



Te Kāwanatanga o Aotearoa
New Zealand Government

National Policy Statement on Urban Development 2020

May 2022

This National Policy Statement was approved by the Governor-General under section 52(2) of the Resource Management Act 1991 on 20 July 2020, and is published by the Minister for the Environment under section 54 of that Act.

This National Policy Statement replaces the National Policy Statement on Urban Development Capacity 2016.

This version of the National Policy Statement incorporates the following amendments:

1. amendments made by section 77S(1) of the Resource Management Act 1991 (as inserted by the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021)
2. amendments made by the Minister for the Environment under section 53(2) of the Resource Management Act 1991 and notified in the New Zealand Gazette on 11 May 2022 as the National Policy Statement on Urban Development 2020 Amendment No 1.

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Part 1: Preliminary provisions

1.1 Title

- (1) This is the National Policy Statement on Urban Development 2020.

1.2 Commencement

- (1) This National Policy Statement comes into force on 20 August 2020.
- (2) See Part 4, which sets out timeframes for complying with different parts of this National Policy Statement.

1.3 Application

- (1) This National Policy Statement applies to:
 - (a) all local authorities that have all or part of an urban environment within their district or region (ie, tier 1, 2 and 3 local authorities); and
 - (b) planning decisions by any local authority that affect an urban environment.
- (2) However, some objectives, policies, and provisions in Parts 3 and 4 apply only to tier 1, 2, or 3 local authorities.

1.4 Interpretation

- (1) In this National Policy Statement:

accessible car park means a car park designed and marked (for instance, in accordance with the mobility car parking scheme) for use by persons with a disability or with limited mobility

Act means the Resource Management Act 1991

active transport means forms of transport that involve physical exercise, such as walking or cycling, and includes transport that may use a mobility aid such as a wheelchair

additional infrastructure means:

- (a) public open space
- (b) community infrastructure as defined in section 197 of the Local Government Act 2002
- (c) land transport (as defined in the Land Transport Management Act 2003) that is not controlled by local authorities
- (d) social infrastructure, such as schools and healthcare facilities
- (e) a network operated for the purpose of telecommunications (as defined in section 5 of the Telecommunications Act 2001)
- (f) a network operated for the purpose of transmitting or distributing electricity or gas

business land means land that is zoned, or identified in an FDS or similar strategy or plan, for business uses in urban environments, including but not limited to land in the following:

- (a) any industrial zone
- (b) the commercial zone
- (c) the large format retail zone
- (d) any centre zone, to the extent it allows business uses
- (e) the mixed use zone, to the extent it allows business uses
- (f) any special purpose zone, to the extent it allows business uses

centre zone means any of the following zones:

- (a) city centre zone
- (b) metropolitan centre zone
- (c) town centre zone
- (d) local centre zone
- (e) neighbourhood centre zone

commencement date means the date on which this National Policy Statement comes into force (see clause 1.2)

community services means the following:

- (a) community facilities
- (b) educational facilities
- (c) those commercial activities that serve the needs of the community

competitiveness margin means the margin referred to in clause 3.22

decision-maker means any person exercising functions or powers under the Act

development capacity means the capacity of land to be developed for housing or for business use, based on:

- (a) the zoning, objectives, policies, rules, and overlays that apply in the relevant proposed and operative RMA planning documents; and
- (b) the provision of adequate development infrastructure to support the development of land for housing or business use

development infrastructure means the following, to the extent they are controlled by a local authority or council controlled organisation (as defined in section 6 of the Local Government Act 2002):

- (a) network infrastructure for water supply, wastewater, or stormwater
- (b) land transport (as defined in section 5 of the Land Transport Management Act 2003)

FDS means the Future Development Strategy required by subpart 4 of Part 3

feasible means:

- (a) for the short term or medium term, commercially viable to a developer based on the current relationship between costs and revenue

- (b) for the long term, commercially viable to a developer based on the current relationship between costs and revenue, or on any reasonable adjustment to that relationship

HBA means the Housing and Business Development Capacity Assessment required by subpart 5 of Part 3

infrastructure-ready has the meaning in clause 3.4(3)

long term means between 10 and 30 years

long-term plan means a long-term plan (including the infrastructure strategy required to be included in it) adopted by a local authority under section 93 of the Local Government Act 2002

medium term means between 3 and 10 years

nationally significant infrastructure means all of the following:

- (a) State highways
- (b) the national grid electricity transmission network
- (c) renewable electricity generation facilities that connect with the national grid
- (d) the high-pressure gas transmission pipeline network operating in the North Island
- (e) the refinery pipeline between Marsden Point and Wiri
- (f) the New Zealand rail network (including light rail)
- (g) rapid transit services (as defined in this clause)
- (h) any airport (but not its ancillary commercial activities) used for regular air transport services by aeroplanes capable of carrying more than 30 passengers
- (i) the port facilities (but not the facilities of any ancillary commercial activities) of each port company referred to in item 6 of Part A of Schedule 1 of the Civil Defence Emergency Management Act 2002

planned in relation to forms or features of transport, means planned in a regional land transport plan prepared and approved under the Land Transport Management Act 2003

plan-enabled has the meaning in clause 3.4(1)

planning decision means a decision on any of the following:

- (a) a regional policy statement or proposed regional policy statement
- (b) a regional plan or proposed regional plan
- (c) a district plan or proposed district plan
- (d) a resource consent
- (e) a designation
- (f) a heritage order
- (g) a water conservation order
- (h) a change to a plan requested under Part 2 of Schedule 1 of the Act

public transport means any existing or planned service for the carriage of passengers (other than an aeroplane) that is available to the public generally by means of:

- (a) a vehicle designed or adapted to carry more than 12 persons (including the driver); or
- (b) a rail vehicle; or

- (c) a ferry

qualifying matter has the meaning in clause 3.32

rapid transit service means any existing or planned frequent, quick, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic

rapid transit stop means a place where people can enter or exit a rapid transit service, whether existing or planned

RMA planning document means all or any of the following:

- (a) a regional policy statement
- (b) a regional plan
- (c) a district plan

short-medium term means within the next 10 years

short term means within the next 3 years

tier 1 local authority means each local authority listed in column 2 of table 1 in the Appendix, and **tier 1 regional council** and **tier 1 territorial authority** have corresponding meanings

tier 2 local authority means each local authority listed in column 2 of table 2 in the Appendix, and **tier 2 regional council** and **tier 2 territorial authority** have corresponding meanings

tier 3 local authority means a local authority that has all or part of an urban environment within its region or district, but is not a tier 1 or 2 local authority, and **tier 3 regional council** and **tier 3 territorial authority** have corresponding meanings

tier 1 urban environment means an urban environment listed in column 1 of table 1 in the Appendix

tier 2 urban environment means an urban environment listed in column 1 of table 2 in the Appendix

tier 3 urban environment means an urban environment that is not listed in the Appendix

urban environment means any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:

- (a) is, or is intended to be, predominantly urban in character; and
- (b) is, or is intended to be, part of a housing and labour market of at least 10,000 people

well-functioning urban environment has the meaning in Policy 1.

- (2) Terms defined in the Act and used in this National Policy Statement have the meanings in the Act, unless otherwise specified.
- (3) Terms defined in the National Planning Standard issued under section 58E of the Act and used in this National Policy Statement have the meanings in that Standard, unless otherwise specified.
- (4) A reference in this National Policy Statement to a **zone** is:
 - (a) a reference to that zone as described in Standard 8 (Zone Framework Standard) of the National Planning Standard; or

- (b) a reference to the nearest equivalent zone, in relation to local authorities that have not yet implemented the Zone Framework in the National Planning Standard.
- (5) If a local authority is required by this National Policy Statement to make a document publicly available, section 5(3) of the Local Government Act 2002 applies to the requirement as if it was made under that Act.

1.5 Implementation by tier 3 local authorities

- (1) Tier 3 local authorities are strongly encouraged to do the things that tier 1 or 2 local authorities are obliged to do under Parts 2 and 3 of this National Policy Statement, adopting whatever modifications to the National Policy Statement are necessary or helpful to enable them to do so.

1.6 Incorporation by reference

- (1) Clause 2(1) of Schedule 1AA of the Act does not apply to any material incorporated by reference in this National Policy Statement.

Part 2: Objectives and policies

2.1 Objectives

Objective 1: New Zealand has well-functioning urban environments that enable all people and communities to provide for their social, economic, and cultural wellbeing, and for their health and safety, now and into the future.

Objective 2: Planning decisions improve housing affordability by supporting competitive land and development markets.

Objective 3: Regional policy statements and district plans enable more people to live in, and more businesses and community services to be located in, areas of an urban environment in which one or more of the following apply:

- (a) the area is in or near a centre zone or other area with many employment opportunities
- (b) the area is well-serviced by existing or planned public transport
- (c) there is high demand for housing or for business land in the area, relative to other areas within the urban environment.

Objective 4: New Zealand's urban environments, including their amenity values, develop and change over time in response to the diverse and changing needs of people, communities, and future generations.

Objective 5: Planning decisions relating to urban environments, and FDSs, take into account the principles of the Treaty of Waitangi (Te Tiriti o Waitangi).

Objective 6: Local authority decisions on urban development that affect urban environments are:

- (a) integrated with infrastructure planning and funding decisions; and
- (b) strategic over the medium term and long term; and
- (c) responsive, particularly in relation to proposals that would supply significant development capacity.

Objective 7: Local authorities have robust and frequently updated information about their urban environments and use it to inform planning decisions.

Objective 8: New Zealand's urban environments:

- (a) support reductions in greenhouse gas emissions; and
- (b) are resilient to the current and future effects of climate change.

2.2 Policies

Policy 1: Planning decisions contribute to well-functioning urban environments, which are urban environments that, as a minimum:

- (a) have or enable a variety of homes that:
 - (i) meet the needs, in terms of type, price, and location, of different households; and
 - (ii) enable Māori to express their cultural traditions and norms; and

- (b) have or enable a variety of sites that are suitable for different business sectors in terms of location and site size; and
- (c) have good accessibility for all people between housing, jobs, community services, natural spaces, and open spaces, including by way of public or active transport; and
- (d) support, and limit as much as possible adverse impacts on, the competitive operation of land and development markets; and
- (e) support reductions in greenhouse gas emissions; and
- (f) are resilient to the likely current and future effects of climate change.

Policy 2: Tier 1, 2, and 3 local authorities, at all times, provide at least sufficient development capacity to meet expected demand for housing and for business land over the short term, medium term, and long term.

Policy 3: In relation to tier 1 urban environments, regional policy statements and district plans enable:

- (a) in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification; and
- (b) in metropolitan centre zones, building heights and density of urban form to reflect demand for housing and business use in those locations, and in all cases building heights of at least 6 storeys; and
- (c) building heights of at least 6 storeys within at least a walkable catchment of the following:
 - (i) existing and planned rapid transit stops
 - (ii) the edge of city centre zones
 - (iii) the edge of metropolitan centre zones; and
- (d) within and adjacent to neighbourhood centre zones, local centre zones, and town centre zones (or equivalent), building heights and densities of urban form commensurate with the level of commercial activity and community services.

Policy 4: Regional policy statements and district plans applying to tier 1 urban environments modify the relevant building height or density requirements under Policy 3 only to the extent necessary (as specified in subpart 6) to accommodate a qualifying matter in that area.

Policy 5: Regional policy statements and district plans applying to tier 2 and 3 urban environments enable heights and density of urban form commensurate with the greater of:

- (a) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or
- (b) relative demand for housing and business use in that location.

Policy 6: When making planning decisions that affect urban environments, decision-makers have particular regard to the following matters:

- (a) the planned urban built form anticipated by those RMA planning documents that have given effect to this National Policy Statement
- (b) that the planned urban built form in those RMA planning documents may involve significant changes to an area, and those changes:

- (i) may detract from amenity values appreciated by some people but improve amenity values appreciated by other people, communities, and future generations, including by providing increased and varied housing densities and types; and
- (ii) are not, of themselves, an adverse effect
- (c) the benefits of urban development that are consistent with well-functioning urban environments (as described in Policy 1)
- (d) any relevant contribution that will be made to meeting the requirements of this National Policy Statement to provide or realise development capacity
- (e) the likely current and future effects of climate change.

Policy 7: Tier 1 and 2 local authorities set housing bottom lines for the short-medium term and the long term in their regional policy statements and district plans.

Policy 8: Local authority decisions affecting urban environments are responsive to plan changes that would add significantly to development capacity and contribute to well-functioning urban environments, even if the development capacity is:

- (a) unanticipated by RMA planning documents; or
- (b) out-of-sequence with planned land release.

Policy 9: Local authorities, in taking account of the principles of the Treaty of Waitangi (Te Tiriti o Waitangi) in relation to urban environments, must:

- (a) involve hapū and iwi in the preparation of RMA planning documents and any FDSs by undertaking effective consultation that is early, meaningful and, as far as practicable, in accordance with tikanga Māori; and
- (b) when preparing RMA planning documents and FDSs, take into account the values and aspirations of hapū and iwi for urban development; and
- (c) provide opportunities in appropriate circumstances for Māori involvement in decision-making on resource consents, designations, heritage orders, and water conservation orders, including in relation to sites of significance to Māori and issues of cultural significance; and
- (d) operate in a way that is consistent with iwi participation legislation.

Policy 10: Tier 1, 2, and 3 local authorities:

- (a) that share jurisdiction over urban environments work together when implementing this National Policy Statement; and
- (b) engage with providers of development infrastructure and additional infrastructure to achieve integrated land use and infrastructure planning; and
- (c) engage with the development sector to identify significant opportunities for urban development.

Policy 11: In relation to car parking:

- (a) the district plans of tier 1, 2, and 3 territorial authorities do not set minimum car parking rate requirements, other than for accessible car parks; and

- (b) tier 1, 2, and 3 local authorities are strongly encouraged to manage effects associated with the supply and demand of car parking through comprehensive parking management plans.

Part 3: Implementation

3.1 Outline of part

- (1) This part sets out a non-exhaustive list of things that local authorities must do to give effect to the objectives and policies of this National Policy Statement, but nothing in this part limits the general obligation under the Act to give effect to those objectives and policies.

Subpart 1 – Providing development capacity

3.2 Sufficient development capacity for housing

- (1) Every tier 1, 2, and 3 local authority must provide at least sufficient development capacity in its region or district to meet expected demand for housing:
 - (a) in existing and new urban areas; and
 - (b) for both standalone dwellings and attached dwellings; and
 - (c) in the short term, medium term, and long term.
- (2) In order to be **sufficient** to meet expected demand for housing, the development capacity must be:
 - (a) plan-enabled (*see* clause 3.4(1)); and
 - (b) infrastructure-ready (*see* clause 3.4(3)); and
 - (c) feasible and reasonably expected to be realised (*see* clause 3.26); and
 - (d) for tier 1 and 2 local authorities only, meet the expected demand plus the appropriate competitiveness margin (*see* clause 3.22).

3.3 Sufficient development capacity for business land

- (1) Every tier 1, 2, and 3 local authority must provide at least sufficient development capacity in its region or district to meet the expected demand for business land:
 - (a) from different business sectors; and
 - (b) in the short term, medium term, and long term.
- (2) In order to be **sufficient** to meet expected demand for business land, the development capacity provided must be:
 - (a) plan-enabled (*see* clause 3.4(1)); and
 - (b) infrastructure-ready (*see* clause 3.4(3)); and
 - (c) suitable (as described in clause 3.29(2)) to meet the demands of different business sectors (as described in clause 3.28(3)); and
 - (d) for tier 1 and 2 local authorities only, meet the expected demand plus the appropriate competitiveness margin (*see* clause 3.22).

3.4 Meaning of plan-enabled and infrastructure-ready

- (1) Development capacity is **plan-enabled** for housing or for business land if:
 - (a) in relation to the short term, it is on land that is zoned for housing or for business use (as applicable) in an operative district plan
 - (b) in relation to the medium term, either paragraph (a) applies, or it is on land that is zoned for housing or for business use (as applicable) in a proposed district plan
 - (c) in relation to the long term, either paragraph (b) applies, or it is on land identified by the local authority for future urban use or urban intensification in an FDS or, if the local authority is not required to have an FDS, any other relevant plan or strategy.
- (2) For the purpose of subclause (1), land is **zoned** for housing or for business use (as applicable) only if the housing or business use is a permitted, controlled, or restricted discretionary activity on that land.
- (3) Development capacity is **infrastructure-ready** if:
 - (d) in relation to the short term, there is adequate existing development infrastructure to support the development of the land
 - (e) in relation to the medium term, either paragraph (a) applies, or funding for adequate development infrastructure to support development of the land is identified in a long-term plan
 - (f) in relation to the long term, either paragraph (b) applies, or the development infrastructure to support the development capacity is identified in the local authority's infrastructure strategy (as required as part of its long-term plan).

3.5 Availability of additional infrastructure

- (1) Local authorities must be satisfied that the additional infrastructure to service the development capacity is likely to be available.

3.6 Housing bottom lines for tier 1 and 2 urban environments

- (1) The purpose of the housing bottom lines required by this clause is to clearly state the amount of development capacity that is sufficient to meet expected housing demand plus the appropriate competitiveness margin in the region and each constituent district of a tier 1 or tier 2 urban environment.
- (2) For each tier 1 or tier 2 urban environment, as soon as practicable after an HBA is made publicly available (see clause 3.19(1)):
 - (a) the relevant regional council must insert into its regional policy statement:
 - (i) a housing bottom line for the short-medium term; and
 - (ii) a housing bottom line for the long term; and
 - (b) every relevant territorial authority must insert into its district plan:
 - (i) a housing bottom line for the short-medium term that is the proportion of the housing bottom line for the short-medium term (as set out in the relevant regional policy statement) that is attributable to the district of the territorial authority; and

- (ii) a housing bottom line for the long term that is the proportion of the housing bottom line for the long term (as set out in the relevant regional policy statement) that is attributable to the district of the territorial authority.
- (3) The housing bottom lines must be based on information in the most recent publicly available HBA for the urban environment and are:
 - (a) for the short-medium term, the sum of:
 - (i) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the short term; and
 - (ii) the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the medium term; and
 - (b) for the long term, the amount of feasible, reasonably expected to be realised development capacity that must be enabled to meet demand, along with the competitiveness margin, for the long term.
- (4) The insertion of bottom lines must be done without using a process in Schedule 1 of the Act, but any changes to RMA planning documents required to give effect to the bottom lines must be made using a Schedule 1 process.

3.7 When there is insufficient development capacity

- (1) If a local authority determines that there is insufficient development capacity (as described in clauses 3.2 and 3.3) over the short term, medium term, or long term, it must:
 - (a) immediately notify the Minister for the Environment; and
 - (b) if the insufficiency is wholly or partly a result of RMA planning documents, change those documents to increase development capacity for housing or business land (as applicable) as soon as practicable, and update any other relevant plan or strategy (including any FDS, as required by subpart 4); and
 - (c) consider other options for:
 - (i) increasing development capacity; and
 - (ii) otherwise enabling development.

Subpart 2 – Responsive planning

3.8 Unanticipated or out-of-sequence developments

- (1) This clause applies to a plan change that provides significant development capacity that is not otherwise enabled in a plan or is not in sequence with planned land release.
- (2) Every local authority must have particular regard to the development capacity provided by the plan change if that development capacity:
 - (a) would contribute to a well-functioning urban environment; and
 - (b) is well-connected along transport corridors; and
 - (c) meets the criteria set under subclause (3).

- (3) Every regional council must include criteria in its regional policy statement for determining what plan changes will be treated, for the purpose of implementing Policy 8, as adding significantly to development capacity.

Subpart 3 – Evidence-based decision-making

3.9 Monitoring requirements

- (1) Every tier 1, 2, and 3 local authority must monitor, quarterly, the following in relation to each urban environment in their region or district:
 - (a) the demand for dwellings
 - (b) the supply of dwellings
 - (c) prices of, and rents for, dwellings
 - (d) housing affordability
 - (e) the proportion of housing development capacity that has been realised:
 - (i) in previously urbanised areas (such as through infill housing or redevelopment); and
 - (ii) in previously undeveloped (ie, greenfield) areas
 - (f) available data on business land.
- (2) In relation to tier 1 urban environments, tier 1 local authorities must monitor the proportion of development capacity that has been realised in each zone identified in clause 3.37(1) (ie, each zone with development outcomes that are monitored).
- (3) Every tier 1, 2, and 3 local authority must publish the results of its monitoring at least annually.
- (4) The monitoring required by this clause must relate to the relevant urban environments, but may apply more widely (such as, for example, where the relevant data is available only on a region or district-wide basis).
- (5) If more than one tier 1 or tier 2 local authority has jurisdiction over a tier 1 or tier 2 urban environment, those local authorities are jointly responsible for doing the monitoring required by this subpart.

3.10 Assessing demand and development capacity

- (1) Every local authority must assess the demand for housing and for business land in urban environments, and the development capacity that is sufficient (as described in clauses 3.2 and 3.3) to meet that demand in its region or district in the short term, medium term, and long term.
- (2) Tier 1 and tier 2 local authorities comply with subclause (1) in relation to tier 1 and tier 2 urban environments by preparing and publishing an HBA as required by subpart 5.

3.11 Using evidence and analysis

- (1) When making plans, or when changing plans in ways that affect the development of urban environments, local authorities must:
 - (a) clearly identify the resource management issues being managed; and
 - (b) use evidence, particularly any relevant HBAs, about land and development markets, and the results of the monitoring required by this National Policy Statement, to assess the impact of different regulatory and non-regulatory options for urban development and their contribution to:
 - (iii) achieving well-functioning urban environments; and
 - (iv) meeting the requirements to provide at least sufficient development capacity.
- (2) Local authorities must include the matters referred to in subclause (1)(a) and (b) in relevant evaluation reports and further evaluation reports prepared under sections 32 and 32AA of the Act.

Subpart 4 – Future Development Strategy (FDS)

3.12 Preparation of FDS

- (1) Every tier 1 and tier 2 local authority must prepare, and make publicly available an FDS for the tier 1 or 2 urban environment:
 - (a) every 6 years; and
 - (b) in time to inform, or at the same time as, preparation of the next long-term plan of each relevant local authority.
- (2) The FDS must apply, at a minimum, to the relevant tier 1 and 2 urban environments of the local authority, but may apply to any wider area.
- (3) If more than one tier 1 or tier 2 local authority has jurisdiction over a tier 1 or tier 2 urban environment, those local authorities are jointly responsible for preparing an FDS as required by this subpart.
- (4) If a local authority that is not a tier 1 or 2 local authority chooses to prepare an FDS, either alone or with any other local authority, this subpart applies as if it were a tier 1 or 2 local authority, except that any reference to an HBA may be read as a reference to any other document that contains broadly equivalent information.
- (5) An FDS may be prepared and published as a stand-alone document, or be treated as part of any other document (such as a spatial plan).

3.13 Purpose and content of FDS

- (1) The purpose of an FDS is:
 - (a) to promote long-term strategic planning by setting out how a local authority intends to:

- (i) achieve well-functioning urban environments in its existing and future urban areas; and
 - (ii) provide at least sufficient development capacity, as required by clauses 3.2 and 3.3, over the next 30 years to meet expected demand; and
 - (b) assist the integration of planning decisions under the Act with infrastructure planning and funding decisions.
- (2) Every FDS must spatially identify:
- (a) the broad locations in which development capacity will be provided over the long term, in both existing and future urban areas, to meet the requirements of clauses 3.2 and 3.3; and
 - (b) the development infrastructure and additional infrastructure required to support or service that development capacity, along with the general location of the corridors and other sites required to provide it; and
 - (c) any constraints on development.
- (3) Every FDS must include a clear statement of hapū and iwi values and aspirations for urban development.

3.14 What FDSs are informed by

- (1) Every FDS must be informed by the following:
- (a) the most recent applicable HBA
 - (b) a consideration of the advantages and disadvantages of different spatial scenarios for achieving the purpose of the FDS
 - (c) the relevant long-term plan and its infrastructure strategy, and any other relevant strategies and plans
 - (d) Māori, and in particular tangata whenua, values and aspirations for urban development
 - (e) feedback received through the consultation and engagement required by clause 3.15
 - (f) every other National Policy Statement under the Act, including the New Zealand Coastal Policy Statement
 - (g) any other relevant national policy required by, or issued under, legislation.

3.15 Consultation and engagement

- (1) When preparing or updating an FDS local authorities must use the special consultative procedure in section 83 of the Local Government Act 2002.
- (2) In order to prepare the draft required by that procedure, local authorities must engage with the following:
- (a) other local authorities with whom there are significant connections relating to infrastructure or community
 - (b) relevant central government agencies

- (c) relevant hapū and iwi
- (d) providers of additional infrastructure
- (e) relevant providers of nationally significant infrastructure
- (f) the development sector (to identify significant future development opportunities and infrastructure requirements).

3.16 Review of FDS

- (1) Every tier 1 and tier 2 local authority must regularly review its FDS to determine whether it needs updating, and the review must be done in time to inform the next long-term plan (ie, every 3 years).
- (2) The review must:
 - (a) engage with the development sector and landowners to identify significant future development opportunities and associated infrastructure requirements; and
 - (b) consider the most recent HBA.
- (3) If, following the review, the local authority decides that the FDS does not need updating, that decision and the reasons for it must be publicly notified.
- (4) If, following the review, the local authority decides that the FDS is to be updated, the local authority must follow the same processes for consultation as apply to the preparation of an FDS, but only in relation to the aspects proposed to be updated.

3.17 Effect of FDS

- (1) Every tier 1 and tier 2 local authority:
 - (a) must have regard to the relevant FDS when preparing or changing RMA planning documents; and
 - (b) is strongly encouraged to use the relevant FDS to inform:
 - (i) long-term plans, and particularly infrastructure strategies; and
 - (ii) regional land transport plans prepared by a local authority under Part 2 of the Land Transport Management Act 2003; and
 - (iii) any other relevant strategies and plans.

3.18 FDS implementation plan

- (1) Every tier 1 and tier 2 local authority must prepare and implement an implementation plan for its FDS.
- (2) If a tier 1 or tier 2 local authority consists of more than one local authority, the implementation plan must be prepared as a single document by all the local authorities that jointly prepared the FDS.
- (3) Every implementation plan, or part of an implementation plan, must be updated annually.

- (4) An implementation plan or part of an implementation plan:
 - (a) is not part of the FDS to which it relates; and
 - (b) does not need to be prepared using the consultation and engagement requirements set out in clause 3.15; and
 - (c) does not have the effect of an FDS as described in clause 3.17.

Subpart 5 – Housing and Business Development Capacity Assessment (HBA)

3.19 Obligation to prepare HBA

- (1) Every tier 1 and tier 2 local authority must prepare, and make publicly available, an HBA for its tier 1 or tier 2 urban environments every 3 years, in time to inform the relevant local authority's next long-term plan.
- (2) The HBA must apply, at a minimum, to the relevant tier 1 or tier 2 urban environments of the local authority (ie, must assess demand and capacity within the boundaries of those urban environments), but may apply to any wider area.
- (3) If more than one tier 1 or tier 2 local authority has jurisdiction over a tier 1 or tier 2 urban environment, those local authorities are jointly responsible for preparing an HBA as required by this subpart.

3.20 Purpose of HBA

- (1) The purpose of an HBA is to:
 - (a) provide information on the demand and supply of housing and of business land in the relevant tier 1 or tier 2 urban environment, and the impact of planning and infrastructure decisions of the relevant local authorities on that demand and supply; and
 - (b) inform RMA planning documents, FDSs, and long-term plans; and
 - (c) quantify the development capacity that is sufficient to meet expected demand for housing and for business land in the short term, medium term, and long term.

3.21 Involving development sector and others

- (1) In preparing an HBA, every tier 1 and tier 2 local authority must seek information and comment from:
 - (a) expert or experienced people in the development sector; and
 - (b) providers of development infrastructure and additional infrastructure; and
 - (c) anyone else who has information that may materially affect the calculation of the development capacity.

3.22 Competitiveness margin

- (1) A competitiveness margin is a margin of development capacity, over and above the expected demand that tier 1 and tier 2 local authorities are required to provide, that is required in order to support choice and competitiveness in housing and business land markets.
- (2) The competitiveness margins for both housing and business land are:
 - (a) for the short term, 20%
 - (b) for the medium term, 20%
 - (c) for the long term, 15%.

Housing

3.23 Analysis of housing market and impact of planning

- (1) Every HBA must include analysis of how the relevant local authority's planning decisions and provision of infrastructure affects the affordability and competitiveness of the local housing market.
- (2) The analysis must include an assessment of how well the current and likely future demands for housing by Māori and different groups in the community (such as older people, renters, homeowners, low-income households, visitors, and seasonal workers) are met, including the demand for different types and forms of housing (such as for lower-cost housing, papakāinga, and seasonal worker or student accommodation).
- (3) The analysis must be informed by:
 - (a) market indicators, including:
 - (i) indicators of housing affordability, housing demand, and housing supply; and
 - (ii) information about household incomes, housing prices, and rents; and
 - (b) price efficiency indicators.

3.24 Housing demand assessment

- (1) Every HBA must estimate, for the short term, medium term, and long term, the demand for additional housing in the region and each constituent district of the tier 1 or tier 2 urban environment:
 - (a) in different locations; and
 - (b) in terms of dwelling types.
- (2) Local authorities may identify locations in any way they choose.
- (3) Local authorities may identify the types of dwellings in any way they chose but must, at a minimum, distinguish between standalone dwellings and attached dwellings.
- (4) The demand for housing must be expressed in terms of numbers of dwellings.

- (5) Every HBA must:
- (a) set out a range of projections of demand for housing in the short term, medium term, and long term; and
 - (b) identify which of the projections are the most likely in each of the short term, medium term, and long term; and
 - (c) set out the assumptions underpinning the different projections and the reason for selecting the most likely; and
 - (d) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.

3.25 Housing development capacity assessment

- (1) Every HBA must quantify, for the short term, medium term, and long term, the housing development capacity for housing in the region and each constituent district of the tier 1 or tier 2 urban environment that is:
- (a) plan-enabled; and
 - (b) plan-enabled and infrastructure-ready; and
 - (c) plan-enabled, infrastructure-ready, and feasible and reasonably expected to be realised.
- (2) The development capacity must be quantified as numbers of dwellings:
- (a) in different locations, including in existing and new urban areas; and
 - (b) of different types, including standalone dwellings and attached dwellings.

3.26 Estimating what is feasible and reasonably expected to be realised

- (1) For the purpose of estimating the amount of development capacity that is reasonably expected to be realised, or that is both feasible and reasonably expected to be realised, local authorities:
- (a) may use any appropriate method; but
 - (b) must outline and justify the methods, inputs, and assumptions used to arrive at the estimates.
- (2) The following are examples of the kind of methods that a tier 1 local authority could use to assess the amount of development capacity that is feasible and reasonably expected to be realised:
- (a) separately estimate the number of feasible dwellings (using a feasibility model) and the number of dwellings that can reasonably be expected to be realised (using building consents data on the number of sites and extent of allowed capacity that has been previously developed), for the short, medium and long term; compare the numbers of dwellings estimated by each method; then pick the lower of the numbers in each time period, to represent the amount of development capacity that is feasible and reasonably expected to be realised

- (b) estimate the number of feasible dwellings or sites, and then assess the proportion of these that can reasonably be expected to be developed in the short, medium and long term, using information about landowner and developer intentions
 - (c) integrate information about past development trends and future landowner and developer intentions into the feasibility model, which could mean modifying assumptions about densities, heights, and timing of development.
- (3) The following is an example of the kind of methods that a tier 2 local authority could use to assess the amount of development capacity that is feasible and reasonably expected to be realised:
- (a) assess the number of dwellings that can reasonably be expected to be developed (using building consents data on the number of sites and extent of allowed capacity that has been developed previously), for the short, medium and long term; and
 - (b) then seek advice from the development sector about what factors affect the feasibility of development.
- (4) Different methods may be appropriate when assessing the development capacity that is reasonably expected to be realised in different circumstances, such as:
- (a) in existing, as opposed to new, urban areas; and
 - (b) for stand-alone, as opposed to attached, dwellings.

3.27 Assessment of sufficient development capacity for housing

- (1) Every HBA must clearly identify, for the short term, medium term, and long term, where there is sufficient development capacity to meet demand for housing in the region and each constituent district of the tier 1 or tier 2 urban environment.
- (2) The requirements of subclause (1) must be based on a comparison of:
 - (a) the demand for housing referred to in clause 3.24 plus the appropriate competitiveness margin; and
 - (b) the development capacity identified under clause 3.25.
- (3) If there is any insufficiency, the HBA must identify where and when this will occur and analyse the extent to which RMA planning documents, a lack of development infrastructure, or both, cause or contribute to the insufficiency.

Business land

3.28 Business land demand assessment

- (1) Every HBA must estimate, for the short term, medium term, and long term, the demand from each business sector for additional business land in the region and each constituent district of the tier 1 or tier 2 urban environment.
- (2) The demand must be expressed in hectares or floor areas.

- (3) For the purpose of this clause, a local authority may identify business sectors in any way it chooses but must, as a minimum, distinguish between sectors that would use land zoned for commercial, retail, or industrial uses.
- (4) The HBA for a tier 1 urban environment must:
 - (a) set out a range of projections of demand for business land by business sector, for the short term, medium term, and long term; and
 - (b) identify which of the projections is the most likely in each of the short term, medium term, and long term; and
 - (c) set out the assumptions underpinning the different projections and the reason for selecting which is the most likely; and
 - (d) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.
- (5) The HBA for a tier 2 urban environment must:
 - (a) set out the most likely projection of demand for business land by business sector in the short term, medium term, and long term; and
 - (b) set out the assumptions underpinning that projection; and
 - (c) if those assumptions involve a high level of uncertainty, the nature and potential effects of that uncertainty.

3.29 Business land development capacity assessment

- (1) Every HBA must estimate the following, for the short term, medium term, and long term, for the region and each constituent district of the tier 1 or tier 2 urban environment:
 - (a) the development capacity (in terms of hectares or floor areas) to meet expected demand for business land for each business sector, plus the appropriate competitiveness margin; and
 - (b) of that development capacity, the development capacity that is:
 - (i) plan-enabled; and
 - (ii) plan-enabled and infrastructure-ready; and
 - (iii) plan-enabled, infrastructure-ready, and suitable for each business sector.
- (2) A local authority may define what it means for development capacity to be “suitable” in any way it chooses, but suitability must, at a minimum, include suitability in terms of location and site size.

3.30 Assessment of sufficient development capacity for business land

- (1) Every HBA must clearly identify, for the short term, medium term, and long term, whether there is sufficient development capacity to meet demand for business land in the region and each constituent district of the tier 1 or tier 2 urban environment.

- (2) The requirements of subclause (1) must be based on a comparison of:
 - (a) the demand for business land referred to in clause 3.28 plus the appropriate competitiveness margin; and
 - (b) the development capacity identified under clause 3.29.
- (3) If there is any insufficiency, the HBA must identify where and when this will occur and analyse the extent to which RMA planning documents, a lack of development infrastructure, or both, cause or contribute to the insufficiency.

Subpart 6 – Intensification in tier 1 urban environments

3.31 Tier 1 territorial authorities implementing intensification policies

- (1) Every tier 1 territorial authority must identify, by location, the building heights and densities required by Policy 3.
- (2) If the territorial authority considers that it is necessary to modify the building height or densities in order to provide for a qualifying matter (as permitted under Policy 4), it must:
 - (a) identify, by location, where the qualifying matter applies; and
 - (b) specify the alternate building heights and densities proposed for those areas.
- (3) The territorial authority must make the information required by subclauses (1) and (2) publicly available at the same time as it notifies any plan change or proposed plan change to give effect to Policy 3.

3.32 Qualifying matters

- (1) In this National Policy Statement, **qualifying matter** means any of the following:
 - (a) a matter of national importance that decision-makers are required to recognise and provide for under section 6 of the Act
 - (b) a matter required in order to give effect to any other National Policy Statement, including the New Zealand Coastal Policy Statement
 - (c) any matter required for the purpose of ensuring the safe or efficient operation of nationally significant infrastructure
 - (d) open space provided for public use, but only in relation to the land that is open space
 - (e) an area subject to a designation or heritage order, but only in relation to the land that is subject to the designation or heritage order
 - (f) a matter necessary to implement, or ensure consistency with, iwi participation legislation
 - (g) the requirement to provide sufficient business land suitable for low density uses to meet expected demand under this National Policy Statement
 - (h) any other matter that makes higher density development as directed by Policy 3 inappropriate in an area, but only if the requirements of clause 3.33(3) are met.

3.33 Requirements if qualifying matter applies

- (1) This clause applies if a territorial authority is amending its district plan and intends to rely on Policy 4 to justify a modification to the direction in Policy 3 in relation to a specific area.
- (2) The evaluation report prepared under section 32 of the Act in relation to the proposed amendment must:
 - (a) demonstrate why the territorial authority considers that:
 - (i) the area is subject to a qualifying matter; and
 - (ii) the qualifying matter is incompatible with the level of development directed by Policy 3 for that area; and
 - (b) assess the impact that limiting development capacity, building height or density (as relevant) will have on the provision of development capacity; and
 - (c) assess the costs and broader impacts of imposing those limits.
- (3) A matter is not a qualifying matter under clause 3.32(1)(h) in relation to an area unless the evaluation report also:
 - (a) identifies the specific characteristic that makes the level of development directed by Policy 3 inappropriate in the area, and justifies why that is inappropriate in light of the national significance of urban development and the objectives of this National Policy Statement; and
 - (b) includes a site-specific analysis that:
 - (i) identifies the site to which the matter relates; and
 - (ii) evaluates the specific characteristics on a site-specific basis to determine the spatial extent where intensification needs to be compatible with the specific matter; and
 - (iii) evaluates an appropriate range of options to achieve the greatest heights and densities directed by Policy 3, while managing the specific characteristics.

3.34 Effects on consideration of resource consents

- (1) Nothing in Policies 3 or 4 or this subpart precludes the consideration (under section 104 of the Act) of any actual or potential effects on the environment associated with building heights.

Subpart 7 – Development outcomes for zones

3.35 Development outcomes for zones

- (1) Every tier 1, 2 or 3 territorial authority must ensure that:
 - (a) the objectives for every zone in an urban environment in its district describe the development outcomes intended for the zone over the life of the plan and beyond; and

- (b) the policies and rules in its district plan are individually and cumulatively consistent with the development outcomes described in the objectives for each zone.

3.36 Development outcomes consistent with intensification policies

- (1) Every tier 1 territorial authority must ensure that the development outcomes for zones in its tier 1 urban environments are consistent with the outcomes required by Policy 3.

3.37 Monitoring development outcomes

- (1) Every tier 1 territorial authority must monitor the extent to which development is occurring in each of the following zones as anticipated by the development outcomes included in the objectives for the zone:
 - (a) city centre zones
 - (b) metropolitan centre zones
 - (c) town centre zones
 - (d) mixed use zones
 - (e) high density residential zones
 - (f) medium density residential zones
 - (g) general residential zones.
- (2) If monitoring under this clause indicates that development outcomes are not being realised, the territorial authority must, as soon as practicable:
 - (a) undertake an assessment to identify whether provisions of the district plan (individually and cumulatively), or any other factors (and if so, what factors), or both, are contributing to the failure to realise development outcomes; and
 - (b) give public notice (as defined in the Act) of the results of the assessment.
- (3) If the assessment indicates that provisions of a district plan are contributing to the failure to realise development outcomes, the territorial authority must change its district plan to address the deficiency.
- (4) If the assessment indicates that other factors are contributing to the failure to realise development outcomes, the territorial authority must consider alternative methods to improve the rate of realisation (such as the use of incentives for site amalgamation).
- (5) Any plan change required under subclause (3) must be notified as soon as practicable, and no later than 12 months after the assessment is publicly notified.

Subpart 8 – Car parking

3.38 Car parking

- (1) If the district plan of a tier 1, 2, or 3 territorial authority contains objectives, policies, rules, or assessment criteria that have the effect of requiring a minimum number of car parks to be provided for a particular development, land use, or activity, the territorial authority must change its district plan to remove that effect, other than in respect of accessible car parks.

- (2) Territorial authorities must make any changes required by subclause (1) without using a process in Schedule 1 of the Act.
- (3) Nothing in this National Policy Statement prevents a district plan including objectives, policies, rules, or assessment criteria:
 - (a) requiring a minimum number of accessible car parks to be provided for any activity; or
 - (b) relating to parking dimensions or manoeuvring standards to apply if:
 - (i) a developer chooses to supply car parks; or
 - (ii) when accessible car parks are required.

Part 4: Timing

4.1 Timeframes for implementation

- (1) Every tier 1, 2, and 3 local authority must amend its regional policy statement or district plan to give effect to the provisions of this National Policy Statement as soon as practicable.
- (2) In addition, local authorities must comply with specific policies of this National Policy Statement in accordance with the following table:

Local authority	Subject	National Policy Statement provisions	By when
Tier 1 only	Intensification	Policies 3 and 4 (see Part 3 subpart 6)	Proposed plan or plan change notified no later than 2 years after the commencement date
Tier 2 only (other than a tier 2 territorial authority required by section 80F of the Act to prepare an IPI)	Intensification	Policy 5	Proposed plan or plan change notified no later than 2 years after the commencement date
Tiers 1 and 2	First FDS made publicly available after the commencement date	Policy 2 (see Part 3 subpart 4)	In time to inform the 2024 long-term plan
Tiers 1 and 2	HBA so far as it relates to housing	Policy 2 (see Part 3 subpart 5)	By 31 July 2021
Tiers 1 and 2	HBA relating to both housing and business land	Policy 2 (see Part 3 subpart 5)	In time to inform the 2024 long-term plan
Tiers 1, 2, and 3	Car parking	Policy 11(a) (see clause 3.38)	No later than 18 months after the commencement date

Appendix: Tier 1 and tier 2 urban environments and local authorities

Table 1

Tier 1 urban environment	Tier 1 local authorities
Auckland	Auckland Council
Hamilton	Waikato Regional Council, Hamilton City Council, Waikato District Council, Waipā District Council
Tauranga	Bay of Plenty Regional Council, Tauranga City Council, Western Bay of Plenty District Council
Wellington	Wellington Regional Council, Wellington City Council, Porirua City Council, Hutt City Council, Upper Hutt City Council, Kāpiti Coast District Council
Christchurch	Canterbury Regional Council, Christchurch City Council, Selwyn District Council, Waimakariri District Council

Table 2

Tier 2 urban environment	Tier 2 local authorities
Whangārei	Northland Regional Council, Whangarei District Council
Rotorua	Bay of Plenty Regional Council, Rotorua District Council
New Plymouth	Taranaki Regional Council, New Plymouth District Council
Napier Hastings	Hawke's Bay Regional Council, Napier City Council, Hastings District Council
Palmerston North	Manawatū-Whanganui Regional Council, Palmerston North City Council
Nelson Tasman	Nelson City Council, Tasman District Council
Queenstown	Otago Regional Council, Queenstown Lakes District Council
Dunedin	Otago Regional Council, Dunedin City Council

Movement and Place Network Classification

Detailed Design

March 2021

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Introduction

One Network Framework – an evolution of the One Network Road Classification

The One Network Framework is an evolution of the One Network Road Classification and has been designed to take a more human-centric approach to classifying our road and street network. It is part of a national response to ensure delivery of a safe transport system that protects and prioritises human life and is particularly needed in our urban areas where communities are striving to create great places to live, work and play. The framework also seeks to bring more distinction to both our urban and rural networks by introducing a stronger multi-modal focus that highlights the strategic importance of each mode in achieving the overall objective of moving people and goods efficiently and effectively.

The One Network Framework provides a **common language** to describe the different functions of roads and streets in relation to both the movement of people and goods and as destinations in their own right, the social spaces which streetscapes provide to our community.

A single classification framework helps us all to understand and determine a future view of how we want our roads and streets to perform and provides the mechanism to have **richer conversations** about competing demands, strategic objectives and potential investment.

The One Network Framework is not designed to provide transport solutions but rather to set the context for nationally consistent conversations. It helps to establish the *function* of a road or a street, and while it can inform design or investment conversations, does not seek to determine the *form* of a road or street. Other guidance is available for that purpose.

Why evolve?

The One Network Road Classification (ONRC) was initiated through recommendations from a 2012 government taskforce to “improve road maintenance investment through level of service differentiation”. The resulting national classification system – the ONRC – has been a giant leap forward in terms of benchmarking investment in asset management, and providing a nationally consistent framework. The benefits of the framework have been numerous, and it has become embedded in a number of national policies and systems. The national application of the ONRC has been world leading and has meant it can be used as the basis for a wide range of decision-making.

Following on from these initial benefits, the evolution of the ONRC into the One Network Framework broadens its success further and ensures it is fit for purpose in more complex urban environments, where there are a number of competing demands on limited road and street space, and a range of modes to be accommodated. This work also brings together and embeds the success of Network Operating Frameworks, which have been utilised in urban areas around the country, but are often based on a slightly different approach to road network classification.

Finally, the evolution of the ONRC brings more granularity to the way our rural networks are classified, through better differentiating freight routes from general traffic routes and reflecting the specific context of rural roads.

By evolving ONRC to account for these extended needs, the framework is strengthened into something that can be used *across* transport and land use disciplines, increasing its relevance.

The One Network Framework provides a common language that can assist in linking strategies and policies together and support better, more holistic, decision-making. This common language also offers a mechanism to translate local movement and place frameworks into a national framework for more aligned investment conversations.

What's in it for you?:

The benefits of the framework differ depending on what transport or land use discipline you work in, and whether you work predominantly in **rural** or **urban** context settings.

For **rural** areas, particularly in relation to asset management, very little may change. The ONRC classes will be mapped by default to represent the 'General Traffic' and 'Freight' classifications. So, for most rural areas, current ONRC categories are likely to strongly correlate (if not completely) with the general movement classes, particularly if there are no public transport networks. The separate 'Freight' mode class allows you to differentiate, at a more granular level, your freight routes. The biggest benefit is in being able to map the place function, allowing you to emphasise where your road networks go through town centres, or past important places such as district schools or marae. This contextual information will be useful for conversations with your community about things like speed management or town centre upgrades.

For **urban** areas, the framework allows you to see the work many of you are doing locally reflected at a national level. Creating liveable towns and cities goes well beyond transport, and this framework helps us nationally move towards a better understanding of our competing demands.

Currently, both central and local government are driving towards several strategic goals including reducing harm from land transport, reducing emissions, a greater emphasis on community wellbeing, and achieving higher quality urban development. All of these require frameworks and tools that naturally lead us to more interdisciplinary planning and 'systems thinking'. Evolving the ONRC to the One Network Framework is a key national response to this shift, and provides a more robust framework that is appropriate for both rural AND urban settings.

To achieve this purpose, the following challenges have been addressed:

- a) The framework caters for active or public transport modes and 'off road' routes which make it useful as a land transport planning tool in urban and rural environments
- b) The emphasis is shifted to the overall movement of people and goods, by any mode, rather than only considering the volume of vehicles a route can support.

- c) The framework considers the role transport corridors play in providing social spaces for people to interact and enjoy and the interplay with travel across and along a transport corridor, the Place function.
- d) It provides a framework that considers the future intended function of the corridor in the medium to long term so that planning can be put in place to achieve that intended state.

Principles:

To be successful the One Network Framework adheres to the following principles:

- It is relevant for both urban and rural settings, by developing a common language that all practitioners can use
- Considers movement of people and goods via all modes of transport, rather than just vehicles
- Differentiates strategic networks of different modes of transport
- Considers movement in the context of place
- Prioritises and protects human life and helps embed the Safe System approach
- Is simple to understand, use and interpret, providing additional layers of complexity only where needed
- Aligns with spatial planning processes, tools and frameworks
- Guides planning, operation and investment decisions in the short and long term

Glossary of Terms

Corridor	<p>(1) The area of land utilised to provide a transport link between two points. Usually constrained within the land area of the road reserve.</p> <p>(2) The collection of routes utilised to provide a transport link between two key points by all available modes which may sometimes be expanded to include off-line modes such as railways and dedicated cycle paths that provide the link.</p>
Mode Neutrality	Mode neutrality means considering all transport modes when planning, regulating and funding transport, and basing decisions on delivering positive social, economic, and environmental outcomes. When assessing the benefits and costs of different transport modes, each mode needs to be considered as part of a multi-modal system.
Movement	In the context of the One Network Framework, Movement equates to the strategic importance of a transport corridor in providing for the movement of people or freight along a corridor, considering all possible transport modes (mode neutrality).
Network	<p>Collective term for all roads and streets under the control of a Road Controlling Authority.</p> <p>National Network: All roads and streets in New Zealand</p> <p>Highways Network: All state highways in New Zealand</p> <p>Also used to describe a collection of roads and streets that is mode specific (Cycle Network).</p>
'Off Road'	A term to describe a transport corridor that is outside (off-line) of the road reserve, for example a dedicated cycle lane through a park that forms part of a strategic cycling network.

Place	In the context of the One Network Framework, Place equates to the strategic importance of the road or street as a destination in its own right, determined by the level and nature of on-street activity occurring within the streetscape, and the level of access required to adjacent land, which interacts with and impacts on the movement function along a corridor.
Road Controlling Authority (RCA)	A regional council, territorial authority, or public organisation that operates a part of the NZ Land Transport network.
Road Reserve	The land area set aside for the purpose of providing for land transport, usually incorporating the entire area between property boundaries.
Strategic Network	A network of roads and streets specifically designated to support movement of a particular mode of transport e.g. Strategic Freight Network. Note that a particular section of road or street can belong to more than one strategic network, then requiring a multi-modal approach to classification.
Street Category	The specific classification assigned to a road or street from the two Street Families based on its intended movement and place function.
Street Family	A Street Family is a group of street categories that are grouped according to the context they refer to. There are two street families, one for the urban realm and one for the rural realm.
Te Araroa	Te Araroa (The Long Pathway) is New Zealand's long distance tramping route, stretching circa 3,000 kilometres along the length of the country. It is made up of a mixture of tracks and walkways, and link sections alongside roads.

PLACE



Place

The classification of ‘Place’ in terms of definable metrics is not necessarily a particularly easy exercise. The intrinsic value of a place is often invoked more by feelings than facts. Despite this, numerous academic engineering studies have sought to quantify the value of place. Much of this enquiry was in response to the need to classify place and its relationship with movement, in so enabling a movement and place approach to transport corridor planning and management.

