Wellington Regional Land Transport Plan – Pūrongo ā-Tau Aroturuki Annual Monitoring Report 2023

Greater Wellington
Te Pane Matua Taiao

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Glossary

AMR	Annual Monitoring Report
AX	Airport Express
CAS	Crash Analysis System
CSC	Community Services Card
DSI	Deaths and Serious Injuries
ERP	Emissions Reduction Plan
EV	Electric Vehicle
FIGS	Freight Information Gathering System
FY	Fiscal Year
GPS	Government Policy Statement on Land Transport
HTS	Household Travel Survey
LNIRIM	Lower North Island Rail Integrated Mobility
NLTF	National Land Transport Fund
RLTP	Regional Land Transport Plan
RCA	Road Controlling Authority
RERP	Regional Emissions Reduction Plan
RSMP	Regional Speed Management Plan
RTC	Regional Transport Committee
SMP	Speed Management Plan
VKT	Vehicle Kilometres Travelled
WTERP	Wellington Transport Emissions Reduction Pathway

Executive Summary

This Annual Monitoring Report (AMR) is the third report on the progress of the Wellington Regional Land Transport Plan (RLTP) 2021, covering the period from 1 July 2022 – 30 June 2023. The AMR tracks progress against the three ambitious targets, measures, and indicators in the Wellington RLTP, which monitor how the region is progressing towards our regional outcomes as well as the priorities of the Government Policy Statement (GPS) on Land Transport.

Key findings from FY 2022/23 are summarised in Table 1. Compared to FY 2021/22, the past year largely marked a return to pre-COVID freedom of movement across regions and internationally with the full reopening of New Zealand's border from 1 August 2022. Notable improvements include a significant recovery in public transport patronage and uptake of electric and hybrid vehicles. Road network resilience dropped as a result of weather events and a slip on SH59—however, improved regional network resilience provided by Transmission Gully mitigated these impacts.

Given that this past year has marked New Zealand's emergence from the COVID-19 pandemic, there remain places where data availability or trends may be difficult to identify. Where this is the case, we have made a note of this in the report.

Table 1: Headline targets and indicator summary

Headline Indicator	2030 Target	Result FY 2022/23	Change 1 year	Change 5 years
Combined mode share for public transport & active travel	39%	34% (3-yr ave) (2019-2022)	▼ -1%	▲ 7%
Deaths and serious injuries on region's roads	122 DSI	195 (5-yr ave)	▼ -5%	▬ 0%
Land transport generated carbon emissions	770 kilotonnes	1195 kilotonnes	▲ 5%	▼ -3%

Measure	Indicator	Result FY2022/23	Change 1 year	Change 5 years
Public transport patronage	Bus and rail boardings (peak times)	18.6 million	▲ 26%	▼ -19%
Public transport journey times	Average travel times on core bus routes	39 mins	▲ 8%	▲ 6%
Public transport journey time variability	Average travel time variability on core bus routes	AM 2.9 mins PM 4.6 mins	▲ 75% ▲ 96%	▼ -30% ▲ 64%
Active travel and public transport (PT) journeys to work & education	Combined mode share (Cordon survey)	Data not yet available		
Deaths and serious injuries on region's roads	Percentage of DSI with speed as a factor	22% (5-yr ave)	▼ -1%	▼ -2%
Participation in active travel to school	% of students using active travel to journey to school	Data not yet available		
Cyclist and pedestrian deaths and serious injuries	DSI for pedestrians & cyclists on roads	55 DSI (5-yr ave)	no change	▼ -1%
Road network resilience	Availability of viable alternative routes	Data not yet available		
	Frequency of unplanned road closures	85 events	▼ -15%	▲ 9%
	Duration of unplanned road closures	971 hours	▲ 307%	▲ 489%
The efficiency of the road network on strategic routes	Average travel speeds on selected strategic routes	37 km/hr (3-yr ave)	▼ -1%	None yet
	Average travel time variability on selected strategic routes	6.5 mins (3-yr ave)	▲ 9%	None yet
Regional freight moved by rail	Annual freight volumes moved by rail	1.34 million tonnes	▼ -8%	▲ 10%
Transport generated emissions	Transport CO_2 emissions (per capita)	2.16 tonnes	▲ 4%	▼ -8%
	Ambient air quality - Nitrogen dioxide	15.6 µg/m3 (CY2022)	▼ -6%	▼ -18%
Vehicle fleet composition	% of new private vehicle registrations that are EV and hybrid vehicles	56% of new registrations	Δ +18%	Δ +44%
	% of the bus fleet that are EV and hybrid vehicles	23% of buses	Δ +5%	Δ +21%

Introduction

What is the Regional Land Transport Plan?

The Wellington Regional Land Transport Plan (RLTP) is a statutory document developed by Greater Wellington Regional Council (Greater Wellington), local councils in the Wellington region, Waka Kotahi—New Zealand Transport Agency, KiwiRail, and other approved organisations. The RLTP sets the direction for the transport network in the region for the next 10-30 years, identifying regional priorities, policies, targets, and objectives. The RLTP must be consistent with the national direction set by Te Manatū Waka—Ministry of Transport in the most recent Government Policy Statement (GPS) on Land Transport (for the period of this AMR, the most recent is GPS 2021).

Overall, the RLTP benefits our region by enabling a connected transport network that makes it easy for us and the resources we rely on to get to where we need to go— while reducing emissions, supporting travel choice, and creating safer and more liveable places.

The RLTP also sets the direction for investment in land transport projects. By indicating the transport projects that the region intends to deliver, the RLTP is a formal bid for transport funding through the National Land Transport Fund (NLTF). The most recent Wellington RLTP was developed in 2021.

What is the Annual Monitoring Report?

Per the requirements of Section 16(6)(e) of the Land Transport Management Act 2003, an RLTP must describe how the region's plan will be monitored to assess progress. Section 5 of the Wellington RLTP 2021 sets out the monitoring framework with regional measures and indicators to track progress towards achieving the strategic objectives and outcomes of the RLTP. The RLTP 2021 notes that an annual monitoring report would be provided to the Wellington Regional Transport Committee (the RTC).

Each Annual Monitoring Report (AMR) for the RLTP 2021 tracks progress against the three ambitious headline targets set in the RLTP 2021. The headline targets (Figure A) demonstrate the scale of the transformation that the region hopes to achieve by 2030, proposing proxy measures to gauge whether we are heading in the right direction.

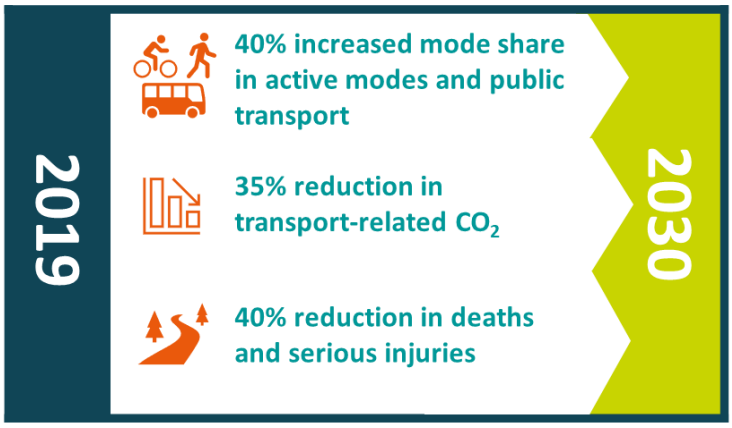


Figure A: Wellington RLTP 2021 Headline Targets

The AMR also reviews measures and indicators that track the region's contributions to the five transport outcomes in the Ministry of Transport's Transport Outcomes Framework (Figure B), which sets common objectives for the transport system centred around wellbeing and liveability and is reflected in the Government Policy Statement on Land Transport.

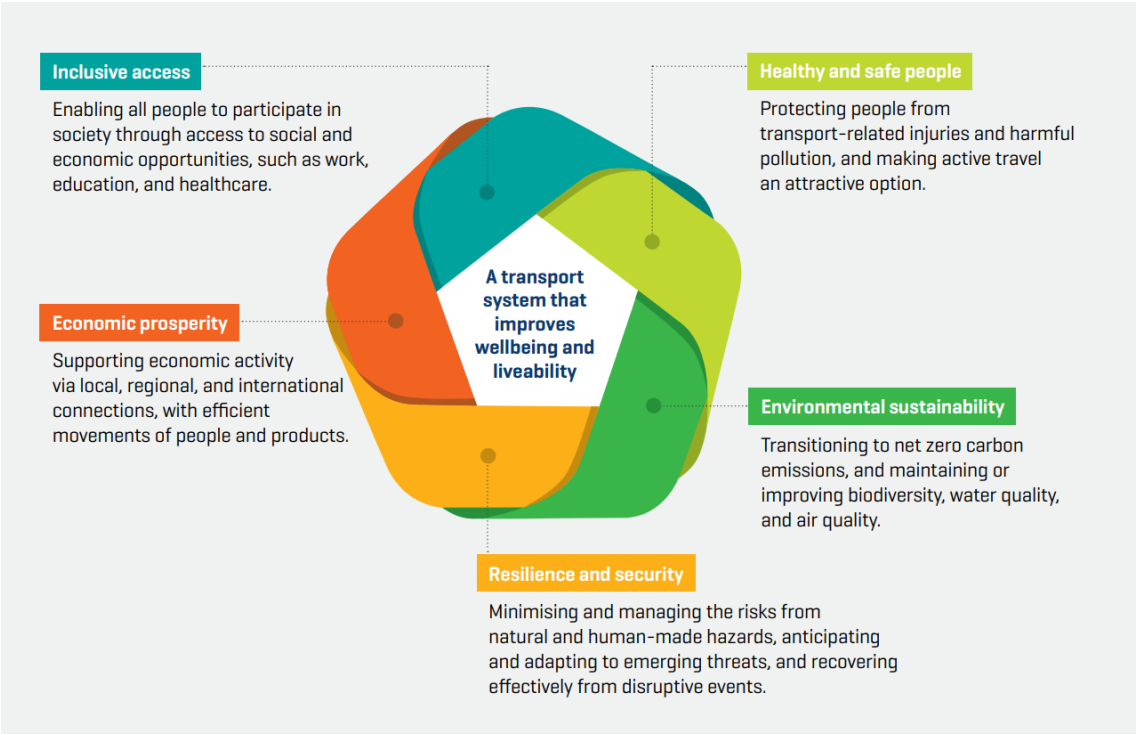


Figure B: Ministry of Transport – Transport Outcomes Framework

This AMR is the third report on progress, and represents data collected between 1 July 2022 and 30 June 2023 (FY 2022/23).

