

# BENCHMARKING SUSTAINABLE URBAN MOBILITY IN FIVE NEW ZEALAND CITIES PROTOTYPE TECHNICAL REPORT

15 DECEMBER 2021





**BENCHMARKING SUSTAINABLE URBAN MOBILITY  
IN FIVE NEW ZEALAND CITIES  
PROTOTYPE TECHNICAL REPORT**

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# ABBREVIATIONS

SUM	Sustainable urban mobility
PT	Public transport
AT	Active transport AND Auckland transport
VKT	Vehicle kilometres travelled

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# 1 INTRODUCTION

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## 1.1 BACKGROUND

Waka Kotahi's 2019 Mode Shift Action Plan, *Keeping Cities Moving*, called for the development of an on-going evaluation programme to establish national and regional mode split baselines, track mode shifts, and enable a quick response to what works and what doesn't. In 2020, *Toitū Te Taiao*, Waka Kotahi's Sustainability Action Plan, set out the vision and plan to achieve a low carbon, safe and healthy land transport system. Sustainable Urban Access is the third pillar of the action plan, and progress will be monitored as part of *Tiakina Te Taiao*, the sustainability monitoring report.

There are several high-level performance monitoring frameworks and indicator sets that are currently used to track progress towards transport sector outcomes. While these frameworks provide a structure for measuring where we are today in comparison to where we were last year, they only tell us about some outcomes, and do not reveal how different intervention strategies contribute to trends. To tell a more comprehensive and useful story, we need to benchmark a wider range of inputs, outputs and outcomes to understand the journey of how to achieve sustainable urban mobility and inspire change.

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## 1.2 PURPOSE

A Sustainable Urban Mobility Benchmarking Programme will serve as both a communication and a monitoring tool for New Zealand cities to understand how they are performing on the journey towards low carbon, safe and healthy urban mobility. The programme will help Councils compare strategic and operational performance, as well as identify good practices for increasing the share of people who use sustainable transport and reducing vehicles kilometres travelled. These insights will enable Councils, and Waka Kotahi, to make evidence-driven investment decisions and deliver projects with a higher value for money. Finally, it will provide a foundational understanding of how we're tracking towards our sustainable urban mobility goals across the cities and highlight areas for improvement.

Through Benchmarking Sustainable Urban Mobility, Waka Kotahi hope to:

- Provide a mechanism to communicate the current state of play in New Zealand cities and grow public awareness and understanding of sustainable urban mobility
- Support councils to better understand urban economies and the operational and leadership steps that lead to transformative change in the transition to zero carbon transport systems
- Facilitate peer-to-peer learning and drive competition through inspiration to lift performance
- Prototype benchmarking reporting and identify an on-going process for integrating reporting into business as usual.

The purpose of this technical report is to outline the process taken to develop the benchmarking programme prototype and to establish baseline reporting. The outcome of the process is

- I. a master document recording the framework and a detailed list of SUM indicators data sources, and calculation methods (reported in the accompanying appendix)
- II. a simplified list in PowerPoint format, and
- III. a complementary public-facing companion report created by TRA.

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# 2 APPROACH

## 2.1 OVERVIEW PHASE

It was important to take stock of the related and previous work in this space. A review of key literature, current monitoring/benchmarking work and best practice, from NZ and overseas, as well as previous work already completed in this space was performed with the following included in the overview:

- Benchmarking Walking and Cycling in Six NZ Cities (Pilot) by Caroline Shaw and Marie Russell) (1)
- The REG Excellence Programme - including the REG RCA Reports found on the LGNZ website [here](#)
- [Sustainable Mobility Indicators - WBCSD](#) (2)
- [Institute of Transport and Development - Indicators for Sustainable Mobility](#) (3)
- [Tiakina Te Taiao - Waka Kotahi Sustainability Monitoring Report](#) (4)
- Ministry of Transport's Transport Outcome Framework (TOF) and indicators (5)
- [Waka Kotahi Benefits Realisation Framework](#) (6)
- [Waka Kotahi One Network Framework](#) (7)
- Waka Kotahi Greenhouse Gas Emission mapping Tool (8)
- A Walking and Cycling Benchmarking Tool by Tim Hughes and Tim Cheesebrough (9)
- Benchmarking examples such as those by [Yardstick Roads Benchmarking](#) and [Austroads best practice guidance](#).
- An overview of Waka Kotahi Enterprise Data Warehouse
- The initial stakeholder survey previously carried out by Waka Kotahi.

### OVERVIEW PHASE REFERENCES:

1. Benchmarking cycling and walking - New Zealand Centre for Sustainable Cities [Internet]. [cited 2021 Nov 22]. Available from: <http://www.sustainablecities.org.nz/resilient-urban-futures/benchmarking/>
2. SMP2.0 Sustainable Mobility Indicators - 2nd Edition [Internet]. World Business Council for Sustainable Development (WBCSD). [cited 2021 Nov 22]. Available from: <https://www.wbcd.org/q39mk>
3. Indicators for Sustainable Mobility [Internet]. Institute for Transportation and Development Policy. [cited 2021 Nov 22]. Available from: <https://www.itdp.org/publication/indicators-sustainable-mobility/>
4. Tiakina Te Taiao - Our Sustainability Monitoring Report | Waka Kotahi NZ Transport Agency [Internet]. [cited 2021 Nov 22]. Available from: <https://nzta.govt.nz/about-us/about-waka-kotahi-nz-transport-agency/environmental-and-social-responsibility/toitu-te-taiao-our-sustainability-action-plan/tiakina-te-taiao-our-sustainability-monitoring-report/>



5. Te Anga Whakatakoto Hua mō ngā Waka | Transport Outcomes Framework [Internet]. Ministry of Transport. [cited 2021 Nov 22]. Available from: <https://www.transport.govt.nz/area-of-interest/strategy-and-direction/transport-outcomes-framework/>
6. Land transport benefits framework and management approach: guidelines | Waka Kotahi NZ Transport Agency [Internet]. [cited 2021 Nov 22]. Available from: <https://www.nzta.govt.nz/resources/land-transport-benefits-framework-and-management-approach-guidelines>
7. One Network Framework - All updates | Waka Kotahi NZ Transport Agency [Internet]. [cited 2021 Nov 22]. Available from: <https://www.nzta.govt.nz/roads-and-rail/road-efficiency-group/one-network-framework/>
8. Vehicle emissions mapping tool | Waka Kotahi NZ Transport Agency [Internet]. [cited 2021 Nov 22]. Available from: <https://www.nzta.govt.nz/roads-and-rail/highways-information-portal/technical-disciplines/air-quality-climate/planning-and-assessment/vehicle-emissions-mapping-tool/>
9. **§ 9(2)(a)**. TECHNICAL PAPER A WALKING AND CYCLING BENCHMARKING TOOL. In: IPENZ Transportation Group Conference Technical paper. Christchurch, New Zealand; 2010. p. 15.

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The overview phase provided insight on key benchmarking indicators that are used in relation to Sustainable Urban Mobility. The key themes and metrics were presented to the Steering Group at the inception meeting on 26 January 2021 and are reproduced in Figure 1.

Figure 1 Overview Themes

## Themes emerging: key benchmarking indicators...

### Indicators measuring the quality of walking and cycling infrastructure, e.g.:

- Separated cycle lanes / non-separated cycle lanes.
- Intersection treatments for cyclists.
- Surface quality of cycle lanes and footpaths.
- Visibility (e.g. path lighting, obstructions).
- Bike parking facilities, end-of-trip facilities.

### Indicators measuring the quality and affordability of the public transport network, e.g.:

- Frequency and reliability of public transport services.
- Support for movement throughout the city, not just to and from the CBD.
- Cost of public transport, and access for low-income users.

### Indicators measuring safety, e.g.:

- Crash/injury data.
- Passive surveillance for cyclists and pedestrians.

### Indicators measuring the environmental attributes of the transport system, e.g.:

- Air quality metrics.
- Carbon emissions data.

### General data capture/management processes, e.g.:

- Is there adequate data collection in place to inform other indicators? What is the quality and reliability of this data?

### Indicators measuring the connectivity of sustainable transport options, e.g.:

- Interconnectivity between different modes, e.g. cycling and walking connections to public transport stops.
- The completeness of the various networks, e.g. the extent to which the cycle network provides unbroken connections.

### Indicators measuring the accessibility of sustainable transport options, e.g.:

- Households (and low-income households) within a reasonable walking distance of public transport stops.
- Accessibility of jobs within a reasonable walking distance of public transport stops.
- Accessibility of the public transport network for those with a disability.
- Ramps, handrails, etc on paths.

### Whether councils provide tools to better enable and equip people to use sustainable transport options, e.g.:

- Apps for public transport services, timetables, billing.
- Digital maps of cycle routes, pedestrian routes, bike storage locations, etc.
- Apps to provide people a way to report faults and issues with the network.

### Alignment with national-level sustainable transport policy documents and plans and industry 'best practice'.

## 2.2 ENGAGEMENT AND CO-CREATION

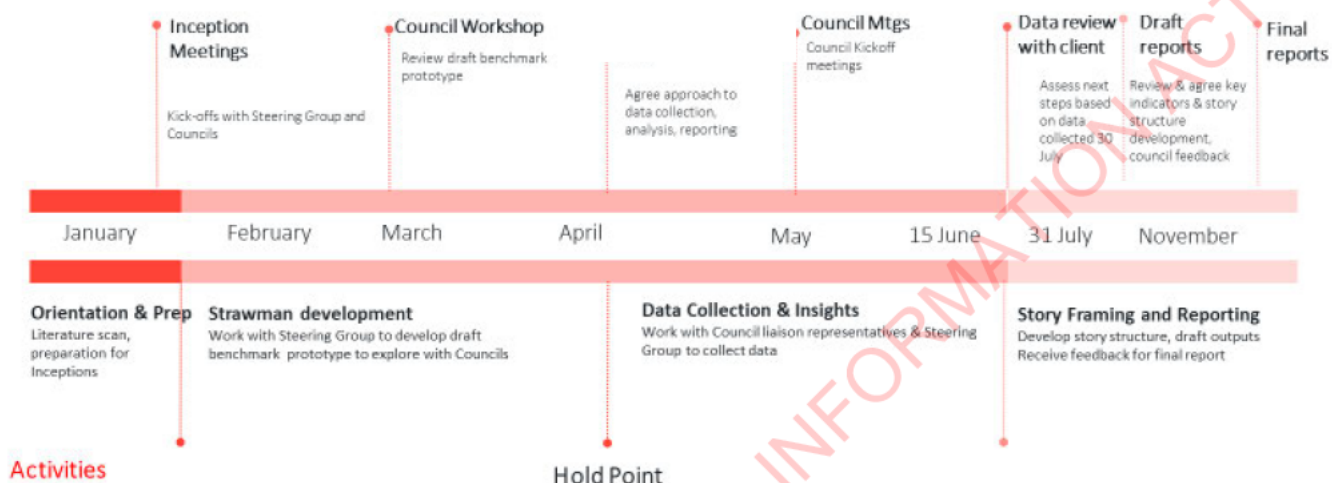
Achieving success in Sustainable Urban Mobility benchmarking relies on engagement with Councils. Five urban councils were involved co-creating the prototype: Auckland Transport and Auckland Council, Hamilton City Council, Tauranga City Council, Wellington City Council, and Christchurch City Council. The respective regional councils also contributed, along with the Ministry of Transport.

The project activities were designed to involve councils and Waka Kotahi early in the process, before collecting data. This process is outlined in Figure 2. Descriptions of the key stakeholder meetings are described in Sections 2.2.1 and 2.2.2.

Figure 2 Overview of project

## Programme and milestones

### Milestones



### 2.2.1 STEERING GROUP MEETINGS

The steering group members were selected by Waka Kotahi to provide strategic direction to the project at key stages, and also to help to connect the work to existing data, information and other projects.

MEETING DATE	PURPOSE	ACTIONS/DECISIONS
26 January 2021	Kick-off	Outline of project and its purpose, role of participants, and their hopes for the project.
15 April 2021	Gateway session	Progress update to the steering group to present the developed set of indicators and seeking feedback for finalisation.

### 2.2.2 STAKEHOLDER CO-DESIGN WORKSHOPS

Waka Kotahi recruited and organised the stakeholder participants from regional and city councils, the Ministry of Transport, and within Waka Kotahi. This group was involved in a series of workshops to co-create the benchmarking narrative, to co-create the benchmark indicators (with a specific focus on input and output indicators) and provide general input to the programme. The stakeholder group included at least one representative to act as a champion from each of the five cities that was benchmarked.

MEETING DATE	PURPOSE	ACTIONS/DECISIONS
23 February 2021	Council intro session	Engaging with Councils on the project, the vision, and inviting their collaboration.
23 March 2021	Prototype workshop	Workshop with councils and Waka Kotahi to develop the longlist of indicators and identify gaps and focus areas.
31 March 2021	Development workshop	Workshop with Waka Kotahi <b>Out of Scope</b> <b>Out of Scope</b> to further develop the indicators shortlisted after the prototype workshop.
6 May 2021	Wellington kick-off meeting	Introducing council contacts from Wellington City Council ( <b>s 9(2)(a)</b> ) and Wellington Regional Council ( <b>s 9(2)(a)</b> ) to the project and outlining the process for data collection.
17 May 2021	Christchurch kick-off meeting	Introducing council contacts from Christchurch City Council ( <b>s 9(2)(a)</b> , <b>s 9(2)(a)</b> ) to the project and outlining the process for data collection.
20 May 2021	Auckland kick-off meeting 1	Introducing council contacts from Auckland Transport ( <b>s 9(2)(a)</b> , <b>s 9(2)(a)</b> ) to the project and outlining the process for data collection.
25 May 2021	Tauranga kick-off meeting	Introducing <b>s 9(2)(a)</b> from Tauranga City Council to the project and outlining the process for data collection.
27 May 2021	Hamilton kick-off meeting	Introducing contacts from Hamilton City ( <b>s 9(2)(a)</b> , <b>s 9(2)(a)</b> ) to the project and outlining the process for data collection.
27 May 2021	Auckland kick-off meeting 2	Introducing contacts from Auckland Transport ( <b>s 9(2)(a)</b> , <b>s 9(2)(a)</b> ) to the project and outlining the process for data collection.
7 July 2021	Cooperative data collection	Working with Hamilton to complete data collection within the spreadsheet.

The stakeholder meeting on 23 March provided feedback on the long list of indicators through a prioritisation exercise. Most indicators were favourably viewed and were taken forward into a workshop on 31 March with subject matter experts within Waka Kotahi. This group provided further prioritisation and guidance for the data collection phase.

Kick-off meetings introduced Councils to the up-coming task, and after the kick-off meetings, the contacts from Councils commenced populating the indicator database with available information. Councils were not tasked with creating new benchmark indicators or underlying data sources.

In addition to steering group meetings and stakeholder co-design workshops, WSP and TRA regularly met with the project manager from Waka Kotahi, **Out of Scope**, to ensure the benchmark information was progressing in line with Waka Kotahi ambitions.

### 2.2.3 INDICATOR REPORTING

The indicator report was populated through data provided through councils, Waka Kotahi, and other available sources such as Statistics New Zealand. Clarification and guidance on sources,

interpretation, and calculation of data was given throughout by council staff and Waka Kotahi and WSP technical experts. As the indicator base developed, WSP met with [Out of Scope] to review and refine methods and definitions (for example, spatial boundaries). The review process included identifying indicators that could not be adequately populated at this time and which could be explored in future stages (for example funding of capital works for walking and cycling).

The full description of indicators are provided in a word document (Appendix 1). Tables are colour coded with red signifying indicators that were agreed to be key, and grey signifying those no longer being pursued.

A separate report was commissioned to develop an indicator of the share of public realm allocated to people, vehicles, and buildings - see Appendix 2

To aid their review as a benchmarking prototype, they were presented in a simplified PowerPoint format, referencing back to the more detailed word document. The simplified version was reviewed for coverage and coherence by Waka Kotahi ([Out of Scope]) (taking over as project manager) and [Out of Scope]).

The simplified version was used by TRA to explore and develop with the Steering Group the narrative for use in the public-facing companion report. The order of indicator reporting was revised to lead with outcomes, then outputs, and finally inputs.

Councils were invited to provide feedback on the indicators using the simplified version incorporating the basic narrative structure. In response, indicators were

- I. Retained as is,
- II. Retained based on data provided at a given date
- III. Revised based on new data and/or methods of calculation
- IV. Noted as needing further investigation and consideration in future stages

# 3 DATA COLLECTION & INSIGHT GATHERING

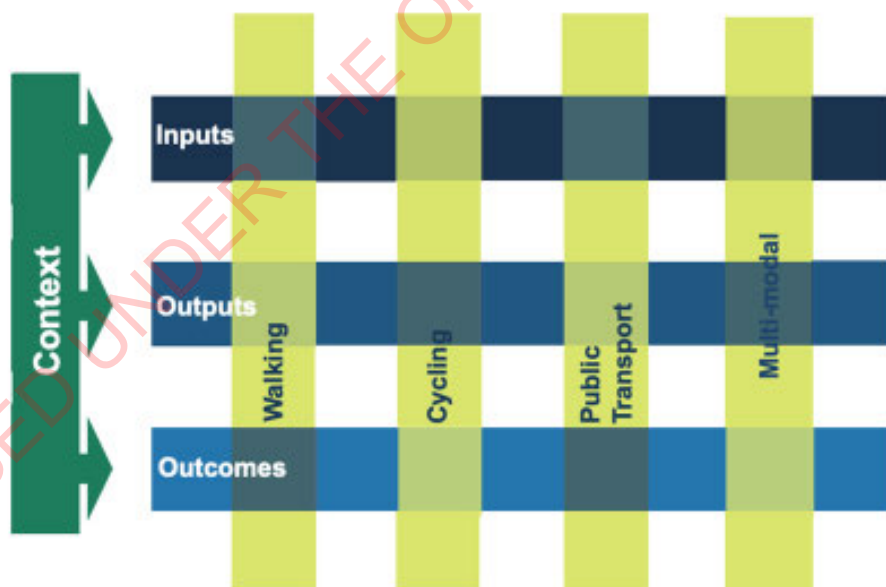
## 3.1 INSIGHTS RELATED TO THE FRAMEWORK AND PROTOTYPE DEVELOPMENT

### 3.1.1.1 COVERAGE

Originally, we provided a framework that grouped indicators as being an Input, Output, or Outcome. Councils provided feedback that they preferred to group indicators by mode type. Given that not all Input, Output, and Outcome groupings correlate to one singular mode type, a matrix-type framework was developed that included multi-modal indicators as well as mode-specific measures. The final framework is represented graphically in Figure 3, where rows represent coverage of input, output, and outcome indicators; and columns represent coverage of modal indicators. The 'context' element represents the need to describe each city's background as part of understanding where they have come from, particular features such as geography, and their vision for mobility.

Figure 3: Sustainability Urban Mobility Framework

### The Sustainable Urban Mobility framework



The challenge of balancing the desire for coverage and detail with simplicity and practicality reflects the underlying complexity of sustainable urban mobility. Diverse decision-makers and invested stakeholders have specific benchmarking needs, meaning that the range of indicators is

wide. Differences across councils in their urban form and where they are on the pathway to sustainable urban mobility adds further complexity.

Some indicators stood out as powerful because they represent a wider trend and/or act as proxy for a range of factors. Such 'bellwether' indicators can be used to simplify the benchmarking dataset and reduce the need to report on everything.

### 3.1.1.2 CONSISTENCY

Identifying the appropriate spatial scale to use for multiple datasets and data sources is critical to allow meaningful comparison between councils and between indicators. Where possible, Statistics New Zealand Main Urban Area boundaries were used as the most consistent scale across councils and indicators. However, the inconsistency of spatial scales used in some datasets makes comparisons across indicators difficult. For example, health statistics come from datasets using District Health Board Boundaries which do not readily align with council jurisdictions (e.g., Wellington city is within the Capital & Coast DHB which includes Kapiti and Porirua councils).

### 3.1.1.3 ALIGNMENT

The SUM benchmarking project is one of several mobility benchmarking frameworks under development and/or implementation. Broadly speaking, the Land Transport Benefits Framework (BF) measures the impact of investment and One Network Framework (ONF) includes service outcomes and performance measures. Over the course of identifying and developing indicators for both BF and ONF, the paucity of data for non-vehicle, non-road transport became apparent. SUM has been able to generate some of the missing pieces in the transport puzzle that can be used to make BF and ONF more comprehensive in their coverage of modes. An advantage of this project compared to ONF in particular, is that it focused on five cities (compared with ONF needing to develop measures for the whole of New Zealand). This meant that some data sources, such as Ministry of Transport's Household Travel Survey, could be used to measure outcomes at city scale in a way that would not be possible for smaller populations.

A point of difference from BF and ONF is the inclusion of inputs and outputs alongside outcomes and how they [will] change over time. As the benchmarking progresses, this will allow greater insights into the investment - operational - optimisation lifecycle of transport assets.

The high-level alignment between the SUM indicators and the Transport Outcomes Framework is shown in the Appendix and the companion report using colour coded buttons to show where an indicator is aligned with a specific outcome. The Inclusive Access outcome was the most frequently aligned an indicator.

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## 3.2 DATA COLLECTION

The data collection stage was comprised of the steps below:

- *Develop benchmarking principles as criteria by which to test indicators, as depicted in Figure 4.*
- *Consolidate the long list of indicators selected during the engagement and co-creation phase.*

- Meet with city council representatives, tasking them with identifying who and where could provide data and/or data sources to a shared database.
- Identify, collect and analyse data and indicators available through other means (e.g., central databases such as RAMM, Council websites, internal Waka Kotahi sources, and other publicly available information).
- Where required, process or scale the information to a common unit of reporting.
- Where required, use the data gathered to calculate the desired indicator.
- Collate gathered data by theme, highlighting data sources; calculation methodologies; and data difficulties. The information is presented in Appendix 1.

Data collection was performed over a 13 week period. The five cities' councils gathered the requested indicator information to the extent it was readily available. Waka Kotahi provided access to indicators they collect (for example, through StoryMaps) and where appropriate directly calculated them.