The classification of place should achieve the following outcomes:

- Reflect the planned and intended function of the specific location
- Relate to the on-street activity generated by adjacent land-use and its requirement for access
- Consider the interaction with the movement function of the corridor, including the requirement for lateral movement across the carriageway
- Be informed by adjacent land-use, and the density of activity occurring ‘off-street’
- Recognise the significance of the catchment from which the location attracts visitors, or the location’s importance to the surrounding community.

Intended nature of place

The ONF intends to primarily describe the future intended function of the transport network and the relationship with adjacent land-use close to the transport corridor. The intended nature of a place is a brief description of the location around and along the road or street that in simple language describes the overall nature of the place.

On-street activity

The level of on-street activity provides a direct pointer to the classification of place. As the level of observable and measurable activity off-carriageway within the corridor increases, so does the classification of place, in proportionate steps. In terms of metrics to describe each on-street activity category, this most closely aligns with pedestrian activity, in so describing a direct correlation between movement and place. On-street activity also creates the need for pedestrians to cross the carriageway laterally and proportionately, and this factor is considered through the interaction with movement metric.

Catchment significance and connection to community

At a high level, catchment significance relates to how far people are willing to travel to experience a place. This most commonly aligns with the facilities that utilise the land adjacent to roads and streets, a sports stadium for instance having regional significance as events will attract people from throughout the region. Guidance is provided within the metrics in terms of the typical facilities utilising the adjacent land that may fall into each class.

Adjacent Land-use

The purpose to which adjacent land is used is a creator of on-street activity and also generates a requirement for access to and from the corridor. While a range of economic and social indicators, such as GDP and population density, could be used as metrics to categorise place in terms of adjacent land-use, the application of this would be cumbersome and require a large amount of data analysis. Land-use zoning in the TLA’s district/unitary plan provides the authorities planned future intentions for the adjacent land as determined by land-use planners and should be used as a significant contributor to place classification. The 23 standard planning zones and an additional 5 special

purpose zones described in the National Planning Standards have been allocated across the 5 classes as a guide to Place classification.

Interaction with movement function

As the levels of on-street activity and requirement for access increase, so does the need for movement laterally across the carriageway. This requirement can be thought of in terms of the frequency of crossing facilities along the corridor, with the requirement for lateral movement across the carriageway increasing in proportion to on-street activity and the need to support associated pedestrian movement. Guidance is provided in the metrics in the level and nature of facility for lateral movement that would usually be evident for each class. For M1P5 in the urban context lateral movement will always be grade separated.

Intensity of use

Intensity of use is a measure of how much the off-carriageway space is being used, by people dwelling in the space, eating al-fresco, browsing market stalls, window shopping, or just relaxing on a bench seat. The metric is indicative of how utilised each square metre of public space is over the course of a day (7am to 5pm). This indicator is included here to be used as a guide, as determination of the actual values of intensity of use would be impractical in most situations.

The table overleaf describes how each of the factors detailed above could be used as an indicator for classification of place.

The factors described in the table are derived from a number of local and overseas movement and place frameworks, including those used by Transport for London, City of Toronto, VicRoads (Victoria, Australia), Transport New South Wales, and Auckland Transport.

Place

Classification factors					Metrics					
	Nature of Place	Level of On-Street Activity	Indicative Land-Use	Catchment Significance	Level of On-Street Activity	Interaction with movement	Indicative Adjacent Land-Use	Catchment Significance	Intensity of use	
					Pedestrian volume	Requirement for lateral movement	Residential and Commercial density: Land-use zone classification	Place significance - Activity generating facilities	The intensity of use of the off-carriageway space by persons dwelling	
P1	Provincial/ Regional	On-street facilities encourage use by active modes, and visitors to stop and experience the locality for longer periods.	Land-use generates high levels of on-street activity including lateral movement across the carriageway. Sites of regional significance that attract significant visitor numbers to the location.	Very high-density mixed use (high rise apartments and office towers), downtown retail and commercial centres.	Streetscape provides for a provincial or regional level of amenity.	Aligned to W1 > 1000 /hour (peak) > 5,000 /day	At intersections, and frequent intermediate intervals midblock	City Centre zone Special purpose zones: Airport zone Hospital zone Port zone Stadium zone Tertiary education zone	Regionally Significant Locations: Central Business Districts Airports Central Metro Stations Ports Hospitals Sports Stadiums and Event Arenas University and Polytechnic Campuses Major tourist destinations	> 4 Person hours/m ² /day (7am to 5pm)
P2	City/ District	On-street facilities encourage visitors to stop and experience the locality.	Surrounding land-use generates significant levels of on-street activity including lateral movement across the carriageway. Weekend markets and special events may also generate peak activity.	Diverse mixed use, low rise apartments, special zones or high density commercial/ retail.	Streetscape provides for a city or district level of amenity.	Aligned to W1,W2 > 2,500 /day	At intersections, and infrequent intermediate intervals midblock	Metropolitan Centre zone High Density Residential Zone Commercial zone Large Format Retail zone	City/District Significant Locations: Main Shopping Centres Big Box Retail precincts Transport Interchanges Secondary Schools Main regional tourist attractions	> 2 Person hours/m ² /day (7am to 5pm)
P3	Neighbourhood/ Township	Increasing levels of on-street activity and access to adjacent land.	Surrounding land-use generates increased on-street activity. Community facilities and points of interest in rural settings generating some on-street activity.	Medium density residential, mixed use residential/ commercial, or industrial areas.	Streetscape provides for a neighbourhood or township level of amenity.	Aligned to W2 > 1000 /day	At intersections and connecting strategic routes (such as pedestrian alleyways and cycle paths)	Medium Density Residential zone Neighbourhood Centre zone Local Centre zone Mixed use zone Town Centre zone Light Industrial zone General Industrial zone Heavy Industrial zone Open space zone Sport and Active Recreation zone	Neighbourhood Significant Locations: Suburban Shopping Centres Suburban Metro Stations Primary Schools Playgrounds Sporting Club Grounds Local parks District Halls Places of local interest/colour	> 1 Person hours/m ² /day (7am to 5pm)
P4	Local	Quieter streets likely to attract some on-street activity. Generally private low frequency access.	Primarily residential or peri-urban in nature, with on-street activity associated with residents going about their lives.	Mostly low density residential in urban and peri-urban areas. Lifestyle blocks in peri-urban areas.	Streetscape has local area significance.	Aligned to W3 < 1000 /day	Casual with care within M4 and M5 movement classes, targeted but infrequent within M1, M2 and M3.	Large Lot Residential zone Low Density Residential zone General Residential Zone Rural Lifestyle zone (R) Settlement zone (R) Natural Open Space zone	Suburban Residences	< 1 Person hours/m ² /day (7am to 5pm)
P5	Limited	Movement of people and goods the primary function. Limited on-street activity and requirement for access.	Little discernible on-street activity.	Mostly rural, except for Motorways and Expressways in urban areas.	Streetscape has local significance in the rural context, but does not provide any amenity for on street activity	No pedestrian movement, Walking may be prohibited along corridor, no Pedestrian facilities provided	Grade separated at M1 in the Urban context Casual with care in Rural context	General Rural zone (R) Rural Production Zone (R)	Rural Environment	Effectively Nil

STREET FAMILIES



Street Families

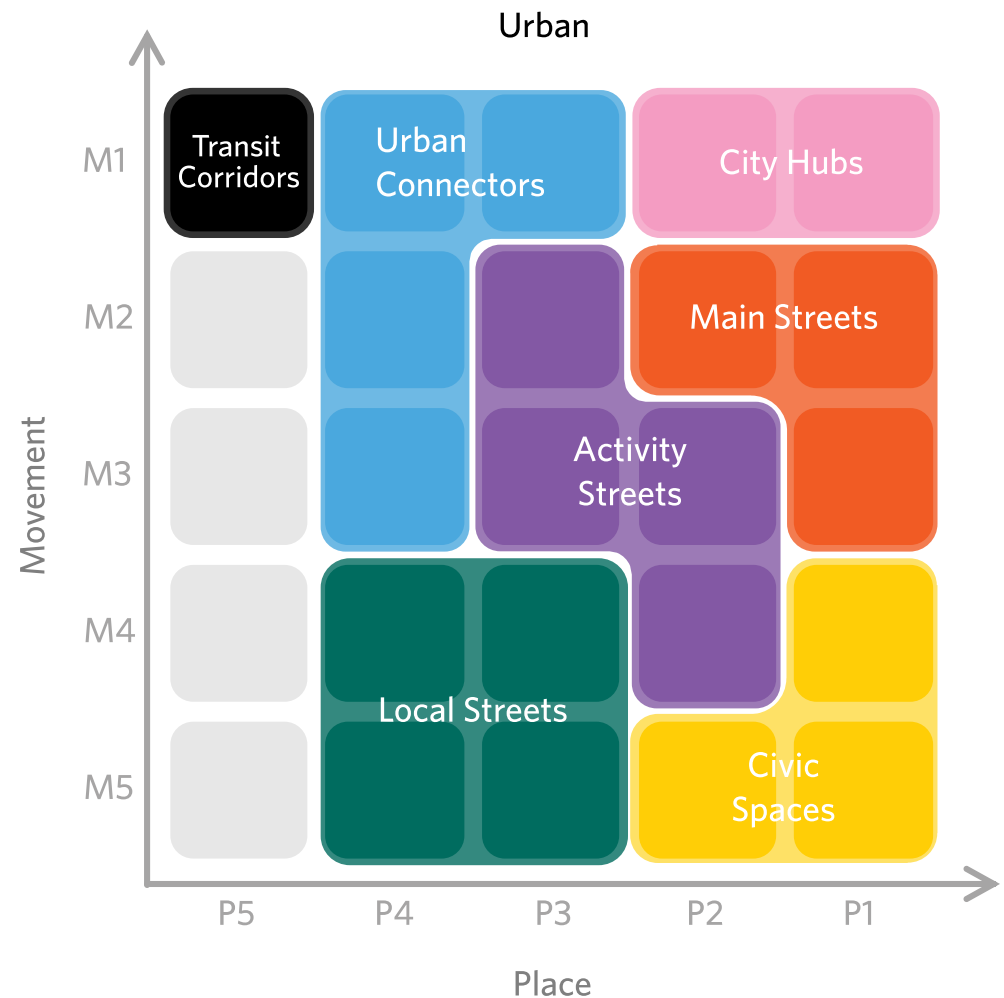
Street families bring together the movement and place elements to determine an overall movement and place classification for the road or street. In order to limit the number of possibilities within the framework, street categories comprise of regions within the movement and place matrix. As an evolution of ONRC the objective of the street families is still to ensure consistent infrastructure funding discussions and as a means for comparative analysis across the entire land transport network in New Zealand.

The street families are designed to be intuitive, so that as a first pass when thinking about the corridor under consideration a particular street category is envisioned in the mind's eye of those undertaking the classification. This can then be checked against what the metrics and factors are indicating an appropriate classification for the corridor should be.

Two sets of street families are provided, one for use in the urban realm and one for rural. This recognises that both the level of people and goods movement for a particular class, and the factors that designate place are different in each context.

Street Family Classification matrix

The current configuration of the street category zones overlaid on the movement and place matrix is shown to the right and overleaf. The colours used are those recommended for use on maps and within spatial systems to provide contrast between different classes likely to appear adjacent to each other.



Differentiation of Urban and Rural

The Street Families describe two sets of movement/place categories, a set for the urban realm, and a set for the rural realm. The definition of what constitutes urban or rural for ONF differs from that used for ONRC which was determined primarily by the speed limit of the particular street or road. For ONF it is intended that Urban and Rural be differentiated based on adjacent land-use, i.e. if the land the street or road traverses is a rural land-use zone then the road is rural.

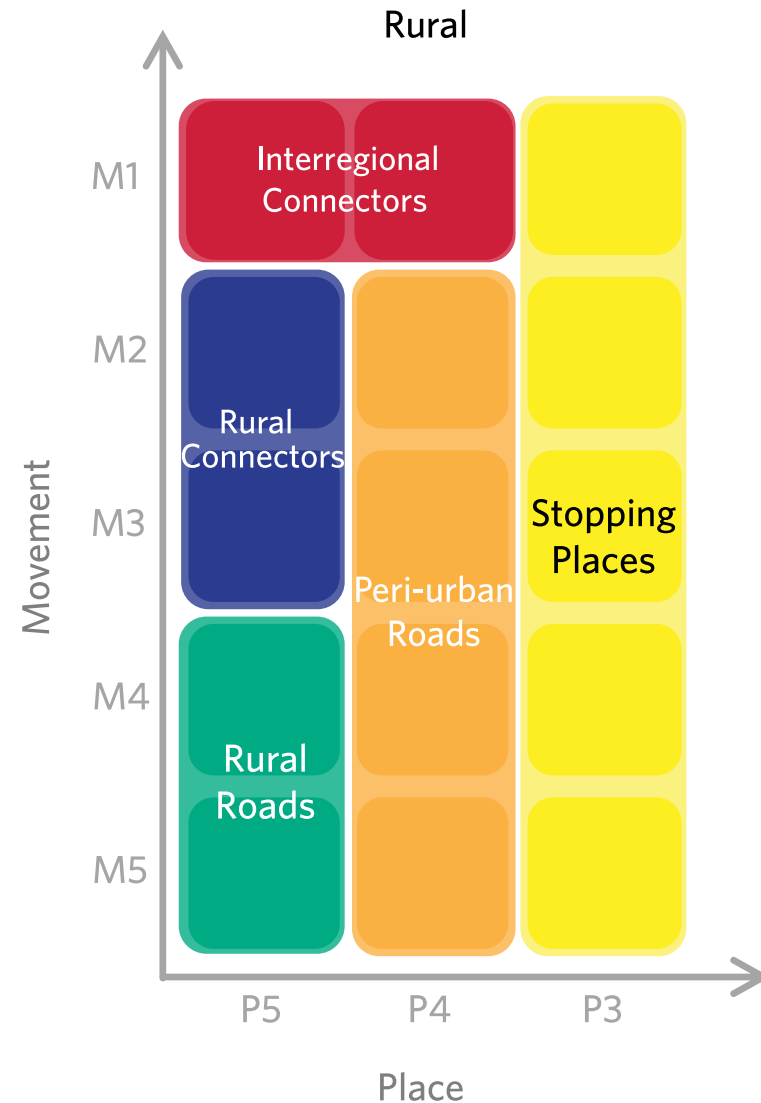
Name

Each street category name suggests the nature of a particular road or street when both the level of movement of people and goods and the nature of the place are factored into the classification. They form part of the common language to be used when referring to similar categories of streets and roads and are easier to remember than technical alphanumeric codes like M2P3.

Street categories can also undertake additional functions that are not immediately invoked by the street category name, and which would appear to be completely different from each other in both function and form, but have in common similar levels of movement and place significance. An example of this is industrial areas when compared to Local Streets and Urban Connectors, where the amount of activity defining the place component is similar, and the level of people and goods movement is comparable.

Description

The descriptions of each street category describe the general characteristics of the street category in terms of the levels of movement, the amount of on-street activity, and indicative adjacent land-use. They provide a summary of all the classification factors for the specific category.



Nature of Place

The significant factors that contribute to the place classification of the street category are described here, with some additional depiction of the specific character for the particular street category.

On-street activity

For the specific street category this describes what a casual observer would experience in terms of the level of activity along and across the street and some indication of the opportunity for lateral movement.

Adjacent land-use

Describes the nature of the adjacent land-use that is generating the requirement for access to the corridor, and therefore contributing to on-street activity and generating movement. The density of residential or commercial properties adjacent to the corridor is also stated.

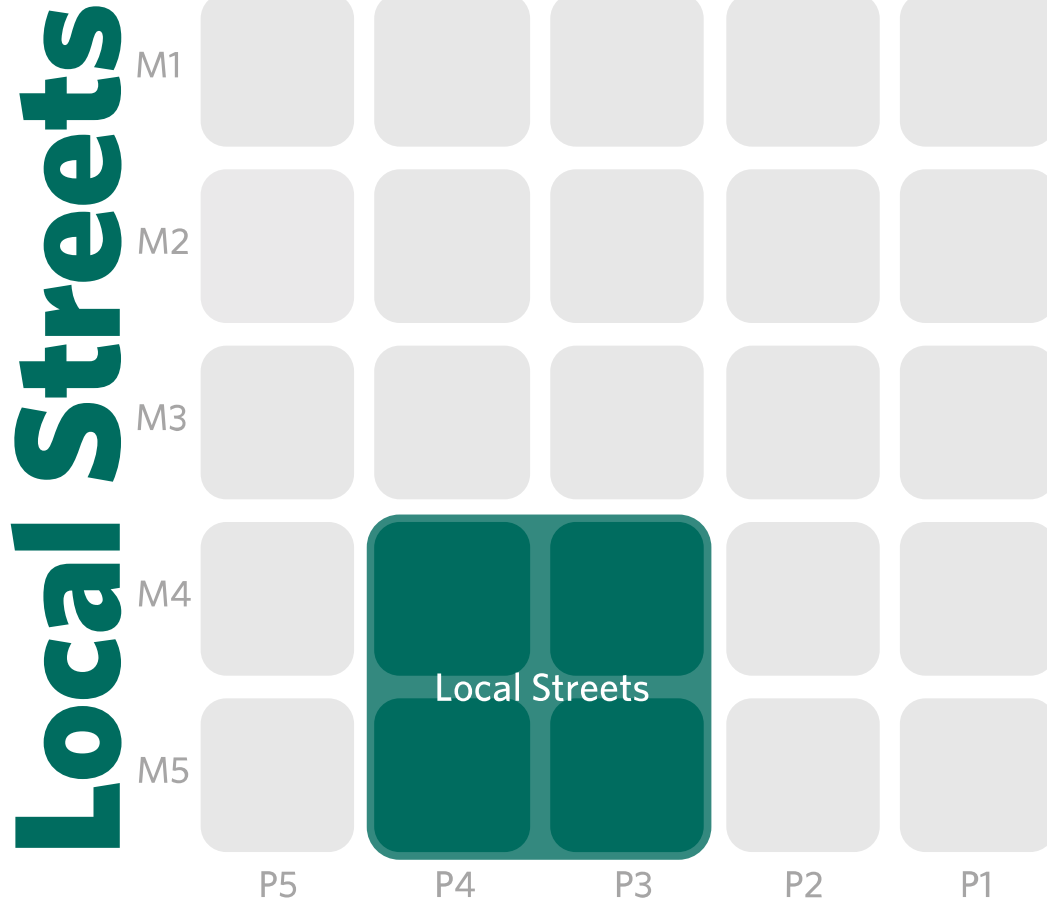
Nature of Movement

A brief description for each of the five transport modes of that mode's typical use of the particular street category and an indication of the adjacent land-use creating the requirement for movement. These descriptions are indicative only and provided as a guide to classification.

Indicative mode share

A chart showing the indicative mix of modes typically using the street category, and the relative volumes of goods or people movement. Again, this is indicative only and provided as a guide to classification.

Urban Street Family



Local Streets provide quiet and safe residential access for all ages and abilities and foster community spirit and local pride. They are part of the fabric of our neighbourhoods, where we live our lives and they facilitate local community access.

Their local Place significance derives from the on-street activity being associated with those who live on these streets. Movement classification is low with most trips locally generated.

Local Streets are the most common and most diverse streets in urban areas. They are generally important components of walking and cycling networks and should support these transport choices for local trips.

Nature of Place

On-street activity

Low levels of on-street activity associated with residents going about their daily lives. Due to the low levels of vehicle movement, lateral movement can be undertaken at any point along the corridor to coincide with desire lines. In some particularly quiet streets the carriageway can often be used as a play area by local children.

Adjacent Land-use

Primarily suburban low density residential use. Can also apply to low density industrial use such as quiet cul-de-sacs in industrial areas.

Nature of Movement

Walking (Pedestrian Activity)

Low levels of pedestrian movement associated with residents going about their daily lives. First/last kilometre of walking trips connecting to higher activity streets.

Cycling

On-street cycling along residential streets where the volume and average speed of traffic means a relatively safe environment for cycling.

Public Transport

Most local streets have no public transport function. Where they are part of the public transport network they are normally secondary public transport corridors, providing local access and coverage, but at reduced schedules.

General Traffic

Low volumes of primarily private vehicles associated with residents going about their daily lives.

Freight

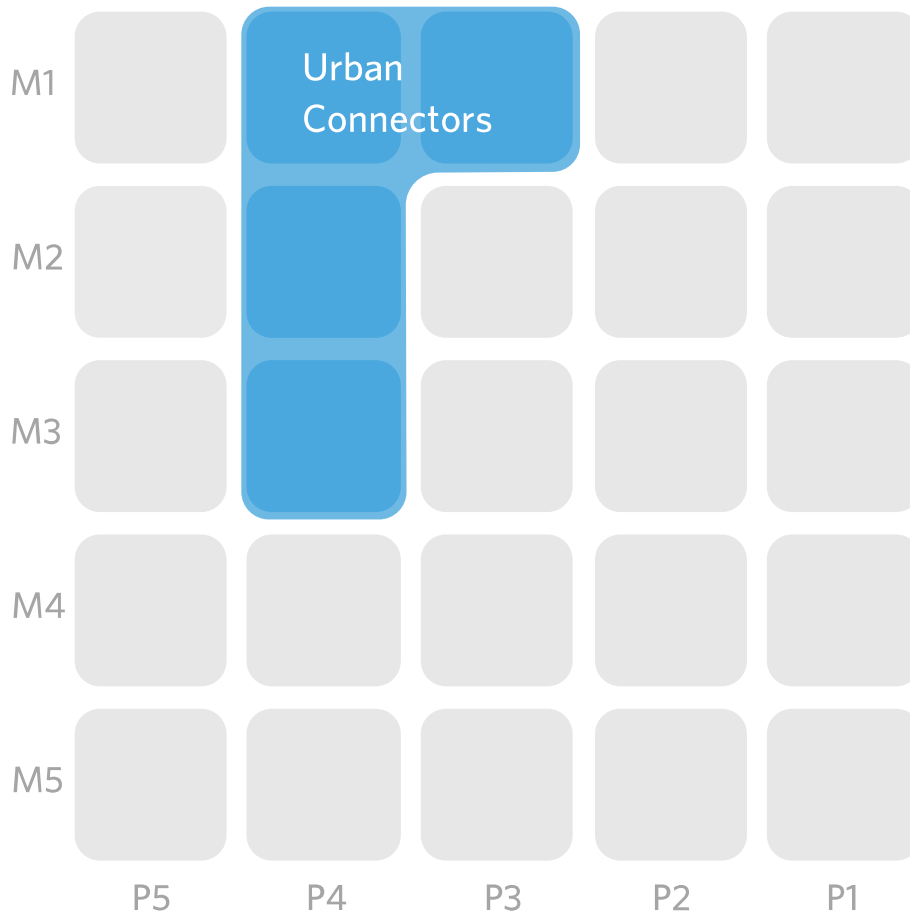
Freight use primarily by parcel delivery couriers in residential streets and occasionally furniture removal vans. Low volumes of HV use in quieter industrial area streets.

Indicative mode share

Local Streets



Urban Connectors



Urban Connectors provide safe, reliable and efficient movement of people and goods between regions and strategic centres and mitigate the impact on adjacent communities.

These streets have a lower Place classification associated with the reduced level of on-street activity resulting from the adjacent land use. The higher Movement classification indicates that the street may be an important route for freight, public transport, private vehicles or cyclists.

The purpose of Urban Connectors is to provide for efficient movement of people and goods from A to B. There are low levels of interaction between the adjacent land use and the street. Separation between modes is likely to be required as average speeds and traffic volumes tend to be higher. Servicing adjacent land has a lower priority, as the key role of these streets is to move along them rather than accessing adjacent properties. Industrial area streets are also most likely to fall within the Urban Connectors category.

Nature of Place

On-street activity

Low levels of on-street activity associated with people needing to pass through an area. Requirement for lateral movement usually confined to intersections with adjoining streets.

Adjacent Land-use

Low to medium density residential and commercial use. Some routes provide for main connectors through industrial areas. Servicing adjacent land has a lower priority, as the key role of these streets is to move along them.

Nature of Movement

Walking (Pedestrian Activity)

Low levels of pedestrian movement associated with people needing to pass through an area. Adjacent land-use and a lack of on-street amenities do not encourage pedestrians to dwell.

Cycling

On-street cycling along busy urban arterials where no special allowance for cycling has been made and the cyclist must share the road with care with vehicles. Urban Collectors supporting longer trips are more likely to be included in on-road primary cycling routes

Public Transport

Urban connectors will often have higher levels of PT, up to PT2 Spine level when providing the link within the route between the residential origin of journeys and the commercial or educational destination. PT services may operate express (limited or no stops) on these sections of the route.

General Traffic

High levels of people movement via private vehicles as route provides for key connections between residential areas and work and education. These routes also provide cross city movement for vehicles travelling longer distances inter-regionally.

Freight

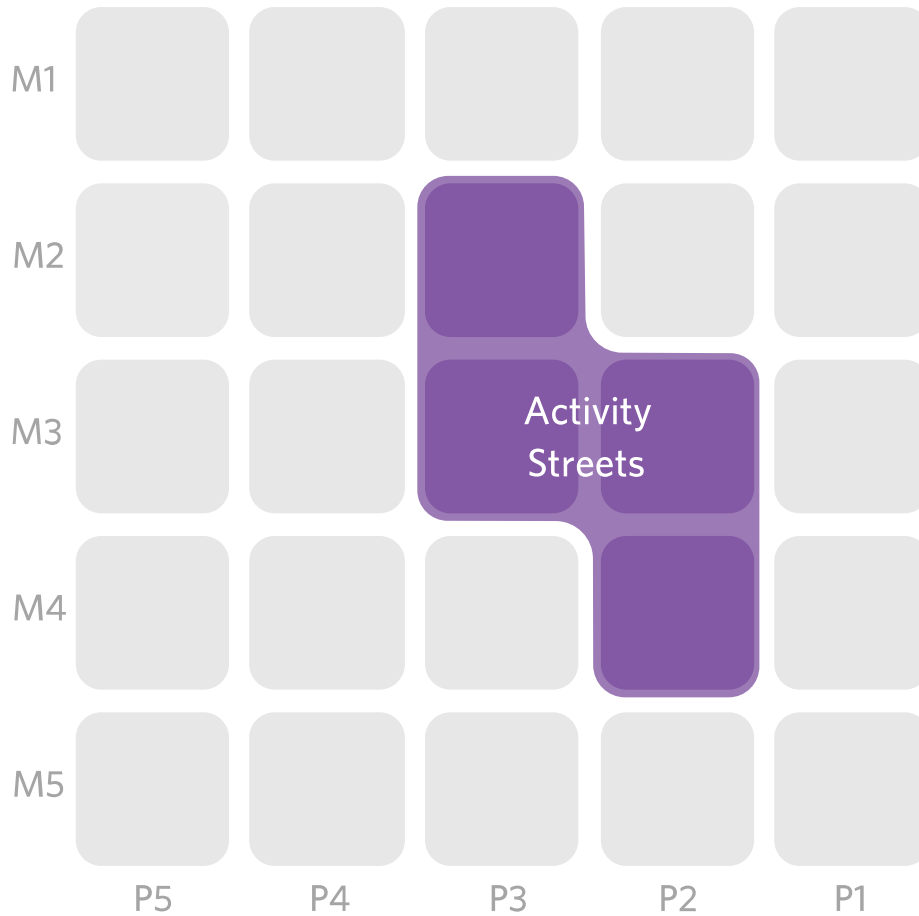
These routes provide the primary freight corridors within the urban realm where there is no Transit Corridor alternative. Urban Connectors provide for safe, reliable and efficient movement of goods between regions and strategic centres.

Indicative mode share

Urban Connectors



Activity Streets



Activity Streets provide access to shops and services by all modes. There is significant demand for movement as well as place with a need to manage competing demands within the available road space. Activity Streets aim to ensure a high quality public realm with a strong focus on supporting businesses, traders and neighbourhood life. Activity streets are where people spend a significant amount of time, working, shopping, eating, residing, and undertaking recreation. Examples range from neighbourhood shopping centres to waterfront esplanades.

Nature of Place

On-street activity

Increased levels of on-street activity associated with the requirement for access to adjacent stores, businesses and community facilities.

Adjacent Land-use

Moderate density of commercial, retail or industrial activities or medium to high density residential properties

Nature of Movement

Walking (Pedestrian Activity)

Increased levels of pedestrian movement associated with access to shops, businesses and community facilities. Some on-street amenities are provided to encourage pedestrians to dwell.

Cycling

On-street cycling along busy urban arterials where no special allowance for cycling has been made and the cyclist must share the road with care with vehicles. As activity streets are often desirable destinations within a short ride of residential areas, many will have some level of facility for cyclists.

Public Transport

Activity Streets on PT routes normally support PT movement at either PT3 Primary or PT4 Secondary level of movement with PT normally having to share the carriageway with a number of other modes.

General Traffic

Moderate levels of people movement via private vehicles as route provides for both through connections between residential origin of journeys and the commercial or educational destination, and as a destination itself.

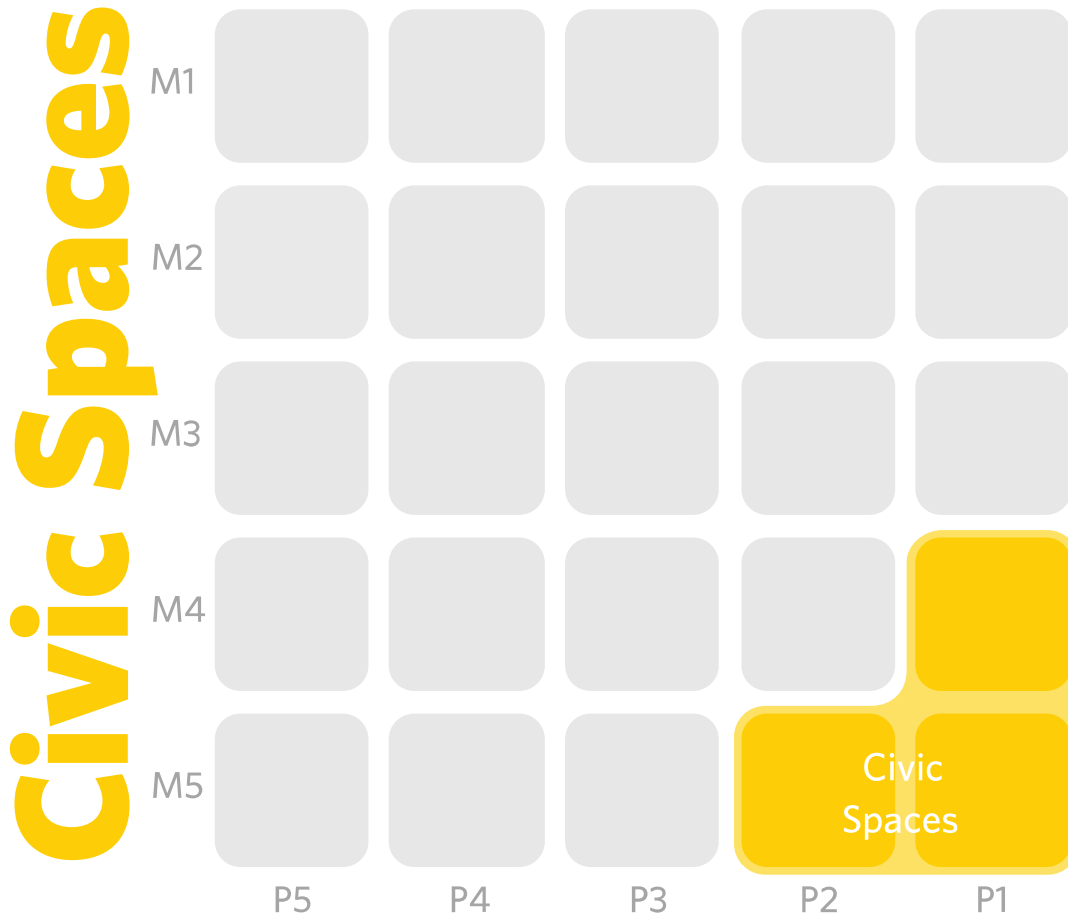
Freight

Moderate levels of through movement of goods, with some freight movement being associated with deliveries to adjacent properties. Higher proportion of goods movement use in industrial area streets connecting manufacturing to shipping and distribution.

Indicative mode share

Activity Streets





Civic Spaces are roads and streets with high demand for pedestrian activity combined with a much lower requirement for vehicle movement. They are places communities value, and intended for visitors to enjoy.

These are spaces that people are encouraged to spend time in, and where people on foot can relax and move freely. There is usually street furniture and other amenities to encourage and support people lingering and spending time in these spaces.

These streets have a higher Place classification representing the increased level of on-street activity and higher density adjacent land use generating that activity. The lower Movement classification indicates that these streets are mainly intended for localised on-street activity with little or no through movement. The lateral movement of pedestrians is usually given priority in these spaces. Examples include pedestrianised streets, plazas and low speed shared streets.

Nature of Place

On-street activity

High levels of on-street activity. These spaces provide pedestrian priority over vehicle movement. Civic spaces allow for safe lateral movement at any point along the route.

Adjacent Land-use

Community based facilities that bring people together. Sports arenas, concert venues, theatres, parks, restaurants and bars particularly those providing al-fresco dining. Tertiary education campuses, tourist attractions.

Nature of Movement

Walking (Pedestrian Activity)

High levels of pedestrian movement. These spaces are designed for pedestrians to stop and spend time socialising, or just enjoying the space. A range of amenities are provided to encourage people to dwell.

Cycling

Some cyclist activity, particularly in shared streets designed to support higher volumes of active mode travel. Some level of facility will usually be provided for cyclists.

Public Transport

Civic spaces are not normally utilised for PT movement, but may occur close to PT interchanges to facilitate the efficient movement of disembarking passengers continuing their journey as pedestrians.

General Traffic

Low speed people movement by general traffic within shared spaces. This mode is sometimes excluded from pedestrianised precincts.

Freight

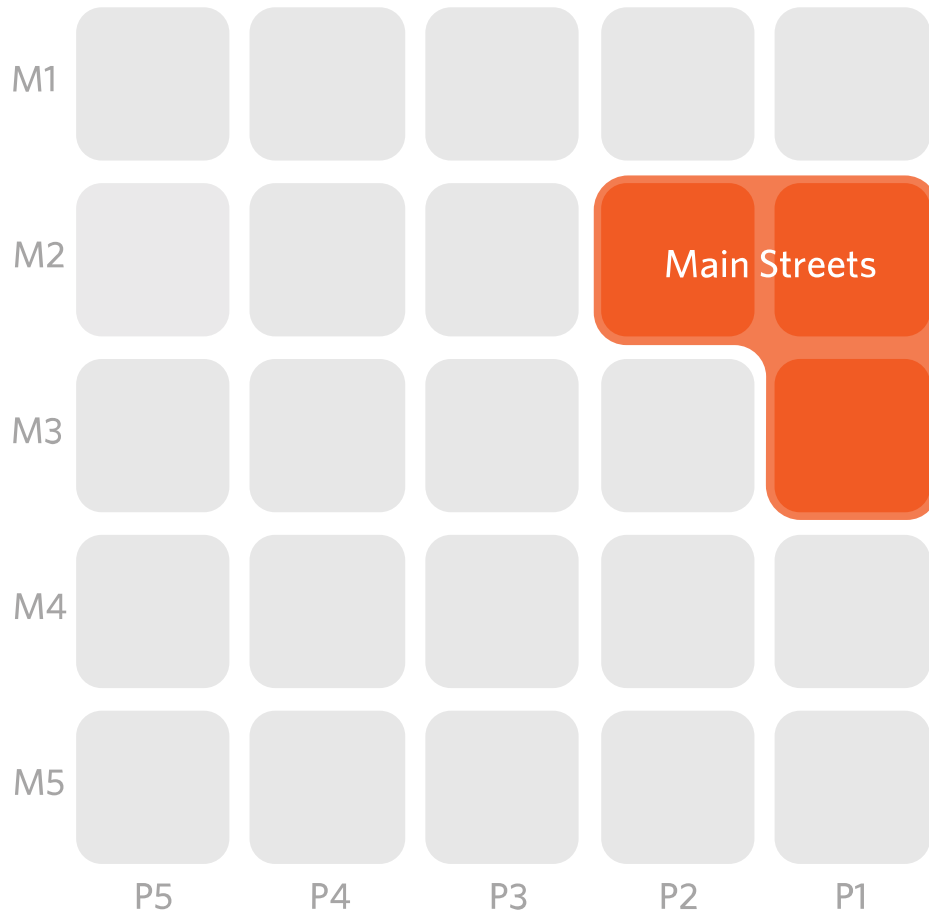
Goods movement primarily by parcel couriers and for goods delivery using light vehicles where vehicle access is provided within shared spaces.

Indicative mode share

Civic Spaces



Main Streets



Main Streets provide a pedestrian friendly environment. They aim to support businesses, on-street activity and public life while ensuring excellent connections with the wider transport network. While not having the level of through movement of City Hubs, they provide a similar function, needing to balance the interaction between people and goods movement and on-street activity. Examples include rural townships and provincial cities where the main through road also doubles as the main commercial centre.

Nature of Place

On-street activity

High levels of on-street activity associated with the requirement for access to adjacent stores, businesses and community facilities. The requirement for lateral movement is tempered by the need to support increased levels of traffic movement.

Adjacent Land-use

Diverse mixed use, low rise apartments, special zones or high density commercial and retail.

Nature of Movement

Walking (Pedestrian Activity)

High levels of pedestrian movement associated with access to adjacent stores, businesses and community facilities. Some on-street amenities are provided to encourage pedestrians to dwell, but the primary purpose of the pedestrian realm is providing connections to shops and businesses..

Cycling

Higher levels of cyclist movement associated with access to adjacent stores, businesses and community facilities. Some on-street facilities are normally provided to encourage cyclists. Many Main Streets will be included within strategic cycling networks.

Public Transport

Main Streets on PT routes typically support PT movement at either PT3 Primary or PT4 Secondary level of movement.

General Traffic

Moderate levels of people movement accessing destinations provided by adjacent land-use via private vehicles, usually combined with a moderate level of through movement. Movement is moderated by the increased on-street activity and interaction with pedestrians moving laterally across the carriageway.

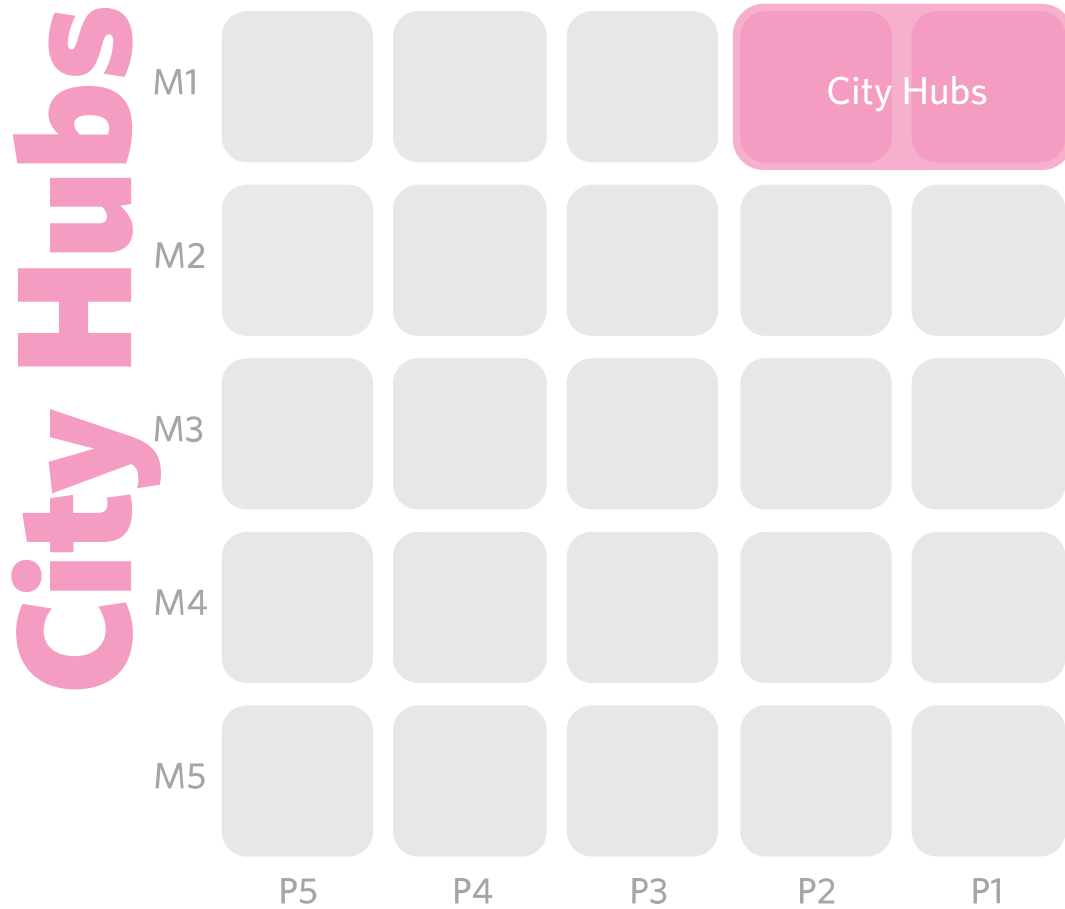
Freight

Low levels of through movement of goods, with most freight movement being associated with deliveries to adjacent properties. In rural townships where the main through road also doubles as the main commercial centre, movement of freight is often diverted away from Main Streets.

Indicative mode share

Main Streets





City Hubs are dense and vibrant places that also have a high demand for people movement. They are also places providing focal points for businesses and culture. These streets should aim to reduce the impact of high traffic volumes while accommodating high pedestrian numbers, multi-modal journeys and access to public transport and essential emergency services.

These streets have both a higher Place and Movement classification. They are busy spaces with lots of activity from people visiting the location due to the adjacent land use activity, and a high amount of through movement of people travelling by all modes.

The large number of competing demands within City Hubs require careful consideration to ensure that this competition between the significant Movement and Place functions is managed. These streets have a high number of people moving through and across them and so require efficient modes of transport, with lateral movement access prioritised to mitigate the impacts of congestion, and ensure a safe environment.

Examples include major city centre streets such as Queen Street in Auckland and Lambton Quay in Wellington.

Nature of Place

On-street activity

Highest levels of on-street activity associated with the requirement for access to adjacent stores, businesses and community facilities, and generated by the high density residential and commercial adjacent land-use. To provide a safe environment for lateral movement, regular controlled crossing opportunities are usually required.

Adjacent Land-use

Very high density office and residential tower blocks, central city shopping centres. Central business precincts of major cities.

Nature of Movement

Walking (Pedestrian Activity)

Highest levels of pedestrian movement associated with access to adjacent stores, businesses and community facilities, and generated by the high density residential and commercial adjacent land-use. Provision of on-street amenities needs to be balanced with the requirement to allow for the movement of high numbers of pedestrians.

Cycling

High levels of cyclist movement associated with access to adjacent stores, businesses and community facilities, and generated by the high density residential and commercial adjacent land-use. City hubs are likely to be included in strategic cycling networks. Cycling is an efficient means of goods delivery (letters, small parcels, fast-food delivery) within City Hubs.

Public Transport

City hubs on PT routes typically support PT movement at a PT2 or PT3 level of movement where there is often a confluence of many PT services converging in metropolitan areas. In many cases PT is given priority within these corridors.

General Traffic

Higher levels of people movement by private vehicle generated by the requirement for access to adjacent stores, businesses and community facilities. Travel times are generally lower due to the increased interaction with the place based activity and requirement for lateral movement by pedestrians.

Freight

Low levels of through movement of goods, with most freight movement being associated with deliveries to adjacent properties. Typically, provision is made for freight off-line by service lanes to divert this mode away from City Hubs.

Indicative mode share

City Hubs



Transit Corridors

M1	Transit Corridors					
M2						
M3						
M4						
M5						
		P5	P4	P3	P2	P1

Transit Corridors provide for the fast and efficient long distance movement of people and goods within the urban realm. This includes motorways and urban expressways. They are mode specific and use by other modes than those intended is discouraged or even prohibited. By definition all dedicated, high movement and mode specific transport corridors such as heavy rail networks and busways are included in this classification.

Nature of Place

On-street activity

Active modes of transport are specifically excluded from using these corridors.

Adjacent Land-use

These corridors can traverse the entire range of urban land-use zones. As there is no provision for access, adjacent land-use is not a generator of on-street activity.

Nature of Movement

Walking (Pedestrian Activity)

Pedestrians are specifically excluded from using these corridors.

Cycling

Cyclists are specifically excluded from using these corridors.

Public Transport

Utilised as mass transit corridors to enable the efficient movement of PT vehicles across cities. May share with other vehicles such as on motorways and expressways, or use dedicated PT only corridors such as busways and metro railways. Some lengths of motorway provide for PT only lanes to prioritise movement by this mode.

General Traffic

Fast and efficient long distance movement of people in cars and light commercial vehicles.

Freight

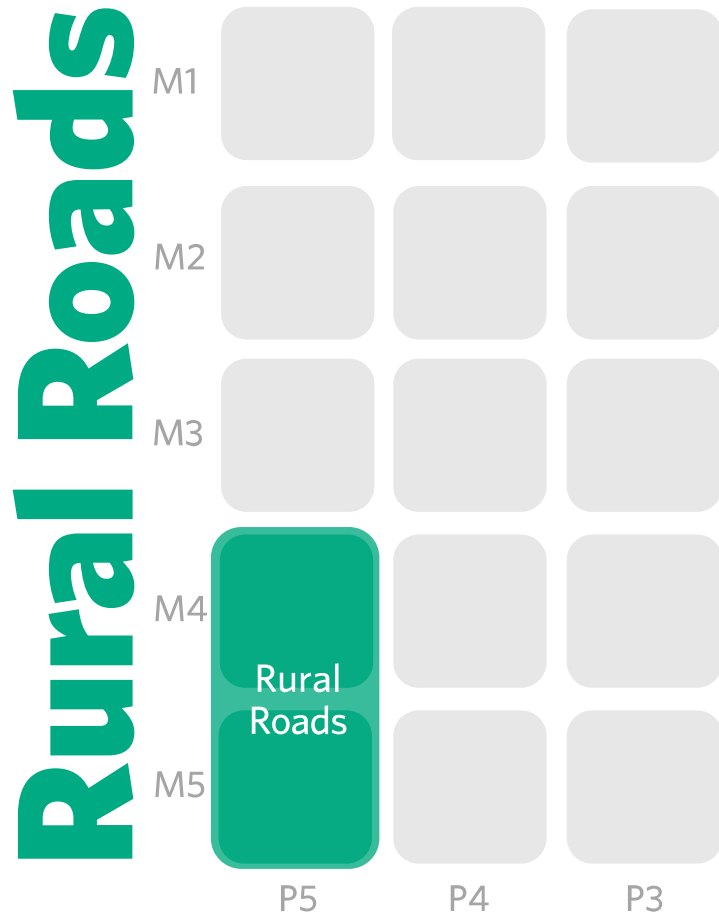
Fast and efficient long distance movement of goods by heavy vehicle on motorways and expressways or by rail.

Indicative mode share

Transit Corridors



Rural Street Family



Rural Roads primarily provide access to rural land, for those that live there, and in support of the land-use activity being undertaken. Rural Roads are the most common and most diverse roads in rural areas. They have no appreciable on-street activity occurring and in many parts of the country are unsealed. Some rural roads are important for freight, collecting dairy and forestry and other primary produce from their source, while others, where volumes of vehicular traffic are very low, can provide safe and pleasant recreational and tourism routes, including the New Zealand Cycle Trail and Te Araroa (New Zealand’s walking trail). In some parts of New Zealand, rural roads are utilised more by people riding horses than by vehicles.

Nature of Place

On-street activity

These corridors usually demonstrate no discernible on-street activity, as no provision is made to support pedestrian movement. Some casual use of roadsides is made for localised movement. On occasion, the corridor may be used for activities such as mustering stock.

Adjacent Land-use

Usually zoned rural production or general rural. The vast range of agricultural, horticultural, vinicultural, forestry and other productive land uses. National parks and other non-productive natural areas.

Nature of Movement

Walking (Pedestrian Activity)

No provision is made to support pedestrian movement. Some casual use of roadsides is made for localised pedestrian movement.

Cycling

Low levels of utility cycling in rural areas within an accessible distance of urban areas.

Public Transport

Some use at PT5 level as school bus routes by targeted services

General Traffic

Low levels of people movement via private vehicles associated with residents access to work and education. Localised movement associated with adjacent rural land-use.

Freight

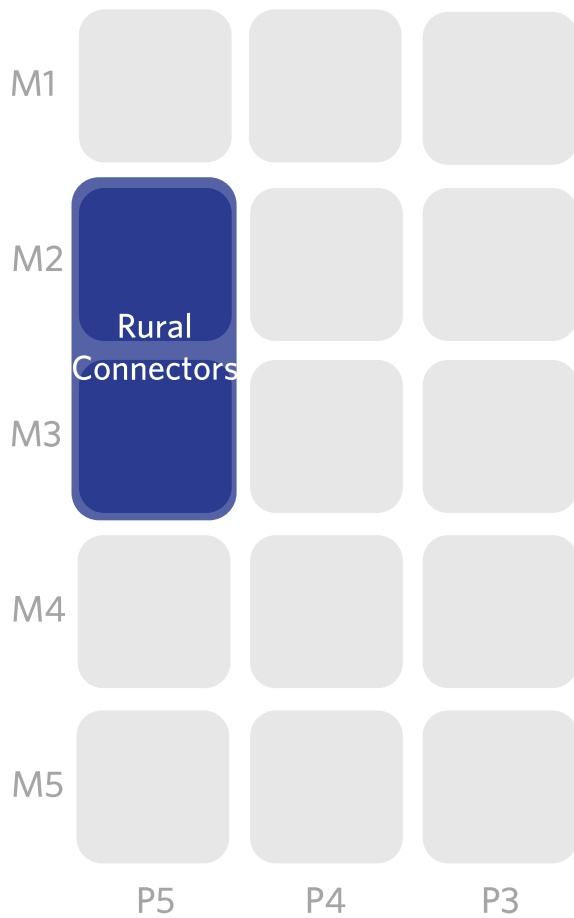
Low levels of goods movement associated with connecting primary producers to processing facilities and goods markets.

Indicative mode share

Rural Roads



Rural Connectors



Rural connectors provide the link between rural roads and interregional connectors. They support an increased level of through traffic, while also providing access from the adjacent land they pass through. Examples include feeder roads into townships and roads to regionally significant tourist attractions.