The AMR is developed by Greater Wellington and the Wellington Transport Analytics Unit using a variety of data sources:

- Metlink (Greater Wellington) provides public transport data (patronage, travel times, etc.).
- Te Manatū Waka—the Ministry of Transport provides mode share data through the Household Travel Survey; information about private vehicle fleet composition; and freight supply chain information through the Freight Information Gathering System (FIGS).
- Waka Kotahi—New Zealand Transport Agency provides information on road deaths and serious injuries (DSI) through the Crash Analysis System (CAS), and information on the resilience of the network through MapHub.
- Greater Wellington collects data on ambient air quality and emissions.
- The census (Stats NZ) provides data on active travel to school (note the most recent Census data is from 2018)
- Other sources of data include the Wellington City Cordon survey (multi-modal travel patterns), TomTom (highway travel times), and Traffic Watcher (highway travel times).

Regional transport highlights for FY 2022/23

FY 2022/23 began with the removal of the final COVID-19 restriction, with Aotearoa New Zealand's international border reopened to all travellers from 1 August 2022. While patterns of living and working in the Wellington region continued to experience periods of mild disruption with changes under the COVID-19 protection framework, FY 2022/23 largely marked a return to the pre-pandemic freedom of movement of 2019.

In the past year, extreme weather events posed significant challenges to the region, especially in the Wairarapa, where Cyclone Gabrielle inflicted damage to critical regional infrastructure in February 2023. Inflationary pressures also continued to affect the delivery of regional transport projects, with both increased costs and industry supply constraints resulting in project delays.

Notable transport events in FY 2022/23 are further discussed below.

Metlink

The Metlink public transport network comprises the region's bus, rail, ferry, and Total Mobility services, and is delivered by Greater Wellington Regional Council.

In July 2022, Metlink's Airport Express (AX) bus service launched in Wellington, improving access to the airport with an environmentally friendly electric service. In its first year of operation, patronage on the AX was 128% of the forecast patronage, marking a successful first year of uptake.

FY 2022/23 marked the continuation of the staff shortage that had affected public transport service delivery since the start of the pandemic. While staff shortages and sickness also affected rail service delivery, the bus network continued to bear the brunt of unplanned cancellations, capacity issues, and temporary service suspensions. In October 2022, Metlink temporarily suspended 67 bus trips in the Wellington region due to the shortage of available drivers, and temporarily suspended a further 114 trips in November 2022.

In November 2022, the Snapper ticketing system used on Metlink bus services was launched on Wellington's rail network. Snapper on Rail marks an important interim step towards paperless ticketing, following on from the Government's October 2022 announcement that New Zealand will deliver the National Ticketing Solution, a nationally consistent, single-payment ticketing system that is anticipated to be delivered on public transport in the Wellington region in 2025.

The first half of 2023 marked improvements in driver recruitment, retention, and working conditions. Greater Wellington successfully lobbied the Government for changes to immigration rules that make it easier for operators to recruit overseas drivers, and supported improvements to driver conditions by improving driver facilities and shift rostering. Greater Wellington funded an increase in driver wages that saw an uplift in the minimum hourly rate for bus drivers to $27 per hour in April 2023,

followed by a further uplift in the minimum rate to $30 per hour for urban drivers and $28 per hour for regional drivers that was backdated to 1 April 2023.

A set of public transport fare changes came into effect in April 2023: fares increased by 6%, and the off-peak discount increased to 50% and was applied to adult Snapper fares and all Snapper concessions. Public transport users benefited from Government's half-price fares initiative that began in April 2022 and ended in the Wellington region on 1 September 2023. Affordability on the public transport network was further increased with the Budget 2023 announcement that extended the Community Connect concession to include: 1) free fares for public transport users under the age of 13; 2) half-price fares for public transport users under the age of 26; and 3) half-price fares for Community Services Card (CSC) holders. The concession for CSC holders was introduced on the network on 1 July, and the age-based concessions were subsequently introduced on 1 September 2023 in the Wellington region.

Budget 2023 also signalled a positive investment in the rail network: in May 2023, the Government committed funding to the procurement of a new fleet of 18 hybrid-electric four-car trains to replace rolling stock reaching end of life in 2027. A partnership between Greater Wellington and Horizons Regional Council with enabling infrastructure delivered by KiwiRail, this Lower North Island Rail Integrated Mobility (LNIRIM) project will increase metro service frequency on the Manawatū and Wairarapa lines and deliver necessary infrastructure.

Public transport patronage has seen positive recovery in the past year, increasing towards pre-COVID-19 numbers across bus, rail, and ferry and exceeding 2019 patronage on the ferry. Bus boardings for the month of June 2023 reflected 99.9% of patronage compared to June 2019; rail boardings were 85% of June 2019 patronage; and ferry boardings were 111% of June 2019 patronage.

Let's Get Wellington Moving

Let's Get Wellington Moving is a significant programme of work to unlock investment in the transport network through central Wellington city. It is a joint initiative between Wellington City Council, Greater Wellington Regional Council and Waka Kotahi—NZ Transport Agency, supported by mana whenua partners Taranaki Whānui ki Te Upoko o Te Ika and Ngāti Toa Rangatira.

The programme's geographical scope extends from Ngā Ūranga Gorge to Miramar, including the Wellington Urban Motorway, access to the port, and connections to the central city, southern and eastern suburbs, the Wellington regional hospital and international airport. The programme seeks a step change in the attractiveness of public transport, walking, and cycling, to support less traffic, reduced carbon emissions, mode shift, and urban intensification in Wellington City. It also aims to deliver reliable access to key regional destinations.

Key progress milestones in FY 2022/23 included:

- The Cobham Drive pedestrian crossing was completed and operational in January 2023.
- A package of pedestrian and accessibility improvements at intersections across the central city was delivered.
- The Golden Mile revitalisation and Thorndon Quay Hutt Road improvements were given the green light after detailed planning, with funding being approved by Wellington City Council and Waka Kotahi.
- Work to identify the best options for the first tranche of People-Friendly City Streets—a package of bus priority, walking, cycling, and amenity improvements—was substantially progressed, with the business case processes expected to be complete by mid-2024.
- The Travel Behaviour Change programme was mobilised with expansion of the teams at Wellington City Council and Greater Wellington who work with people to understand what motivates them to travel the way they do and to provide practical, on-the-ground support to help people change their travel habits.
- Significant progress was made on the Transformational Programme, which includes Mass Rapid Transit, Basin Reserve upgrade, new Mount Victoria Tunnels and Eastern Enhanced Bus. This included completion and approval of the Indicative Business Case, and investigation work completed on Stage 1 of the Detailed Business Case with a focus on refining options and improving certainty ahead of scheme design. The Detailed Business Case is expected to be completed in 2024.

Other highlights

Travel Choice

Coordinated by Greater Wellington, Movin' March is a programme that encourages schools, students, and their whānau across the region to get involved in active travel, and enjoy the benefits of walking, scooting, and biking to school during the month of March. In March 2023, the programme welcomed record-breaking commitment to active travel from 140 schools, with nearly 38,000 students recording their participation in active travel. Movin' March is a gateway that encourages future school engagement, connects with other Travel Choice programmes such as Pedal Ready, and provides tools and resources to families and schools that support active travel via its Getting to School website.

The Pedal Ready programme, run by Greater Wellington's Travel Choice team in partnership with Waka Kotahi, councils, NZ Police, the Cycle Action Network, and other local organisations, delivers free cycle and scooter skills training to adults and school children across the Greater Wellington region. As New Zealand's first Bike Ready accredited cycle skills provider, Pedal Ready instils participants with road safety awareness and the skills they need to feel confident when cycling and scooting. In FY 2022/23, the Pedal Ready programme trained 366 adults and 5,275 children, compared to 3,134 children in FY 2021/22 (with enrolment numbers affected by a

post-COVID lull) and 5,267 in FY 2020/21. This training occurred through a variety of courses delivered in Kāpiti, Porirua, Wellington City, Hutt City, Upper Hutt, and the Wairarapa (which combines road safety efforts through the Wairarapa Road Safety Council that books school trainings across the wider region).

Programmes such as Pedal Ready and Movin' March support the delivery of RLTP objectives around mode shift and environmentally sustainable travel, safety, and the reduction of transport-generated carbon emissions.

Te Ara Tupua

In FY 2022/23, construction works ramped up for Te Ara Tupua. A partnership between Waka Kotahi, local councils (Wellington City, Hutt City, and Greater Wellington), and mana whenua partners Taranaki Whānui ki Te Upoko o Te Ika and Ngāti Toa Rangatira, Te Ara Tupua delivers a walking and cycling link along the harbour between Wellington and Lower Hutt, creating a safe, connected route for pedestrians and cyclists as well as a more resilient coastal edge for the road and rail. Waka Kotahi is leading the delivery of two sections of the route (Ngā Ūranga to Pito-One and Pito-One to Melling) and working closely with partners to connect the route to Te Awa Kairangi—Riverlink and Thorndon Quay and Hutt Road walking and cycling links.