### 3.3 DESCRIPTION OF INDICATORS

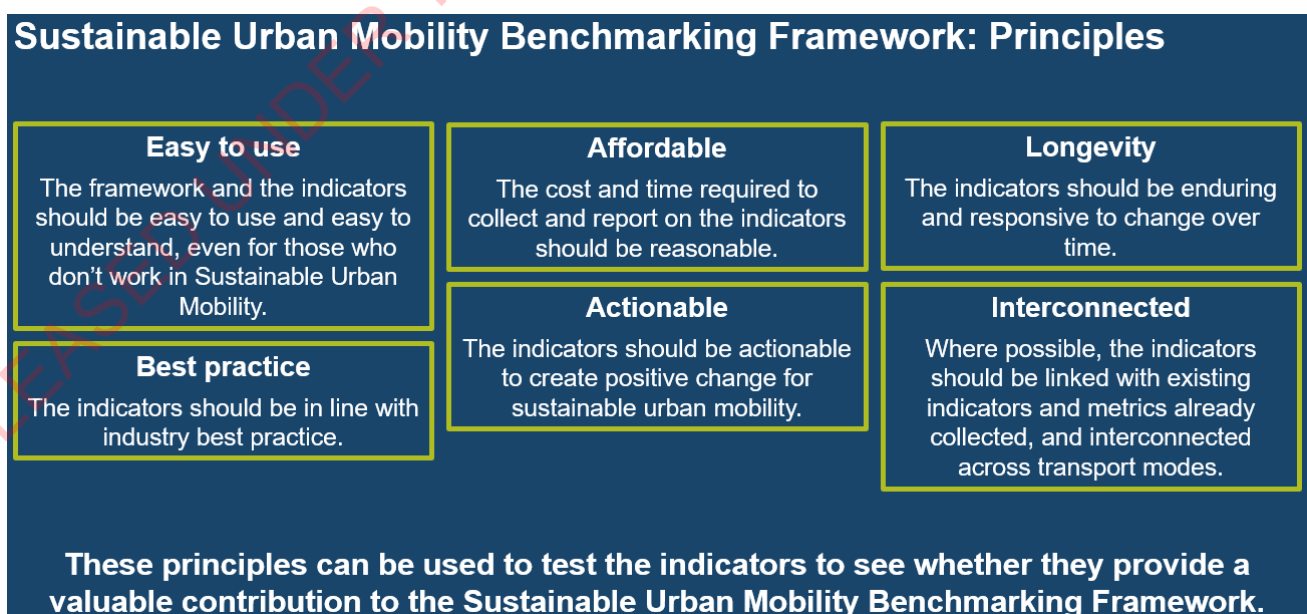
The full master list of collated indicators, with descriptions, and commentary are provided in Appendix 1.

The indicators are ordered according to the framework by inputs, outputs, and outcomes

### 3.4 INSIGHT-GATHERING

Throughout the project, WSP gained insights about the emerging benchmarking prototype. Figure 4 describes the principles agreed with the Steering Group at the beginning of the project.

Figure 4: Benchmarking Principles





### 3.4.1 INSIGHTS RELATED TO EFFORT

We can categorise the indicators into three categories in terms of the effort involved in capturing and reporting:

- i. *Low effort - currently reported (example, mode share %), which are easy to incorporate in a prototype.*
- ii. *High effort where processing and calculation is required (e.g., “Cost to travel by public transport compared to the cost to travel by private vehicle”, and “Time to travel by public transport compared to the time to travel by private vehicle”). These are time-consuming to incorporate in a prototype and calculations need methodology and definition to be meaningful.*
- iii. *High effort where judgement is required to assess the indicator, leading to effort in drilling into data sources and trying to make useful comparisons across councils (example, “Presence and details of an overarching sustainable urban mobility strategy”). These are time-consuming to incorporate in a prototype and need definition and guidance to be meaningful.*

Given that around half of the 66 indicators are not currently reported and fall into categories (ii) and (iii), three implementation considerations emerge:

- i. quality control will need to be an important part of implementing the prototype programme and ensuring calculations are consistent across councils.
- ii. council capacity will be a big factor in the prototype success. Reducing the number of indicators in the prototype or otherwise considering how to reduce the burden will enhance the chance of success.
- iii. support is needed from Waka Kotahi to refine and develop novel indicators to reduce the burden on councils

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## 3.5 OBSERVATIONS

The five councils engaged with the process, some more enthusiastically than others. The challenge for our Council champions was gathering data from people across many departments, and often without the prerequisite knowledge of who and where to search. Competing priorities and capacity constraints within the councils extended the gathering exercise from a planned 6-week period to 13 weeks. The smaller urban centres were particularly stretched for resource to assist. Often councils pointed to Waka Kotahi as having the data that we were seeking from councils. This data is now identified in Appendix 1 to reduce burden on councils.

A multi-disciplinary team within Waka Kotahi engaged enthusiastically and provided excellent knowledge and insight. Waka Kotahi was tasked with providing the data they gather. The challenge for Waka Kotahi representatives was similar to councils in terms of gathering information is spread throughout the organisation.

Relationships matter for getting people on board and obtaining data. Working through council champions was critical for engaging with the appropriate council officers. **Out of Scope** was also valuable for using networks to contact officers and encouraging participation.

# 4 MOVING FORWARD

## 4.1 KEY POINTS

- Ways forward for prioritising the monitoring and reporting of sustainable urban mobility include:
  - Identify where the novel plus useful indicators are for councils and Waka Kotahi: what do they know now that they were not sure of or were not aware of before? This will help ensure the benchmarking is useful to councils first and foremost and not an additional reporting burden
  - Identify the detailed alignment between SUM indicators and other monitoring and reporting programmes. This will help facilitate and normalise the inclusion of non-vehicle, non-road transport into standard reporting.
  - Increase the synergy between SUM and other monitoring and reporting programmes. While an important aim of SUM benchmarking is to communicate the sustainability case and progress, sustainability and mobility practitioners need to see the detailed data sources and methods used to calculate indicators so they can have confidence in their interpretation and use. Providing links between the simple, communication documents and the detailed indicator report allows a 'layered' approach.
  - Identify where SUM indicators can be used to increase the sensitivity and validity of measures in the Benefits Framework and One Network Framework to active and public transport modes
  - Working with end users to identify the best balance between telling a compelling story for change and full descriptive reporting.
- Recommendations for improvements in the process
  - If SUM were to be rolled out to other urban centres, consideration would need to be given to the consistency and validity of indicators across different scales.
  - Developing scalable ways of measuring inputs and qualitative measures for comparability across councils and over time.
  - Linking SUM to other measurement / monitoring work that is more specific and/or in-depth can support and expand SUM insights and reduce the need for detailed descriptive statistics. For example, Ministry of Transport Household Travel Survey reporting of mode-share by ethnicity and age can be used to provide a context for bellwether indicators such as the gender ratio of cycling mode share.
- How data and information can be presented going forward
  - Next stage can review the presentation of indicators from the various end user perspectives
    - What about the current format helps them most?

- Where are there opportunities to consolidate the indicator database? For example, to focus on bellwether indicators.
- Input indicators were the most challenging to develop. There were many and varied data sources, hard to compare and develop into something meaningful. The current version is very much a stake in the sand that would benefit from validation – does the status actually reflect the state of inputs to sustainable urban mobility? Are the policies identified the most useful ones for assessing the state of play? Further exploration will be needed to determine which inputs will be the most useful for showing change over time and their impact on outputs and outcomes.
- Considerations for future target setting

A number of indicators have been signalled in the Appendix for future development either because the data or methodology was not available at the time of reporting, because alternative methods may be viable but were out of scope in this project, or because improved methods are needed or suggested in the feedback. Further investigation and collaboration across ongoing Waka Kotahi and local authority reporting initiatives will be valuable. Priorities for further development can be informed by a user review of the prototype and knowledge of emerging technology and methods within Waka Kotahi.

Specific points for consideration from council feedback include:

- Which indicators would benefit from accounting for the differing geographical scales across the five cities?
- How can 'best practice' be defined, or is it appropriate to refer to a 'standard practice' (such as the RAMM 'good' category) at this stage in developing benchmarking indicators?
- How to include a wider variety of cycling infrastructure, for example, painted cycle lanes? And should they be included?
- How to balance different user needs, for example, the desire for more detailed reporting with overload and utility.
- How to include micro-mobility and other forms of shared transport in future reporting.

# 5 LIMITATIONS

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# APPENDIX A – SUSTAINABLE URBAN MOBILITY BENCHMARKING INDICATORS

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# Sustainable Urban Mobility Benchmarking Indicators

November 2021

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## Note

Indicators coloured **red** are key indicators.

Indicators colours grey are no longer being pursued.

## Spatial boundaries

The boundaries used for each calculation are noted in each table. The following maps show the Stats New Zealand Major Urban Area boundaries.



Figure 1: Auckland Major Urban Area

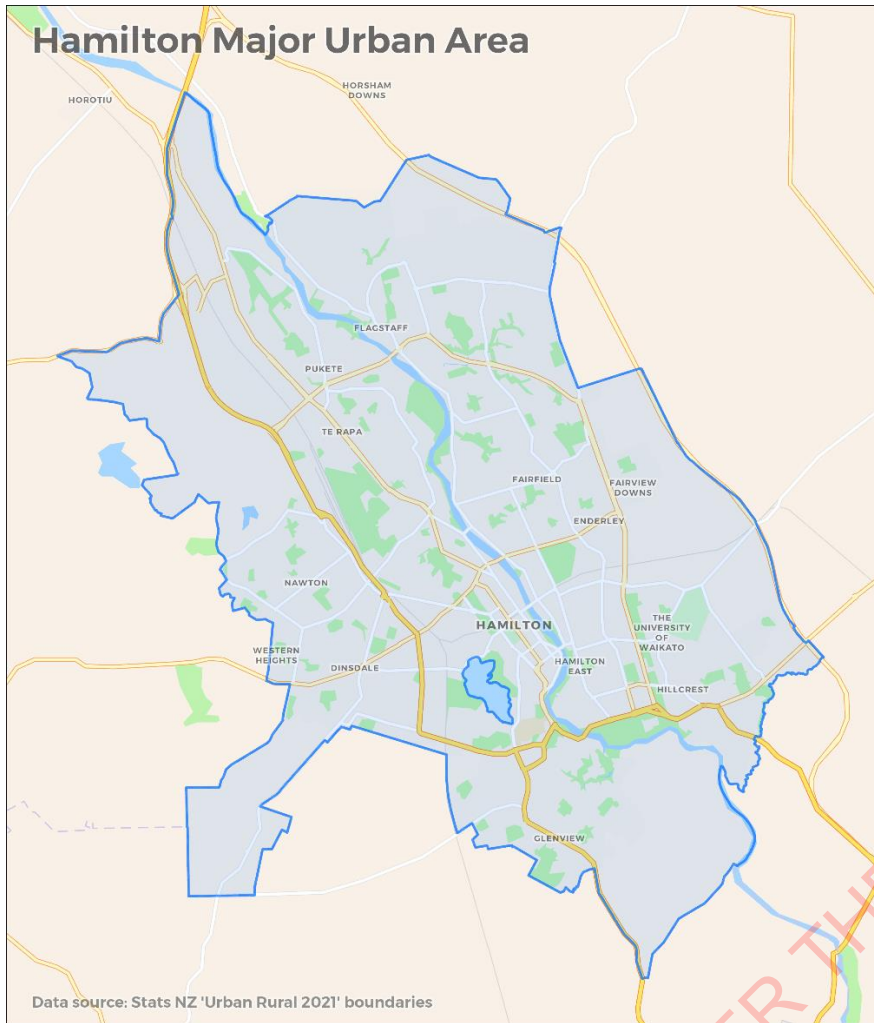


Figure 2: Hamilton Major Urban Area boundary

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Figure 3: Tauranga Major Urban Area boundary

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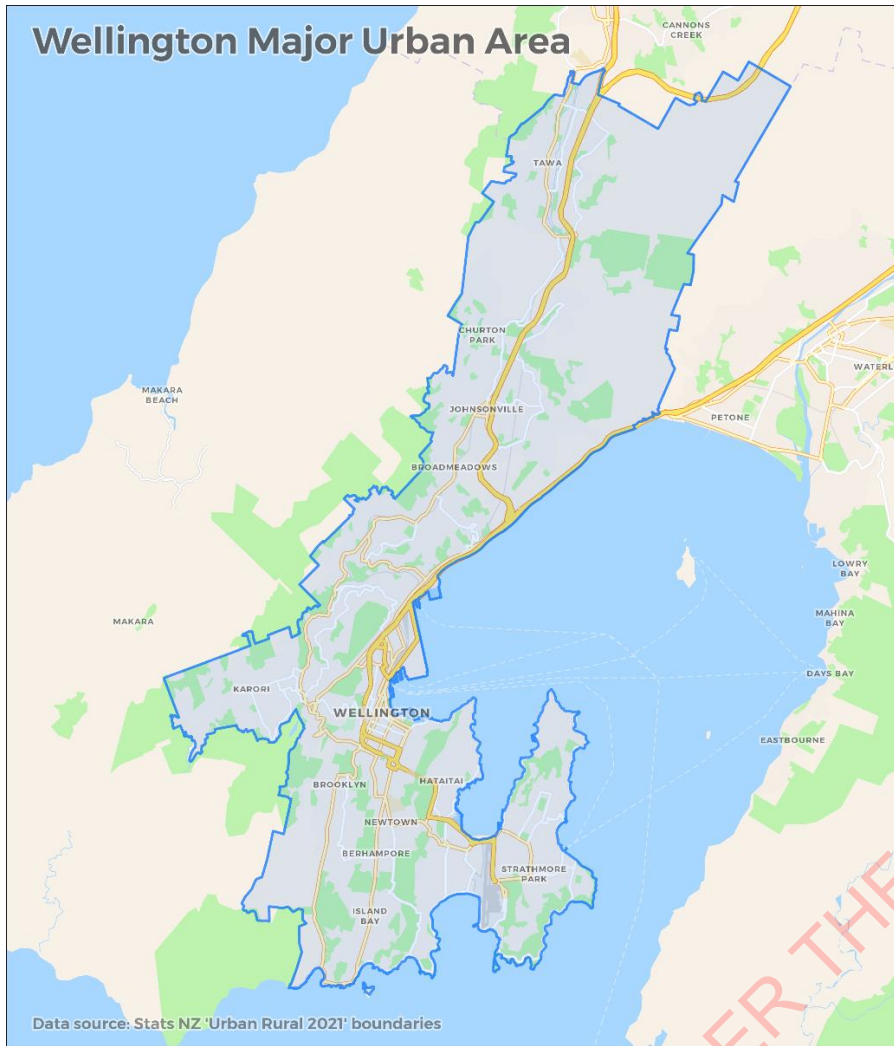


Figure 4: Wellington Major Urban Area boundary

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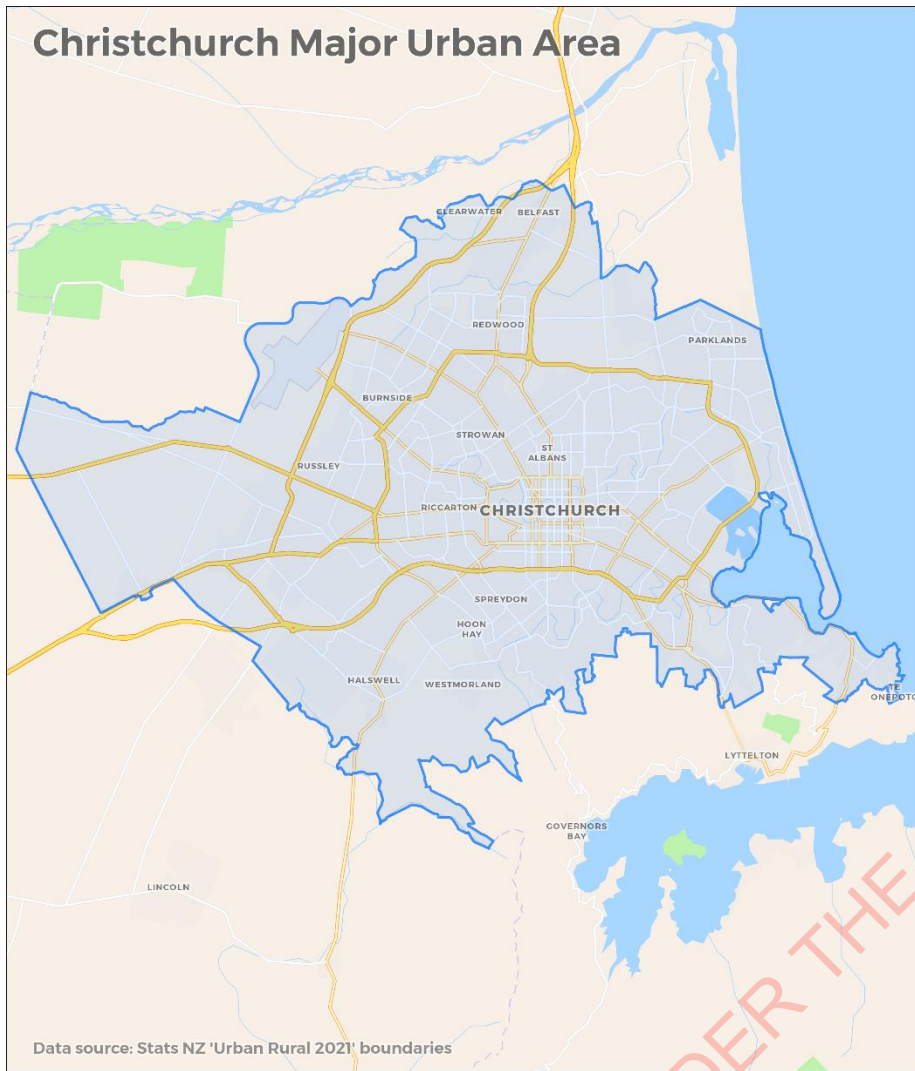


Figure 5: Christchurch Major Urban Area boundary

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# Multi-modal

## Strategies, policies, and plans

Table 1

Sustainable urban mobility policy framework				
Overarching sustainable urban mobility strategy				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of an overarching sustainable urban mobility strategy</i>				
<p><a href="#">Auckland Plan 2050</a> (Auckland Council, published 2018)</p> <p><a href="#">Better Travel Choices</a> (Auckland Transport, Auckland Council, &amp; Waka Kotahi, published 2019)</p> <p>Better Travel Choices is designed to focus the mode shift efforts of Auckland Transport, Auckland Council, and Waka Kotahi.</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Auckland Regional Land Transport Plan 2021-2031</a> (Auckland Transport, published 2021)</li> </ul>	<p><a href="#">Access Hamilton Strategy</a> (Hamilton City Council, published 2010)</p> <p>A new Access Hamilton Strategy is currently under development. A draft of the new strategy has not yet been published, but some details are available on Hamilton City Council's <a href="#">Access Hamilton page</a>.</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Hamilton-Waikato Metro Area Mode Shift Plan</a> (Hamilton City Council, Waikato Regional Council, &amp; Waka Kotahi, published 2020)</li> <li>• <a href="#">Waikato Regional Land Transport Plan 2021-2051</a> (Waikato Regional Council, published 2021)</li> </ul>	<p><a href="#">Urban Form and Transport Initiative (UFTI)</a> (SmartGrowth, Final Report published 2020)</p> <p>UFTI is a collaboration between SmartGrowth, Waka Kotahi, Tauranga City Council, and other councils within the Bay of Plenty Region. It aims to provide a coordinated approach to address urban development and transport issues through the delivery of key projects. It is supported by the <a href="#">Western Bay of Plenty Transport System Plan</a> (published 2021)</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Proposed SmartGrowth Future Development Strategy</a> (SmartGrowth, published 2018)</li> <li>• <a href="#">Tauranga Transport Strategy 2012-2042</a> (Tauranga City Council, published 2012)</li> <li>• <a href="#">Regional Mode Shift Plan: Bay of Plenty</a> (Tauranga City Council, Bay of Plenty Regional Council, &amp; Waka Kotahi, published 2020)</li> <li>• <a href="#">Bay of Plenty Regional Land Transport Plan 2021-2031</a> (Bay of Plenty Regional Council, published 2021)</li> </ul>	<p><a href="#">Wellington Urban Growth Strategy 2014-2043</a> (Wellington City Council, published 2014)</p> <p>The Wellington Urban Growth Strategy 2014-2043 will eventually be superseded by the Wellington Spatial Plan. A draft of the spatial plan has been published <a href="#">online</a>.</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Regional Mode Shift Plan: Wellington</a> (Wellington City Council, Wellington Regional Council, &amp; Waka Kotahi, published 2020)</li> <li>• <a href="#">Wellington Regional Land Transport Plan 2021</a> (Wellington Regional Council, published 2021)</li> <li>• <a href="#">Let's Get Wellington Moving programme</a></li> </ul>	<p><a href="#">Christchurch Transport Strategic Plan 2012-2042</a> (Christchurch City Council, published 2012)</p> <p>A new Transport Strategic Plan is currently under development.</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Canterbury Regional Land Transport Strategy 2012-2042</a> (Canterbury Regional Land Transport Committee, published 2012)</li> <li>• <a href="#">Regional Mode Shift Plan: Greater Christchurch</a> (Christchurch City Council, Environment Canterbury, &amp; Waka Kotahi, published 2020)</li> <li>• <a href="#">Canterbury Regional Land Transport Plan 2021-2031</a> (Environment Canterbury, published 2021)</li> </ul>
<i>Whether the overarching sustainable urban mobility strategy includes indicators/targets</i>				
<p>Yes – the Auckland Plan 2050 includes a set of indicators which measure performance against its transport and access outcomes. However, specific targets are not included.</p>	<p>No – the current Access Hamilton Strategy does not include any indicators or targets.</p> <p>It remains to be seen whether the new strategy will include any indicators or targets.</p>	<p>Yes – the UFTI Final Report includes a set of indicators which measure performance against its movement objectives. However, specific targets are not included.</p>	<p>Somewhat – the Wellington Urban Growth Strategy 2014-2043 only includes one relevant indicator – changes in journey patterns and mode share. It does not include any specific targets.</p> <p>The current draft Wellington Spatial Plan does not include any indicators</p>	<p>Yes – the Christchurch Transport Strategic Plan 2012-2042 includes a set of indicators which measure performance against transport outcomes identified in the Canterbury Regional Land Transport Strategy 2012-2042. However, specific targets are not included.</p>

<p>Indicators include:</p> <ul style="list-style-type: none"> <li>• Access to jobs by different modes.</li> <li>• Mode share of walking, cycling, and public transport.</li> <li>• Household transport costs.</li> </ul> <p>Better Travel Choices does not currently include any indicators or targets, but these may be added over time as wider policy work progresses.</p>		<p>Indicators include:</p> <ul style="list-style-type: none"> <li>• Percentage of jobs accessible within 30–45 minutes by different modes during the morning peak.</li> <li>• Percentage of people living within 500 metres of frequent public transport services.</li> <li>• Number of DSI and FSI crashes by mode.</li> </ul>	<p>or targets, but as it is still under development it remains to be seen whether the final version will.</p> <p>In addition, the Wellington Annual Plan includes a number of indicators relating to sustainable modes, and the Wellington Residents Monitoring Survey includes a section on transport with several questions asking about people's experience using sustainable modes.</p>	<p>A draft of the new plan has not yet been published, so indicator details for that have yet to be confirmed. However, Christchurch City Council have advised that specific targets will be included.</p> <p>Indicators in the current plan include:</p> <ul style="list-style-type: none"> <li>• Percentage of households within a 10-minute walk or 30-minute public transport trip to key activity centres.</li> <li>• Average trip length for all trips.</li> <li>• Time spent walking and cycling (hours per capita).</li> </ul> <p>In addition, the Christchurch Transport Activity Plan (which is part of the Christchurch Long Term Plan 2021-31) includes a target to increase the share of non-car modes in daily trips (≥17% for 2021/22, ≥17% for 2022/23, ≥18% for 2023/24, and ≥20 for 2030/31).</p>
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*Whether performance against the indicators/targets is monitored and reported on*