Nature of Place

On-street activity

These corridors usually demonstrate no discernible on-street activity, as no provision is made to support pedestrian movement. Some casual use of roadsides is made for localised movement. On occasion, the corridor may be used for activities such as mustering stock.

Adjacent Land-use

Usually zoned rural production or general rural. The vast range of agricultural, horticultural, viticultural, forestry and other productive land uses. National parks and other non-productive natural areas

Nature of Movement

Walking (Pedestrian Activity)

No provision is made to support pedestrian movement. Some casual use of roadsides is made for localised pedestrian movement.

Cycling

Low levels of utility cycling in rural areas within an accessible distance of urban areas. Some use of rural connector roads for tourist cycling.

Public Transport

Some use at PT5 level as school bus routes by targeted services. May be used as a PT4 Secondary PT route for longer distance services between towns but usually with no provision of stops.

General Traffic

Higher levels of people movement in private vehicles associated with longer journeys between towns and connecting rural residents to work and education in townships.

Freight

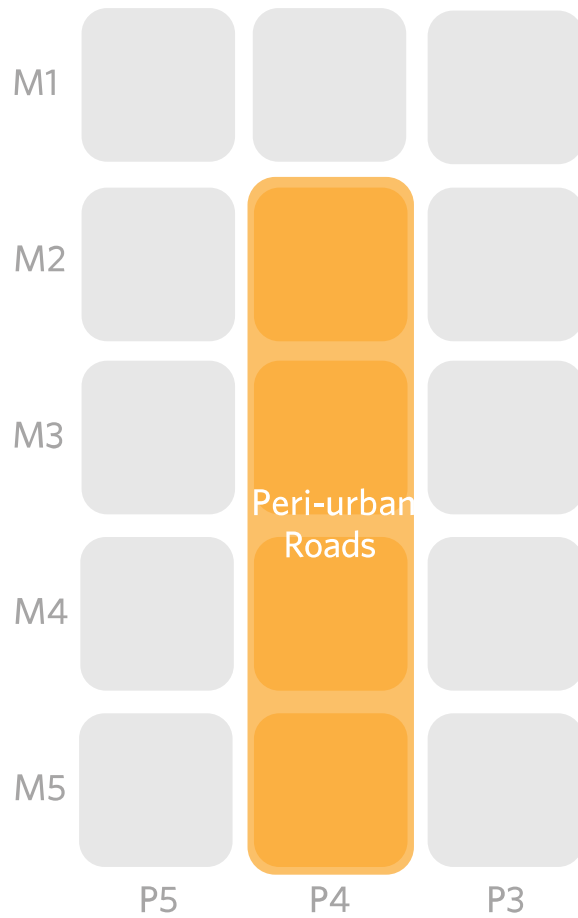
High levels of goods movement associated with connecting primary producers to processing facilities and goods markets. Rural connectors also provide the secondary routes for longer distance goods movement within regions.

Indicative mode share

Rural Connectors



Peri-urban Roads



Peri-urban Roads primarily provide access from residential property on the urban fringe, where the predominant adjacent land-use is residential, but usually at a lower density than that found in urban residential locations. On street activity is discernible and local in nature but also at lower levels than in urban areas. The level of people and goods movement on peri-urban roads can range from low volume through to regional.

Nature of Place

On-street activity

Low levels of on-street activity associated with residents going about their lives. Some activity associated with first/last kilometre of trips to and from adjacent urban areas.

Adjacent Land-use

Adjacent land-use is residential on larger lot properties and lifestyle blocks. Nearer urban areas and in small hamlets and settlements the size of properties may reduce to appear almost urban in nature.

Nature of Movement

Walking (Pedestrian Activity)

Low levels of pedestrian movement associated with residents going about their daily lives utilising the roadside berms.

Cycling

Low levels of cyclist movement associated with residents going about their daily lives and accessing nearby townships.

Public Transport

Some use at PT5 level as school bus routes by targeted services. May be used as a PT4 Secondary PT route for longer distance services between towns, and in some instances may also include provision of bus stops.

General Traffic

Moderate levels of people movement in private vehicles passing through and by residents accessing work and education in nearby townships.

Freight

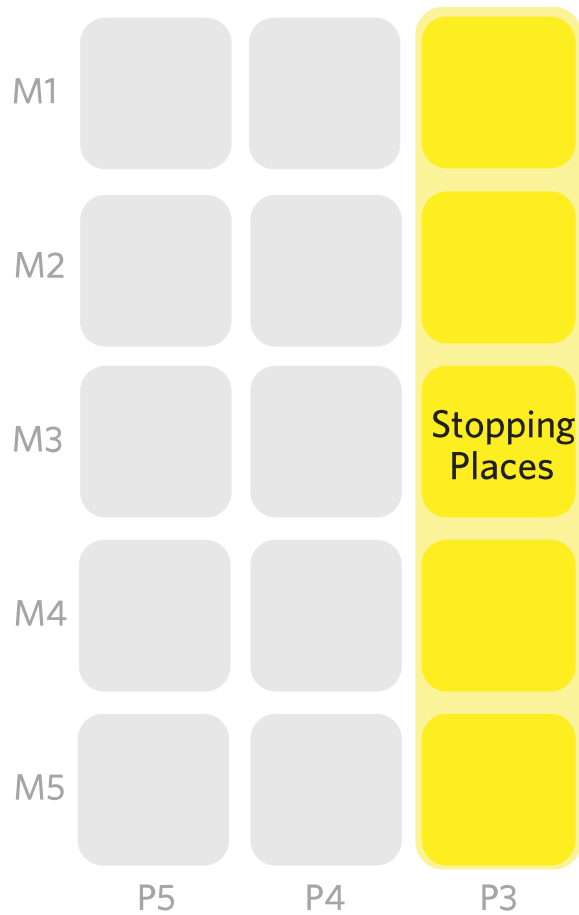
Varying levels of goods movement depending on the associated movement class.

Indicative mode share

Peri-urban Roads



Stopping Places



Stopping Places are where people gather in a rural setting. There is adjacent land-use generating on-street activity, and lateral movement across the carriageway can be expected. They have levels of on-street activity or adjacent land-use generating activity that is above the level normally generated by local residents. Examples include rural schools, community halls, marae, and sites of scenic interest. The movement classification around Stopping Places covers the entire range from M5 to M1 and so they can occur on quiet rural roads through to interregional connectors.

Nature of Place

On-street activity

Increased on-street activities, usually for a short section of corridor to access key designations immediately adjacent to and accessed from the corridor. Can occur on routes of any movement class. Some type of intervention is usually required on the higher movement corridors to ensure safe and efficient access.

Adjacent Land-use

Special use areas such as rural schools, community halls, marae and tourist attractions.

Nature of Movement

Walking (Pedestrian Activity)

Increased pedestrian movement including significant lateral pedestrian movement within the length of corridor designated as a Stopping Place.

Cycling

Some cyclist movement including lateral movement within the length of corridor designated as a Stopping Place, particularly by cycle tourists accessing tourist attractions.

Public Transport

Where the stopping place is a rural school will usually be utilised as a place for school bus services to stop and discharge/uplift passengers. Some tourist destinations close to urban areas may be on scheduled PT routes.

General Traffic

Varying levels of people movement by private vehicle depending on the route. The requirement for access to and from the adjacent land-use is intensified around the location, compared to the general nature of the associated corridor the Stopping Place occurs on.

Freight

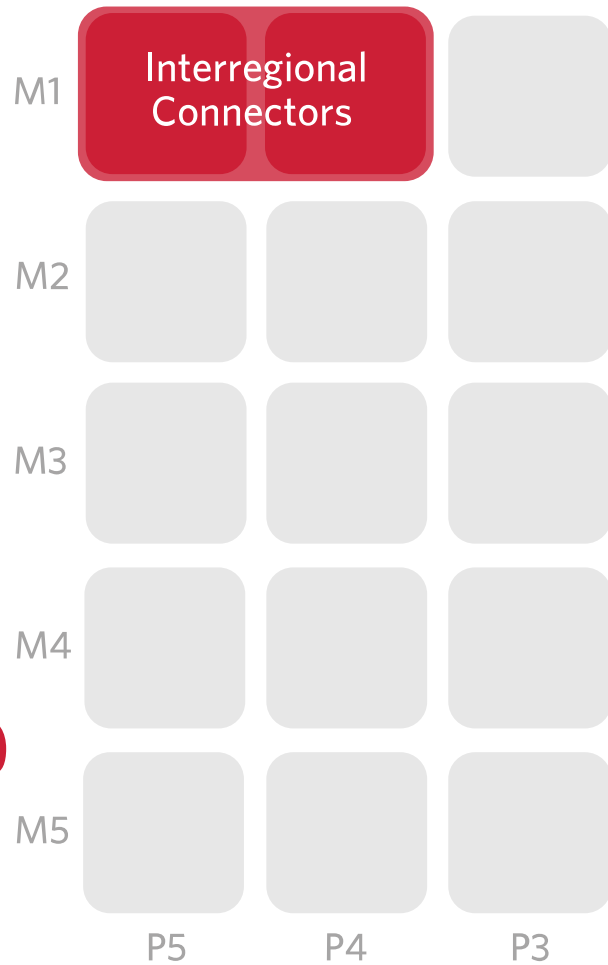
Varying levels of goods movement depending on the corridor movement class.

Indicative mode share

Stopping Places



Interregional Connectors



Interregional Connectors provide safe, reliable and efficient movement of people and goods between regions and strategic centres in a rural context. The focus of Interregional Connectors is to provide for efficient movement of people and goods over significant distances, and therefore these roads will usually have reduced land use access along them, many being designated as Limited Access Roads (LARs).

Nature of Place

On-street activity

These corridors usually demonstrate no discernible on-street activity, as no provision is made to support pedestrian movement. Some casual use of roadsides is made for localised movement. Some CR level cycling activity is possible on routes that connect the NZ cycle trail, or by cycle tourists.

Adjacent Land-use

Usually zoned rural production or general rural. The vast range of agricultural, horticultural, viticultural, forestry and other productive land uses. National parks and other non-productive natural areas.

Nature of Movement

Walking (Pedestrian Activity)

These corridors usually demonstrate no discernible on-street activity, as no provision is made to support pedestrian movement. Some casual use of roadsides is made for localised movement.

Cycling

Low levels of utility cycling in rural areas within an accessible distance of urban areas. Use of Interregional Connectors for tourist cycling, particularly to link parts of the NZ cycle trail.

Public Transport

May be used as a PT4 Secondary PT route for longer distance services between cities and satellite towns.

General Traffic

High levels of people movement by private vehicles undertaking interregional travel.

Freight

Interregional Connectors provide the primary routes for long distance goods movement inter-regionally and nationally.

Indicative mode share

Interregional Connectors



MOVEMENT



Movement of People and Goods

The classification of overall movement should achieve the following outcomes:

- Recognise the contribution to movement of all modes of transport, including active modes
- Focus on the movement of people and goods along a corridor, not simply the number of vehicles using the carriageway
- Provide a method for classification that is principles based and both prescriptive and intuitive. That is, the approximate classification can be derived using quantitative measures, and refined using qualitative factors.
- Feel right when the movement and place classification for the corridor is compared against the street category that classification places it in, i.e. the intended function of the corridor is congruent with its movement class.

People movement

A fundamental shift from the One Network Road Classification framework is the consideration of movement as people and goods, rather than the number of cars and trucks using a corridor. This approach also better recognises the contribution of other modes to the classification of overall movement. Consider figure 1, if we need to move 100 people along a corridor. This can be achieved by 100 pedestrians, or 100 cyclists, or 84 cars and light vehicles, or 2.5 buses, or just one train carriage. In reality it will be some combination of all available modes. The point is that 100 pedestrians walking down a street is as valid a means of movement as 84 cars travelling down the same street.

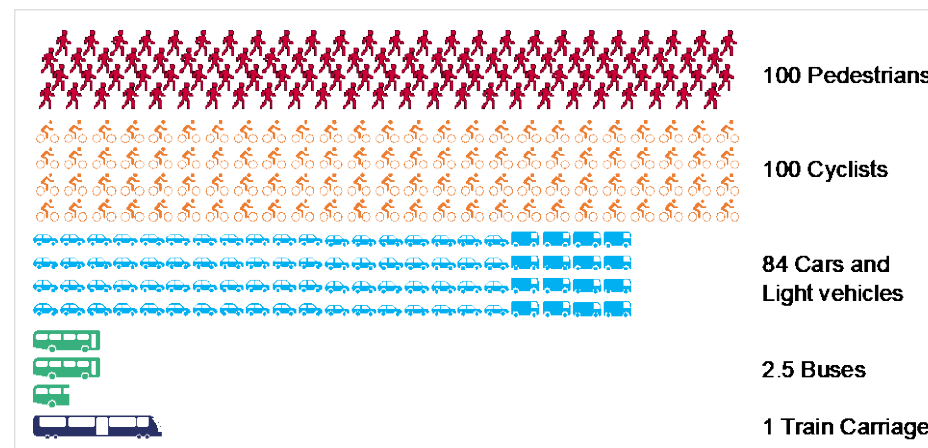


Figure 1: People movement

Linking locations of significance

Other factors for movement need to be considered, such as the intent of the corridor in linking locations of significance. This categorisation factor is known as strategic significance and indicates the importance of the corridor within the transport network. Factors that contribute to strategic significance include the importance of the start and end points of the journey, usually in terms of their contribution to the economy, access to essential services and the distance between these points, for example inter-regional journeys being categorised higher than local journeys. Strategic significance is also designated by network design. This is best demonstrated that in most instances there are likely to be more than one possible route to connect two locations of significance, but only one will usually be designated as the strategic corridor for that link.

Putting this together with people movement means that a footpath linking a major transport interchange with a metropolitan centre carrying 30,000 pedestrians a day has a similar rating for movement to an urban motorway.

Considerations to determine Movement Significance		Nature of Movement	Strategic Hierarchy	Scale of People Movement
M1	Major	Strategic transport corridors providing critical connections and moving high volumes. Often with separated modes and competition for space (expressways, cycleways, bus lanes etc.)	Mass movement corridors across a city, region or nationally	Typically > 20,000 per day
M2	Significant	Priority corridors linking main centres or significant destinations and travel hubs within a city or region. Typically higher proportions of freight movement.	Busy corridors connecting important hubs within a city or region	10,000 – 25,000 per day
M3	Moderate	Corridors for moving people and goods around a city or region. Increasing volumes across multiple modes.	Collector corridors to major transport connector routes	3,000 – 12,000 per day
M4	Minor	Local movements by people connecting to the main transport corridors. Increased levels of modal mix.	Local movement linking to collector corridors	300 – 4,000 per day
M5	Low	Local movement by people making short trips or connecting to collector routes. Typically lower volumes.	Local access and movement	Typically < 500 per day

GENERIC TRAFFIC



General Traffic

General traffic will continue to use the 8 levels of classification prescribed by the One Network Road Classification framework.

This approach has the following advantages:

- For much of the network, the current ONRC classification can be directly transcribed over to One Network Framework
- The ONRC classification methodology for general traffic is well known throughout the sector
- Existing approaches to performance monitoring and reporting for carriageways can be retained

The significant difference to ONRC is that the One Network Framework is also intended to describe a view of the future intended function of the network in addition to the current operational state, i.e. the future intended function classification will reflect how the corridor is expected to operate in the medium to long term. This coupled with the fact that the categorisation need only consider the General Traffic mode means that some adjustment to the ONRC measures to align with strategic significance may be justified.

Rural / Urban difference

As for the ONRC, the categorisation for General Traffic will recognise the difference between streets within urban areas, and rural roads, i.e. the threshold to be rated in a particular class will be lower in the rural context than in the urban context.

It is intended that Urban and Rural be differentiated based on adjacent land-use, i.e. if the land the street or road traverses is a rural land-use zone then the road is rural.

Strategic significance

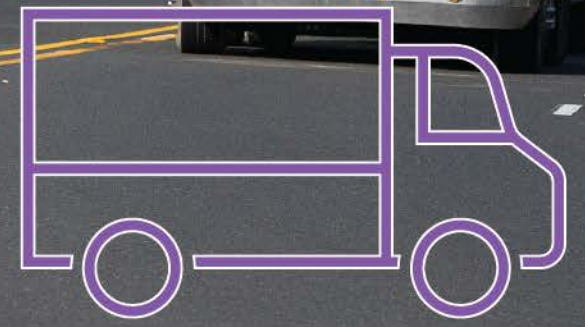
For general traffic, the strategic significance of each class is implicit, with the higher rated classes having greater strategic significance. When classifying general traffic, it will be important to look at the function the corridor is intended to provide, and not simply the volume of vehicles it is expected to convey. For example, urban motorways do not have to be capable of supporting 35,000 cars per day if their primary purpose is to connect to a strategically important location. Likewise, a rural road that is supporting relatively low volumes of traffic could be elevated in status if it is the sole means of connectivity to a remote region to ensure the corridor receives adequate funding to maintain the appropriate level of resilience.

Generally, the methodology for determining the movement classification of the general traffic mode will continue to utilise the ONRC method, which includes consideration of traffic volumes, importance of the link (strategic significance), and differentiating urban and rural contexts. The AADT metrics for each category will be adjusted to reflect people movement rather than vehicle movement, therefore allowing for a base comparison with other modes and the facility to use simple arithmetic to determine an overall movement classification based on all modes.

General Traffic

Class	ONRC Class	Strategic Significance	ONRC Metric / class differentiator	People movement per day
GT1	ONRC - High Volume.	The high volume movement of people nationally or to nationally significant locations. Nationally significant routes.	Urban > 35,000, Rural > 20,000 VPD	Urban > 40,000, Rural > 25,000
GT2	ONRC – National	The movement of people nationally or to nationally significant locations	Urban > 25,000 Rural > 15,000	Urban > 30,000 Rural > 18,000
GT3	ONRC – Regional	Connectors providing significant movement of people between cities and regions.	Urban > 15,000 Rural > 10,000	Urban > 18,000 Rural > 12,000
GT4	ONRC – Arterial	Connectors providing significant movement of people through or between neighbourhoods and towns.	Urban > 5,000 Rural > 3,000	Urban > 6,000 Rural > 3,500
GT5	ONRC – Primary Collector	Major collectors that link neighbourhoods to townships/districts.	Urban > 3,000 Rural > 1,000	Urban > 3,500 Rural > 1,200
GT6	ONRC – Secondary Collector	Minor collectors that link local areas to neighbourhoods.	Urban > 1,000 Rural > 1,000	Urban > 1,200 Rural > 1,200
GT7	ONRC – Access	Movement within a local area or to access areas outside the local area.	Urban < 1,000 Rural < 200	Urban < 1,200 Rural < 250
GT8	ONRC – Low Volume	Low volume movement within a local area	Urban < 200 Rural < 50	Urban < 250 Rural < 60

FREIGHT



Freight

For the reasons stated above under general traffic, the ONRC categories for Freight are being maintained. For freight, this means there are 7 categories, as ONRC made no distinction between Access and Low Volume for freight.

Strategic Significance

Generally, the methodology for determining the movement classification of the freight mode will continue to utilise the ONRC method, which includes consideration of vehicle counts and importance of the link (strategic significance). The AADT metrics for each category will remain as they are as they are a proxy for goods movement. This will continue to be the case until access to accurate and comprehensive information about the tonnage of goods being moved on the road network is available.

Goods Movement

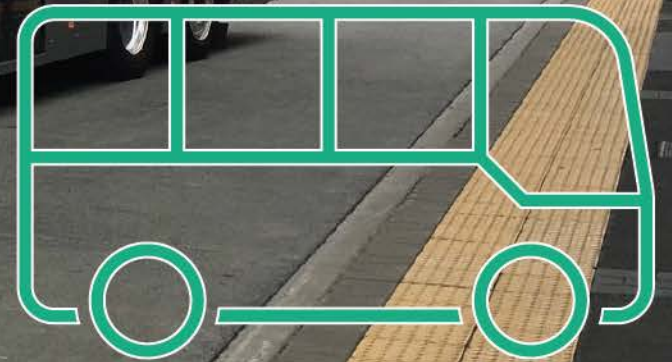
Converting AADT to goods movement at present is a simple arithmetic exercise of multiplying the number of vehicles by an assumed average load size. To date, no work has been done around quantifying the correlation between tonnage of goods moved and movement of people, and therefore it is difficult to factor goods movement into overall movement. Strategic importance of the route for freight, both in terms of volumes of freight able to be moved and providing links between significant places is still a valid methodology for classifying Freight Movement. The framework also allows for the inclusion railway lines as part of the freight network. This allows for a corridor planning approach to freight movement, providing for mode shift from road to rail as part of strategic network transport planning.

Freight

Class	ONRC Class	Strategic Significance	ONRC Metric / class differentiator	Goods Movement
F1	ONRC - High Volume.	The high volume movement of goods nationally or to nationally significant freight hubs	> 1,200 VPD	> 30,000 Tn/day
F2	ONRC – National	The movement of goods nationally or to nationally significant freight hubs	> 800	> 20,000 Tn/day
F3	ONRC – Regional	Connectors providing significant movement of goods between cities and regions.	> 800	> 10,000 Tn/day
F4	ONRC – Arterial	Connectors providing significant movement of goods through or between neighbourhoods and towns	> 300	> 7,000 Tn/day
F5	ONRC – Primary Collector	Major collectors that link neighbourhoods to townships/districts.	> 150	> 3,500 Tn/day
F6	ONRC – Secondary Collector	Minor collectors that link local areas to neighbourhoods.	> 25	> 600 Tn/day
F7	ONRC – Access ONRC – Low Volume *	Freight movement within a local area or to access areas outside the local area.	< 25	< 600 Tn/day

* The ONRC functional classification made no distinction between Access and Low Volume for Freight movement, and therefore F7 covers both classes.

PUBLIC TRANSPORT



Public Transport

The classification for Public Transport movement has been developed in consultation with specialists in PT and multi-modal transport within Waka Kotahi. The ONF project seeks to align with other frameworks and approaches in general use across the transport sector, and in this case with how PT practitioners view their network.

Public Transport Service Level descriptor

The service level descriptor will be included in the ONF as it underpins the cornerstone concept of the ONF of creating a common language for use across all disciplines within the transport sector. The descriptor is a useful short-form label for each of the PT classes that quickly invokes the nature of the PT service or route.

Distinguishing between PT Services and Movement Corridors

In order to standardise the contribution of public transport to the movement function of a corridor, the distinction needs to be made between a Public Transport Service and Public Transport use of a corridor. A PT service has attributes such as headway (the regularity of a particular service), and service start and end points, that do not apply to the corridor. A corridor may support more than one PT service, so the cumulative result of all services using a corridor will be what defines the PT movement categorisation.

Strategic Significance

Strategic significance describes the extent to which the particular corridor contributes to the Public Transport Network. For PT this ranges from dedicated corridors that support rapid transit to corridors where low volumes of targeted PT services operate.

Indicative Vehicle volume (at peak)

Vehicle volume is the combined number of services per hour (at peak) that would be observed for all services passing a point on the section of street being classified. Where the street supports more than one PT service then the vehicle frequency will be higher than for the individual services. For example, if two services which both have a 15 minute headway at peak (4 services per hour) utilise the same street for part of their route, the effective vehicle volume would be 8 services per hour along that section of street. Vehicle volume then is an indication of the total demand on the street section by public transport. Vehicle volumes usually increase as PT routes get closer to central business districts and key transport interchanges.

Metro Rail and Ferries

By definition, all Metro Rail lines, and ferry sea lanes would be classified as PT1 as they are considered rapid transit corridors irrespective of headway, availability and or volume of people movement. For this reason, all Metro Rail and ferry services are described in Vehicle Volume as PT1.

People Movement

Public transport is a very efficient means of moving people, with a fully laden 44 seat bus equating to at least 35 private motorcars, even more efficient for higher occupancy PT vehicles like double-decker buses that are becoming increasingly common in NZ. ONF is concerned with people movement rather than traffic volumes. Using the movement of people or freight along a corridor over a period of time (standardised to daily counts) also allows for direct comparisons across transport modes in their contribution to transport outcomes.

School Buses

School buses can be included within the classification consideration of a particular corridor if the route the school bus takes is shared with other public transport services. If the route is only used for school buses, then the corridor would be classified as Targeted.

Public Transport

Class	Public Transport Service Level descriptor	Strategic Significance (Role in Public Transport Network)	Indicative vehicle volume (At peak) (Bi-directional)	Indicative People Movement (Bi-directional)	Description
PT1	Dedicated	Strategically significant corridors where 'rapid transit' services are operated, providing a quick, frequent, reliable, and high-capacity service that operates on a permanent route (road, rail or sea lane) that is dedicated to public transport or largely separated from other traffic.	All metro rail corridors and dedicated corridors for non-rail public transport: all services. Buses, ferries and other non-rail public transport on largely separated corridors: > 12 services per hour.	>3000 per day	Dedicated or largely separated public transport corridors provide for the fast and efficient movement of people by rapid transit. By definition, they include dedicated busways and all metro rail lines and ferry sea lanes. They are only service public transport (excepting rail lines that can also provide a goods movement function under the freight mode).
PT2	Spine	Strategically significant corridors where many frequent services operate and many different bus services merge together to create very high frequencies and overall passenger movement . Any deficiencies on these corridors affect multiple services and large parts of an urban area.	>12 services per hour	1000 to 10000+ per day	Spine corridors are where many inbound services come together or outbound services operate, usually within city centres or at major transport interchanges, and much of the street space can be dedicated to public transport infrastructure, including significant space utilised for bus stops. Examples are Symonds Street in Auckland central, and Manners Street in Wellington.
PT3	Primary	Strategic corridors where frequent public transport services operate, providing regular (generally at least once every 15 minutes) services across most of the day, seven days a week.	> 4 services per hour	500 to 2000 per day	Primary public transport corridors occur on the parts of the network where frequent service can be expected. This could be for part of route where the collection of services operating results in a better than 15-minute headway frequency of that part of the route. These corridors are more likely to be on major arterial roads.
PT4	Secondary	Corridors where PT services operate at most times of day , but less frequently. The main focus of PT services using these corridors is to provide basic access and coverage.	< 4 services per hour	100 to 1000 per day	Secondary public transport corridors occur in the parts of the network providing local access and coverage, but at reduced schedules. Routes typically traverse local streets and minor arterial roads
PT5	Targeted	Corridors where services only operate at certain times of the day (e.g. peak only) or for specific trip purposes (e.g. school buses only).	N/A	< 100 per day	These services provide a basic level of access to public transport, but on a much-reduced schedule, typically only once a day return, such as school bus services, and long-distance commuter services, or at peak times only.

Note: Not all classes of Public Transport will be applicable to all RCAs. It is expected that only large metropolitan councils will likely have corridors rated as PT1. Some smaller authorities also may not have corridors that would have the required frequency of operation or level of people movement to be classed as PT2 or even PT3. Councils are welcome to define ferry-based public transport services in line with whichever PT class they feel is more appropriate to reflect the strategic significance of the service.

CYCLING



Cycling

The project team has collaborated with active mode subject matter experts within Waka Kotahi and the transport sector to co-design and develop out the base guide shown in the table overleaf.

Strategic Significance

For cycling primarily within the urban realm, there are currently 3 classes (C1 to C3) comprised of two classes for the primary and secondary strategic cycle networks and the third class being the ‘everything else’ category. The three classes are intended for utility cycling, i.e. cycling done for the purpose of getting to an activity at the journeys end and therefore for the purpose of transport.

Class CR – Cycling Regional is a class for corridors supporting cycling within the rural realm. It is intended that roads in the rural realm will only be classified for cycling where there is a discernible (greater than casual and occasional) use of a particular corridor by cyclists. This could be for routes providing connections between settlements, as part of the NZ Cycle Trail, or routes known as popular with road cyclists.

It is allowable for rural cycle routes to be classified as primary or secondary where they form part of the strategic cycling network and provide at least in part a utility cycling function. In this case the section of corridor fulfilling that function should be classified as C1 or C2 instead of CR.

Off-road cycling corridors

All cycling classes are intended as applicable to both cycling that occurs on the carriageway of roads and streets, as well as off-line corridors such as dedicated cycle paths, shared paths and pathways through parks. The determinant of class for off-road routes is where the route fits within the strategic cycling network for the RCA (C1, C2 or C3), supported by the volume of movement the route is intended to support.

Cycling

Class	Strategic Significance	Description
C1	Primary strategic cycling network, intended to support high volumes of cyclist movement	The primary strategic cycle network provides the backbone of the overall cycle network catering for higher volumes of cycle movement, longer and more efficient journeys (connecting across townships or between suburbs), and connecting to key locations of employment and education.
C2	Secondary strategic cycling network, providing key connections to schools, community facilities, employment or to public transport.	The secondary strategic cycle network provides the collector function within the network, joining local streets and roads to the primary strategic cycle routes. They also support key local cycle movement providing connections to schools, local shopping centres, suburban workplaces and public transport. This class can also be applied to off-road cycling routes such as cycle paths through parks where the route fulfils the function of a secondary cycling corridor.
C3	Every other street or path that forms part of the completed cycling network but is not part of the primary or secondary network. Localised cycling movement along and across residential streets, first/last kilometre to provide link to primary and secondary cycling networks.	This class covers all other routes that could form part of a completed cycling network but are not identified as primary or secondary strategic networks. This class includes residential streets where the volume and average speed of traffic can create a safe environment for cycling. This class may also include any off-road routes, such as paths through parks where cycling is permissible but not part of the strategic cycling network. The type of journey undertaken on these routes is primarily utility cycling for the purpose of getting to an activity at the journeys end.
CR	Cycling Regional: These are rural cycling routes that can be used for either utility cycling providing connections between settlements linking to key destinations, or for recreation or tourism purposes such as road cycling and cycle tourism . NZ Cycle trails. Excludes specialist cycling facilities such as mountain bike parks.	These routes occur mostly in the rural context and provide for longer cycle journeys that can be utility cycling to school or work, or cycling activity that is undertaken for the purpose of recreation or tourism, i.e. to experience the journey rather than to reach the destination. These routes include all the off-road sections of the NZ cycle trail, as well as the touring stages of that network, the pieces of the road network that provide link between the off-road portions. This class can also be used for routes known to be popular as training circuits with road cyclists. Excluded from this class and from inclusion in the cycle network overall are specialist cycling facilities such as the trails within mountain bike parks.

WALKWAY



Walking

The One Network Framework project team has collaborated with active mode subject matter experts within Waka Kotahi and the transport sector to co-design and develop the base guide shown in this section.

While walking is a mode of transport in its own right, pedestrians are also closely correlated with the place function of a street so classifying walking networks needs to be done alongside classifying ‘place’. The existence or volumes of pedestrians in an area is often an indication of the importance, or quality, of the place function.

Pedestrian activity within street categories

As mentioned, walking networks have a direct relationship to Place function and therefore can be closely associated with some of the Street Categories e.g. Main Streets or Civic Spaces.

Further information is contained within the Street Families section of this document on the contribution of pedestrian movement to the nature of place, and how that would be observed using the various street families.

Intended Function

For walking primarily within the urban realm, there are currently 3 classes (W1 to W3) comprised of the primary and secondary strategic walking networks and the third class being the ‘everything else’ category intended to cover all other urban streets where walking is possible. The three classes are intended for walking networks that connect origins and destinations rather than areas where people dwell, however there is often a close correlation between these ‘movement’ and ‘place’ functions for walking networks.

Walking Special (WS) is a class for walking that is undertaken mainly for recreational and tourism purposes and predominantly in the rural context. This recognises the significance of walking corridors such as Te Araroa and Department of Conservation tracks and allows for these routes to be

daylighted in overall walking network planning, to ensure they interface safely with movement corridors, and are not severed. Those parts of Te Araroa that traverse urban areas and share their route with the defined urban walking network should be classified either W1, W2 or W3 as should sections of rural road that have footpaths provided for local trips rather than longer distance tourism based trips.

All other rural roads will usually have no movement classification for walking, except where specific provision is made for local movement.

Indicative key walking catchments

Ninety percent of walking trips are less than 2km so walking networks are best classified by focussing on catchments around key attractors, rather than classifying longer corridors as done for other modes of transport.

Given the short distance of walking trips, and the accessibility they provide people of all ages and abilities, walking networks are dense and need to cater for direct desire lines. Because of this, classifying walking catchments (or ‘ped sheds’ as they are sometimes known) is best done using routes that are available for walking, rather than ‘as the crow flies’ catchments, to allow for obstructions and severance to be factored in.

City and suburb centres, shopping precincts, business districts, schools and universities are all key pedestrian attractors and therefore are strategically important parts of walking networks. Walking catchments are also critical to support public transport networks. Strategic walking networks therefore also correlate closely with public transport stops and interchanges.

Walking networks can include both on-street and off-street environments, where pathways through parks or alleyways etc provide key walking connections.

Connections to Public Transport

Accessibility to public transport is a key influencer in its use as a mode of travel. Studies and user research have sought to define the catchment reach of various types of public transport stop in terms of the distance people are willing to walk to either a local bus stop or a metro rail station. Regularity and reliability of services is also a major factor in choosing public transport. So public transport stops with more frequent services will have relatively higher patronage and associated pedestrian activity round them.

Walking

Class	Intended Function	Intended Function Description	Associated Street Categories (Indicative)	Indicative key walking catchments	Connections to Public Transport (indicative)
W1	Key routes within primary walking catchments connecting pedestrians with key destinations and places of significance.	The most intensely used pedestrian network providing connections to and between key destinations and places that play host to significant pedestrian activity. This includes access to and within the city centres and suburban / local centres. To workplaces, city hubs, civic spaces, community, health, significant educational and recreational facilities, and near transport hubs. W1 can include traffic free environments and routes away from motorised traffic where “place” is significant (e.g. city hubs, waterfront esplanades etc). Users generally able to move at their own rate, safely and comfortably whatever their ability, given priority at intersections, directional signs provided to assist users find key destinations, unimpeded by alt uses of space for sandwich boards, wheelie bins etc..	Civic Spaces, Main Streets, City Hubs	Key walking routes within 800m of P1/P2 amenities or land use zones including: Central Business Districts Town Centre Central City/Metropolitan Zone Hospitals Main Shopping Centres University and Polytechnic Campuses May include primary or secondary schools with large school rolls and dense local student catchments.	Within 500m of a stop or interchange on a PT1 or PT2 route Within 1km of a stop on a Metro Rail route, central ferry terminals or transport interchanges
W2	Key routes within secondary walking catchments, providing key connections to local destinations and providing access to W1 networks.	Provides connection to and between W1 routes, connects to locations of local pedestrian activity such as primary schools and to residential and suburban catchments. The local connections walking network. W2 can include off-line routes away from motorised traffic.	Activity Streets, Stopping Places, Urban Connectors	Key walking routes within 800m beyond W1 walking catchments Key walking routes within 800m of P2/P3 amenities/land use zones. May include catchments around smaller primary or secondary schools with local student catchments.	Within 250m of a stop on a PT3 or PT4 route
W3	Every other street or path that forms a completed walking network but is not considered ‘primary’ or ‘secondary’.	Localised pedestrian movement along and across residential streets. W3 routes connect to and support access to W1 and W2 networks. This class also can include any off-road routes, such as paths through parks where walking is undertaken for the purpose of getting to a local activity at the journeys end. Progress/route selection may be affected by topography, and or temporary uses of space (wheelie bins)	Local Streets, Peri-urban Roads	Around and through P4 places	
WS	Walking Special: Rural routes used predominantly for recreation or tourism and so provide a reduced transport function. Includes rural parts of Te Araroa, DoC tracks.	These routes occur mostly in the rural context and are used for walking activity that is predominantly undertaken for the purpose of recreation or tourism (e.g. routes include Te Araroa, Department of Conservation walking tracks etc). Where local pedestrian facilities form part of designated sections of Te Araroa etc., these sections of the network should be classified as either W1, W2, or W3.	Rural Roads, Rural Connectors, Interregional Connectors	Around Rural P5 places	N/A

Approach to classification

Classification of streets and roads is undertaken to:

- Provide the means for describing the various components of the transport network based on their intended purpose and function
- Ensure the provision of consistent service levels on similar function roads
- Recognise that the various classes of streets and roads provide differing levels of utility within the transport network
- Differentiate service performance targets by class
- Guide planning, operation and investment decisions
- Aid in understanding the function and characteristics of different corridors, and the service outcomes which can be expected from users of that corridor
- Allow for comparative analysis and benchmarking of the performance of transport networks across RCAs and the country.

In order to achieve all of these desired outcomes it is important that the classification framework is applied consistently across the country within all RCAs.

Usually, a blunt instrument like rigorously defined metrics for each class would be used and enforced so that consistency was almost assured. This approach also does not work as well when considering the future intended function of the network, i.e. what the network may look like in 10 years' time, as any numbers assigned to factors such as people movement will be predictive only.

There is a desire to have a framework that is easy to use, intuitive, and avoids being overly prescriptive. With street category classification within street families in particular, it is recommended the approach be to determine the function of the road or street first, and then if appropriate adjust the classification based on metrics.

This means placing more weight on the classification factors such as strategic significance, and how a street or road will provide for the economic and social

outcomes being sought through providing transport connections to important destinations or providing liveable community spaces, and less on the quantitative metrics.

Intended Function

The One Network Framework uses the concept of intended function as a key determinant in movement and place classification. This recognises that networks are planned, designed and built with a longer term focus, for example significant connector roads are often planned and built ahead of the expected volume of people movement they are designed to support. In this case the street should be classified as an Urban connector, even if the current level of movement indicates it is operating as a local street. Another example is 'rat-run' routes where streets intended to function as local streets are used as commuter routes. While operating as a connector, the local street's intended function is still a local street, and this is how it should be considered. The incongruity of the use of the local street supporting higher people movement can then be used as a trigger to put in place strategies to move the traffic over to the route that is intended as the connector. Classifying by intended function also ensures that roads and streets receive the appropriate level of investment in operations and maintenance.

Collaborative multi-discipline approach

It is envisaged that classification of the future strategic intended function (long term view) of transport networks will involve a collaborative, multidiscipline approach. Representation at workshops to classify networks should be from a range of disciplines that cover both the planning and design aspects of transport networks and urban/rural land-use.

Versions of classification

The One Network Framework will describe both the current and future intended functions of the transport network and the relationship with adjacent land-use close to the transport corridor. This will inform current operations as well as enabling multi-disciplinary discussions to be undertaken to plan transport networks aligned with growth strategies, land-use planning, and urban design.

A single classification framework helps us all to understand and determine a future view of how we want our roads and streets to perform and provides the mechanism to have **richer conversations** about competing demands, strategic objectives and potential investment.

Current function

The current function is intended to reflect the network as it operates today, for both movement and place. This incorporates the intended nature of place, on-street activity and adjacent land use, as well as the movement of people and goods.



Current Function

The current function view of the network will be used in operations and maintenance, and reporting on the delivery of service outcomes and network performance.

Future intended function

The significant difference to ONRC is that the One Network Framework also describes a view of the future intended function of the network in addition to the current operational state, i.e. the future intended function classification will reflect how the corridor is expected to operate in the medium to long term. This builds on the current function and is derived from existing growth strategies, District/Unitary plans, and long term transport plans to predict how the network will operate in ten to thirty years' time.

The development of the future intended function view of the network will encourage a collaborative approach to transport and land-use planning, and urban design that considers how planned changes in land-use will affect the transport network.

The future intended function view will be used in activity management plans, long term transport plans, and the development of business cases.



Future Intended Function

■ ■ ■ ONE
■ ■ ■ NETWORK
■ ■ ■ FRAMEWORK

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AGENCY



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Request to REG for REG background analysis on the ONF Classification of PT Services

Andrew McKillop <Andrew.McKillop@nzta.govt.nz>

8 February 2023 at 09:43

To: Wellington Commuter <wellingtoncommuter@gmail.com>

Cc: One Network Framework <onf@nzta.govt.nz>, Official Correspondence <Official.Correspondence@nzta.govt.nz>

Good morning Tony

As a follow up to our telecon yesterday, please see our response to your list of key points from our meeting last year. I apologise for the delay in getting this information back to you.

Please refer the following feedback which is based off engagement with Caroline Dumas and the ONF team.

The One Network Framework (ONF) recognises that streets not only keep people and goods moving, but they're also places for people to live, work and enjoy. The ONF is designed to contribute to improving road safety and build more vibrant and liveable communities. Movement and Place frameworks such as the ONF have many uses at the strategic network planning and development level, as well as at the detailed project level.

Refer your meeting notes, we confirm the following changes

- The One Network Framework tool provides a common and consistent language to be used across government for transport planning, operations and maintenance and projects. It was developed by the sector, led by Waka Kotahi but using the Road Efficiency Group as the sector forum. Councils across the sector have been engaged via these forums to have input and to get agreement on the One Network Framework. Most of the work was in collaborative working groups, using co-design principles
- Waka Kotahi released an updated detailed design and classification guidance for ONF in September 2022, in line with stakeholder feedback. <https://www.nzta.govt.nz/planning-and-investment/planning/one-network-framework/>
- The One Network Framework is just that, a tool to inform the basis of other transport discussions and documentation such as business plans, specifications and contracts.
- However, the One Network Framework is not a standard that can be directly applied to solve real world transport problems.
- For example, the One Network Framework alone is not suitable to assess whether a specific public transport service is, or is not a rapid transit service under the Urban Planning Statement - Urban Design. To do this, a council or other organisation would need to develop and apply a PT assessment standard based on suitable public transport criteria. In doing this they should, of course, base the standard on the language and structure outlined in the One Network Framework.
- As a tool, the One Network Framework is a success across New Zealand, and it will continue to be enhanced and embedded as a key foundation to government transport planning.

Andrew

Andrew McKillop

Programme Director

Te Ringa Maimoa Transport Excellence Partnership

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From: Wellington Commuter <wellingtoncommuter@gmail.com>

Sent: Friday, 27 January 2023 10:09 pm

To: Andrew McKillop <Andrew.McKillop@nzta.govt.nz>

Cc: One Network Framework <onf@nzta.govt.nz>; Official Correspondence <Official.Correspondence@nzta.govt.nz>

Subject: Re: Request to REG for REG background analysis on the ONF Classification of PT Services

CAUTION: The sender of this email is from outside Waka Kotahi. Do not click links, attachments, or reply unless you recognise the sender's email address and know the content is safe.

Hi Andrew

I am just following up on when you can confirm the amended meeting summary email.

I am sorry to hassle you but it has become quite important to get this summary confirmed so can you please get back to me by Tuesday?

Please call me if there's an issue.

Cheers

Tony Randle

0274846266

On Mon, 23 Jan 2023 at 14:23, Andrew McKillop <Andrew.McKillop@nzta.govt.nz> wrote:

HNY, and Apologies Tony. I shall check with Caroline tomorrow and respond accordingly.

17 December 2021

Tony Randle
fyi-request-17720-bea871af@requests.fyi.org.nz

Kia ora Tony

The information you requested – CAS-471846-X7Q8C9

Thank you for your request for information dated 25 November 2021 about the Regional Land Transport Plan (RLTP) 2021-31's definition of rapid transit, and the exclusion of the Onehunga Line from this definition.

Auckland Transport (AT) has been collaborating on the development of an Auckland Rapid Transit Plan with Auckland Council (AC) and Waka Kotahi New Zealand Transport Agency (WK). An early part of this project involved the development of a 'Rapid Transit Baseline' (Baseline), by which these three agencies agreed on a shared understanding of rapid transit in the Auckland context. This Baseline document's definitions are the basis on which decisions were made regarding which services would be included as rapid transit in the RLTP. The Baseline document has also been through the governance of the Auckland Transport Alignment Project (ATAP), which includes representatives from the Ministry of Transport, KiwiRail, the Treasury, and other central government agencies.

Members of the rapid transit plan's working group discussed the interrelationship of the National Policy Statement on Urban Development (NPS-UD), the RLTP, and the Baseline's definitions to agree that the Onehunga line did not meet the agreed definition of rapid transit in Auckland. The key criteria that the service fails on is frequency – the Onehunga line only operates services half-hourly, and there are no plans to change this in the next 10 years (i.e., the timeframe of the RLTP). This contrasts with other train services, which will all operate at least every 15 minutes (7am to 7pm, 7 days a week) once the City Rail Link opens. At this point they will meet the Baseline's definition of frequent (and therefore met its definition of rapid transit)

Questions 1, 2, 3, 4 and 5

In answer the first five of your questions, regarding the definition of "quick" (called "fast" in the Baseline), "frequent", "reliable" and "high capacity", the Baseline's definition was used. The full document (Auckland Rapid Transit Baseline - Working Doc.pdf) is attached as per your request, but the relevant criteria are set out below:



3.2 Rapid transit is defined by its service characteristics

Rapid transit is:

- **Fast** – rapid transit services offer time-competitive travel with private vehicles, particularly at peak times. This does not require rapid transit to always be faster than travel by private vehicle. It does mean travel times must be close enough that other advantages of rapid transit (such as its reliability) make it a highly attractive option. **To achieve this characteristic, rapid transit is generally faster than other public transport services, through provision of a dedicated corridor and wider spacing between stops.**
- **Frequent** – rapid transit services form part of the frequent public transport network, and therefore operate at frequencies that enable users to ‘turn up and go’ at most times of day, seven days a week.ⁱ These high frequencies enable rapid transit to quickly shift large numbers of people and allow for efficient connections between different public transport services.
- **Reliable** – rapid transit services operate with very high levels of reliability and are unaffected by other parts of the transport network. They have priority over other traffic through a dedicated corridor and/or priority at intersections. High reliability helps make rapid transit services competitive with private vehicles. Reliability complements frequency, by ensuring even spacing between services and predictable departure times, which enhances the customer experience.
- **High capacity** – the combination of high frequency and large vehicles able to carry many people means that rapid transit corridors can move significant numbers of people per hour in a relatively small amount of space.

Regarding your fifth question, around the definition of a “a permanent route”, the Baseline assumes that ‘permanent’ means that the service operates regularly (not intermittently, such as on some days of the week but not others) on infrastructure that is intended for its use.

The Baseline’s definition says the following about the quality of that infrastructure:

3.4 Rapid transit has total priority

A key aspect of rapid transit is its ability to always operate reliably, regardless other factors affecting the transport network. In order to achieve this reliability, rapid transit usually operates in corridors that are physically separated from other modes. This results in total priority that enable services to run more quickly, frequently, and safely than other public transport services.

These dedicated corridors may operate at-grade, above or below ground, or in a combination. Corridors typically avoid conflicts where they cross another transport corridor through grade-separation. Where rapid transit corridors cross others at-grade, the rapid transit corridor should have priority by way of signal pre-emption (such as level crossings on the rail network). This provides the priority that ensures services can continue at speed and without impacting reliability. Grade separated crossings are generally preferred to reduce risks to other users and minimise the chances of service disruption.

AT-grade corridors may be on-street in urban areas, but only where this does not affect the quality of service or have unacceptable safety risks. Generally, this requires dedicated lanes and priority at intersections, although ‘time-segregated’ running may also be an option.ⁱⁱ

Questions 6 and 7

With regards to your question 6 and 7, there were no “reports, presentations or working papers” other than the Baseline that specifically addressed the status of the Onehunga Line and its stops as it related to their classification (or not) as rapid transit.

The following table from the Baseline outlines how the agencies assessed the existing rapid transit network, as set out in the Regional Public Transport Plan, against the Baseline’s criteria. This was the basis for the classification of the included in the RLTP. Criteria that are green were considered to be met today. Yellow will be met once projects funded in the RLTP are met. Red means the criteria will not be met (either in whole or on parts of the route) within the timeframe of the RLTP:

Service	Fast	Frequent	Reliable	High Capacity	Dedicated Corridor	Shaping Urban Development
Western Line (rail)						
<i>Travel time and off-peak frequency issues will be resolved once City Rail Link and new timetable are operational.</i>						
Southern Line (rail)						
<i>Off-peak frequency issue will be resolved once City Rail Link and new timetable are operational.</i>						
Eastern Line (rail)						
<i>Off-peak frequency issue will be resolved once City Rail Link and new timetable are operational.</i>						
Onehunga Branch (rail)						
<i>Frequency limited by single track.</i>						
Pukekohe Connection (rail)						
<i>Existing shuttle service and associated infrastructure limit speed (due to transfer), frequency and capacity. Electrification will overcome these issues. New stations, part of the New Zealand Upgrade Programme, will help to shape urban development.</i>						
Northern Busway services (NX1, NX2)						
<i>Priority infrastructure does not extend for full length of services. This lack of a dedicated corridor creates delays and reliability issues in the city centre. The impact of these issues on customers is mitigated by the frequency of services. There is limited evidence to date of the busway shaping urban growth, although proposals for intensification near certain stations are emerging.</i>						
 Generally meets requirements		 Deficiencies that will be addressed by funded projects			 Deficiencies that will not be addressed by funded projects	

The Baseline document was completed in early 2020. Some of its references, particularly to work that needs to be done, are now out of date. Work on the Auckland Rapid Transit Plan has progressed and is due to be finalised early in 2022. The Baseline will be incorporated into the final plan.

Questions 8 and 9

Correspondence within AT and between AT, AC and WK regarding your questions these questions is attached. The correspondence, which directly addresses your questions 8 and 9, could be considered brief; this is because all the agencies involved had already agreed that the Onehunga line did not meet the definition of rapid transit, either now or in the planned future, as part of the Baseline's development. Some information such as names have been withheld under section 7(2)(a) of the LGOIMA, to protect the privacy of natural persons including that of deceased natural persons.

Should you believe that we have not responded appropriately to your request, you are able to make a complaint to the Office of the Ombudsman in accordance with section 27(3) of the LGOIMA Act, and seek an investigation and review in regard to this matter.

Yours sincerely



Hamish Bunn
Group Manager Investment, Planning & Policy

Encl: Auckland Rapid Transit Baseline - Working Doc.pdf
Auckland Transport - CAS-471846-X7Q8C9 Combined emails_Redacted.pdf

ⁱ A true 'turn up and go' frequency would be a minimum of every 10 minutes. Currently, some rapid transit services only achieve this during the peak. The Regional Public Transport Plan (RPTP) aspires for the entire rapid transit network to achieve this minimum frequency by 2028. The current definition in the RPTP is at least every 15 minutes, between 7am and 7pm, 7 days a week.

ⁱⁱ Time segregated running is where sections of space are shared by rapid transit and other modes, and access to these sections is controlled (e.g. by traffic signals) to dedicate the space to rapid transit operations when required

Auckland Rapid Transit Baseline



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DRAFT

1. Executive Summary

What is the Auckland Rapid Transit Baseline?