Regional Speed Management Plan 2024

In May 2022, the Land Transport Rule: Setting of Speed Limits 2022 came into effect. The Rule establishes an integrated speed management planning process that considers how safety infrastructure, safety cameras, and speed limits can make our transport system safer.

The new speed management planning process takes a regional approach, tasking Regional Transport Committees (RTCs) with coordinating input from Road Controlling Authorities (RCAs) into an overall Regional Speed Management Plan (RSMP). Taking a regional approach ensures more regional consistency and timelier adoption of speed reductions by removing the requirement for speed limits to be set through bylaws. Under the Rule, RCAs must progress towards reducing speed limits around all schools by December 2027 (with an interim target of 40% of schools by 30 June 2024) and reduce speed limits around marae and on high-risk roads.

Wellington region RCAs are continuing to progress with the development of their speed management plans (SMPs), in alignment with the regional principles and objectives set out in the front end of the Wellington RSMP 2024 and endorsed by the Wellington RTC in December 2022. SMPs are due to be submitted to the Director of Land Transport for certification by the end of March 2024.

The reduction of speed limits resulting from these changes supports the region's objectives to reduce deaths and serious injuries on regional roads, and the RLTP 2021 headline target of 40 percent reduction in deaths and serious injuries by 2030 (aligned with the Government's Road to Zero vision).

Wellington Transport Emissions Reduction Pathway

In June 2023, the Wellington Regional Transport Committee (RTC) endorsed the creation of the Wellington Transport Emissions Reduction Pathway (WTERP). The WTERP responds to the Government's Emissions Reduction Plan (ERP) 2022, which sets emissions and vehicle kilometres travelled (VKT) reduction targets for the transport sector and tasks Tier 1 (including Wellington) councils with creating regional VKT reduction plans for light vehicles.

Informed by evidence, transport modelling, and focus groups with technical experts, the WTERP sets out a pathway of interventions to reduce transport emissions in the Wellington region. Given the scale of the change necessary to achieve overall emissions reduction targets, the interventions in the WTERP are broader and targeted towards improvements to the light vehicle fleet, land use and transport integration, and lower-carbon and more efficient freight sector. Improvements to public transport capacity and travel demand management initiatives are identified in the pathway as playing an integral role in reducing transport emissions.

Once finalised in early 2024, the WTERP will lay the foundations for the transformative and urgent change required to reduce transport-related emissions and signal the role that central government must play in enabling levers such as road pricing through legislative and policy changes. The WTERP also informs the transport content in the Wellington Regional Leadership Committee's Regional Emissions Reduction Plan, which focuses on emissions reduction across multiple sectors and is anticipated to be finalised in March 2024.

Measuring against our headline targets

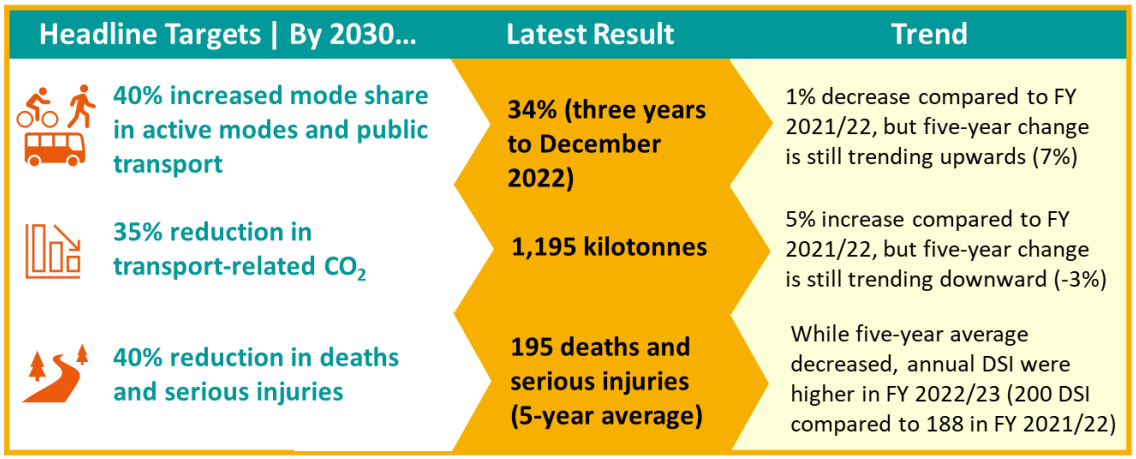


Figure 1: Headline targets and indicator summary

Target 1: 40 percent increase in active travel and public transport mode share by 2030

Active travel and public transport play an essential role in reducing transport-related emissions, providing alternatives to private vehicle use. The reliability, speed, frequency, ease of use, and affordability of public transport alternatives are among the key factors that encourage mode shift away from private vehicles. For active modes, factors to encourage mode shift include perceptions of safety and ease of access.

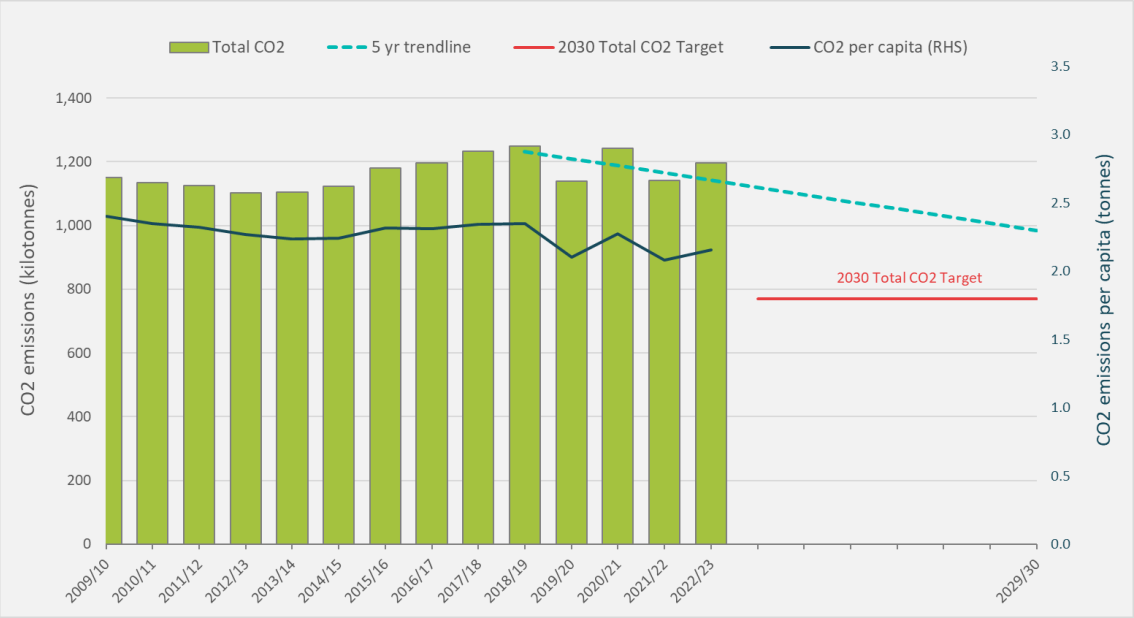
Measuring active travel and public transport mode share provides a helpful high-level indicator of how the region is progressing towards our longer-term vision for the transport system, which includes increasing the uptake of lower-carbon modes of travel.

For the purpose of the AMR, the region's progress towards the RLTP headline target to increase active travel and public transport mode share by 40 percent by 2030 is measured as a three-year average using the results of the New Zealand Household Travel Survey (HTS) delivered by Te Manatū Waka—Ministry of Transport. The HTS measures all types of household travel (e.g. travel to work, education, shopping, and leisure) by travel mode. For the three years from 2019-2022, the three-year average decreased from 35% (in 2018-2021) to 34%; however, the overall absolute change from the 2018 average is positive at 7%. This slight reduction in mode share may have been influenced by a general increase in traffic as the region emerged from COVID-19, as well as by the negative effects of public transport service suspensions (bus) and unplanned cancellations (bus and rail) due to staff shortages.

Target 2: 35 percent reduction in transport-generated carbon dioxide emissions by 2030

Emissions reduction sits at the heart of the Wellington RLTP in both the headline target and in many of the regional objectives. The Greater Wellington Region Emissions Inventory 2021/22, commissioned by eight of the Wellington region's councils (including Greater Wellington), was released in June 2023 and showed that the region's gross greenhouse gas emissions have fallen by 9 percent since 2019. Between 1 July 2021 – 30 June 2022, the report highlights an 18% reduction in transport emissions. However, it is important to note that this is partially attributable to the restriction of travel during COVID-19 (including air travel, which is not included in the scope of this report), and may not indicate a trend.

For the purpose of the AMR, reductions in transport-generated carbon emissions are measured by using regional fuel sales as a proxy for these emissions (Figure 2) and exclude emissions related to air travel.



Source: Fuel supply data from Wellington City Council and Masterton District Council

Figure 2: Transport CO_2 emissions (per capita)

Fuel sales (and subsequently transport CO_2 emissions) increased in FY 2022/23 compared to FY 2021/22. The main contributing factor is a return to pre-COVID-19 freedoms of movement in the past year, compared to the COVID-19 alert level changes experienced in the previous year, which has resulted in an increase in travel across all modes including by private motor vehicle.