<p>Yes – performance against the indicators in the Auckland Plan 2050 is monitored on an ongoing basis and reported in an <a href="#">annual monitoring report</a> and a <a href="#">three-yearly progress report</a>.</p> <p>Progress reports for the Better Travel Choices plan will be provided to the Minister of Transport and Mayor of Auckland every six months.</p>	<p>Not applicable – the current Access Hamilton Strategy does not include any indicators or targets.</p> <p>Monitoring and reporting details for any indicators or targets included in the new strategy have yet to be confirmed.</p>	<p>Yes – the UFTI Final Report details how SmartGrowth will monitor performance against the indicators and report on them on an annual basis. However this annual reporting process has not yet begun.</p>	<p>Somewhat – Wellington City Council monitors 'changes in journey patterns and mode share' through a range of more specific indicators which are reported in Council's Annual Reports. Monitoring and reporting details for any indicators or targets included in the Wellington Spatial Plan have yet to be confirmed.</p>	<p>Somewhat – the Christchurch Transport Strategic Plan 2012-2042 mentions that the indicators will be monitored and reported in several different ways, including by Environment Canterbury and through Christchurch City Council's Community Outcomes Monitoring Programme. However, publicly available reporting was unable to be located.</p> <p>Monitoring and reporting details for the new plan have yet to be confirmed.</p> <p>In addition, the Life in Christchurch Transport Survey is conducted on a regular basis to monitor travel mode choice and user satisfaction.</p>
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**Spatial plan**

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a spatial plan</i>				
<p><a href="#">Auckland Plan 2050</a> (Auckland Council, published 2018)</p>	<p><a href="#">Hamilton-Waikato Metro Spatial Plan</a> (Future Proof, 2020)</p>	<p>Not currently – but the Urban Form and Transport Initiative Final Report indicates that developing a Western Bay of Plenty Joint Spatial Plan is a key next step in the implementation process.</p>	<p>Not currently – but the Wellington Spatial Plan is under development. A draft of the plan is available on the <a href="#">Planning for Growth website</a>.</p>	<p>Not currently – but the Greater Christchurch 2050 Spatial Plan is under development. A draft has not yet been released, but details of the development process are available on the <a href="#">Greater Christchurch website</a>.</p>

Low carbon strategy **Environmental sustainability**

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a low carbon strategy</i>				
<p><a href="#">Te Tāruke-ā-Tāwhiri: Auckland's Climate Plan</a> (Auckland Council, published 2020)</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Auckland Low Carbon Strategic Action Plan</a> (Auckland Council, published 2014)</li> <li>• <a href="#">Auckland's Low Emission Bus Roadmap</a> (Auckland Transport, published 2018)</li> </ul>	<p><a href="#">Hamilton 2020/2021 Climate Change Action Plan</a> (Hamilton City Council, published 2020)</p> <p>Hamilton City Council are also currently working on a 2050 climate strategy.</p>	<p>Not currently – but a process is underway to produce an environment strategy which will include a carbon reduction focus. Detail on this process is available on Council's <a href="#">website</a>.</p>	<p><a href="#">Te Atakura: First to Zero</a> (Wellington City Council, published 2020)</p>	<p><a href="#">Ōtautahi Christchurch Climate Change Strategy (draft)</a> (Christchurch City Council, draft released 2021)</p>
<i>Whether the low carbon strategy includes indicators/targets</i>				
<p>Yes – Te Tāruke-ā-Tāwhiri includes the overall target to reduce emissions to zero by 2050. In addition, it also includes a scenario to reduce emissions by 50 percent by 2030 (against a 2016 baseline). In addition, it sets several transport specific targets, including:</p> <ul style="list-style-type: none"> <li>• Mode share increases for walking, cycling, and public transport (with targets for 2030 and 2050).</li> <li>• 100% of Auckland's bus fleet zero emission by 2030.</li> <li>• Reduction in vehicle kilometres travelled by 12% by 2030.</li> </ul>	<p>Somewhat – the Hamilton 2020/2021 Climate Change Action Plan includes a target to reduce Hamilton City Council's emissions by 50% by 2030 (excluding biogenic methane), but it does not include an overall target for the city. It is expected that this will be set in the 2050 climate strategy (currently under development).</p>	<p>Not applicable – Tauranga City Council does not currently have a low carbon strategy.</p>	<p>Ye – Te Atakura: First to Zero includes the overall target to reduce emissions to zero by 2050. In addition, it states that Wellington City Council will develop targets to strongly increase public and active transport use by 2025, which will be included in the next Long-Term Plan.</p>	<p>Yes – the draft Ōtautahi Christchurch Climate Change Strategy includes the overall target to reduce emissions to zero by 2045. In addition, it also includes a target to reduce emissions by 50% by 2030.</p>
<i>Whether performance against the indicators/targets is monitored and reported on</i>				
<p>Yes – monitoring and reporting of emissions is undertaken annually. Auckland Council publishes a yearly technical report 'Auckland's Greenhouse Gas Inventory' which is released on the <a href="#">Knowledge Auckland</a> website. Emissions are also reported in Council's Annual Reports.</p>	<p>Yes – Hamilton City Council publishes a yearly <a href="#">emissions profile</a> showing Council's emissions. It also publishes an emissions profile for the city, but this is not yet linked to an emissions reduction target.</p>	<p>Although Tauranga City Council does not yet have a low carbon strategy, it does still publish an <a href="#">emissions profile</a> for the city.</p>	<p>Yes – monitoring and reporting of emissions is undertaken annually as part of the Te Atakura: First to Zero strategy. The first Wellington City Greenhouse Gas Inventory Report has been released on Wellington City Council's <a href="#">Zero Carbon Capital website</a>. Data from the inventory report is also included in Council's Annual Report 2019-2020.</p>	<p>Yes – Christchurch City Council currently publishes an emissions profile on their <a href="#">climate change page</a>. The draft Ōtautahi Christchurch Climate Change Strategy also identifies the need for more substantial reporting to be established.</p>
<b>Walking plan</b>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a walking policy/plan</i>				
<p>Included as part of the <a href="#">Auckland Plan 2050</a>.</p>	<p>Hamilton City Council's current <a href="#">Access Hamilton Strategy</a> includes an Active Travel Plan, however this is no longer available on Council's website.</p>	<p>Included as part of the <a href="#">Tauranga Transport Strategy 2012-2042</a>.</p>	<p><a href="#">Wellington City Walking Policy</a> (Wellington City Council, published 2008)</p>	<p>Included as part of the <a href="#">Christchurch Transport Strategic Plan 2012-2042</a></p>



<p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Future Connect</a> (Auckland Transport, published 2021), the long-term network plan for Auckland.</li> </ul>	<p>Council have advised that a new Active Travel Plan will be created as part of the new Access Hamilton Strategy (currently under development).</p> <p><i>Other relevant documents:</i></p> <p><a href="#">Waikato Regional Walking and Cycling Strategy 2009-2015</a> (Waikato Regional Council, published 2009)</p>			<p>(currently in the process of being updated).</p>
<p><i>Whether the walking policy/plan includes indicators/targets</i></p>				
<p>Yes – the Auckland Plan 2050 includes a set of indicators which measure performance against its transport and access outcomes. However, specific targets are not included. Also, most of the indicators are quite broad and look at multiple modes.</p> <p>Future Connect also includes deficiency indicators for footpath width and pedestrian severance.</p>	<p>The current Active Travel Plan was unable to be located to confirm. It remains to be seen whether the new plan will include any indicators or targets.</p>	<p>No indicators/targets.</p>	<p>Yes – for each objective, the Wellington City Walking Policy includes an indicator to measure performance. However, specific targets are not included.</p> <p>In addition, the Wellington Annual Plan includes a number of indicators relating to walking.</p>	<p>Yes – the Christchurch Transport Strategic Plan 2012-2042 includes a set of indicators which measure performance against transport outcomes identified in the Canterbury Regional Land Transport Strategy 2012-2042. However, specific targets are not included. Also, most of the indicators are quite broad and look at multiple modes.</p> <p>A draft of the new plan has not yet been published, so indicator details for that have yet to be confirmed. However, Christchurch City Council have advised that specific targets will be included.</p>
<p><i>Whether performance against the indicators/targets is monitored and reported on</i></p>				
<p>Yes – performance against the indicators is monitored on an ongoing basis and reported in an <a href="#">annual monitoring report</a> and a <a href="#">three-yearly progress report</a>.</p>	<p>Not applicable (no indicators/targets).</p>	<p>Not applicable (no indicators/targets).</p>	<p>Somewhat – the indicators rely on data that is already monitored and reported on in other documents (such as Wellington City Council's Resident Satisfaction Survey). However, there does not appear to be any reporting of the indicators which is linked back to the policy.</p>	<p>Somewhat – the Christchurch Transport Strategic Plan 2012-2042 mentions that the indicators will be monitored and reported in several different ways, including by Environment Canterbury and through Christchurch City Council's Community Outcomes Monitoring Programme. However, publicly available reporting was unable to be located.</p> <p>Monitoring and reporting details for the new plan have yet to be confirmed.</p>

Cycling plan				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a cycling policy/plan</i>				
<p>Included as part of the <a href="#">Auckland Plan 2050</a>.</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• <a href="#">Future Connect</a> (Auckland Transport, published 2021), the long-term network plan for Auckland.</li> <li>• <a href="#">Auckland Cycling Programme Business Case</a> (Auckland Transport, published 2017) – currently in the process of being reviewed.</li> </ul>	<p><a href="#">Hamilton Biking Plan 2015-2045</a> (Hamilton City Council, published 2015)</p> <p><i>Other relevant documents:</i></p> <ul style="list-style-type: none"> <li>• Access Hamilton Strategy: Active Travel Action Plan (no longer available on Council's website, currently in the process of being updated).</li> <li>• <a href="#">Waikato Regional Walking and Cycling Strategy 2009-2015</a> (Waikato Regional Council, published 2009)</li> </ul>	<p><a href="#">Tauranga Cycle Plan</a> (Tauranga City Council, published 2018)</p> <p><i>Other relevant documents:</i></p> <p><a href="#">Tauranga Transport Strategy 2012-2042</a> (Tauranga City Council, published 2012)</p>	<p><a href="#">Wellington City Cycling Policy</a> (Wellington City Council, published 2008)</p> <p><i>Other relevant documents:</i></p> <p><a href="#">Wellington Cycleways Programme Master Plan and Cycling Framework</a> (Wellington City Council, published 2015)</p>	<p>Included as part of the <a href="#">Christchurch Transport Strategic Plan 2012-2042</a> (currently in the process of being updated).</p>
<i>Whether the cycling policy/plan includes indicators/targets</i>				
<p>Yes – the Auckland Plan 2050 includes a set of indicators which measure performance against its transport and access outcomes. However, specific targets are not included. Also, most of the indicators are quite broad and look at multiple modes.</p> <p>Future Connect also includes a deficiency indicator for safe and appropriate facilities.</p>	<p>Yes – the Hamilton Biking Plan 2015-2045 includes a set of indicators to measure performance. However, most of the indicators do not include specific targets, except for the user satisfaction indicator.</p>	<p>Yes – the Tauranga Cycle Plan includes a set of indicators to measure performance. However, most of the indicators do not include specific targets, except for the mode share indicator.</p>	<p>Yes – for each objective, the Wellington City Cycling Policy includes an indicator to measure performance. However, specific targets are not included.</p> <p>In addition, the Wellington Cycleways Programme Master Plan details several indicators to measure performance, however it mentions that these will be developed further as part of the business case process. The accompanying Wellington City Cycle Network Strategic Case document expands on the indicators, but it also notes that they are still in draft.</p> <p>The Wellington Annual Plan also includes a number of indicators relating to cycling.</p>	<p>Yes – the Christchurch Transport Strategic Plan 2012-2042 includes a set of indicators which measure performance against transport outcomes identified in the Canterbury Regional Land Transport Strategy 2012-2042. However, specific targets are not included. Also, most of the indicators are quite broad and look at multiple modes.</p> <p>A draft of the new plan has not yet been published, so indicator details for that have yet to be confirmed. However, Christchurch City Council have advised that specific targets will be included.</p> <p>In addition, the Christchurch Transport Activity Plan (which is part of the Christchurch Long Term Plan 2021-31) includes several cycling targets, covering cycling safety, infrastructure, perceptions, number of total users and number of users in the CBD, and the condition of off-road facilities.</p>
<i>Whether performance against the indicators/targets is monitored and reported on</i>				
<p>Yes – performance against the indicators is monitored on an ongoing basis and reported in an <a href="#">annual monitoring report</a> and a <a href="#">three-yearly progress report</a>.</p>	<p>Unclear – the Hamilton Biking Plan 2015-2045 does state that the indicators will be monitored and reported annually, however no mention is made of the indicators in</p>	<p>Not currently – the Tauranga Cycle Plan mentions that the indicators will be monitored and reported on Tauranga City Council's <a href="#">cycle page</a>, however this has not yet happened.</p>	<p>Somewhat – the indicators in the Wellington City Cycling Policy rely on data that is already monitored and reported on in other documents (such as Wellington City Council's Resident Satisfaction Survey).</p>	<p>Somewhat – the Christchurch Transport Strategic Plan 2012-2042 mentions that the indicators will be monitored and reported in several different ways, including by Environment Canterbury and through Christchurch City Council's</p>

	Hamilton City Council's annual publications or on their website.		However, there does not appear to be any reporting of the indicators which is linked back to the policy.	Community Outcomes Monitoring Programme. However, publicly available reporting was unable to be located. Monitoring and reporting details for the new plan have yet to be confirmed. Targets in the Christchurch Transport Activity Plan will be monitored on an ongoing basis and reported in the Council's Long Term Plan.
Public transport plan				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
Presence and details of a public transport policy/plan				
<a href="#">Auckland Regional Public Transport Plan 2018-2028</a> (Auckland Council, published 2018) <i>Other relevant documents:</i> • <a href="#">Future Connect</a> (Auckland Transport, published 2021), the long-term network plan for Auckland.	<a href="#">Waikato Regional Public Transport Plan 2018-2028</a> (Waikato Regional Council, published 2018) <i>Other relevant documents:</i> <a href="#">Access Hamilton Strategy: Passenger Transport Action Plan</a> (Hamilton City Council, published 2010) (currently in the process of being updated)	<a href="#">Bay of Plenty Regional Public Transport Plan 2019</a> (Bay of Plenty Regional Council, published 2018 and updated 2019) <i>Other relevant documents:</i> <a href="#">Tauranga Transport Strategy 2012-2042</a> (Tauranga City Council, published 2012)	<a href="#">Wellington Regional Public Transport Plan</a> (Wellington Regional Council, published 2014) The Wellington Regional Public Transport Plan will soon be replaced by the <a href="#">Wellington Regional Public Transport Plan 2021-2031</a> (currently in draft). <i>Other relevant documents:</i> Wellington Bus Priority Action Plan (currently in draft) (co-developed by Wellington City Council and Greater Wellington Regional Council). The plan aims to make buses more reliable and quicker on key routes within Wellington City.	<a href="#">Canterbury Regional Public Transport Plan 2018-2028</a> (Environment Canterbury, published 2018)
Whether the public transport policy/plan includes indicators/targets				
Yes – the Auckland Regional Public Transport Plan 2018-2028 includes a set of indicators to measure performance. The indicators include targets (expected outcomes) for the end of the three-year period when the plan is updated (currently 2021). Future Connect also includes deficiency indicators for a number of public transport service metrics, such as travel time reliability and patronage/capacity ratio.	Yes – the Waikato Regional Public Transport Plan 2018-2028 includes a set of indicators to measure performance. However, specific targets are not included. In addition, the Access Hamilton Strategy: Passenger Transport Action Plan also includes a set of indicators.	Yes – the Bay of Plenty Regional Public Transport Plan 2019 includes a set of indicators to measure performance, which all include specific targets.	Not yet – the current Wellington Regional Public Transport Plan does not include any indicators or targets, but the new Wellington Regional Public Transport Plan 2021-2031 (currently in draft) includes a set of indicators to measure performance, all of which include specific targets.	Yes – the Canterbury Regional Public Transport Plan 2018-2028 includes a set of indicators to measure performance, all of which include specific targets.
Whether performance against the indicators/targets is monitored and reported on				
Yes – performance against the indicators is monitored on an	Yes – performance against the indicators in the Waikato Regional Public Transport Plan is monitored on an ongoing basis and reported when	Yes – performance against the indicators is monitored on an	Not applicable yet (no indicators/targets in the current plan).	Yes – the plan states that Environment Canterbury will prepare annual reports to monitor performance against the indicators,

ongoing basis and reported when the plan is updated (every three years).	the plan is updated (every three years). Monitoring and reporting for the indicators in the Access Hamilton Strategy: Passenger Transport Action Plan are unclear, as some details on the different mechanisms to monitor the indicators has been included, but there are no reporting details.	ongoing basis and reported when the plan is updated (every three years).		however these reports were unable to be located on Council's website. Some indicators are reported on in Council's Long-Term Plan and Annual Plan, as well as on the <a href="#">reporting page</a> on their website.
Parking policy/plan				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a parking policy/plan</i>				
<a href="#">Auckland Transport Parking Strategy</a> (Auckland Transport, published 2015)	<a href="#">Access Hamilton Parking Management Action Plan</a> (Hamilton City Council, published 2010) Council have advised that a new Parking Management Action Plan will be created as part of the new Access Hamilton Strategy (currently under development).	No parking policy/plan.	<a href="#">Wellington Parking Policy</a> (Wellington City Council, published 2020)	<a href="#">Christchurch Suburban Parking Policy</a> (Christchurch City Council, published 2019) A Christchurch Central City Parking Policy is also under development. A draft of the policy has not yet been published, but some details are available <a href="#">online</a> .
<i>Whether the parking policy/plan includes indicators/targets</i>				
Yes – target peak occupancy rate of 85% for on-street parking.	No indicators/targets.	Not applicable (no parking policy/plan).	Yes – the Wellington Parking Policy includes a range of broad measures and indicators which aim to show the impact of the policy's objectives and principles over time.	No – the current Suburban Parking Policy does not include targets. It is unclear whether the new Central City Parking Policy will.
<i>Whether performance against the indicators/targets is monitored and reported on</i>				
Not available.	Not applicable (no indicators/targets).	Not applicable (no parking policy/plan).	Somewhat – the policy does specify that three performance measures related to parking will continue be reported on in Wellington City Council's Annual Plan, but no mention is made of a monitoring and reporting process for the other targets.	Not applicable (no indicators/targets).
Speed management policy/plan				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a speed management policy/plan</i>				
<a href="#">Auckland Safe Speeds Programme</a> (Auckland Transport, published online)	<a href="#">Hamilton Speed Management Plan</a> (Hamilton City Council, updated 2019)	No speed management policy/plan	Wellington Transport Activity Management Plan 2021-2051: Speed Management Programme (not publicly available) (Wellington City Council, published 2021)	No citywide speed management policy/plan has been created yet, but a speed management plan for the Marshland, Spencerville, and Kainga areas is currently under development.

<i>Whether the speed management policy/plan includes indicators/targets</i>				
Somewhat – Auckland Transport carries out resident satisfaction monitoring on safety perceptions before and after changes are made.	No indicators/targets.	Not applicable (no speed management policy/plan).	Yes – the Speed Management Programme includes targets around consultation and implementation of speed management interventions.	Not applicable (no citywide speed management policy/plan, and a draft of the area specific plan has not yet been published).
<i>Whether performance against the indicators/targets is monitored and reported on</i>				
Yes – Auckland Transport publishes the results of resident satisfaction monitoring on their <a href="#">Safe Speeds Programme</a> page.	Not applicable (no indicators/targets).	Not applicable (no speed management policy/plan).	Unclear – monitoring and reporting details are not included.	Not applicable (no citywide speed management policy/plan, and a draft of the area specific plan has not yet been published).

Table 2

<b>Presence and comprehensiveness of a multi-modal hierarchical network map</b>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of multi-modal hierarchical network map</i>				
<a href="#">Auckland Transport Future Connect Map</a> The Future Connect Map includes multiple modes, the strategic network for each mode, and a hierarchy of the network for each mode.	Hamilton City Council maintains an internal GIS map which includes multiple modes and a hierarchy of the network. Some of these maps have been exported as static images and used in various Council publications, however apart from that the maps are not publicly accessible.	No multi-modal hierarchical network map.	No multi-modal hierarchical network map.	<a href="#">Christchurch City Council ONF Map</a> Christchurch City Council has developed a One Network Framework (ONF) map which includes multiple modes and functional classifications of the network. Council has also advised that a multi-modal hierarchical network map will be included as part of the new Christchurch Transport Strategic Plan.

Table 3

<b>Presence and comprehensiveness of an infrastructure improvement programme</b>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of an infrastructure improvement programme</i>				
<a href="#">Auckland Transport Asset Management Plan 2018-2021</a> (Auckland Transport, published 2018)	The Hamilton Network Operating Framework, which comprises three documents – the Network Operating Framework Overview, the Network Operating Plan, and the Network Improvement Plan. (Hamilton City Council, published 2017)	Details of an infrastructure improvement programme were not provided and have not been located.	Wellington Transport Activity Management Plan (Wellington City Council, published 2020)	<a href="#">Christchurch Road Operations Activity Management Plan</a> (Christchurch City Council, published 2017)
<i>Whether the infrastructure improvement programme incorporates the delivery of walking and cycling improvements as part of road maintenance and renewals</i>				
Yes – the plan mentions that footpath and cycleway renewals	Somewhat – the Network Improvement Plan identifies locations where changes will be	Not applicable	Not yet – the current plan generally only requires replacement to current standards, but Wellington City	Somewhat – the <a href="#">Christchurch Long Term Plan</a> includes a Cycleway

should be treated as an opportunity to improve amenity and safety.	required to achieve the level of service set out in the Network Operating Framework Overview and sets out a plan for how and when those changes will be made. However, it is unclear whether this includes direction on improvements to walking and cycling infrastructure as part of road maintenance and renewals.		Council are working on developing a 'build back better' strategy which will trigger a fuller consideration of improvements to implement their Sustainable Transport Hierarchy. The delivery of walking and cycling improvements is incorporated into Let's Get Wellington Moving projects.	Improvement Reseal Support programme.
Notes				
Information for this indicator was limited – treat with caution.				

Table 4

<b>Whether the District Plan's objectives and policies support sustainable urban mobility (where relevant)</b>
This indicator has been put on hold – a full assessment of the District Plan's objectives and policies as they relate to sustainable urban mobility would provide a potentially useful indicator, but an assessment has not been undertaken yet due to project time constraints.

Table 5

<b>Presence and comprehensiveness of a communications plan to promote and build understanding of sustainable urban mobility</b>
<b>Out of Scope</b> has advised this may be better shown through a case study (e.g. Christchurch's comms plan for Major Cycleway Routes or Auckland's bus advertising).

## Funding

Table 6

<b>Emission reduction potential of Regional Land Transport Plan investments</b>
TBC – <b>Out of Scope</b> has advised that he will be able to provide this at a later date.

## Partnerships

Table 7

<b>Whether there is a joint commitment to sustainable urban mobility between local and regional councils</b>
Indicator flagged – no longer pursuing.