This Baseline document provides a definition for rapid transit within Auckland’s context, and sets out the role rapid transit plays in Auckland’s transport and urban development. Objectives underpin these roles, both at a network and individual corridor level.

The current status of individual corridors that make up the planned rapid transit network is also set out, along with the transport and urban form outcomes the corridors are expected to support. In pulling together this information the document acts as an agreed Baseline on the current state of Auckland’s rapid transit network and the necessary next steps in its development.

The Baseline has been produced in partnership between Auckland Council, Auckland Transport, and Waka Kotahi NZ Transport Agency. Further work on an Auckland Rapid Transit Plan will build on the work of the Baseline.

What is rapid transit and why is it important in Auckland?

Rapid transit is defined at a high level in the Government Policy Statement on Land Transport (GPS) and the National Policy Statement on Urban Development (NPS-UD) as:

a quick, frequent, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic.

The Baseline’s definition builds on what is outlined in the GPS and the NPS-UD to provide more detail that is relevant in the Auckland context. This added detail emphasises that rapid transit in Auckland operates on strategic corridors and is not affected by congestion. It also emphasises rapid transit is the core of Auckland’s wider public transport network and will play a key role in shaping the region’s growth and urban development.

The Baseline’s definition of rapid transit is that:

rapid transit provides fast, frequent, and reliable high-capacity access along strategic corridors that are separated from other modes and unaffected by congestion. Rapid transit is the backbone of Auckland’s public transport network and is critical to supporting and shaping Auckland’s growth and urban form.

The roles rapid transit is expected to play within the transport network and in relation to land use planning and development are touched on in this definition. Internationally, rapid transit plays a variety of different roles depending on the context of the urban area it is in. The Baseline makes clear that in Auckland, rapid transit is expected to support the Auckland Plan 2050’s vision for the future growth of the city. This means rapid transit will focus on:

- supporting and shaping a quality compact urban form
- the public transport network’s backbone
- providing more space-efficient access to opportunities.

Objectives have been developed to clearly articulate the desired outcomes that will come from rapid transit effectively performing these roles. These Objectives have been linked to the wider system planning objectives that Auckland Transport uses in its network planning. They are then supported by measures that enable performance against the Objectives to be quantified. The seven Objectives are for rapid transit in Auckland to:

1. Increase access to opportunities, especially in major and growing employment areas
2. Increase people throughput on Auckland's most critical corridors
3. Increase the share of travel unaffected by congestion
4. Increase public transport's mode share, especially for medium to long journeys
5. Enable an integrated, efficient and effective public transport network
6. Focus most housing and employment growth in centres, nodes, and development areas
7. Support high quality integrated urban communities.

Achieving these Objectives will result in rapid transit playing a more important role in the lives of more Aucklanders. It will offer them a fast and reliable public transport option to access a wider range of opportunities and supporting a greater mix of housing across the city. This will also mean greater use of public transport and an associated reduction in transport-related greenhouse gas emissions.

Why is a Baseline needed?

Rapid transit's importance to Auckland's future is underscored by the significant existing and planned investment in it, across multiple agencies. This investment forms the largest single part of new capital investment planned for transport in Auckland. \$7.6 billion for rapid transit improvements was included in the 2021 Auckland Transport Alignment Plan (ATAP) and Regional Land Transport Plan 2021 (RLTP) programmes. Investment in rapid transit also influences other parts of the investment programme (for example, road connections to access stations). Changes to plans for rapid transit therefore have significant flow-on effects for the planning of other investments, and the transport system as a whole.

Rapid transit also has significant impacts on, and interfaces with, land use planning. The Auckland Plan sees rapid transit as critical to achieving its goals for the region's future development and desired transport outcomes. Zoning in the Unitary Plan was planned to enable residential and commercial intensification around the existing rapid transit network. The recently released National Policy Statement on Urban Development (NPS-UD) will require Council to enable greater intensification around both existing and planned rapid transit.

Multiple agencies are involved with the development on Auckland's rapid transit network. These include Auckland Council, the Ministry of Transport, Waka Kotahi New Zealand Transport Agency, and KiwiRail. Beyond the high-level network plans in ATAP and the Auckland Plan there has not been a consistent understanding, agreed between agencies, of what these agencies are collectively working towards in developing the rapid transit network, or how this will be done.

This Rapid Transit Baseline is the first step towards developing this consistent understanding and agreed way forward. It provides an overview of the current status of rapid transit in Auckland, as well as planning for its future development, and lays a foundation that an Auckland Rapid Transit Plan can build on.

What is the current status of planning for rapid transit?

There are three major rapid transit projects currently under construction in Auckland: the City Rail Link; the Northern Busway's extension; and the Eastern Busway's construction. These projects alone will significantly expand the existing rapid transit network and represent over \$5 billion of investment.

Planning is underway for a range of other projects, including major expansions of the network to new corridors (such as the City Centre to Māngere project), extensions to the existing network (such as expanded the electrified rail network to Pukekohe), and steps towards future investment (such as Airport to Botany project). These projects are currently led by a range of organisations, including Auckland Transport, Waka Kotahi, the Ministry of Transport, and KiwiRail (with support from other organisations).

These projects under investigation are focussed on expanding the existing rapid transit network to support growth, improve access to centres, and offer alternatives to congested corridors. Objectives for all corridors have been developed to articulate how they will contribute to the overall objectives for rapid transit in Auckland.

Assessing the history of work on these projects has shown where the Baseline can add value and save time in the planning phase. The lack of a consistent understanding around the intentions for the future development of the rapid transit network has resulted in some duplication of work on the business cases for many current projects. This Baseline will ensure that future investigations have an agreed vision to refer to. This will be important given there are several conceptual corridors (such as between Onehunga and New Lynn) where no detailed planning work has been undertaken but where work will be required in future.

Future planning will also need to address issues that current business case work has found hard to determine answers to. This primarily relates to how corridors will integrate with each other, such as within the City Centre. Such answers can only be determined at a network planning level, as opposed to at a project level. This is a key issue that an Auckland Rapid Transit Plan must help to resolve.

What are the next steps beyond this Baseline?

Work has begun on an Auckland Rapid Transit Plan to address issues around network integration and provide more detail around prioritising and staging the development of the network. Like this Baseline, the Plan is being developed collaboratively by Auckland Council, Auckland Transport, and Waka Kotahi. Other agencies, including the Ministry of Transport and KiwiRail, will also be involved.

The Auckland Rapid Transit Plan will build on the high-level plans of ATAP and the Auckland Plan, as well as this Baseline, and develop a detailed plan for the development of Auckland's rapid transit network over the next three decades. It is expected to be completed in late 2021.

2. Context

Rapid transit plays an increasingly critical role in moving people around Auckland and in supporting the city's growth and development. Auckland's current rapid transit network comprises the electrified heavy rail network between Swanson and Papakura, as well as the Northern Busway:

- The rail network serves large parts of central, west, south and east Auckland. It has provided passenger services for well over a century but has been substantially upgraded over the past decade. Electric trains were progressively implemented from 2014 to 2015.
- The Northern Busway opened in 2008 and connects the North Shore with the city centre and beyond. In doing so, the Busway provides the dedicated infrastructure for several bus routes, including core Northern Express services that also use the Auckland Harbour Bridge and local roads to the south of the busway, and bus shoulder lanes between Constellation and Albany stations.

Together, this network carried over 26 million passengers in 2019 with use growing strongly prior to the COVID-19 pandemic, which impacted usage during 2020.

Significant plans to expand and upgrade Auckland's rapid transit network are being progressed. City Rail Link, an extension of the Northern Busway to Albany and the first stage of the Eastern Busway between Panmure and Pakuranga are all under construction. Planning is also well advanced to expand the rapid transit network on the City Centre to Mangere and Northwest corridors, as well as to extend rail electrification to Pukekohe (allowing direct and more frequent services).

The rapid transit network's development has been the focus of recent planning work, including the Auckland Transport Alignment Project (ATAP). This work focuses on how rapid transit will support wider objectives for the transport network, such as mode shift, climate change and spatial priorities. ATAP, and the Regional Public Transport Plan 2018 (RPTP) include detail of how the rapid transit network will develop over the next decade. Beyond this time period there is less clarity about future direction. ATAP's long-term direction is shown in a high-level network diagram, with minimal detail about how and why these corridors should be developed.

Developing Auckland's rapid transit network will be the most significant transport investment in the region over the coming decades. It needs to be well planned and integrated within the broader public transport system and with Auckland's growth aspirations. This makes getting clarity on long-term planning at a network level critical, which cannot be achieved through project-level business cases alone.

This document – the Auckland Rapid Transit Baseline – is an important step towards providing network-level clarity about how rapid transit in Auckland will be developed over time, while retaining the flexibility to respond to different future scenarios.

Together with subsequent network planning, this Rapid Transit Baseline will provide a link between high-level plans like Future Connect and the Auckland Plan 2050 with project-level business cases and funding plans. To do this, the Rapid Transit Baseline report:

- defines rapid transit
- details the role rapid transit needs to play in supporting Auckland's future success

- outlines key objectives which will be used to measure success
- summarises the ‘current situation’, including both existing rapid transit infrastructure and services as well as the current state of rapid transit planning
- identifies key issues that need to be addressed through future network planning.

Figure 2-1 - Map of urban form and rapid transit network shows the existing rapid transit network and its relationship to existing and planned urban areas.

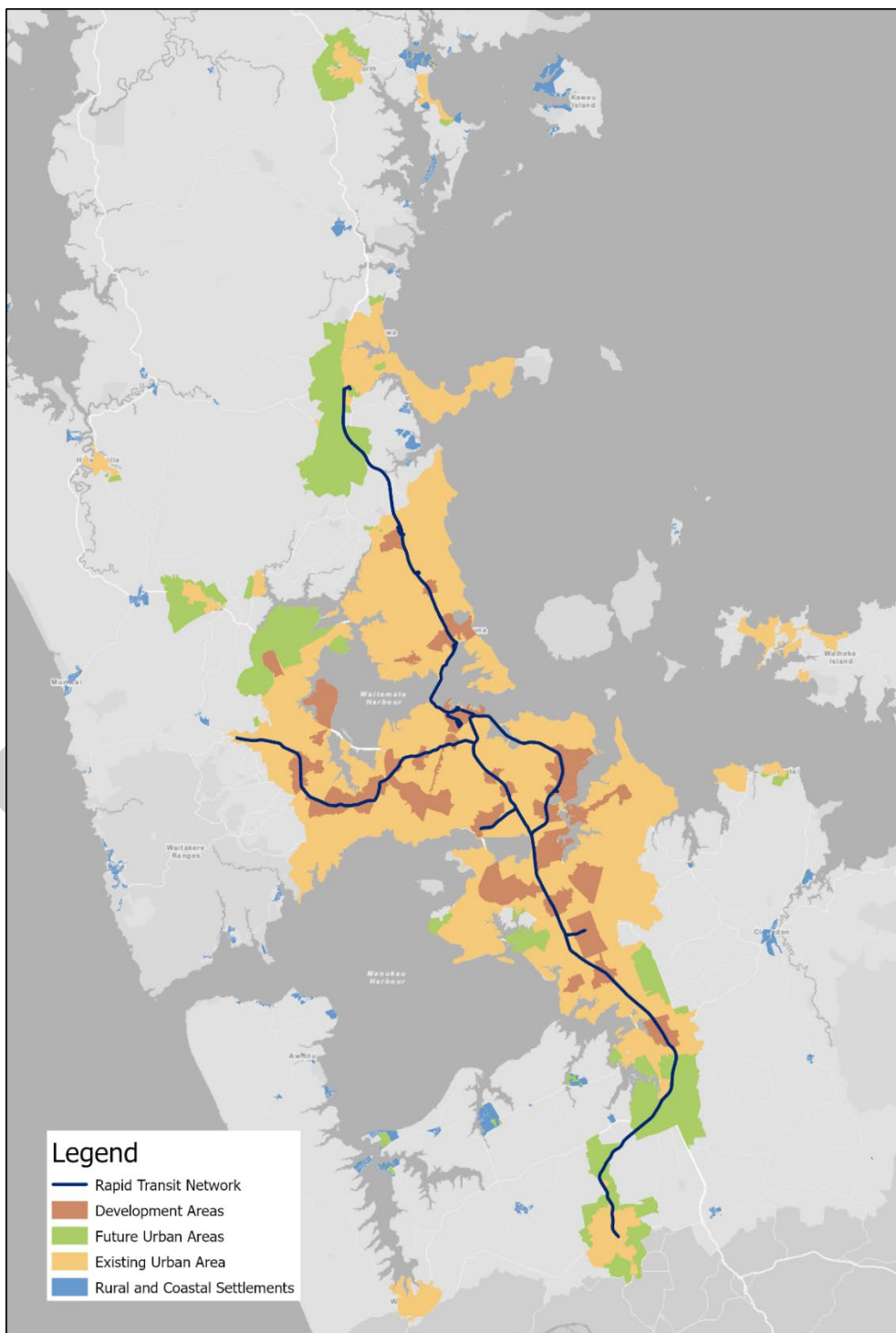


Figure 2-1 - Map of urban form and rapid transit network

3. Defining Rapid Transit

There are a variety of different forms of rapid transit around the world, which makes a clear definition important.¹ The purpose of this section is to establish a common understanding of what is meant by rapid transit in the Auckland context. As agreed by Auckland Council, Auckland Transport and Waka Kotahi, in Auckland:

rapid transit provides fast, frequent, and reliable high-capacity access along strategic corridors that are separated from other modes and unaffected by congestion. Rapid transit is the backbone of Auckland’s public transport network and is critical to supporting and shaping Auckland’s growth and urban form.

The key elements of this definition are discussed in more detail throughout this section. An assessment of Auckland’s current rapid transit network, in relation to these characteristics, can be found in section 6.1. The rest of this section discusses the ideal characteristics of rapid transit.

3.1 Rapid transit is public transport

Rapid transit is a form of high-capacity public transport moving large numbers of people throughout the day. Together, multiple rapid transit services form the rapid transit network (RTN). Rapid transit services operate at high frequencies throughout the day (at least every 15 minutes) and are therefore part of the frequent public transport network.

What distinguishes rapid transit from the frequent network and wider public transport network is the higher quality experience it provides customers. Its service characteristics and corridor design, discussed in more detail below, mean rapid transit can move large numbers of people quickly, and efficiently. For this reason, rapid transit is the core of the wider public transport network, supported by other public transport services. Other forms of transport, including walking, cycling and park and ride can also support access to rapid transit.

Figure 3-1- Rapid Transit Network within the wider public transport network illustrates the relationship between the rapid transit, the frequent transit network, and the overall public transport network. These layers are defined in the RPTP.

¹ The National Policy Statement on Urban Development and the 2021 Government Policy Statement on Land Transport define rapid transit as “A quick, frequent, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic.” The definition in this document is consistent with the national level definition but provides further detail relevant to Auckland.

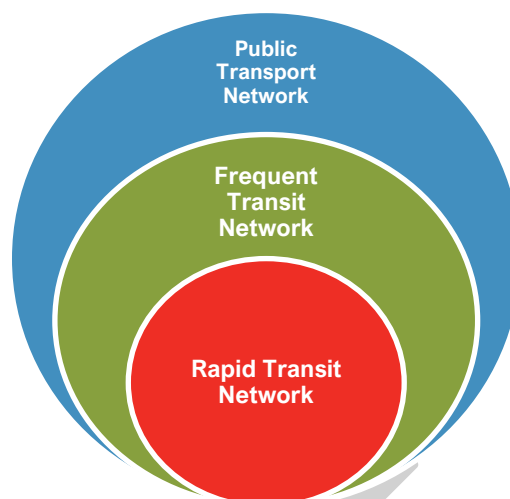


Figure 3-1- Rapid Transit Network within the wider public transport network

Further detail on how the various layers of the public transport network work together is outlined in section 4, on the Role of Rapid Transit.

3.2 Rapid transit is defined by its service characteristics

Rapid transit is:

- **Fast** – rapid transit services offer time-competitive travel with private vehicles, particularly at peak times. This does not require rapid transit to always be *faster* than travel by private vehicle. It does mean travel times must be close enough that other advantages of rapid transit (such as its reliability) make it a highly attractive option. To achieve this characteristic, rapid transit is generally faster than other public transport services, through provision of a dedicated corridor and wider spacing between stops.
- **Frequent** – rapid transit services form part of the frequent public transport network, and therefore operate at frequencies that enable users to ‘turn up and go’ at most times of day, seven days a week.² These high frequencies enable rapid transit to quickly shift large numbers of people and allow for efficient connections between different public transport services.
- **Reliable** – rapid transit services operate with very high levels of reliability and are unaffected by other parts of the transport network. They have priority over other traffic through a dedicated corridor and/or priority at intersections. High reliability helps make rapid transit services competitive with private vehicles. Reliability complements frequency, by ensuring even spacing between services and predictable departure times, which enhances the customer experience.

² A true ‘turn up and go’ frequency would be a minimum of every 10 minutes. Currently, some rapid transit services only achieve this during the peak. The RPTP aspires for the entire rapid transit network to achieve this minimum frequency by 2028. The current definition in the RPTP is at least every 15 minutes, between 7am and 7pm, 7 days a week.

- **High capacity** – the combination of high frequency and large vehicles able to carry many people means that rapid transit corridors can move significant numbers of people per hour in a relatively small amount of space.

These characteristics combine to result in a user experience that is ‘rapid’. Users do not have to wait long for their service to arrive and once on-board they get to their destination with minimal delays. This makes rapid transit an attractive option for a wide range of trips, encouraging significant mode shift from private vehicles and helping shape urban form and development.

3.3 Rapid transit is easy to use

Rapid transit is also intuitive and easy to use, providing a high-quality customer experience that is simple to understand, especially for new or infrequent passengers. This ease of use is a result of:

- **Services forming a legible network** – routes on the Rapid Transit Network are easy to understand. They have a simple, regular service pattern rather than multiple variations.
- **Consistent stopping patterns** – rapid transit services have easily identifiable stations that make it easy to determine where they stop. Services stop at every designated station, without users needing to request a stop.³
- **Clear wayfinding** – the Rapid Transit Network has clear and consistent branding and wayfinding, which helps users navigate it. The infrastructure that supports rapid transit, including stations, shelters and vehicles, help users to identify it.
- **Easy boarding** – features like off-board ticketing and all-door boarding mean that Rapid Transit services are easy to board. This accommodates large numbers of people using them and reduces dwell times which helps ensure service reliability.
- **Accessibility** – all stations and vehicles are accessible, ensuring the Rapid Transit Network is easy to use for all, regardless of age or ability.

3.4 Rapid transit has total priority

A key aspect of rapid transit is its ability to always operate reliably, regardless other factors affecting the transport network. In order to achieve this reliability, rapid transit usually operates in corridors that are physically separated from other modes. This results in total priority that enable services to run more quickly, frequently, and safely than other public transport services.

These dedicated corridors may operate at-grade, above or below ground, or in a combination. Corridors typically avoid conflicts where they cross another transport corridor through grade-separation. Where rapid transit corridors cross others at-grade, the rapid transit corridor should have priority by way of signal pre-emption (such as level crossings on the rail network).

³ Some forms of bus rapid transit, including Auckland's Northern Busway, do require users to request a stop.

This provides the priority that ensures services can continue at speed and without impacting reliability. Grade separated crossings are generally preferred to reduce risks to other users and minimise the chances of service disruption.

At-grade corridors may be on-street in urban areas, but only where this does not affect the quality of service or have unacceptable safety risks. Generally, this requires dedicated lanes and priority at intersections, although ‘time-segregated’ running may also be an option.⁴

3.5 Rapid transit can use a range of modes and technologies

Rapid transit can be provided by a range of types of public transport modes or technologies, including trains, buses, and ferries. Any mode that provides high-capacity services that can be fast, frequent and reliable can form part of the rapid transit network. Certain modes may be more suitable for an individual corridor, depending on the characteristics of and demand expected from that corridor.

Examples of rapid transit modes are:

- **Bus** – buses running frequently with high levels of priority on dedicated busway corridors are rapid transit. Auckland’s Northern Express bus services are a good example of bus rapid transit.
- **Light Rail** – light rail vehicles are modern trams that generally operate at higher capacity than Auckland’s historic trams. When operating frequently and with sufficient priority at intersections they are a form of rapid transit. New systems in Seattle, and several cities across Australia, are good examples of this mode as rapid transit.
- **Light Metro** – a rail-based mode that with a capacity between that of light and heavy rail. It has an exclusive corridor, unlike heavy rail trains which may share a dedicated corridor with freight trains. Because of this, light metro can be driverless, which reduces operating costs compared to heavy rail. Vancouver’s SkyTrain system is a form of light metro transit.
- **Heavy Rail** – trains are a typical form of rapid transit, given most railways are dedicated corridors with high levels of priority. Not all train services are automatically rapid transit – some are too infrequent to be considered as such. Auckland’s suburban trains are rapid transit, but its inter-city trains to Hamilton and Wellington are not.
- **Ferry** – ferries can operate with high levels of priority unless there is a significant level of other traffic operating on the waterway. Ferries can offer a fast and reliable travel option that can be attractive where land-based routes are significantly longer. High frequencies and a core role in the overall public transport network are key conditions for ferries to be considered rapid transit. The SeaBus service in Vancouver is an example of a rapid transit ferry service.

⁴ Time segregated running is where sections of space are shared by rapid transit and other modes, and access to these sections is controlled (e.g. by traffic signals) to dedicate the space to rapid transit operations when required

The infrastructure required to achieve total priority varies depending on the mode and network design. This means modes have different effects on the rest of the transport network and the city's urban form.

3.6 Rapid transit shapes and supports the city's urban form

Well designed and fully integrated rapid transit plays a significant role in positively shaping and supporting a city's urban form. The speed and reliability of rapid transit services can significantly increase the level of access to opportunities in areas around stations. Improved access makes areas within a convenient walking distance of rapid transit stations attractive places to live, work and visit. This can increase land value in a way that supports higher density development and a wider mix of uses.

Rapid transit's ability to efficiently move large numbers of people to key locations can also enable higher density development within walking distance of stations. An attractive service that supports a high public transport mode share in an area can mean less need for investment in private vehicle infrastructure. This reduces the amount of land needed for roads and car parking, which supports higher density land use.

Realising the full potential of a rapid transit network requires urban form and rapid transit to be planned and delivered in an integrated way. The location and design of rapid transit stops, provision of walking and cycling networks, local amenities, land use zoning and urban design controls are all important factors that will influence Rapid Transit's ability to shape the urban form and maximise mode shift to public transport.

The National Policy Statement on Urban Development 2020 (NPS-UD) recognises the importance of good accessibility in supporting "well-functioning urban environments". The NPS-UD requirement for 'tier 1 local authorities' (including Auckland) to enable development of at least six storeys within a walkable catchment of rapid transit stops is a key mechanism in linking intensification with good accessibility. This applies around both current and planned stops, reflecting that rapid transit decisions shape future growth and do not only respond to existing land use.

3.7 Rapid transit should be tailored to a corridor's needs

The service characteristics outlined above are fundamental to any service being considered rapid transit. Total priority in a corridor is critical to ensuring these characteristics can be delivered. These characteristics are common to all services across the rapid transit network. At an individual corridor level, however, rapid transit can and should be tailored to meet the unique characteristics and demands of the corridor. These include:

- *Distance between stops.* Generally, stops are located closer together in higher density areas and further apart in lower density areas. Some corridors may have many important locations to serve which results in close stop spacing. Other corridors may have fewer important locations, resulting in more widely spaced stops. Operating patterns may enable some services to skip some stops, in order to achieve faster travel times between key destinations.

- *Mode/technology.* A variety of modes can be used for rapid transit, as outlined above. Choosing the right mode involves considering:
 - existing and future demand – this includes assessing existing land use patterns (as the generator of demand) and the potential for growth and any related development patterns
 - how to optimise existing infrastructure – including complementary public transport services and routes, and the potential for through-route services to existing rapid transit corridors
 - impacts on urban form – different technologies will have different impacts on urban form and amenity, due to their associated infrastructure. Depending on the context of the local area and the infrastructure, these impacts can be positive or negative.
 - value for money – costs to accommodate different modes will vary considerably depending on how infrastructure will be designed to address the above considerations. Value for money should always be thought of as part of these other considerations.
- *Phased implementation.* Some corridors may not immediately justify a full rapid transit solution but would benefit from an improved service that builds towards rapid transit over time. These interim improvements can be staged to appropriately cater to and induce demand, and should:
 - be of an appropriate scale
 - deliver parts of the intended long-term corridor
 - be future-proofed
 - deliver appropriate value over the timeframes they are planned to be in place.

3.8 Assessing a service under this definition

Table 1 below provides an example of how a service can be determined as rapid transit or not, based on meeting the definition within this section. It shows that whether services are rapid transit or not is determined by a combination of service characteristics and the infrastructure supporting the service.

Frequent bus route	Peak time bus lanes, but without priority through intersections	No	A lack of priority through intersections, a lack of all-day priority and a lack of physical separation from other traffic means that these services are not considered rapid transit.
Frequent bus route	Mixture of separate busway, shared traffic lanes and on-street bus lanes	Partly	The section of the corridor operating as a fully separated busway meets the definition of rapid transit, but the overall service does not. This is due to sections of shared running with other traffic meaning speed and reliability are affected by congestion.
Heavy rail service operating mainly at peak times with limited off-peak and weekend services.	Dedicated rail corridor	No	For rapid transit to fulfil its role as the backbone of the public transport network, it needs to operate frequently at all times of day, not just during the peak.
On-street modern light-rail with frequent service	On-street dedicated right-of-way with absolute priority at intersections	Yes	Although the service runs on street, the absolute priority at intersections, the dedicated right-of-way and high all-day frequencies mean this service is classified as rapid transit.

Table 1 - Worked example of assessing if a service meets the definition of rapid transit

An assessment of Auckland's existing rapid transit network against the definition is in section 6.1.

4. Role of Rapid Transit

Rapid transit systems in major urban areas around the world have many similarities in the roles they play within the transport system and overall urban structure. Typically, rapid transit serves the busiest public transport routes, allowing large volumes of people to move efficiently along the most critical corridors and to the highest intensity locations.

Because urban form varies between different cities, the role of rapid transit in responding to that urban form also varies in cities around the world. For example:

- Perth's rail-based rapid transit system focuses predominantly on serving existing land-use and travel patterns, efficiently moving large volumes of people from low-density suburbs to the city centre.
- Vancouver's 'Skytrain' rapid transit system has played a key role in shaping the city's growth patterns with many stations surrounded by high density buildings and mixed-use development. The Skytrain has a greater focus on meeting all-day demand and serving secondary centres, reflecting Vancouver's urban form pattern.
- In very large cities, multiple rapid transit systems can work in an integrated way to meet the different travel needs of the city. Paris, for example, has a Metro system, which serves shorter trips within the inner area while the RER serves longer distance trips to the outer urban area. Tram lines also fill gaps in these other networks.

The similarities and differences of rapid transit around the world illustrates the need to apply rapid transit in a way that meets the characteristics of the city. This includes geography and current land-use patterns, as well as future growth plans and desired transport outcomes. This section sets out the various roles that Rapid Transit is expected to play within Auckland.

4.1 Rapid Transit's Role in Auckland

Auckland's harbours and topography constrain the number of possible connections between different parts of the region. Combined with the city's current and planned land use patterns, this layout concentrates large numbers of trips onto a few corridors, creating major bottlenecks and severe congestion for many longer distance journeys. This helps to define the role rapid transit needs to play to support the region's future success

Auckland's forecast growth will add to the region's transport challenge. Auckland's population has doubled since the mid-1980s to around 1.7 million and is projected to approach 2.5 million by 2050. This growth is forecast to increase travel demand over the next 30 years, resulting in an extra 400,000 peak time trips and 2 million more daily trips across all modes.

Accommodating this scale of travel demand growth will be very challenging. The motorway network is now largely completed, and previously protected transport corridors are now fully utilised. Adding new connections or widening existing roads and motorways is becoming progressively more expensive and will have a negative impact on communities. Furthermore, this approach often just transfers bottlenecks to somewhere else on the network rather than eliminating them.

Auckland's scale of growth also creates exciting opportunities to reshape the city to be more vibrant, prosperous, inclusive and sustainable. Through the Auckland Plan 2050, Auckland's focus is on achieving a 'quality compact' urban form where:

- vibrant centres allow people to easily access opportunities and their daily needs and provide businesses with a diverse and growing customer and employee catchment.
- increased supply of a range of housing choices is available in areas close to good travel options and with good access to employment and service opportunities.
- newly developed urban areas have multi-modal transport options early in their development, enabling more sustainable travel habits and making more efficient use of land.

The combination of Auckland's constrained geography, substantial population growth, limited opportunities to add road capacity, and support for a 'quality compact' urban form define a fundamental role for rapid transit in the region's future success.

The following parts of this section outline the different roles rapid transit must play in supporting Auckland's future success. These are:

- supporting and shaping a quality compact urban form
- the public transport network's backbone
- providing more space-efficient access to opportunities.

4.2 Supporting and shaping a quality compact urban form

Rapid transit has a key role to play in delivering a quality compact urban form by supporting successful centres. It does this by making redevelopment of existing urban areas attractive and feasible by improving access to them and helping ensure new urban areas have multi-modal travel options as they grow. This role is most critical in supporting major centres, but smaller centres located along rapid transit corridors can also benefit from this support.

Successful major centres (the city centre and metropolitan centres) need to be easily accessed by large numbers of people. This means they must be well connected to residential areas, but also to other major centres. This access supports and enables the productivity gains that come from highly specialised employment and the agglomeration benefits that arise from many businesses operating in close proximity to each other.⁵

Space is always at a premium in high-density centres, requiring trade-offs between public amenity, buildings, and movement. This means rapid transit's ability to move large numbers of people efficiently is most needed in major centres (compared to smaller centres). Reducing reliance on private vehicles for access to these centres also means that space otherwise required for car access and parking can be used more productively (such as for housing, businesses, or open space).

⁵ Remy Prud'homme and Chang-Woon Lee (1999) 'Size, Sprawl, Speed and the Efficiency of Cities' *Urban Studies* Vol. 36, No. 11, 1849-1858

Rapid transit can also support successful smaller-scale centres (such as town centres) by improving access to these locations. Over time, increased housing density in and around centres will support a wider mix of uses (such as cafes and local services) without a substantial increase in space dedicated to car parking and access. The access afforded by rapid transit means these smaller centres have the potential to grow in size over time. This may enable them to play a more important role in the hierarchy of Auckland's centres in the future.

Both within and outside of centres, large-scale redevelopment to higher densities needs to be accompanied by mode shift towards public transport. This will avoid increased densities resulting in more congestion, which is important given the difficulty of adding road capacity in existing urban areas. Rapid transit's ability to provide a highly attractive and reliable travel option means it is a proven way of supporting mode shift. Rapid transit also makes areas more attractive to live in due to the access it provides, which is critical to the market success of higher density developments.

Helping to ensure new 'greenfield' urban areas have multi-modal travel options as they grow is another key task for rapid transit. These areas are usually located at the edge of the existing urban area and typically have the longest average trip lengths. If they become car dependent, the effects will be felt right across Auckland through significantly more congestion on major roads and higher emissions. Therefore, it is critical for greenfield growth areas to have a high public transport mode share early in their development. Rapid transit is essential to achieving this, given the long trip lengths from these areas to key employment areas.

Greenfield areas close to rapid transit also provide excellent opportunities to create 'transit-oriented developments', where higher densities and a mix of uses are focused around stations. Transit-oriented developments support the use of rapid transit by increasing the number of people living and working within walking distance of stations. At the same time the stations can act as focal points for the community, creating vibrant, liveable and prosperous neighbourhoods. This provides an increased catchment that supports the use of rapid transit.

Rapid transit is most effective in delivering successful outcomes when stations, walking and cycling infrastructure, local amenities and urban planning and design controls are planned and delivered comprehensively. Not considering these factors together can result in lower than expected ridership, unrealised development potential or both, significantly undermining the benefits from rapid transit investment.

4.3 Being the public transport network's backbone

The rapid transit network is the core of the wider public transport, as noted in the Definition section. It forms part of the wider frequent transit network, and together these services act as Auckland's strategic public transport network.

Other services are designed to support the frequent transit network, either by connecting to or complementing it. Connections between services expand the reach of rapid transit services. This means that rapid transit sits at the top of a 'hierarchy' of public transport services, providing the highest quality service and customer experience. This is illustrated in Figure 4-1, on the next page.

ASPIRATION				
SERVICES LAYER	RAPID 	FREQUENT 	CONNECTOR 	OTHER SERVICES (Local, rural-township, peak only, school, Total Mobility, on-demand services)
Defining feature	CORE – ALL DAY NETWORK			SUPPORTING NETWORK
Minimum hours of operation	5.30am – 11.30pm			No minimum
City Centre Services	10 minutes		20 minutes	Driven by need
Minimum Headway	10 minutes		20 minutes	
Non-City Centre services	7am-7pm, 7 days	20 minutes		
Minimum Headway	Outside those times	20 minutes	30 minutes	
Achieving Efficiency and Reliability	Dedicated Right of Way	Whole-of-route bus priority	Priority measures	Limited priority measures

Figure 4-1 - Public Transport Service Layers (source: Auckland Transport Regional Public Transport Plan 2018)

Fulfilling its role as the backbone of the public transport network requires rapid transit to perform a variety of functions that vary across the region. These functions include:

- quickly, efficiently and reliably moving people along the routes where high levels of demand result in other forms of public transport struggling to operate effectively
- in inner areas, meeting strong demand for travel along major corridors into the city centre and between other major centres. This eases pressure on the rest of the public transport network
- in outer areas, acting as the key connection to and between major centres, other parts of the region and to major public transport hubs. Other forms of public transport cannot provide this function as effectively as rapid transit.

Figure 4-2 below illustrates how the rapid transit network functions as the backbone of a wider network. Local bus services connect to rapid transit services as key interchanges, and rapid transit then provides longer-distance connections, particularly to the city centre. In some areas, particularly the central isthmus, local buses provide these connections to the city centre.

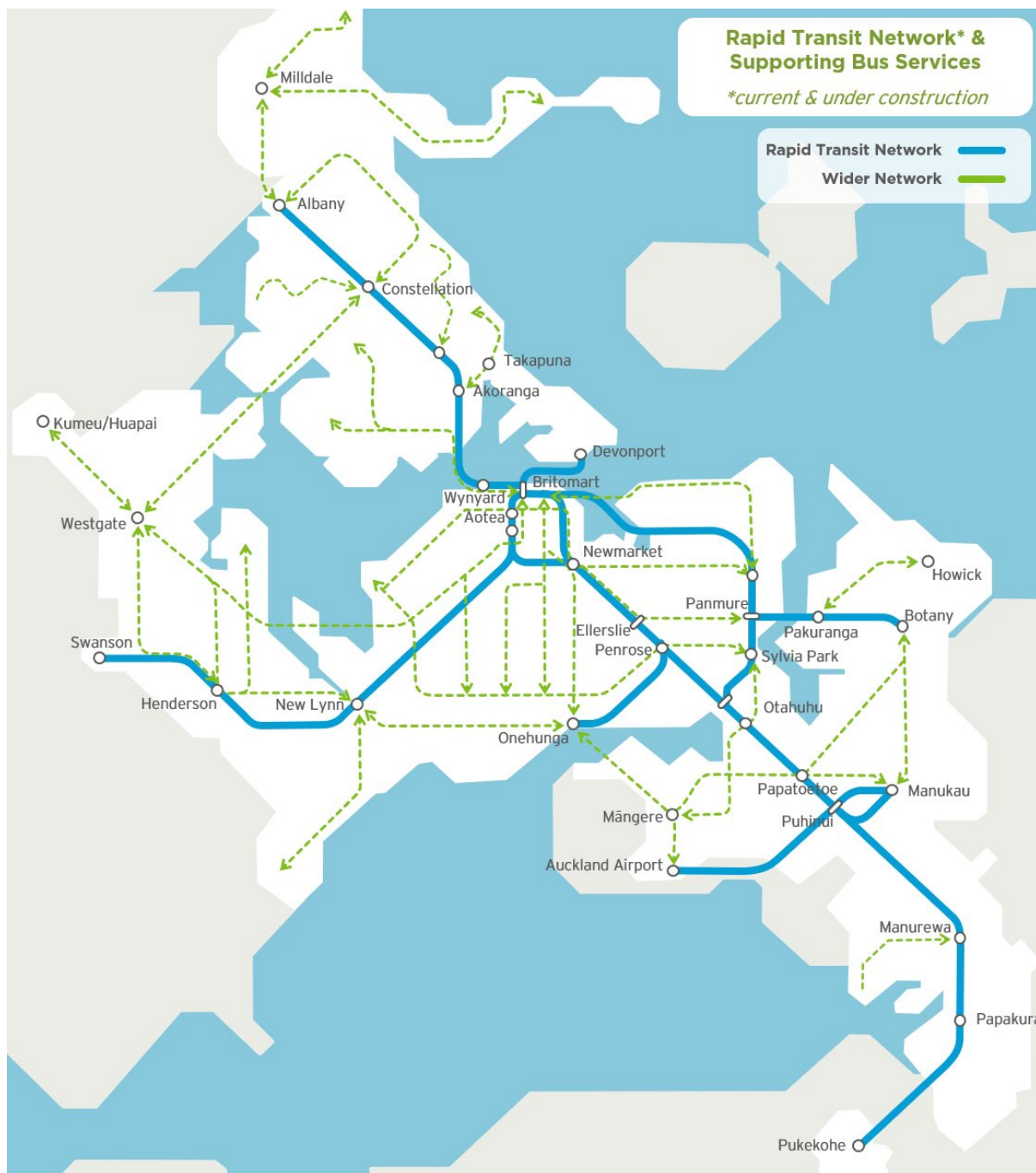


Figure 4-2 – Schematic map of rapid transit within public transport network

4.4 Providing space-efficient access to opportunities

Safe, reliable and sustainable access to a wide variety of economic and social opportunities within a reasonable travel time is fundamental to the success of Auckland and the wellbeing of residents and visitors. For Aucklanders to benefit from the region’s growth, they need to be able to easily reach the new opportunities that growth provides them. This could be a more suitable and higher paying job, a better educational opportunity, important social connections, recreation, business customers, cultural institutions and more.

Auckland’s layout makes providing good access to opportunities challenging. Travel demand is channelled into a limited number of key corridors for trips between major sub-regions (north, west, central, east and south). Existing land-use patterns also focus travel demand into some locations (including the city centre, major centres, and Airport area). Many of these corridors are already under significant pressure at peak times, which will only increase further in the future as Auckland’s population continues to grow.

The ability to move people in relatively few vehicles and in relatively little space (per person) becomes increasingly important in these situations, where many people need to be moved along a constrained corridor or where many people are trying to access an important location.

Compared to the capacity of a single lane of traffic (800-2,000 vehicles per hour), rapid transit offers the potential to move vastly more people. The numbers possible vary depending on the mode’s capacity, and service frequency. This is outlined in Figure 4-3 below. The bars show the approximate numbers of passengers per hour that can be moved on different systems at a given number of vehicles per hour (the numbers within the bars). These numbers are a guide only and vary depending on the specific vehicle technology used. Anticipated demand is a key factor in determining the appropriate mode and vehicle capacity for a rapid transit corridor.

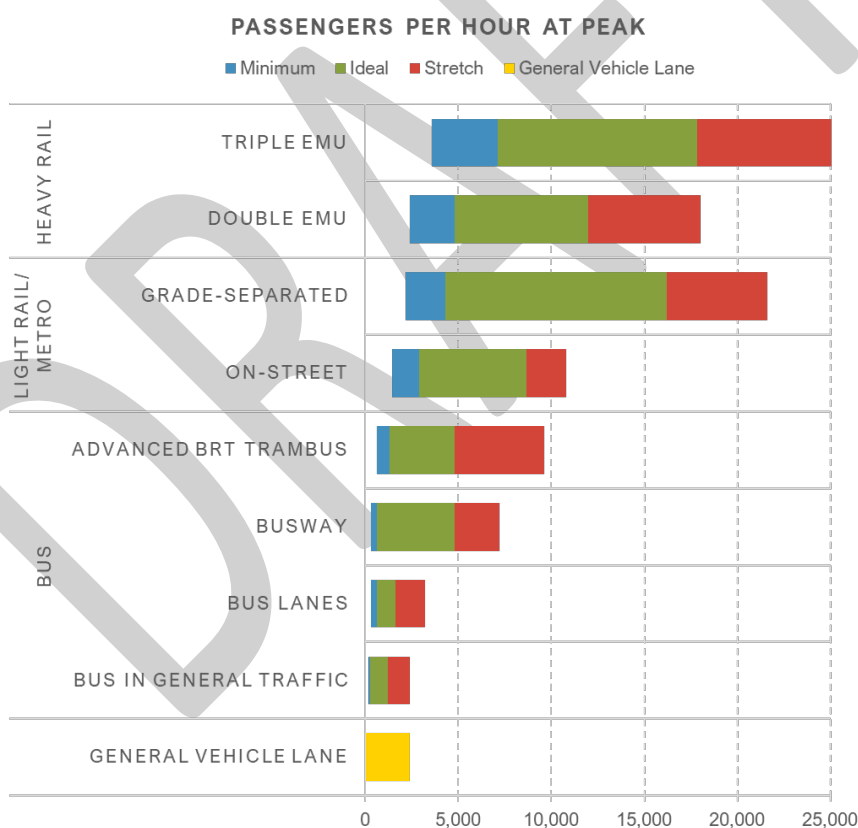


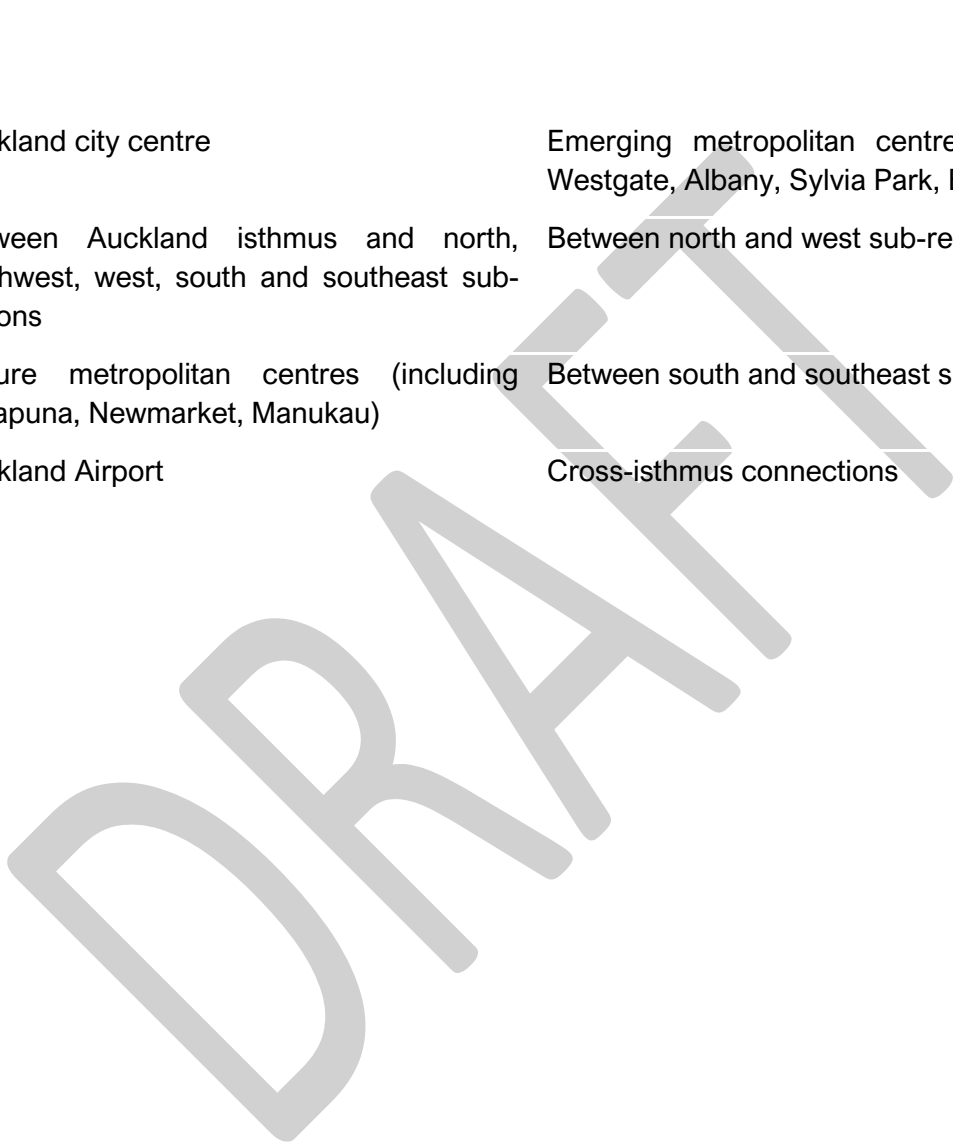
Figure 4-3 – Approximate passengers per hour that can be carried by different public transport modes.

Rapid transit’s dedicated corridors allow these access improvements to be maintained over time, even as demand grows (at least until services have extremely high demand levels). This contrasts with most other forms of transport, where growing demand leads to congestion and poor reliability and a gradual reduction in service quality over time.

Current and future corridors and locations within Auckland that are under the greatest pressure, and therefore have the greatest need for space efficient access that rapid transit delivers, are outlined in **Error! Reference source not found.** below. Rapid transit can play a significant role in addressing these constraints.

Table 2: Areas with existing and emerging access constraints

Auckland city centre	Emerging metropolitan centres (including Westgate, Albany, Sylvia Park, Botany)
Between Auckland isthmus and north, northwest, west, south and southeast sub-regions	Between north and west sub-regions
Mature metropolitan centres (including Takapuna, Newmarket, Manukau)	Between south and southeast sub-regions
Auckland Airport	Cross-isthmus connections



5. Rapid Transit Objectives

5.1 Summary

The objectives outlined below clarify the outcomes sought through the development of rapid transit networks. These objectives will inform future planning work and business case development.

The overarching objective is that rapid transit effectively performs its required role in the transport system, and the public transport network, to support and shape a successful Auckland. The specific objectives that support these roles are:

1. Increase access to opportunities, especially in major and growing employment areas
2. Increase people throughput on Auckland's most critical corridors
3. Increase the share of travel unaffected by congestion
4. Increase public transport's mode share, especially for medium to long journeys
5. Enable an integrated, efficient and effective public transport network
6. Focus most housing and employment growth in centres, nodes, and development areas⁶
7. Support high quality integrated urban communities

The objectives link with the transport system planning objectives used in Auckland, which underpin the development of Future Connect, ATAP and the RLTP. These system planning objectives, and the rapid transit objectives that support them, are:

- **Connecting** – Better connecting people, places, goods and services (supported by objectives 2 and 3)
- **Travel Choice** - Accelerating better travel choices for Aucklanders (supported by objectives 1, 3, 4 and 5)
- **Growth** – Enabling Auckland's growth through a focus on intensification in brownfield areas and some managed expansion into emerging greenfield areas (supported by objectives 6 and 7)
- **Sustainability** – Improving environmental resilience and sustainability of the transport system and significantly reducing the greenhouse emissions it generates (supported by objective 4).

⁶ As described in the Auckland Plan.

- **Safety** – Make the transport system safe by eliminating harm to people (supported by objective 4.)

The rest of this section outlines each objective in more detail.

DRAFT

Objective 1: Increase access to opportunities, especially to major and growing employment areas

Increasing the number of people able to access major and growing employment centres is important for Auckland's economic productivity and overall prosperity. The evolution of Auckland's economy towards service-sector employment is contributing to future jobs growth focused in a few key centres. Enabling safe and efficient access to these centres is critical to expanding the number of workers, and the variety of skills, within a reasonable travel time of these key locations. In doing so, it enables workers to reach these new job opportunities.

Due to its speed, reliability and service quality, rapid transit has a unique role to play in significantly increasing the number of people who are able to easily access these centres. Rapid transit's extremely high 'space efficiency' (i.e. number of people moved compared to the amount of space required to move them) is the only way significantly more people can access major centres while also enabling these centres to become more people-focused, high-quality places – which is also critical to their success.

Measures:

- Number of people within 45 min PT travel time of key centres.
- Total number of jobs people can access within 45 mins by PT.
- Mode share of trips to key centres.

Objective 2: Increase people throughput on Auckland's most critical connections

Auckland's geography splits the city into several sub-regions, divided by water, topography, and linked by only a few connections. Travel demand is funnelled into a limited number of corridors, creating bottlenecks that result in congestion, poor travel reliability and ultimately much lower levels of access for areas outside the Auckland isthmus.

Ongoing population and employment growth are placing increased pressure on Auckland's most critical transport corridors, including the small number of connections between major sub-regions. Adding road capacity to these corridors is generally extremely costly and often unacceptable or infeasible due to environmental and/or community impacts.

Rapid transit's ability to move large numbers of people along narrow corridors means it is uniquely suited to significantly increasing the throughput of people in these most essential parts of Auckland's transport system. In some cases, this will involve 'upgrading' busy existing public transport routes to a higher capacity mode to achieve improved service quality. In other cases, rapid transit should be introduced as an attractive travel alternative to reshape travel demand along key corridors.

Measures:

- Capacity along key corridors.
- Person movement per hour along key corridors.

Objective 3: Increase the share of travel unaffected by congestion

Congestion leads to delays and highly variable travel times that adds cost and undermines quality of life. Reducing the impact of congestion on people's lives is a key component of improving accessibility and overall wellbeing.

Because it operates on dedicated corridors, rapid transit can still provide a fast and highly reliable travel option even when other parts of the transport network are under strain and highly congested. As a growing share of people use rapid transit, the impact of congestion on Auckland will reduce as more and more people are unaffected by it in their travel. This means they will be able to time their trips more precisely and reduce 'buffer times' where people travel earlier than desired to compensate for poor reliability.

Measures:

- Per capita annual delay from congestion.
- Share of travel on rapid transit compared to other modes.
- Service reliability and punctuality (passenger weighted).

Objective 4: Increase public transport's mode share, especially for medium to longer journeys, to help reduce emissions

The combination of rapid population growth and few opportunities to add road capacity within existing urban areas makes it critical to increase the share of travel by public transport, walking and cycling (mode shift). Reducing Aucklanders' reliance on the private vehicle is an essential part of enabling easy, safe and sustainable access to opportunities.