Overall, the five-year trend shows that transport CO_2 emissions continuing to decline—however, per Figure 2, maintaining the current rate of reduction in transport generated CO_2 would not be enough for the region to meet the 2030 headline target set in the RLTP. It is anticipated that the WTERP will provide a pathway and help key decision-makers understand the level of change required to accelerate the region's

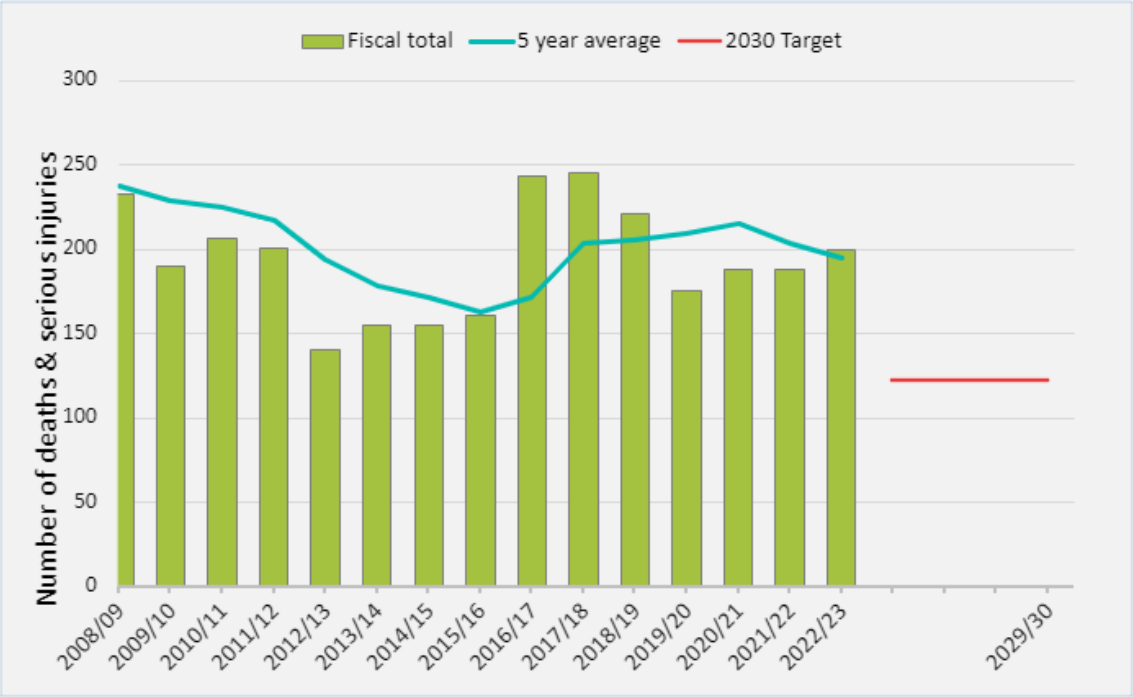
progress towards the transport emissions reduction targets set in both the RLTP and in the ERP 2022.

Target 3: 40 percent reduction in deaths and serious injuries on regional roads by 2030

Through the Road to Zero programme, the Government adopted the vision of zero deaths and serious injuries on New Zealand roads. The target adopted in the Wellington RLTP is to reduce the 2018 five-year rolling average of 204 DSI by 40 percent (or to below 122 DSI). The five-year average is used as the indicator in order to smooth out any annual anomalies and reveal a longer-term trend.

The AMR uses a five-year rolling average to measure progress towards the 2030 target. In FY 2022/23, deaths and serious injuries increased on regional roads compared to FY 2021/22 (200 DSI compared to 188). Per Figure 3 below, the overall five-year average continues to decline (an average of 195 DSI compared to the FY 2021/22 average of 204 DSI).

The increase in the number of DSI in FY 2022/23 may reflect the increased volume of traffic on the roads post-COVID-19.



Source: Waka Kotahi Crash Analysis System (CAS)

Figure 3: Deaths & serious injuries on region's roads

Measuring against our five transport outcomes

Inclusive access

As defined in the Ministry of Transport's Transport Outcomes Framework, "inclusive access" enables all people to participate in society through access to social and economic opportunities such as work, education, and healthcare. To achieve this outcome, the transport system must be accessible to all people in New Zealand, including those with disabilities, low-income earners, and people of different ages, genders, and ethnicities.

Measures:
Public transport patronage, journey times on core bus routes, active travel and public transport journeys to work

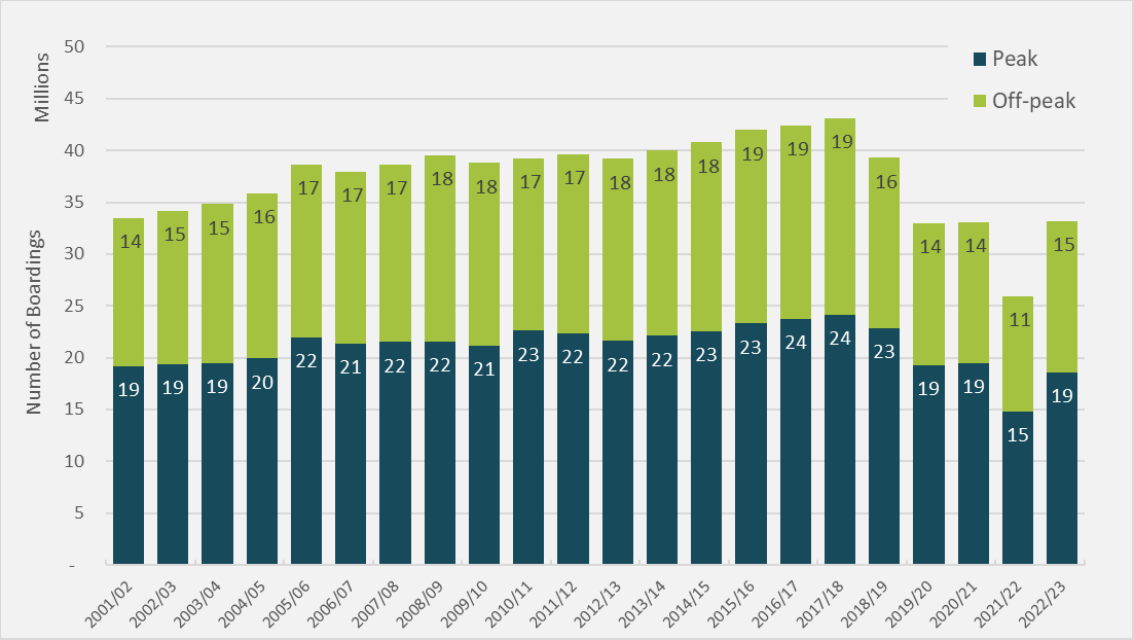
Updated indicators on inclusive access

Indicator	Latest Result	Trend	Comment
The number of people boarding bus, train, and ferry services during peak and off-peak times	**Peak times: 18.6m** **Off-peak: 14.6m**	Peak boardings increased by 26%, and off-peak by 31%, compared to FY 2021/22	Patronage is showing strong recovery, increasing towards pre-COVID-19 levels
Average travel times on core regional bus routes	**AM: 39 mins** **PM: 36 mins**	AM travel times increased by 8%, and PM by 6%, compared to FY 2021/22	Both travel time variance and the increase in average travel times are likely influenced by increased traffic and congestion on core routes in FY 2022/23 compared to FY 2021/22
Travel time variability on core regional bus routes	**AM: 2.9 mins** **PM: 4.6 mins**	AM travel variance increased by 75%, and PM by 96%, compared to FY 2021/22	
Combined mode share of travel to work trips by walking, cycling, & public transport	**No data available**	The 2023 Cordon Survey results contained only public transport data and did not include walking and cycling – for this purpose of this report, the complete result is not available.	

Public transport patronage

A number of the RLTP objectives and targets are progressed via the uptake of public transport, giving people access to reliable and affordable travel choices that minimise environmental harm. The indicator measured in this report monitors annual public transport boardings during peak (6am–9am and 3pm–6:30pm on weekdays) and off-peak (between 9am–3pm on weekdays, and all day on weekends) journey times.

Figure 4 shows the number of people boarding rail, bus, and ferry services during peak and off-peak times. Public transport patronage increased significantly in FY 2022/23 (by 28 percent compared to FY 2021/22), showing progress towards FY 2018/2019 patronage levels with a particular increase in off-peak patronage. However, the five-year average continues to show a decline of 16 percent from peak patronage – this is anticipated to change as new post-COVID-19 normal trends emerge.



Source: Metlink (Greater Wellington)

Figure 4: Annual public transport boardings by time of day

Possible factors leading to the increase in patronage include the general downward trend of COVID-19 transmission in the community over the course of FY 2022/23 (particularly from January 2023 onwards). The Government's half-price public transport fares initiative that began in March 2022, as well as the introduction of reduced cumulative off-peak concessions on Metlink public transport in April 2023, also increased the affordability of public transport in FY 2022/23 and has encouraged more off-peak ridership both during the day and on weekends. The uptick in off-peak patronage in FY 2022/23 compared to FY 2019/20 may also reflect the enduring nature of people working from home, given that much of the public transport network is focused on the Wellington CBD during peak times.

Bus journey times and variability

Reliable, consistent journey times are a key factor in making public transport an attractive option for public transport users. Public transport particularly incentivises mode shift away from private vehicles if these journey times are competitive with journey times by car. This indicator measures the average travel times on select core bus routes for both AM and PM peaks, on specific core corridors and as an average of outbound and inbound trips (Figure 5). "Core" bus routes are defined in the Wellington Regional Public Transport Plan 2021 as those that "operate at least every 15 minutes during the day, and often more frequently during busy periods." The core bus routes included in the indicator for this report are different segments routes 1, 2, 3, 110, 120, 130, and 220.

In FY 2022/23, average travel times on core bus routes increased above the levels observed in FY 2020/21 and FY 2021/22, reflecting a return to higher traffic volumes and congestion levels consistent with pre-COVID-19 levels resulting in slower travel times on the network. Average travel times in FY 2022/23 were 2.9 minutes slower than FY 2021/22 in the AM peak, and 2.8 minutes slower in the PM peak.