## Mode shift programmes and promotions

Table 8

Presence of mode shift programmes and promotions				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Do you undertake any initiatives that encourage sustainable transport to school?</i>				
<b>Travel plans</b>				
<ul style="list-style-type: none"> <li>Support for the development and implementation of Safe School Travel Plans.</li> </ul>	Not provided	<ul style="list-style-type: none"> <li>3 Travel Safe Coordinators that work with schools on School Travel Action Plans.</li> </ul>	Not provided	<ul style="list-style-type: none"> <li>School travel planning programme to support the development and implementation of travel plans.</li> </ul>
<b>Programmes with schools</b>				
<ul style="list-style-type: none"> <li>Travelwise Schools and Rural Schools programme (350 schools).</li> <li>Walking School Buses (approximately 290 Walking School Buses reaching 3,000 students).</li> <li>Bike Ready training for school children (5,600 students at Grade 1 and 3,500 at Grade 2).</li> </ul>	<ul style="list-style-type: none"> <li>Kids on Bikes programme (delivered to, 1,793 students across 15 schools in 2020/21).</li> <li>Design Your Own Helmet competition (1,800 entries from 27 schools).</li> <li>Happy Feet programme for ECE preschools (over 300 children).</li> <li>Walking School Buses (6 Walking School Buses reaching 210 students).</li> </ul>	<ul style="list-style-type: none"> <li>Travel Smart student groups working on road safety and active travel initiatives.</li> <li>Kids Can Ride programme which delivers Bike Ready training (reaching approximately 3,900 students).</li> <li>Intermediate Cycle Programme which supports cycling to and from intermediate school (reaching approximately 200 students).</li> </ul>	<ul style="list-style-type: none"> <li>Movin' March programme supporting active travel to school (reaching approximately 37,000 students across 132 schools in 2021).</li> <li>Active Travel Action school curriculum resource.</li> <li>Scooter Ready programme delivering scooter skills training (2020/21 pilot programme reaching 28 classes across 10 schools).</li> <li>Pedal Ready programme delivering cycle skills training (2020/21 programme reaching 5,923 students across 63 schools).</li> <li>Bikes in Schools facilitation.</li> </ul>	<ul style="list-style-type: none"> <li>Walk or Wheel to School Day event designed to promote, reward, and incentivise getting to and from school using active modes.</li> <li>Cycle Safe programme providing cycle skills training and education.</li> </ul>
<b>Programmes supporting schools</b>				
<ul style="list-style-type: none"> <li>Support for mode shift initiatives.</li> <li>Support for road safety initiatives.</li> <li>Support for the NZ Police to deliver the Stepping Out programme.</li> <li>Driver targeted campaigns focused on slow speeds around schools.</li> <li>Support for the Bikes in Schools programme to extend their reach in Auckland (currently reaching 67 schools).</li> </ul>	<ul style="list-style-type: none"> <li>Support for the NZ Police Schools Community Officers.</li> </ul>	Not provided	<ul style="list-style-type: none"> <li>Support for Innovating Streets projects around schools.</li> </ul>	Not provided

Do you undertake any initiatives that encourage sustainable transport to work?

Travel plans

<ul style="list-style-type: none"> <li>Support for businesses to conduct workplace travel surveys and develop and implement workplace travel plans (approximately 60 large businesses engaged annually).</li> </ul>	<ul style="list-style-type: none"> <li>Employed a Workplace Travel Coordinator in 2020 to develop a plan for Hamilton City Council, with the intention to support other businesses with their travel planning (currently working with two organisations).</li> </ul>	<ul style="list-style-type: none"> <li>Full-time Workplace Travel Coordinator.</li> </ul>	<ul style="list-style-type: none"> <li>Currently developing a Wellington Regional Hospital Travel Action Plan (potentially reaching 5,000 employees at Wellington Regional Hospital plus 2,000-3,000 employees at Hutt Hospital).</li> </ul>	<ul style="list-style-type: none"> <li>Central City behaviour change programme to encourage workplace-based behaviour change through the provision of planning consultations and incentives (annual target to engage with 3,260 staff).</li> </ul>
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Programmes with workplaces

<ul style="list-style-type: none"> <li>Travelwise Choices programme.</li> <li>Ongoing work to digitise and scale the business engagement programme (with a goal of reaching 200 large businesses).</li> <li>Trial product to allow businesses to subsidise staff travel (currently 4 businesses taking part in the trial).</li> <li>Give it a Go public transport programme which provides journey planning and 2 weeks of free public transport (approximately 1,500 staff taking part annually).</li> </ul>	<ul style="list-style-type: none"> <li>Investigating travel demand management tools to enable smart travel.</li> <li>Investigating the implementation of a ride sharing scheme.</li> </ul>	Not provided	<ul style="list-style-type: none"> <li>Ongoing collaboration with Victoria University of Wellington to support sustainable transport (potentially reaching 3,500 staff plus students across four campuses).</li> <li>Support for sustainable transport initiatives at other businesses.</li> <li>Workplace Travel Forum (29 members across 19 organisations who meet quarterly to discuss sustainable transport initiatives).</li> </ul>	Not provided
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Programmes supporting workplaces

<ul style="list-style-type: none"> <li>Support for the Aotearoa Bike Challenge (9,231 participants in 2021).</li> </ul>	<ul style="list-style-type: none"> <li>Trialling an e-bike scheme for Hamilton City Council staff (used by 15 staff in 2020/21).</li> </ul>	<ul style="list-style-type: none"> <li>Funding for an Adult Cycle Coordinator through the local Regional Sports Trust.</li> <li>Funding support for a Bike Month in February run by the local Regional Sports Trust.</li> <li>Support for the Aotearoa Bike Challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Previous support for the Aotearoa Bike Challenge, but now focusing on multi-modal initiatives.</li> </ul>	Not provided
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Do you undertake any initiatives that encourage sustainable transport in the wider community (e.g. car share initiatives, cycling skills training, community events, etc)?

Programmes

<ul style="list-style-type: none"> <li>Administration of the contestable Community Bike Fund.</li> <li>Targeted campaigns to normalise cycling.</li> </ul>	<ul style="list-style-type: none"> <li>Distribution of hi vis backpack covers, vests, lights bells, and armband lights through a variety of channels.</li> <li>Recruitment of an Adult Cycling Coordinator to coordinate various cycling events and projects (adult cycle skills training, women's only cycle training, e-bike training, off-road sessions).</li> </ul>	<ul style="list-style-type: none"> <li>Cycle skills training programmes (children and adults).</li> </ul>	<ul style="list-style-type: none"> <li>Pedal Ready cycle skills training (reaching 369 adults and 131 children in 2020/21).</li> </ul>	<ul style="list-style-type: none"> <li>Community travel planning pilot programme to target a community on a cycle route and revitalised bus route.</li> <li>Mass marketing and communications campaign for the Christchurch Northern Corridor, including education of new bus services, park-and-ride facilities, and shared paths.</li> </ul>
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	<ul style="list-style-type: none"> <li>E-bike training for Hamilton City Council staff.</li> </ul>			
<b>Events</b>				
<ul style="list-style-type: none"> <li>Deliver community-based Kids Learn to Ride events (approximately 1,500 participants).</li> <li>Partnership with Bike Auckland to provide capacity building support for over 30 community cycling events through the Bike Burbs programme.</li> <li>Deliver 30 pit-stop events to provide safety checks and bike maintenance.</li> </ul>	<ul style="list-style-type: none"> <li>Love Your Bike Day to provide cycle skills, education, bike maintenance, etc (324 registrations in 2021).</li> </ul>	<ul style="list-style-type: none"> <li>Road safety workshops.</li> </ul>	<ul style="list-style-type: none"> <li>Support for the Greater Wellington Summer Events Programme including the Family Bike the Remutaka Rail Trail (reaching 56 adults and 24 children in 2020/21).</li> </ul>	Not provided
<b>Wider support</b>				
<ul style="list-style-type: none"> <li>Work with communities to deliver events and activities that activate the cycle network and promote safe cycling.</li> <li>Support for EcoMatters to deliver bike hubs.</li> <li>Support for regional events to be bike friendly (e.g. valet bike parking).</li> <li>Develop and distribute maps of the cycle network.</li> </ul>	<ul style="list-style-type: none"> <li>Partnership with the Hamilton Settlement Centre Trust to deliver adult cycle skills training (45 adults trained in 2020/21).</li> <li>Development of safety education videos.</li> </ul>	<ul style="list-style-type: none"> <li>Promotion of Bike Month.</li> <li>Promotion of the Aotearoa Bike Challenge.</li> </ul>	<ul style="list-style-type: none"> <li>Support for family/community cycling events such as the E-bike Have a Go event.</li> <li>Support for territorial authority events such as the Bike the Hutt Picnic.</li> </ul>	<ul style="list-style-type: none"> <li>Promotion and resourcing for the Aotearoa Bike Challenge.</li> </ul>
<i>How many FTE are dedicated to the above work within your organisation?</i>				
Approximately 28 FTE	Not provided	Integrated with road safety FTE	7.7 FTE	13.59 FTE (plus casual staff)

## Infrastructure

Table 9

### Proportion of total central city street space dedicated to sustainable urban mobility (see Appendix 2 for graphical representation)

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
Percentage of central city space by category: <ul style="list-style-type: none"> <li>People space (footpaths and open space): <u>20%</u></li> <li>Vehicle space (carriageway and parking): <u>22%</u></li> </ul>	Percentage of central city space by category: <ul style="list-style-type: none"> <li>People space (footpaths and open space): <u>11%</u></li> <li>Vehicle space (carriageway and parking): <u>20%</u></li> </ul>	Percentage of central city space by category: <ul style="list-style-type: none"> <li>People space (footpaths and open space): <u>26%</u></li> <li>Vehicle space (carriageway and parking): <u>22%</u></li> </ul>	Percentage of central city space by category: <ul style="list-style-type: none"> <li>People space (footpaths and open space): <u>20%</u></li> <li>Vehicle space (carriageway and parking): <u>19%</u></li> </ul>	Percentage of central city space by category: <ul style="list-style-type: none"> <li>People space (footpaths and open space): <u>29%</u></li> <li>Vehicle space (carriageway and parking): <u>22%</u></li> </ul>

Percentage of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): <u>58%</u></li> <li>• Carriageway: <u>16%</u></li> <li>• Parking: <u>6%</u></li> <li>• Footpaths: <u>11%</u></li> <li>• Open space: <u>9%</u></li> </ul>	Percentage of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): <u>69%</u></li> <li>• Carriageway: <u>15%</u></li> <li>• Parking: <u>5%</u></li> <li>• Footpaths: <u>9%</u></li> <li>• Open space: <u>2%</u></li> </ul>	Percentage of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): <u>52%</u></li> <li>• Carriageway: <u>18%</u></li> <li>• Parking: <u>4%</u></li> <li>• Footpaths: <u>14%</u></li> <li>• Open space: <u>12%</u></li> </ul>	Percentage of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): <u>61%</u></li> <li>• Carriageway: <u>17%</u></li> <li>• Parking: <u>2%</u></li> <li>• Footpaths: <u>12%</u></li> <li>• Open space: <u>8%</u></li> </ul>	Percentage of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): <u>49%</u></li> <li>• Carriageway: <u>13%</u></li> <li>• Parking: <u>9%</u></li> <li>• Footpaths: <u>8%</u></li> <li>• Open space: <u>21%</u></li> </ul>
<i>Details</i>				
Hectares of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): 166.8 ha</li> <li>• Carriageway: 45.3 ha</li> <li>• Parking: 18.2 ha</li> <li>• Footpaths: 29.4 ha</li> <li>• Open space: 26.9 ha</li> </ul> Scale: Auckland Central City	Hectares of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): 92.7 ha</li> <li>• Carriageway: 19.4 ha</li> <li>• Parking: 6.5 ha</li> <li>• Footpaths: 12.1 ha</li> <li>• Open space: 3.1 ha</li> </ul> Scale: Hamilton Central City	Hectares of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): 58.7 ha</li> <li>• Carriageway: 20.8 ha</li> <li>• Parking: 4.1 ha</li> <li>• Footpaths: 15.4 ha</li> <li>• Open space: 13.7 ha</li> </ul> Scale: Tauranga Central City	Hectares of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): 130.8 ha</li> <li>• Carriageway: 35.8 ha</li> <li>• Parking: 5.0 ha</li> <li>• Footpaths: 25.7 ha</li> <li>• Open space: 16.2 ha</li> </ul> Scale: Wellington Central City	Hectares of central city space by type: <ul style="list-style-type: none"> <li>• Parcels (private land): 44.4 ha</li> <li>• Carriageway: 11.8 ha</li> <li>• Parking: 7.8 ha</li> <li>• Footpaths: 6.9 ha</li> <li>• Open space: 19.3 ha</li> </ul> Scale: Christchurch Central City
<i>Data source and method</i>				
Street space calculated by AitkenTaylor using data from LINZ and Google.				

Table 10 *Healthy & Safe People*

Length of streets with a posted speed limit of 30 kph or less (as a percentage of total roading)				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>• Percentage of total roading 30 kph or less: <u>0.46%</u></li> <li>• Kilometres of streets 30 kph or less: <u>19.307 km</u></li> <li>• Kilometres of total roading: <u>4218.940 km</u></li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of total roading 30 kph or less: <u>0.83%</u></li> <li>• Kilometres of streets 30 kph or less: <u>5.933 km</u></li> <li>• Kilometres of total roading: <u>711.632 km</u></li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of total roading 30 kph or less: <u>1.2%</u></li> <li>• Kilometres of streets 30 kph or less: <u>7.808 km</u></li> <li>• Kilometres of total roading: <u>678.654 km</u></li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of total roading 30 kph or less: <u>2.1%</u></li> <li>• Kilometres of streets 30 kph or less: <u>15.550 km</u></li> <li>• Kilometres of total roading: <u>737.622 km</u></li> </ul>	<ul style="list-style-type: none"> <li>• Percentage of total roading 30 kph or less: <u>1.5%</u></li> <li>• Kilometres of streets 30 kph or less: <u>26.370 km</u></li> <li>• Kilometres of total roading: <u>1790.820 km</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Auckland Major Urban Area 2020	Scale: Stats NZ Hamilton Major Urban Area 2020	Scale: Stats NZ Tauranga Major Urban Area 2020	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Christchurch Major Urban Area 2020
<i>Data source</i>				
Data sourced from MegaMaps (2021). MegaMaps incorporates Stats NZ Urban Rural 2020 boundaries on 24/06/2021. Kilometres of total roading from MegaMaps (2021). Method: Streets within the urban area were exported from MegaMaps, which includes the speed limit of each street as well as its length.				

Table 11 Healthy & Safe People

Percentage of schools with a variable speed limit of 40 kph or less				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of schools with a variable speed limit of 40 kph or less: <u>34.5%</u></li> <li>Number of schools with a variable speed limit of 40 kph or less: <u>192</u></li> <li>Total number of schools: <u>556</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of schools with a variable speed limit of 40 kph or less: <u>62.3%</u></li> <li>Number of schools with a variable speed limit of 40 kph or less: <u>38</u></li> <li>Total number of schools: <u>61</u></li> </ul>	Data on variable speeds for Tauranga schools unable to be obtained.	Data on variable speeds for Wellington schools unable to be obtained.	<ul style="list-style-type: none"> <li>Percentage of schools with a variable speed limit of 40 kph or less: <u>58.6%</u></li> <li>Number of schools with a variable speed limit of 40 kph or less: <u>85</u></li> <li>Total number of schools: <u>145</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Auckland Territorial Authority 2021	Scale: Stats NZ Hamilton Territorial Authority 2021	Not applicable	Not applicable	Scale: Stats NZ Christchurch Territorial Authority 2021
<i>Data source</i>				
Data on schools with variable speed limits sourced from Waka Kotahi. Data on the total number of schools sourced from the <a href="#">Ministry of Education</a> .				

Table 12

Length of streets in the lowest Infrastructure Risk Rating category (as a percentage of total roading)				
<i>Where the lowest IRR category represents the streets with the lowest risk</i>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of total roading in the lowest IRR category: <u>8.32%</u></li> <li>Kilometres of streets in the lowest IRR category: <u>351.015 km</u></li> <li>Kilometres of total roading: <u>4218.940 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of total roading in the lowest IRR category: <u>5.17%</u></li> <li>Kilometres of streets in the lowest IRR category: <u>36.81 km</u></li> <li>Kilometres of total roading: <u>711.632 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of total roading in the lowest IRR category: <u>12.53%</u></li> <li>Kilometres of streets in the lowest IRR category: <u>85.04 km</u></li> <li>Kilometres of total roading: <u>678.65 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of total roading in the lowest IRR category: <u>8.21%</u></li> <li>Kilometres of streets in the lowest IRR category: <u>60.58 km</u></li> <li>Kilometres of total roading: <u>737.622 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of total roading in the lowest IRR category: <u>6.25%</u></li> <li>Kilometres of streets in the lowest IRR category: <u>351.02 km</u></li> <li>Kilometres of total roading: <u>1790.82 km</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Auckland Major Urban Area 2020	Scale: Stats NZ Hamilton Major Urban Area 2020	Scale: Stats NZ Tauranga Major Urban Area 2020	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Christchurch Major Urban Area 2020
<i>Data source</i>				
Data sourced from MegaMaps (2021). MegaMaps incorporates Stats NZ Urban Rural 2020 boundaries.				
<i>Notes</i>				
<p><b>Out of Scope</b> has advised this indicator will be dropped due to concerns over the applicability of the IRR to SUM modes and the ability to see meaningful change over time. However, there is the potential to use the <a href="#">iRAP</a> rating system in future if that is adopted.</p>				

## Travel behaviour

Table 13 *Inclusive Access*

Transport mode share (all trips)				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Walking: <u>12%</u></li> <li>Cycling: <u>1%</u></li> <li>Public transport: <u>4%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>10%</u></li> <li>Cycling: <u>2%</u></li> <li>Public transport: <u>1%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>11%</u></li> <li>Cycling: <u>2%</u></li> <li>Public transport: <u>1%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>24%</u></li> <li>Cycling: <u>1%</u></li> <li>Public transport: <u>5%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>12%</u></li> <li>Cycling: <u>3%</u></li> <li>Public transport: <u>2%</u></li> </ul>
<i>Details</i>				
Scale: Auckland Main Urban Area	Scale: Hamilton Main Urban Area	Scale: Tauranga Main Urban Area	Scale: Wellington Main Urban Area (including Kāpiti)	Scale: Christchurch Main Urban Area
<i>Data source</i>				
Mode share data from the Ministry of Transport New Zealand Household Travel Survey, 3 year moving average from 2015-2018. 'Main Urban Area' boundaries are provided by the survey and are defined as Stats NZ meshblocks in areas with a population >30,000.				

Table 14 *Inclusive Access*

Transport mode share to education				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Walking: <u>21.5%</u></li> <li>Cycling: <u>1.6%</u></li> <li>Public transport: <u>13.5%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>19.9%</u></li> <li>Cycling: <u>4.9%</u></li> <li>Public transport: <u>8.1%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>14.0%</u></li> <li>Cycling: <u>8.9%</u></li> <li>Public transport: <u>4.1%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>34.2%</u></li> <li>Cycling: <u>2.0%</u></li> <li>Public transport: <u>12.8%</u></li> </ul>	<ul style="list-style-type: none"> <li>Walking: <u>20.9%</u></li> <li>Cycling: <u>8.9%</u></li> <li>Public transport: <u>9.4%</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Auckland Major Urban Area 2018	Scale: Stats NZ Hamilton Major Urban Area 2018	Scale: Stats NZ Tauranga Major Urban Area 2018	Scale: Stats NZ Wellington Major Urban Area 2018	Scale: Stats NZ Christchurch Major Urban Area 2018
<i>Data source</i>				
Mode share from the Stats NZ 2018 Census ('Main means of travel to education by Statistical Area 2'). Urban area boundaries from the Stats NZ Urban Rural Boundaries 2018.				

Table 15 *Environmental Sustainability*

Annual Vehicle Kilometres Travelled (VKT) per capita				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>VKT per capita: <u>5,042 km</u></li> <li>Total VKT: <u>7,412,307,000 km</u></li> <li>Total population: <u>1,470,120</u></li> </ul>	<ul style="list-style-type: none"> <li>VKT per capita: <u>4,626 km</u></li> <li>Total VKT: <u>816,436,956 km</u></li> <li>Total population: <u>176,500</u></li> </ul>	<ul style="list-style-type: none"> <li>VKT per capita: <u>3,867 km</u></li> <li>Total VKT: <u>585,040,828 km</u></li> <li>Total population: <u>151,300</u></li> </ul>	<ul style="list-style-type: none"> <li>VKT per capita: <u>3,013 km</u></li> <li>Total VKT: <u>651,333,342 km</u></li> <li>Total population: <u>216,200</u></li> </ul>	<ul style="list-style-type: none"> <li>VKT per capita: <u>5,018 km</u></li> <li>Total VKT: <u>1,980,586,000 km</u></li> <li>Total population: <u>394,700</u></li> </ul>

Details				
Scale: Auckland Council boundary	Scale: Hamilton City Council boundary	Scale: Tauranga City Council boundary	Scale: Wellington City Council boundary	Scale: Christchurch City Council boundary
Data source				
VKT data from 2019/2020 (from 1 July 2019 to 30 June 2020, includes COVID lockdown). Population data from the Stats NZ subnational population estimates (at 30 June 2020) by Statistical Area 2.				

Table 16

### Average speed of traffic on key routes compared to posted speed limits

§ 9(2)(a) has provided access to the TomTom Move Portal to access speed data (as of 27/07), however this indicator has been parked due to time constraints.