If population growth simply translates into increased vehicle travel, then the result will be more congestion, poorer access to opportunities, higher emissions, a less healthy and safe population, and overall a poorer quality city for residents, businesses and visitors.

Rapid transit has a critical role to play in supporting mode shift, particularly for medium and longer journeys, meaning it has a key role to play in reducing transport emissions. The speed, reliability and service quality of rapid transit makes it strongly suited to achieving mode shift, especially compared to other forms of public transport. High quality design, including universal access to stations that feels safe for all passengers throughout the day, is key to encouraging more people to use these services.

Measures:

- Share of travel by public transport (overall, on key corridors, to key locations).
- Vehicle kilometres travelled per capita – link to measure around CO₂ emissions.
- Public transport ridership (total and per capita).

Objective 5: Enable an integrated, efficient and effective public transport network

As the core of the public transport network, rapid transit needs to be properly integrated with other public transport services, as well as walking and cycling networks, to ensure it can successfully perform this role. This means that network design and ticketing need to enable transfers between rapid transit and other services. Key interchanges must also be designed to minimise transfer times between services. Where two rapid transit corridors intersect, interchanges should enable easy transfers between the corridors.

As the rapid transit network expands, it should increasingly carry a greater share of all public transport trips. A greater portion of these trips will be transfers from other services. Passenger journeys on rapid transit will, on average, be for longer distances than those of on other services, reflecting rapid transit's role in carrying medium to long distance trips.

Measures:

- Proportion of all public transport boardings on rapid transit services.
- Share of public transport journeys involving transfers to rapid transit.
- Share of rapid transit journeys involving a cycling connection.
- Share of rapid transit journeys involving a walking connection.
- Average passenger kilometres per service kilometre.
- Average transfer time between services at key interchanges.
- Safe and universal access to stations.

Objective 6: Focus most housing and employment growth in centres, nodes and development areas

The Auckland Plan 2050 and the Auckland Unitary Plan are based on a quality compact approach to growth. This approach focusses most growth within the existing urban area and enables the greatest amount of change to occur in and around centres, and in nodes and development areas. Accommodating a significant proportion of Auckland's future growth in these locations is important for protecting rural areas from urban encroachment, managing infrastructure costs, supporting liveability and wellbeing and reducing environmental impacts.

Areas that have access to rapid transit will be able to support redevelopment to higher densities. This is because these locations will have better access to opportunities and be more attractive places to live, thereby increasing land values and potentially improving the feasibility of higher density development. Rapid transit is particularly important in supporting high intensity employment areas, by creating large 'pools' of employees who can travel to the centre of employment in a reasonable amount of time and with a high level of reliability

Rapid transit also reduces the amount of space that needs to be dedicated to carparking by providing high quality travel options. This means that space which would have otherwise been

required for parking can be developed instead for housing, businesses and other activities. For employment centres, rapid transit's spatial efficiency also means that they can be more intense, supporting higher productivity through agglomeration.

Measures:

- Proportion of new dwellings within walking distance of rapid transit.
- Proportion of new dwellings within cycling distance of rapid transit.
- Proportion of commercial development within walking distance of rapid transit.
- Proportion of commercial development within cycling distance of rapid transit.
- Proportion of metropolitan and town centres within walking distance of rapid transit.
- Proportion of major public facilities (including universities, hospitals, large shopping centres) within walking distance of rapid transit.

Objective 7: Support high quality integrated communities

For Auckland to be an attractive place for people to live, work, play and visit, it is important for the city's growth and development to be accommodated in a way that creates high quality integrated communities. This means a variety of uses and housing types, and easy walkable access to travel choices, services and other opportunities.

Rapid transit needs to support, and not detract from, the creation of high-quality integrated communities. To do this effectively, consideration needs to be given to the location, design and access to stations, so they can act as hubs that help build a sense of community identity. Stations should be a focal point for development, helping to deliver 'transit-oriented developments'. Higher intensity mixed use development, community facilities, public spaces and walking and cycling connections should be comprehensively planned with rapid transit to create safe, resilient and accessible neighbourhoods and communities.

Careful design also needs to help ensure rapid transit corridors avoid or minimise the negative impacts they might have on communities, including through creating severance or potential noise and visual impacts on communities from rapid transit infrastructure. Some forms of rapid transit infrastructure, like elevated structures, should only be used very sparingly due to these negative impacts.

Measures:

- Resident satisfaction surveys.
- Proportion of people walking and cycling to stations.

6. Current Situation

6.1 Existing rapid transit network

Auckland’s relatively young rapid transit network is a result of significant investment in infrastructure and service levels over the past 15-20 years. Today, the rapid transit network comprises services on the electrified heavy rail network between Swanson and Papakura, as well as the Northern Busway.

Prior to the impacts of Covid-19, use of the rapid transit network was growing strongly, as people were attracted to these high-quality services. This is shown in Figure 6.

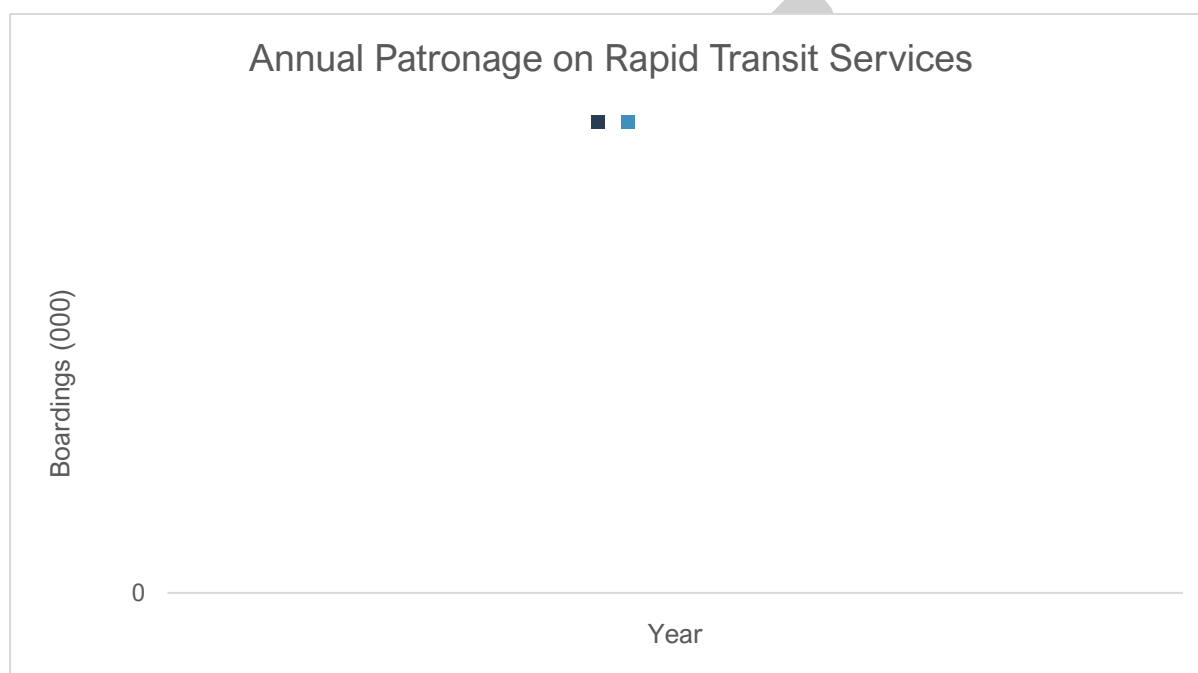


Figure 6-1: Annual boardings on Auckland’s rapid transit services, 2010-2019

The Northern Busway was opened in 2008 and serves several bus routes, including the core Northern Express services. These services also use the Auckland Harbour Bridge and local roads to the south of the busway, and bus shoulder lanes north of the busway between Constellation and Albany stations.

The rail network has provided passenger services within Auckland, and beyond, for over a century. Since Britomart station was opened in 2003, the rail network has been substantially upgraded to enable more frequent and reliable services. Electric trains were progressively implemented in 2014 and 2015.

The development of Auckland’s rapid transit network has played a central role in supporting increased ridership of public transport, with a large share of overall ridership growth occurring on rapid transit. Figure 6-2 shows how the rapid transit network’s share of ridership growth was greater than 50% between 2013 and 2018.

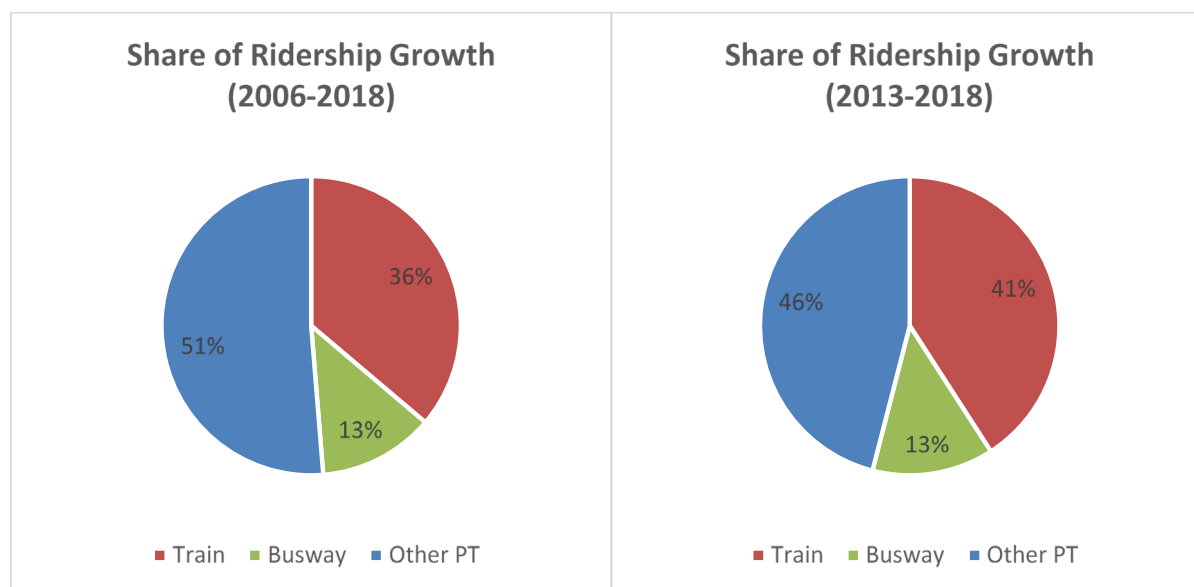


Figure 6-2: Rapid transit's share of ridership growth in Auckland

Improvements to Auckland's current rapid transit network's services and infrastructure are in progress, as shown in Table 3 below.

City Rail Link	3.5-kilometre-long twin rail tunnels linking Britomart Station with the North Auckland Line. Includes two new underground stations and a major upgrade to the current Mt Eden Station.	2024
Northern Busway Extension	Extends the Northern Busway from Constellation Station northwards to Albany Station. Includes an upgrade of Constellation Station and a new station at Rosedale Road.	2023
Eastern Busway	Provides the first stage of a new bus rapid transit corridor, between Panmure train station and Pakuranga. The busway will ultimately be extended to Botany in future stages.	2021

Table 3 - Rapid transit projects under construction

In addition to projects under construction, there are others currently in the planning phase, such as electrification and development of new stations between Papakura and Pukekohe.

These improvements are necessary to enable the existing network to fully perform the roles expected of it, as set out in this Baseline. Improving access to and between Auckland's metropolitan centres, the city centre, and other employment hubs, is a key objective for many of the corridors currently planned or under construction. As these corridors develop, they will also support higher-density development around stations.

As shown in Table 4 below, none of the existing routes that make up Auckland's current rapid transit network fully meet the definition of rapid transit set out in section 3. Many will be addressed by the projects that are already under construction (as shown in Table 3). How to address the remaining deficiencies will be a key consideration for future rapid transit planning.

Service	Fast	Frequent	Reliable	High Capacity	Dedicated Corridor	Shaping Urban Development
Western Line (rail)						
<i>Travel time and off-peak frequency issues will be resolved once City Rail Link and new timetable are operational.</i>						
Southern Line (rail)						
<i>Off-peak frequency issue will be resolved once City Rail Link and new timetable are operational.</i>						
Eastern Line (rail)						
<i>Off-peak frequency issue will be resolved once City Rail Link and new timetable are operational.</i>						
Onehunga Branch (rail)						
<i>Frequency limited by single track.</i>						
Pukekohe Connection (rail)						
<i>Existing shuttle service and associated infrastructure limit speed (due to transfer), frequency and capacity. Electrification will overcome these issues. New stations, part of the New Zealand Upgrade Programme, will help to shape urban development.</i>						
Northern Busway services (NX1, NX2)						
<i>Priority infrastructure does not extend for full length of services. This lack of a dedicated corridor creates delays and reliability issues in the city centre. The impact of these issues on customers is mitigated by the frequency of services. There is limited evidence to date of the busway shaping urban growth, although proposals for intensification near certain stations are emerging.</i>						
 Generally meets requirements	 Deficiencies that will be addressed by funded projects		 Deficiencies that will not be addressed by funded projects			

Table 4 - Assessment of existing rapid transit network characteristics

6.2 Strategic planning

The scale, cost, and long-lasting impacts of rapid transit give it as strategic significance that makes long-term planning especially important. In the Auckland context, a series of strategic planning documents guide more detailed planning, including the Auckland Plan 2050, the Auckland Transport Alignment Project (ATAP), the Regional Land Transport Plan (RLTP), Future Connect, and the Regional Public Transport Plan (RPTP).

To date, only the Auckland Plan and ATAP have set out the long-term rapid transit network in detail. Multiple versions of ATAP since 2016 have all emphasised the importance of Auckland’s rapid transit network to achieving long-term transport and urban form outcomes. ATAP 2018 largely focused on investments out to 2028, but also included a high-level diagram of a ‘potential’ future rapid transit network for Auckland, as shown below in Figure 6-3: ATAP rapid transit network plan below.

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Figure 6-3: ATAP rapid transit network plan

This diagram built on previous versions of ATAP that had identified the most likely future rapid transit corridors but took a step further by identifying the likely appropriate mode for each corridor. ATAP considered that detailed decisions about mode, exact alignment, sequencing and other design matters would need to be addressed through more detailed work, such as network planning and project-level business cases.

Work to date on these business cases has confirmed and advanced the understanding of the need for key corridors, including City Centre to Māngere, the Northwest, North Shore, and

Airport to Botany. Some of this more detailed work has raised key issues with the high level network outlined in ATAP, or has reached key points in project development where more detailed network guidance is required to move forward.

This highlights the need for a more detailed network-level plan, to incorporate the more detailed thinking from business cases while also provide more direction to business cases, particularly on how individual corridors should integrate together. Some business cases will not be able to advance further without an answer to network-level questions, such as how new corridors (such as City Centre to Māngere, Northwest and North Shore) will interact in the city centre.

The remainder of this section discusses each of the rapid transit corridors in the above diagram in more detail (the heavy rail network is discussed as a whole). It provides context, current status, latest findings of current work (where relevant), and a view to the future for each corridor.

Each corridor includes information under the following headings:

- Overview – this section includes a general description of the corridor, its history, and expected demands. Sub-headings cover:
 - Status – whether the corridor is existing, under construction, under investigation (the subject of current business case or pre-construction work), or conceptual (shown on plans only).
 - Mode – the existing mode on the corridor, planned (where funding is committed) mode, or potential mode (where investigations are on-going).
 - Type – radial (routes connecting to the city centre) or crosstown (routes between other key centres or interchanges).
- Transport function – a description of the corridor’s current and planned role in the wider transport network.
- Shaping urban form – how the corridor is expected to respond to and influence land use, now and into the future.
- Objectives – key goals for the corridor to achieve to meet expectations about its transport function and role in shaping urban form. This includes the relevant network-level objective that the corridor objective supports.

The final part of this section then covers interfaces between corridors, outlining locations where multiple corridors meet and issues that need to be considered.

6.3 Rail Network

Overview:

Auckland's passenger rail network operates four lines:

- The Western Line between Britomart and Swanson.
- The Eastern Line between Britomart and Manukau.
- The Southern Line between Britomart and Papakura, with a diesel shuttle providing connections between Papakura and Pukekohe.
- The Onehunga Line between Britomart and Onehunga.

Status:	Existing (electric service on four lines, plus diesel shuttle on one line) Under construction (City Rail Link) – expected opening in 2024. Under investigation (Papakura to Pukekohe electrification and new stations) – targeted opening in 2025.
Mode:	Heavy rail (existing)
Type:	Radial

Auckland's rail network forms the majority of the existing rapid transit network and will continue to play a significant role in its future. Patronage has grown strongly since Britomart Station was opened in 2003. The introduction of electric trains in 2014, and the reorganisation of bus services to better connect with trains between 2016 and 2018, has supported continued passenger growth. Prior to the first COVID-19 lockdown in March 2020, trains were carrying 22 million passengers per year.

The next step change in the rail network will occur when the City Rail Link (CRL) opens in late 2024. This will significantly improve travel times to the city centre from across the network, especially the Western Line. It will also enable trains to operate more frequently during peak times and throughout the day. The extra frequency and capacity provided, combined with improved access, is expected to lead to further growth in patronage.

The CRL's opening will be supported by investment in complementary infrastructure, including:

- a third main line between Wiri and Westfield, which enables increased frequencies. This is funded by the Government's New Zealand Upgrade Programme (NZUP)
- additional trains, to enable increased frequencies, along with upgrades to support their stabling and maintenance
- improvements to signalling and rail network management, to enable more efficient operations

- grade separations and closures of rail level crossings to improve safety and enable increased train movements.

These infrastructure upgrades are part of the Auckland Rail Development Plan (ARDP), which is led by KiwiRail (as the owner of the rail network) with input from Auckland Transport (which plans passenger services) and Waka Kotahi (as a key funding partner and the regulator of rail safety in New Zealand). The ARDP feeds into ATAP and is reflected in the Government's New Zealand Rail Plan.

NZUP is also funding the electrification of the southern line between Papakura and Pukekohe, as well as the construction of new stations in Drury and Paerata. Electrification will remove the need for passengers from Pukekohe to change from the existing diesel shuttle to electric trains at Papakura, and support growth occurring in Drury and Paerata. It is anticipated the electrification and new stations will be complete around 2025.

Once these currently programmed works are complete, Auckland's rail network will have capacity for around 22,000 passengers per hour on trains to the city centre during the peak. This is an increase from around 15,000 passengers per hour in 2020. The maximum capacity enabled by the CRL is 54,000 passengers per hour. Significant further investment will be required to reach this maximum. Elements of this further investment will include:

- additional rolling stock, depots, and supporting facilities
- extending the third main from Wiri to Pukekohe and adding a fourth main line from Wiri to Westfield
- further separations and closures of rail level crossings which will be rolled out as a programme of works
- further upgrades to signalling equipment
- upgrading all stations across the network to enable longer trains which will be undertaken in a targeted programme enabling longer trains on services with limited stops.

These upgrades will occur in progressive steps, each enabling an increase in peak hour capacity. KiwiRail, Auckland Transport and Waka Kotahi are working together to better understand when this investment will be required, to ensure growth in passenger demand can be met. This investment will also ensure the right infrastructure is in place so that KiwiRail can continue to meet demand for rail freight services as passenger demand grows.

Inter-regional trains (such as the Northern Explorer between Auckland and Wellington, or the Te Huia service between Auckland and Hamilton) are not considered rapid transit, given their limited frequency.

Transport function

Rail is a core part of Auckland's transport network, providing for a wide range of passenger trips while also playing a key role in Auckland's freight system. For large parts of East, South and West Auckland, the rail network is the only public transport connection to the city centre, and local buses act as feeder services to key train stations to expand the catchment of the rail network.

Most stations focus on serving their immediate walk-up catchment, with less than 10 per cent of boardings arriving by bus and most boardings resulting from walking, cycling or being dropped off. However, transfers from buses make up a significant proportion of boardings at key interchanges, including Panmure (44%), Ōtāhuhu (44%) and Manukau (32%). Park and rides play a role at some stations, generally in outer parts of the region. This trend is expected to continue in the future as residential intensification results in more people living within walking distance of stations. However, the number of transfers may grow as a proportion of overall boardings at key interchanges.

Auckland's land-use patterns mean the rail network caters for both long-distance trips between outer suburbs and the city centre, as well as local trips over shorter distances. The split of these roles varies by line; the Southern line caters more for longer-distance trips where speed is an advantage, while the Western line has the greatest use for local trips which tend to be shorter distances. This creates a tension on some lines currently; the need to balance both roles mean neither is as well provided for as it could be. In future, infrastructure investment is likely to be required to enable multiple service patterns to operate so that both roles can be better catered for. This would allow long distance trains from the south to run express through parts of the network, skipping stations and thereby reducing travel times, while other trains serving all stops would cater for short distance trips. Passengers could change between these types of services at key interchange stations.

Shaping urban form

Because much of Auckland's rail network dates back to the 19th century, many of Auckland's town centres developed along the Southern and Western lines. Today, this creates a significant opportunity for the rail system to support the redevelopment of these centres to higher densities and a wider mix of uses. The rail network also passes through rural land in the south that has been identified for urbanisation, creating the opportunity for large-scale, best-practice transit-oriented development.

The metropolitan centres of Henderson, New Lynn, Newmarket, Sylvia Park, Manukau and Papakura are all served by the rail network. Boardings at all these stations are higher than most other stations on the network. The boarding profiles of Sylvia Park, Manukau, and Henderson (and the other centres to a lesser extent) show that they are well-used destinations throughout the day. This contrasts with suburban station commuter profiles having most boardings in the morning peak, and most alightings in the evening peak. This shows that the rail network plays an important role in servicing the metropolitan centres for trips other than commuting. The importance of this role is expected to increase over time as these centres further develop and intensify.

Future role and objectives

Major expansions to Auckland's heavy rail network through the addition of new lines and corridors appears to be extremely challenging, with multiple project-level business cases highlighting the high cost of extending heavy rail to places like the North Shore and Auckland Airport. Therefore, the key role of the heavy rail network in the future is likely to be to continue to serve its current catchments.

A combination of population and employment growth in the areas served by rail (including buses that feed into rail), and ongoing mode shift as rail becomes an increasingly attractive travel choice over time through investments like CRL, means higher frequencies and longer trains will be needed to meet future forecast demand and make the most of the CRL. There is also a need, especially in the south, for rail to provide a fast-enough trip for longer distance journeys so that it becomes the primary travel choice for those trips. Reducing conflicts between passenger and freight trains is also an ongoing need.

Overall, the key objectives for the rail network are:

- to enable and support ridership growth and mode shift in parts of Auckland served by the rail network.
- to better support the multiple roles the rail network plays in providing for shorter-distance, longer-distance and inter-city trips on passenger services, as well as increased freight volumes.
- to support redevelopment and intensification around existing train stations (especially in town and metropolitan centres), including best practice transit-oriented developments (particularly where new stations are provided in greenfield growth areas).

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6.4 City Centre to Māngere

Overview

Planned connection between the City Centre and Auckland Airport via Mount Roskill, Onehunga and Māngere.

Status: Under investigation – targeted opening in late-2020s

Mode: Light rail or light metro (potential)

Type: Radial

The City Centre to Māngere corridor has been the subject of multiple investigations since the mid-2010s. Initial work was led by Auckland Transport, before being handed to Waka Kotahi for further business case development. This work investigated a potential surfaced-based light rail corridor.

The proposed transit corridor was intended to address existing and growing bus congestion issues on Dominion Road and surrounding corridors and support intensification of the central Auckland isthmus. It would also significantly improve access to Māngere, where high-quality public transport options are limited and potential for significant redevelopment exists. The corridor would also provide a single-seat ride from the city centre to Auckland Airport.

In 2019, the Ministry of Transport led a ‘parallel process’ that assessed bids from both Waka Kotahi and New Zealand Infra to develop alternative ways to provide rapid transit in the corridor, including considering funding and financing arrangements. Both bids developed were based on a light metro system, which would provide faster end-to-end travel times but have different local transport and urban development outcomes from the previous light rail schemes. In 2020 Cabinet agreed to end the parallel process and re-tasked the Ministry with developing options for public sector-led delivery of rapid transit in the corridor. This work is ongoing.

Transport function

Dominion Road, Symonds Street and Wellesley Street⁷ are some of the busiest bus corridors in New Zealand. A step-change in public transport capacity and efficiency is required to meet on-going ridership growth and alleviate current and forecast bus capacity constraints in the city centre. Without this, increased travel times to and around the city centre will negatively impact Auckland’s productivity. Upgrading the corridor to rapid transit will address these issues.

The wider corridor will also improve access to growing employment areas, including at and around Auckland Airport, the wider Onehunga area, and the City Centre. Without a major increase in the number of people accessing the airport by public transport, the road network will not be able to function effectively, and the success of this critical employment area will be

⁷ When not affected by CRL construction activity.

placed at risk. Access to the airport is constrained given there are only two corridors that connect it to the wider transport network, neither of which provide well for public transport.

Improved public transport access to the airport is primarily intended to serve workers in the wider precinct. The rapid transit corridor will also provide an attractive and reliable “one seat journey” between the city centre and airport for travellers. While single-seat options between the two locations do exist, these are subject to congestion and therefore unreliable travel times. The objective for this single-seat connection is therefore to ensure it is reliable, with end-to-end journey time somewhat less important given these trips will be a relatively small proportion of trips along the corridor (approximately four per cent in the morning peak).

Shaping urban form

Previous work has highlighted that the provision of rapid transit in this corridor can unlock significant growth potential along its route, especially:

- Employment growth at both ends of the corridor: in the city centre and at the Airport. Access constraints to the city centre, and poor travel choices to the Airport, are both expected to constrain employment growth in these two critical locations over time.
- Housing growth along the corridor, particularly at Māngere, Onehunga and Mt Roskill where there are major public landholdings and significant redevelopment potential.

Providing a step-change in improved access along this corridor, combined with significant investment by Kāinga Ora in Mt Roskill and Māngere and Council in Onehunga, creates a rare opportunity to significantly address Auckland’s housing challenges in a way that is well aligned with achieving a quality compact urban form. If growth does not occur here, there will be greater pressure for development at the urban edge and in rural areas of Auckland.

Rapid transit is also expected to upgrade the streetscape amenity of the various centres on the route, supporting their role as key community hubs and helping to encourage intensification along the corridor.

Corridor Objectives:

Objectives for this corridor were outlined in ATAP 2018 as:

- Alleviate current and forecast bus capacity constraints in the city centre.
- Improve access to growing employment areas, particularly at and around Auckland Airport.
- Unlock significant growth potential along the corridor, especially around Mangere, Onehunga and Mt Roskill.
- Provide an attractive and reliable “one seat journey” between the city centre and airport for travellers.

6.5 Northwest

Overview

Planned connection between Kumeū, Westgate, Point Chevalier and the City Centre.

Status:	Existing limited bus priority lanes (on motorway shoulders and Great North Rd)
	Under investigation (interim bus improvements) – targeted opening in mid-2020s
	Conceptual (light rail) – no anticipated date for opening
Mode:	Bus rapid transit (planned for interim)
	Light rail (potential)
Type:	Radial

The need for a step-change in the quality of public transport available to Auckland’s north-western suburbs has been recognised at a strategic level over the past decade. A rapid transit corridor alongside State Highway 16 will enable fast, frequent and reliable service, supported by connections with a reorganised local bus network.

Auckland Transport previously investigated the appropriate mode for this corridor. An indicative business case suggested a busway was the most appropriate mode, because it could be more easily staged (however this business case did not look at city centre constraints). ATAP 2018 determined that light rail provided a better long-term solution and could integrate with the proposed City Centre to Māngere corridor, while also highlighting that staging options and shorter-term bus improvements should be investigated in more detail.

Recent work has focused on developing an interim bus-based solution, which can be implemented quickly in advance of further work on the corridor. This will give buses greater priority, and implement interchanges at Lincoln Road and Te Atatū, enabling a reorganisation of the local bus network to connect with motorway-running buses.

The Government’s COVID-19 Recovery and Relief Fund has allocated \$50 million to support this interim solution, which will be operational by the mid-2020s. Future demand will exceed the capacity this interim solution will enable, so work must continue on the permanent solution.

Transport function

State Highway 16 is a critical corridor for the Northwest of Auckland. There are a number of centres and suburbs located along this corridor, such as Te Atatū, Massey, Westgate, West Harbour, Hobsonville, Whenuapai and Kumeū that are far from other rapid transit services and have limited public transport options available. This has led to low public transport mode share in the area, and over-reliance and congestion on the motorway.

A rapid transit corridor will enable fast, frequent and reliable services to complement the State Highway’s function, increasing transport choices for the northwest. While the motorway currently has some bus shoulder lanes that operate at peak time, these do not enable an attractive public transport service. Buses cannot stop in the shoulder lanes to provide access to destinations or connections to other services. This means an efficient connected network cannot operate in the area. As such there are no high frequency services available all-day, and public transport does not provide direct connections to key destinations.

New interchanges on the rapid transit corridor will enable a connective and more frequent network, improving access not only to the City Centre but also to key destinations across the northwest. This will make public transport more attractive for a wider range of trips. Journeys to the City Centre in particular will be much more attractive once the corridor is in place.

Shaping urban form

A lack of attractive public transport options has led to the northwest being historically low density and reliant on private vehicles. Recent developments, particularly in Hobsonville Point, have begun to shift to denser housing typologies. Significant intensification is enabled within the existing urban area, and large-scale greenfield growth is planned in the future urban areas of Red Hills, Whenuapai and Kumeū. Providing this growth area with good travel options early in its development is important in supporting higher density housing typologies, as well as providing residents with mode choice and the ability to avoid congested road corridors.

Rapid transit will support the ongoing development of Westgate as a metropolitan centre and key employment node, as well as the intensification of other centres along the corridor, including Kumeū and Point Chevalier. Appropriate intensification will also be enabled around other stations along the corridor, which will provide amenity that supports the functioning of the stations as key assets in their communities.

Corridor Objectives

Objectives for this corridor were outlined in ATAP 2018 as:

- Support substantial growth along the corridor and in the broader northwest part of Auckland.
 -
- Address the projected decline in employment access in the west
- Provide an opportunity for travellers to avoid projected congestion along State Highway 16 and to improve the productivity of this corridor
- Improve the frequency, connectivity and efficiency of public transport in this part of Auckland
- Support increased mode share of public transport system in this part of Auckland.

6.6 North Shore

Overview

Existing bus rapid transit corridor between Hibiscus Coast, North Shore, and the City Centre.

Status:	Existing (Constellation to Akoranga)
	Under construction (Albany to Constellation) – targeted opening in 2023
	Conceptual (Milldale to City Centre) – no anticipated date for opening
Mode:	Bus rapid transit (existing)
	Light rail or light metro (potential)
Type:	Radial

The northern busway is one of Auckland’s most successful public transport corridors, and the Northern Express bus rapid transit services are the busiest bus services in the region (measured by annual boardings). Services currently have a dedicated corridor between Constellation and Akoranga stations, within sections of bus lanes operating on the approaches to the Harbour Bridge and also within the City Centre. Work is currently underway to extend the physical busway to Albany Station.

As the primary north-south public transport corridor for the wider North Shore and growing Hibiscus Coast area, the North Shore corridor has significant strategic importance. This significance will only increase as the population of its catchment increases. Te Tupu Ngātahi, the Supporting Growth Alliance, has been investigating the future extension of the rapid transit corridor to Milldale, via the future urban zone of Dairy Flat. In the interim, bus shoulder lanes along State Highway 1 will enable an improvement in the reliability of the existing services to Hibiscus Coast station.

Recent work by Waka Kotahi and Auckland Transport has confirmed previous expectations that the busway in its current form will eventually run out of capacity, likely in the late 2020s. Even with upgrades to the busway, the scale of growth in the wider North Shore and Hibiscus Coast will require a higher-capacity mode within the next 20 years. Over 12,000 people per hour are expected to use the corridor in the 2050s, the highest forecast demand of any rapid transit corridor in Auckland.

Further work is required to determine the exact mode, route and timing of this new connection. It may complement the existing busway, rather than replace it. A new connection may be able to directly serve the Takapuna metropolitan centre. How the North Shore corridor interacts with the rest of the rapid transit network in the City Centre is also a key question further work must answer.

Transport function

The North Shore has very few strategic transport corridors, given its geography and history of development. This concentrates many trips onto State Highway 1. The current busway provides a high-capacity and congestion-free alternative to this corridor.

The busway relies on feeder bus services to extend its catchment to cover the wider North Shore. Transfers from local buses make up a third of boardings at all the stations on the busway, and over two-thirds at Akoranga, Sunnynook and Constellation stations. Park and rides at the northern stations also contribute significantly to patronage. The existing stations have limited walk-up catchments due to their proximity to, and the severance created by, the motorway. This is expected to change over time as the surrounding areas intensify and new stations north of Albany are better integrated with surrounding development.

The current corridor focuses primarily on trips to-and-from the wider city centre (including Ponsonby and Newmarket). One route from the upper East Coast Bays uses the busway to Smales Farm, before travelling to Takapuna. A future rail-based corridor may include Takapuna, which would enable the corridor to be used for more trips within the North Shore. The extension to the Hibiscus Coast will also provide access from that area to the metropolitan centres of Albany and Takapuna.

Shaping urban form

Growth on the North Shore has been strongly influenced by its transport connections across the Waitematā Harbour. Initial development relied on ferries to access the city centre, before the opening of the Harbour Bridge in the 1950s and construction of the Northern Motorway enabled greater levels of development. Without significant accompanying investment in public transport the majority of the North Shore, and more recently the Hibiscus Coast, developed as low-density suburban areas with limited availability and use of public transport.

The construction of the Northern Busway in the 2000s has significantly increased public transport use but its location adjacent to the motorway, bypassing Takapuna and only serving the northeast edge of Albany has to date limited its impact on the North Shore's urban form.

In the future, rapid transit needs to play a greater role in supporting the intensification of the North Shore, especially in the Albany and Takapuna metropolitan centres and at Smales Farm. It will also enable future urban areas near Dairy Flat to develop in way that supports transport choice and quality urban outcomes.

Corridor Objectives

- Provide fast, frequent, reliable and high capacity connectivity along the main north-south 'spine' of the North Shore, and between the North Shore and the isthmus, especially for trips to the city centre.
- Add resilience to the North Shore's transport system and to cross-harbour travel.
- Support the growth of key centres on the North Shore, especially Takapuna and Albany, and the creation of best practice transit-oriented developments in greenfield growth areas around Dairy Flat and Silverdale.

6.7 Eastern Busway

Overview

Planned connection between Ellerslie, Panmure, Pakuranga and Botany.

Status: Under construction (Panmure to Pakuranga) – expected opening in 2021
Under investigation (Pakuranga to Botany) – targeted opening in 2024
Conceptual (Ellerslie to Panmure) – no anticipated date for opening

Mode: Bus rapid transit (planned)

Type: Radial

The eastern busway is a planned 7km radial rapid transit route that will provide a high-quality connection to Panmure station from the wider East Auckland area. Panmure station was upgraded as an early stage of the project in 2014. The first stage of the busway itself is now under construction between Panmure and Pakuranga and will be operational in 2021. The subsequent stages between Pakuranga and Botany are under investigation, with an application to designate the corridor expected in 2021. Construction of these stages is funded by the Regional Fuel Tax.

The busway is being designed for over 4,000 passengers an hour in the peak direction (which will require buses running more frequently than one every minute).

Transport function

A lack of reliable and fast services contributes to East Auckland having very low public transport mode share, relative to the wider Auckland region.⁸ The eastern busway is intended to help address this low mode share, by providing infrastructure that will significantly increase the speed, reliability and attractiveness of services.

The dedicated corridor is being designed as an ‘open’ busway that can be used by multiple different bus routes. This maximises the area that benefits from the busway. Services from both the Ti Rakau Drive and Pakuranga Road corridors will use the busway to access Panmure Station, where many people transfer to the train to access the City Centre and other destinations.

The ability to improve services from multiple corridors is a key reason why an open busway is appropriate for this corridor. Another mode would force people wanting to connect to trains at Panmure to transfer twice and reduce the attractiveness of the network.

Shaping urban form

⁸ Howick local board had 6% PT mode share for travel to work, compared to the regional average of 11% at the 2018 census. The average of the local boards of the Auckland isthmus is higher still, at 15%.

Much of East Auckland (the area within the bounds of Howick Local Board) was developed during the second half of the 20th Century. It is largely low-density and has a car-based urban form that does not support walkability. Which is partly why the area has low levels of public transport use. This, combined with limited local employment opportunities that requires many residents to commute to jobs outside the area, has resulted in significant congestion on Pakuranga Road and Ti Rakau Drive at peak times. This congestion slows down buses making them a less attractive transport option.

A current lack of transport choices is a key contributor to limiting the attractiveness of these locations for redevelopment. Due to reliance on private vehicles, large amounts of carparking is required in and around the centres which in turn limits land available for development. The Eastern Busway will help to support changes to the area's urban form, by enabling improvements to public transport that will support more medium and high-density development, as enabled under the Auckland Unitary Plan. Botany is zoned as a metropolitan centre that can support significant commercial and residential development. Pakuranga town centre can also support a mix of uses at higher densities.

Extension to Ellerslie

Previous network planning has envisaged an extension of the Eastern Busway from Panmure west to Ellerslie station. No detailed planning work has progressed for this section of the corridor to date. The main service that will use the busway, route 70, continues from Panmure to the City Centre via Ellerslie Panmure Highway and Great South Road.

Bus priority lanes operate for much of this route, for various periods (24 hours in the City Centre, 7am-7pm around Newmarket, and at peak times on Great South Road). Ellerslie Panmure Highway has no bus priority measures. Given the main busway service runs on this section, congestion on the highway can affect the reliability of services on the busway itself.

AT's Connected Communities programme is proposing to upgrade the corridor between Ellerslie and Panmure to include bus priority. This would help to ensure reliability for services using the corridor but will not provide the level of separation required by rapid transit.

Upgrading this section of the corridor to a full busway over time will enable increases in priority and volumes of service. It will provide for improved connections from East Auckland to the rapid transit network at Ellerslie station, as well as the wider Ellerslie employment area. Under the NPS-UD, new rapid transit stops along the corridor would also trigger changes in zoning to enable intensification along Ellerslie Panmure Highway.

Corridor Objectives:

- Increase public transport ridership and mode shift in east Auckland by providing a step-change improvement to service speed and reliability.
- Extend the rail network's catchment into east Auckland through a high-quality bus/rail interchange at Panmure and a fast, frequent and reliable bus journey in east Auckland.
- Help unlock significant growth potential along the corridor, especially at Botany, Pakuranga and Panmure.

6.8 Airport to Botany

Overview

Planned connection between Auckland Airport, Manukau and Botany.

Status: Under construction (interim improvements) – expected opening in 2021
Under investigation (full scheme) – targeted opening in mid-2030s

Mode: Bus rapid transit (planned)

Type: Orbital

This is a planned rapid transit corridor connecting key destinations in southeast Auckland. Significant planning work has progressed on this corridor over the past two years, confirming bus rapid transit as the preferred mode due to demand and stage-ability. This work has also led to the development of a phased programme that integrates delivery of the rapid transit corridor with planned road improvements to State Highway 20B.

The first phase of improvements, which includes an upgraded bus/train interchange at Puhinui station and new transit lanes between Manukau and the Airport, is now under construction. This phase will open in 2021. Subsequent phases of improvements to the mid-2030s would see progressive extension of services and implementation of the final infrastructure.

The project is expected to cater to over 2,500 passengers during the peak hour in the 2040s.

Transport function

Auckland Airport is a significant employment area in South Auckland. Access to the airport is constrained given there are only two corridors that connect it to the wider transport network. This leads to congestion at peak times when workers in the airport precinct are changing shifts. Public transport on these two corridors is limited, and while operating frequently it is subject to significant reliability issues caused by the congestion. Variable and slow travel times result in a limited catchment and unattractive service, particularly for workers who commute from a wide area.

A fast, frequent and reliable rapid transit service will significantly improve access to the airport and expand the catchment for which public transport is an attractive option. A connection to the rail network at Puhinui will integrate the airport to the wider rapid transit network. This is primarily intended to cater for the large workforce in the wider airport precinct but will also benefit air travellers.

Reliance on private vehicles is also a characteristic of southeast Auckland. Existing rapid transit connections focus on radial trips towards the City Centre. Local bus connections, especially on trips between the key centres of Manukau and Botany, are indirect, have limited priority and, as a result, are unreliable. The rapid transit corridor will improve connections between these centres, offering competitive travel times with private cars. It will also enable reorganisation of the local bus network, with connections between local and rapid services offering improved travel choice.

Shaping urban form

Significant potential for intensification exists along the intended corridor, especially in Manukau and Botany metropolitan centres. Substantial public sector investment is planned for Manukau through Kāinga Ora and Panuku led developments. This will bring a greater mix of residential and commercial uses to the area and could be aligned with the implementation of the rapid transit corridor through Manukau, to minimise disruption and maximise the potential for complementary private sector redevelopment in the area.

Rapid transit will support improved use of public transport to access these centres, which will be important as they transition from largely car-dependant centres to locations with a range of transport options. This transition is already underway in Manukau, with recent investments in its train and bus stations, but Botany currently has limited public transport infrastructure. Investment could also support intensification of the more suburban sections of the corridor, particularly along Te Irirangi Drive. This would contribute to increased amenity and more intense land use around the corridor's stops.

Provision of rapid transit to the corridor could also support an intensification of office-based employment in the airport precinct. A lack of transport choices currently supresses development potential at the airport, as potential employees are put off by the limited and unreliable options. Intensification of uses at the airport will support increased employment in the wider South Auckland area.

Corridor Objectives:

- Improve access to southern Auckland's two major employment areas (Manukau and the airport).
- Provide a connection to the heavy rail network through an upgraded Puhinui station.
- Improve transport options for the highly car dependent southeast Auckland.
- Support major growth opportunities at key locations along the route, particularly around Manukau, Puhinui and Botany.

6.9 Upper Harbour

Overview

Planned connection between Henderson and Constellation stations via Westgate.

Status: Conceptual – no anticipated date for opening

Mode: Bus rapid transit (potential)

Type: Orbital

This is a potential rapid transit corridor that has been previously identified in high-level plans. Previous work by Auckland Transport has also investigated parts of the corridor. Transit lanes on Lincoln Road have been designed to prioritise buses between Henderson and State Highway 16, which will form an early stage of this corridor. This upgrade is expected in the mid-2020s, although an Upper Harbour service may not use Lincoln Road immediately following the upgrade. Previously, Indicative Business Case work on the Northwestern corridor also identified a potential alignment for a busway alongside State Highway 18 between Westgate and Hobsonville Point. There is no date for when this section may be implemented. No detailed work has occurred on the section through Greenhithe.

Transport function

This corridor is intended to provide a high-quality and direct public transport option for trips between the North Shore and West Auckland. It will also serve communities adjacent to the corridor and provide them improved access to radial rapid transit connections. The existing bus service that connects these areas travels on local roads which are not as direct as the motorway and have limited bus priority. This means the service is slow, unreliable compared to services on many arterials with priority, and, as a result, is not seen as an attractive option (particularly outside of peak times). There are limited alternative routes which could be used to make this service more attractive, which is why a dedicated corridor is required.

This orbital corridor will connect three radial rapid transit corridors, the Northern, Northwestern and Western lines. Providing fast and reliable connections between these lines will increase the usefulness of the entire rapid transit network for a wider range of trips.

Shaping urban form

Northwest Auckland is growing quickly, through new developments like Hobsonville. This rapid growth is likely to continue, as future urban areas at Whenuapai, Red Hills and Kumeu-Huapai are developed. The Upper Harbour corridor will also improve access to two 'nodes' identified in the Auckland Plan 2050, Westgate and Albany, as well as the metropolitan centre of Henderson. This means the corridor has a key role to play in supporting these areas as significant centres for residential and employment growth.

High quality transport links in northwest Auckland are particularly important because West Auckland has a shortage of jobs compared to its residential population, while major employment opportunities exist on the North Shore. This results in significant commuter flows out of the area, including to the North Shore, which will increase congestion on the existing network unless quality alternatives are provided. As well as providing employment access for

people living in the northwest, it is also important for this corridor to encourage more jobs into the northwest to reduce pressure on key transport links to other parts of Auckland.

Corridor Objectives:

- Provide a fast, frequent and reliable rapid transit connection between West Auckland and the North Shore.
- Enable, support and shape high quality growth and development outcomes in Henderson, Westgate, Albany and near stations along the corridor.
- Improve access to employment and other opportunities, especially from West Auckland to the North Shore.

DRAFT

6.10 Southern Isthmus

Overview

Potential connection between New Lynn and Onehunga via the southern Auckland isthmus.

Status: Conceptual – no anticipated date for opening

Mode: Bus rapid transit (potential)

Type: Orbital

This is a potential rapid corridor that has been previously been identified in high-level plans. Little detailed planning has been undertaken to identify its exact route. These plans have envisaged a bus rapid transit corridor. Other options could be possible, depending on how the wider rapid transit network develops and if there is a potential for this corridor to share their infrastructure.

Transport function

The southern Auckland isthmus has good radial public transport links to the city centre, which provide frequent services supported by varying levels of bus priority. These offer competitive travel options to the City Centre and fringe, particularly during peak times. Key projects, including Connected Communities and the City Centre to Māngere rapid transit corridor, will further strengthen the priority of these routes and improve their reliability and travel times.

The area's orbital public transport links (to the east and west), however, are not as strong. While there are public transport services connecting to key centres in New Lynn and Onehunga, these are generally not as frequent and not as well supported by bus priority measures as the radial routes. Improving these connections, by introducing a new rapid transit option, will significantly improve travel choices in the area. It will also integrate with the wider rapid transit network in a number of locations, significantly increasing the catchment of the network and thereby making the wider rapid transit network useful for a wider range of trips.

Shaping urban form

There are several major growth areas across the southern isthmus, including New Lynn, Avondale, Mt Roskill, Three Kings, Royal Oak and Onehunga. New and improved radial rapid transit corridors, including the western rail line and City Centre to Māngere, will provide increased access to these areas. Given their significant growth these areas should also be supported by an orbital corridor, to ensure that a wide range of destinations are accessible by public transport. Investment in an orbital corridor will support that in the radial corridors, improving the usefulness of the wider rapid transit network.

Given the significant public land holdings in the area there is potential to integrate this rapid transit corridor with these developments. Integrating stops on the rapid transit corridor with higher-density redevelopment has the potential to maximise the benefits of both investments.

Corridor Objectives:

- To enable a wider variety of journeys by rapid transit by linking together several radial corridors and creating a connected network.
- Enhance access to the New Lynn metropolitan centre from the southern isthmus.
- To support access for the substantial redevelopment opportunities in the southern isthmus.

DRAFT

6.11 Devonport ferry

Overview

Water-based connection between Devonport peninsula and the city centre.

Status: Existing (not operating at rapid service levels)

Mode: Ferry

Type: Radial

Ferries have connected Devonport to Auckland since the 1860s. They have remained a popular way to access the city centre since the opening of the Auckland Harbour Bridge, as they offer a reliable and time-competitive option compared to the often-congested Lake Road and Harbour Bridge.

The ferry currently does not operate frequently enough to be considered rapid transit. It is also privately operated, meaning that Auckland Transport cannot specify its timetable. If the service were to be operated frequently throughout the day, it would be considered rapid transit.

Transport function

The ferry plays an important role in connecting Devonport to the city centre and wider rapid transit network. The only alternative corridor is Lake Road, which experiences congestion and reliability issues. The ferry plays a critical role in relieving pressure on this corridor. The topography of the Devonport peninsula means the ferry service has a large catchment area, supported by the local bus network. These local services connect to the ferry, which enables onwards journeys to the city centre. In this way, it also acts as the backbone of the area's public transport network.

Shaping urban form

Devonport has relied on ferries services since it was founded, and its existing urban form has been shaped by the level of access the service provides. Limited population growth is expected in Devonport under the Unitary Plan. Maintaining the ferry service is key to supporting both the continuing functions of the existing area, which is also a popular tourist destination.

Corridor Objectives:

- To provide an attractive alternative to Lake Road by offering a reliable and competitive travel option, free from congestion.
 - This supports Objective 3: Increase the share of travel unaffected by congestion.
- Act as the backbone of the local public transport network in the Devonport peninsula.
 - This supports Objective 3: Increase the share of travel unaffected by congestion.

6.12 Interfaces between corridors

City Centre

Status: Existing/planned

Corridors: Rail network, North Shore, Northwest, City Centre to Māngere, Devonport ferry

The city centre is where all six radial rapid transit lines will meet in future. It is already a key connection point between train lines and northern busway services, and this will be enhanced once the City Rail Link opens. It is also served by the Devonport ferry service.

A key aspect for work on the three new radial corridors to resolve is how these will interchange with the City Rail Link (CRL). Surface-level rapid transit can offer connections at all three city-centre stations (Karangahape, Aotea and Britomart). A new sub-surface tunnel could connect directly with Aotea Station, which is future-proofed to enable a new east-west tunnel underneath the north-south tunnel being built as part of the CRL.

As the hub of the radial network, it is critical that connections in the city centre work well. This will enable people to make connective trips between corridors, and in-doing so greatly enhance the usefulness of the entire network for a wide range of trip purposes.

Panmure

Status: Existing/planned

Corridors: Eastern line, Eastern busway

Improving connections from East Auckland to trains at Panmure Station is a key reason the Eastern Busway is being progressed. The station and bus interchange were re-built in 2014 in anticipation of the Eastern Busway. The current pedestrian crossing from the southern bus platform to the station entrance may require further upgrades in future, to safely accommodate increases in the number of transferring passengers.

Puhinui

Status: Under construction

Corridors: Eastern line, Southern line, Airport to Botany

Puhinui Station will be a common station on both train lines and the Airport to Botany corridor. It is currently being redeveloped to integrate with both the interim Airport to Botany service, and the full corridor in the future. In the interim, services will call at stops on the western side of the rail line. In the future, a dedicated bridge over the railway will offer improved connections between services.

Manukau

Status: Planned

Corridors: Eastern line, Airport to Botany

Airport to Botany services will stop on Davies Avenue, outside the existing Manukau Station. This area is planned to become bus-only, to improve connections for customers and priority for the rapid transit corridor. This location also provides connections to local bus services.