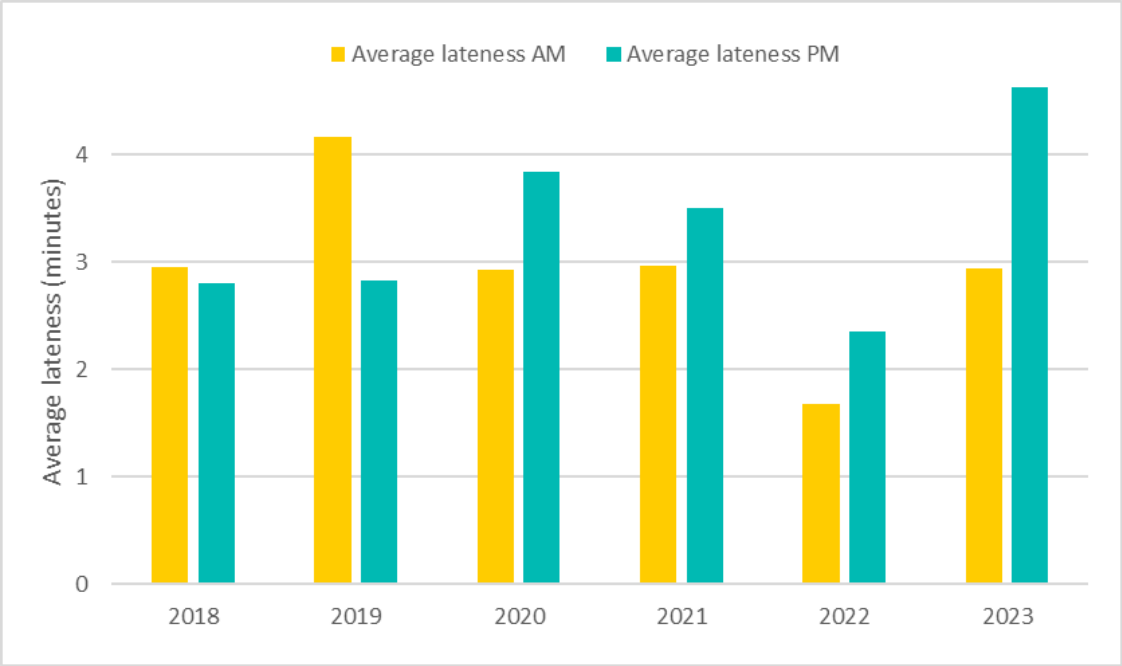
Source: Metlink (Greater Wellington)

Figure 5: Travel times on core bus routes, FY2017-2023

An important part of making public transport attractive is giving people certainty that their bus will arrive as scheduled. The indicator below measures travel time variability on corridors of the same core bus routes indicated above, as a measure of average lateness. This variability measure was taken in the month of February 2023.

Compared to the previous year, the average lateness of buses on these core routes (Figure 6) increased by 75% during AM travel (from 1.7 minutes to 2.9 minutes late) and by 96% during the PM (from 2.4 minutes to 4.6 minutes).

Influencing factors for the uptick in average lateness include the increase in traffic congestion due to higher traffic volumes as well as the significant uptick in public transport patronage, with more passengers indicating longer boarding and disembarking times as well as a higher frequency of stopping along the bus routes. In February and March 2022 (when last year's indicator was measured), relatively faster and more reliable travel times were enabled by reduced traffic volumes, lower traffic congestion, and significantly lower public transport patronage as a result of the COVID-19 Omicron wave and the Parliamentary protests that disrupted usual bus routes. The result for 2023 broadly reflects a return to pre-COVID-19 conditions.



Source: Metlink (Greater Wellington)

Figure 6: Travel time variability on core routes

Other activities

In September 2021, the Greater Wellington Transport Committee adopted the new Metlink Accessibility Charter, which centres on the vision of a public transport network that is accessible for all with ease and dignity. In FY 2022/23, progress continued on the development of the Metlink Accessibility Action Plan[1], which sets out a systematic pathway to planning and a commitment to public transport network improvements for users with accessibility requirements. Key actions over the period of the AMR were to identify accessibility initiatives through a co-design process with the disability community, public transport operators and frontline staff, technical advisors, and the Public Transport Advisory Group.

Healthy and safe people

Per the Ministry of Transport's Transport Outcomes Framework, "healthy and safe people" envisions a transport system that protects people from transport-related injuries and harmful pollution, and makes physically active travel an attractive option.

Measures:
Deaths and serious injuries from road transport, participation in active travel to school

[1] The Metlink Accessibility Action Plan has since been published on the Metlink website in August 2023: https://www.metlink.org.nz/assets/Accessibility-content/Metlink-Accessibility-Action-Plan.pdf.

Updated indicators on healthy and safe people

Indicator	Latest Result	Trend	Comment
Percentage of crashes involving DSIs when inappropriate speed is a contributing factor	**18% of DSIs for FY 2022/23**	5-year change shows DSIs are trending downwards (2% decrease)	Traffic volumes are returning to pre-COVID-19 levels
Percentage of students cycling, scooting, and walking to school by school sector	**32% active travel for ages 5–9 years, and 34% for ages 10–14 (Census 2018)**	No trend yet	Results of the 2023 census are anticipated to be released in May 2024
Number of deaths and serious injuries for pedestrians and cyclists	**55 DSIs (five-year average), 64 DSIs (FY 2022/23)**	5-year change indicates DSIs are trending downwards (1% decrease)	

Deaths and serious injuries when speed is a contributing factor

The Wellington RLTP sets the headline target—aligned with Waka Kotahi's Road to Zero vision—to reduce the 2018 five-year rolling average of 204 DSI by 40 percent (or to below 122 DSI). Driving at unsafe speeds risks seriously endangering drivers, passengers, cyclists, and pedestrians on the road.

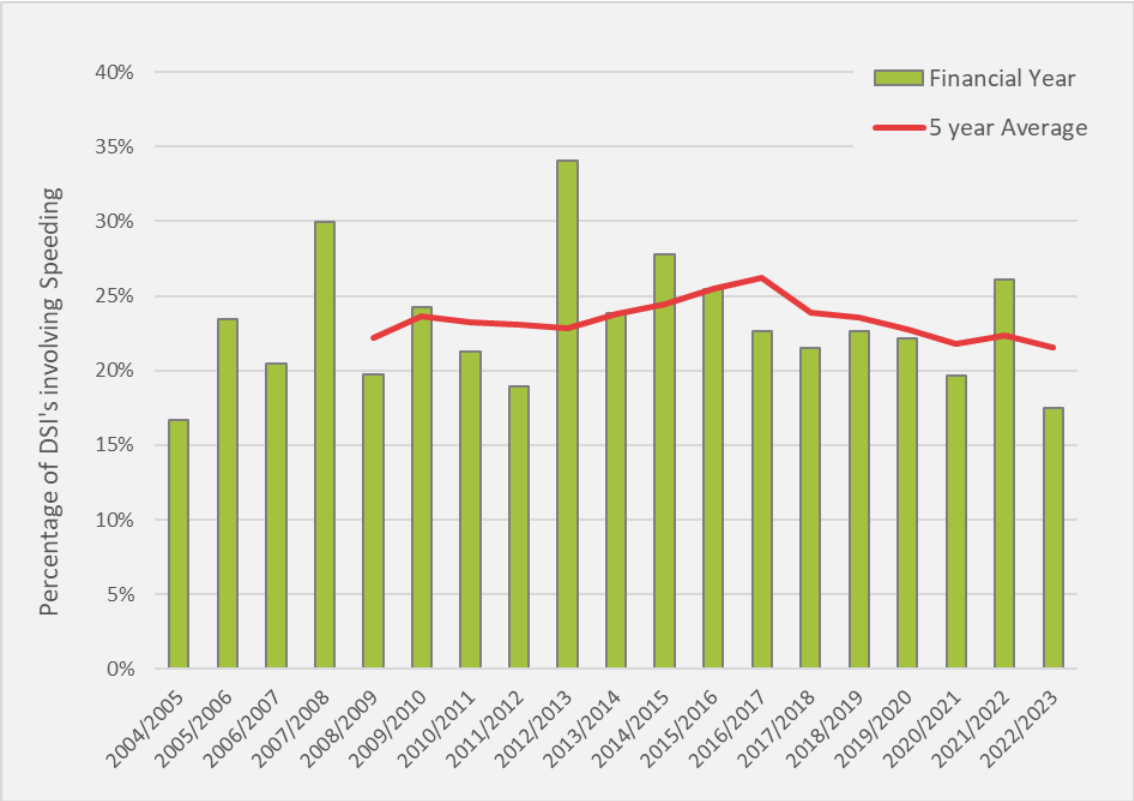
Infrastructure improvements and lowering speed limits are interventions that discourage driving at unsafe speeds and make the roads safer for all users. As discussed earlier in the report, the Land Transport Rule: Setting of Speed Limits 2022 introduced requirements to lower speed limits around schools, town centres, and marae through the development of the Regional Speed Management Plan 2024. Once RSMPs are implemented, these speed reductions are projected to contribute to fewer deaths and serious injuries in the region and nationwide.

In FY 2022/23, the Wairarapa took steps to improve road safety by reducing speed limits between Masterton and Featherston, around schools, and in town centres. Open road sections on State Highway 2 that were the site of significant fatal and serious injury crashes had speed limits reduced from 100 kmph to 80kmph, while limits in the town centres of Masterton, Carterton, Greytown, and Featherston reduced to between 30-50kmph. After engagement and consultation with the public, the police, and road user groups, these changes came into effect on 27 January 2023.

In FY 2022/23, the proportion of DSI where speed was a contributing factor[2] dropped significantly compared to FY 2021/22 (which, per Figure 7 below, had spiked in a way that stands out as an anomaly amongst the data from FY 2018-2023—perhaps influenced by reduced traffic volumes on the road, leading to an increase in speeding). The proportion in FY 2022/23 was 18% compared to 26% in FY 2021/22 (and 20% in FY 2020/21).