Table 17 *Inclusive Access*

### Percentage of trips less than 5 km, and percentage of trips less than 2 km

Percentage of total trips by each mode that are less than 5 km, and percentage of total trips by each mode that are less than 2 km

Auckland	Hamilton	Tauranga	Wellington	Christchurch
Result				
<ul style="list-style-type: none"> <li>Trips by all modes: <u>63% less than 5 km, 37% less than 2 km</u></li> <li>Trips by car/van (driver): <u>58% less than 5 km, 30% less than 2 km</u></li> <li>Trips by car/van (passenger): <u>64% less than 5 km, 33% less than 2 km</u></li> <li>Trips by motorbike: <u>41% less than 5 km, 5% less than 2 km</u></li> <li>Trips by walking: <u>99% less than 5 km, 91% less than 2 km</u></li> <li>Trips by cycling: <u>76% less than 5 km, 59% less than 2 km</u></li> <li>Trips by public transport: <u>36% less than 5 km, 14% less than 2 km</u></li> <li>Trips by other modes: <u>47% less than 5 km, 15% less than 2 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Trips by all modes: <u>72% less than 5 km, 42% less than 2 km</u></li> <li>Trips by car/van (driver): <u>68% less than 5 km, 37% less than 2 km</u></li> <li>Trips by car/van (passenger): <u>71% less than 5 km, 36% less than 2 km</u></li> <li>Trips by motorbike: <u>Sample too small</u></li> <li>Trips by walking: <u>99% less than 5 km, 88% less than 2 km</u></li> <li>Trips by cycling: <u>75% less than 5 km, 52% less than 2 km</u></li> <li>Trips by public transport: <u>43% less than 5 km, 14% less than 2 km</u></li> <li>Trips by other modes: <u>Sample too small</u></li> </ul>	<ul style="list-style-type: none"> <li>Trips by all modes: <u>60% less than 5 km, 34% less than 2 km</u></li> <li>Trips by car/van (driver): <u>55% less than 5 km, 27% less than 2 km</u></li> <li>Trips by car/van (passenger): <u>59% less than 5 km, 27% less than 2 km</u></li> <li>Trips by motorbike: <u>Sample too small</u></li> <li>Trips by walking: <u>100% less than 5 km, 92% less than 2 km</u></li> <li>Trips by cycling: <u>69% less than 5 km, 45% less than 2 km</u></li> <li>Trips by public transport: <u>21% less than 5 km, 11% less than 2 km</u></li> <li>Trips by other modes: <u>58% less than 5 km, 34% less than 2 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Trips by all modes: <u>71% less than 5 km, 46% less than 2 km</u></li> <li>Trips by car/van (driver): <u>64% less than 5 km, 33% less than 2 km</u></li> <li>Trips by car/van (passenger): <u>63% less than 5 km, 30% less than 2 km</u></li> <li>Trips by motorbike: <u>52% less than 5 km, 29% less than 2 km</u></li> <li>Trips by walking: <u>99% less than 5 km, 91% less than 2 km</u></li> <li>Trips by cycling: <u>71% less than 5 km, 43% less than 2 km</u></li> <li>Trips by public transport: <u>45% less than 5 km, 19% less than 2 km</u></li> <li>Trips by other modes: <u>66% less than 5 km, 36% less than 2 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Trips by all modes: <u>64% less than 5 km, 36% less than 2 km</u></li> <li>Trips by car/van (driver): <u>58% less than 5 km, 28% less than 2 km</u></li> <li>Trips by car/van (passenger): <u>65% less than 5 km, 35% less than 2 km</u></li> <li>Trips by motorbike: <u>Sample too small</u></li> <li>Trips by walking: <u>99% less than 5 km, 90% less than 2 km</u></li> <li>Trips by cycling: <u>69% less than 5 km, 31% less than 2 km</u></li> <li>Trips by public transport: <u>52% less than 5 km, 14% less than 2 km</u></li> <li>Trips by other modes: <u>68% less than 5 km, 60% less than 2 km</u></li> </ul>
Details				
<ul style="list-style-type: none"> <li>Total sample: 35,588</li> <li>Car/van (driver) sample: 22,325</li> <li>Car/van (passenger) sample: 6,922</li> <li>Motorbike sample: 64</li> <li>Walking sample: 4,370</li> <li>Cycling sample: 308</li> <li>Public transport sample: 1,357</li> <li>Other modes sample: 242</li> <li>Scale: Auckland Main Urban Area</li> </ul>	<ul style="list-style-type: none"> <li>Total sample: 9,905</li> <li>Car/van (driver) sample: 5,985</li> <li>Car/van (passenger) sample: 2,631</li> <li>Motorbike sample: 20</li> <li>Walking sample: 967</li> <li>Cycling sample: 149</li> <li>Public transport sample: 117</li> <li>Other modes sample: 36</li> <li>Scale: Hamilton Main Urban Area</li> </ul>	<ul style="list-style-type: none"> <li>Total sample: 10,171</li> <li>Car/van (driver) sample: 6,147</li> <li>Car/van (passenger) sample: 2,539</li> <li>Motorbike sample: 30</li> <li>Walking sample: 1,017</li> <li>Cycling sample: 268</li> <li>Public transport sample: 120</li> <li>Other modes sample: 50</li> <li>Scale: Tauranga Main Urban Area</li> </ul>	<ul style="list-style-type: none"> <li>Total sample: 19,205</li> <li>Car/van (driver) sample: 9,475</li> <li>Car/van (passenger) sample: 3,732</li> <li>Motorbike sample: 62</li> <li>Walking sample: 4,424</li> <li>Cycling sample: 215</li> <li>Public transport sample: 1,077</li> <li>Other modes sample: 220</li> </ul>	<ul style="list-style-type: none"> <li>Total sample: 17,855</li> <li>Car/van (driver) sample: 11,872</li> <li>Car/van (passenger) sample: 3,074</li> <li>Motorbike sample: 42</li> <li>Walking sample: 1,973</li> <li>Cycling sample: 475</li> <li>Public transport sample: 319</li> <li>Other modes sample: 100</li> </ul>

			• Scale: Wellington Main Urban Area (including Kāpiti)	• Scale: Christchurch Main Urban Area
<i>Data source</i>				
Data from the Ministry of Transport New Zealand Household Travel Survey, 3 year moving average from 2015–2018. 'Main Urban Area' boundaries are provided by the survey and are defined as Stats NZ meshblocks in areas with a population >30,000.				
<i>Notes</i>				
Interpretation: Overall short trips reflect underlying urban form.				

Table 18

### Share of growth by public transport and active transport

**Out of Scope** has advised this may be better shown through a case study (e.g. showing Auckland's method).

## Safety

Table 19 *Healthy & Safe People*

### Average personal road safety risk

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Personal risk: <u>5</u></li> <li>Injury outcomes: <u>34.48</u></li> <li>Crash outcomes: <u>28.32</u></li> </ul>	<ul style="list-style-type: none"> <li>Personal risk: <u>5</u></li> <li>Injury outcomes: <u>39.68</u></li> <li>Crash outcomes: <u>33.44</u></li> </ul>	<ul style="list-style-type: none"> <li>Personal risk: <u>4</u></li> <li>Injury outcomes: <u>33.16</u></li> <li>Crash outcomes: <u>29.40</u></li> </ul>	<ul style="list-style-type: none"> <li>Personal risk: <u>6</u></li> <li>Injury outcomes: <u>42.99</u></li> <li>Crash outcomes: <u>37.92</u></li> </ul>	<ul style="list-style-type: none"> <li>Personal risk: <u>6</u></li> <li>Injury outcomes: <u>29.99</u></li> <li>Crash outcomes: <u>25.25</u></li> </ul>
<i>Details</i>				
Scale: Auckland Council boundaries for personal risk score; Stats NZ Auckland Major Urban Area 2020 for injury and crash outcomes	Scale: Hamilton City Council boundaries for personal risk score; Stats NZ Hamilton Major Urban Area 2020 for injury and crash outcomes	Scale: Tauranga City Council boundaries for personal risk score; Stats NZ Tauranga Major Urban Area 2020 for injury and crash outcomes	Scale: Wellington City Council boundaries for personal risk score; Stats NZ Wellington Major Urban Area 2020 for injury and crash outcomes	Scale: Christchurch City Council boundaries for personal risk score; Stats NZ Christchurch Major Urban Area 2020 for injury and crash outcomes

*Data source and method*

The 'personal risk' score was obtained from Waka Kotahi's [Communities at Risk Register](#) for 2020 (Deaths and Serious Injuries (DSI) / 100,000,000 Vehicle Kilometres Travelled (VKT)).

For both injury and crash outcomes, the total number was divided by the Vehicle Kilometres Travelled (VKT) for the urban area. Crash and injury data sourced from Waka Kotahi's Crash Analysis System (CAS) and is for the 2019/2020 period. State highway incidents are not included.

## Access

Table 20 *Inclusive Access*

### Average walking time to key destinations

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>GP: <a href="#">00:13:10</a></li> <li>Primary school: <a href="#">00:12:08</a></li> <li>Secondary school: <a href="#">00:25:15</a></li> <li>Supermarket: <a href="#">00:19:27</a></li> </ul>	<ul style="list-style-type: none"> <li>GP: <a href="#">00:15:09</a></li> <li>Primary school: <a href="#">00:13:41</a></li> <li>Secondary school: <a href="#">00:27:18</a></li> <li>Supermarket: <a href="#">00:18:09</a></li> </ul>	<ul style="list-style-type: none"> <li>GP: <a href="#">00:21:37</a></li> <li>Primary school: <a href="#">00:18:04</a></li> <li>Secondary school: <a href="#">00:41:33</a></li> <li>Supermarket: <a href="#">00:20:44</a></li> </ul>	<ul style="list-style-type: none"> <li>GP: <a href="#">00:13:35</a></li> <li>Primary school: <a href="#">00:11:47</a></li> <li>Secondary school: <a href="#">00:31:32</a></li> <li>Supermarket: <a href="#">00:15:21</a></li> </ul>	<ul style="list-style-type: none"> <li>GP: <a href="#">00:13:34</a></li> <li>Primary school: <a href="#">00:12:55</a></li> <li>Secondary school: <a href="#">00:29:48</a></li> <li>Supermarket: <a href="#">00:20:04</a></li> </ul>
<i>Details</i>				
Scale: Stats NZ Auckland Major Urban Area 2018	Scale: Stats NZ Hamilton Major Urban Area 2018	Scale: Stats NZ Tauranga Major Urban Area 2018	Scale: Stats NZ Wellington Major Urban Area 2018	Scale: Stats NZ Christchurch Major Urban Area 2018
<i>Data source and method</i>				
<p>Meshblocks with the average walking distance to key destinations obtained from Waka Kotahi's Land Transport Benefits Framework StoryMap, using meshblock boundaries and population data from the Stats NZ 2013 Census. Major Urban Area boundaries were obtained from the Stats NZ Urban Rural Boundaries 2018.</p> <p>The average walking distance to each key destination for each meshblock was multiplied by the total population within that meshblock. The totals were then summed for all the meshblocks that intersected the Major Urban Area boundary for each city and divided by the total population of all the intersected meshblocks to produce a population weighted average walking distance for each destination within each urban area.</p>				

## Amenity

Table 21

### Methods and tools used to assess streetscape amenity

**Out of Scope** has advised this may be better shown through a case study.

## Environment

Table 22 *Environmental Sustainability*

Quantity of greenhouse gas emissions from land transport				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Tons per capita (all greenhouse gases): <u>1.52 tons</u></li> <li>PM<sub>10</sub>: <u>515.34 tons per year</u></li> <li>CO<sub>2</sub>: <u>2,231,850 tons per year</u></li> <li>NO<sub>2</sub>: <u>1,386.88 tons per year</u></li> <li>Total greenhouse gas emissions: <u>2,233,752.22 tons per year</u></li> </ul>	<ul style="list-style-type: none"> <li>Tons per capita (all greenhouse gases): <u>1.42 tons</u></li> <li>PM<sub>10</sub>: <u>55.9558 tons per year</u></li> <li>CO<sub>2</sub>: <u>249,930 tons per year</u></li> <li>NO<sub>2</sub>: <u>147.503 tons per year</u></li> <li>Total greenhouse gas emissions: <u>250,133.4588 tons per year</u></li> </ul>	<ul style="list-style-type: none"> <li>Tons per capita (all greenhouse gases): <u>1.50 tons</u></li> <li>PM<sub>10</sub>: <u>51.3915 tons per year</u></li> <li>CO<sub>2</sub>: <u>226,010 tons per year</u></li> <li>NO<sub>2</sub>: <u>136.77 tons per year</u></li> <li>Total greenhouse gas emissions: <u>226,198.1615 tons per year</u></li> </ul>	<ul style="list-style-type: none"> <li>Tons per capita (all greenhouse gases): <u>1.25 tons</u></li> <li>PM<sub>10</sub>: <u>68.3752 tons per year</u></li> <li>CO<sub>2</sub>: <u>269,666 tons per year</u></li> <li>NO<sub>2</sub>: <u>177.186 tons per year</u></li> <li>Total greenhouse gas emissions: <u>269,911.5612 tons per year</u></li> </ul>	<ul style="list-style-type: none"> <li>Tons per capita (all greenhouse gases): <u>1.56 tons</u></li> <li>PM<sub>10</sub>: <u>136.446 tons per year</u></li> <li>CO<sub>2</sub>: <u>614,431 tons per year</u></li> <li>NO<sub>2</sub>: <u>355.28 tons per year</u></li> <li>Total greenhouse gas emissions: <u>614,922.726 tons per year</u></li> </ul>
<i>Details</i>				
<ul style="list-style-type: none"> <li>Year: 2020</li> <li>Scale: Stats NZ Auckland Major Urban Area 2020</li> <li>Total urban population: 1,470,120</li> </ul>	<ul style="list-style-type: none"> <li>Year: 2020</li> <li>Scale: Stats NZ Hamilton Major Urban Area 2020</li> <li>Total urban population: 176,500</li> </ul>	<ul style="list-style-type: none"> <li>Year: 2020</li> <li>Scale: Stats NZ Tauranga Major Urban Area 2020</li> <li>Total urban population: 151,300</li> </ul>	<ul style="list-style-type: none"> <li>Year: 2020</li> <li>Scale: Stats NZ Wellington Major Urban Area 2020</li> <li>Total urban population: 216,200</li> </ul>	<ul style="list-style-type: none"> <li>Year: 2020</li> <li>Scale: Stats NZ Christchurch Major Urban Area 2020</li> <li>Total urban population: 394,700</li> </ul>
<i>Data source</i>				
Greenhouse gas emissions data sourced from the Waka Kotahi Benefits Framework StoryMap. Population data from the Stats NZ subnational population estimates (at 30 June 2020) by Statistical Area 2. Urban area boundaries from the Stats NZ Urban Rural Boundaries 2020.				



# Walking

## Walking funding

Table 23

### Funding for walking capital projects

Indicator flagged – no longer pursuing (funding for maintenance and renewals focused on instead).

Table 24

### Funding for footpath maintenance and renewals

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Funding for footpath maintenance and renewals per capita 2020/21: <u>\$14.44</u></li> <li>Total funding for footpath maintenance and renewals 2020/21 FY: <u>\$22,700,000*</u></li> </ul> <p>*Part of the total funding figure includes cycleway maintenance costs so the actual funding for footpaths will be somewhat less than is reported.</p>	<ul style="list-style-type: none"> <li>Funding for footpath maintenance and renewals per capita 2020/21: <u>\$31.08</u></li> <li>Total funding for footpath maintenance and renewals 2020/21 FY: <u>\$5,079,000</u></li> </ul>	<ul style="list-style-type: none"> <li>Funding for footpath maintenance and renewals per capita 2020/21: <u>\$21.71</u></li> <li>Total funding for footpath maintenance and renewals 2020/21 FY: <u>\$2,991,000</u></li> </ul>	<ul style="list-style-type: none"> <li>Funding for footpath maintenance and renewals per capita 2020/21: <u>\$39.61</u></li> <li>Total funding for footpath maintenance and renewals 2020/21 FY: <u>\$8,286,000</u></li> </ul>	<ul style="list-style-type: none"> <li>Funding for footpath maintenance and renewals per capita 2020/21: <u>\$11.22</u></li> <li>Total funding for footpath maintenance and renewals 2020/21 FY: <u>\$4,246,000</u></li> </ul>
<i>Details</i>				
<p>Cost breakdown from the Auckland Transport Asset Management Plan 2018–2021:</p> <ul style="list-style-type: none"> <li>\$3,300,000 for footpath and cycleway maintenance (combined total).</li> <li>\$19,400,000 for footpath renewals.</li> </ul> <p>Other details:</p> <ul style="list-style-type: none"> <li>Scale: Auckland Council</li> <li>Time period: 2020/21 prospective funding</li> <li>Auckland population: 1,571,556 (from Stats NZ 2018 Census)</li> </ul>	<p>Cost breakdown from the Hamilton City Council Annual Plan 2020/21:</p> <ul style="list-style-type: none"> <li>\$5,079,000 for replacement of footpaths.</li> </ul> <p>Other details:</p> <ul style="list-style-type: none"> <li>Scale: Hamilton City Council</li> <li>Time period: 2020/21 prospective funding</li> <li>Hamilton City population: 163,434 (from Stats NZ 2018 Census)</li> </ul>	<p>Cost breakdown from the Tauranga City Council Annual Plan 2020/21:</p> <ul style="list-style-type: none"> <li>\$2,991,000 for local roads pedestrian improvements.</li> </ul> <p>Other details:</p> <ul style="list-style-type: none"> <li>Scale: Tauranga City Council</li> <li>Time period: 2020/21 prospective funding</li> <li>Tauranga City population: 137,802 (from Stats NZ 2018 Census)</li> </ul>	<p>Cost breakdown from the Wellington City Council 2020/21 Annual Plan:</p> <ul style="list-style-type: none"> <li>\$390,000 for street furniture maintenance.</li> <li>\$6,775,000 for footpaths asset stewardship.</li> <li>\$921,000 for pedestrian network maintenance.</li> <li>\$200,000 for pedestrian network structures maintenance.</li> </ul> <p>Other details:</p> <ul style="list-style-type: none"> <li>Scale: Wellington City Council</li> <li>Time period: 2020/21 prospective funding</li> <li>Wellington City population: 209,181 (from Stats NZ 2018 Census)</li> </ul>	<p>Cost breakdown from the Christchurch City Council 2020/21 Annual Plan:</p> <ul style="list-style-type: none"> <li>\$4,246,000 for footpath renewals.</li> </ul> <p>Other details:</p> <ul style="list-style-type: none"> <li>Scale: Christchurch City Council</li> <li>Time period: 2020/21 prospective funding</li> <li>Christchurch City population: 378,444 (from Stats NZ 2018 Census)</li> </ul>

Data source				
<a href="#">Auckland Transport Asset Management Plan 2018-2021</a> <a href="#">Auckland Regional Land Transport Plan 2021-2031</a>	<a href="#">Hamilton City Council 2020/21 Annual Plan</a>	<a href="#">Tauranga City Council 2020/21 Annual Plan</a>	<a href="#">Wellington City Council 2020/21 Annual Plan</a>	<a href="#">Christchurch City Council 2020/21 Annual Plan</a>
Notes				
Funding figures are based on information reported in the relevant plans but may not fully account for actual spending on footpath maintenance and renewals. Per capita funding should therefore be treated with caution.				

## Walking monitoring and data collection

Table 25

Whether there is an ongoing programme to monitor and inspect the quality of walking infrastructure, and make necessary improvements				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a walking monitoring and inspection programme</i>				
The Auckland Transport Asset Management Plan 2018-2021 sets out the details on the monitoring of footpaths.	The Hamilton Network Operating Framework sets out the details on the monitoring of footpaths.	Not provided	Wellington Transport Activity Management Plan	Christchurch Road Operations Activity Management Plan
<i>Whether the cycling monitoring and inspection programme includes targets to measure performance</i>				
Yes – the plan includes a range of performance indicators and targets that relate to footpaths.	Somewhat – targets from the Access Hamilton: Active Travel Action Plan are referenced.	Not applicable	Yes – an indicator monitoring the percentage of footpaths categorised as better than average condition, and a target to resolve all (100%) of extreme risks based on the plan's risk matrix.	Details not provided
Notes				
Information for this indicator was limited – treat with caution.				

## Walking level of service

Table 26 *Inclusive Access*

Percentage of the urban road network with a footpath on at least one side				
Where at least 70% of the road length is covered by a footpath on at least one side				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on at least one side: <u>82.2%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on at least one side: <u>82.7%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on at least one side: <u>73.3%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on at least one side: <u>65%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on at least one side: <u>90.4%</u></li> </ul>

<ul style="list-style-type: none"> <li>Kilometres of streets with a footpath on at least one side: <u>3,582.90km</u></li> <li>Kilometres of urban road network: <u>4,359.12km</u></li> </ul>	<ul style="list-style-type: none"> <li>Kilometres of streets with a footpath on at least one side: <u>581.431 km</u></li> <li>Kilometres of urban road network: <u>703.420km</u></li> </ul>	<ul style="list-style-type: none"> <li>Kilometres of streets with a footpath on at least one side: <u>524.05 km</u></li> <li>Kilometres of urban road network: <u>714.73 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Kilometres of streets with a footpath on at least one side: <u>602.66 km</u></li> <li>Kilometres of urban road network: <u>927.57 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Kilometres of streets with a footpath on at least one side: <u>1,495.92 km</u></li> <li>Kilometres of urban road network: <u>1,655.34 km</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
<i>Data source and method</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a footpath network GeoJSON file from Wellington City Council. Method: Total length of footpaths where at least 70% of the road length is covered by a footpath on at least one side (left, right, or centre) / total urban road length.				

Table 27 *Inclusive Access*

<b>Percentage of the urban road network with a footpath on both sides</b>				
<i>Where at least 70% of the road length is covered by a footpath on both the left and right side</i>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on both sides: <u>65.93%</u></li> <li>Kilometres of streets with a footpath on both sides: <u>2,873.97 km</u></li> <li>Kilometres of urban road network: <u>4,359.12 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on both sides: <u>63.9%</u></li> <li>Kilometres of streets with a footpath on both sides: <u>449,198 km</u></li> <li>Kilometres of urban road network: <u>703.420km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on both sides: <u>29.1%</u></li> <li>Kilometres of streets with a footpath on both sides: <u>207.71 km</u></li> <li>Kilometres of urban road network: <u>714.73 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on both sides: <u>31%</u></li> <li>Kilometres of streets with a footpath on both sides: <u>285,744 km</u></li> <li>Kilometres of urban road network: <u>927.57</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the urban road network with a footpath on both sides: <u>64%</u></li> <li>Kilometres of streets with a footpath on both sides: <u>1,059.98 km</u></li> <li>Kilometres of urban road network: <u>1,655.34 km</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
<i>Data source and method</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a footpath network GeoJSON file from Wellington City Council. Method: Total length of footpaths where at least 70% of the road length is covered by a footpath on both sides (left and right) / total urban road length.				

Table 28 *Inclusive Access*

<b>Percentage of footpaths 1.8 metres or wider</b>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of footpaths 1.8 metres or wider: <u>21.9%</u></li> <li>Kilometres of footpaths 1.8 metres or wider: <u>1,404.92 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths 1.8 metres or wider: <u>45.9%</u></li> <li>Kilometres of footpaths 1.8 metres or wider: <u>503,373 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths 1.8 metres or wider: <u>14.4%</u></li> <li>Kilometres of footpaths 1.8 metres or wider: <u>115.02 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths 1.8 metres or wider: <u>28.6%</u></li> <li>Kilometres of footpaths 1.8 metres or wider: <u>290.34 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths 1.8 metres or wider: <u>23.7%</u></li> <li>Kilometres of footpaths 1.8 metres or wider: <u>470.52 km</u></li> </ul>

• Total kilometres of footpaths with a width attribute in RAMM: <u>6,4225.98km</u>	• Total kilometres of footpaths with a width attribute in RAMM: <u>1,096,592 km</u>	• Total kilometres of footpaths with a width attribute in RAMM: <u>799.22 km</u>	• Total kilometres of footpaths with a width attribute in the Wellington footpath GeoJSON: <u>1,015,960 km</u>	• Total kilometres of footpaths with a width attribute in RAMM: <u>2,615.08 km</u>
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
<i>Data source and method</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a footpath network GeoJSON file from Wellington City Council. Method: Footpaths with a width attribute greater than or equal to 1.8 metres / total length of footpaths with a width attribute.				