Botany

Status: Planned

Corridors: Eastern busway, Airport to Botany

Botany station will be the terminus of both corridors, and a key interchange for local bus services. The station will be delivered by the Eastern Busway project, but future-proofed for expansion to accommodate Airport to Botany services. Optioneering processes to select a preferred plan for this station have taken considerable time, as multiple options were considered for how services from the two rapid transit corridors would interact. This included considering if rapid transit services should through-run between corridors. A detail network-level plan for rapid transit would have assisted these considerations.

Onehunga

Status: Potential

Corridors: Onehunga line, City Centre to Māngere, Southern isthmus

Onehunga station is an existing stop on the Onehunga line and is likely to be on the City Centre to Māngere corridor. Depending on its alignment, the southern isthmus corridor could also connect at this location. Integrating these three corridors at a single station would enable connections between the radial and orbital rapid transit corridors, as well as other public transport services, improving accessibility across the network.

New Lynn

Status: Conceptual

Corridors: Western line, Southern isthmus

A station on the western line is a potential western terminus for the southern isthmus corridor. An interchange at New Lynn station, where the local bus network already connects to the rapid transit network, will maximise the usefulness of the new radial corridor. Further work is needed to determine if New Lynn is the best location for this interchange.

Mount Roskill

Status: Potential

Corridors: City Centre to Māngere, Southern isthmus

Depending on the final alignment of these corridors, there may be the potential for a combined rapid transit and local bus interchange in Mount Roskill. This would enable connections between radial and orbital rapid transit services, as well as between feeder bus services.

Exactly how this interface would work needs to be explored further, as it could have significant design implications for both corridors which have not been explored to date.

Auckland Airport

Status: Potential

Corridors: City Centre to Māngere, Airport to Botany

Auckland Transport's previous light rail design incorporated a shared a corridor through the airport with the Airport to Botany corridor. Both corridors will terminate at the airport terminal, and potentially share a common stop at the airport's office precinct. Auckland International Airport Ltd owns the land both corridors will use at the airport, so work must be coordinated to ensure good outcomes.

Constellation

Status: Potential

Corridors: North Shore, Upper Harbour

The eastern terminus of the Upper Harbour line is intended to be Constellation station on the North Shore corridor. Constellation is a major interchange between the existing Northern busway services and local buses and the likely route of the future Northern Pathway walking and cycling route. Integrating another rapid transit line here will have significant spatial implications, but further work is needed to determine what these are.

Westgate and Lincoln

Status: Potential

Corridors: Northwest, Upper Harbour

the Northwestern and Upper Harbour lines are intended to have common stations at Lincoln Road and Westgate metropolitan centre. The lines could share common infrastructure between these stations. This would require either both corridors to operate with the same mode or be built so that two different modes could share a right-of-way. Both stations will be major interchanges with local bus services.

Henderson

Status: Potential

Corridors: Western line, Upper Harbour

The western terminus of the Upper Harbour line is intended to be Henderson Station. Henderson is already a major interchange between Western line train services and local buses. Integrating another rapid transit line here will have significant spatial implications, but further work is needed to determine what these are.

7. Next Steps

7.1 Roles, responsibilities and funding arrangements

The planning, funding and delivery of rapid transit in Auckland requires effort by multiple agencies within central and local government. The complex, city-shaping nature of rapid transit means that a number of organisations need to be involved in the development of projects, but at the moment there is inconsistency and a lack of clarity around the roles and responsibilities of the different organisations. Funding arrangements (i.e. the share of funding provided by different sources) are predominantly determined by which organisation is the project lead, meaning that the lack of clarity around roles and responsibilities also flows through to uncertainty around funding arrangements.

Around the time ATAP 2018 was finalised, the Minister of Transport provided Waka Kotahi with new functions to plan, design, deliver and fund rapid transit. As part of the ‘Future of Rail’ review, KiwiRail’s role as owner of the rail network has been reconfirmed, although Waka Kotahi now have a greater role in funding rail investments. Despite these changes, there is still a lack of clarity and consistency in the planning, design and delivery of rapid transit in Auckland.

The table below illustrates the inconsistent nature of the current situation:

	Project Lead	Funding
City Rail Link	City Rail Link Limited	50% Auckland Council, 50% Crown
Northern Busway Extension (Constellation to Albany)	Waka Kotahi (mainline busway) Auckland Transport (Rosedale station)	Mainline busway: 100% NLTF. Rosedale station: 51% NLTF, 49% Council
Eastern Busway	Auckland Transport	51% NLTF, 49% Council
City Centre to Māngere	Not yet determined	100% NLTF (seed funding only)
Northwest Rapid Transit	Waka Kotahi	100% NLTF (seed funding only)
Pukekohe rail electrification	KiwiRail	NZ Upgrade Programme
North Shore Rapid Transit	Not yet determined	Unclear
Greenfield rapid transit networks	Joint AT/Waka Kotahi	75% NLTF 25% Auckland Council (investigation costs only)
Airport to Botany	Not yet determined	Unclear

Addressing the current lack of clarity and consistency in the role, responsibilities and funding arrangements for rapid transit would deliver several key benefits:

- Ensure that project design and development deliver a ‘best for Auckland and New Zealand’ outcome, rather than one driven by governance or funding arrangements. For example, there is a risk that current arrangements incentivise rapid transit corridors to be located near motorways, so they are considered part of the state highway network.
- Supporting a more mode neutral transport system. Having the roles, responsibilities and funding arrangements for rapid transit more closely aligned to those for state highways will help support more mode neutral outcomes.
- Create significant efficiencies for project planning and delivery, as key policy issues will have already been resolved.
- Support more equitable funding arrangements for rapid transit that reflect the wide variety of transport, urban development and other benefits that these projects create.

7.2 Network planning

This document – the Rapid Transit Baseline – is the first step towards bridging the gap between high level strategic transport and spatial plans (e.g. ATAP, Auckland Plan) and rapid transit project business cases. Further developing this link through work on an Auckland Rapid Transit Plan will help ensure project business cases have better network level guidance on key issues like mode, timing, and outcomes sought including urban form.

Business cases for several major rapid transit initiatives (e.g. Additional Waitemata Harbour Connections, supporting growth investigations for the north and northwest areas) have struggled to reach conclusive positions on these issues because of significant interdependencies with other parts of the rapid transit network, or because their perspective is naturally at a corridor level, rather than a regional ‘network level’ perspective.

Key tasks for an Auckland Rapid Transit Plan:

- Outlining the nature of the problem if Auckland does not invest in rapid transit beyond current committed projects
- Considering the impact of key assumptions and uncertainties on future demand, including:
 - different rates of population and employment growth in Auckland
 - different distribution and location of growth across Auckland
 - different levels of ‘working from home’
 - the impact of different road pricing options on rapid transit demand.
- Testing whether any corridors should be added, removed or amended on the ATAP rapid transit diagram.
- Considering the advantages and disadvantages of ‘strategic level’ mode choice options (e.g. bus, heavy rail, light-rail, light-metro) across different corridors
- Outlining key sequencing choices and triggers for developing Auckland’s rapid transit network

- Guiding decisions about how access to rapid transit stations should be improved over time.

This work is underway, and is needed urgently to inform:

- Key decisions on corridors like City Centre to Māngere and the North Shore that will need to be made in the next 12-18 months
- Further ATAP updates planned to be undertaken in 2021 that focus on the 2030-2050 period
- Consideration of how land-use and spatial planning documents may need to respond to the National Policy Statement on Urban Development.

DRAFT

Auckland Regional Land Transport Plan 2021-2031



The Regional Land Transport Plan 2021-2031 sets out the land transport objectives, policies and measures for the Auckland region over the next 10 years. It includes the land transport activities of Auckland Transport, Auckland Council, Waka Kotahi NZ Transport Agency, KiwiRail, and other agencies.



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Responding to Auckland’s transport challenges cont.

Rapid transit and the National Policy Statement on Urban Development (NPS-UD)

An implication of the NPS-UD requirements is that investment identified in this, or future RLTP’s may necessitate changes to the Auckland Unitary Plan.

The purpose of this section is to outline the status of Auckland’s RTN following the investment identified in this RLTP.

It also reflects the frequency of services described in the current Regional Public Transport Plan 2018-2028 (RPTP).

Auckland’s RTN will continue to develop over time. While some projects in this RLTP will improve the service characteristics of routes to the degree that they meet the criteria to be considered part of Auckland’s RTN, other projects are a stepping stone on the way to achieving this status in following decades.

Auckland’s existing RTN consists of the Northern Busway (between Constellation and Akoranga Stations), and the Western, Southern and Eastern rail lines.¹⁰ Within the 10-year timeframe of this RLTP, the network will be expanded to include the Northern Busway to Albany, the new Eastern Busway, and an extension of the Southern Line to Pukekohe.

The figure below shows:

- Existing and planned rapid transit routes (i.e. the RTN that will be in place at the end of the 10-year timeframe of the RLTP)
- Future rapid transit routes (as outlined in the Auckland Plan 2050) for which some investment is identified in this RLTP but will not meet the standard of rapid transit within the 10-year timeframe of this RLTP
- Parts of the transit network that do not meet the definition of rapid transit now or in the future, but are important to support the operation of the RTN, for example, the Onehunga branch line and Northern Busway section along SH1. These parts of the network are shown as ‘supplementary network’.

The locations of stops on planned services are finalised through processes outside of the RLTP (such as designations under the Resource Management Act). AT and Auckland Council will work together to determine where stops are for the purposes of meeting the NPS-UD’s requirements.



¹⁰ Some of these routes do not currently meet the frequency requirements for rapid transit; however they are proposed to do so by 2028 in the RPTP.

From: [Alastair Cribbens](#)
To: [Luke Elliott \(AT\)](#)
Cc: [Amanda Harland](#)
Subject: Draft RLTP content re NPSUD (AC and AH edits)
Date: Wednesday, 8 December 2021 10:09:22
Attachments: [Draft RLTP content re NPSUD \(AC and AH edits\).docx](#)

Hi Luke, as discussed here's an updated version with a few more minor changes from Amanda and myself. I've added WK into the last paragraph as I assume they'd be involved but please check this (and that the phrasing) is correct.

Alastair

1.4 Rapid transit and the National Policy Statement on Urban Development

The Government Policy Statement on Land Transport (GPS) defines rapid transit as: “a quick, frequent, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic.”

~~The National Policy Statement for Urban Development (NPS-UD) shares this same definition and defines it as either existing or planned service. Planned means planned in a regional land transport plan such as this RLTP.~~

The ~~National Policy Statement on Urban Development (NPS-UD)~~ ~~NPS-UD~~ introduces a new requirement for Auckland Council to ensure the Auckland Unitary Plan enables building heights of at least six storeys within at least a walkable catchment of current and planned rapid transit stops. The NPS-UD defines “planned” as meaning “planned in a regional land transport plan” such as this RLTP.

This requirement is intended to ensure that intensification in urban areas and in desirable and suitable locations is enabled in plans. This is to contribute support to a “well-functioning urban environments and improve housing affordability through competitive land markets” as described in the NPS-UD. ~~—, and —~~ There are some exceptions to the requirement ~~exist~~ where enabling these changes will not contribute to this ~~goal~~ overall intent.

Auckland Council is working through the implications of the NPS-UD for the Auckland Unitary Plan. ~~It intends to consult with the public on these changes later in 2021.~~

~~One~~ An implication of the NPS-UD requirements is that investment identified in this, or future RLTP’s, may necessitate changes to the Auckland Unitary Plan. The purpose of this section is to set out outline in one place the status of Auckland’s rapid transit network following the investment set out identified in this RLTP. It also reflects the frequency of services described in the current Regional Public Transport Plan 2018-2028 (RPTP).

~~Given the importance of the existing and planned rapid transit network to these considerations under the NPS-UD, the purpose of this section of the RLTP is to clarify the extent of the existing rapid transit network investment contributes to ‘planned’ rapid transit services. This be used in Auckland Council’s work on the implications on the NPS-UD. Auckland’s rapid transit network will continue to develop over time. While some projects in this RLTP will improve the service characteristics of routes to such a stage degree that they can meet the criteria to be considered part of Auckland’s rapid transit network, other projects are a steppingstone on the way to achieving this status in following decades.~~

Auckland’s existing rapid transit network consists of the Northern Busway (between Constellation and Akoranga Stations), and the Western, Southern and Eastern rail lines¹. Within the 10-year timeframe of this RLTP, this the network will be expanded to include the City Rail Link, Northern Busway to Albany, the new Eastern Busway, and an extension of the Southern Line to Pukekohe.

~~The locations of stops on planned services are finalised through processes outside of the RLTP (such as designations under the RMA). Auckland Transport and Auckland Council will work~~

¹ Some of these services do not currently meet the frequency requirements for rapid transit; however, they are proposed to do so by 2028 in the RPTP.

Commented [AH1]: I'm struggling to follow this. I got lost from "combined with...". Maybe the sentence needs to be broken up?

~~together to determine where stops are for the purposes of meeting the NPS-UD's requirements.~~

Figure XX below ~~outlines~~ identifies:

- existing and planned rapid transit ~~services~~ routes (i.e. the rapid transit network that will be in place at the end of the 10-year timeframe of the RLTP). ~~These services are considered rapid transit for the purpose of the NPS-UD~~
- ~~investment towards the future~~ rapid transit ~~network~~ routes (as outlined in the Auckland Plan 2050) ~~for which some investment is identified in this RLTP but that will not meet the standard of rapid transit within the 10-year timeframe of this RLTP. This is not considered to be 'planned' rapid transit service, for the purpose of the NPS-UD~~
- ~~parts of the future rapid transit network that, while do not meeting the definition of rapid transit now or in the future but, are intrinsically tied to important in supporting the operation of the rapid transit network and important to understand from a network management and planning perspective (for example, such as the Onehunga branch line and northern busway section along the motorway State Highway 1 and the Devonport ferry service). These is parts of the network are shown as the 'supplementary network'. It also includes the Devonport ferry service which, due to current legislative arrangements, is not under the control of AT and so does not have sufficient certainty as to future frequency.~~
- ~~where services currently or are planned to operate, or where infrastructure exists today, but which do not meet the definition of rapid transit under the NPS-UD (i.e. they are not frequent, or on route that is separated from other traffic). This is shown as the 'supplementary network' and is not considered to be existing or 'planned' rapid transit service, for the purpose of the NPS-UD.~~

Commented [AH2]: This is quite complicated – a lot of ideas trying to be communicated in the one bullet point,

Commented [AH3]: Do you want to include reference to the Devonport Ferry where you had it before?

From: s7(2)(a)
To: [Luke Elliott \(AT\)](#)
Subject: RE: Rapid Transit - NPS/RLTP
Date: Friday, 12 February 2021 10:36:05
Attachments: [image001.png](#)
[image003.png](#)

Luke

Thanks for getting back to us.

This has quite a way to go in Wellington as there has been understandably a great deal of interest in what we are designating as rapid transit and why.

Like you we've stayed away from designating particular stops as rapid transit even though a number of planners would like us to do that. Two rail lines in particular have attracted attention for different reasons.

The first is the Johnsonville line that runs wholly within Wellington City. One view is that this is neither rapid nor can it sustain the frequency that rapid transit might suggest. However, Wellington City are keen to have it as rapid transit because of the intensification opportunities that it offers particularly at Johnsonville itself. While the line can't take any more trains – it's single track and runs on a 13 minute headway at peak, it has capacity growth. It is built for six car trains and currently runs 4-car only at peak. And the integration of its ticketing into the broader Metlink system, be it Snapper or Project Next could see Johnsonville become a hub with bus services feeding it rather than proceeding down the Ngauranga Gorge.

The other question is the northern end of the Kāpiti Line where Paraparaumu and Waikanae are suitable for intensification but some of the intermediate stops such as Pukerua Bay and Paekakariki are not. This has raised the questions about some stations being designated as rapid transit and others not, and the types of services that would stop or not stop. One line of thought has it that express services would only stop at rapid transit stops on the outer stretches of the network whereas local all stop services would not be regarded as rapid transit. Our draft PT plan which goes out with the RLTP notes that "Metlink will work with Territorial Authorities to further define rapid transit corridors including to define access points to rapid transit."

The other in my mind complicating factor is the use of the phrase "rapid transit," as it is broad all encompassing term. Metlink in Wellington talk about a "high quality, high capacity, high frequency core network" which encompasses most but not all of the rail network and certain bus routes which while they do not meet the definitions of rapid transit serve the same purpose which is to provide an attractive alternative to private motor vehicle use along key passenger corridors.

So to answer your specific questions:

- a. On the train lines, the Wairarapa line is not considered part of the rapid transit service with between two to five services a day each way on it. With respect to why the other lines are in, we've used the draft Regional Growth Framework which defines a rapid transit network – so we're being consistent. We're also cognisant of the draft One Network Framework which calls out metropolitan rail lines as rapid transit;

- b. Buses are not part of the network unless they become part of the Let's Get Wellington Moving MRT network although they do form part of that "high quality, high capacity, high frequency core network"
- c. The designation of zoning around the stop is in our view for the TAs as rapid transit is only one of the conditions, not the trigger.

Cheers

Grant



s7(2)(a)

Privacy

Kaiwhakahaere Waka-ā-rohe | Manager, Regional Transport

Greater Wellington Te Pane Matua Taiao

M: s7(2)(a)

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From: Luke Elliott (AT) <xxxx.xxxxxx@xx.xxxx.xx>

Sent: Wednesday, 10 February 2021 5:06 PM

To: s7(2)(a) s7(2)(a) Privacy @gw.govt.nz>

Subject: RE: Rapid Transit - NPS/RLTP

Kia ora s7(2)

Thank you for the information you provided, and apologies for my delayed reply. I'd hope to get back to you with what we've agreed here in Auckland but we're still going through the process of that, especially making sure that our colleagues at Council are happy with it.

I can give you an example of our thinking though. We've used some of the early parts of your text as a starting point, modified for the Auckland context, to talk about the NPS, GPS and RLTP relationship and the implications for Council's planning.

We've agreed with Council it's not the RLTP's place to list out the stops. We have been specific about which parts of our train and busway network we expect to be rapid transit within 10 years though. Some parts of our rail network we've said don't meet the definition as they aren't/won't be frequent enough.

Here's a map we've used to explain it – only existing and 10-year are considered rapid transit for the NPS' purpose:



The 'supplementary network' are the parts where we don't think the level of service meets the definition of rapid transit under the NPS.

Bus services in painted bus lanes aren't being considered rapid transit, but the busway is. I'm curious as to how you tackled the issue of some train lines having low frequency – it looks like you're still considering this rapid transit, and leaving it to the local council to determine if they'll change the zoning around the stop?

I'll send our finalised text once we've agreed it.

Kind regards,

Luke

From: s7(2)(a) <s7(2)(a)@gw.govt.nz>

Sent: Wednesday, 3 February 2021 11:33 a.m.

To: Luke Elliott (AT) <xxxx.xxxxxxx@xx.xxxx.x>

Cc: Mark Fleming (AT) <xxxx.xxxxxxx@xx.xxxx.xx ->; s7(2)(a) Privacy <s7(2)(a) Privacy @gw.govt.nz>; s7(2)(a) s7(2)(a) @gw.govt.nz

Subject: RE: Rapid Transit - NPS/RLTP

Luke,

We've had a long debate in Wellington about what it is and isn't with quite a range of views about what needs to be in the RLTP to meet the requirements of the NPS-UD.

I've been keen not to deviate from the GPS and NPS-UD definitions for a number of reasons:

- a. it's relative: quick and frequent are relative to what was there before. A quick light rail service moves at a different speed than a metro rail service which may be different from a busway; high-capacity is again relative to what. New Zealand's high capacity may well be different from Japan or Singapore;
- b. the challenge of what that definition is trying to achieve in terms of human behaviour and what may achieve that in New Zealand. My research from a few years' ago and Metlink's approach under previous plans was that for public transport to be attractive, the service frequency needs to be 10 minutes or less (15 mins at a push for example evening or early morning services); stops have to be within 10 minutes walk of the stops; and this level of service needs to be maintained over the entire service period ie having rapid transit in peak time only will not lead to an overall behaviour change. My concern here is that we may designate a rail line as rapid transit but if it doesn't change overall human behaviour then there is little point.
- c. In Wellington we have a number of bus routes (our high frequency bus routes) that get close to providing the levels of service which are attractive ie they run 10-15 minutes during the daytime (greater at evenings and weekends)
- d. Looming definitional work that the PT team in Waka Kotahi, the One Network Framework have underway and in Wellington the draft Regional Growth Framework that has defined a rapid transit network.
- e. Our view that the RLTP should not be the vehicle to define land use which we believe should be the land use planners role. Some of them believe that the RLTP should be designating the stops.

So our approach has been to stick to the GPS and NPS-UD and use the Regional Growth Framework definitions which are the four urban rail lines (excludes Wairarapa service – Metlink operated, and Capital Connection – Kiwirail operated) and the mass rapid transit network proposed by Let's Get Wellington Moving once defined.

Below is the text which will be going to RTC next week for consultation. This text will be in both the Wellington RLTP and RPTP which will be jointly consulted on from 15 Feb.

I've copied Mark Fleming in who is the TSIG rep and s7(2)(a) Privacy who is the lead on the RLTP.

Let me know what you think and any questions and happy to talk. I'd also be curious if you are

treating the busways that you have as rapid transit.

Regards

s7(2)



s7(2)(a)

Private
Kaiwhakahaere Waka-ā-rohe | Manager, Regional Transport

Greater Wellington Te Pane Matua Taiao

M: s7(2)(a)

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A.3.2 Rapid transit in the Wellington

Region

The Government Policy Statement on Land Transport (GPS) defines rapid transit as: “a quick, frequent, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic.”

The National Policy Statement for Urban Development (NPS-UD) shares the same definition for rapid transit service but extends it to any existing or planned service. Planned means planned in a regional land transport plan such as this RLTP.

The NPS-UD introduces a new requirement for Wellington’s regional policy statement and the district plans of Wellington City, Hutt City, Upper Hutt City, Porirua City and Kāpiti Coast District to enable building heights of at least six storeys within at least a walkable catchment of current and planned rapid transit stops. This means that rapid transit identified in the RLTP has a connection to the land-use controls in these Resource Management Act (RMA) documents.

However, whether or not intensification is appropriate around rapid transit stops will be considered as part of each council’s district plan processes.

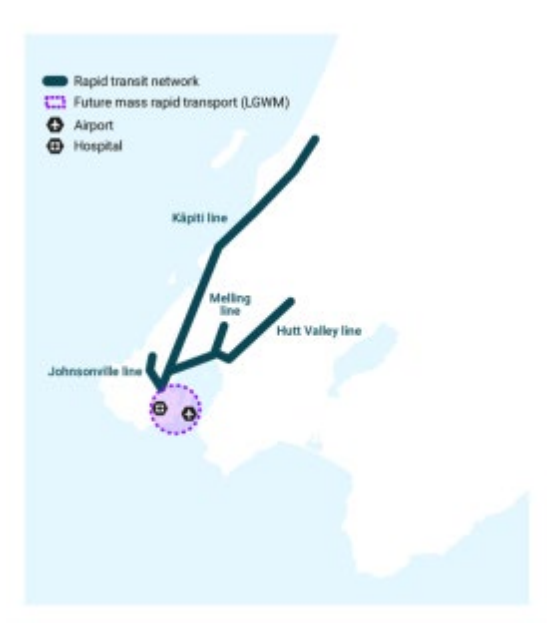
The NPS-UD also has directions to enable building heights and density commensurate to levels of existing and planned public transport generally. The RLTP and the Wellington Region’s

RMA documents work together to enable more people, businesses and community services to be located in areas well-serviced by existing and planned public transport.

The rapid transit network and services for the Wellington Region comprise the Kāpiti, Hutt, Melling and Johnsonville rail lines. The mass rapid transit network proposed by the Let’s Get Wellington Moving programme (once the rapid transit network and stops are confirmed) will also form part of this rapid transit network.

The rail lines are part of Metlink’s core public transport network. Plans to upgrade this network to increase service frequency and capacity are contained in the Wellington Regional Public Transport Plan and reflected in the significant activities in section 4 *Regional programme*. The Let’s Get Wellington Moving mass rapid transit corridor will be developed as part of the Let’s Get Wellington Moving programme.

Urban intensification opportunities around public transport stops will be planned through the district plans of the Wellington Region’s district and city councils.



From: Luke Elliott (AT) <xxxx.xxxxxx@xx.xxxx.x>
Sent: Wednesday, 3 February 2021 10:33 AM
To: [s7\(2\)\(a\)](#) [s7\(2\)\(a\) Privacy](#) [@gw.govt.nz](mailto:s7(2)(a)@gw.govt.nz)>
Subject: Rapid Tranist - NPS/RLTP

Hi [s7\(2\)](#)

As discussed, we’re having the same debate around what exactly to put in our RTLP to respond to the NPS-UD on rapid transit.

We settled on not listing stop locations, which sounded like your approach, too.

I was interested in your idea of a nationally consistent approach – if you could share your wording that would be much appreciated, and I can give you what we come up with too if you’d like.

Many thanks,

Luke

**Luke Elliott | Principal Planner Rapid Transit Network
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From: [Amanda Harland](#)
To: [Alastair Cribbens](#)
Subject: Draft RLTP content re NPSUD (AI C edits)
Date: Wednesday, 10 February 2021 21:19:35
Attachments: [Draft RLTP content re NPSUD \(AI C edits\).docx](#)

Hi Al

I think it still needs more work. I've deleted some parts to try and simplify it but in the process I have probably omitted some important points. Let me know.

Amanda

1.4 Rapid transit and the National Policy Statement on Urban Development

The Government Policy Statement on Land Transport (GPS) defines rapid transit as: “a quick, frequent, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic.”

~~The National Policy Statement for Urban Development (NPS-UD) shares this same definition and defines it as either existing or planned service. Planned means planned in a regional land transport plan such as this RLTP.~~

The ~~National Policy Statement on Urban Development (NPS-UD)~~ ~~NPS-UD~~ introduces a new requirement for Auckland Council to ensure the Auckland Unitary Plan enables building heights of at least six storeys within at least a walkable catchment of current and planned rapid transit stops. ~~Planned means planned in a regional land transport plan such as this RLTP.~~

This [requirement](#) is intended to contribute to a "well-functioning urban environment" [as defined in the NPS-UD.](#) ~~and~~ ~~s~~ There are some exceptions to the requirement ~~exist~~ where [enabling these](#) changes will not contribute to this goal.

Auckland Council is working through the implications of the NPS-UD for the Auckland Unitary Plan. It intends to consult with the public on these changes [later in 2021.](#)

~~One~~ ~~An~~ ~~implication of the NPS-UD requirements is that investment identified in this, or future RLTP's, may necessitate changes to the Auckland Unitary Plan. The purpose of this section is to set-out outline in one place the status of Auckland's rapid transit network following the investment set-out identified in this RLTP combined with the frequency of services described in the current Regional Public Transport Plan 2018-2028 (RPTP).~~

~~Given the importance of the existing and planned rapid transit network to these considerations under the NPS-UD, the purpose of this section of the RLTP is to clarify the extent of the existing rapid transit network investment contributes to 'planned' rapid transit services. This be used in Auckland Council's work on the implications on the NPS-UD. Auckland's rapid transit network will continue to develop over time. While some projects in this RLTP will improve the service characteristics of routes to such a the degree that they meet the criteria to be considered part of Auckland's rapid transit network, other projects are a steppingstone on the way to achieving this status in following decades.~~

Auckland's existing rapid transit network consists of the Northern Busway (between Constellation and Akoranga Stations), and the Western, Southern and Eastern rail lines¹. Within the 10-year timeframe of this RLTP, ~~this the network~~ will be expanded to include the Northern Busway to Albany, the new Eastern Busway, and an extension of the Southern Line to Pukekohe.

~~The locations of stops on planned services are finalised through processes outside of the RLTP (such as designations under the RMA). Auckland Transport and Auckland Council will work together to determine where stops are for the purposes of meeting the NPS-UD's requirements.~~

Figure XX below [outlines/identifies](#):

¹ ~~Some of these routes do not currently meet the frequency requirements for rapid transit; however, they are proposed to do so by 2028 in the RPTP.~~

Formatted: Highlight

Commented [AH1]: I'm struggling to follow this. I got lost from "combined with...". Maybe the sentence needs to be broken up?

- existing and planned rapid transit ~~services/routes~~ (i.e. the rapid transit network that will be in place at the end of the 10-year timeframe of the RLTP). ~~These services are considered rapid transit for the purpose of the NPS-UD~~
- ~~investment towards the future rapid transit network/routes~~ (as outlined in the Auckland Plan 2050) ~~for which some investment is identified in this RLTP but that will not meet the standard of rapid transit within the 10-year timeframe of this RLTP. This is not considered to be 'planned' rapid transit service, for the purpose of the NPS-UD~~
- ~~parts of the future rapid transit network that, while do not meeting the definition of rapid transit now or in the future but, are intrinsically tied to important in supporting the operation of the rapid transit network and important to understand from a network management and planning perspective (for example, such as the Onehunga branch line and northern busway section along the motorway State Highway 1 and the Devonport ferry service). These is parts of the network are shown as the 'supplementary network'. It also includes the Devonport ferry service which, due to current legislative arrangements, is not under the control of AT and so does not have sufficient certainty as to future frequency.~~
- ~~where services currently or are planned to operate, or where infrastructure exists today, but which do not meet the definition of rapid transit under the NPS-UD (i.e. they are not frequent, or on route that is separated from other traffic). This is shown as the 'supplementary network' and is not considered to be existing or 'planned' rapid transit service, for the purpose of the NPS-UD.~~

Commented [AH2]: This is quite complicated – a lot of ideas trying to be communicated in the one bullet point,



The locations of stops on planned services are finalised through processes outside of the RLTP (such as designations under the RMA). Auckland Transport and Auckland Council will work together to determine where stops are for the purposes of meeting the NPS-UD's requirements.

From: [Luke Elliott \(AT\)](#)
To: [Alastair Cribbens](#); [Amanda Harland](#); [Mark Fleming \(AT\)](#)
Cc: [Sean Cavanagh \(AT\)](#); [Kelly Seekup \(AT\)](#)
Subject: Draft comments for RLTP re: NPS-UD
Date: Friday, 5 February 2021 17:18:21
Attachments: [Draft RLTP content re NPSUD.docx](#)

Hi all,

As we've been discussing, we need to ensure the draft RLTP is clear on what investment is and is not considered existing and planned rapid transit for the purpose of the NPS-UD.

Based on discussions with Council, I've put together the attached (which is partly based on a draft we received from Greater Wellington on the details of their wording). This is a starter for 10, but hopefully gives an idea of what we should say and show.

Alastair and Amanda, I'm keen for your feedback on the wording. Mark, this is really an FYI at this point to make sure you're across it.

I've suggested where it might sit in relation to the draft of the RLTP I've seen, but I'm happy for it to go anywhere as long as we're clear.

Hopefully this is helpful. Happy to discuss.

Kind regards,

Luke

**Luke Elliott | Principal Planner Rapid Transit Network
Integrated Network Planning | Planning and Investment**

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Auckland Central

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The NPS-UD introduces a new requirement for Auckland Council to ensure the Auckland Unitary Plan enables building heights of at least six storeys within at least a walkable catchment of current and planned rapid transit stops. This is intended to contribute to a "well-functioning urban environment", and some exceptions to the requirement exist where changes will not contribute to this goal.

Auckland Council is working through the implications of the NPS-UD for the Auckland Unitary Plan. It intends to consult with the public on these changes later in 2021.

Given the importance of the existing and planned rapid transit network to these considerations under the NPS-UD, the purpose of this section of the RLTP is to clarify the extent of the existing rapid transit network investment contributes to 'planned' rapid transit services. This be used in Auckland Council's work on the implications on the NPS-UD.

Auckland's existing rapid transit network consists of the Northern Busway (between Constellation and Akoranga Stations), and the Western, Southern and Eastern rail lines. Within the 10-year timeframe of this RLTP, this will be expanded to include the Northern Busway to Albany, the new Eastern Busway, and an extension of the Southern Line to Pukekohe.

The locations of stops on planned services are finalised through processes outside of the RLTP (such as designations under the RMA). Auckland Transport and Auckland Council will work together to determine where stops are for the purposes of meeting the NPS-UD's requirements.

Figure XX below outlines:

- existing and planned rapid transit services (i.e. the rapid transit network that will be in place at the end of the 10-year timeframe of the RLTP). These services are considered rapid transit for the purpose of the NPS-UD
- investment towards the future rapid transit network (as outlined in the Auckland Plan 2050) that will not meet the standard of rapid transit within the 10-year timeframe of this RLTP. This is not considered to be 'planned' rapid transit service, for the purpose of the NPS-UD
- parts of the future rapid transit network where services currently or are planned to operate, or where infrastructure exists today, but which do not meet the definition of rapid transit under the NPS-UD (i.e. they are not frequent, or on route that is separated from other traffic). This is shown as the 'supplementary network' and is not considered to be existing or 'planned' rapid transit service, for the purpose of the NPS-UD.



From: [Luke Elliott \(AT\)](#)
To: [Alastair Cribbens](#); [Amanda Harland](#)
Subject: RE: Aligning rapid transit in RLTP and Baseline re: NPS-UD
Date: Thursday, 4 February 2021 10:39:35
Attachments: [RE Rapid Tranist - NPSRLTP.msg](#)

Happy to still meet.

We really need to progress with finalising the Baseline – this is the last outstanding issue, for me. See attached for Greater Wellington’s approach in their RLTP.

Speak soon,

Luke

From: Alastair Cribbens <[x@xx](#)>

Sent: Thursday, 4 February 2021 10:20 a.m.

To: Luke Elliott (AT) <[x@xx](#)>; Amanda Harland <[x@xx](#)>

Subject: RE: Aligning rapid transit in RLTP and Baseline re: NPS-UD

Ok, this isn’t particularly helpful but I’d still be keen to have a brief discussion at 11.

From: [s7\(2\)\(a\)](#) <[s7\(2\)\(a\)@nzta.govt.nz](#)>

Sent: Thursday, 4 February 2021 9:48 AM

To: Luke Elliott (AT) <[x@xx](#)>; Alastair Cribbens <[x@xx](#)>; Amanda Harland <[x@xx](#)>

Subject: RE: Aligning rapid transit in RLTP and Baseline re: NPS-UD

Hi all,

Sorry I can’t make today’s meeting. In general I think we’ve covered off the definitions of rapid transit really strongly in the baseline report.

Attached is some more detailed work that we had done for us late last year, to help inform the development of some nationwide policy stuff for rapid transit. I’m not sure I’m allowed to share this yet, so please keep to yourself but feel free to dig out any useful nuggets.

Thanks

[s7\(](#)

-----Original Appointment-----

From: Luke Elliott (AT) <[x@xx](#)>

Sent: Tuesday, 26 January 2021 3:05 PM

To: Luke Elliott (AT); [s7\(2\)\(a\)](#); Alastair Cribbens; Amanda Harland

Subject: Aligning rapid transit in RLTP and Baseline re: NPS-UD

When: Thursday, 4 February 2021 11:00 AM-12:00 PM (UTC+12:00) Auckland, Wellington.

Where: Microsoft Teams Meeting

Hi all,

Alastair and I were chatting about what we’re putting into the RLTP in regards to the NPS-UD, and we came to the topic of needing to align that to what’s in the Baseline. This conversation follows up on the one we had at the end of last year.

Let me know if this time doesn’t suit.

Thanks,

Luke

Microsoft Teams meeting

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From: s7(2)(a)
To: [Luke Elliott \(AT\)](#)
Cc: [Mark Fleming \(AT\)](#); s7(2)(a); s7(2)
Subject: RE: Rapid Transit - NPS/RLTP
Date: Wednesday, 3 February 2021 11:33:21
Attachments: [image007.png](#)
[image002.png](#)

Luke,

We've had a long debate in Wellington about what it is and isn't with quite a range of views about what needs to be in the RLTP to meet the requirements of the NPS-UD.

I've been keen not to deviate from the GPS and NPS-UD definitions for a number of reasons:

- a. it's relative: quick and frequent are relative to what was there before. A quick light rail service moves at a different speed than a metro rail service which may be different from a busway; high-capacity is again relative to what. New Zealand's high capacity may well be different from Japan or Singapore;
- b. the challenge of what that definition is trying to achieve in terms of human behaviour and what may achieve that in New Zealand. My research from a few years' ago and Metlink's approach under previous plans was that for public transport to be attractive, the service frequency needs to be 10 minutes or less (15 mins at a push for example evening or early morning services); stops have to be within 10 minutes walk of the stops; and this level of service needs to be maintained over the entire service period ie having rapid transit in peak time only will not lead to an overall behaviour change. My concern here is that we may designate a rail line as rapid transit but if it doesn't change overall human behaviour then there is little point.
- c. In Wellington we have a number of bus routes (our high frequency bus routes) that get close to providing the levels of service which are attractive ie they run 10-15 minutes during the daytime (greater at evenings and weekends)
- d. Looming definitional work that the PT team in Waka Kotahi, the One Network Framework have underway and in Wellington the draft Regional Growth Framework that has defined a rapid transit network.
- e. Our view that the RLTP should not be the vehicle to define land use which we believe should be the land use planners role. Some of them believe that the RLTP should be designating the stops.

So our approach has been to stick to the GPS and NPS-UD and use the Regional Growth Framework definitions which are the four urban rail lines (excludes Wairarapa service – Metlink operated, and Capital Connection – Kiwirail operated) and the mass rapid transit network proposed by Let's Get Wellington Moving once defined.

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I've copied Mark Fleming in who is the TSIG rep and s7(2)(a) Privacy who is the lead on the RLTP.

Let me know what you think and any questions and happy to talk. I'd also be curious if you are treating the busways that you have as rapid transit.

Regards

s7(2)



s7(2)(a)

Kaiwhakahaere Waka-ā-rohe | Manager, Regional Transport

Greater Wellington Te Pane Matua Taiao

M: s7(2)(a)

100 Cuba St, Te Aro, Wellington 6011

A.3.2 Rapid transit in the Wellington

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However, whether or not intensification is appropriate around rapid transit stops will be considered as part of each council’s district plan processes.

The NPS-UD also has directions to enable building heights and density commensurate to levels of existing and planned public transport generally. The RLTP and the Wellington Region’s

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The rail lines are part of Metlink’s core public transport network. Plans to upgrade this network to increase service frequency and capacity are contained in the Wellington Regional Public Transport Plan and reflected in the significant activities in section 4 *Regional programme*. The Let’s Get Wellington Moving mass rapid transit corridor will be developed as part of the Let’s Get Wellington Moving programme.

Urban intensification opportunities around public transport stops will be planned through the district plans of the Wellington Region’s district and city councils.



From: Luke Elliott (AT) <xxxx.xxxxxx@xx.xxxx.xx>

Sent: Wednesday, 3 February 2021 10:33 AM

To: s7(2)(a) s7(2)(a) Privacy@gw.govt.nz>

Subject: Rapid Transit - NPS/RLTP

Hi s7(2)

As discussed, we're having the same debate around what exactly to put in our RTLP to respond to the NPS-UD on rapid transit.

We settled on not listing stop locations, which sounded like your approach, too.

I was interested in your idea of a nationally consistent approach – if you could share your wording that would be much appreciated, and I can give you what we come up with too if you'd like.

Many thanks,

Luke

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From: [Kelly Seekup \(AT\)](#)
To: [Alastair Cribbens](#)
Subject: RE: Specific rapid transit routes
Date: Friday, 20 November 2020 09:54:53

Thanks Alastair
 Much appreciated
 Regards Kelly

From: Alastair Cribbens <~~ac@xxx~~>
Sent: Thursday, 19 November 2020 8:39 p.m.
To: Kelly Seekup (AT) <~~ks@xxx~~>
Subject: Specific rapid transit routes

Hi Kelly,

Good to chat yesterday. I promised to send through the table I had setting out the initial thoughts I've had about the future major contenders for rapid transit status, but sorry it took me a little while to tidy it up. Here it is, hope it makes sense.

Route	Description	Comments
Rail network exc Onehunga	Planned to run 10 minute peak (plus additional peak services) and 15 minute inter and off frequencies	Wouldn't meet a 10 minute frequency requirement.
Onehunga branch trains	Remains at 20 min peak and 30 min off-peak frequency for the next 10 years.	Not getting close to sub-15 minute frequencies. Not rapid.
Northern busway	Runs completely separate from traffic for approx 10 km nth bound and 12km sth bound (post NCI) from Albany to Akoranga and Harbour Bridge (respectively). But from there to city (3.8km HB to city), in CC (NX1 1.25km, NX2 2km) and nth of Albany (12.5km) uses bus lanes or general traffic lanes.	Northern busway enhancements will help, but will they be enough for it to meet service characteristic levels outside of the busway? Need to wait for business case (and funding).
(Future) NX3 / Currently the 866	Planned to be frequent by 2028. Runs from Albany to city along the busway then to Newmarket along Ponsonby Road.	Similar approach required for all three. Three obvious options: 1) Whole route rapid 2) Only rapid when on busway 3) Whole route not rapid
70	Route running from Botany to city centre. Travels along the Eastern Busway (for part of the route).	Two main issues/questions:
72	Route running from Botany to Panmure via Howick. Will run along part of the Eastern Busway.	1) Only on busway may run counter to ideal approach for NX1 and NX2 (i.e. would be not rapid in CC or nth of Albany) 2) What impact does the non-busway section have on reliability – could lead to delays and/or bunching? Option 2 – only rapid when on busway is probably the preferred option
(Future) AirportLink/38	Once Puhinui upgrade in place new route to run Airport-Manukau via Puhinui.	Transit lane makes this easy – not rapid unless far more separation is in place.

	Described in the RPTP as rapid transit Will run in Transit lane along Puhinui Road and to Manukau.	
North Western routes	Need to find out more about these routes	...
All these examples only look at individual frequent routes, there will also be bus routes that use busways (especially the eastern busway) for part of their route that by themselves aren't 'frequent' but which together could be considered so.		

Alastair

Alastair Cribbens | Principal Transport Advisor
Growth, Transport & Infrastructure Strategy
Auckland Plan Strategy and Research, CPO

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Auckland Regional Land Transport Plan 2021-2031



The Regional Land Transport Plan 2021-2031 sets out the land transport objectives, policies and measures for the Auckland region over the next 10 years. It includes the land transport activities of Auckland Transport, Auckland Council, Waka Kotahi NZ Transport Agency, KiwiRail, and other agencies.



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Responding to Auckland’s transport challenges cont.

Rapid transit and the National Policy Statement on Urban Development (NPS-UD)

An implication of the NPS-UD requirements is that investment identified in this, or future RLTP’s may necessitate changes to the Auckland Unitary Plan.

The purpose of this section is to outline the status of Auckland’s RTN following the investment identified in this RLTP.

It also reflects the frequency of services described in the current Regional Public Transport Plan 2018-2028 (RPTP).

Auckland’s RTN will continue to develop over time. While some projects in this RLTP will improve the service characteristics of routes to the degree that they meet the criteria to be considered part of Auckland’s RTN, other projects are a stepping stone on the way to achieving this status in following decades.

Auckland’s existing RTN consists of the Northern Busway (between Constellation and Akoranga Stations), and the Western, Southern and Eastern rail lines.¹⁰ Within the 10-year timeframe of this RLTP, the network will be expanded to include the Northern Busway to Albany, the new Eastern Busway, and an extension of the Southern Line to Pukekohe.

The figure below shows:

- Existing and planned rapid transit routes (i.e. the RTN that will be in place at the end of the 10-year timeframe of the RLTP)
- Future rapid transit routes (as outlined in the Auckland Plan 2050) for which some investment is identified in this RLTP but will not meet the standard of rapid transit within the 10-year timeframe of this RLTP
- **Parts of the transit network that do not meet the definition of rapid transit now or in the future, but are important to support the operation of the RTN, for example, the Onehunga branch line and Northern Busway section along SH1. These parts of the network are shown as ‘supplementary network’.**

The locations of stops on planned services are finalised through processes outside of the RLTP (such as designations under the Resource Management Act). AT and Auckland Council will work together to determine where stops are for the purposes of meeting the NPS-UD’s requirements.



¹⁰ Some of these routes do not currently meet the frequency requirements for rapid transit; however they are proposed to do so by 2028 in the RPTP.



One Network Framework (ONF)

Classification Guidance

Waka Kotahi NZ Transport Agency

17 November 2022

Version 1.0

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More information

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More information about the One Network Framework (ONF) is available on the Waka Kotahi website at www.nzta.govt.nz/onf

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Version history

This table shows a record of all changes to this document.

Version	Date	Role and organisation	Reason
1.0	17/11/2022	ONF integration programme – Waka Kotahi	All draft document information and feedback reviewed - Version 1 approved.

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Terminology used in this document

Term	Definition
AADT	Annual average daily traffic
Adjacent land-use	Land-use types that tend to be along the side of and has direct access or contributes to the on-street activity of the road or street being classified.
Classification	Categorising roads based on the main function(s) each category of road performs
Corridor	<ul style="list-style-type: none"> The area of land utilised to provide a transport link between two points. Usually constrained within the land area of the road reserve The collection of routes utilised to provide a transport link between two key points by all available modes which may sometimes be expanded to include off-line modes such as railways and dedicated cycle paths that provide the link
Function	The purpose or role in the network that the road or street performs
Infrastructure Risk Rating (IRR)	A road assessment methodology designed to assess road safety risk, primarily as an input to the speed management process. The road safety risk is assessed by coding each road and roadside feature that feeds into the IRR model so that a risk rating can be determined
MegaMaps	A geospatial tool that Waka Kotahi uses to provide RCAs with speed management information for their network
Movement function	How people and goods move along and across roads and streets by any mode
Network	Collective term for all roads and streets under the control of a Road Controlling Authority <ul style="list-style-type: none"> National Network: All roads and streets in New Zealand Highways Network: All state highways in New Zealand
On-street activity	Significant on-street activity is a combination of pedestrian activity, numbers of people spending time in the area (dwell time) and the density of land-use along the side of the road or street
Place function	The extent to which the land use along the side of a road or street is a destination that people want to visit or spend time in
RAMM	Road Assessment and Maintenance Management software system
Road Controlling Authority (RCA)	A regional council, territorial authority, or public organisation such as Waka Kotahi and Department of Conservation that operates a part of the NZ Land Transport network
Street category	The specific classification assigned to a road or street from the two Street Families based on its intended movement and place function. In RAMM there are two street categories: <ul style="list-style-type: none"> Original street category: the category allocated to the road or street through the automated process Current street category: the current classification of the road or street. This will be the same as the original street category if it wasn't changed through the moderation process or any subsequent classification reviews
Street family	Group of street categories that are grouped according to the urban and rural context they refer to
Traffic calming	measures introduced into a road to encourage drivers to travel at an appropriate speed for their surroundings, and to discourage unnecessary through traffic

Introduction

The One Network Framework (ONF) is a tool to classify roads and streets within the New Zealand transport network.

The One Network Framework (ONF) evolves the One Network Road Classification (ONRC) to a two-dimensional classification framework focused on **movement** and **place**¹.

The ONRC was developed by the Road Efficiency Group (REG) following recommendations from the Road Maintenance Taskforce in 2012. A national road classification with levels of service enabled an operational and cultural change in road activity management and improved prioritisation of investment. This built on the 2011 State Highway Classification to help manage the future State Highway network more effectively.

The **place function** within the transport network acknowledges that roads and streets are destinations and places for people, as well as transport corridors for vehicle movements. It also ensures that the ONF is fit for purpose in more complex urban environments with a range of modes to accommodate and competing demands on limited road and street space.

By introducing a stronger multi-modal focus, the ONF also brings more distinction to both urban and rural networks. It highlights the strategic importance of each mode to the overall objective of moving people and goods efficiently and effectively.

The ONF makes the following key shifts:

- A shift from the volume of vehicles on the network to the network's functional importance for moving people and goods, by any mode.
- It considers adjacent land use, and the role the transport network plays as part of the wider public realm.
- When fully implemented, it will consider both the current and future movement and place function of the network. This will allow gaps to be identified and guide network changes and investment decisions seeking to close the identified gaps.
- It includes walking, cycling, freight, public transport, and general traffic networks, some of which include off-road routes.

Benefits of the ONF

Bringing **movement function** and **place function** together will:

- improve the integration of land use and transport planning
- position an agreed future vision for movement and place at the heart of how we plan, design, and manage maintenance and operations
- support more strategic and informed decision-making
- create a common language for discussing the function of roads and streets – from spatial planning, transport planning and urban design to modal priorities, the ways network's function, and maintenance and operations
- provide an easy-to-understand mechanism to have more informed conversations about the complexity of transport networks, including competing demands, strategic objectives, and potential investment.

Including the **place function** in strategic planning and investment decision-making recognises that shared, integrated planning between transport and land-use will result in better outcomes.

The ONF provides a foundation for nationally consistent conversations. The ONF isn't designed to provide transport solutions, but it helps to establish the **function** of a road or a street. While it contributes to design or investment conversations, the ONF doesn't seek to determine the **form** of a road or street. Other guidance such as the Aotearoa Urban Street Planning and Design Guide is available to support that purpose, alongside local centre plans and street design manuals.

¹ The ONF was approved by the Waka Kotahi Board in February 2021.

When fully implemented, the ONF can be used to benchmark performance and align performance measures and outcomes.

The ONF also introduces modal layers of walking, cycling, public transport, and freight, recognising that our roads and streets have different functions for different modes.

Context

In 2021, Road Controlling Authorities (RCAs) and Waka Kotahi collaborated in a process that resulted in a fit for purpose ONF current state of the New Zealand RCA² network.

The process began with the creation of an automated ONF layer in RAMM that was made available to RCAs. The purpose of the automation was to support RCAs in the classification process – it was estimated that the automation would be around 80% accurate depending on the size and complexity of RCA networks. The automation was based on current ONRC classifications, Annual Average Daily Traffic (AADT) as a proxy for the level of movement function, and generalised land-use based on the Infrastructure Risk Rating Manual to determine place value function.

Each RCA then reviewed (checked, verified, and updated) their area's automated ONF layer. The objective of this review was to use local network knowledge to update the ONF classification categories where necessary, for each section of street or road. RCAs completed this process and confirmed to Waka Kotahi when finalised. The RCAs' current state ONF network was then moderated in a series of online workshops following a high-level review and analysis by the Waka Kotahi ONF team. The results of these regional moderation workshops were then reviewed through a national moderation process over two on-line sessions. This national moderation concluded that the current state ONF road/street network is fit for purpose, providing a baseline for comparison against a future state network classification using ONF, developed by RCAs³.

