

If calling please ask for: Democratic Services

21 November 2018

Regional Transport Committee

Order Paper for meeting to be held in the Council Chamber, Greater Wellington Regional Council, Level 2, 15 Walter Street, Te Aro, Wellington on:

Tuesday, 27 November 2018 at 10.00am

Membership of Committee

Cr Donaldson (Chair) Greater Wellington Regional Council Cr Laidlaw (Deputy) Greater Wellington Regional Council

Mayor Booth
Mayor Guppy
Upper Hutt City Council
Wayor Gurunathan
Mayor Napier

Carterton District Council
Upper Hutt City Council
Kapiti Coast District Council
South Wairarapa District Council

Mayor PattersonMasterton District CouncilMayor TanaPorirua City CouncilMayor WallaceHutt City CouncilCr Calvi-FreemanWellington City Council

Emma Speight New Zealand Transport Agency

Recommendations in reports are not to be construed as Council policy until adopted by Council

Regional Transport Committee

Order Paper for Meeting to be held on Tuesday, 27 November 2018 in the Council Chamber, Greater Wellington Regional Council, Level 2, 15 Walter Street, Te Aro, Wellington at 10.00am

Public Business

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3.	Public participation		
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Report 18.369

28/08/2018 File: CCAB-16-304

Minutes of the Regional Transport Committee meeting held in the Council Chamber, Greater Wellington Regional Council, Level 2, 15 Walter Street, Te Aro, Wellington on Tuesday 28 August 2018 at 11:02am

Present

Cr Barbara Donaldson (Chair) Greater Wellington Regional Council Cr Chris Laidlaw (Deputy) Greater Wellington Regional Council

Mayor BoothCarterton District CouncilCr Calvi-FreemanWellington City CouncilMayor GuppyUpper Hutt City CouncilCr LeggettPorirua City Council

Mayor Napier South Wairarapa District Council

Mayor Patterson Masterton District Council

Deputy Mayor Bassett Hutt City Council

Emma Speight New Zealand Transport Agency

Public Business

1 Apologies

Moved (Cr Donaldson/Mayor Guppy)

The Committee accepts the apologies for absence from Mayors Gurunathan, Tana and Wallace.

The motion was CARRIED.

2 Conflict of Interest declarations

There were no declarations of conflict of interest.

3 **Public Participation**

Kara Lipski and Ben Pette, Wellington Public Transport Users Association spoke to item 6, Progress report on projects in the Regional Land Transport Plan 2015.

4 Confirmation of the minutes of 19 June 2018

Moved

(Cr Leggett/Mayor Napier)

That the Committee confirms the minutes of 19 June 2018, Report 18.271.

The motion was **CARRIED**.

5 NZTA updates

6

Emma Speight, Regional Relationships Lower North Island Director, NZTA, gave an oral report to the Committee on NZTA projects, including an update that the National Land Transport Programme is due for release on Friday 31 August 2018. She advised that under the Provincial Growth Fund the Wairarapa Councils may be able to get funding for transport projects but that such projects will still need to meet NZTA criteria. Emma spoke at Rail Safety Week and that NZTA is currently consulting on Traffic Control Management. The committee was also informed about upcoming changes to the road layouts of SH1 at Linden and McKay's crossing due to the construction of Transmission Gully and that there would be adjustments to speed limits in these areas.

7 Progress report on projects in the Regional Land Transport Plan 2015

Moved

(Mayor Napier/Deputy Mayor Bassett)

Harriet Shelton, Manager, Regional Transport Planning spoke to the report

That the Committee:

- 1. Receives the report.
- 2. Notes the content of the report.

The motion was **CARRIED**

Regional Transport Committee 27 November 2018, Order Paper - Confirmation of the minutes of 28 August 2018
The meeting closed at 11:48am
B Donaldson (Chair)
Date:



Report 2018.535

Date 16 November 2018 File TRPL-10-570

Committee Regional Transport Committee

Author Helen Chapman, Senior Transport Planner

Proposed variations to the Wellington Regional Land Transport Plan 2018-21 programme

1. Purpose

To seek the Regional Transport Committee's (the Committee) support for two proposed variations of the Wellington Regional Land Transport Plan 2018-21 programme described in this report.

2. Background

2.1 The Regional Land Transport Programme

The current Regional Land Transport Plan (RLTP) was prepared in 2015 and subsequently updated by the mid-term review in June 2018. Part of that update was the development of a new programme section for 2018-21.

The RLTP programme contains all the land transport activities proposed to be undertaken throughout the region, and the regional priority of significant activities (costing >\$5m).

The activities in the RLTP are submitted by the NZ Transport Agency (NZTA) and 'Approved Organisations' (including the eight territorial authorities and Greater Wellington Regional Council (GWRC)).

3. Process for considering a variation

Section 18D of the Act states that if a good reason exists to do so, the Committee may prepare a variation to its RLTP during the six years to which it applies. This can be at the request of an Approved Organisation, the NZTA, or on the Committee's own motion.

Section 18D (4) of the Act requires the Committee to consider any variation request promptly.

Section 18D (5) of the Act notes that consultation is not required for any variation that is not significant or that arises from the declaration or revocation of a state highway.

4. Proposed variations and significance

The details of the proposed variations to be considered by the Committee at this meeting are set out below along with an assessment of their significance.

The significance policy for proposed variations to the RLTP is set out in Appendix B (page 191) of the RLTP 2015. Officers have assessed the significance of the proposed variations, for the purpose of consultation, against the RLTP significance policy.

A record of the key factors considered by officers in making a determination of significance is provided in Tables one and two.

1. Wellington City bus hubs to support new network

Request by: Greater Wellington Regional Council

Details of the subject activity: A programme of development of seven bus hubs in Wellington City to support the new bus network. The bus hubs are located at: Kilbirnie, Hospital, Johnsonville, Courtenay Place, Miramar, Karori, and Brooklyn.

Description of variation: To change the programme to reflect that the bus hubs are now a separately identified activity over \$5 million

Reason for the variation: The bus hubs were expected to be able to be delivered as part of the low cost/low risk programme, but further scoping has shown that the project cannot be split up into separate standalone projects and the costs are higher than initially anticipated.

Estimated total cost: \$14.4 million

Proposed timing and cash-flow: Design work has been completed; construction of the hubs is underway and is expected to be completed within 2018/19.

Funding sources: Local and national

Table one: Significance of the RLTP variation for Wellington City bus hubs to support new network

1) Key considerations in determining sig	Key considerations in determining significance – Would the proposed variation:										
Materially change the balance of strategic investment?	No	This change is not considered to materially change the overall balance of strategic investment as bus hubs were already included within the RLTP as a low cost/low risk activity.									

Negatively impact on the contribution to Government or GPS objectives and priorities?	No	The proposed variation relates to projects that will make a positive contribution towards the Government Policy Statement objectives of a land transport system that provides access to economic and social opportunities and enables transport choice and access.					
Affect residents?	No	The bus hubs variation will have a impact on a small number of resident to the project. No properties are affected by the proposed activity.					
Affect the integrity of the RLTP, including its overall affordability?	No	The proposed variation is not expe affect the integrity of the RLTP or it affordability.					
Several types of variations are consi proposed variations:	dered to be	generally not significant in their own i	right. Are the				
An activity in the urgent interests	of public s	afety?	No				
A small scope change costing les than \$20M	s than 10%	% of estimated total cost, or less	Yes				
Replacement of a project within a project?	group of (generic projects by another	No				
A change of the duration or priorit not substantially alter the balance the programme?		tivity in the programme which does gnitude and timing of activities in	N/a				
The addition of an activity previou 18 and 18A of the Act and which of		ted on in accordance with sections h section 20 of the Act?	Yes				
Note: A variation that is assessed as meeting however the key considerations in the first ta			red significant,				
3) Other considerations –			l part of				
What are the likely impacts, time delays or cost on public safety, economic social, environmental wellbeing as a consequence of undertaking consultation? The bus hubs are a critical implementation of the new Metlink went live in July 2018. Delay in the of the hubs is impacting on custom delays would impact on custom service.							
What are the relative costs and benefits of consultation? There would be little benefit in addition consultation on the bus hubs independent other projects. Extensive consultation of already occurred and construction commence.							
To what extent has consultation the community or rele- stakeholders been underta- already?	vant uaken re	Consultation on the priority of the bundertaken as part of the RLTF eview. Consultation and a public ampaign were also undertaken as vider changes to the Metlink networlonsent for the hubs involved consuffected parties.	mid-term information part of the c. Resource				

Conclusion: The variation is therefore **not** considered to be significant for the purpose of requiring consultation.

