%
MIN2	Proportion of requests completed within specified timeframes - parliamentary questions	Achieved	100%	100%	99%	99%
MIN3	Proportion of requests completed within statutory timeframes - Official Information Act	Not achieved	100%	98%	99%	99%
Road user charges refunds						
RUC1	Average number of days to process road user charges refund applications	Achieved	20 working days or less	16 working days	Not applicable	Not applicable
Bad Debt Provision - Motor Vehicle Registration/Licences and Road User Charges						
BDP1	Proportion of bad debt for road user charges against forecast revenue	Achieved	≤0.45%	0.15%	0.41%	0.47%
Urban cycleways - local routes						
UC1	Proportion of urban cycleways projects for local routes completed as planned	Not achieved	100%	46%	100%	100%

Ref	Appropriation and measure name	Result	2020/21 Budget standard	2020/21 Actual	2019/20 Actual	2018/19 Actual
Housing Infrastructure Fund loans						
HIF1	The loan will be drawn down for the purposes and on the terms agreed between Waka Kotahi NZ Transport Agency and the Minister of Transport	Achieved	100%	100%	100%	100%
NLTF borrowing facility for short-term advances						
NLTF1	The loan will be drawn down for the purposes and on the terms agreed between Waka Kotahi NZ Transport Agency and the Minister of Transport	Achieved	100%	100%	100%	100%
Regional state highways						
RSH1	Proportion of Waka Kotahi NZ Transport Agency regional state highway activities delivered to agreed standards and timeframes [B]	Not achieved	≥90%	70%	Not applicable	Not applicable
Reinstatement of the South Island transport corridors						
SHM5a	Proportion of restoration projects of State Highway 1 between Picton and Christchurch delivered to agreed standards and timeframes	Achieved	100%	100%	97%	99%
SHM5b	Proportion of rebuild projects of State Highway 1 between Picton and Christchurch delivered to agreed standards and timeframes	Achieved	100%	100%	100%	29%
Tuawhenua Provincial Growth Fund – Transport projects						
PGF1	Supporting regional and infrastructure projects – average number of days to provide feedback on Provincial Growth Fund funding applications	Achieved	20 working days or less	9 working days	9 working days	20 working days
PGF2	Enabling infrastructure projects – average number of days to release Provincial Growth Fund infrastructure funding once approved	Achieved	20 working days or less	13 working days	10 working days	13 working days
Capital investment package – roads, walking and cycling						
CIP1	Proportion of roads and walking and cycling infrastructure delivered to agreed standards and timeframes [C]	Not achieved	≥90%	79%	81%	Not applicable

Ref	Appropriation and measure name	Result	2020/21 Budget standard	2020/21 Actual	2019/20 Actual	2018/19 Actual
Waka Kotahi NZ Transport Agency regulatory loans						
REG1	The loan will be drawn down for the purposes and on the terms agreed between Waka Kotahi NZ Transport Agency and the Minister of Transport	Achieved	100%	100%	100%	Not applicable
Waka Kotahi NZ Transport Agency Palmerston North Premises						
PNP1	Proportion of operational expenditure spent to budget	Achieved	100%	100%	100%	Not applicable
Protection of Waka Kotahi NZ Transport Agency's Core Regulatory Functions						
REGP1	Funding is drawn down and utilised for the purposes and on the terms agreed to by Cabinet	Achieved	100%	100%	100%	Not applicable
COVID-19 NLTF Borrowing Facility						
NLTFC1	The loan will be drawn down for the purposes and on the terms agreed between Waka Kotahi NZ Transport Agency and the Minister of Transport	Achieved	100%	100%	100%	Not applicable
Enhanced Road Maintenance - State Highways						
ERM1	Number of forestry workers employed to complete hazardous tree removal and enhanced road maintenance on state highways under the Tairawhiti redeployment package	Achieved	≥8 workers	8 workers	Unable to measure	Not applicable
NLTF Funding for Cost Pressures and Revenue Shocks						
CNLTF1	Funding is drawn down and utilised for the purposes and on the terms agreed to by Cabinet	Achieved	100%	100%	Not applicable	Not applicable
CNLTF2	Operating Cost Pressure and Revenue Shortfall Funding - Funding is drawn down and utilised for the purposes and on the terms agreed to by Cabinet	Achieved	100%	100%	Not applicable	Not applicable
CNLTF3	Capital Cost Pressure Funding - Funding is drawn down and utilised for the purposes and on the terms agreed to by Cabinet	Achieved	100%	100%	Not applicable	Not applicable
CNLTF4	Equity Injection to Waka Kotahi NZ Transport Agency - Funding is drawn down and utilised for the purposes and on the terms agreed to by Cabinet	Achieved	100%	100%	Not applicable	Not applicable

[A] The result is dependent on the number of applications received by Waka Kotahi.

[B] Formerly Proportion of regional state highway activities delivered to agreed standards and timeframes. The scope of this measure was changed to include Regional Investment Opportunities transport projects that are delivered by Waka Kotahi. The result of this measure is not comparable to the result in previous years.

[C] The methodology of this measure was changed this year to include assessment against time standards because that information was not available in the early stages of NZUP. Details of NZUP projects can be found in the significant capital projects report on pages 187 - 189 of appendix 3. The following results are also reported under the output class section of the annual report on pages 53-75.