[2] DSI where speed is a contributing factor is calculated using data from the Waka Kotahi Crash Analysis System (CAS) as reported by the New Zealand Police, which has its limitations. According to CAS, from 2016-2020, less than 30% of DSI had speed listed as a contributing factor nationwide. However, more recent research using multiple sources of evidence estimated that speeding was involved in approximately 60% of fatal road crashes in New Zealand from 2016-2020, and speeds above New Zealand's limits for safe and appropriate speeds were present in

Overall, the downward trend observed since FY 2016/17 continues, with FY 2022/23 marking the lowest recorded proportion since FY 2004/05.



Source: Waka Kotahi Crash Analysis System

Figure 7: Proportion of deaths & serious injuries when speed is a contributing factor

Pedestrian and cyclist deaths & serious injuries

To ensure our transport network contributes to health and safety outcomes for our region, our roads must be safe for all users and particularly those who are more vulnerable to the risk of transport-related injuries, such as cyclists and pedestrians. Infrastructure improvements play a key role in ensuring that all road users are given adequate space and protection to minimise the risk from other traffic. Wellington region projects such as Te Ara Tupua seek to deliver safer, connected and resilient routes for cyclists and pedestrians, which in turn encourages mode shift away from private vehicle use.

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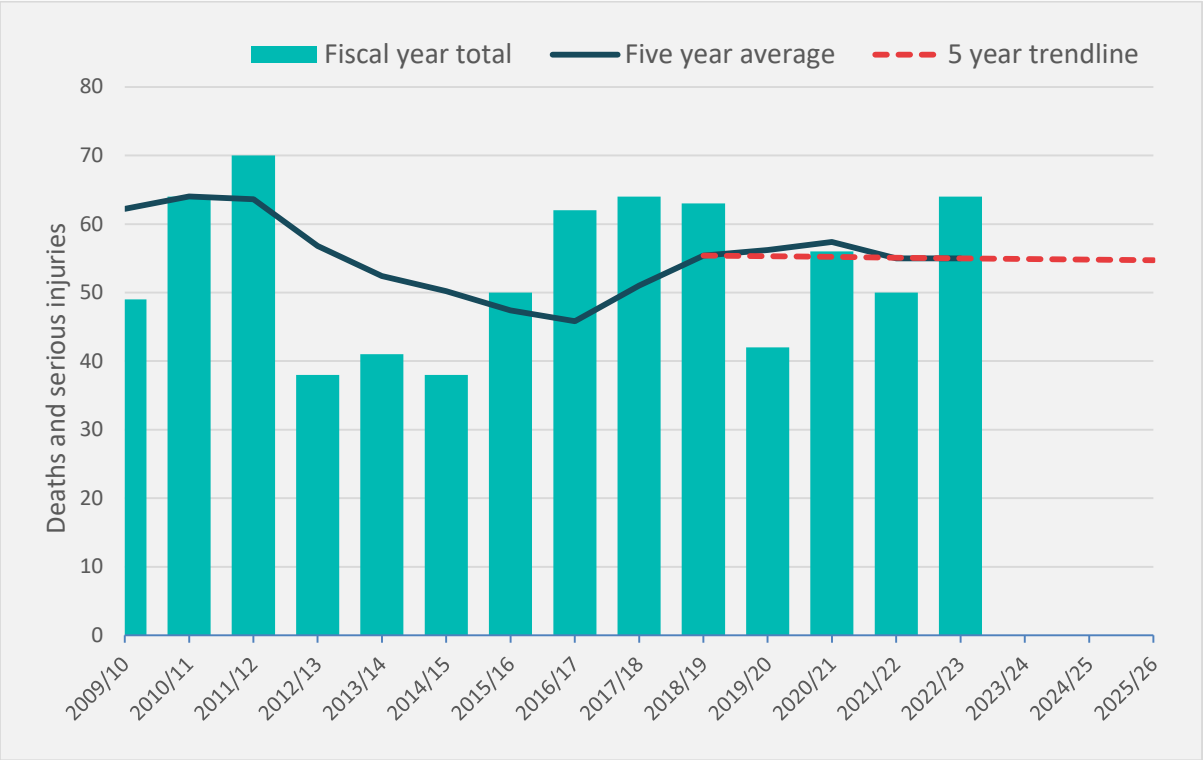
approximately 71% of injury crashes. Waka Kotahi's Speed Management Guide 2022 sets out the Setting of Speed Limits Framework, which provides evidence-based guidance for what safe and appropriate speeds should be on New Zealand roads. Under this framework, Waka Kotahi estimates that only 15 percent of New Zealand's speed limits are set to a safe and appropriate speed. Therefore, the CAS statistic does not reflect the full picture of DSI caused by speeds that are greater than what would be considered safe and appropriate, but less than current legal speed limits. Speed management planning processes currently underway in the region prioritise bringing more roads in line with safe and appropriate speeds, per Waka Kotahi guidance and the Land Transport Rule: Setting of Speed Limits 2022.

In FY 2022/23, the five-year average of DSI for pedestrians and cyclists remained consistent with FY 2021/22. However, the fiscal year total increased from 50 DSI in FY 2021/22 to 64 in FY 2022/23, likely influenced by the increased traffic volume post-COVID-19. The five-year trendline for DSI of pedestrians and cyclists on the road remains consistent from FY 2018/19 (Figure 8).



Source: Waka Kotahi Crash Analysis System

Figure 8: Deaths & serious injuries of pedestrians and cyclists on the road

Participation in active travel to school

The New Zealand census measured what percentage of children aged 5-9 years and 10-14 years travel to school by active transport. The most recent census from 2018 showed that 32% of children aged 5-9 and 34% of children aged 10-14 travelled to school using active transport.

In FY 2022/23, Waka Kotahi ran the second year of the pilot of Te Haerenga o Ngā Tamariki (the Tamariki Tool), supported by Greater Wellington. Over twelve weeks from February – April 2023, participating schools used the Tamariki Tool to collect data on how students in years 1-8 were travelling to school. In the second year of the initiative, 6,300 trips were entered into the Tamariki Tool by 24 schools located across the region. The results of the Tamariki Tool in 2023 showed that private vehicles accounted for 52% of student mode share in February 2023—this decreased to 31% in March 2023. Correspondingly, active travel modes increased significantly from February to March (walking mode share increased from 27% to 39%, while scooting increased from 10% to 16%).

Collecting information on student travel provides a valuable data source to inform and measure the success of targeted behaviour change initiatives (such as Movin' March discussed earlier in this report, which encourages active travel uptake in the month of March) to support active travel and the reduction of vehicle kilometres travelled, which in turn supports regional mode shift objectives. Waka Kotahi's multi-modal team is currently working on extending the tool's availability to other councils across the motu from Term 1 2024. Greater Wellington continues to assist Waka Kotahi to prepare for this launch and encourage all primary schools in the region to participate.

Resilience and security

Per the Ministry of Transport's Transport Outcomes framework, "resilience and security" as an outcome signifies a transport system that minimises and manages the risks from natural and human-made hazards; anticipates and adapts to emerging threats; and recovers effectively from disruptive events.

Measures:
Road network resilience

Updated indicators on resilience & security

Indicator	Latest Result	Trend	Comment
The availability of a viable alternative to high-risk and high-impact routes	No result	*An indicator to measure this regionally has not yet been identified; anecdotally, however, Transmission Gully has provided an alternative route during the closure of State Highway 59 in FY 2022/23*	
The frequency and duration of resolved road closures on major roads	85 events and 971 hours of road closures in FY 2022/23	While the frequency decreased in the past year, the 5-year change is a 9% increase (frequency), and a 489% increase (duration)	Slips caused by extreme weather events led to prolonged road closures, especially on SH59

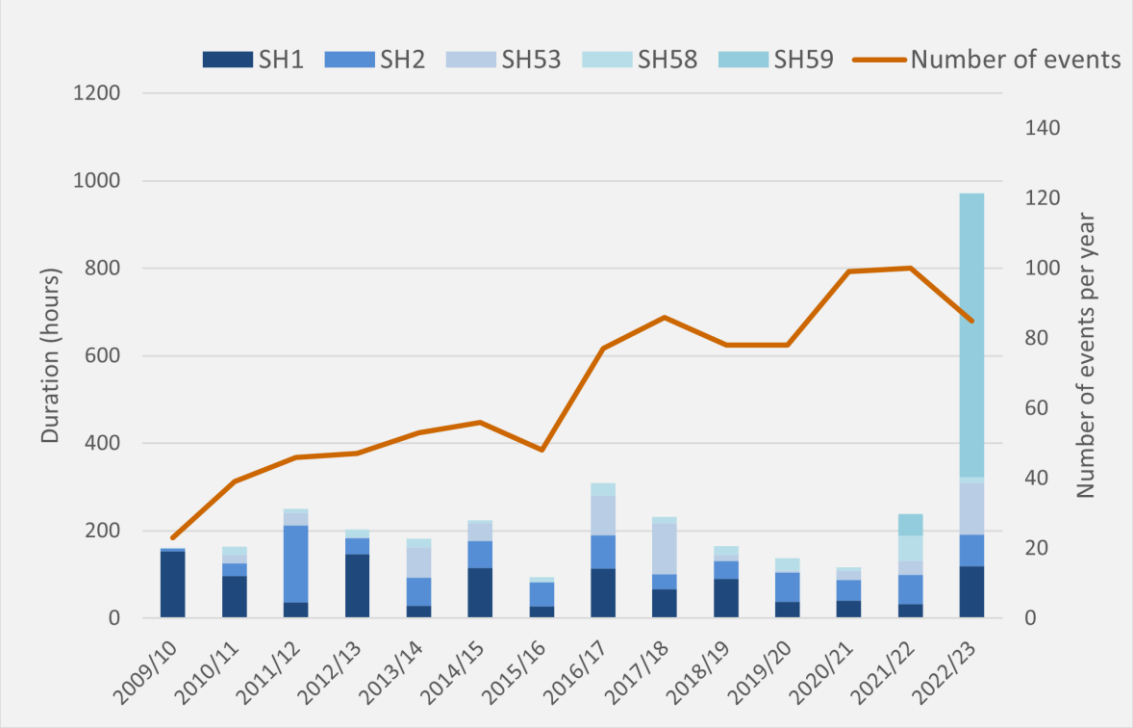
A resilient road network

A key objective in the RLTP is to ensure journeys to, from and within the Wellington Region are connected, resilient and reliable. At this time, there is no suitable data source for the availability of alternative routes across the region. However, the opening of Transmission Gully demonstrates the important role that alternative routes provide when other regional links are affected by road closures, as discussed with Figure 9 below.