2. Hutt City LED Accelerated Renewals

Request by: Hutt City Council

Details of the subject activity: The activity involves the accelerated renewal of approximately 7100 Category P streetlights and up to 4500 Category V streetlights with LED Luminaires. The activity will reduce energy and maintenance costs and improve pedestrian and vehicle safety.

Description of variation: To add a new activity to the 3 year programme due to the extension of NZTA subsidies (namely accelerated LED renewals).

Reason for the variation: NZTA has extended the period over which the heightened FAR for LED renewals is available. This extension means that the activity is now expected to be completed before the end of June 2021. The extended FAR period had not been confirmed at the time the RLTP was prepared.

Estimated total cost: \$4.5 million

Funding sources: Local and national

Proposed timing and cash-flow: The activity is expected to commence in November/ December 2018 and be completed by the end of June 2021. \$1.5 million of the project funding is proposed to be spent in 2018/ 2019 and \$1.5 million each in 2019/ 2020 and 2020/ 2021.

Full details of the proposed variation(s) for inclusion in Tables one and two of the programme section of the 2018 Mid-term update of the RLTP 2015 are set out in **Attachment 1** to this report.

Table two: Significance of the RLTP variation for Hutt City LED Accelerated Renewals

1) Key considerations in determining significance – Would the proposed variation:										
Materially change the balance of strategic investment?	No	The proposed cost variation of \$4.5 million associated with this activity is not considered to materially change the overall balance of strategic investment in the context of the total programme cost.								
Negatively impact on the contribution to Government or GPS objectives and priorities?	No	The proposed variation relates to a project that will make a positive contribution towards the Government Policy Statement objectives through the construction of improvements that will have a significant contribution to road safety and sustainability.								

• A	ffect residents?	No	The proposed variation would have only positive effects on residents through improved safety. Any perceived negative affects — mainly attributable to perceived light pollution can be managed through the implementation process.						
	ffect the integrity of the RLTP, acluding its overall affordability?	No	The proposed variation is not expected to affect the integrity of the RLTP or its overall affordability.						
	everal types of variations are wn right. Are the proposed var		ered to be generally not significa	ant in their					
• A	n activity in the urgent interests of	of public s	afety?	No					
	small scope change costing less nan \$20M	s than 10%	% of estimated total cost, or less	No					
	eplacement of a project within a roject?	group of (generic projects by another	No					
no		•	tivity in the programme which does gnitude and timing of activities in	N/a					
	he addition of an activity previous 8 and 18A of the Act and which o		ted on in accordance with sections th section 20 of the Act?	No					
	idered significant, however the		any one of these criteria will genensiderations in the first table sho						
3) O	ther considerations –								
de ed w	· · · · · · · · · · · · · · · · · · ·								
	 What are the relative costs and benefits of consultation? The proposed variation would have only positive effects on residents through improved safety. Any perceived negative affects – mainly attributable to perceived light pollution can be managed through the implementation process. 								
th st	o what extent has consultation we ne community or relevant takeholders been undertaken Iready?	ti	The proposed variation is not expected to affect the integrity of the RLTP or its overall affordability.						
Cond	clusion: The variation is therefore	ore not o	onsidered to be significant for the	purpose of					

requiring consultation.

5. Next Steps

If the Committee agrees to the variation requests, they will then be forwarded to GWRC for approval at its Council meeting on 13 December 2018. As is the case with the RLTP itself, GWRC must either accept the recommendation or refer the variations back to the Committee, with a request that it be reconsidered.

Once the variations have been approved by GWRC, they are then forwarded to the NZTA for consideration of inclusion in the NLTP for funding.

There is no obligation for the NZTA to vary the NLTP by including the new activities. However, it must give written reasons for any decision not to do so.

6. The decision-making process and significance

The matter requiring decision in this report has been considered by officers against the requirements of Part 6 of the Local Government Act 2002. Part 6 sets out the obligations of local authorities in relation to the making of decisions.

6.1 Significance of the decision

The matters for decision in this report are subject to the legislative requirements of the Land Transport Management Act 2003. Section 18D(5) of the Land Transport Management Act 2003 requires the Committee to determine if a proposed variation to the RLTP is significant, in accordance with its significance policy adopted under 106(2) of the Land Transport Management Act 2003 and included in the programme.

An assessment of the variation against the RLTP significance policy is set out in section 5 of this report and concludes the matter **does not** trigger the requirement to carry out consultation.

7. Recommendations

That the Committee:

- 1. **Receives** the report.
- 2. **Notes** the content of the report.
- 3. **Agrees** to recommend to Greater Wellington Regional Council that the Regional Land Transport Plan 2018-21 programme be varied to include the proposed activities in **Attachment 1** of this report.

Report prepared by: Report approved by: Report approved by:

Helen Chapman Harriet Shelton Luke Troy

Senior Transport Planner Manager Regional Transport General Manager Strategy

Attachment 1: Proposed variation(s) to RLTP 2018-21 programme

<u>Attachment 1 – Proposed variation(s) to RLTP 2018-21 programme</u>

Table One: Significant activity priority, and contribution to regional objectives

Priorit band	Organisation	Project name	A high quality, reliable public transport network	An increasingly resilient transport network	An attractive and safe walking and cycling network	A safe system for all users of the regional transport network	An efficient and optimised transport system that minimises the impact on the environment	A well planned, connected and integrated transport network	A reliable and effective strategic road network	An effective network for the movement of freight
1	GWRC	Wellington City bus hubs to support new network								

Table Two: Significant activities costs and timing

Organisation	Project Name	Description	Activity Stage	Expected start year	End year	Cost (\$m) 2018/19	Cost (\$m) 2019/20	Cost (\$m) 2020/21	3 year cost (\$m)	Total projected cost (\$m)	Funding source	BCR	Profile
GWRC	Wellington City bus hubs to support new network	A programme of development of seven bus hubs in Wellington City to support the new bus network. The bus hubs are located at: Kilbirnie, Hospital, Johnsonville, Courtenay Place, Miramar, Karori, and Brooklyn.	PBC - Construction	2018	2018	14.4				14.4	Local- National	TBD	HML*

Table five: Non-prioritised activities

Project Nan	ne	Description	Expected start year	End year	Cost (\$m) 2018/19	Cost (\$m) 2019/20	Cost (\$m) 2020/21	3 year cost (\$m)	Total projected cost (\$m)	Funding source		
	Hutt City Council											
Accelerated Renewals	LED	Replacing existing luminaires with LED Luminaires.	2018	2021	1.5	1.5	1.5	4.5	4.5	Local- National		



Report 18.473

Date 22 November 2018 File CCAB-16-328

Committee Regional Transport Committee Author Jill Corrin, Senior Data Analyst

Annual Monitoring Report on the Regional Land Transport Plan

1. Purpose

To present to the Regional Transport Committee (the Committee) the Annual Monitoring Report (AMR) that reports on the progress made in 2017/18 financial year towards implementing the Regional Land Transport Plan 2015 (RLTP).

2. Background

The Land Transport Management Act 2003 (amended in 2013) requires the Committee to prepare an RLTP. The RLTP sets the strategic direction for a region's land transport network and replaces the Regional Land Transport Strategy. The monitoring requirements for the RLTP are set out in Appendix A of the Plan itself.

This is the fourth year of monitoring for the RLTP adopted in April 2015. The AMR for 2017/18 is a summary report. This means that an only those measures with recent results in the year just finished are included and an account of their progress in relation to RLTP targets are discussed,

The AMR presents the latest data and information on the RLTP outcomes and measures. For most measures, this covers the timeframe up to 30 June 2018. The information referenced in the AMR is sourced from Greater Wellington Regional Council (GWRC), local councils, NZ Transport Agency, and Statistics New Zealand. GWRC data on public transport is collected as part of operational reporting requirements.

Not all data is updated annually. Some is only available after every census (the results from the 2018 census will be available next year), and some measures, due to being new reporting indicators, have only two or three years of data to report on.

There are eight RLTP strategic objectives, and 20 RLTP outcomes, each with at least one measure and a 2025 target. By measuring each outcome, we can determine the level of overall progress in delivering the strategic objectives.

How the outcome is progressing was determined by both a short-term (two to four years) and five-year trend line for each measure (where data is available), to allow trends to be discussed.