Ref	Appropriation and measure name	Result	2020/21 Budget standard	2020/21 Actual	2019/20 Actual	2018/19 Actual
National Land Transport Programme PLA						
IM1	Proportion of total cost of managing the investment funding allocation system to National Land Transport Programme expenditure	Achieved	≤1.1%	1.00%[A]	1.02%[B]	1.03%
RSP1	Proportion of road safety advertising campaigns that meet or exceed their agreed success criteria	Achieved	≥80%	85%	90%	89%
LRI1	Length of the local road network modified to align with safe and appropriate speed	Unable to measure	Baseline to be set	Unable to measure	Unable to measure	Unable to measure
SHI1	Proportion of state highway improvement activities delivered to agreed standards and timeframes[C]	Not achieved	≥90%	68%	71%	88%
SHI2	Length of the state highway network modified to align with safe and appropriate speed	Achieved	≥250 kms	465.2 kms	50.5 kms[D]	68.5 kms
LRM1	Smooth ride: proportion of travel on smooth roads	Achieved	≥86%	87%	87%	87%
LRM2	Local road maintenance cost per lane kilometre delivered	Not achieved	≤$3,000	$4,004	$3,628	$3,455
SHM1	Proportion of state highway maintenance activities delivered to agreed standards and timeframes[E]	Achieved	≥90%	96%	Not applicable	Not applicable
SHM2	Safe stopping: proportion of network above skid threshold	Not achieved	≥98%	97%	95%	97%
SHM4	State highway maintenance cost per lane kilometre delivered	Achieved	$24,000-$28,000	$26,292	$25,352	$22,997
RI1	Proportion of regional improvement activities delivered to agreed standards and timeframes	Not achieved	≥90%	77%	88%	98%
TR1	Proportion of transitional rail projects delivered to plan	Not achieved	≥90%	83%	Not applicable	Not applicable

Ref	Appropriation and measure name	Result	2020/21 Budget standard	2020/21 Actual	2019/20 Actual	2018/19 Actual
PT1	Number of boardings on urban public transport services (bus, train and ferry)	Achieved	≥119 million	120 million	139 million	168 million
PT2	Proportion of people with access to frequent public transport services at peak times in Auckland, Wellington and Christchurch	Achieved	Increasing	24.3%	23.8% [F]	25.7% [F]
WC1	Network kilometres of walking and cycling facilities delivered	Achieved	Increasing	85.3 kms	63.2 kms	104.8 kms
Road user charges investigation and enforcement						
REV6	Proportion of unpaid road user charges identified through investigations and assessments that are collected	Achieved	65-75%	73%	Not applicable	Not applicable
SuperGold card - administration of the Public Transport Concessions Scheme						
SG1	Proportion of bulk funding payments of Crown SuperGold allocation paid to approved organisations within a month from funding amount agreement date	Not achieved	100%	29%	Not applicable	Not applicable
SuperGold Card - public transport concessions for cardholders						
SG2	Number of boardings using SuperGold concessions	Achieved	≥11.3 million	12.2 million	12.6 million	15.7 million
National Land Transport Programme Capital PLA						
RPT1	Proportion of rapid transit activities delivered to agreed standards and timeframes	Not achieved	≥90%	39%	Not applicable	Not applicable
SHI1	Proportion of state highway improvement activities delivered to agreed standards and timeframes [A]	Not achieved	≥90%	68%	71%	88%
Reinstatement of the South Island transport corridors						
SHM5	Proportion of restoration and rebuild projects of State Highway 1 between Picton and Christchurch delivered to agreed standards and timeframes	Achieved	100%	100%	97%	81%
Tuawhenua Provincial Growth Fund – Transport projects						

Ref	Appropriation and measure name	Result	2020/21 Budget standard	2020/21 Actual	2019/20 Actual	2018/19 Actual
RI2	Infrastructure project - proportion of Waka Kotahi NZ Transport Agency projects funded by the Provincial Growth Fund delivered to agreed standards and timeframes	Not achieved	≥90%	60%	Unable to measure	Unable to measure

A This reflects the cumulative cost across the three years of the 2018-21 National Land Transport Programme (NLTP).

B This reflects the cumulative cost of years 1 and 2 of the 2018-21 NLTP (2018/19 and 2020/21). This was incorrectly reported as 1.03% in the 2019/20 annual report.

C This is a performance measure for two appropriations: NLTP PLA and NLTP Capital PLA. The scope of this measure changed this year to include only projects funded by the National Land Transport Fund. Crown-funded Accelerated Regional Roading projects previously included in this measure are reported under *Proportion of Waka Kotahi NZ Transport Agency regional state highway activities delivered to agreed standards and timeframes* (in appendix 5, page 198). This change does not materially affect the result of this measure.

D This result was reported as 119 km in the previous annual report, which reflected the cumulative length of the state highway network that was modified in 2018/19 and 2019/20. This year, we assessed results against the target for the financial year only, so have adjusted the figure to show lengths modified for the 2019/20 only.

E The scope and methodology of this measure was changed this year to replace the financial proxy used in previous calculations with actual physical works delivered under the programme. The result of this measure is not comparable with the result in previous years.

F This was rounded off in the previous annual report.