As all RCAs have a current state ONF network it's expected any changes will be a result of:

- RCAs needing to classify new roads or streets.
- RCAs reviewing some parts of their current state ONF network because of the vesting of new roads or streets or identification of an anomaly that was not picked up during the review of the automated layer in 2021.
- RCAs making changes as part of the ONF annual review process.
- RCAs amending Stopping Places to their network. The national moderation process found some variability between RCAs in classifying Stopping Places as some didn't classify any while others classified a significant number.

² Including State Highway and Department of Conservation

³ See ONF National Moderation Summary report, dated 1 March 2022, for more detail on this process and the results of moderation.

Purpose of this document

This guidance provides information on how to classify a new road/street or change the classification of an existing road/street within an RCA's network. It provides guidance for classifying modal network information for a road/street under ONF and outlines details of how to update or add this information within the RAMM system. It should be read in conjunction with the ONF Detailed Design that provides the broader ONF context, an explanation of each road/street category, functional descriptions, and defines attributes and criteria.

Who is this document for?

The information in this document is designed to help practitioners working at RCAs to collaboratively classify their network to ONF in RAMM.

These include strategic transport planners, urban design and land use planners, asset managers, and multi-modal specialists from both local and central government.

Classifying a new road or street

The following steps set out the process for RCAs when classifying a new road or street with an ONF category in RAMM.

Ensure you have the 'carriageway section' layer on.

1. Select the carriageway you want to add an ONF record for
2. Select the 'Add Linked Child' option
3. Choose One Network Framework
4. Click Next
5. Select Not Linked
6. Click Next
7. Click Next⁴
8. Choose the correct road
9. Click Next
10. Use the drop-down options to add:
 - a. 'Movement Ranking',
 - b. 'Place Ranking'
 - c. 'Street Family',

this will then automatically populate the street category⁵.

11. Click Save

A worked example for Riccarton Road, Christchurch is included in Appendix B.

Please do not create ONF classifications for state highways in Local Authority RAMM databases, these will be automatically imported by 2023 based on Waka Kotahi's classification as the state highway RCA.

⁴ Because you selected the carriageway the shape is already provided, so the only thing to do is click Next. Don't change the shape - this ensures that the ONF start and end value is correct, and the shape matches the carriageway and results in a nice simple match when this data is moved into MegaMaps. Some issues have occurred because people are drawing their own shapes and it's harder to match the ONF records to the carriageway when that is done. Following the above process will improve ONF data over time.

⁵If the automatically populated street category is not what you expected to see you can change this manually by using the drop-down arrow, though it is likely an indication that you need to review the movement and place rankings that have been entered.

Figure 1 – Step 1 and 2: Creating a new ONF road

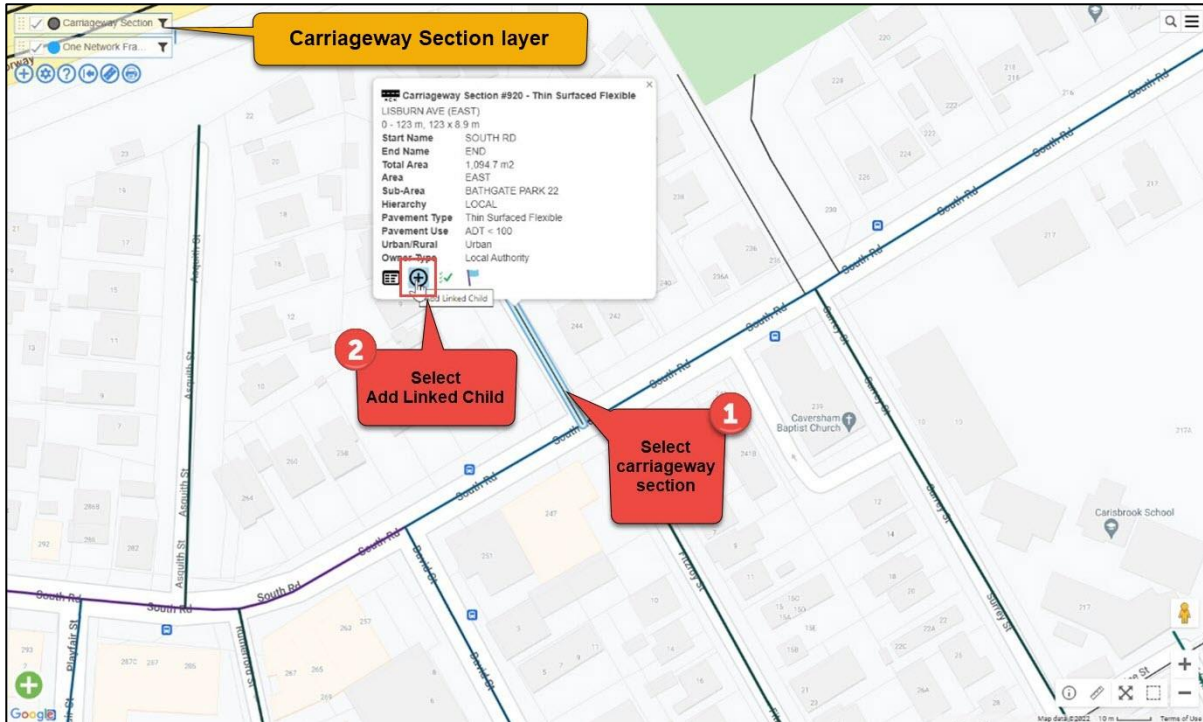


Figure 2 – Step 3 and 4: Creating a new ONF road

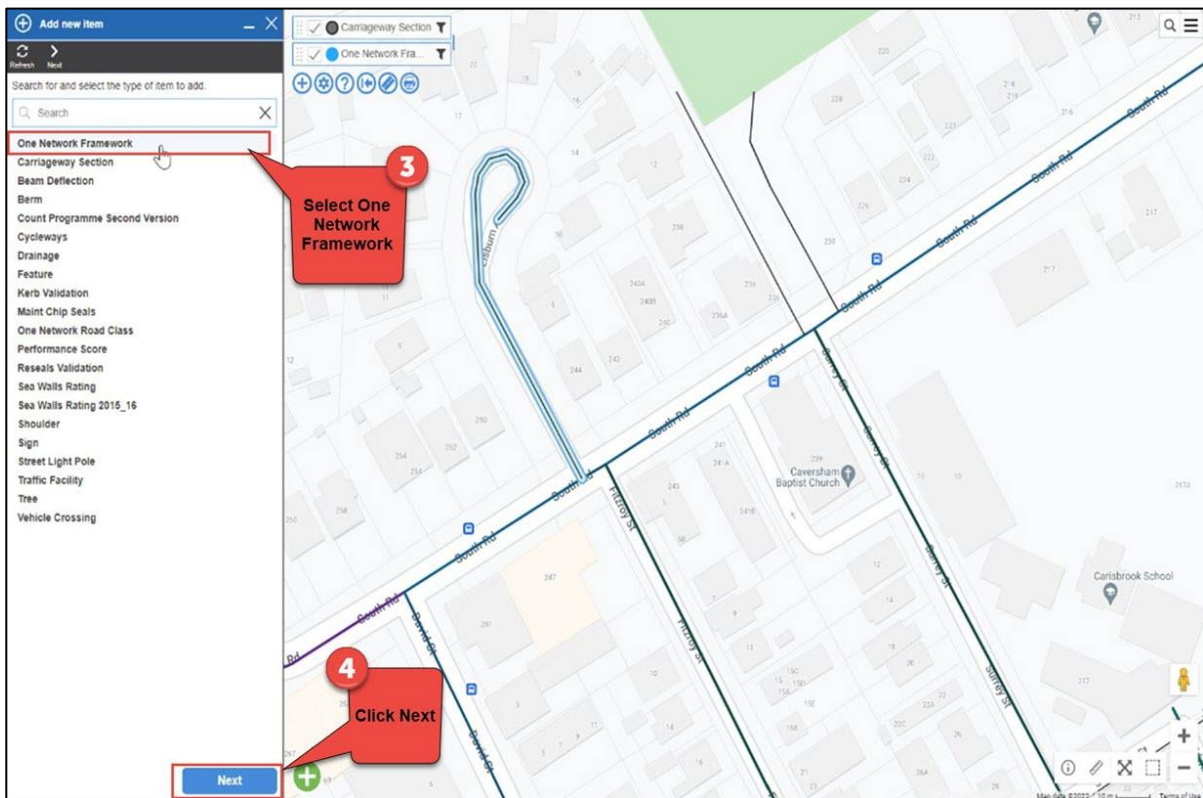


Figure 3 – Step 5 and 6: Creating a new ONF road

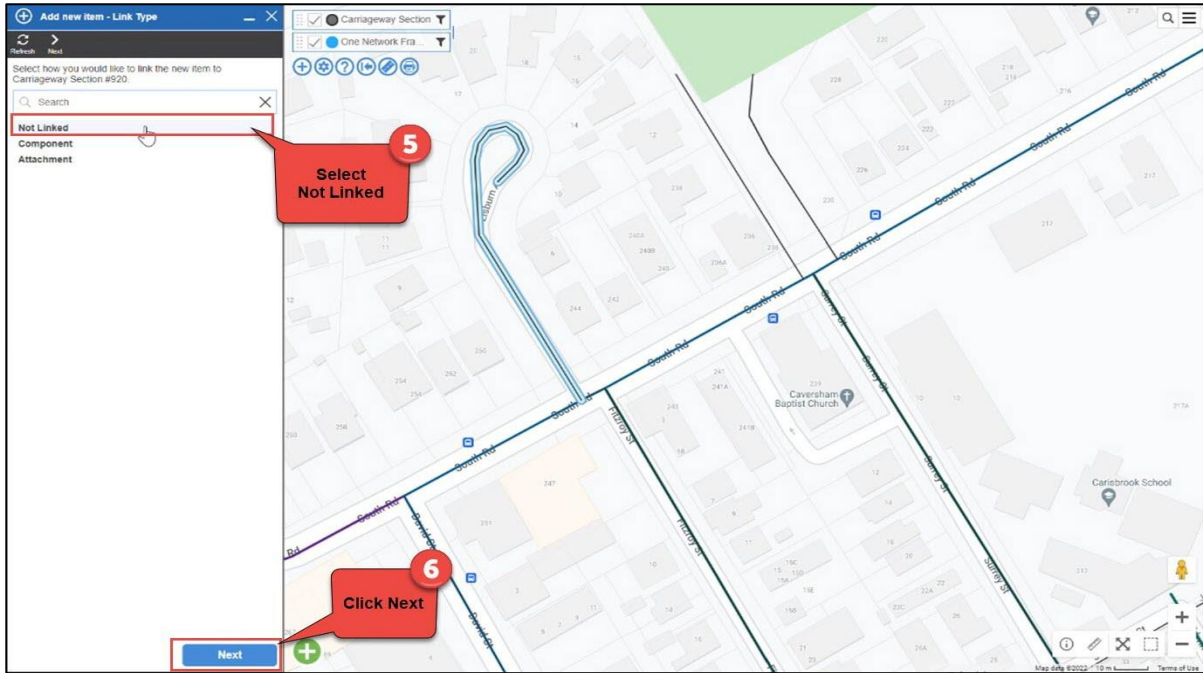


Figure 4 – Step 6 and 7: Creating a new ONF road

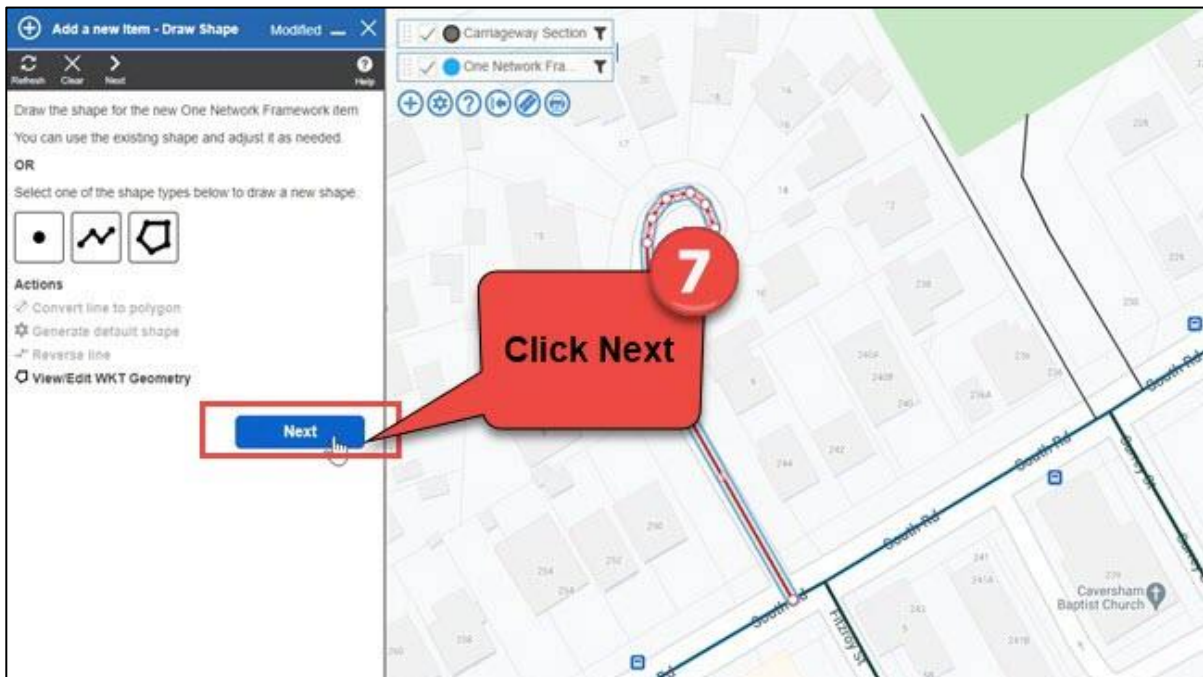


Figure 5 – Step 8 and 9: Creating a new ONF road

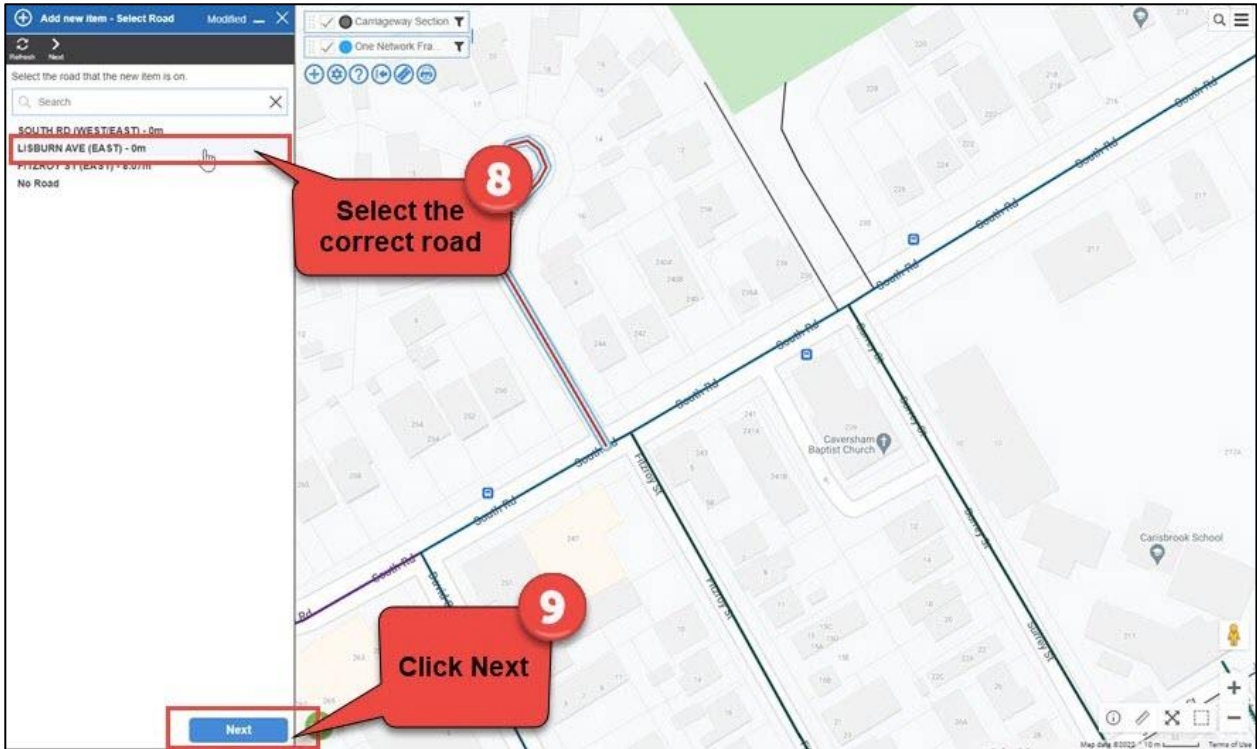
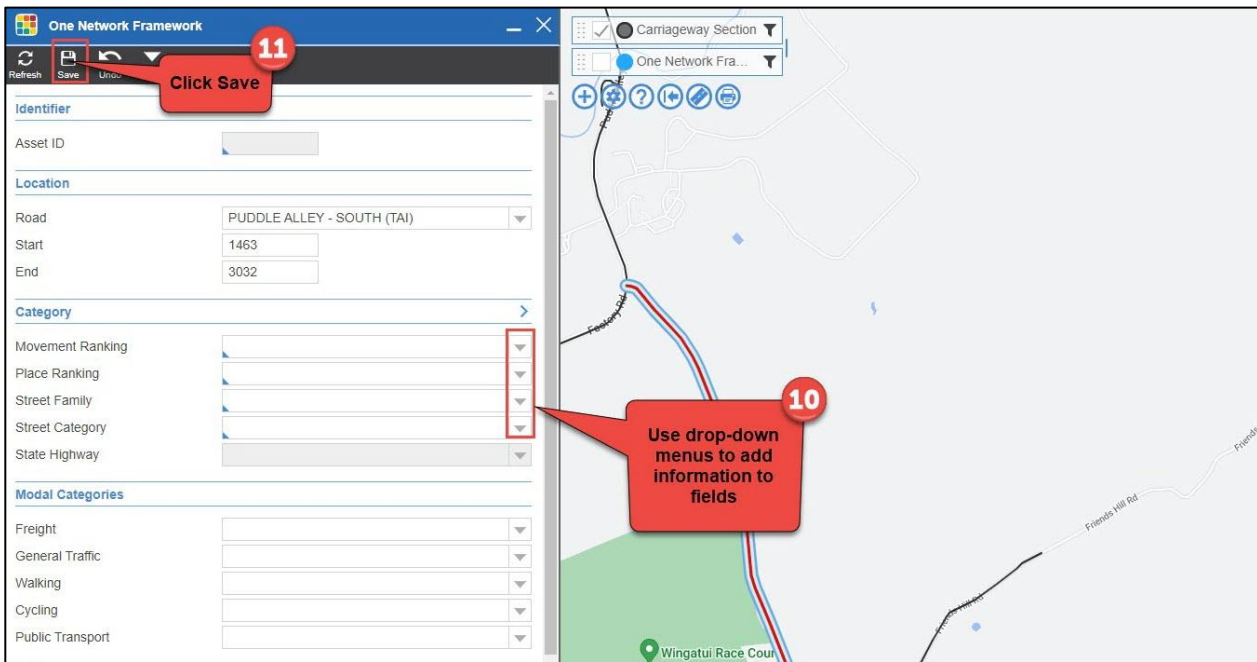


Figure 6 – Step 10 and 11: Creating a new ONF road



Considerations for classifying roads and streets in RAMM

Street Family

Choose the appropriate street family for the road or street - whether a road or street is in the urban or rural street family is based on the adjacent land-use and its interaction with and access from the road or street, with the district/unitary plan zone being the significant indicator. For example, if the land the road or street runs through is within a rural land-use zone then the road is rural. If the road borders urban/rural zones use the logical best fit of the on-street activity for that road/street.

Movement and Place rankings

To set the street classification in RAMM the movement and place rankings can be entered, and this will automate the street category. The function of the street category in the Detailed Design should align to the movement and place rankings given.

- Movement relates to all modes (refer to movement table in Detailed Design for scale of people movement) although depending on the function of the road it may also be useful to refer to specific modal tables (see Modal section of Detailed Design).
- The General Traffic and Freight table are particularly relevant for helping to distinguish between Local Streets and Urban Connectors, and Rural Roads and Rural Connectors where the function of the road or street is unclear. It is suggested that in these cases Urban or Rural Connectors would correspond to GT4 and GT5 except for Urban Connectors in some of our major cities that may correspond to GT3.
- It is assumed that most, if not all new roads and streets in urban areas will be local streets which have a place ranking of P3 or P4. The roads and streets with higher place rankings of P1 and P2 are more likely to already exist in the ONF current state, or feature in the future state classifications rather than the current state.
- The type of movement along a road or street can also impact on place. The higher place ranking of P1 and P2 indicates dense on-street activity, and in particular, large numbers of people spending time in the area immediately adjacent to the road or street (e.g., al fresco dining, using street furniture, listening to buskers etc). In these situations, high motor vehicle movement will reduce the place function as people will not want to spend time along the side of these roads or streets. In these cases of high motor vehicle movement (around GT3 and above) it is suggested that the highest place function would be P3.

Street Category

In many cases the category of the road or street will be clear as in the above example of a Local Street. In those cases where the category is unclear start by working out the function of the road or street.

- Refer to the Detailed Design that provides an explanation of each category and sets out functional descriptions and defining attributes.
- There will be cases where a road or street appears to have two functions. In these cases, it is important to determine the predominant or primary function of the road or street. For example, a road with the function of an Urban Connector also has a retirement home, day care centre and park located at intervals along the road. Although these destinations will generate some on-street activity the predominant function of the road is not changed by these destinations and so the road should be classified as an Urban Connector.
- In other cases, there may be destinations or clusters of destinations, such as a group of shops on both sides of the road, that generate significant on-street activity and people wanting to cross the road. In this situation the predominant function of the road is an Urban Connector but the significant levels of on-street activity and people crossing the road mean that these sections should be classified as Activity Streets. Therefore, the road would be classified as an Urban Connector with sections of Activity Street at intervals where there is significant on-street activity generated by the adjacent land-use.
- Consider the function of surrounding roads and streets or roads and streets that connect to the new road/street – is the function of these roads or streets different to the new road or street or the same? Will the function of the new road or street change the function of surrounding or connecting roads/streets in the network?
- If applicable, also consider what the expected function of the new road or street was in your RCA planning documents and how it fits within the overall network.

Making changes to current classification

There will be instances where an RCA wants to make a change to the classification of a road or street. The following process sets out the considerations for RCAs.

Step 1 - Review the rationale for change

- Has the function of the road or street changed? For example, the development of new housing along a peri-urban road causing it to change to a local street. If needed, refer to the table with functional descriptions and defining attributes for each category in the Detailed Design.
- Has the place function of the road/street increased or decreased? For example, on-street activity from new businesses in a mixed-use zone causing a change from a local to an activity street. Or the opposite where businesses in an activity street relocate thereby making the function of the road/street a local street.
- Consider whether the place function has changed significantly enough to change the current function of the road/street, thereby warranting a change in classification. For example, a small business moving into a local street is unlikely to influence the on-street activity enough to change the function of the street – it is still a local street but now has a small business located on it. In contrast, a decrease in place function due to road widening and increased movement for example is likely to lead to a decrease in place function around the road/street.
- Has the movement value of the road/street increased or decreased? And is this enough to influence the function of the road/street and therefore its classification? For example, traffic calming measures may divert sufficient motor vehicle traffic from an urban connector to mean it may change to a local street or activity street if there is sufficient on-street activity.

Step 2 - Check consistency with surrounding network

- Check the function of surrounding roads, or roads that connect to the road that you think needs to change – is the function of these roads or streets different or the same? Will the change influence the function of surrounding or connecting roads/streets in the network? Is the change consistent with RCA planning documents?
- Make sure there is a relationship of function between the changed road/street and surrounding roads and streets. For example, shorter streets that run off a long Main Street in an urban area are more likely to be Activity Streets than Main Streets due to the difference in function illustrated by lower place and movement values.
- Make sure there is a consistency of function between roads and streets of the same category in your network – that is, a Main Street in one part of your network has the same function as a Main Street in another part of the network.

Step 3 - Making the change in RAMM

The below steps and supporting figures below should be followed to make these changes in the RAMM system once it is confirmed a change is needed. Ensure you have the ONF layer on first, then:

1. Click on the road or street that you want to change.
2. Click on 'Show Detail'.
3. Use drop-down menus to change the relevant fields⁶
4. Add rationale in the notes field for the changes made:
 - You could add date of change, what made the function change, any other detail that will help anyone reviewing the change to understand why.
 - You can expand the notes field for easier viewing/input by clicking the expand button in the corner of each notes field, remember to click apply in the expanded notes area to save the notes correctly when using this feature.
5. Then click 'Save' to save your changes.

⁶ After making changes check that the street family is correct. If the automatically populated street category is incorrect, you can change this manually by using the drop-down arrow, though it is likely an indication that you need to review the movement and place rankings that have been entered.

Figure 7 – Step 1 and 2: Changing an ONF classification

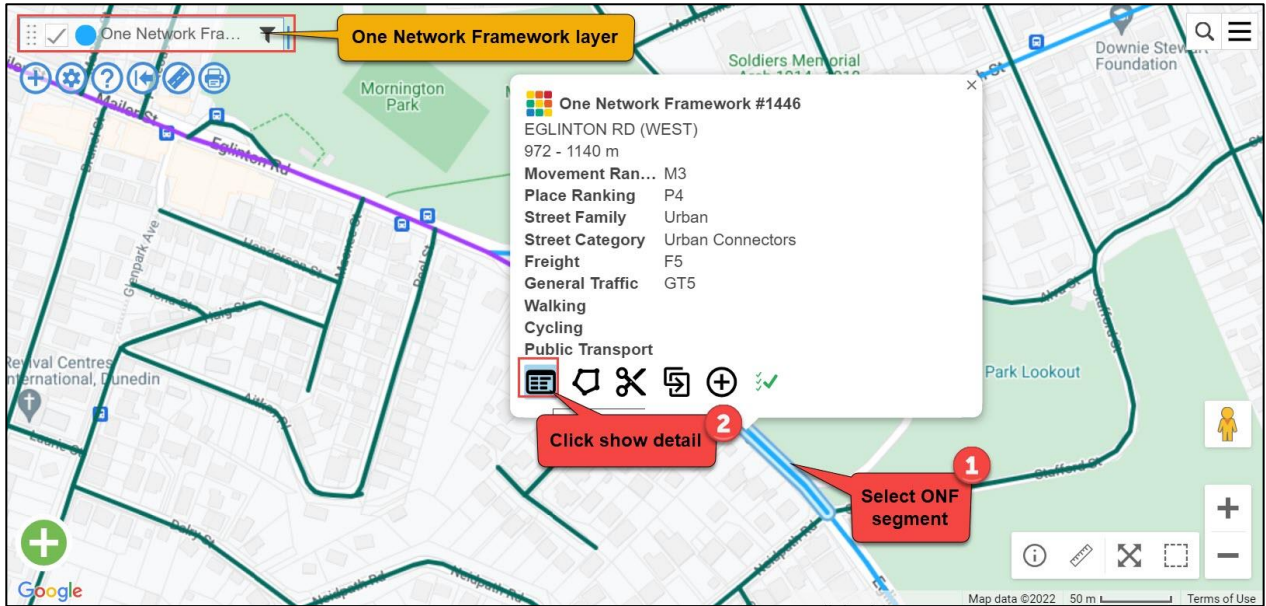


Figure 8 – Step 3 and 4: Changing an ONF classification

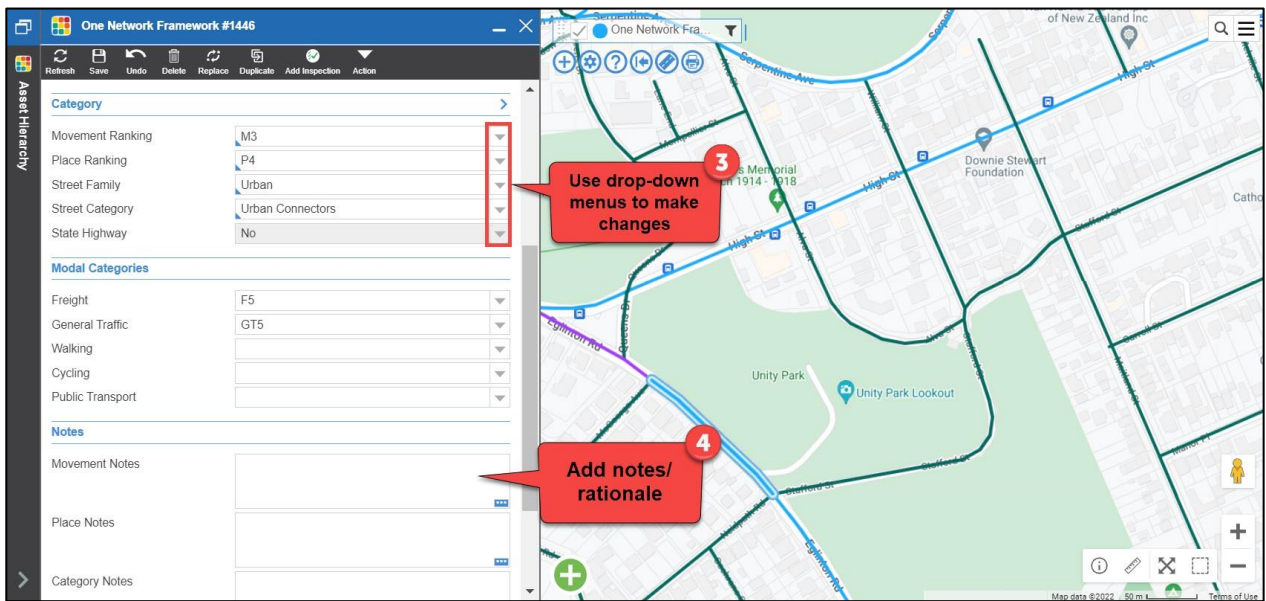
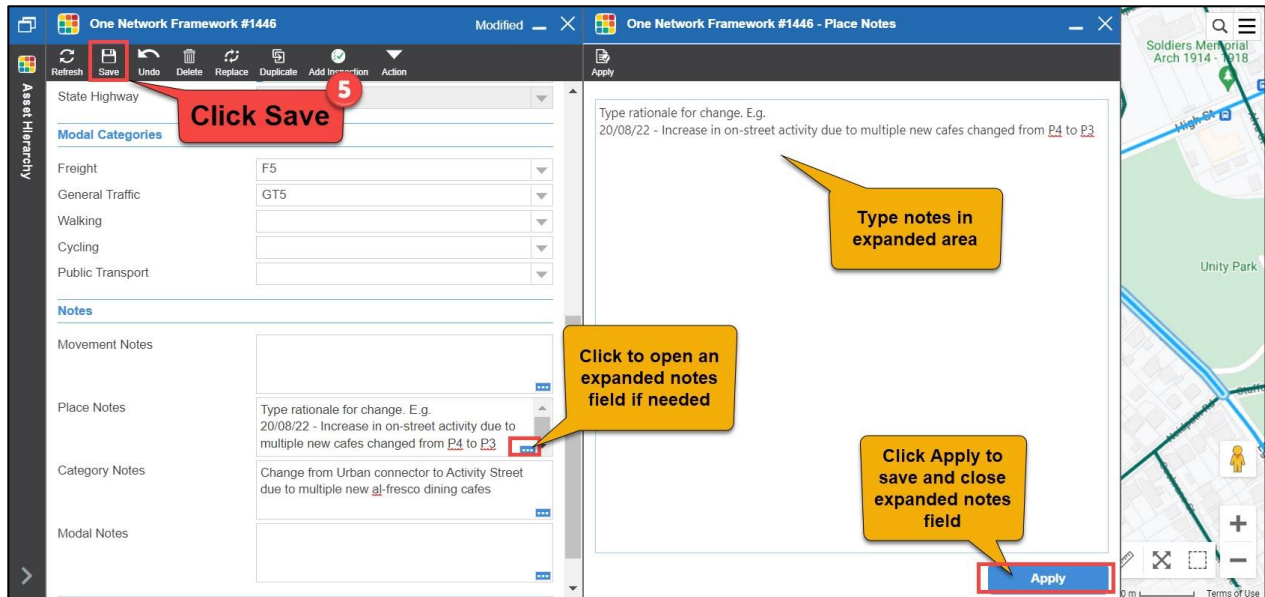


Figure 9 – Step 5: Changing an ONF classification



Other considerations

The following provides guidance for specific classification considerations relating to lanes, roundabouts, on and off ramps, bridges, overpasses/underpasses, and stopping places:

Multiple lanes

- Multiple lanes on a road or street should be classified with the same Road or Street category.
- Where there is a split carriageway, both sides of the carriageway should have the same classification. If both sides of the carriageway are within the same road reserve, then only one ONF record needs to be created/maintained for that road or street. Regardless of where the carriageway, pathway, or lane is located, if they contribute to overall movement along that road or street with connections to similar start or end points, then they are considered the same street classification under ONF.

Roundabouts

- Where roundabouts and similar traffic installations have been assigned unique road sections, they should be assigned the Road or Street category with the highest place function ranking of the adjacent street category, if they both have the same place value, then consider the one with the highest movement value as well. For example, a roundabout with two approaches classified as Urban Connector and one classified as Activity Street should be classified as Activity Street.

Ramps

- On and off ramps should be classified the same as the road or street they are providing access to or from.

Bridges, overpasses, underpasses, and tunnels

- Bridges, overpasses, underpasses and tunnels should have the same Road/Street category as the adjoining (not intersecting) carriageway section(s) i.e., the section where movement is generated from/to, not the intersecting corridor in the case of over and underpasses.

Stopping places

- National moderation found that there was variability in the use of Stopping Places across the New Zealand network with some RCAs classifying a significant number while others didn't classify any. There was also some inconsistency in the classification of Stopping Places with some RCAs classifying a short section of corridor immediately adjacent to a significant rural destination while others classified long sections of road along the side of a lake or river.
- As a result, it was agreed⁷ that Stopping Places '*should only be used for rural destinations that are directly using the road for access and where some type of intervention is required*' – please refer to the Stopping Places category description in the Detailed Design for further detail.

Modal classification

The below section provides information for updating current modal classifications in the RAMM system and guidance on the approach for classifying modal networks under the ONF. It is intended to be used alongside the modal information found within the Detailed Design.

General Traffic and Freight modal classifications have been automatically classified in the RAMM system based on existing ONRC values, which are determined primarily from vehicle volume data. There may be instances where this is not accurate, and RCA's may amend these classifications as required.

The Not Applicable (N/A) classification option

Some parts of the transport network will not cater to a particular mode and therefore will not need to have a classification assigned to the ONF road segment in RAMM. To indicate that a deliberate decision has been made not to assign a modal classification to that part of the network (rather than just having not been classified yet) an "N/A - Not applicable" option has been made available for each modal category in RAMM. If an ONF road segment has not yet been classified for a particular mode, then it is expected that field will remain blank until it is classified.

Examples where the "N/A – Not applicable" modal classification option might be used:

- Roads where Freight or General traffic is not permitted.
- Off-road routes for cyclists and pedestrians where motor vehicles are not permitted.
- Motorways and transit corridors where pedestrian access and cycling is not permitted.

Off-road routes and paths

It is recommended that off-road routes and paths that are of strategic importance to one or more modal networks are classified under ONF.

- Using the Street Family, along with Movement and Place values (see appendix A), you will be able to determine the associated ONF street category, even if the off-road asset or route itself is not considered a road or street.
- In most instances where the off-road route or path does not allow for movement of vehicular traffic the value for movement is likely to be low (M4 or M5) but may still have high place value depending on the interaction with surrounding land use.
- Use the N/A modal classification option to show that the off-road route or path does not cater to General Traffic, Freight, or Public Transport as needed.
- You may choose to add relevant asset-related information, such as it being an off-road route, to the free-text notes fields with RAMM.
- Though it is *not a requirement* for ONF segments to follow carriageway sections within RAMM in order to be classified, for linear referencing/mapping purposes it is preferred to have a carriageway section to start with. Therefore, it is recommended that off-road routes and paths have an ONF segment either added as a "linked child" of a carriageway (if it already exists), or that a carriageway is added before creating the ONF segment. Refer to RAMM help documentation for more information on how to add carriageways and ONF segments.

⁷ During the National Moderation for ONF in Nov 21

Updating modal classifications in RAMM using the map

Updating individual ONF segments

Ensure you have the ONF layer open and selected in RAMM.

1. Locate and select the ONF road segment in RAMM to update.
2. Click the show 'detail button'.
3. Scroll down to the 'modal categories' section and use the drop-down menu next to the mode(s) being classified to select the appropriate classification from the pre-defined options.
4. (Optional) scroll down to the 'Modal Notes' field and add any relevant notes regarding the modal classification.
5. Click the save button.

Figure 10 – Step 1 and 2: Modal classification

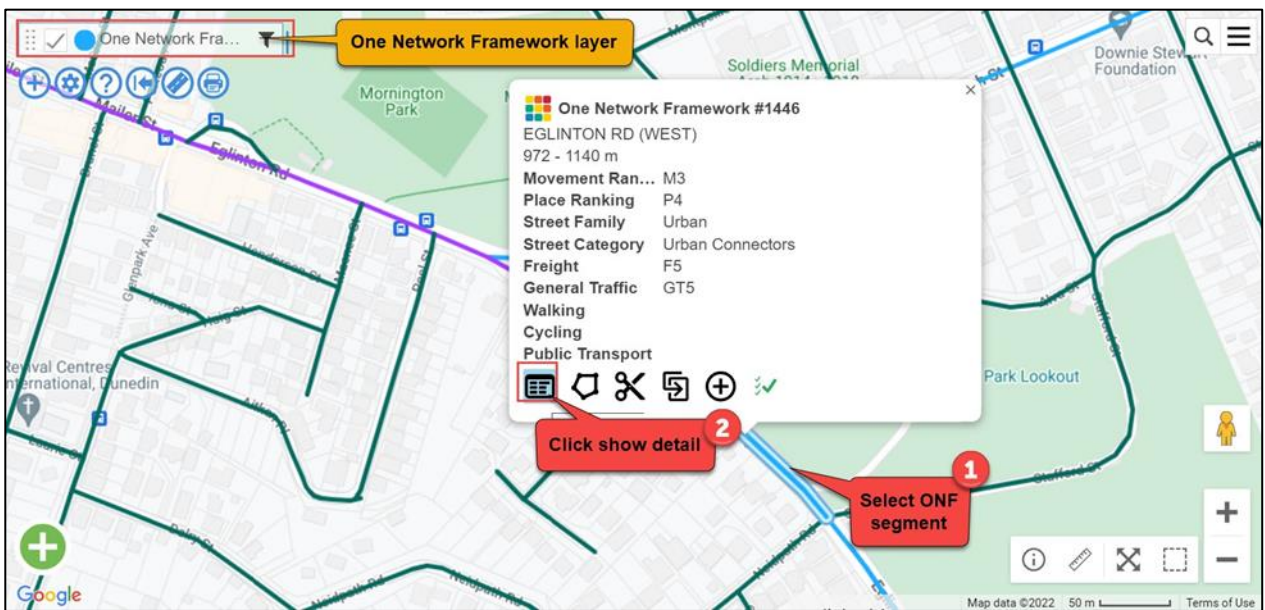
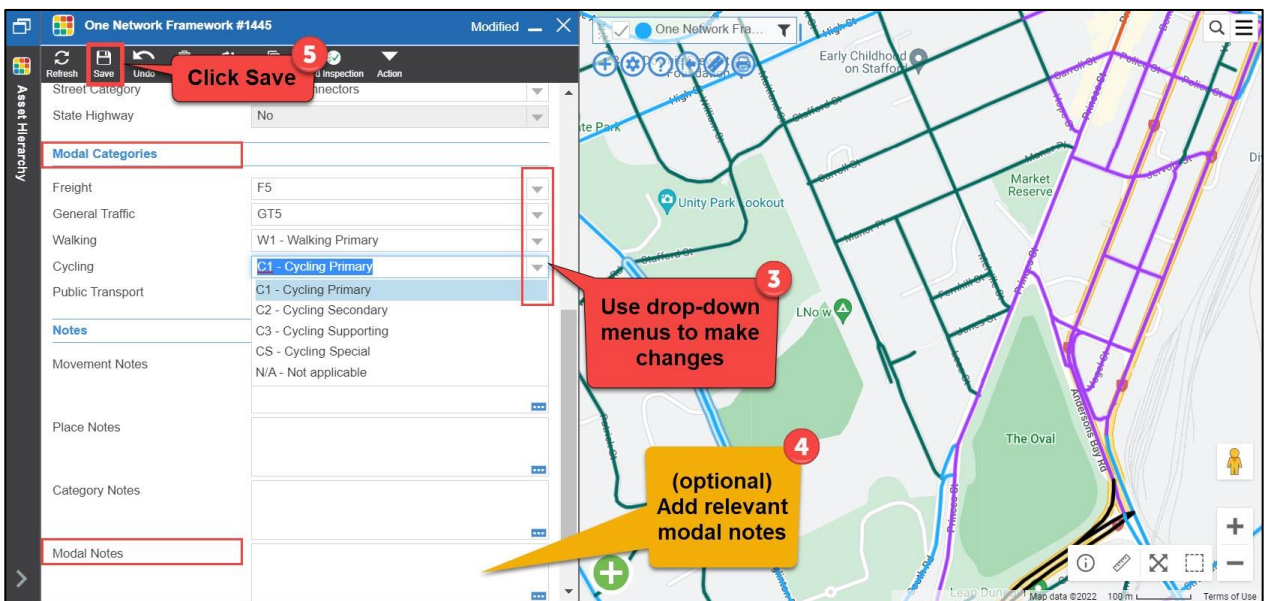


Figure 11 – Step 3 and 4: Modal classification



Updating multiple ONF segments to the same modal classification at once (bulk change)

Ensure you have the ONF layer open and selected in RAMM.

1. Hold the 'CTRL' key on your keyboard and click each ONF segment to add to the current selection, if you click the wrong segment click it again while still holding the 'CTRL' key to unselect it.
2. Click the 'One Network Framework' layer name.
3. Select 'Bulk Change' from the menu.
4. Click the drop-down arrow next to 'column' field and select the mode that you are updating.
5. Click the drop-down arrow next to the 'New Value' field and choose from one of the pre-defined classification values to assign to the selected ONF road segments.
6. Select apply.
7. A confirmation pop-up will appear, select 'yes' to save changes or 'no' to return to editing.

Figure 12 – Step 1, 2, and 3: Modal classification bulk change

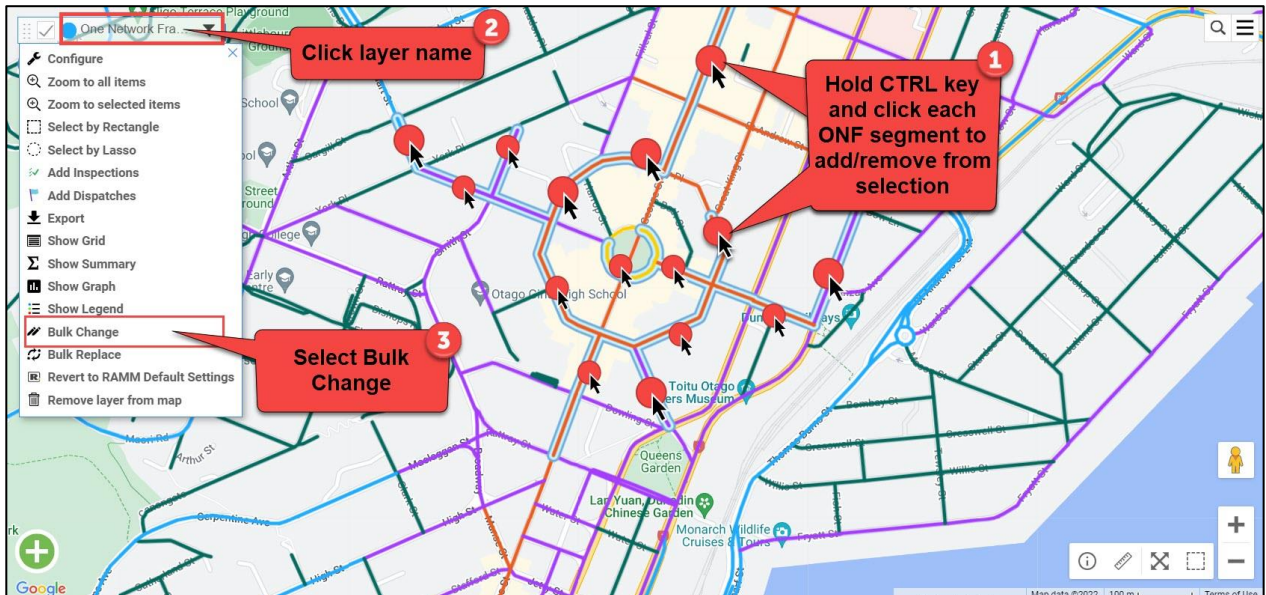


Figure 13 – Step 4 and 5: Modal classification bulk change

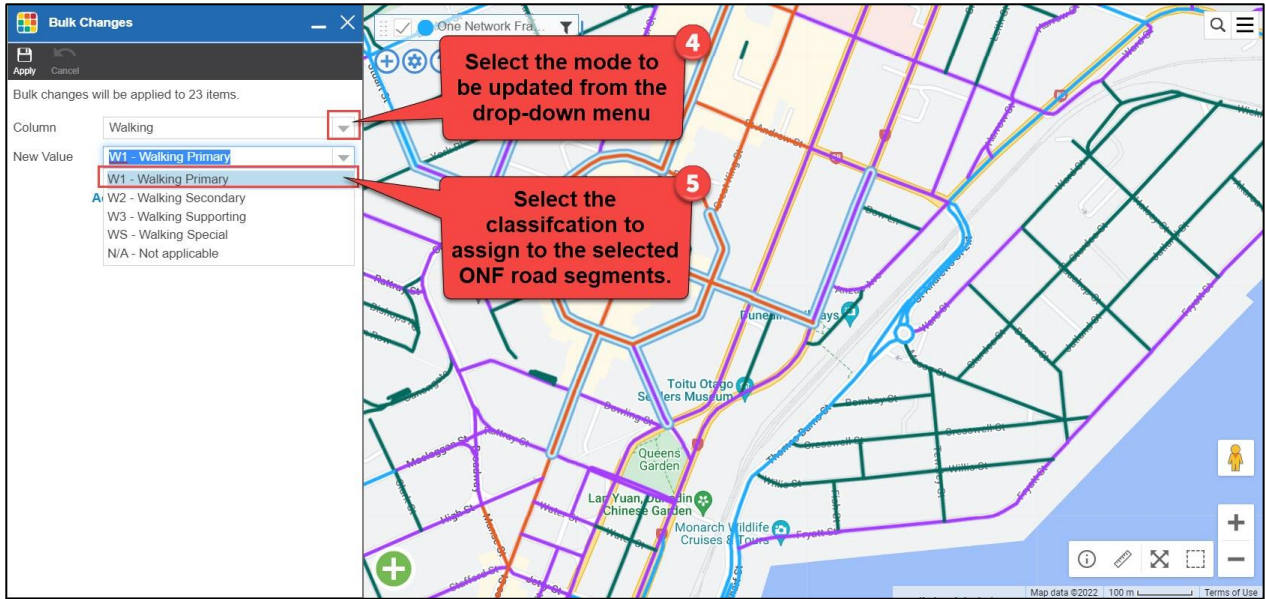
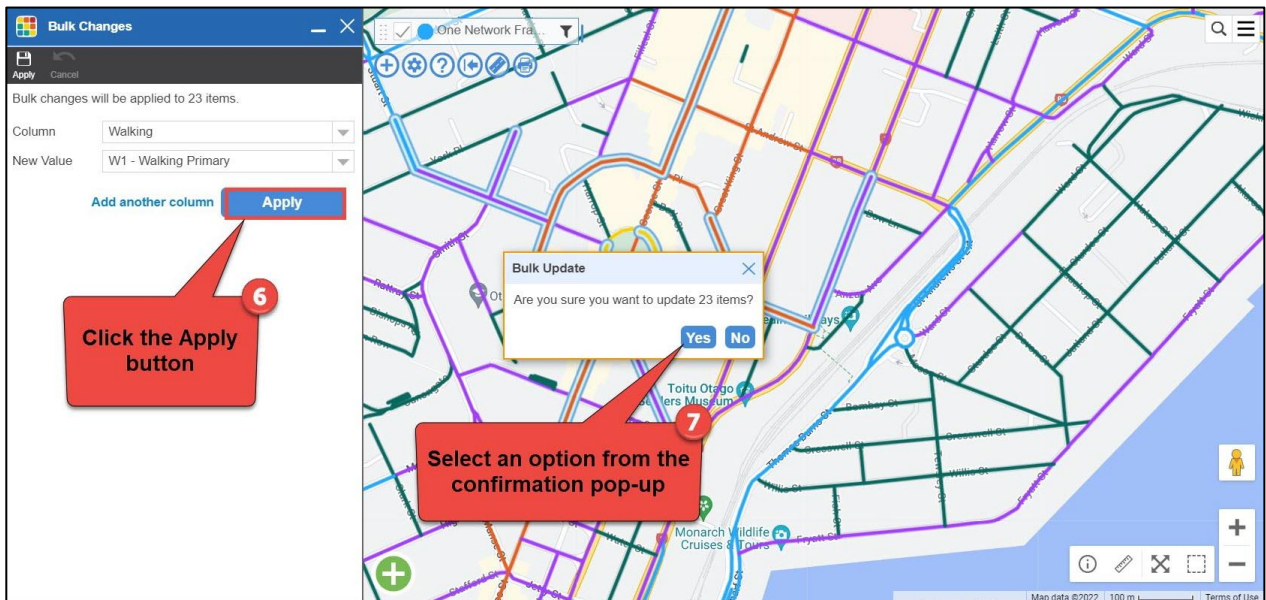


Figure 14 – Step 6 and 7: Modal classification bulk change



Public Transport

Classifying the Public Transport network is primarily based on the quantity of total services that move along a corridor, as well as the quantity of people being moved, the time of day the services travel, and the total frequency of public transport services (in both directions). Classification of the Public Transport network should be carried out in collaboration with Regional Councils as they will understand the volumes of people travelling on their services and the total volume of services on a particular part of the transport network.