3. Comment

The available information tells us that more people are using public transport in the region, particularly for trips to Wellington City CBD. Customer satisfaction with public transport has fluctuated over the last five years but overall the satisfaction rating has increased. More people are cycling in urban areas; however measures indicate a reduction in the perceived level of service for cycling.

The short term trend shows a small increase in transport emissions per person and absolute emissions. The trend in public transport vehicle fleet emissions was neutral, but changes from July 2018 onwards with the new bus contracts and the introduction of low emission buses are expected to result in a positive trend in future. Any changes resulting from the new bus contracts from July 2018 will be reported in the 2019 AMR.

For an overview on the progress of all the RLTP measures, please refer to the summary table in **Attachment 1**.

4. Communication

The AMR will be published on GWRC's website. It will also be distributed to key stakeholders and interest groups.

5. The decision-making process and significance

The matters requiring decision in this report have been considered by officers against the requirements of Part 6 of the Local Government Act 2002.

5.1 Significance of the decision

The significance of the matter has been considered, taking into account the Council's significance policy and decision-making guidelines. Due to the procedural nature of this decision it is recommended that the matter be considered to have low significance.

A formal record outlining consideration of the decision-making process is required in this instance.

5.2 Engagement

Engagement on the matters contained in this report aligns with the level of significance assessed In accordance with the significance and engagement policy, no engagement on the matters for decision is required.

6. Recommendations

That the Committee:

- 1. Receives the report.
- 2. Notes the content of the report.
- 3. **Approves** the 2017/18 Annual Monitoring Report on the Regional Land Transport Plan as set out in Attachment 1.
- 4. **Delegates** to the Chair of the Committee the ability to make minor editorial changes to the 2017/18 Annual Monitoring Report on the Regional Land Transport Plan, as part of the design and publication process.

Report prepared by: Report approved by: Report approved by:

Jill Corrin Harriet Shelton Luke Troy

Senior Data Analyst, Data and Manager, Regional Transport General Manager, Strategy

Analysis Planning

Attachment 1: 2017/18 Annual Monitoring Report on the Regional Land Transport Plan

Attachment 1 to Report 18.473



2017/18 Annual Monitoring Report on the Regional Land Transport Plan

For more information, contact Greater Wellington Regional Council:

Report 2018.551 October 2018

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Executive Summary

The Wellington Regional Land Transport Plan (RLTP) sets out the strategic direction for the region's land transport network. It includes a policy framework comprising eight strategic objectives and 20 outcomes to guide land transport planning and investment for the region. The strategic objectives and outcomes in the RLTP have been developed in response to the major transport challenges and issues facing the region.

This Annual Monitoring Report (AMR) has been prepared to measure progress against the RLTP outcomes and associated targets. It covers the 2017/18 financial year and represents the fourth year of monitoring since the RLTP was adopted in April 2015. This report presents data and information on the 20 RLTP outcomes, each with at least one measure and target. Some measures can only be updated when census data becomes available (2018 Census data is due to be released from March 2019 onwards and will be included in the 2019 AMR).

The available information tells us that more people are using public transport in the region, particularly for trips to Wellington City CBD. Customer satisfaction with public transport has fluctuated over the last five years but overall the satisfaction rating has increased. More people are cycling in urban areas; however measures indicate a reduction in the perceived level of service for cycling.

The short term trend shows a small increase in transport emissions per person and absolute emissions. The trend in public transport vehicle fleet emissions was neutral, but changes from July 2018 onwards with the new bus contracts and the introduction of low emission buses are expected to result in a positive trend in future. Any changes resulting from the new bus contracts from July 2018 will be reported in the 2019 AMR.

Table 1 lists each outcome with the RLTP 2025 target and 2013/14 baseline for each measure. The results for each measure for 2017/18 are shown (if available) and progress is indicated by colour and symbols according to short term or 5 year trend – defined in the legend below.

Table 1 legend

	General Progress for each measure is summarised in the table:			Observed progress in relation to RLTP Target
2017/18 data	The latest results on the measure - if data is available			The general direction of the data trend is toward the target
Short term trend	The trend is based on 2 to 4 years of results so trend is likely to change		\leftrightarrow	Neutral trend
5 year trend	Where the measure has at least five years of data, the long term trend is determined, and colour coding and			The general direction of the data trend is away from the target
	arrows indicate the progress of the trend in relation to the RLTP and direction of results			A new data series or no information at this time
			↑	Results are increasing
			→	Results are decreasing
			✓	RLTP Target achieved

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Table 1: Summary of RLTP measures for each strategic objective and outcome

Objective: A high	quality, reliable public transport netwo	rk		1	61	i -	
Outcome	Measure 2025 target		Baseline	2017/18 data	Short term trend	5 year trend	Comment
	Annual public transport boardings per capita	Increase to at least 76 boardings	72 boardings in 2013	73.7 per capita	↑	↑	1.2% increase in the last five years.
Increased public transport use	Public transport mode share of journey-to-work trips (census)	Increase to at least 17.8%	16.6% in 2013		↑		An update using the 2018 Census data will be in the 2019 AMR.
•	Public transport mode share of trips crossing Wellington City CBD cordon (AM peak)	Increase to at least 34.7%	33.1% in 2013	36.9%	↑	↑	Mode share exceeds the RLTP target for second year.
	Population living within 500m of a core bus service or 1km of a railway station (census)	Improvement toward at least 50%	41.6% in 2013	-	↑		An update using the 2018 Census data will be in the 2019 AMR.
Improved public transport accessibility	Population living within 500m of any bus stop or 1km of a railway station.	Improvement toward at least 88%	87.6% in 2013	- -	↑		An update using the 2018 Census data will be in the 2019 AMR.
for all	Accessibility to public transport network for all users	Continual improvement in physical accessibility and standards of vehicles, parking and facilities.	A comprehensive range of bus and rail facilities for customers.	17 new bus stops installed	1	↑	New and upgraded bus shelters, bus stops, and additional park & ride spaces.
Improved quality of	Public transport vehicle fleet emissions	At least a 50% reduction in emissions (average 15 g/km per bus)	2014 emissions 29.6 g/km³	28.2 g/km ³	\leftrightarrow	\leftrightarrow	The bus fleet had a mix of newer and older vehicles. Going forward new Low emission buses will replace the older fleet.
public transport	Overall satisfaction with the Wellington region's public transport system (all modes)	Δt least 90%		85%	\leftrightarrow	↑	Level of satisfaction with PT has fluctuated over the last five years but overall satisfaction rating has increased.
Improved public	Peak period public transport travel times on core routes	A continuous improvement on core routes	bus travel times: 41 min AM & 40 min PM (2014)		V	\	Average bus travel times slowly decrease over five years.
transport reliability and journey times	Peak period bus travel time variability on core routes	A continuous improvement in variability along core routes	Ave lateness: 3.8 minutes AM 3.2 minutes PM (2014)	3.0 mins AM 2.8 mins PM	\	4	Some fluctuation in the last five years but overall downward trend in travel time variability.
	Rail service punctuality	At least 96% of services reach destination within 5 mins of timetabled time	88% in 2017	88.3%	\leftrightarrow		Second year for this data series, punctuality rating is unchanged from last year.

Objective: A reliable	& effective strategic road netw	vork	1				
Outcome	Measure	2025 target	Baseline	2017/18 data	Short term trend	5 year trend	Comment
Reduced severe road congestion	Rolling average peak period travel speeds on selected strategic routes	A 10% increase in 3 year rolling average travel speed (40 km/hr AM, 45 km/hr PM)	36 km/hr AM 41 km/hr PM (2016)	35 km/hr AM 40 km/hr PM	\leftrightarrow		Short term trend only because this is the third year for this data series. Results show a slight decrease in travel speed.
Improved reliability of the strategic road network	Average peak travel time predictability on selected strategic routes	A 10% increase in the 3 year rolling average predictability (71% AM, 73% PM)	64% AM 66% PM (2016)	62% AM 62% PM	\		Short term trend only because this is the third year for this data series. Results show a small decrease in travel time predictability.
Objective: An effecti	ve network for the movement	of freight					
Improved freight efficiency	Rolling average all-day travel speeds on important regional freight routes	A 10% increase in average travel speed (68 km/hr inbound, 66 km/hr outbound)	62 km/hr inbound, 60 km/hr outbound (2016)	62 km/hr Inbound 61 km/hr Outbound	\leftrightarrow		Small to no change in average travel speed for freight. No enough data yet for five year trend.
	Average all-day travel speed predictability on important regional freight routes	A 10% increase in travel time predictability (95% inbound, 93% outbound)	86% inbound 85% outbound (2016)	91% inbound 91% outbound	↑		Five percentage point Increase in predictability over the last three years. No enough data yet for five year trend.
Increased proportion of freight moved by rail	Percentage of long distance freight volumes moved by rail	An increasing proportion of freight moved by rail	18.3 million tonnes (2012)	-	↑		Rail freight volumes moving in and out of the region have increased by 43% from 2012 to 2017.Next freight demand study to be run in 2019.
Objective: A safer sys	tem for all users of our regiona	al road network					
Improved regional road safety	Killed and seriously injured totals, measured on an annual basis against a 5-year rolling average (CAS data)	At least a 50% reduction in 5 year average (total below 92 seriously injured or killed)	183 killed or seriously injured people (2013)	179 deaths or seriously injured	↑	\leftrightarrow	The number of people seriously injured has increased by 7% in the last two years.
	Total casualties on an annual basis against a 5-year rolling average (CAS data)	At least a 50% reduction in 5 year average (below 540 casualties)	1,080 casualties (2013)	954 casualties	1	\	In the last year a 4% increase in number of casualties.
Increased safety for pedestrians and cyclists	The number of vulnerable road users (cyclists and pedestrians) killed and seriously injured annually against a 5-year rolling average (CAS data)	At least a 50% reduction in 5 year average (below 28 killed or seriously injured)	53 killed or seriously injured (2013)	48 killed or seriously injured	V	+	The total killed or injured is below the baseline but people seriously injured rises for the last two years.