Table 29 Inclusive Access

Percentage of footpaths that meet an acceptable condition standard				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of footpaths that meet an acceptable condition standard: <u>98%</u></li> <li>Kilometres of footpaths graded 1-3 in RAMM: <u>6,100.89 km</u></li> <li>Total kilometres of footpaths with a condition attribute in RAMM: <u>6,247.29 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths that meet an acceptable condition standard: <u>99.9%</u></li> <li>Kilometres of footpaths graded 1-3 in RAMM: <u>62,878 km</u></li> <li>Total kilometres of footpaths with a condition attribute in RAMM: <u>62,915 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths that meet an acceptable condition standard: <u>98.7%</u></li> <li>Kilometres of footpaths graded 1-3 in RAMM: <u>822.13 km</u></li> <li>Total kilometres of footpaths with a condition attribute in RAMM: <u>832.56 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths that meet an acceptable condition standard: <u>90.2%</u></li> <li>Kilometres of footpaths graded 1-3 in RAMM: <u>916,501 km</u></li> <li>Total kilometres of footpaths with a condition attribute in RAMM: <u>1,015,960 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of footpaths that meet an acceptable condition standard: <u>97.8%</u></li> <li>Kilometres of footpaths graded 1-3 in RAMM: <u>556.15 km</u></li> <li>Total kilometres of footpaths with a condition attribute in RAMM: <u>568.95 km</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
<i>Data source and method</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a footpath network GeoJSON file from Wellington City Council. Data for Auckland, Hamilton, Tauranga, and Wellington from within the last 3 years, data for Christchurch from 2010 and 2015 condition ratings. Condition grade 1-3 is considered an 'acceptable' standard (where 1 = very good, 2 = good, and 3 = average). Method: Kilometres of footpaths with a condition grade of 1-3 / total kilometres of footpaths with a condition grade.				

Table 30 Inclusive Access

Density of pedestrian crossings in the urban area (both signalised and zebra)				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Pedestrian crossings per km<sup>2</sup>: <u>3.85</u></li> <li>Total pedestrian crossings: <u>2,345</u></li> <li>Size of the urban area: <u>608.65 km<sup>2</sup></u></li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian crossings per km<sup>2</sup>: <u>2.55</u></li> <li>Total pedestrian crossings: <u>282</u></li> <li>Size of the urban area: <u>110.37 km<sup>2</sup></u></li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian crossings per km<sup>2</sup>: <u>1.29</u></li> <li>Total pedestrian crossings: <u>175</u></li> <li>Size of the urban area: <u>135.43 km<sup>2</sup></u></li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian crossings per km<sup>2</sup>: <u>5.50</u></li> <li>Total pedestrian crossings: <u>618</u></li> <li>Size of the urban area: <u>112.42 km<sup>2</sup></u></li> </ul>	<ul style="list-style-type: none"> <li>Pedestrian crossings per km<sup>2</sup>: <u>3.33</u></li> <li>Total pedestrian crossings: <u>982</u></li> <li>Size of the urban area: <u>295.15 km<sup>2</sup></u></li> </ul>

Details				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
Data source and method				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a pedestrian crossings GeoJSON file from Wellington City Council. Method: Total number of pedestrian crossings (both signalised and zebra) / total urban area size.				

Table 31 Inclusive Access

Proportion of zebra crossings that are raised				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
Result				
No raised attribute for zebra crossings in Auckland RAMM.	No raised attribute for zebra crossings in Hamilton RAMM.	No raised attribute for zebra crossings in Tauranga RAMM.	No raised attribute for zebra crossings in Wellington crossings GeoJSON.	No raised attribute for zebra crossings in Christchurch RAMM.
Details				
Scale: Stats NZ Major Urban Area	Scale: One Network Framework (ONF) Hamilton urban roads	Scale: One Network Framework (ONF) Tauranga urban roads	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
Data source				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a crossings GeoJSON file from Wellington City Council.				

## Walking uptake

Table 32 Inclusive Access

Annual percentage change of counts from pedestrian counters				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
Result				
<b>2017</b> <ul style="list-style-type: none"> <li>Total count: <u>143,107</u></li> <li>Daily average: <u>392</u></li> </ul> <b>2018</b> <ul style="list-style-type: none"> <li>Total count: <u>153,018</u></li> <li>Yearly percent change: <u>6.93%</u></li> <li>Daily average: <u>419</u></li> </ul> <b>2019</b> <ul style="list-style-type: none"> <li>Total count: <u>179,585</u></li> <li>Yearly percent change: <u>17.36%</u></li> <li>Daily average: <u>492</u></li> </ul>	<b>2017</b> <ul style="list-style-type: none"> <li>Total count: <u>578,228</u></li> <li>Daily average: <u>1,584</u></li> </ul> <b>2018</b> <ul style="list-style-type: none"> <li>Total count: <u>482,390</u></li> <li>Yearly percent change: <u>-16.57%</u></li> <li>Daily average: <u>1,322</u></li> </ul> <b>2019</b> <ul style="list-style-type: none"> <li>Total count: <u>579,506</u></li> <li>Yearly percent change: <u>20.13%</u></li> <li>Daily average: <u>1,588</u></li> </ul>	<b>2017</b> <ul style="list-style-type: none"> <li>Total count: <u>819,012</u></li> <li>Daily average: <u>2,244</u></li> </ul> <b>2018</b> <ul style="list-style-type: none"> <li>Total count: <u>967,702</u></li> <li>Yearly percent change: <u>18.15%</u></li> <li>Daily average: <u>2,651</u></li> </ul> <b>2019</b> <ul style="list-style-type: none"> <li>Total count: <u>1,072,945</u></li> <li>Yearly percent change: <u>10.88%</u></li> <li>Daily average: <u>2,940</u></li> </ul>	<b>2018</b> <ul style="list-style-type: none"> <li>Total count: <u>1,417,040</u></li> <li>Daily average: <u>2,651</u></li> </ul> <b>2019</b> <ul style="list-style-type: none"> <li>Total count: <u>1,329,018</u></li> <li>Yearly percent change: <u>-6.21%</u></li> <li>Daily average: <u>3,641</u></li> </ul> <b>2020</b> <ul style="list-style-type: none"> <li>Total count: <u>1,211,129</u></li> <li>Yearly percent change: <u>-8.87%</u></li> <li>Daily average: <u>3,309</u></li> </ul>	<b>2018</b> <ul style="list-style-type: none"> <li>Total count: <u>525,649</u></li> <li>Daily average: <u>1,440</u></li> </ul> <b>2019</b> <ul style="list-style-type: none"> <li>Total count: <u>604,166</u></li> <li>Yearly percent change: <u>14.94%</u></li> <li>Daily average: <u>1,655</u></li> </ul> <b>2020</b> <ul style="list-style-type: none"> <li>Total count: <u>623,720</u></li> <li>Yearly percent change: <u>3.24%</u></li> <li>Daily average: <u>1,704</u></li> </ul>

2020	2020	2020		
<ul style="list-style-type: none"> <li>Total count: <u>264,507</u></li> <li>Yearly percent change: <u>47.29%</u></li> <li>Daily average: <u>723</u></li> </ul>	<ul style="list-style-type: none"> <li>Total count: <u>492,422</u></li> <li>Yearly percent change: <u>-15.03%</u></li> <li>Daily average: <u>1,345</u></li> </ul>	<ul style="list-style-type: none"> <li>Total count: <u>1,011,622</u></li> <li>Yearly percent change: <u>-5.72%</u></li> <li>Daily average: <u>2,764</u></li> </ul>		
<i>Details</i>				
Count sites: Grafton Gully, NW Cycleway Kingsland, Upper Harbour Shared Path.	Count sites: Flagstaff, Gallagher Drive Pathway, Waikato River Path.	Count sites: Harbour Bridge Path, Historic Village Main Entry, K Valley West.	Count sites: Airport Tunnel Counter, Hutt Road Shared Path, Oriental Parade Shared Path  The Oriental Parade Shared Path counter was missing data for three months in 2020. The missing data has been manipulated using the average difference between the daily averages of 2019 and 2020.	Count sites: Main Road Shared Path, Railway Cycleway, South Hagley Park.
<i>Data source</i>				
Count data provided by <b>Out of Scope</b> at Waka Kotahi. Three sites were selected based on their location and the completeness of their datasets.				

## Walking safety

Table 33 *Healthy & Safe People*

Reported pedestrian injuries and fatalities				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Personal risk (pedestrian involved): 1</li> <li>Auckland DHB pedestrian hospitalisations: <u>11.9 per 100,000 people</u> (over a 2-year period from 2016-2018)</li> <li>Waitemata DHB pedestrian hospitalisations: <u>8.6 per 100,000 people</u> (over a 2-year period from 2016-2018)</li> <li>Counties Manukau DHB pedestrian hospitalisations: <u>9.9 per 100,000 people</u> (over a 2-year period from 2016-2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (pedestrian involved): 3</li> <li>Waikato DHB pedestrian hospitalisations: <u>7.9 per 100,000 people</u> (over a 2-year period from 2016-2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (pedestrian involved): 2</li> <li>Bay of Plenty DHB pedestrian hospitalisations: <u>8.9 per 100,000 people</u> (over a 2-year period from 2016-2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (pedestrian involved): 1</li> <li>Capital &amp; Coast DHB pedestrian hospitalisations: <u>7.8 per 100,000 people</u> (over a 2-year period from 2016-2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (pedestrian involved): 1</li> <li>Canterbury DHB pedestrian hospitalisations: <u>7.1 per 100,000 people</u> (over a 2-year period from 2016-2018)</li> </ul>
<i>Details</i>				
Scale: Auckland Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Hamilton City Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Tauranga City Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Wellington City Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Christchurch City Council boundaries for personal risk score; DHB boundaries for hospitalisations.

*Data source and method*

The 'personal risk (pedestrian involved)' score was obtained from Waka Kotahi's [Communities at Risk Register](#) for 2020 (pedestrian Deaths and Serious Injuries (DS) / million hours of travel).  
Pedestrian hospitalisation data from Massey University's Environment Health Indicators New Zealand report (2020).

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# Cycling

## Cycling funding

Table 34

Funding for cycling capital projects
Indicator flagged – no longer pursuing (funding for maintenance and renewals focused on instead).

Table 35

Funding for cycleway maintenance and renewals				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
A total funding figure of \$3,300,000 is included for footpath and cycleway maintenance in the Auckland Transport Asset Management Plan 2018-2021.	Funding for cycleway maintenance and renewals not provided in the Hamilton City Council 2020/21 Annual Plan.	Funding for cycleway maintenance and renewals not provided in the Tauranga City Council 2020/21 Annual Plan.	<ul style="list-style-type: none"> <li>Per capita funding for cycleway maintenance and renewals 2020/21: <b>\$6.97</b></li> <li>Total funding for cycleway maintenance and renewals 2020/21: <b>\$1,458,000</b></li> </ul>	Funding for cycleway maintenance and renewals not provided in the Christchurch City Council 2020/21 Annual Plan.
<i>Details</i>				
Scale: Auckland Council Time period: 2020/21 prospective funding	Scale: Hamilton City Council Time period: 2020/21 prospective funding	Scale: Tauranga City Council Time period: 2020/21 prospective funding	Cost breakdown from the Wellington City Council 2020/21 Annual Plan: <ul style="list-style-type: none"> <li>\$176,000 for cycleways maintenance.</li> <li>\$1,282,000 for cycleways asset stewardship.</li> </ul> Other details: <ul style="list-style-type: none"> <li>Scale: Wellington City Council</li> <li>Time period: 2020/21 prospective funding</li> <li>Wellington City population: 209,181 (from Stats NZ 2018 Census)</li> </ul>	Scale: Christchurch City Council Time period: 2020/21 prospective funding
<i>Data source</i>				
<a href="#">Auckland Transport Asset Management Plan 2018-2021</a>	<a href="#">Hamilton City Council 2020/21 Annual Plan</a>	<a href="#">Tauranga City Council 2020/21 Annual Plan</a>	<a href="#">Wellington City Council 2020/21 Annual Plan</a>	<a href="#">Christchurch City Council 2020/21 Annual Plan</a>
<i>Notes</i>				
Funding figures are based on information reported in the relevant plans but may not fully account for actual spending on cycleway maintenance and renewals. Per capita funding should therefore be treated with caution.				



## Cycling network map

Table 36

Presence of a cycle network map showing existing facilities, planned facilities, and the functional classifications of the network				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a cycle network map</i>				
<a href="#">Auckland Transport Future Connect Map</a> Includes the current cycle network and future cycle network. <a href="#">Auckland Cycleway Map</a> Includes existing cycleways and their functional classifications.	<a href="#">Proposed Biking and Micro-mobility Strategic Network Plan</a> (As part of the Draft Biking and Micro-mobility Programme Single Stage Business Case, published 2021) Includes the cycle network's proposed routes and their functional classifications. <a href="#">Hamilton Bike Map</a> (Published 2017) Includes existing cycleways and their functional classifications.	<a href="#">Tauranga Cycle Network</a> Includes existing cycleways and their functional classifications.	<a href="#">Wellington map of cycleways</a> Includes existing cycleways and their functional classifications. <a href="#">Wellington planned cycle network</a> (Updated 2018) Includes an indicative plan of the proposed cycle network. <a href="#">Wellington Bike Parks and Fix-it Stands</a> (Updated 2021)	Christchurch One Network Framework map (not publicly available) Includes existing and future cycleways and the functional classifications of the network. <a href="#">Christchurch cycle map</a> Includes existing cycleways and their functional classifications, and bike parks.

## Cycling monitoring and data collection

Table 37

Whether there is an ongoing programme to monitor and inspect the quality of cycling infrastructure, and make necessary improvements				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Presence and details of a cycling monitoring and inspection programme</i>				
The Auckland Transport Asset Management Plan 2018-2021 sets out the details on the monitoring of cycleways.	The Hamilton Network Operating Framework sets out the details on the monitoring of cycleways.	Not provided	The Wellington Transport Activity Management Plan monitors the condition of cycle paths along with footpaths, and on-road cycle lanes are condition rated along with roads.	<a href="#">Christchurch Major Cycleways Activity Management Plan</a> (Christchurch City Council, published 2017)
<i>Whether the cycling monitoring and inspection programme includes targets to measure performance</i>				
Yes – the plan includes a range of performance indicators and targets that relate to cycleways.	Somewhat – targets from the Access Hamilton: Active Travel Action Plan are referenced.	Not applicable	Yes – an indicator monitoring the percentage of footpaths categorised as better than average condition, and a target to resolve all (100%) of extreme risks based on the plan's risk matrix.	Yes – cycling performance targets from the LTP are included.
Notes				
Information for this indicator was limited – treat with caution.				

## Cycling level of service

Table 38 Inclusive Access

Kilometres of cycle network, including 10 kph streets (as a percentage of total roading)				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of cycle network: <u>0.19%</u></li> <li>Kilometres of urban cycle network, including 10kph streets: <u>8.424km</u></li> <li><u>Kilometres of total urban roading: 4,359.12 km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of cycle network: <u>0.21%</u></li> <li>Kilometres of urban cycle network, including 10kph streets: <u>1.500km</u></li> <li><u>Kilometres of total urban roading: 703.42 km</u></li> </ul>	No cycleway data in RAMM.	<ul style="list-style-type: none"> <li>Percentage of cycle network: <u>1.7%</u></li> <li>Kilometres of urban cycle network, including 10kph streets: <u>15,346km</u></li> <li><u>Kilometres of total urban roading: 927.57km</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of cycle network: <u>2%</u></li> <li>Kilometres of urban cycle network, including 10kph streets: <u>34,999km</u></li> <li><u>Kilometres of total urban roading: 1,655.34 km</u></li> </ul>
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
<i>Data source and method</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a cycleway network GeoJSON file from Wellington City Council. 10kph streets obtained from MegaMaps 2021 on 24/06/2021.				
Method: Total kilometres of cycleways + 10 kph streets / total urban road length.				

Table 39 Inclusive Access

Kilometres of the strategic cycle network delivered over the last three years (Long Term Plan cycle)				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<u>5,240 km</u>	<u>0.118 km</u> (Note: Most assets don't have a construction data in the Hamilton RAMM – there is only one asset with a construction date built within the last three years).	No cycleway data in RAMM.	<u>6,264 km</u>	5,466 km
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area

<i>Data source and method</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a cycleway network GeoJSON file from Wellington City Council. Method: Kilometres of cycleways with a construction date within the last three years.				
<i>Notes</i>				
Concerns over validity of RAMM as the best source of this information – treat with caution. More accurate data to be confirmed.				

Table 40 *Inclusive Access*

<b>Percentage of the cycle network that meets best practice standard</b>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
No condition data in Auckland RAMM.	<u>13.5%</u>	No cycleway data in Tauranga RAMM.	No cycleway condition data in Wellington cycleways GeoJSON.	No condition data in Christchurch RAMM.
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
<i>Data source and method</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a cycleway network GeoJSON file from Wellington City Council. Method: Cycleways with a condition rated 'good' are considered to meet the best practice standard.				

Table 41 *Inclusive Access*

<b>Percentage of signalised intersections that include additional safety features for cyclists</b>				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<u>1%</u>	No relevant data in Hamilton RAMM.	<u>2.8%</u>	<u>2.6%</u>	No relevant data in Christchurch RAMM.
<i>Details</i>				
Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Major Urban Area	Scale: Stats NZ Wellington Major Urban Area 2020	Scale: Stats NZ Major Urban Area
<i>Data source</i>				
Auckland, Hamilton, Tauranga, and Christchurch data obtained from RAMM. Wellington data obtained from a call box GeoJSON file from Wellington City Council. Method: Number of signalised intersections where the 'display type' attribute includes bicycle / total number of signalised intersections.				

## Cycling uptake

Table 42 *Inclusive Access*

Annual percentage change of counts from cyclist counters				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<p>2015</p> <ul style="list-style-type: none"> <li>Total count: <u>569,625</u></li> <li>Daily average: <u>1,994</u></li> </ul> <p>2016</p> <ul style="list-style-type: none"> <li>Total count: <u>621,889</u></li> <li>Yearly percent change: <u>9.18%</u></li> <li>Daily average: <u>2,140</u></li> </ul> <p>2017</p> <ul style="list-style-type: none"> <li>Total count: <u>684,048</u></li> <li>Yearly percent change: <u>10.00%</u></li> <li>Daily average: <u>2,322</u></li> </ul> <p>2018</p> <ul style="list-style-type: none"> <li>Total count: <u>727,547</u></li> <li>Yearly percent change: <u>6.36%</u></li> <li>Daily average: <u>2,443</u></li> </ul> <p>2019</p> <ul style="list-style-type: none"> <li>Total count: <u>793,311</u></li> <li>Yearly percent change: <u>9.04%</u></li> <li>Daily average: <u>2,629</u></li> </ul> <p>2020</p> <ul style="list-style-type: none"> <li>Total count: <u>812,562</u></li> <li>Yearly percent change: <u>2.43%</u></li> <li>Daily average: <u>2,664</u></li> </ul>	<p>2017</p> <ul style="list-style-type: none"> <li>Total count: <u>172,116</u></li> <li>Daily average: <u>472</u></li> </ul> <p>2018</p> <ul style="list-style-type: none"> <li>Total count: <u>178,418</u></li> <li>Yearly percent change: <u>3.66%</u></li> <li>Daily average: <u>489</u></li> </ul> <p>2019</p> <ul style="list-style-type: none"> <li>Total count: <u>200,231</u></li> <li>Yearly percent change: <u>12.23%</u></li> <li>Daily average: <u>549</u></li> </ul> <p>2020</p> <ul style="list-style-type: none"> <li>Total count: <u>219,294</u></li> <li>Yearly percent change: <u>9.52%</u></li> <li>Daily average: <u>599</u></li> </ul>	<p>2017</p> <ul style="list-style-type: none"> <li>Total count: <u>298,052</u></li> <li>Daily average: <u>817</u></li> </ul> <p>2018</p> <ul style="list-style-type: none"> <li>Total count: <u>323,715</u></li> <li>Yearly percent change: <u>8.61%</u></li> <li>Daily average: <u>887</u></li> </ul> <p>2019</p> <ul style="list-style-type: none"> <li>Total count: <u>304,880</u></li> <li>Yearly percent change: <u>-5.82%</u></li> <li>Daily average: <u>835</u></li> </ul> <p>2020</p> <ul style="list-style-type: none"> <li>Total count: <u>325,059</u></li> <li>Yearly percent change: <u>6.62%</u></li> <li>Daily average: <u>888</u></li> </ul>	<p>2018</p> <ul style="list-style-type: none"> <li>Total count: <u>745,544</u></li> <li>Daily average: <u>2,043</u></li> </ul> <p>2019</p> <ul style="list-style-type: none"> <li>Total count: <u>697,296</u></li> <li>Yearly percent change: <u>-6.47%</u></li> <li>Daily average: <u>1,910</u></li> </ul> <p>2020</p> <ul style="list-style-type: none"> <li>Total count: <u>548,763</u></li> <li>Yearly percent change: <u>-21.30%</u></li> <li>Daily average: <u>1,499</u></li> </ul>	<p>2017</p> <ul style="list-style-type: none"> <li>Total count: <u>797,007</u></li> <li>Daily average: <u>2,184</u></li> </ul> <p>2018</p> <ul style="list-style-type: none"> <li>Total count: <u>831,716</u></li> <li>Yearly percent change: <u>4.35%</u></li> <li>Daily average: <u>2,279</u></li> </ul> <p>2019</p> <ul style="list-style-type: none"> <li>Total count: <u>921,287</u></li> <li>Yearly percent change: <u>10.77%</u></li> <li>Daily average: <u>2,524</u></li> </ul> <p>2020</p> <ul style="list-style-type: none"> <li>Total count: <u>956,625</u></li> <li>Yearly percent change: <u>3.84%</u></li> <li>Daily average: <u>2,614</u></li> </ul>
<i>Details</i>				
Count sites: Karangahape Rd, NW Cycleway Kingsland, NW Cycleway Te Atatu, Tamaki Drive WB, Upper Harbour Shared Path.	Count sites: Flagstaff, Gallagher Drive Pathway, Greenwood Street, Waikato River Path, Wairere Drive North + Wairere Drive South (counted as one).	Count sites: Cameron Road 18th Ave, K Valley East, Harbour Bridge Path, Kulim Park, Matua Saltmarsh.	Count sites: Airport Tunnel Counter, Hutt Road Cycle Lane + Hutt Road Shared Path (counted as one), Karori Tunnel City Bound, Oriental Parade Shared Path, Thorndon Quay.	Count sites: Cashmere Rd, Colombo St South, Main Rd on-road + Main Rd shared path (counted as one), Marshland Rd, North Hagley Park.
<i>Data source and method</i>				
Count data provided by <span style="background-color: black; color: white; padding: 2px;">Out of Scope</span> at Waka Kotahi. Five sites were selected based on their location and the completeness of their datasets.				