While the total number of unplanned road closures decreased (dropping to 85 compared to 100 in FY 2021/22), Figure 9 shows a significant spike in the total duration of unplanned road closures in FY 2022/23 compared to FY 2021/22. In 2022, winter was both the warmest and wettest on record according to the National Institute of Water and Atmospheric Research (NIWA). In August 2022, bad weather led to many slips across the Wellington region, including a major slip between Paekākāriki and Pukerua Bay that led to SH59 being closed for a few weeks (which accounts for the vast majority of the unplanned road closure duration in Figure 9).

However, it is worth noting that Transmission Gully provided an available alternative north-south route—this meant that SH59 was closed for longer than would have been the case if SH59 had been the only north-south route. The length of the closure of SH59 enabled the full remediation of the slip to provide a longer-term solution.

In September 2022, SH53 also experienced a major slip that closed the highway between Featherston and Martinborough, contributing to the increased length of closures on SH53 in FY 2022/23 compared to FY 2021/22.



Source: Waka Kotahi

Figure 9: The duration and frequency of unplanned road closures on state highways

Economic prosperity

Per the Ministry of Transport's Transport Outcomes Framework, "economic prosperity" encapsulates a transport system that supports economic activity via local, regional, and international connections, with efficient movements of people and products.

Measures:
The efficiency of the road network on strategic routes, and regional freight moved by rail

Updated indicators on economic prosperity

Indicator	Latest Result	Trend	Comment
Average travel speeds on selected strategic routes	37 kmph AM peak, and 45 kmph off-peak (three-year average to Feb 2023)	Decrease from 38 kmph AM peak and decrease from 47 kmph off-peak measured in Mar 2022	Decrease across all routes with the exception of Waikanae to Wellington Airport on SH1 (likely due to utilisation of Transmission Gully)
Average travel time variability on selected strategic routes	6.5 mins (three-year rolling ave)	Increase of 9% (from 6.0 mins) compared to last year	Influenced by increased congestion in FY 2022/23
Annual freight volumes moved by rail	1.34 million tonnes	One-year change is a 8% decrease from FY 2021/22; however, 5-year change shows upwards trend (10% increase)	Decrease over the past year in transport of domestic goods, influenced by economic conditions

An efficient road network

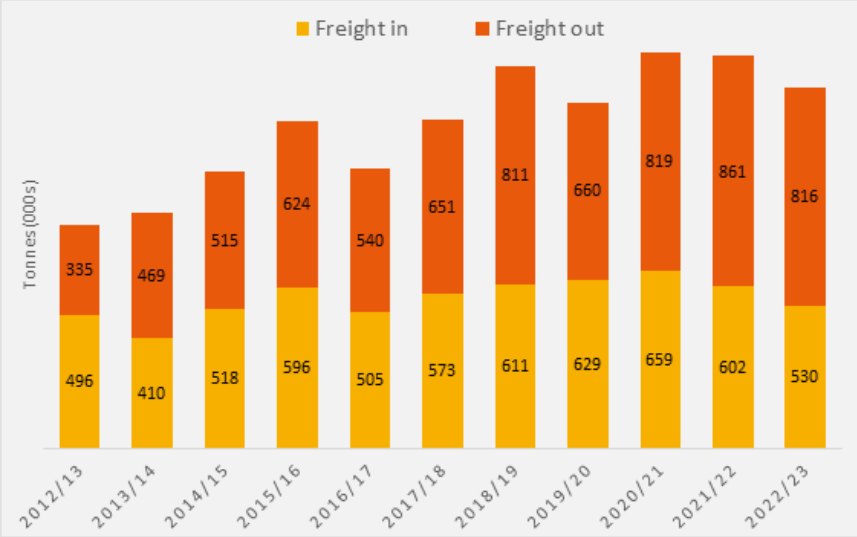
A key investment priority of the Wellington RLTP is to improve strategic access to key regional destinations for people and freight, including the port, airport, and hospitals. Strategic routes comprise state highways and regional roads with high traffic volumes that are essential to regional productivity, in connecting people and goods with regional hubs.

The efficiency of the road network can be estimated by trends in travel speed at peak travel times, which for the purposes of this indicator is measured in February 2023 on select strategic routes (Waikanae to the Wellington Airport; Island Bay to Wellington Station; SH58 Paremata to Seaview; Karori to Quays; Upper Hutt to Wellington CBD; and Seaview to CentrePort). As measured in February 2023, the latest three-year rolling average is 37 kmph for AM peak (down from 38 kmph in February 2022) and 45 kmph for off-peak (decreasing from 47 kmph a year earlier). While average speeds for most corridors decreased, likely influenced by increased traffic volumes, speeds from Waikanae to Wellington Airport on SH1 rose from a three-year rolling average of 54 kmph up to 58 kmph (likely due to the increased utilisation of Transmission Gully).

Average travel time variability (as a measure of lateness) on these same corridors increased to 6.5 minutes (as a three-year rolling average) in February 2023, an increase of 3.5 minutes compared to last year. This increase in lateness is likely influenced the most by increased congestion on strategic routes compared to FY 2021/22, with the return of pre-COVID-19 traffic volumes.

Regional freight moved by rail

The Wellington region relies on our road, rail, and coastal shipping networks to move freight efficiently. Developing the rail network to increase the volume of freight moved by rail will not only benefit the regional economy, but also contribute to emissions reduction objectives by transporting freight via a more carbon-efficient mode compared to trucking.



Source: Freight Information Gathering System (Ministry of Transport)

Figure 10: Freight moved by rail in and out of the region

The Freight Information Gathering System (FIGS) data provides annual estimates of rail freight volume nationwide and within each region. The combined movement of freight by rail in and out of the Wellington region was 1.35 million tonnes in FY 2022/23 (Figure 10)—a reduction of approximately 117 thousand tonnes from FY 2021/22 (8 percent). A contributing factor to this decrease was the reduction in domestic goods transported in FY 2022/23, due to economic conditions and cost of living pressures.

Environmental sustainability

In the Ministry of Transport's Transport Outcomes Framework, "environmental sustainability" involves a transport system that transitions to net zero carbon emissions, and maintains or improves biodiversity, water quality, and air quality.

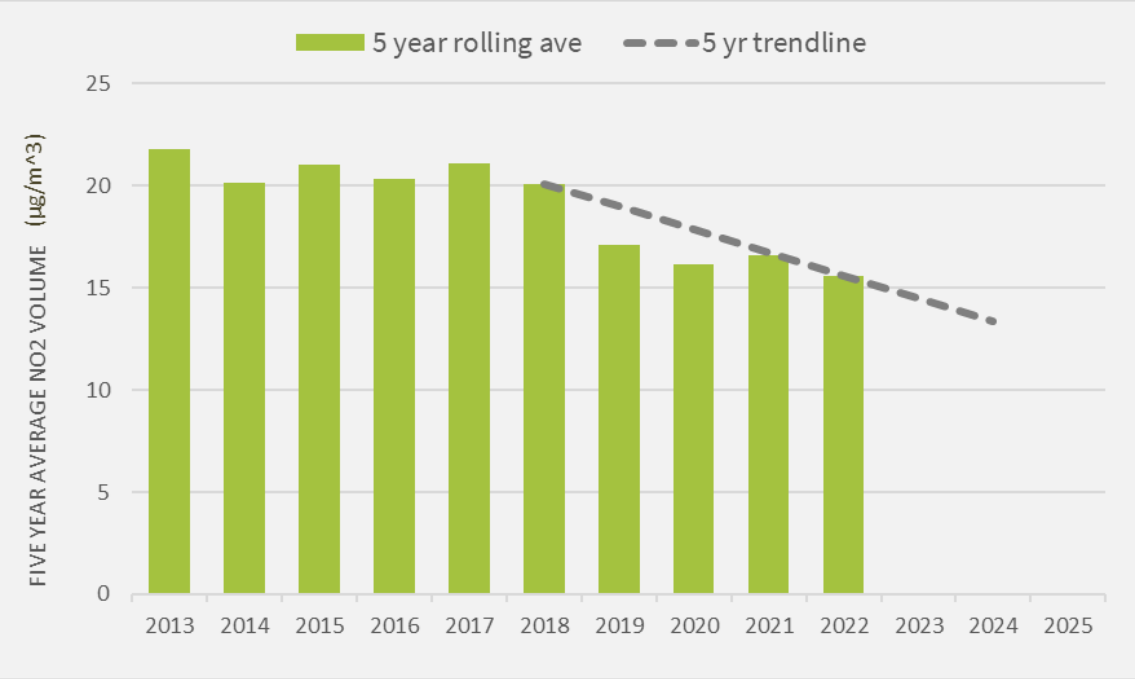
Measures:
Transport-generated emissions and vehicle fleet composition

Updated indicators on environmental sustainability

Indicator	Latest Result	Trend	Comment
Transport CO_2 emissions	2.16 tonnes of CO_2 per capita	5-year change indicates an 8% decrease, and one-year change indicates a 4% increase	Increase in emissions in the past year likely reflects the increase in traffic volumes post-COVID-19
Ambient air quality (nitrogen dioxide and black carbon matter)	Nitrogen dioxide is 17.1 µg/m³ (5-year average to Dec 2022)	Nitrogen dioxide has decreased by 18% over the last five years	
Percentage of the private car fleet that are EV and hybrid vehicles	56% of new registrations are hybrid or electric	Five-year change indicates a 44% increase, and one-year change indicates an 18% increase	Indicator includes light private vehicles only
Percentage of the bus fleet that are EV and hybrid vehicles	23% of the bus fleet are EVs (as at June 2023)	Up from 18% in FY 2021/22	Five-year absolute change is 21%

Air quality – nitrogen dioxide

The RLTP supports initiatives that contribute to ongoing improvement of the vehicle fleet to reduce greenhouse gas emissions and improve air quality, including uptake of electric vehicles, alternative fuel options, and improved fuel efficiency.