AMR for RLTP v.6

An increasingly resilient	<u> </u>				Short		
Outcome	Measure	2025 target	Baseline	2017/18 data	term trend	5 year trend	Comment
Improved transport infrastructure resilience to disruption from unplanned events	Proportion of region covered by an adopted regional risk register	100% - risk register by 2017 and agreed prioritisation methodology by 2019	No risk register	Up-to-date regional risk register produced	✓	~	The risk register provides a list of regional network priorities. This will be updated as work is completed.
A transport network that supports the restoration of access and regional recovery after a major event	Estimated time to reopen key road connections to and within the region and to key recovery facilities.	Continuous reduction in number of days to reopen the transport network	Existing emergency plan estimates (2014)	-	\	+	Transport network projects that are planned or under construction will help to improve resilience and reduce the recovery time.
Reduced regional economic risk	Proportion of region covered by an adopted and comprehensive regional restoration and emergency plan	100%	Existing regional restoration emergency plans(2014)	-	↑	1	Progress is ongoing on emergency and recovery planning for the region.
Objective: A well planne	ed, connected and integrated trans	port network					
Improved land use and transport integration	Population living within 500m of any bus stop or 1km of a railway station	Continual improvement towards 88%	87.6% in 2013	-	↑		Estimates indicate that is a small increase in accessibility, an update using the 2018 census data will be in the 2019 AMR.
Improved integration between transport modes	Number of secure cycle parking spaces at railway stations	Increase by 50% (441 cycle spaces)	294 cycles spaces (2013)	361 cycle spaces	\leftrightarrow	↑	No new cycle parking spaces this year – but plans for additional cycle spaces next year.
Objective: An attractive	and safe walking and cycling netw	ork					
Increased mode share for	Proportion of journey to work trips by walking	13.6% of journey to work trips	11.6% in 2013	-	1		A slow upward trend from 2001 & 2013 census results
pedestrians and cyclists	Proportion of journey to work trips by bike	4.6% of journey to work	2.9% in 2013	-	↑		A slow upward trend from 2001 & 2013 census results.
	Proportion of urban trips by walking	20.1% of trips crossing the CBD cordon	18.4% in 2013	18.5%	1	\	Pedestrian mode share is increasing in the short term alongside steady increase in PT mode share
	Proportion of urban trips by bike	4.6% of trips crossing Wellington CBD cordon	2.6% in 2013	2.8%	↑	1	Cycling mode share has increased this year
Improved level of service for pedestrians and cyclists	Perception of level of service for cyclists and pedestrians	95% and 60% level of service (walking & cycling)	Walking 90% Cycling 50% (2013)	2015 results: Walking 85% Cycling 44%	V	\	The perceived level of service for cyclists and pedestrians are both showing a downward trend up to 2015.
Increased use of active modes for journeys to school	Use of active modes in journeys to school for those participating in the School Travel Plan programme.	Continually increasing use of active modes	27% walking, 13% cycle, scooter or skateboard (2013).	2014 results: 26% walking 14.5% cycle or scooter	\leftrightarrow		The online reporting tool for schools to record student travel is being rebuilt. School data will be available in 2019.

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Objective: An efficient and optimised transport system that minimises the impact on the environment							
Outcome	Measure	2025 target	Baseline	2017/18 data	Short term trend	5 year trend	Comment
Reduced harmful emissions from transport	Transport generated emissions (per capita)	15% reduction in annual per capita CO ₂ emissions (1.86 tonnes per capita)	2.18 tonnes per capita (2013)	2.28 tonnes per capita	↑	1	A small increase in emissions per capita of 4.7% since baseline year.
	Transport generated emissions (absolute)	10% reduction in total annual CO ₂ emissions (956 kilotonnes)	1,062 kilotonnes (2013)	1,191 kilotonnes	↑	↑	A 12% increase in emissions in the last 5 years.
	Concentrations of harmful transport-generated pollutants	A reduction in the average concentration of harmful transport pollutants (20.2 µg/m³)	22.4 μg/m³ (2013)	20.9 μg/m³	\leftrightarrow	\	Since 2013, pollutant levels have dropped by 7%.
Increased private vehicle occupancy	Peak period private vehicle occupancy	Gradual increase in private vehicle occupancy to 1.45	1.39 people per vehicle (2013)	1.37	↑	\leftrightarrow	Small increase in occupancy since last year.

Project highlights of 2017/18

A number of major projects and milestones occurred during the 2017/18 financial year:

- In April 2018, the rollout of the Public Transport Transformation Programme (PTTP) began in Wairarapa with the first 'Go-Live' date
- In June 2018, the RLTP mid-term review was completed and approved by the Regional Council. The associated RLTP variation and updated programme for the 2018-21 period was forwarded to NZTA for their consideration when developing the National Land Transport Programme
- The Let's Get Welly Moving (LGWM) short list evaluation was completed in May 2018, followed by development of a draft recommended programme of investment (RPI). The RPI will lay out LGWM's approach for Wellington's transport over the next decade or more.

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A high quality reliable public transport network

This section focuses on public transport: on increasing patronage, reliability and accessibility.

MEASURE + Five yea	r trend
Annual public transport boardings per capita	^
Public transport mode share of trips crossing Wellington City CBD cordon (AM peak)	1
Accessibility to public transport network for all users	↑
Public transport vehicle fleet emissions	\leftrightarrow
Overall satisfaction with the Wellington region's public transport system (all modes)	↑
Peak period public transport travel times on core routes	\
Peak period bus travel time variability on core routes	\

Note: Only measures with enough data to indicate a five year trend are included.

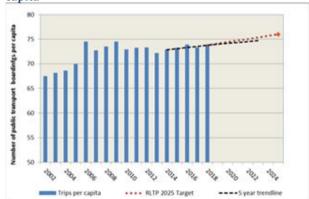
Increased public transport use

The Wellington region has a high quality, well used public transport network of bus, train and harbour ferry services. Wellington residents are high users of public transport with New Zealand's highest number of public transport boardings per capita and high mode share compared to other regions. Figure 1 shows the annual number of public transport trips per capita taken by train, bus and ferry. It is calculated using annual public transport patronage and regional population.

In 2018, approximately 38.5 million public transport annual trips were made, equating to:

- 73.8 public boardings per capita
- This is an increase of 1.2% in the last five years.
- The RLTP target is 76 boardings per capita by 2025 (indicated by the orange marker in Figure 1).

Figure 1: Annual public transport boardings per capita



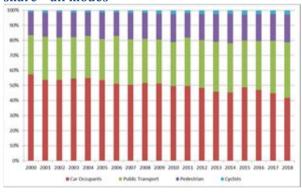
DATA SOURCE: METLINK, GWRC

The second measure for increased public transport participation comes from the journey to work data from the Census. Public transport mode share was 16.6% in the region in 2013 and the RLTP target is at least 17.8% mode share in 2025. An update on this measure (from the 2018 census) will be available in the next AMR.

Public transport mode share is also measured using the annual March cordon survey. This is a count of the people entering the Wellington City CBD by public transport during morning peak travel times. In the same month Wellington City Council (WCC) commissions a survey that counts vehicles, pedestrians and cyclists crossing into the Wellington City CBD cordon during morning peak.