Table 43 *Inclusive Access*

Mode share of cycling by gender				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Gender ratio (male/female): <u>3.13</u></li> <li>Male: <u>1.5%</u></li> <li>Female: <u>0.7%</u></li> </ul>	<ul style="list-style-type: none"> <li>Gender ratio (male/female): <u>3.36</u></li> <li>Male: <u>2.0%</u></li> <li>Female: <u>0.5%</u></li> </ul>	<ul style="list-style-type: none"> <li>Gender ratio (male/female): <u>1.80</u></li> <li>Male: <u>3.6%</u></li> <li>Female: <u>2.2%</u></li> </ul>	<ul style="list-style-type: none"> <li>Gender ratio (male/female): <u>2.23</u></li> <li>Male: <u>1.5%</u></li> <li>Female: <u>0.9%</u></li> </ul>	<ul style="list-style-type: none"> <li>Gender ratio (male/female): <u>3.24</u></li> <li>Male: <u>4.1%</u></li> <li>Female: <u>1.1%</u></li> </ul>
<i>Details</i>				
Scale: Auckland Main Urban Area	Scale: Hamilton Main Urban Area	Scale: Tauranga Main Urban Area	Scale: Wellington Main Urban Area (including Kāpiti)	Scale: Christchurch Main Urban Area
<i>Data source</i>				
Mode share data from the Ministry of Transport New Zealand Household Travel Survey based on total population, 3 year moving average from 2015–2018. 'Main Urban Area' boundaries are provided by the survey and are defined as Stats NZ meshblocks in areas with a population >30,000.				

## Cycling safety

Table 44 *Healthy & Safe People*

Reported cyclist injuries and fatalities				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Personal risk (cyclist involved): <u>9</u></li> <li>Auckland DHB cyclist hospitalisations: <u>5.8 per 100,000 people</u> (over a 2-year period from 2016–2018)</li> <li>Waitemata DHB cyclist hospitalisations: <u>3.5 per 100,000 people</u> (over a 2-year period from 2016–2018)</li> <li>Counties Manukau DHB cyclist hospitalisations: <u>1.7 per 100,000 people</u> (over a 2-year period from 2016–2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (cyclist involved): <u>10</u></li> <li>Waikato DHB cyclist hospitalisations: <u>3.3 per 100,000 people</u> (over a 2-year period from 2016–2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (cyclist involved): <u>16</u></li> <li>Bay of Plenty DHB cyclist hospitalisations: <u>4.2 per 100,000 people</u> (over a 2-year period from 2016–2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (cyclist involved): <u>12</u></li> <li>Bay of Plenty DHB cyclist hospitalisations: <u>3.7 per 100,000 people</u> (over a 2-year period from 2016–2018)</li> </ul>	<ul style="list-style-type: none"> <li>Personal risk (cyclist involved): <u>7</u></li> <li>Canterbury DHB cyclist hospitalisations: <u>5.0 per 100,000 people</u> (over a 2-year period from 2016–2018)</li> </ul>
<i>Details</i>				
Scale: Auckland Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Hamilton City Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Tauranga City Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Wellington City Council boundaries for personal risk score; DHB boundaries for hospitalisations.	Scale: Christchurch City Council boundaries for personal risk score; DHB boundaries for hospitalisations.
<i>Data source and method</i>				
The 'personal risk (cyclist involved)' score was obtained from Waka Kotahi's <a href="#">Communities at Risk Register</a> for 2020 (cyclist Deaths and Serious Injuries (DSI) / million hours of travel). Cyclist hospitalisation data from Massey University's Environment Health Indicators New Zealand report (2020).				

## Public transport

### Public transport funding

Table 45

#### Funding for public transport capital projects

Combined with the 'Funding for public transport operations' indicator – see 'Funding for public transport'.

Table 46

#### Funding for public transport

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Funding for public transport per capita 2019/20: <u>\$313.51</u></li> <li>Total funding for public transport 2019/20: <u>\$492,697,225</u></li> </ul>	<ul style="list-style-type: none"> <li>Funding for public transport per capita 2020/21: <u>\$78.53</u></li> <li>Total funding for public transport operations 2020/21: <u>\$36,602,000</u></li> </ul>	No details on public transport funding in the Bay of Plenty Regional Council Annual Plan 2020/21.	<ul style="list-style-type: none"> <li>Funding for public transport per capita 2020/21: <u>\$734.71</u></li> <li>Total funding for public transport 2020/21: <u>\$378,204,000</u></li> </ul>	<ul style="list-style-type: none"> <li>Funding for public transport per capita 2020/21: <u>\$140.97</u></li> <li>Total funding for public transport 2020/21: <u>\$86,639,000</u></li> </ul>
<i>Details</i>				
<ul style="list-style-type: none"> <li>Scale: Auckland Region</li> <li>Time period: 2019/20 FY actual funding</li> <li>Auckland Region population: 1,571,556 (from Stats NZ 2018 Census)</li> </ul>	<ul style="list-style-type: none"> <li>Scale: Waikato Region</li> <li>Time period: 2020/21 FY prospective funding</li> <li>Waikato Region population: 466,113 (from Stats NZ 2018 Census)</li> </ul>	<ul style="list-style-type: none"> <li>Scale: Bay of Plenty Region</li> <li>Time period: 2020/21 prospective funding</li> </ul>	<ul style="list-style-type: none"> <li>Scale: Wellington Region</li> <li>Time period: 2020/21 FY prospective funding</li> <li>Wellington Region population: 514,767 (from Stats NZ 2018 Census)</li> </ul>	<ul style="list-style-type: none"> <li>Scale: Canterbury Region</li> <li>Time period: 2020/21 FY prospective funding</li> <li>Canterbury Region population: 614,586 (from Stats NZ 2018 Census)</li> </ul>
<i>Data source</i>				
<a href="#">Auckland Transport 2020 Annual Report</a>	<a href="#">Waikato Regional Council Annual Plan 2020/21</a>	<a href="#">Bay of Plenty Regional Council Annual Plan 2020/21</a>	<a href="#">Greater Wellington Regional Council Annual Plan 2020/21</a>	<a href="#">Environment Canterbury Annual Plan 2020/21</a>
<i>Notes</i>				
This indicator was originally 'funding for public transport operations' but was changed to 'funding for public transport' based on feedback from <b>Out of Scope</b> . Funding figures are based on information reported in the relevant plans but may not fully account for actual spending on public transport operations. Per capita funding should therefore be treated with caution.				

Table 47

#### Concessions for public transport users

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Details of current public transport concessions</i>				
<ul style="list-style-type: none"> <li>Free travel for children under 5 years.</li> <li>Discounted travel for children 5-15 years during the week, and free travel during the weekend.</li> </ul>	<ul style="list-style-type: none"> <li>Free travel for children under 5 years.</li> <li>Discounted travel for children 5-14 years.</li> </ul>	<ul style="list-style-type: none"> <li>Discounted travel for children up until 19 years.</li> <li>Free travel on selected routes for school students travelling to and from school before 9 AM and</li> </ul>	<ul style="list-style-type: none"> <li>Free travel for children under 5 years.</li> <li>Discounted travel for children 5-15 years.</li> </ul>	<ul style="list-style-type: none"> <li>Discounted travel for students under 18 years.</li> <li>Free travel for senior citizens (SuperGold Card holders) between 9 AM-3 PM and after 6:30 PM</li> </ul>

<ul style="list-style-type: none"> <li>Discounted travel for secondary school students 16-19 years.</li> <li>Discounted travel for full-time tertiary students.</li> <li>Free travel for senior citizens (SuperGold Card holders) on selected services after 9 AM during the week, and all day on weekends and public holidays.</li> <li>Discounted travel for those enrolled in the Total Mobility scheme and for holders of a Blind Foundation ID.</li> </ul>	<ul style="list-style-type: none"> <li>Discounted travel for secondary school students.</li> <li>Discounted travel for tertiary students and staff (at University of Waikato or Wintec).</li> <li>Free travel for senior citizens (SuperGold Card holders) between 9 AM-3 PM and after 6:30 PM during the week, and all day on weekends and public holidays.</li> <li>Free travel for those enrolled in the Total Mobility scheme + free travel for a companion.</li> </ul>	<p>between 2:30 PM-6:30 PM (trial concession until the end of 2021).</p> <ul style="list-style-type: none"> <li>Free travel for senior citizens (SuperGold Card holders).</li> <li>Free travel for people with a permanent mobility impairment that restricts them from driving a private vehicle.</li> </ul>	<ul style="list-style-type: none"> <li>Discounted travel for children 16 years and older who are enrolled at school.</li> <li>Discounted travel for full-time tertiary students on selected routes</li> <li>Free travel for senior citizens (SuperGold Card holders) between 9 AM-3 PM and after 6:30 PM during the week, and all day on weekends and public holidays.</li> <li>Discounted travel for those enrolled in the Total Mobility scheme and for holders of a Blind Low Vision NZ membership card (some service exclusions apply).</li> <li>Discounted off-peak bus travel for Snapper Card users and discounted off-peak train travel for off-peak 10-rip ticket holders between 9 AM-3 PM and after 6:30 PM during the week, and all day on weekends and public holidays.</li> </ul>	<ul style="list-style-type: none"> <li>discounted travel during the week, and all day on weekends and public holidays.</li> <li>Discounted door-to-door transport services for people with an impairment that prevents them from travelling unaccompanied on regular public transport services.</li> </ul>
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## Public transport monitoring and data collection

Table 48

<b>Whether there is an ongoing programme to monitor and inspect the quality of public transport infrastructure and make necessary improvements</b>
Indicator flagged – no longer pursuing.

Table 49

Whether public transport patronage is monitored, reported, and measured against targets for mode shift				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Details</i>				
Somewhat – public transport patronage is monitored and reported in the Auckland Regional Public Transport Plan 2018-2028 but is not measured against targets for mode shift.	Somewhat – public transport patronage is not reported in detail in either the Waikato Regional Public Transport Plan 2018-2028 or Waikato Regional Council 2019/20 Annual Report, but the Annual Report does include a target for mode shift.	Yes – public transport patronage is monitored and reported in the Bay of Plenty Regional Public Transport Plan 2019, which also includes targets for mode shift.	Yes – public transport patronage is monitored and reported in the Wellington Regional Public Transport Plan 2021-2031, which also includes targets for mode shift.	Yes – public transport patronage is monitored and reported in the Canterbury Regional Public Transport Plan 2018-2028, which also includes targets for mode shift.
<i>Source</i>				
<a href="#">Auckland Regional Public Transport Plan 2018-2028</a>	<a href="#">Waikato Regional Council 2019/20 Annual Report</a>	<a href="#">Bay of Plenty Regional Public Transport Plan 2019</a>	<a href="#">Wellington Regional Public Transport Plan 2021-2031</a>	<a href="#">Canterbury Regional Public Transport Plan 2018-2028</a>

## Public transport level of service

Table 50 *Inclusive Access*

Kilometres of priority bus routes (as a percentage of total roading)				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<a href="#">210.90 km</a>	Data on priority bus routes unable to be located.	Data on priority bus routes unable to be located.	Data on priority bus routes unable to be located.	Data on priority bus routes unable to be located.
<i>Details</i>				
Scale: Stats NZ Auckland Major Urban Area 2020	Not applicable	Not applicable	Not applicable	Not applicable
<i>Data source</i>				
Auckland data sourced from Auckland Transport's Open GIS Data portal.				

Table 51 *Economic Prosperity*

Average punctuality of bus services				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Average punctuality for all bus services in 2019: <a href="#">95.5%</a></li> <li>Average punctuality for all bus services in 2020: <a href="#">97.2%</a></li> </ul>	Data not available.	Data not available.	<ul style="list-style-type: none"> <li>Average punctuality for all bus services in 2018: <a href="#">92.0%</a></li> <li>Average punctuality for all bus services in 2019: <a href="#">93.7%</a></li> <li>Average punctuality for all bus services in 2020: <a href="#">95.0%</a></li> <li>Average punctuality for all bus services in 2021: <a href="#">95.2%</a></li> </ul>	Metro Christchurch does not report bus punctuality data.
<i>Details</i>				
'Punctuality' is defined by Auckland Transport as the percentage of scheduled trips that departed the first stop between 59 seconds early and 4 minutes and 59 seconds late.	Not applicable	Not applicable	'Punctuality' is defined by Metlink as the percentage of scheduled services that departed from the origin between 1 minute early and 5 minutes late.	Not applicable
<i>Data source and method</i>				
Data from Auckland Transport's <a href="#">Metro Patronage Report</a> . The average punctuality for all bus services is calculated by summing the yearly punctuality score for each service and dividing the result by the number of services with a reported punctuality score.	Not applicable	Not applicable	Data from <a href="#">Metlink</a> . The average punctuality for all bus services was calculated by summing the overall weekly punctuality score for each week in the year and dividing the result by the number of weeks.	Not applicable



			<p>2018 punctuality from week commencing 16/07/18 to week commencing 24/12/18.</p> <p>2019 punctuality from week commencing 31/12/18 to week commencing 23/12/19.</p> <p>2020 punctuality from week commencing 30/12/19 to week commencing 21/12/20.</p> <p>2021 punctuality from week commencing 28/12/20 to week commencing 31/05/21.</p>	
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**Notes**

This indicator was originally 'average punctuality of low-frequency bus services' but was changed to 'average punctuality of (all) bus services' based on feedback from **Out of Scope** (Waka Kotahi).

Table 52

**Percentage of public transport stops that meet best practice design standards**

Indicator flagged – no longer pursuing.

Table 53

**Percentage of bus fleet that is accessible**

Where accessible buses are defined as those that can be accessed by people using a wheelchair

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<u>91%</u>	<u>100%</u>	<u>100%</u>	An exact percentage of accessible buses is not provided by Metlink, but they do say report that 'most' are, with only a small percentage of their older fleet not accessible.	<u>100%</u>
<i>Details</i>				
91% of Auckland Transport buses either have 'kneel to the curb' ability or wheelchair ramps.	100% of Busit buses have 'kneel to the curb' ability.	100% of all Baybus buses in the Bayhopper network (those operating in Tauranga and the Western Bay of Plenty) either have 'kneel to the curb' ability or wheelchair ramps.	Metlink's accessible fleet all have 'kneel to the curb' ability. Their older fleet do include wheelchair ramps, but they are unable to support larger mobility devices and therefore do not meet Metlink's accessibility requirements.	100% of Metro buses in Christchurch and Timaru either have 'kneel to the curb' ability or wheelchair ramps.
<i>Data source</i>				
Data from <a href="#">Auckland Transport</a> (June 2021).	Data from <a href="#">Busit</a> (June 2021).	Data from <a href="#">Baybus</a> (June 2021).	Data from <a href="#">Metlink</a> (June 2021).	Data from <a href="#">Christchurch Metro</a> (June 2021).

Table 54 Environmental Sustainability

Percentage of bus fleet that runs on clean energy				
Where accessible buses are defined as those that can be accessed by people using a wheelchair				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<u>2.6%</u>	<u>0%</u>	<u>0%</u>	<u>2.1%</u>	<u>1.2%</u>
<i>Details</i>				
33 Auckland Transport buses run on clean energy (32 Battery Electric Vehicle (BEV) and 1 Hydrogen Fuel Cell Vehicle (FCEV)) out of a peak vehicle requirement of 1,250 buses.	0 Busit buses running on clean energy.	0 Baybus buses running on clean energy.	10 Metlink buses running on clean energy out of a peak vehicle requirement of 480 buses.	3 Metro buses running on clean energy out of a peak vehicle requirement of 260 buses.
<i>Data source</i>				
Data from Waka Kotahi (May 2021). Details of Auckland buses from Auckland Transport (June 2021).				

## Public transport access

Table 55 Inclusive Access

Percentage of the population who live within a 500-metre walk of a public transport stop with service every 15 minutes, and service every 30 minutes				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
<ul style="list-style-type: none"> <li>Percentage of the population within 500 metres of a public transport stop with service every 15 minutes: <u>35.7%</u></li> <li>Percentage of the population within 500 metres of a public transport stop with service every 30 minutes: <u>70.5%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the population within 500 metres of a public transport stop with service every 15 minutes: <u>10.2%</u></li> <li>Percentage of the population within 500 metres of a public transport stop with service every 30 minutes: <u>59.1%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the population within 500 metres of a public transport stop with service every 15 minutes: <u>5.0%</u></li> <li>Percentage of the population within 500 metres of a public transport stop with service every 30 minutes: <u>51.7%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the population within 500 metres of a public transport stop with service every 15 minutes: <u>43.1%</u></li> <li>Percentage of the population within 500 metres of a public transport stop with service every 30 minutes: <u>76.0%</u></li> </ul>	<ul style="list-style-type: none"> <li>Percentage of the population within 500 metres of a public transport stop with service every 15 minutes: <u>29.3%</u></li> <li>Percentage of the population within 500 metres of a public transport stop with service every 30 minutes: <u>71.8%</u></li> </ul>
<i>Details</i>				
<ul style="list-style-type: none"> <li>Population within 500 metres of a public transport stop with service every 15 minutes: 480,481</li> <li>Population within 500 metres of a public transport stop with service every 30 minutes: 948,543</li> <li>Total urban area population: 1,346,094</li> <li>Scale: Stats NZ Auckland Major Urban Area (2018)</li> </ul>	<ul style="list-style-type: none"> <li>Population within 500 metres of a public transport stop with service every 15 minutes: 16,368</li> <li>Population within 500 metres of a public transport stop with service every 30 minutes: 95,064</li> <li>Total urban area population: 160,848</li> <li>Scale: Stats NZ Hamilton Major Urban Area (2018)</li> </ul>	<ul style="list-style-type: none"> <li>Population within 500 metres of a public transport stop with service every 15 minutes: 6,901</li> <li>Population within 500 metres of a public transport stop with service every 30 minutes: 70,601</li> <li>Total urban area population: 136,668</li> <li>Scale: Stats NZ Tauranga Major Urban Area (2018)</li> </ul>	<ul style="list-style-type: none"> <li>Population within 500 metres of a public transport stop with service every 15 minutes: 86,931</li> <li>Population within 500 metres of a public transport stop with service every 30 minutes: 153,336</li> <li>Total urban area population: 201,774</li> <li>Scale: Stats NZ Wellington Major Urban Area (2018)</li> </ul>	<ul style="list-style-type: none"> <li>Population within 500 metres of a public transport stop with service every 15 minutes: 104,817</li> <li>Population within 500 metres of a public transport stop with service every 30 minutes: 256,945</li> <li>Total urban area population: 358,095</li> <li>Scale: Stats NZ Christchurch Major Urban Area (2018)</li> </ul>

*Data source and method*

Service area polygons of access to public transport stops with service every 15 minutes and every 30 minutes obtained from Waka Kotahi's Land Transport Benefits Framework StoryMap (where 15-minute service areas are based on public transport data from 2019, 30-minute service areas are based on public transport data from 2018, and the walking network is from OpenStreetMap). Major Urban Area boundaries obtained from Stats NZ Urban Rural Boundaries (2018). Population data obtained from Stats NZ Census 2018 Statistical Area 1 (SA1).

Service area polygons of access to public transport stops with service area 15 minutes and every 30 minutes was clipped to the Major Urban Area boundary for each city. The clipped polygons were then used to summarise the total population within that each service area, using the 2018 Census SA1 units as the summarising features. The resulting population within each service area was divided by the total population within the relevant Major Urban Area to produce percentages.

*Notes*

This indicator was originally 'Percentage of the population served by a high frequency service' but was combined with the 'Access to public transport stops' to form the current indicator. The percentages will be sensitive to the time of day and week.

Table 56

**Access to public transport stops**

Combined with the 'Percentage of the population served by a high frequency service' indicator – see 'Percentage of the population who live within a 500-metre walk of a public transport stop with service every 15 minutes, and service every 30 minutes'.

Table 57 *Inclusive Access*

**Access to employment by public transport**

Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
Average number of jobs that can be accessed by a 45-minute public transport journey: <u>268,141 (36%)</u>	Average number of jobs that can be accessed by a 45-minute public transport journey: <u>110,491 (100%)</u>	Average number of jobs that can be accessed by a 45-minute public transport journey: <u>48,636 (73%)</u>	Average number of jobs that can be accessed by a 45-minute public transport journey: <u>75,936 (48%)</u>	Average number of jobs that can be accessed by a 45-minute public transport journey: <u>193,902 (91%)</u>
<i>Details</i>				
Scale: Stats NZ Auckland Major Urban Area 2018	Scale: Stats NZ Hamilton Major Urban Area 2018	Scale: Stats NZ Tauranga Major Urban Area 2018	Scale: Stats NZ Wellington Major Urban Area 2018	Scale: Stats NZ Christchurch Major Urban Area 2018

*Data source*

Meshblocks with the average number of jobs a person could reach within a 45-minute public transport journey were obtained from Waka Kotahi's Land Transport Benefits Framework StoryMap, using meshblock boundaries and population data from the Stats NZ 2013 Census. Major Urban Area boundaries were obtained from the Stats NZ Urban Rural Boundaries 2018.

The number of jobs that could be accessed for each meshblock was multiplied by the total population within that meshblock. The totals were then summed for all the meshblocks that intersected the Major Urban Area boundary for each city and divided by the total population of all the intersected meshblocks to produce a population weighted average number of jobs per person within each urban area.