Source: Greater Wellington

Figure 11: Air quality – nitrogen dioxide

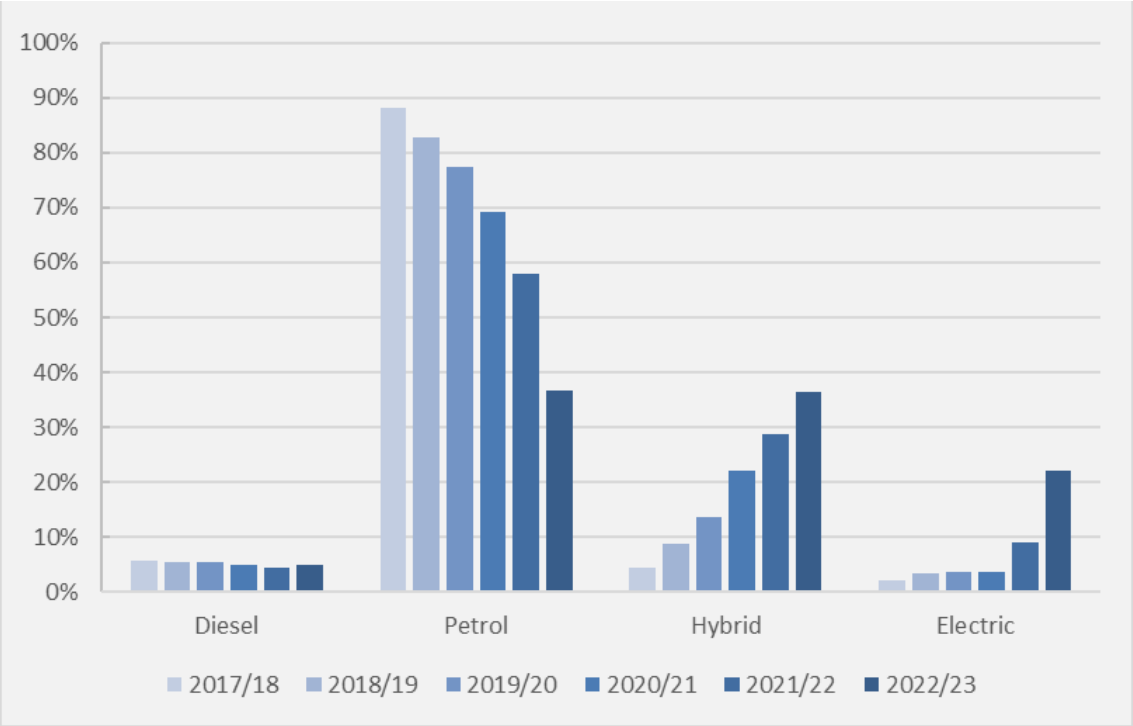
For the purpose of this report, air quality is monitored based on levels of nitrogen dioxide (NO_2), a harmful pollutant arising from vehicle emissions. The data is gathered from Waka Kotahi's national air quality (NO_2) monitoring network including multiple sites across the region (except the Wairarapa). The Waka Kotahi sites are mostly located along the state highways, but include a small number of local roads.

Figure 11 (which is a calendar year indicator) shows the results from NO_2 monitoring sites: in 2022, NO_2 was on average 17.1 µg/m^3, calculated using a five-year moving average. Levels of NO_2 have decreased by 18% over the last 5 years. As the data is a five-year rolling average from 1 January 2018 to 31 December 2022, improvements in air quality continue to reflect the reduction in regional traffic as a result of COVID-19. As discussed at the end of this section, lower-emissions vehicles also influenced improvements to air quality in Wellington CBD.

Changes to the vehicle fleet

Changes to the vehicle fleet to reduce the prevalence of pollutants and emissions are essential to improving air quality. This indicator monitors the transition from fuel-powered internal combustion engine (ICE) vehicles to low-emissions vehicles such as EV or hybrid cars and vans in the Wellington region.

In FY 2022/23, electric vehicle registrations accounted for over 20% of total new vehicle registrations, marking a significant jump from FY 2021/22 (Figure 12). Hybrid vehicle registrations also continued to increase, accounting for more than 35% of total new registrations.



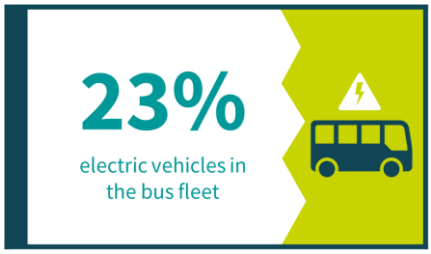
Source: Waka Kotahi

Figure 12: New registrations for private vehicle fleet by engine type

The Government's Clean Car Discount scheme made the purchase of low-emissions vehicles more affordable for new vehicle buyers. Per the Land Transport (Clean Vehicle Discount Scheme Charges) Regulations 2022, effective 1 April 2022, the Clean Car Discount ensured that vehicles with zero or low emissions would qualify for a rebate, while vehicles with high emissions would incur a fee. In FY 2022/23, this likely contributed to the spike in low emissions new vehicle registrations in the Wellington region, and conversely the reduced proportion of new registrations for petrol cars.

Electric bus fleet

From 2021 onwards, per Greater Wellington policy, all new buses purchased for Metlink public transport operations must be electric vehicles with the goal of having an emissions-free fleet by 2035. With the goal to fully decarbonise the public transport fleet by 2035, the conversion of the Metlink bus fleet to electric vehicles (EVs) continues to progress—in June 2023, the fleet was 23% EV buses compared to 18% in June 2022.



Greater Wellington's annual report released in September 2022 showed that increasing the EV bus fleet has resulted in cleaner air along the Golden Mile, showing the positive effect that converting the diesel fleet has on improving environmental sustainability.

Conclusion

Overall, FY 2022/23 marked a return to pre-COVID-19 freedoms of movement and the emergence of a new post-COVID-19 normal. Public transport patronage and highway traffic volumes both show strong recovery to pre-COVID-19 levels.

Challenges in FY 2022/23 included challenges to resilience due to extreme weather events, which increased the duration of road closures. However, Transmission Gully provided a key boost to the region's overall resilience by providing an alternative route for road users during the prolonged closure of State Highway 59.

In FY 2022/23, DSI increased for pedestrians, cyclists, and drivers, likely influenced by increased traffic volumes post-COVID-19. While DSI for drivers increased by 6.4 percent from FY 2021/22 to FY 2022/23, DSI for cyclists and pedestrians increased by 28 percent from FY 2021/22—indicating that the reduced presence of vehicles on the road in the last fiscal year likely contributed to greater safety outcomes for these more vulnerable road users.

Other challenges included the increased cost of living and economic conditions that delayed transport project delivery during FY 2022/23, and which influenced a decrease in the amount of freight goods transported by rail compared to FY 2021/22.

Improvements in FY 2022/23 included a significant increase in public transport patronage towards pre-COVID-19 levels. In FY 2022/23, public transport patronage throughout the day reflected changes in working behaviours, with more people continuing to work from home and the increased affordability of off-peak travel encouraging the uptake of off-peak and weekend travel. Compared to 2019, patronage during the morning peak was 10% to 15% lower in FY 2022/23, but the proportion of off-peak and weekend patronage increased.

Improvements in FY 2022/23 also included better air quality due to the decrease in vehicle pollutants, likely influenced by higher electrification as well as the introduction of more buses of a higher Euro (vehicle emissions) standard, supporting outcomes for healthy and safe people in the Wellington region. The Wellington region also continued to make strides in the uptake of more environmentally sustainable modes of travel, with a steady increase in new hybrid and EV registrations in the region and the continued conversion of the Metlink public transport bus fleet.

Subsequent Annual Monitoring Reports and updates to the Wellington RTC will provide an opportunity to monitor how some of the emerging trends evolve through time.

Reporting on the RLTP Programme 2021-24

The next Annual Monitoring Report on FY 2023/24 (July 2023 – June 2024) will be presented to the Wellington RTC in December 2024.

In addition to the Annual Monitoring Report, the Wellington Regional Transport Committee receives regular reports on the progress of the RLTP Programme 2021-24 to the March and September meetings of the RTC. These can be found in the order papers for the relevant meetings on the Greater Wellington website. In the future, updates on key metrics will also be provided to the RTC on a quarterly basis to indicate the direction of travel.

RLTP 2021 Mid-Term Review

Every three years, the RLTP must undertake a mid-term review to confirm that the programme identified in the RLTP remains fit for purpose for the second half of its six-year duration. This review includes the formal bid for funding from the National Land Transport Fund through the preparation of the RLTP 2024-27 transport programme.

The review is underway at the end of 2023, with public consultation scheduled for early 2024.

Interested in learning more about the Wellington RLTP?

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December 2023