The mode counts from the two surveys are used to work out mode share for the Wellington CBD. The time series for main transport modes is shown in **Figure 2**. Vehicle mode share has been shrinking as PT mode share increases (since 2001)¹.

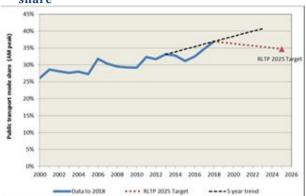
Figure 2: Wellington City cordon mode share – all modes



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¹ Other traffic monitoring shows that motor vehicle volumes are not declining but there is an increase in number of vehicles travelling into the city before morning peak periods.

Figure 3: Public transport cordon mode share



Data source: GWRC

Figure 3 shows public transport trips crossing the Wellington City CBD cordon during peak hour. In 2018 the mode share for public transport is 36.9%; this is a 10% increase over the last five years. This year's mode share has exceeded the RLTP target of 34.7% for the second year in a row.

Improved public transport accessibility for all

Access to public transport is monitored using three outcomes: two that measure the proportion of the population living in the vicinity of public transport and the third measures accessibility to the public transport in terms of infrastructure, information and facilities.

The first measure looks at those residents within 500m of core bus route and 1km from any railway station; in 2013 this was 42%, the same result in 2006. Secondly those residents living 500m within any bus stop and 1 km from a rail service; in 2013 this was 87.6%. This is a small drop from 89% in 2006.

The next update for this measure (using 2018 census results) will be available in the 2019 AMR. Population growth will affect this measure; recent population growth particularly in Wellington CBD has increased the proportion of people living in the vicinity of public transport.

Accessibility to the public transport network is evaluated by looking at the investment in transport infrastructure in the region. There is ongoing work on bus and rail facilities, examples of this are:

- 17 new and 29 upgraded bus shelters have been installed
- 50+ new and modified bus stops.
- 32 new Park & Ride spaces at Pomare station.

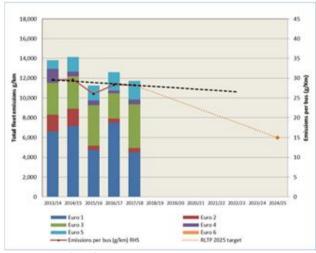
Improved quality of public transport

There are two measures used in the RLTP to assess the quality of public transport in the Wellington region. These are: public transport vehicle fleet emissions² and overall satisfaction with the region's public transport system.

Figure 4 shows bus fleet emissions for Euro type buses 1-5. The composition of the vehicle fleet³ varies during the year, some of the changes are permanent others are to do with available supply in the region. In the year to July 2018 there was a drop in the number of Euro 1 type and increase in Euro 3 and new Euro 6 buses. The percentage of the fleet that was type Euro 4 or above was 40%; this will increase each year as the fleet transitions to new vehicles.

The red line in **Figure 4** shows the average emissions per bus; in 2018 this was 28.2 g/km (units are on the right-hand side of figure). Average emissions per bus have decreased by 5% from 2014 to 2018. The trend line (black dotted line) is almost flat and therefore a neutral trend. Since 2014, the fleet was mainly Euro three or older. This will change from July 2018 onwards with the new bus contracts and the introduction of low emission buses. The RLTP target is for a 50% reduction in fleet emissions.

Figure 4: Bus fleet emissions and RLTP target



Data source: GWRC

The second measure designed to recognise public transport quality is customer satisfaction. The Metlink annual customer satisfaction survey asks

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 $^{^2}$ Bus emissions are the sum of CO, CO2, HC, NOx and PM_{10} emissions.

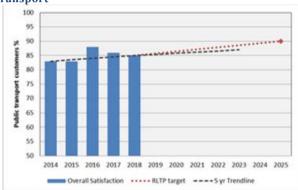
³ The bus fleet also includes a range of pre-1995 makes/models referred to as non-euro; these buses are excluded from fleet emission calculations because emission rates for these vehicles are not available.

passengers to rate overall satisfaction for the region's public transport network. This covers fleet, transport facilities, on-time performance and customer service.

Figure 5 shows the results of the customer satisfaction survey from 2014-2018⁴. The 2018 Metlink survey found that 85% of customers were generally satisfied with the public transport service; this is a 1 percentage point drop compared to the previous year but overall customer satisfaction has been trending upwards toward the target.

The RLTP target for this outcome is to achieve at least 90% overall satisfaction with the public transport for the region.

Figure 5: Customer satisfaction with public transport



Data source: Metlink

Improved public transport reliability and journey times

There are three measures used in the RLTP to assess public transport reliability and journey times in the Wellington region. These are: peak period public transport travel times on core routes, peak period bus travel time variability on core routes and rail service punctuality.

The Metlink network consists of three layers: core routes, local routes and targeted services. The **core routes** are the urban rail network and frequent bus services that form the network's backbone, linking areas of high demand with high-capacity, direct services with extensive operating hours⁵.

Figure 6 shows results for bus travel time on core routes during peak AM and PM hours (2014-

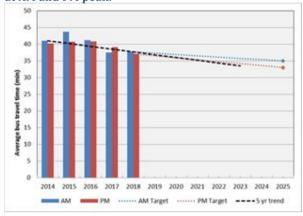
⁴ The Metlink survey has undergone changes to the methodology, so earlier survey results on customer satisfaction are not compatible with surveys for 2014 onwards.

 5 The Core bus routes used to measure travel time & lateness are routes: 1,3,11,110,120 and 130

2018). The data series began in 2014 due to a change to the methodology. In 2018 results show:

- Travel times during the AM peak average 37.7 minutes and
- PM peak average 37.1 minutes each.
- Bus travel times have fallen by approximately 3 minutes (average time) in AM and PM peak since 2014.
- The RLTP target is for continuous improvement in PT travel times to 2025.

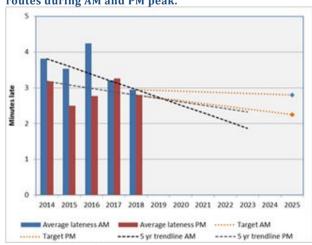
Figure 6: Average bus travel times on core routes at AM and PM peak.



Data source: GWRC

Figure 7 shows the second measure for this outcome: average lateness which represents variability of bus times on core routes. Comparing the results for variability between 2014 and 2018 there are minor changes; a decrease in variability in AM peak from 3.8 minutes to 3.0 minutes and from 3.2 minutes to 2.8 minutes in the PM peak.

Figure 7: Average lateness along core bus core routes during AM and PM peak.



Data source: GWRC

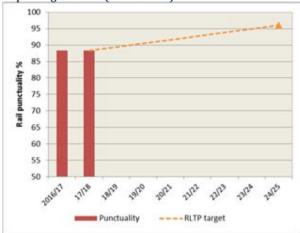
Figure 8 shows the percentage of passenger rail services in the region which run to time. The

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punctuality rating refers to trains arriving at stations at the scheduled time and less than five minutes late.⁶

In 2016 the methodology for measuring rail service punctuality was broadened to include all key stations⁷ (previously it was just Wellington station). Two years into the new methodology the punctuality rating is 88% for 2017/18. The 2025 target is at least 96% punctuality.

Figure 8: Percentage of rail services arriving or departing on time (2016-2018)



Data source: GWRC

A reliable and effective strategic road network

This section discusses transport outcomes that relate to the strategic road network, including road congestion and travel times.

congestion and trayer times.				
MEASURE + Short-term trend				
Rolling average peak period travel speeds on selected strategic routes	\leftrightarrow			
Average peak travel time predictability on selected strategic routes	4			

Reduced severe road congestion and improved reliability of strategic road network

Strategic routes consist of state highways and high volume regional roads⁸. The strategic network serves an important role for both inter-regional long distance trips and short to medium distance trips within the region. It provides access and connectivity for people and goods to key regional destinations.

This indicator uses GPS data obtained from commercial vehicles (including a mix of light, medium and heavy). The performance measures are based on March weekday average travel time and speeds for inbound AM peak and outbound PM peak vehicles on the six routes in the region.

The travel time data is used to calculate the average vehicle speed for the road network which is used to indicate levels of congestion - as increasing travel speed over time implies that traffic is less congested.

Average travel speed on strategic routes

Figure 9 shows the average travel speed and RLTP target for the six strategic routes. The target is to increase the baseline travel speed by 10%. In 2018 the AM inbound and PM outbound travel speed is 35.4 and 39.7 km/hr respectively.