## Public transport journey comparisons

Table 58 *Inclusive Access Economic Prosperity*

Time to travel by public transport compared to the time to travel by private vehicle				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
An average journey (leaving after 8 AM on a Wednesday) to the CBD by public transport takes <u>2.55x</u> as long as a journey by private vehicle.	An average journey (leaving after 8 AM on a Wednesday) to the CBD by public transport takes <u>2.89x</u> as long as a journey by private vehicle.	An average journey (leaving after 8 AM on a Wednesday) to the CBD by public transport takes <u>3.29x</u> as long as a journey by private vehicle.	An average journey (leaving after 8 AM on a Wednesday) to the CBD by public transport takes <u>2.13x</u> as long as a journey by private vehicle.	An average journey (leaving after 8 AM on a Wednesday) to the CBD by public transport takes <u>2.29x</u> as long as a journey by private vehicle.
<i>Details</i>				
<ul style="list-style-type: none"> <li>Average private vehicle journey time: <u>00:21:26</u></li> <li>Average public transport journey time: <u>00:54:40</u></li> <li>Scale: Auckland Major Urban Area (Stats NZ, 2018)</li> <li>Destination point: Bus stop closest to the centroid of the Stats NZ 'Queen Street' SA2</li> <li>Number of journeys modelled: 7,896</li> </ul>	<ul style="list-style-type: none"> <li>Average private vehicle journey time: <u>00:09:53</u></li> <li>Average public transport journey time: <u>00:28:36</u></li> <li>Scale: Hamilton Major Urban Area (Stats NZ, 2018)</li> <li>Destination point: Bus stop closest to the centroid of the Stats NZ 'Hamilton Central' SA2</li> <li>Number of journeys modelled: 959</li> </ul>	<ul style="list-style-type: none"> <li>Average private vehicle journey time: <u>00:12:14</u></li> <li>Average public transport journey time: <u>00:40:15</u></li> <li>Scale: Tauranga Major Urban Area (Stats NZ, 2018)</li> <li>Destination point: Bus stop closest to the centroid of the Stats NZ 'Tauranga Central' SA2</li> <li>Number of journeys modelled: 810</li> </ul>	<ul style="list-style-type: none"> <li>Average private vehicle journey time: <u>00:13:14</u></li> <li>Average public transport journey time: <u>00:28:14</u></li> <li>Scale: Wellington Major Urban Area (Stats NZ, 2018)</li> <li>Destination point: Bus stop closest to the centroid of the Stats NZ 'Wellington Central' SA2</li> <li>Number of journeys modelled: 1,320</li> </ul>	<ul style="list-style-type: none"> <li>Average private vehicle journey time: <u>00:13:33</u></li> <li>Average public transport journey time: <u>00:31:04</u></li> <li>Scale: Christchurch Major Urban Area (Stats NZ, 2018)</li> <li>Destination point: Bus stop closest to the centroid of the Stats NZ 'Christchurch Central' SA2</li> <li>Number of journeys modelled: 2,268</li> </ul>
<i>Method and data sources</i>				
<p>Centroids of Stats NZ Statistical Area 1 (SA1) polygons were clipped to the Stats NZ Major Urban Area boundaries for each of the five cities. The centroids were then snapped to the nearest street on OpenStreetMap. Road types that are unable to support pedestrians were excluded from the snap. Snapping ensured that the points were accessible by the transport network, as by default some centroids were in areas that are untraversable (for example, reserves).</p> <p>New latitude and longitude coordinates were generated for the points. These coordinates were processed using Google's Distance Matrix API to generate private vehicle, public transport, and walk journey times from each point to a destination point located in the city centre. A start time of 8:00 AM on a Wednesday was chosen.</p> <p>Public transport journeys included walk times to get to the most suitable public transport stop, but did not include any extra time between 8:00 AM and when the journey began (i.e. if the journey began at 8:05, the 5 minutes from 8:00 to 8:05 was not included). However, time spent waiting for public transport was included (Google includes some waiting time in their calculation). Transfer time between services was also included. Congestion delays for both public transport and private vehicle journeys was also factored into the overall time (as the start time was specifically chosen to represent rush hour traffic conditions).</p> <p>The destination point was selected using a slightly different process, as instead of simply snapping it to the street network it was snapped to the nearest bus stop. This was to ensure that the end of journey walk time for public transport was zero, maintaining consistency between cities.</p> <p>Any journey where the walk time was less than the public transport time was excluded. Total time for the remaining journeys was multiplied by the total population for its SA1 unit for driving and public transport. The sum of all the travel time for each mode was then summed and divided by the total population to generate a population-weighted average journey time for each mode. The public transport journey time was divided by the private vehicle journey time to generate a time difference factor for each city.</p>				

Table 59 *Inclusive Access Economic Prosperity*

Cost to travel by public transport compared to the cost to travel by private vehicle				
Auckland	Hamilton	Tauranga	Wellington	Christchurch
<i>Result</i>				
An average journey to the CBD by public transport costs <u>1.73x</u> as	An average journey to the CBD by public transport costs <u>2.34x</u> as	An average journey to the CBD by public transport costs <u>1.87x</u> as	An average journey to the CBD by public transport costs <u>2.88x</u> as	An average journey to the CBD by public transport costs <u>2.35x</u> as

<p>much as a journey by private vehicle, <u>when only factoring in the cost of petrol.</u></p> <ul style="list-style-type: none"> <li>• An average journey to the CBD by public transport costs <u>0.26x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol and early bird all-day parking.</u></li> <li>• An average journey to the CBD by public transport costs <u>0.17x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking.</u></li> </ul>	<p>much as a journey by private vehicle, <u>when only factoring in the cost of petrol.</u></p> <ul style="list-style-type: none"> <li>• An average journey to the CBD by public transport costs <u>0.16x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol and early bird all-day parking.</u></li> <li>• An average journey to the CBD by public transport costs <u>0.12x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking.</u></li> </ul>	<p>much as a journey by private vehicle, <u>when only factoring in the cost of petrol.</u></p> <ul style="list-style-type: none"> <li>• An average journey to the CBD by public transport costs <u>0.38x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol and early bird all-day parking.</u></li> <li>• An average journey to the CBD by public transport costs <u>0.21x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking.</u></li> </ul>	<p>much as a journey by private vehicle, <u>when only factoring in the cost of petrol.</u></p> <ul style="list-style-type: none"> <li>• An average journey to the CBD by public transport costs <u>0.15x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol and early bird all-day parking.</u></li> <li>• An average journey to the CBD by public transport costs <u>0.13x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking.</u></li> </ul>	<p>much as a journey by private vehicle, <u>when only factoring in the cost of petrol.</u></p> <ul style="list-style-type: none"> <li>• An average journey to the CBD by public transport costs <u>0.22x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol and early bird all-day parking.</u></li> <li>• An average journey to the CBD by public transport costs <u>0.16x</u> as much as a journey by private vehicle, <u>when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking.</u></li> </ul>
<i>Details</i>				
<ul style="list-style-type: none"> <li>• Average cost of a public transport journey to the CBD: <u>\$4.82</u></li> <li>• Average cost of a private vehicle journey to the CBD, when only factoring in the cost of petrol: <u>\$2.78</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol and early bird all-day parking: <u>\$18.78</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking: <u>\$29.00</u></li> <li>• Scale: Auckland Major Urban Area (Stats NZ, 2018)</li> <li>• Destination point: Bus stop closest to the centroid of the Stats NZ 'Queen Street' SA2</li> <li>• Number of journeys modelled: 7,896</li> </ul>	<ul style="list-style-type: none"> <li>• Average cost of a public transport journey to the CBD: <u>\$1.97</u></li> <li>• Average cost of a private vehicle journey to the CBD, when only factoring in the cost of petrol: <u>\$0.84</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol and early bird all-day parking: <u>\$12.51</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking: <u>\$15.81</u></li> <li>• Scale: Hamilton Major Urban Area (Stats NZ, 2018)</li> <li>• Destination point: Bus stop closest to the centroid of the Stats NZ 'Hamilton Central' SA2</li> <li>• Number of journeys modelled: 959</li> </ul>	<ul style="list-style-type: none"> <li>• Average cost of a public transport journey to the CBD: <u>\$2.72</u></li> <li>• Average cost of a private vehicle journey to the CBD, when only factoring in the cost of petrol: <u>\$1.45</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol and early bird all-day parking: <u>\$7.12</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking: <u>\$12.66</u></li> <li>• Scale: Tauranga Major Urban Area (Stats NZ, 2018)</li> <li>• Destination point: Bus stop closest to the centroid of the Stats NZ 'Tauranga Central' SA2</li> <li>• Number of journeys modelled: 810</li> </ul>	<ul style="list-style-type: none"> <li>• Average cost of a public transport journey to the CBD: <u>\$3.26</u></li> <li>• Average cost of a private vehicle journey to the CBD, when only factoring in the cost of petrol: <u>\$1.13</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol and early bird all-day parking: <u>\$21.46</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking: <u>\$25.79</u></li> <li>• Scale: Wellington Major Urban Area (Stats NZ, 2018)</li> <li>• Destination point: Bus stop closest to the centroid of the Stats NZ 'Wellington Central' SA2</li> <li>• Number of journeys modelled: 1,320</li> </ul>	<ul style="list-style-type: none"> <li>• Average cost of a public transport journey to the CBD: <u>\$2.65</u></li> <li>• Average cost of a private vehicle journey to the CBD, when only factoring in the cost of petrol: <u>\$1.13</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol and early bird all-day parking: <u>\$11.80</u></li> <li>• Average cost of a private vehicle journey to the CBD, when factoring in the cost of petrol, vehicle maintenance, fixed costs (e.g. insurance), vehicle depreciation, and early bird all-day parking: <u>\$16.29</u></li> <li>• Scale: Christchurch Major Urban Area (Stats NZ, 2018)</li> <li>• Destination point: Bus stop closest to the centroid of the Stats NZ 'Christchurch Central' SA2</li> <li>• Number of journeys modelled: 2,268</li> </ul>

#### Method and data sources

The snapped SA1 centroids used in the 'Time to travel by public transport compared to the time to travel by private vehicle' indicator were used as the journey starting points for the cost comparisons, and the snapped CBD SA1 centroid was used as the destination. As with the time comparison indicator, only SA1 centroids within the Stats NZ 2018 major urban area boundaries were modelled. Any journey where the walk time was less than the public transport journey time was excluded. Results will be sensitive to the time of day and week.

To generate the average cost of a public transport journey, a map of the public transport fare zones was obtained for each city from their respective provider (Auckland Transport, Busit (Hamilton), Baybus (Tauranga), Metlink (Wellington), and Christchurch Metro). The centroid was then assigned a cost based on the fare charge a journey from that location to the destination centroid would incur on public transport, leaving after 8 AM on a Wednesday, and paying the adult card fare. The cost for each centroid was then multiplied by the total population of the centroid (from the Stats NZ 2018 Census), which was then summed for all the centroids, and divided by the total population of all the summed centroids to generate a population-weighted average public transport journey cost.

To generate the average cost of a private vehicle journey, average fuel cost information was obtained for each area using [PriceWatch](#), and average parking cost information was obtained by getting the mean cost of the early bird all-day parking fare from three Wilsons parking buildings offering early bird pricing which were located closest to the destination point for each urban area. For Tauranga, early bird all-day parking fares from TCC parking buildings were used instead, as Wilsons does not operate there. In addition, the 2020/21 Tier 1 per kilometre charge rate from [Inland Revenue](#) was obtained to represent the overall cost of vehicle ownership (petrol, vehicle maintenance, fixed costs, and vehicle depreciation). The petrol and Tier 1 costs were calculated for each trip by multiplying their per kilometre rate by the kilometre converted journey distance generated using Google's Distance Matrix API. These costs were then multiplied by the population of each SA1 unit, summed, and divided by the total population of all the summed centroids. These individual costs, along with the parking cost, were added in several different ways to generate population-weighted average private vehicle journey costs (petrol only, petrol + parking, and petrol + maintenance + fixed + depreciation + parking). The public transport journey cost was divided by each combined private vehicle journey cost to generate cost difference factors for each city.

# APPENDIX B – FIVE CITIES PUBLIC REALM ASSESSMENT

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# FIVE CITIES

public realm assessment

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AitkenTaylor



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This report has been prepared by AitkenTaylor for Waka Kotahi NZ Transport Agency.

Where possible, all data has been generated using relevant LINZ information, and, when practicable, cross referenced using Google Street View.

While all efforts have been made to ensure accuracy within this report, the data provided should be considered thematic only.

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# 01

## TĀMAKI MAKĀURAU AUCKLAND

36°51'3.98"S 174°45'51.83"E

**PROJECT AREA: 286.6 ha**

RELEASED

## TĀMAKI MAKAURAU | AUCKLAND | SPATIAL COVERAGE



PARCELS

**166.8 ha**



CARRIAGEWAY

**45.3 ha**



PARKING

**18.2 ha**



FOOTPATHS

**29.4 ha**



OPEN SPACE

**26.9 ha**

# TĀMAKI MAKĀURAU | AUCKLAND | SPATIAL DISTRIBUTION



**PARCELS**  
**58%**

Parcels (private land) cover approximately 166.8 ha, and account for the largest land coverage in the city centre.

Generally speaking, 60% of the parcel area is covered in buildings with much of the remaining land area utilised for private parking and/or servicing.



**CARRIAGEWAY**  
**16%**

The public street network accounts for approximately 45.3ha of city centre land coverage.

1.5ha of this is attributed to dedicated bus lanes, and 0.8ha is attributed to dedicated cycle lanes.

*\* The carriageway assessment is limited to movement traffic lanes only and does not include on-street parking, footpaths and pedestrianised areas.*



**PARKING**  
**6%**

Public car parking covers approximately 18.2ha, or 6% of land in the city centre.

Of this total area, off-street parking accounts for 80% (14.5ha), with the remaining 3.7ha attributed to on-street parking.



**FOOTPATHS**  
**11%**

Footpaths account for approximately 29.4ha, or 11%, of land coverage in the city centre.

This assessment is focused on kerb-side footpaths only, and excludes paths within open spaces and the waterfront (registered within the open space category).



**OPEN SPACE**  
**9%**

Open Space totals approximately 26.9 ha within the city centre.

The greater portion of this can be attributed to the waterfront, and the city's large green areas, such as Victoria Park and Albert Park.



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# 02

## KIRIKIRIROA HAMILTON

37°47'10.89"S 175°16'43.31"E

**PROJECT AREA: 133.8 ha**

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## KIRIKIROA | HAMILTON | SPATIAL COVERAGE



PARCELS  
**92.7 ha**



CARRIAGEWAY  
**19.4 ha**



PARKING  
**6.5 ha**



FOOTPATHS  
**12.1 ha**



OPEN SPACE  
**3.1 ha**

## KIRIKIRIROA | HAMILTON | SPATIAL DISTRIBUTION



PARCELS  
**69%**

Parcels (private land) coverage is approximately 92.7 ha, and accounts for the greatest land use area in the city centre.



CARRIAGEWAY  
**15%**

Public Streets\* account for approximately 19.4ha of land coverage.

Bus lanes and cycle lanes account for a little over 0.1ha.

*\* The carriageway assessment is limited to movement traffic lanes only and does not include on-street parking, footpaths and pedestrianised areas.*



PARKING  
**5%**

Public car parking covers approximately 6.5 ha of the city centre.

On-street parking accounts for approximately 25% of all available parking, while off street parking accounts for the remaining 75%.



FOOTPATHS  
**9%**

Footpaths account for approximately 12.1 ha of land coverage in the city centre.

It should be noted that as this calculation spans the area between the parking/ carriageway, and parcel boundaries, a portion of this total will be attributed to grassed areas, not strictly sealed foot paths.

Paths within public spaces are registered in the open space category.



OPEN SPACE  
**2%**

Open Space totals approximately 3.1 ha of city centre land coverage.

Almost all of this can be attributed to paved urban spaces, with much of the city's green spaces sitting slightly outside the project boundary.



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# 03

## TAURANGA

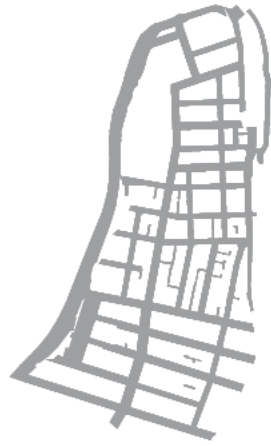
37°41'3.94"S 176°10'2.75"E

**PROJECT AREA: 112.7 ha**

## TAURANGA | SPATIAL COVERAGE



PARCELS  
**58.7 ha**



CARRIAGEWAY  
**26.8 ha**



PARKING  
**4.1 ha**



FOOTPATHS  
**9.4 ha**



OPEN SPACE  
**13.7 ha**

## TAURANGA | SPATIAL DISTRIBUTION



PARCELS  
**52%**

Parcels (private land) coverage is approximately 58.7 ha, and accounts for the greatest land use area in the city centre.

Buildings account for approximately 30.1 ha of this area.



CARRIAGEWAY  
**24%**

Public Streets\* account for approximately 26.8ha of land coverage within the city centre perimeter.

Close to 1ha of this total can be attribute to dedicated cycle lanes.

*\* The carriageway assessment is limited to movement traffic lanes only and does not included on-street parking, footpaths and pedestrianised areas.*



PARKING  
**4%**

Public car parking covers approximately 4.1ha, or 4% of the city centre.

On-street parking accounts for 2.2 ha, or 54% of total available parking, while off street parking covers 1.9 ha or 46% of the parking total.



FOOTPATHS  
**8%**

Footpaths account for approximately 9.4 ha or 8% of land coverage in the city centre.

It should be noted that as this calculation spans the area between the parking/ carriageway, and parcel boundaries, a portion of this total will be attributed to grassed areas, not strictly sealed foot paths.

Paths within public spaces are registered in the open space category.



OPEN SPACE  
**12%**

Open Space totals approximately 13.7 ha, or 12% of city centre land coverage. Almost half of this allocation sits within the Tauranga and Wharepai Domains .

The Open Space category also includes soft and hard landscaped areas interfacing with the bay.



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# 04

## TE ARO WELLINGTON

41°28'87.67"S 174°77'70.44"E

**PROJECT AREA: 213.5 ha**



## TE ARO | WELLINGTON | SPATIAL COVERAGE



PARCELS

**130.8 ha**



CARRIAGEWAY

**35.8 ha**



PARKING

**5.0 ha**



FOOTPATHS

**25.7 ha**



OPEN SPACE

**16.2 ha**

## TE ARO | WELLINGTON | SPATIAL DISTRIBUTION



### PARCELS

61%

Parcels (private land) cover approximately 130.8 ha, and account for the largest land coverage in the city centre.

Generally speaking, building coverage on these parcels is dense.



### CARRIAGEWAY

17%

The public street network accounts for approximately 35.8ha of city centre land coverage.

1.5ha of this is attributed to dedicated bus lanes, and 0.8ha is attributed to dedicated cycle lanes.

*\* The carriageway assessment is limited to movement traffic lanes only and does not include on-street parking, footpaths and pedestrianised areas.*



### PARKING

2%

Public car parking covers approximately 5.0ha, or 2% of the city centre.

Of this total area, on-street parking accounts for 46% (2.3ha), with the remaining 54% (2.7ha) being publicly accessible off-street parking.



### FOOTPATHS

12%

Footpaths account for approximately 25.7ha or 8% of land coverage in the city centre.

This assessment is focused on kerb-side footpaths only, and excludes paths within open spaces, such as the waterfront environment (captured within the open space category).



### OPEN SPACE

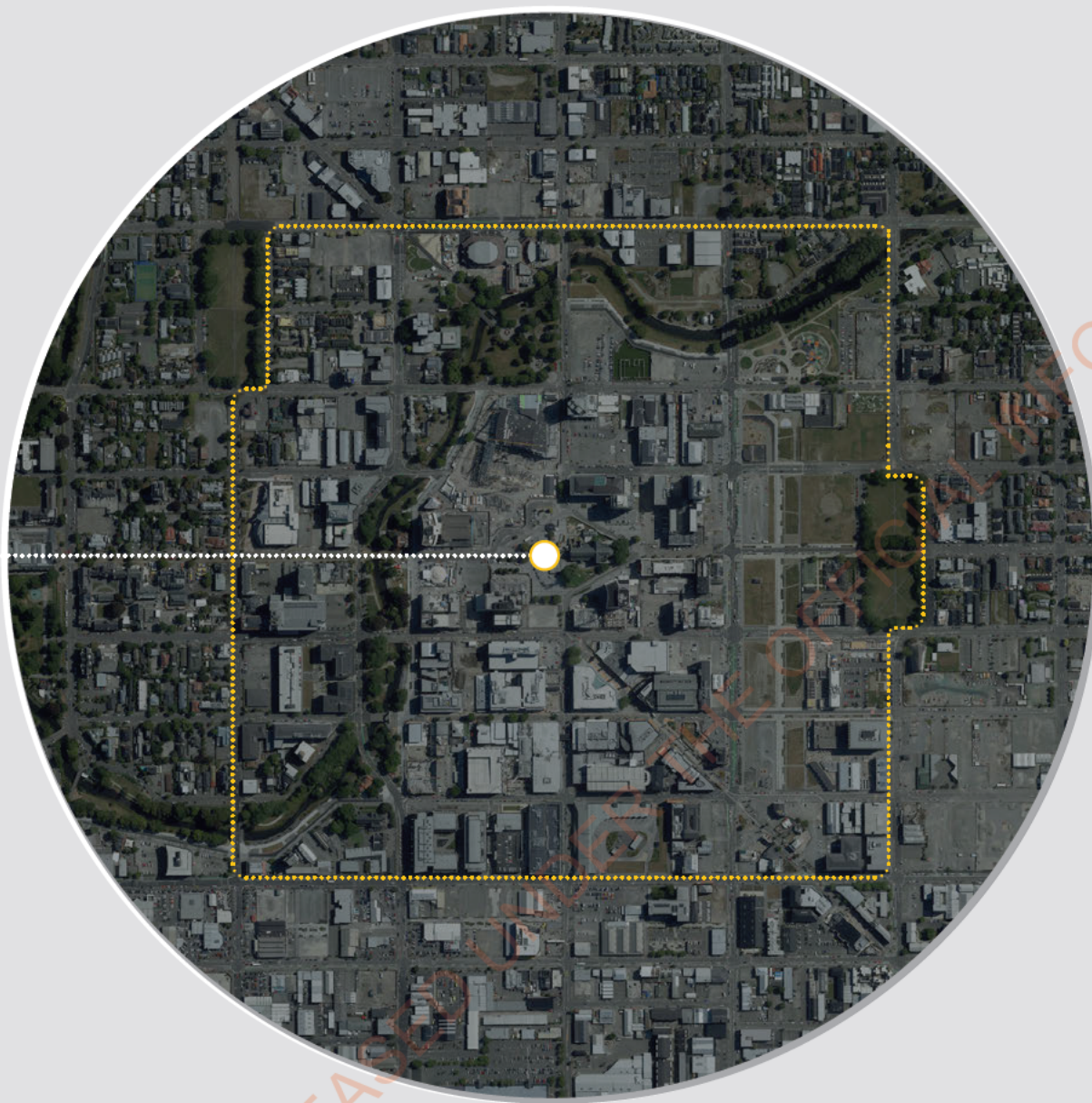
8%

Open Space totals approximately 16.2ha within the city centre.

Much of this can be attributed to the waterfront environment, though pedestrianised areas such as Cuba St have also been included within this category.



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# 05

## ŌTAUTAHI CHRISTCHURCH

43°31'53.17"S 172°38'12.71"E

**PROJECT AREA: 90.3 ha**

## ŌTAUTAHI | CHRISTCHURCH | SPATIAL COVERAGE



PARCELS  
**44.4 ha**



CARRIAGEWAY  
**11.8 ha**



PARKING  
**7.8 ha**



FOOTPATHS  
**6.9 ha**



OPEN SPACE  
**19.3 ha**

# ŌTAUTAHI | CHRISTCHURCH | SPATIAL DISTRIBUTION



**PARCELS**  
**49%**

Parcels (private land) cover approximately 44.4 ha, and account for the greatest land coverage in the city centre.

Of this area, a little over half, or approximately 24.5 ha, is covered by buildings. The remainder is typically vehicle access, parking and circulation areas.



**CARRIAGEWAY**  
**13%**

The public street network accounts for approximately 11.8ha of city centre land coverage.

Dedicated cycle lanes account for approximately 0.3ha and bus lanes 0.1ha.

*\* The carriageway assessment is limited to movement traffic lanes only and does not include on-street parking, footpaths and pedestrianised areas.*



**PARKING**  
**9%**

Public car parking covers approximately 7.8ha, or 9% of the city centre.

Of this total area, on-street parking only accounts for 15%, with the remaining 85% being publicly accessible off-street parking. This off-street parking is often located on sites currently vacant due to earthquake damage.



**FOOTPATHS**  
**8%**

Footpaths account for approximately 6.9ha or 8% of land coverage in the city centre.

This assessment is typically limited to paths within the street environment, and does not include paths within public open spaces such as Latimer or Victoria Squares (these areas have been accounted for within the open space category)



**OPEN SPACE**  
**21%**

Open Space totals approximately 19.3 ha, or 21%. 2 ha of this total is attributed to the Avon River.

The Open Space category includes shared spaces such as Oxford Terrace and Cashel Street as well as the many parks and newly developed open spaces within the defined CBD boundary.