The travel speed for inbound and outbound travel has been decreasing since the beginning of this series. Initial findings indicate that traffic congestion on these routes is not improving, driven by increasing population and employment and a growing economy leading to increased travel demand.

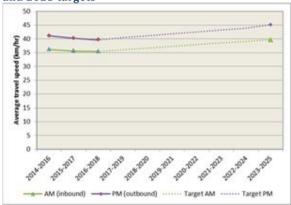
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⁶ This punctuality target was reached in 2016/17 using the methodology for rail service punctuality initially agreed on in the RLTP

⁷ Under the new operating contracts (with Transdev) revised performance measures were introduced in 2016.

⁸ Six strategic routes: Wellington Airport to Waikanae (SH1), Wellington CBD to Upper Hutt (SH2), SH58 Haywards road to Paremata, Bowen St to Karori, Wellington Railway Station to Island Bay, Petone to Wainuiomata.

Figure 9: Three year rolling average travel speed and 2025 targets



Data source: BECA

Travel time predictability

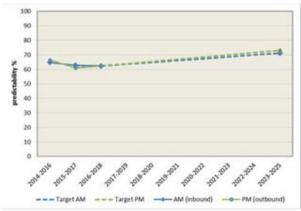
Travel predictability (previously variability) is the second measure for this RLTP objective and is averaged over the six strategic routes. The measure indicates how well customers can predict their journeys based on typical historic performance.

Predictability measures the travel times against the baseline to determine how consistent or reliable the travel time is for each route. The higher the predictability rating the more consistent the travel time is for the route.

Figure 10 shows the average peak travel time predictability. The results for 2018 show:

- 62% inbound (AM peak) and 62% outbound (PM peak).
- Predictability has decreased by 2-4 percentage points since 2016 for AM and PM times, a result of increased travel demand.
- The target is a 10% increase on the baseline result, this is 71.2% (AM inbound) and 73% (PM outbound) predictability.

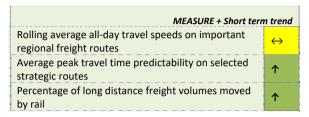
Figure 10: Predictability for strategic routes



Data source: BECA

An effective network for the movement of freight

This section refers to the transport outcomes for the movement of freight, including improving freight efficiency and freight volumes.



Improved freight efficiency

The region's freight network consists of roads, rail and port infrastructure. Road and rail are the two primary modes for freight in the region. Wellington is a key gateway for freight travelling between the north and south islands.

The three key freight routes⁹ represent typical road freight movement across the region. The average all day travel speeds for freight transport provide a measure of efficiency for freight movement. New methodology has been introduced for this outcome outlined in section 3.1.

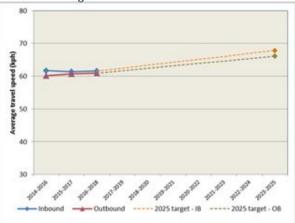
Figure 11 shows the three year rolling average travel speed over the three key freight routes. The 2018 results show:

- Inbound travel speed is 61.6 km/hr and
- Outbound travel speed is 60.9 km/hr averaged over the three key routes.
- Little to no change in travel speed in the last three years.
- The 2025 target is 67.8 km/hr (inbound) and 66.1 km/hr (outbound).

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⁹ Paremata to Seaview (via SH58), Paremata to Seaview (via Ngauranga gorge), Seaview to Centreport.

Figure 11: Average travel speed on freight route & 2025 RLTP target

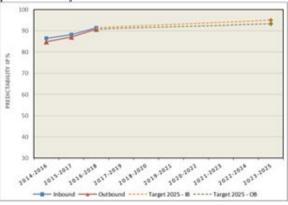


Data source: BECA

The second measure for improved freight efficiency monitors the predictability of the journey time for freight. Predictability measures the consistency of travel time by testing how predictable the journey time is over 15 min periods. Fluctuating travel times mean low predictability and vice versa.

Figure 12 shows the rolling average predictability rating from 2016-2018 and the RLTP target. In 2018, predictability for freight was 91% for both inbound and outbound travel. This is the third year that predictability has improved. The targets for 2025 are 95% & 93% for inbound and outbound predictability respectively.

Figure 12: Average all day freight travel speed predictability



Data source: BECA

Increased proportion of freight moved by rail

The data associated with freight volumes transported by rail and used for this measure is provided by the Ministry of Transport (MoT) National Freight Demand study.

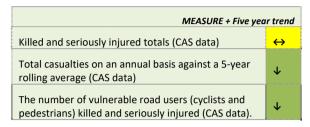
The freight study was last completed in 2013 and the next one is planned for 2019. The baseline total for this measure is 18.3 million tonnes for the region (rail, shipping, and road freight). Major exporters and importers have increased the use of rail. More than 30 percent of New Zealand's export goods travel on rail¹⁰.

The Freight Information Gathering system (FIGS, Ministry of Transport) provides information on trends in rail freight movement national wide. Rail freight (tonnes) has increased by 43% from 2012 to 2017 in the Wellington region.

¹⁰ Ministry of Transport - http://www.transport.govt.nz/rail/rail-in-new-zealand/

A safer system for all users of our regional road network

This section discusses the transport outcomes that are related to regional road safety which includes road crash fatalities and casualties.



Improved regional road safety

A system wide approach is used to address safety issues. Safer Journeys, the national strategy guiding road safety improvements, seeks to establish the safe system approach within New Zealand.

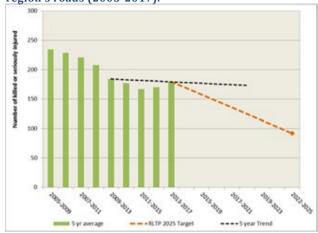
Figure 13 shows the number of fatal¹¹ and serious¹² injury casualties for all vehicle types in the Wellington region according to NZTA's Crash Analysis System (CAS). A five-year rolling average is used for this measure as it smooths out annual fluctuations and highlights long-term trends.

In 2017 the number of people seriously injured on the region's roads (248) was above the five year (2013-2017) average (179) for the second year running. In 2017 there were 14 deaths and 234 serious injury casualties.

Figure 13 shows the five year rolling average trendline to be almost a flat line, indicating that the previous downward trend for casualties has now reversed, in the short term.

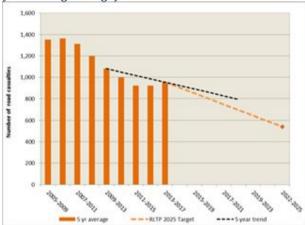
At a national level, serious and fatal road casualties have followed a similar trend with a downward movement in casualties from 2005 to 2015 then an increase in the last two years (up by 9.7%). The main causes of serious road crashes are poor observation, failing to give way, speed, alcohol and poor handling.

Figure 13: People killed or seriously injured on region's roads (2005-2017).



Data source: CAS, NZTA

Figure 14: Total casualties on the region's roads (5 year rolling average)



Data source: CAS, NZTA

Figure 14 shows the total road casualties for the region to 2017 and RLTP targets to 2025. The total casualties for 2017 were 1,164 and the five year rolling average (2013-17) is 954 casualties. This year represents the first increase in the rolling average since 2010. The five year trend-line shows a decrease in total casualties overall but this may change if annual casualties continue to rise.

Increased safety for pedestrians and cyclists (vulnerable road users)

This measure assesses the safety of the road network for pedestrians and cyclists by examining CAS data over time.

¹¹ Injuries that result in death within 30 days of a crash

¹² Serious is defined as fractures, concussion, internal injuries, severe cuts and lacerations, severe shock requiring medical treatment, and any injury involving admittance to hospital.

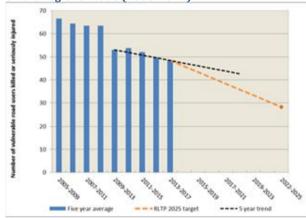
Figure 15 shows the number of pedestrians and cyclists killed or seriously injured on the region's roads. In 2017 CAS data showed:

- The number killed or seriously injured was 66 (including 7 fatalities),
- Results were above the five year rolling average of 48.
- The 2025 target is below 29 seriously injured.

The rolling average trend-line (dotted black line) shows a downward trend but the line is beginning to flatten out because casualties have increased in the last two years.

There were 29 seriously injured and one fatally injured cyclists and 30 seriously injured and 6 fatally injured pedestrians during 2017 in the Wellington region.

Figure 15 Cyclists & pedestrians seriously injured on the regions roads (2005-2017)



Data source: CAS, NZTA

Local authorities and NZTA are investing heavily in cycling and pedestrian infrastructure which is focused on targeting casualty blackspots and providing a cycling network.

The 2025 RLTP target is at least a 50% reduction in the baseline (57 casualties), for vulnerable road user casualties on the region's road network. The 5 year trend line is currently not aligned to the target.

An increasingly resilient transport network

This section discusses outcomes concerned with the resilience of the transport network, including the regional risk register, restoration and recovery timeline for the network and regional emergency plan.

MEASURE + 5 year		
Proportion of region covered by an adopted regional risk register	✓	
Estimated time to reopen key road connections to and within the region and to key recovery facilities.	↑	
Proportion of region covered by an adopted and comprehensive regional restoration and emergency plan	1	

A transport network that supports the restoration of access and regional recovery after a major event

A resilient network is one that is designed, developed and maintained to recover quickly from unplanned events. The region's road network is vulnerable to disruption or closure given an extreme event. This is because Wellington's topography and relatively narrow corridors of development, infrastructure and transport across the region make it relatively susceptible to disruption from natural hazards events and traffic crashes.

Planning and investment are needed in preparation of an extreme event to improve the resilience of existing key transport corridors and infrastructure and to identify alternative access points.

To improve the regional response to resilience, a Regional Transport Network Resilience Programme Business Case (PBC) was finalised at the end of 2016.

The PBC produced a list and a set of maps that set out locations where the transport network is vulnerable, what it is vulnerable to and how critical that location is in relation to other parts of the region's transport network. This is the regional risk register. The register will be updated as new information becomes available and work is completed.

The second resilience measure addresses the importance of access to key routes and infrastructure after an event. The restoration plans include the estimated time to reopen key supply lines and road connections to and within the

region¹³. Future improvements to the regional network to improve resilience, using the regional risk register to guide the prioritisation of this work, will reduce the number of days to restore key recovery facilities. This work is ongoing.

The third resilience measure is about the adoption of a comprehensive regional emergency plan.

The Wellington Region Civil Defence Emergency Management Group (the CDEM Group) is made up of various agencies who work together to provide civil defence and emergency management to the region. Examples of progress toward this measure (from the group) in the last year include the following:

- Amendment to the Group plan to include Strategic Recovery Planning requirements¹⁴.
- Wellington Region Earthquake plan (draft).
- Group Resilience Framework for the region.
- Regional CDEM Training strategy i.e. to manage the training of EOC and ECC staff.

This section discusses transport outcomes that are concerned with an integrated network, including improving land use and transport integration.

MEASURE + five year trend Population living within 500m of any bus stop or 1km of a railway station (short term trend) Number of secure cycle parking spaces at railway 1 stations

Improved land use and transport

Ensuring the residents have good access to public transport services is a desirable outcome for the region. This means that people have choices about how they travel. There are economic and health benefits to investing in public transport i.e. increasing public transport patronage reduces congestion on the roads, is more energy efficient than single car use and is beneficial to the environment by reducing emissions and contributes to active travel use.

Improved integration between transport modes

The provision of cycle facilities at railway stations consists of a mix of secure cycle racks, cages, and lockers.

Figure 16 shows the 5 year trend and targets for cycle parking facilities at railway stations. In 2018 there were no additional cycle spaces available to commuters at railway stations across the region. The regional total is 361 cycle storage spaces. Additional facilities are planned for the 2018/19 year. The trend line for cycle spaces shows an increasing line

generally toward the target.

........ 450 400 350 samples of cycle spaces 300 250 200 150 2011 2013 2015 2017 Actual cycle spaces **** RLTP 2025 Target ---- 5 yr trendline

Figure 16: The number of cycle parking spaces at railway stations and RLTP target

Data source: GWRC

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A well planned, connected and integrated transport network

¹³ Wellington Lifelines Group/WREMO¹³: Restoring Wellington transport links after a major earthquake-Initial project report, 2013 ¹⁴ In 2016 amendments to the Civil Defence Emergency Management (CDEM) Act created new requirements for CDEM Groups to engage in strategic recovery planning

An attractive and safe walking and cycling network

This section discusses transport outcomes that promote active mode use; focusing on trips made by cyclists and pedestrians to work and study as well as cyclist/pedestrian level of service (LoS).

MEASURE + five year trend		
Proportion of urban trips by walking	\	
Proportion of urban trips by bike	1	
Perception of level of service for cyclists and		
pedestrians	Ψ	
Use of active modes in journeys to school for those		
participating in the School Travel Plan programme.		

Increased mode share for pedestrians and cyclists

From a transport network perspective, walking and cycling are the most efficient mode choice particularly for short trips. Both modes integrate well with other modes such as public transport and are essential for connecting modes for trips.

The Census journey to work data is summarised for the RLTP as mode share¹⁵ which includes walking and cycling. Walking mode share for the region was 11.6% in 2013 up from 9.8% in 2001. Cycling mode share was 2.9% in 2013 up from 2.3% in 2001. The 2018 census results will be included in the 2018/19 AMR.

The Wellington City CBD cordon survey is undertaken annually in March and captures all trips by pedestrians, cyclists, public transport, and motor vehicles that cross a notional cordon around Wellington City CBD. This dataset can be used to determine changes in travel patterns, mode share and patronage through time.

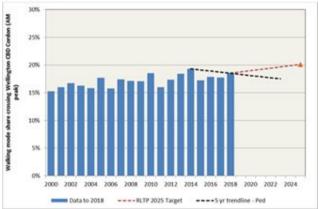
Figure 17 shows the mode share for pedestrians in the cordon count morning peak. Survey results for pedestrians crossing the cordon show the following:

- Mode share has fluctuated from 16% to 19% since 2001
- Five year trend indicates a slight decrease in pedestrian mode share.
- In 2018, 18.5% of those people crossing the cordon were walking.

 The 2025 RLTP target is 20.1% mode share for pedestrians.

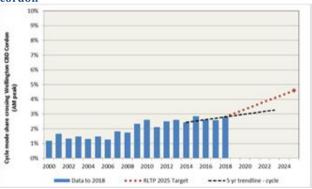
The cordon count survey is taken over one week in March; some of the annual variability can be attributed to the short time frame of the survey which can be influenced by weather conditions.

Figure 17: Mode share for Pedestrian crossing the CBD cordon



Data source: Wellington CBD cordon survey, WCC

Figure 18: Mode share for cyclist crossing the cordon



Data source: Wellington CBD Cordon survey

Figure 18 shows mode share for cyclists crossing the cordon. The cordon survey results reveal the following:

- The average number of cyclists has increased by 12.7% in the last five years, (250 cyclists).
- Mode share for cyclists is 2.8% for 2018.
- The five year trend is a positive trend line.
- The 2025 RLTP target for this measure is 4.6% of trips crossing the cordon are cyclists.

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¹⁵ Mode share is the proportion of trips to work completed by a specific mode, modes are typically motor vehicle, bus, rail, cycle, walk, motorcycle.

Improved level of service for pedestrians and cyclists

The levels of service for the walking and cycling networks are drawn from the GWRC Transport Perceptions Survey (TPS) through the following response: 'the proportion of respondents that rated the level of service for pedestrians and cyclists as good or neither good nor bad'. This survey was last run in 2015 and occurs every two or three years.

The percentage of respondents who rated the level of service for pedestrians as good was 85% in 2015 down from the 2012 high point of 90%. The five year trend line also showing a decline in perceived level of service mainly due to the 2015 result. Upper Hutt respondents rated pedestrian service higher than other TAs at 89% and Porirua's rating was the lowest at 76%.

In the same survey, people were asked to rate the level of service for cyclists. Those that rated the service as either good or neither good nor bad have declined since 2007, from 53% in 2007 down to 44% in 2015.

Increased use of active modes for journeys to school

The School Travel Plan (STP) programme within the Wellington region began in 2006. It is a joint partnership between GWRC, local councils and the schools. The aim is to increase the number of journeys to school made by active modes. The latest survey data available for STP is 2014.

In 2014, 74 schools (with 22,000 children) were included in the STP programme. Across the region, participation rates for school children varied from Kapiti (80% of children participated in the programme) to Upper Hutt (32%) and Porirua (9%). Across the region, approximately 25% of school children participated in the programme (2014).

Currently under development is *The Track our Travel online tool.* This tool replaces the paper classroom surveys that were part of the Wellington Region STP Programme.

GWRC is working with the Privacy Commissioner, NZTA and the Ministry of Education to collect up-to-date data about how children travel to school around the region. Our current focus is to ensure data is appropriately managed and stored. A pilot is expected to be underway towards the end of the 2018/19 financial year.

An efficient and optimised transport system that minimises the impact on the environment

This section discusses transport outcomes connected to environmental impacts specifically transport generated emissions and vehicle occupancy.

MEASURE + Five year trend		
Transport generated emissions (per capita)	↑	
Transport generated emissions (absolute)	↑	
Concentrations of harmful transport-generated	.l.	
pollutants	Ψ	
Peak period private vehicle occupancy	\leftrightarrow	

Reduced harmful emissions from transport

Carbon dioxide (CO_2) accounts for the bulk of transport-generated emissions and is therefore a suitable proxy for total transport-generated greenhouse gas emissions. This measure has been calculated from fuel consumption information¹⁶. The RLTP target is for 15% reduction in annual per capita CO_2 emissions by 2025.

This measure provides an indication of whether the transport system is becoming more efficient, in relation to emissions, by producing fewer emissions on a per person basis.

Figure 19 represents both measures associated with transport generated CO_2 emissions. These are CO_2 kilotonnes (LHS) and CO_2 emissions per capita (RHS). Recent and current results for this measure show:

- CO₂ kilotonnes (shown as blue bars below) have increased by 11.9% in the last five years.
- Due mainly to increases in diesel consumption¹⁷
- Diesel sales rise by 28% and petrol sales increase by 1.0% in the last five years.
- In 2018, CO₂ emissions were 1,191 kilotonnes and 2.28 tonnes per capita.

Both the CO₂ emissions per capita trend-line (red dotted line) and total emissions (black line) show an

¹⁶ Carbon dioxide emission levels have been calculated using production rates from the Ministry of Economic development greenhouse gas emissions report (2010). The factors are 2.33 Kg/L of CO2 per litre of petrol and 2.65 kg/L for diesel.

¹⁷ Diesel fuel is used for many non-transport uses in the economy e.g. agricultural, mining, fishing, industrial and electricity generation. MBIE estimate that the proportion is ...

upward trend as fuel sales increase; a result of increased travel driven by a growing economy.

Figure 19 Transport generated CO_2 emissions per capita and total emissions (2000-2018)



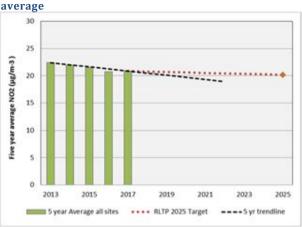
Data source: GWRC

Regional monitoring network

The current measure for concentrations of harmful transport-generated pollutants is based on levels of nitrogen dioxide (NO2), a harmful pollutant arising from vehicle emissions. The data currently used to track trends in traffic-related air pollutants is from NZTA's national NO2 monitoring network and is collected by passive samplers18 at multiple sites across the region (except the Wairarapa). The NZTA sites are mostly along the state highways, but include a small number of local roads.

Figure 20 shows the results from NO_2 monitoring sites, the level is calculated using a five year moving average. From 2013 to 2017 there has been a downward trend in the level of nitrogen dioxide; overall there has been a 7% reduction in NO_2 during this time.

Figure 20: NO_2 monitoring using a five year



Data source: NZTA

One of the aims of this RLTP objective is to improve the long term reporting and monitoring framework to inform a regional indicator of trends in trafficrelated air pollutants which can be linked to trends in traffic intensity and changes in the vehicle fleet.

As trends in traffic emissions and impacts on air quality are likely to differ quite strongly across the region, this requires monitoring at a number of representative "peak", "roadside" and "urban background" sites. To address this information gap, a more regionally representative NO₂ passive nitrogen dioxide monitoring network has now been established for future RLTP reporting.

Over time and as resources permit, other trafficrelated air pollution indicators, such as black carbon, and particle monitoring will be added to key sites in the network.

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¹⁸ NZTA Ambient Air Quality (Nitrogen Dioxide) Monitoring Programme – Operating Manual 2013/14: Passive sampling techniques are 'screening' methods and are useful for spatial and temporal assessments. Pg. 24.

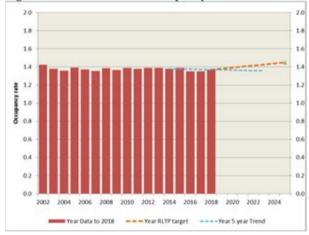
Increased private vehicle occupancy

Multiple occupancy vehicle trips (including buses) contribute to the efficient usage of the region's roads, as they raise the average number of people per vehicle, which in turn reduces the number of vehicles on the road. Given that capacity on the road network is limited, increasing average vehicle occupancy levels is a means of transporting more people, more efficiently across the network.

The Wellington City Council cordon survey measures vehicle occupancy crossing the Wellington City CBD between 7am and 9am. This survey data is used as a basis for developing future vehicle occupancy targets.

Figure 21 shows vehicle occupancy has fluctuated from 1.35 to 1.42 since 2002. In 2018, vehicle occupancy was 1.37. The 2025 RLTP target is to increase the occupancy rate to 1.45 people per vehicle. Due to the small change from year to year the trend line is neutral.

Figure 21: Private vehicle occupancy rate



Data source: Wellington CBD Cordon survey

RLTP implementation

The RLTP implementation for 2015-2025 consists of the projects and activities that make up the Regional Programme. The progress of the RLTP implementation will be reported on to the Regional Transport Committee every 6 months by a separate reporting mechanism: the RLTP Progress Report.

The purpose of the half yearly progress report is to update the Committee on the status and progress of significant projects and programmes of regional interest in the Regional Land Transport Plan 2015.

The RLTP progress reports can be found on the GWRC website under Regional Transport Committee

(RTC) meeting documents. The two reports that cover 2017/18 year are:

The first progress report for 2017/18 on projects in the RLTP (July to December 2017), RTC meeting March 2018 publication ref: 18.45.

March RLTP Progress report.pdf

The second progress report for 2017/18 on the RLTP projects (January to June 2018), RTC meeting August 2018 publication ref: 18.313.

August RLTP Progress report.pdf

Table 2: RLTP 2015 Strategic objectives & outcomes

	Strategic Objectives	Outcomes		
		Increased public transport use		
Chautau 2	A high quality, reliable public transport network	Improved public transport accessibility for all		
Chapter 2	A flight quality, reliable public transport network	Improved quality of public transport		
		Improved PT reliability and journey times		
Chapter 3	A reliable and effective strategic road network	Reduced severe road congestion		
Chapter 5	A reliable and effective strategic road fletwork	Improved reliability of the strategic road network		
Chapter 4	An effective network for the movement of freight	Improved freight efficiency		
Chapter 4	All effective network for the movement of freight	Increased proportion of freight moved by rail		
Chapter 5	A safer system for all users of our regional road network	Improved regional road safety		
Chapter 3	A salet system for all users of our regional road fletwork	Increased safety for pedestrians and cyclists		
		Improved transport infrastructure resilience to disruption from unplanned events		
Chapter 6	An increasingly resilient transport network	A transport network that supports the restoration of access and regional recovery after a major event		
		Reduced regional economic risk		
Chapter 7	A well planned, connected and integrated transport	Improved land use and transport integration		
Chapter 7	network	Improved integration between transport modes		
		Increased mode share for pedestrians and cyclists		
Chapter 8	An attractive and safe walking and cycling network	Improved level of service for pedestrians and cyclists		
		Increased use of active modes for journey to school		
	An efficient and optimised transport system that minimises	Reduced harmful emissions from transport		
Chapter 9	the impact on the environment'	Increased private vehicle occupancy		
Chapter 9	• • •	Increased private vehicle occupancy		

Glossary

AM Morning peak period
AMR Annual Monitoring Report

BERL Business and Economic Research Limited

CARD Communications and Resource Deployment system

CAS Crash Analysis System
CBD Central Business District

CO₂ Carbon dioxide

FAR Funding Assistance Rates
GPS Government Policy Statement
GWRC Greater Wellington Regional Council

IP Inter Peak
Km Kilometres

Km/hr Kilometres per hour

Mins Minutes

NITIS National Integrated Ticketing Interoperability Standard

NLTP National Land Transport Programme

NZTA NZ Transport Agency
PM Afternoon peak period
Police New Zealand Police
RHS Right hand side

RoNS Roads of National Significance
RLTP Regional Land Transport Plan
RTC Regional Transport Committee

SH State highway

TMIF Transport Monitoring Indicator Framework

VKT Vehicle kilometres travelled