Approach

1. Look over the classification table with a particular focus on familiarising yourself with the 'strategic significance' column.
2. Consider the 'strategic significance' descriptions in conjunction with the 'Indicative vehicle volume' column to begin to classify your network. Note that you are classifying the number of services *per hour* on a certain part of your network in *both directions* and this may include a *range* of public transport routes that use that part of the network. For example:
 - a. If services on the corridor only operate at some times of the day (e.g., peak hour service only, weekday services only, school bus services only) then it is class PT 5.
 - b. If services operate throughout the day (i.e., 7am-7pm, seven days a week) but with less than 4 services an hour on average along the road, then it is class PT 4.
 - c. If services operate throughout the day with at least 4 services per hour on average, then move to step 3.
3. Undertake a second filter to sort corridors carrying higher public transport vehicle volumes between classes 1-3, as follows:
 - a. If services operate on a dedicated corridor and meet the standards of a rapid transit service (as outlined in the National Policy Statement on Urban Development⁸) then it is class PT1.
 - b. If at least 20 services per hour operate on the corridor at most times, across several different services, carrying very large volumes of people, then it is class PT2.
 - c. If neither of the above points are met, then it is likely PT3.

Notes, examples, and rationale:

- The 'indicative vehicle volume' and 'indicative people movement' numbers have been provided as a 'Rule of thumb', but other columns (such as 'strategic significance' or 'description') may also inform the ultimate choice in public transport classification for each corridor.
- As noted below the table, not all classes of Public Transport will be applicable to all RCAs and it is expected that only large metropolitan councils will likely have corridors rated as PT1 or PT2.
- Devonport Ferry in Auckland is PT4, Secondary, because it operates at frequencies of less than 4 an hour across most of the day, despite operating on dedicated (water) corridor.
- Eastbourne Ferry in Wellington is PT5, Targeted, because it only operates at some times of the day (peak only).
- Lambton Quay or other parts of the 'Golden Mile' in Wellington are classed as PT2, Spine, because they have a significant number of overlapping bus services that well-exceed 20 services per hour.
- Parts of Symonds Street in Auckland are classed as PT2, Spine, because there are a significant number of overlapping bus services that well-exceed 20 services per hour.
- Hutt, Kapiti, Western, Eastern and Southern railway lines in Wellington and Auckland are PT1, Dedicated, because they generally provide a frequent service (averaging around 4 trains per hour across the day) on a dedicated rail corridor and have been classified as such in the NPS-UD.
- Johnsonville Line & Onehunga Branch Line are PT4, Secondary, because they have less than four services per hour on the corridor.
- Northern Busway is PT1, Dedicated, but on-street sections of the Northern Express (NEX) service (e.g., Fanshawe Street) are likely to be PT2 - Spine, or PT3 - Primary, depending on number of services per hour through the corridor (in both directions).
- The Parade in Island Bay would be PT3, Primary, because it has greater than 4 services per hour during most of the day (7am – 7pm).

⁸ Rapid transit service means any existing or planned frequent, quick, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic " from NPS-UD p.11

Cycling

Classification of the Cycling network (including micro mobility) is predominantly based on the quantity of people using the network, and the connectivity provided by that part of the network to key places/destinations. Most cycling networks do not currently have volumetric data, therefore local judgement and knowledge of the network is needed to determine how each section will be classified.

Approach to classifying the Cycling network

Look over the classification table with a particular focus on familiarising yourself with the 'strategic significance column'. The strategic significance descriptions should be used alongside the descriptions of the various tiers of the cycling network set out below.

Commencing with the C1 - primary network in an urban centre and classifying the network working outwards will usually be the easiest way to undertake the classification, this will also allow for a sense check of the connectivity between the various network classes as you go. The C2 - secondary and remaining network will usually extend out from the C1- primary network.

C1 – Primary

Provides a core network of cycling corridors that connect significant places and key locations of employment and education.

- a. This might include larger hospitals, major employment, shopping precincts and retail areas, universities / polytechnic / colleges, significant civic spaces and facilities, frequent public transport stations and interchanges, and public transport corridors.
- b. The network caters for higher volumes of cycle movement, longer and more efficient journeys (connecting across townships or between suburbs). Average cycling travel speeds are likely to be higher on the C1 network. The volume of use may even require segregation of cyclists from each other, from pedestrians, or from traffic and the volumes may even demonstrate a “cycling peak” for commuting.
- c. C1 networks may include both on-street and off-street facilities but delays will likely be minimised at intersections with crossings, advanced stop boxes, etc.

C2 – Secondary

Supports mostly local, short trips to suburban centres, including important links to stations and other interchanges. They also feed to C1 routes.

- d. Typical destinations accessed from C2 might include, larger primary schools, secondary schools, some colleges, medical centres, local employment and local retail, supermarkets etc.
- e. Cycling volumes will be noticeable. Cycling trips will be taking place throughout the day. Routes will tend to follow direct desire lines, travel speeds for cyclists will be fairly high and the degree of delay experienced by cyclists at intersections will be managed. User facilities may be a mixture of on-road and off-road facilities, this may include some degree of separation. The facility type in C2 will likely mirror the targeted cyclist type. Confident cyclists may well be comfortable riding in cycle lanes whereas the “interested but concerned” may expect segregation from traffic.
- f. This class can also be applied to off-road cycling routes such as cycle paths through parks where the route fulfils the function of a secondary cycling corridor.

C3 – Supporting

Neighbourhood and local links that make up the balance of the cyclable road network that isn't C1 or C2. C3 might provide short connections to C1/C2 routes.

- g. Primarily C3 supports mostly local, short trips to local centres (local schools (usually primary schools), amenities like parks and shops) and local medical centres.
- h. Cycling volumes (and typical traffic volumes) will be low, similarly the general riding speeds and traffic speeds will be low. The network will range from simple quiet local streets, residential roads, traffic calmed parts of the network, shared space environments and may include off road paths through parks etc.
- i. Dedicated cycling facilities are likely to be quite rare and routes are less likely to be direct.

CS – Cycling Special

Mainly a rural network classified around recreational and tourism trips. This recognises the significance of cycling routes, some of which are on a national scale such as NZ Cycle Trail and allows for these routes to be highlighted in overall cycling network planning.

- j. They will typically be low volume cycle use, low design speed and provide a quieter more remote cycling environment alongside rivers, across rural landscapes and be features such as rail trails.
- k. Whilst generally off-road it should be noted though that CS routes can be on-road and provide for longer cycle journeys that can be utility cycling to school or work or routes known to be popular as training circuits with road cyclists.

Notes, considerations, and rationale:

- Where a cycling route serves both a transport and tourism / recreational function the classification should primarily reflect the transport function and should be classified accordingly.
- Specialist cycling facilities, such as the trails within mountain bike parks that are used for recreation, are generally not considered part of the cycling network as these do not reflect movement for transport purposes.
- CS - routes that traverse urban areas and share their route with the defined urban cycling network should be classified either C1, C2 or C3. This might include sections of rural road where there is a discernible (greater than casual and occasional) use of a particular corridor by cyclists and where connections are made between key destinations or settlements.
- Consideration for connection to public transport - Access by cycle to public transport may include access to bus stops, bus stations and interchanges / hubs, train stations, or ferries. Strategic cycling networks may integrate public transport stops and interchanges, both in terms of cycle parking provision at public transport networks but also being influenced by where buses/trains/ferries that can carry bikes operate.
- Reserves and Parks - Ultimately the scale of the reserve, its location and the number of paths used for cycling will drive how the reserve is dealt with. At this stage, you may choose to not classify these sections. If they are important parts of your cycling networks or provide links between on-road sections, you can determine how they might be classified in relation to the connecting cycling network.
- Service lanes, no exit roads - Might not have been initially classified into a street category under ONF, however it may play part of the strategic cycling network and therefore warrant classification.
- Shared paths, cycle paths, etc. – These are generally an asset that functions with the same movement and place rankings as part of an adjacent street/road corridor rather than being classified separately into its own street category. The exception to this may be something which is quite removed from your “street corridor”.

Relationship between cycling and street categories

In the ONF classification process “movement” and “place” levels are used to determine the final street category type. Recognising that certain cycling network types may predominantly be associated with certain street category types then allows the classifier to undertake a rough audit or assessment of the ONF classification in relation to cycling networks (C1-3, CS) against final street category as something of a “sense check” when the classification process concludes.

Table 1 - Indicative cycling and street categories

Class	Indicative associated Street Categories
C1 ⁹	Civic Spaces, Main Streets, City Hubs, Urban Connectors
C2	Activity Streets, Urban Connectors

⁹ C1 and C2 Notes – It should be remembered that some urban connectors might well carry significant volumes of cyclists and those on longer cycling trips (for example cycling to work). The facilities may be no more than a cycle lane or bus lane within the roadway but equally the facility could be quite significant.

C3	Local Streets, Peri-urban Roads
CS	Rural Roads, Rural Connectors, Stopping Places

Walking

Classifying the Walking network is predominantly based on the quantity of people using the network and the connectivity provided by that part of the network to key places/destinations. Most Walking networks do not currently have volumetric data, therefore local judgement and knowledge of the network is needed to determine how each section will be classified. The overall look and feel of a route, the type of “place” combined with the level of walking will allow an RCA to classify the network.

Approach

Look over the classification table in the Detailed Design with a particular focus on familiarising yourself with the ‘strategic significance column’. The strategic significance descriptions should be used alongside the descriptions of the various tiers of the walking network set out below.

Commencing with the W1 - primary network in an urban centre and classifying the network working outwards will usually be the easiest way to undertake the classification, this will also allow for a sense check of the connectivity between the various network classes as you go. The W2 - secondary and remaining network will usually extend out from the W1 - primary network.

W1 - Primary

Provides a core network of walking route with the highest concentrations of significant walking activity. They are likely to be in central locations within 1- 2km of an urban centre and reinforce the perception of the “20 minute city”. The routes will connect to significant places and key locations of employment and education.

- a. This might include larger hospitals, major employment, shopping precincts and retail areas, universities / polytechnic / colleges, significant civic spaces, and facilities.
- b. Frequent public transport stations and interchanges are obvious focal points for walking journeys, key routes within about 500m of a stop or interchange on a PT1, PT2 or PT3 route or within about 1.5kms of a stop on a Metro Rail route, central ferry terminals, or transport interchanges would likely be classified as part of the primary walking network.
- c. The volume of use many even require segregation when the space is shared with cyclists but in general the footpath provision means that users are generally able to move about easily despite large pedestrian volumes.
- d. The network will include both on-street and off-street facilities, but delay will be minimised at intersections and there should be plenty of crossing opportunities mid-block (be that via formal facilities or through traffic managed or traffic free environments). The route will be direct and offer good levels of safety (personal and road).

W2 – Secondary

Supports mostly local, short trips to suburban centres. They also feed into W1 routes in larger central areas.

- e. Typical destinations accessed by W2 might include, larger primary schools, secondary schools, some colleges, medical centres, local employment and local retail, supermarkets, etc.
- f. Walking volumes will be noticeable. Walking activity will be noticeable throughout the day. Routes will tend to follow direct desire lines and the degree of delay experienced at intersections will be managed. Crossing opportunities will be common and formal crossing facilities will common. Shared facilities (with cyclists) may be common in some locations.
- g. This class can also be applied to off-road walking routes such as shared paths through parks where the route fulfils the function of a secondary walking corridor.
- h. W2 will be associated with a variety of public transport network types but will most commonly link to PT 3 or PT4 bus stops for a distance up to about 500m.

W3 - Supporting

Neighbourhood and local links that balance of pedestrian network (i.e., all routes within a suburban or local centre) covering local walking links as well as all residential local streets that aren't part of the W1 or W2 network.

- i. W3 often provide short connections to W1/W2 routes.
- j. Primarily W3 supports mostly local, short trips to local centres (local schools (usually primary schools), amenities like parks and shops) and local medical centres.
- k. Walking volumes will be low. The network will range from simple quiet local streets, residential roads, traffic calmed parts of the network, shared space environments. This can include any off-road routes, such as paths through parks where walking is undertaken for the purpose of getting to a local activity at the journeys end.
- l. Dedicated walking facilities are likely to be no more significant than an adequate footpath and dedicated crossing facilities may be quite rare.

WS – Walking Special

Walking Special (CS) is mainly a rural network classified around recreational and tourism trips. This recognises the significance of walking routes, some of which are on a national scale such as Te Araroa and DoC tracks and allows for these routes to be highlighted.

- m. Volumes of user are likely to be low and very sporadic / seasonal.
- n. The network is likely located beside rivers, creeks and rail lines and is often separated from motor-vehicle traffic.
- o. Some sections may be shared facilities with cyclists.
- p. Some parts of the WS network may be no more than the sealed shoulder at the edge of the roadway in a rural area and may be locally used to connect remote settlements.

Relationship between walking and street categories

Walking has a direct relationship to “place’ with increased pedestrian activity occurring within more significant places, i.e., places with increased on-street activity. In the ONF classification process “movement” and “place” levels are used to determine the final street category type. Recognising that certain walking network types may predominantly be associated with certain street category types then allows the classifier to undertake a rough audit or assessment of the ONF classification in relation to walking networks (W1-3, WS) against final street category as something of a “sense check” when the classification process concludes.

Table 2 - Indicative walking and street categories

Class	Indicative associated Street Categories
W1 ¹⁰	Civic Spaces, Main Streets, City Hubs
W2	Activity Streets, Stopping Places
W3	Urban Connectors, Local Streets, Peri-urban Roads
WS	Rural Roads, Rural Connectors

General Traffic

The General Traffic modal network classification has been automatically applied in the RAMM system based on existing ONRC values. There may be instances where the ONRC was not accurate at the time of automation, or RCA's may want to change these classifications for another reason (e.g., updated vehicles counts show change in vehicle volumes, no general traffic access to that part of the network resulting in an N/A classification, etc.). Using the table in the Detailed Design consider the current vehicle

¹⁰ W1 and W2. It should be remembered that some urban connectors might well carry significant volumes of pedestrians and those on longer walking trips (for example walking to work). The facilities may be no more than a footpath adjacent to the roadway but the strategic importance of these routes should be considered.

volumes and current strategic significance for general traffic for the network being re-classified and change the classification, ensuring to note the reason for change in the movement or modal notes fields provided.

Freight

The Freight modal network classification has been automatically applied in the RAMM system based on existing ONRC values. There may be instances where the ONRC was not accurate at the time of automation, or RCA's may want to change these classifications for another reason (e.g., a strategic freight network plan has become realised - with a shift in freight from one corridor to another, no freight access to that part of the network resulting in an N/A classification, etc.). Using the table in the Detailed Design consider the current freight vehicle volumes, total volume of goods being moved (where data is available), and current strategic significance for freight to determine the correct freight classification. Update this in RAMM and note the reason for change in the movement or modal notes fields provided.

Displaying the Modal Map Layers and Filtering in RAMM

A map layer has been created for each of the different modes so that you are able to view these in the map. The below steps outline how to open and filter the information within these map layers.

1. Click the Add Layer icon.
2. Type ONF in the search bar.
3. Under the Map Layer section select the modal layer that you want to open.
4. Ensure the modal layer you want to view is ticked; this will display that modal network on the map.

Continue the below steps if you want to further filter the information shown based on the classification values. This is useful if you only want to view a particular class, e.g., filter by W1 – Primary to display ONF segments that have been classified as part of the primary walking network.

5. Click the filter icon next to the name of the map layer.
6. Click the area where classification values are displayed, this will open the select values area.
7. Untick the classifications you do not want to show, so that only the classifications you want to view remain selected.
8. Click Apply.
9. Click X to close the filter section (if Auto Apply is not already ticked, then click on the apply button before closing the filter section).

This will now show the filtered classification on the map.

If the map is showing a clustered view, refer to appendix 3 “The ONF map – Clustered to Standard view” for steps for changing to standard view.

Note that these are templated map layers that will revert to all values displayed (removing the filtering) each time the map layer is opened.

Figure 15 – Step 1: Viewing a Modal Map Layer and filtering

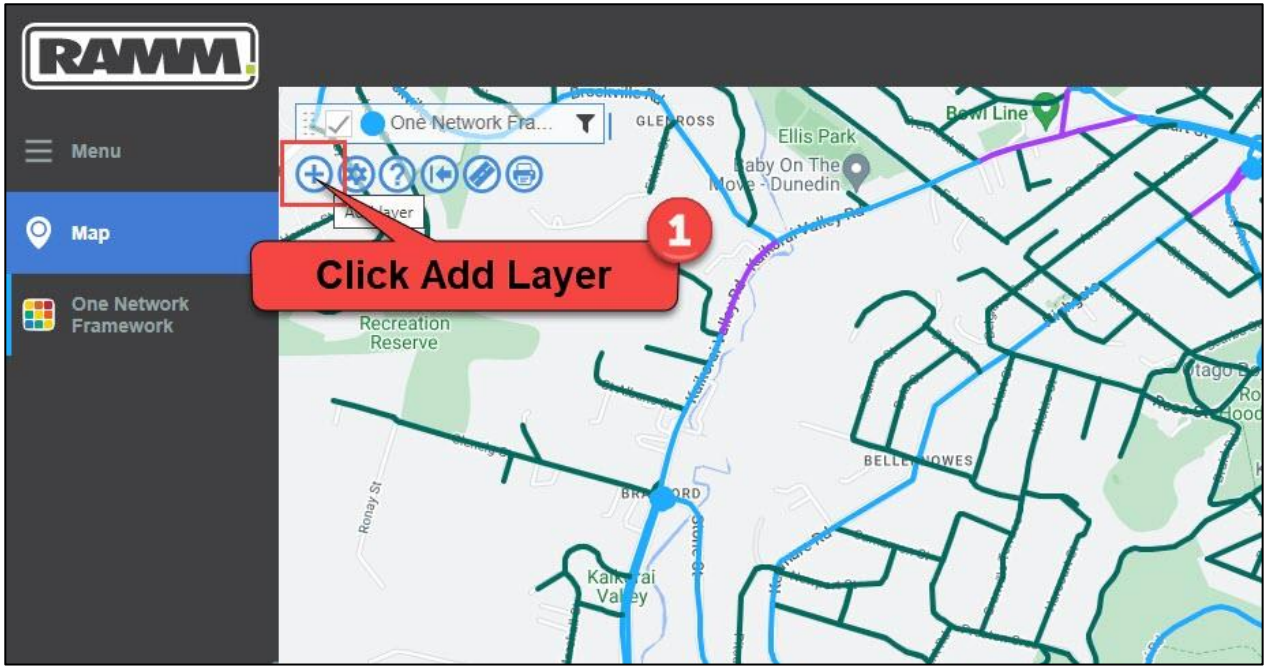


Figure 16 – Step 2 and 3: Viewing a Modal Map Layer and filtering

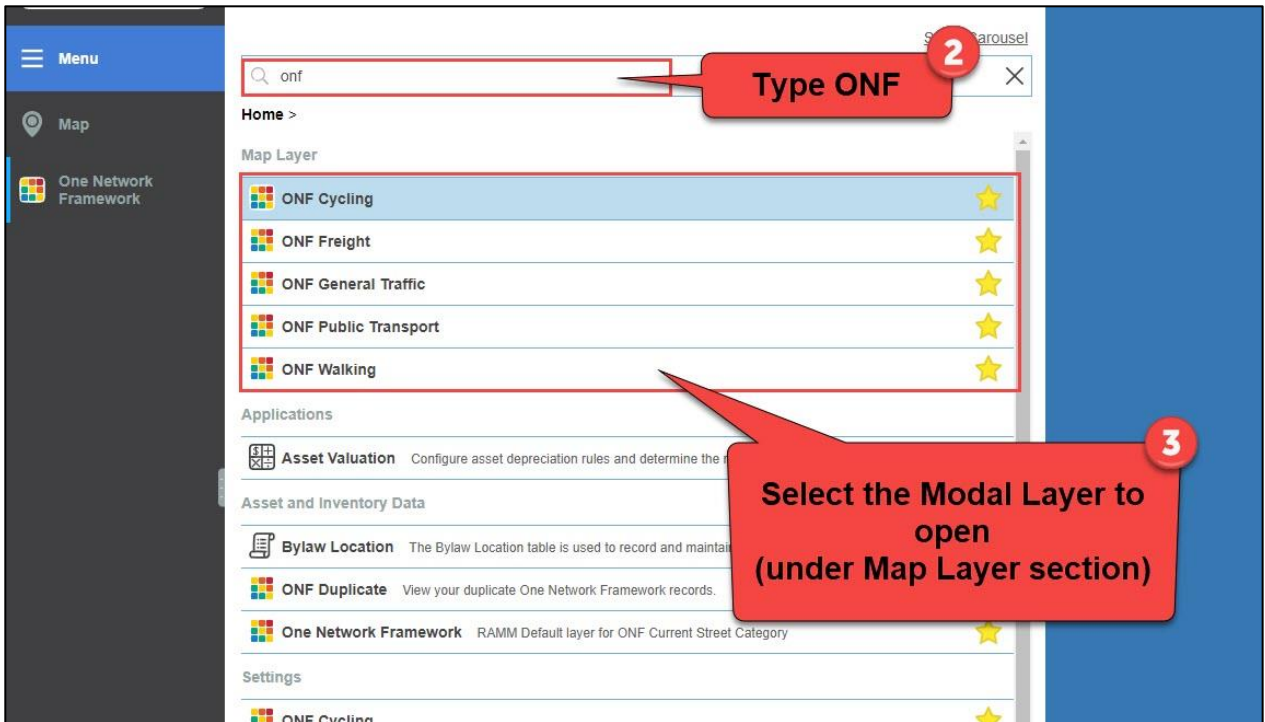


Figure 17 – Step 4: Viewing a Modal Map Layer and filtering

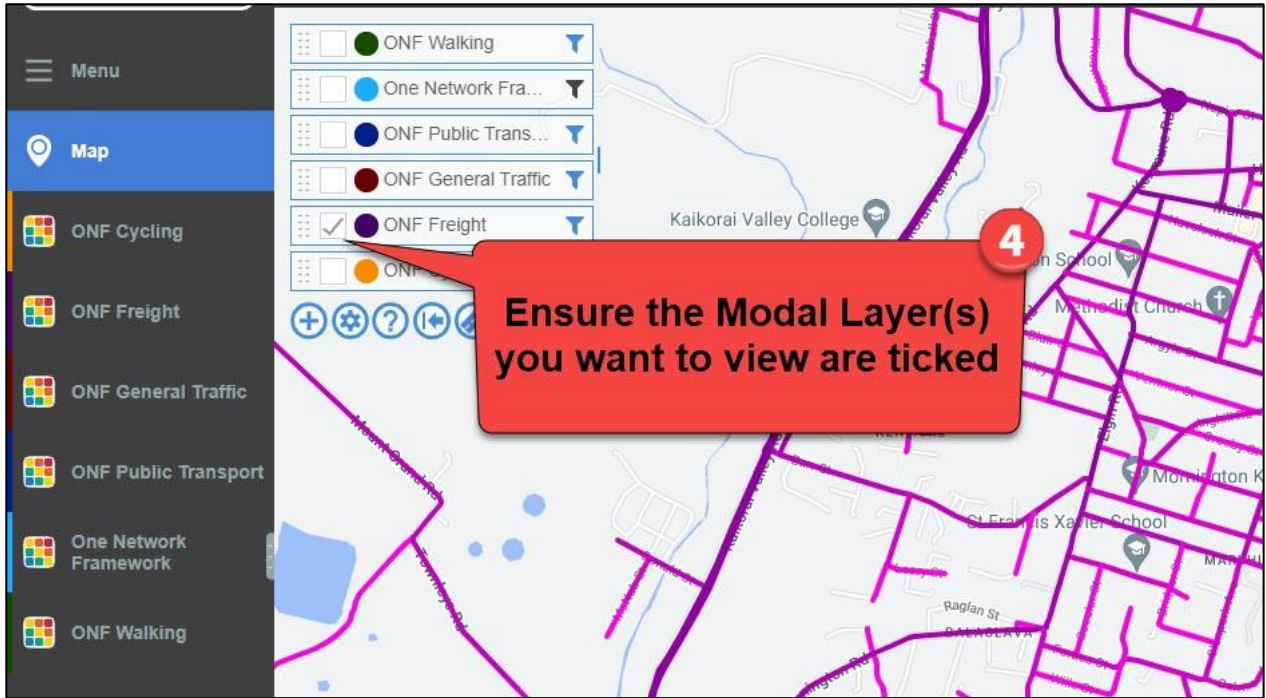


Figure 18 – Step 5: Viewing a Modal Map Layer and filtering

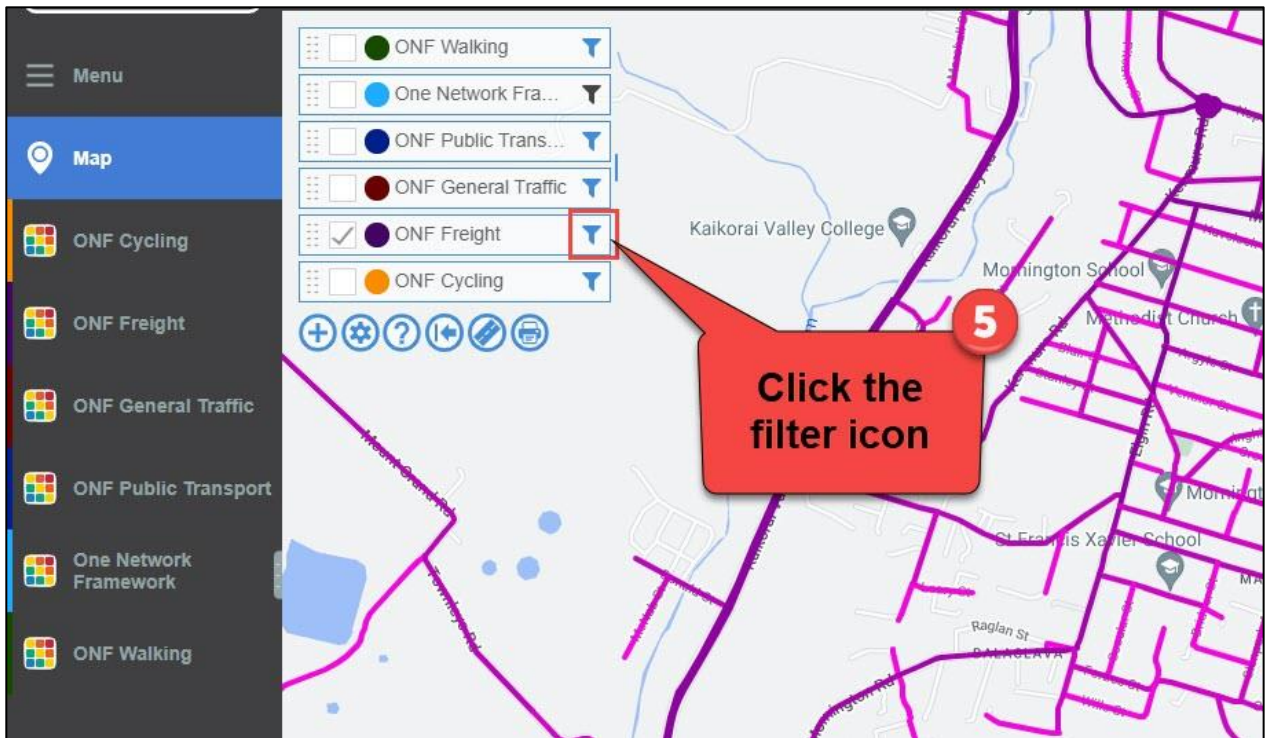


Figure 19 – Step 6, 7, and 8: Viewing a Modal Map Layer and filtering

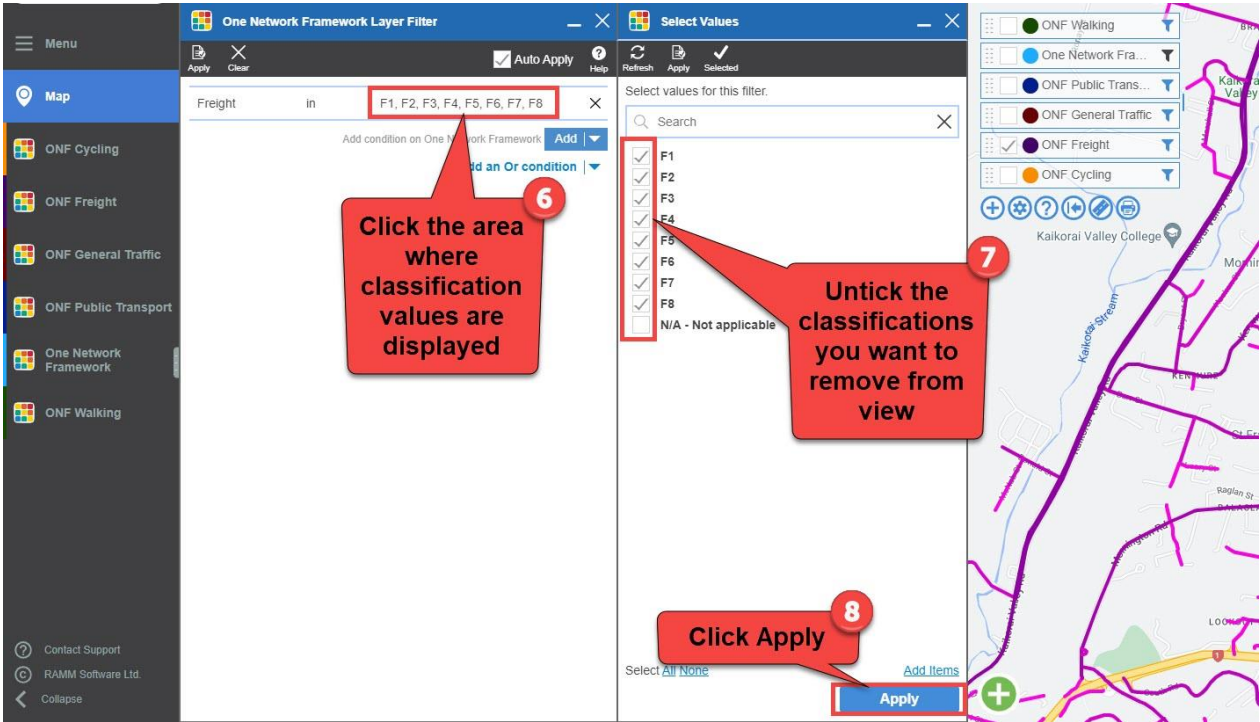
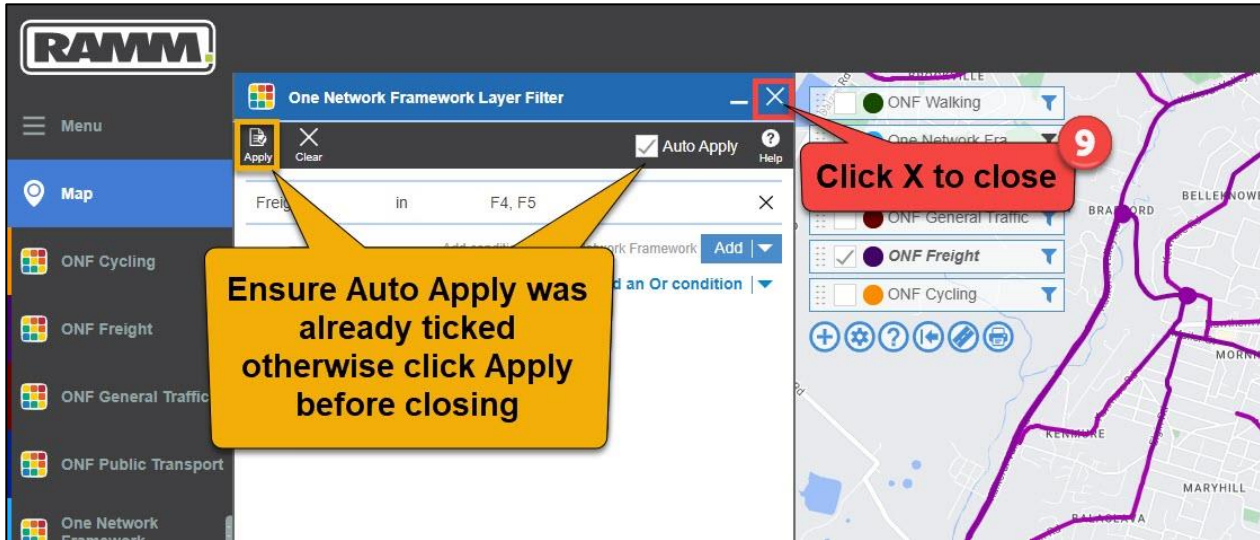


Figure 20 – Step 9: Viewing a Modal Map Layer and filtering



Appendices

Appendix A – Movement and Place Tables

Table 3 - Place

Place function ranking	Level of on-street activity	Typical adjacent land-use	Level of on-street activity – pedestrian volume
P1	<ul style="list-style-type: none"> • Very high on-street activity – very high numbers of pedestrians • Very high numbers of people spending time in the location • Major movement across the carriageway 	High rise office blocks and apartments, central city shopping and entertainment, major commercial centres, streets with this level of place are most likely to be located within the CBD of major cities	<p>>1000 /hour at peak</p> <p>> 5,000 /day</p>
P2	<ul style="list-style-type: none"> • High/very high on-street activity – high numbers of pedestrians • High numbers of people spending time in the location • Significant movement across the carriageway 	Office blocks, low rise apartments, entertainment venues, retail, commercial businesses, community facilities	>2,500 /day
P3	<ul style="list-style-type: none"> • Medium to high on-street activity • Some people spending time in the location • Some movement across the carriageway 	Office blocks and low-rise apartments, retail, entertainment venues, commercial/trade businesses, community facilities, industrial	>1000 /day
P4	<ul style="list-style-type: none"> • Low to medium on-street activity related to people going about their lives • Limited movement across the carriageway 	Residential, schools, community facilities, low intensity commercial/industrial	<1000 /day
P5	<ul style="list-style-type: none"> • Little discernible on-street activity 	Mostly rural except for State Highways (motorways/ expressways) in urban areas	Negligible pedestrian movement

Table 4 - Movement

Considerations to determine Movement Significance		Nature of Movement	Scale of People Movement (all modes)
M1	Major	Mass movement of people and/or goods on roads or streets that are of major importance in urban areas, within and between regions or nationally.	Typically > 20,000 per day
M2	Significant	Movement of people and/or goods on inter-regional routes or primary roads and streets linking main centres or significant destinations and travel hubs within a city/town or region.	10,000 – 25,000 per day
M3	Moderate	Movement of people and/or goods around a city, town or region	3,000 – 12,000 per day
M4	Minor	Local movement by people making short trips or connecting to connector roads	300 – 4,000 per day
M5	Low	Local movement by people going about their daily lives	Typically < 500 per day

Appendix B – Worked example, Riccarton Road, Christchurch

This worked example focuses on Riccarton Road, Christchurch, between Clarence Street and Matipo Street (see figure 21).

Riccarton Road is situated west of the Christchurch city centre, Hagley Park, and Botanic Gardens.

Street Family: Urban

Function – Riccarton Road provides:

Access to shops and commercial businesses.

Major connection from the western suburbs to Christchurch city centre, Hagley Park/ Botanic Gardens.

Core bus route for the city.

Place assessment:

High levels of on-street activity due to shops and nearby Riccarton Mall.

High levels of pedestrians moving along and across the road.

Some on-street amenities – street furniture, planting.

Figure 21 – Riccarton Rd

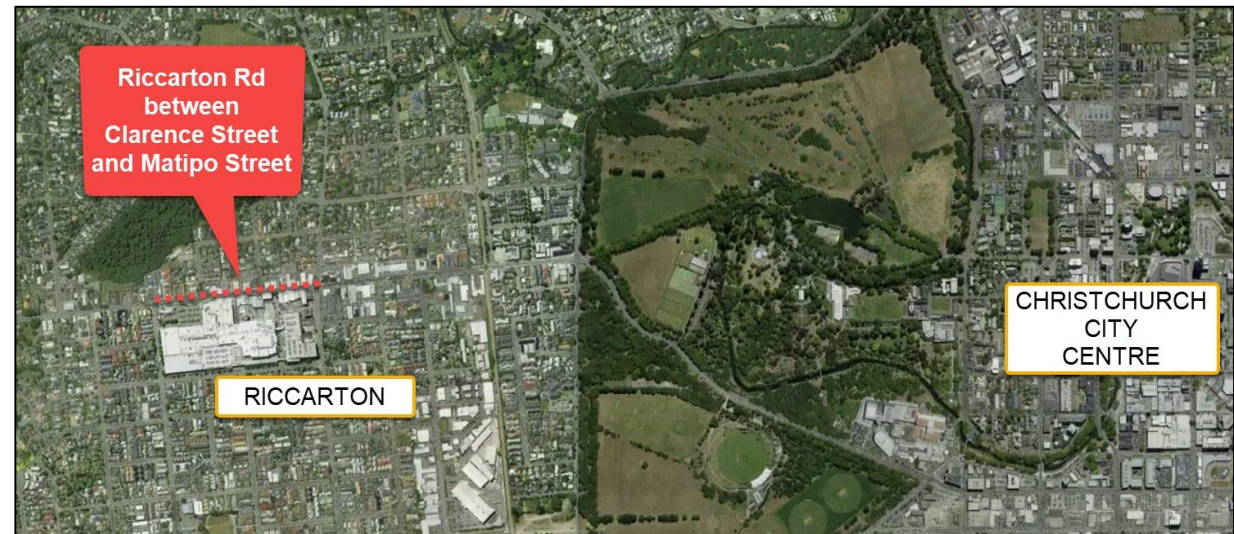


Figure 22 – Riccarton Rd – Street view to east



Movement assessment:

All modes – core bus route, major route for motor vehicle drivers accessing Christchurch City Centre, high pedestrian numbers, cyclists.

Regular crossing opportunities as high pedestrian movement across road to access shops and businesses.

Place value:

P1 for section between Clarence Street and Rimu Street due to commercial activity, residential density, and proximity to Canterbury University.

P2 for the remainder of the road as high on-street activity and high pedestrian numbers.

Movement value:

M2 as key bus route and major connection for motor vehicle drivers into the city centre, moving lots of people through corridor.

Final Road/Street category:

Main Street.

Modal classifications:

Public Transport: PT2 – Spine (nine different bus services merge on this part of the corridor, with ≥ 20 buses per hour (total combined in both directions)).

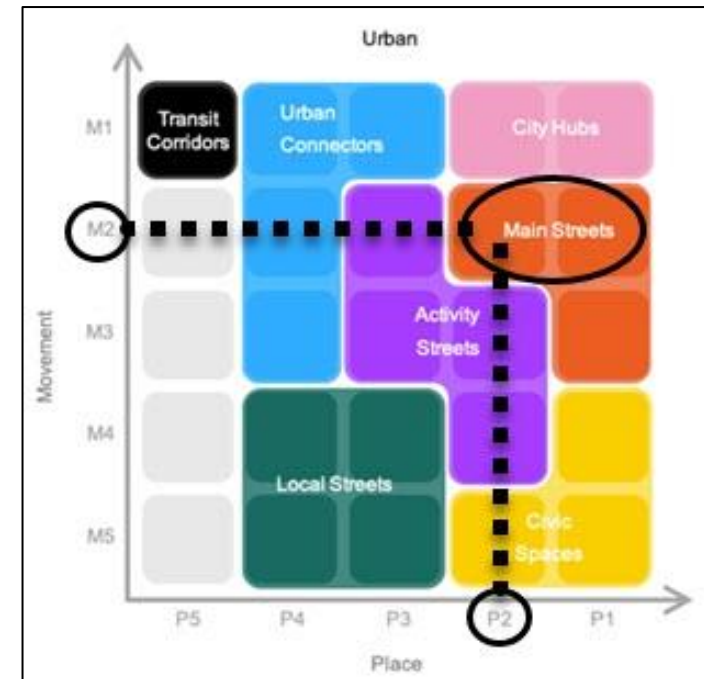
Cycling: C1 – Primary (proximity to shopping precinct, marked cycling lane/facility, cycle parking facilities, and connection to PT2 bus stops).

Walking: W1 – Primary (proximity to shopping precinct, high volume of on street pedestrian activity, and connection to PT2 bus stops).

Freight: F4 - (1,100 heavy vehicles per day, connector providing significant movement of goods through or between neighbourhoods and towns, >300 VPD).

General Traffic: GT4 - (13,950 AADT, connector providing significant movement of goods through or between neighbourhoods and towns).

Figure 23 – Riccarton Rd Classification



Appendix C - Working with ONF in RAMM

Finding the ONF map in the RAMM Menu

To open the ONF map layer in RAMM:

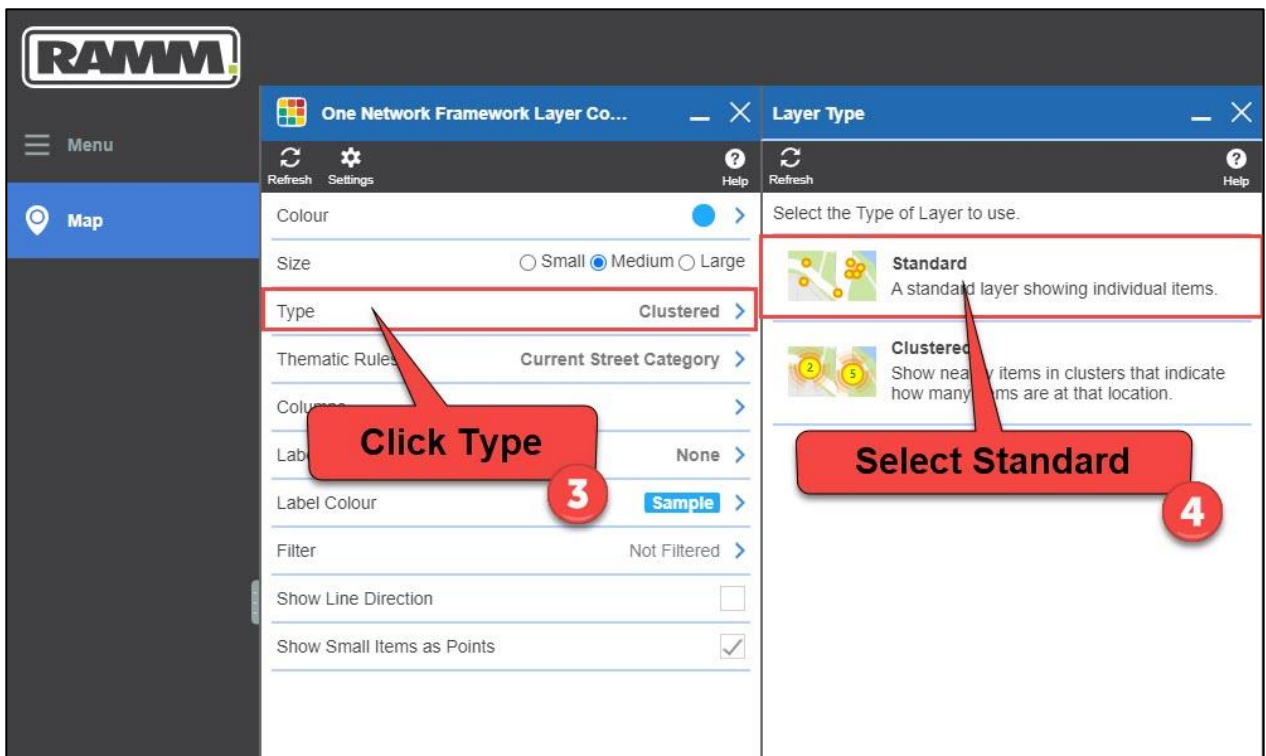
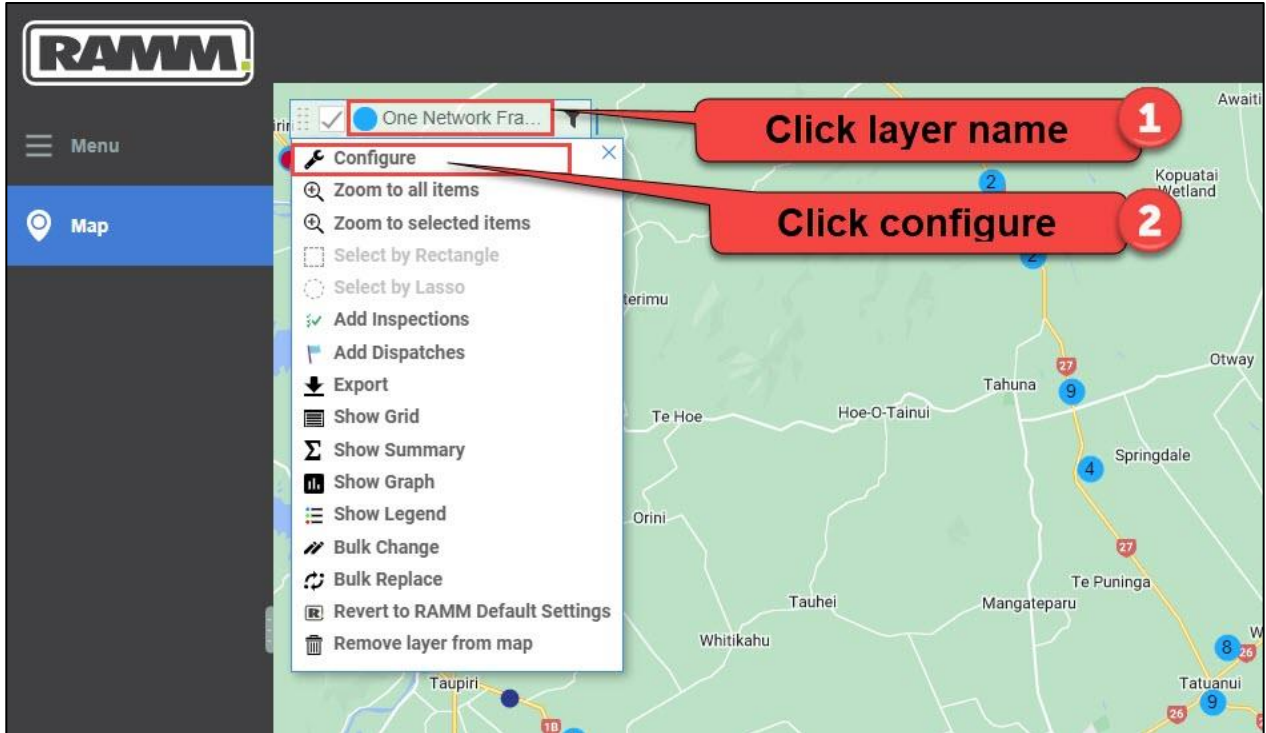
1. Click on the RAMM Menu.
2. Type 'ONF' or 'One Network Framework' in the Search tool.
3. Click on 'One Network Framework' under Map Layer.

The screenshot displays the RAMM software interface. On the left, a dark sidebar contains a 'Menu' button with a hamburger icon, a location pin icon, and a 'Collapse' button. The main content area features a search bar at the top with the text 'onf' entered. Below the search bar, a 'Map Layer' section is highlighted, and the 'One Network Framework' option is selected. The interface is annotated with three red callout boxes: Box 1 points to the 'Menu' button with the text 'Click to Open the Menu'; Box 2 points to the search bar with the text 'Type ONF'; and Box 3 points to the 'One Network Framework' option under the 'Map Layer' section with the text 'Under Map Layer Click "One Network Framework"'. The interface also shows various other sections like 'Applications', 'Asset and Inventory Data', 'Settings', and 'Work Management'.

The ONF map – Clustered to Standard view

To see individual roads with their associated ONF categories on the map rather than the 'clustered' view:

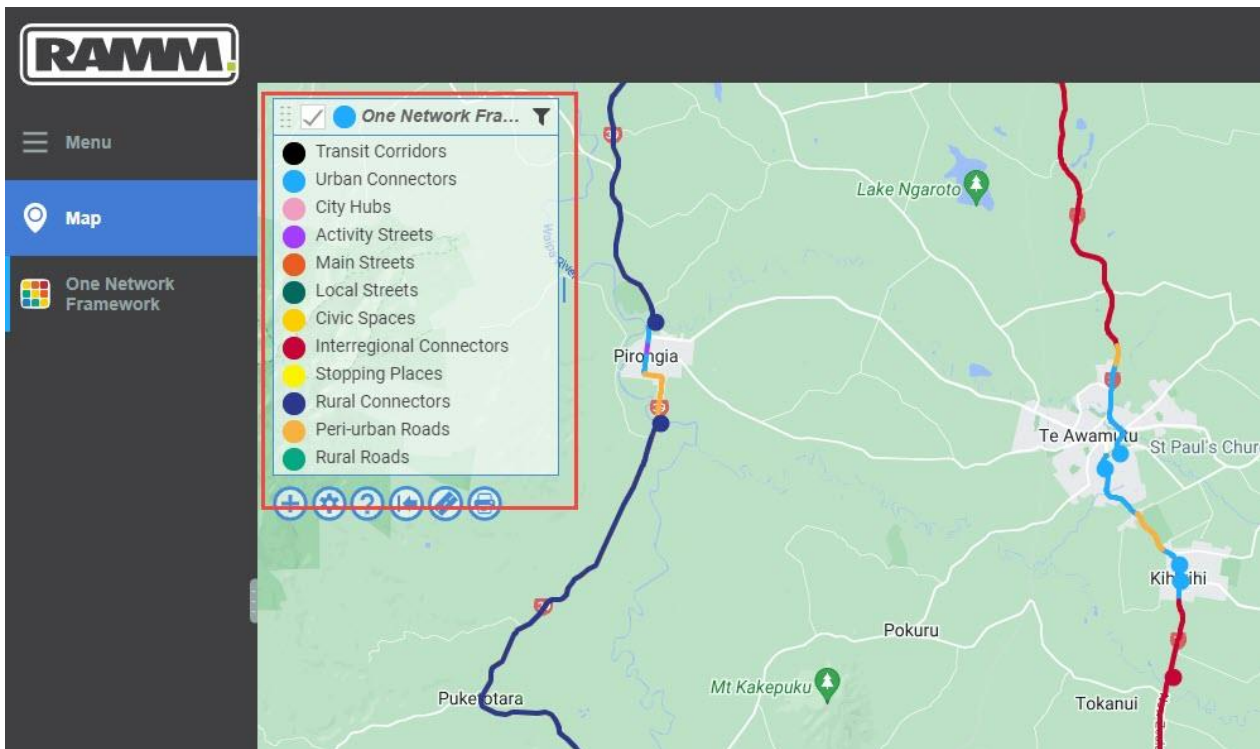
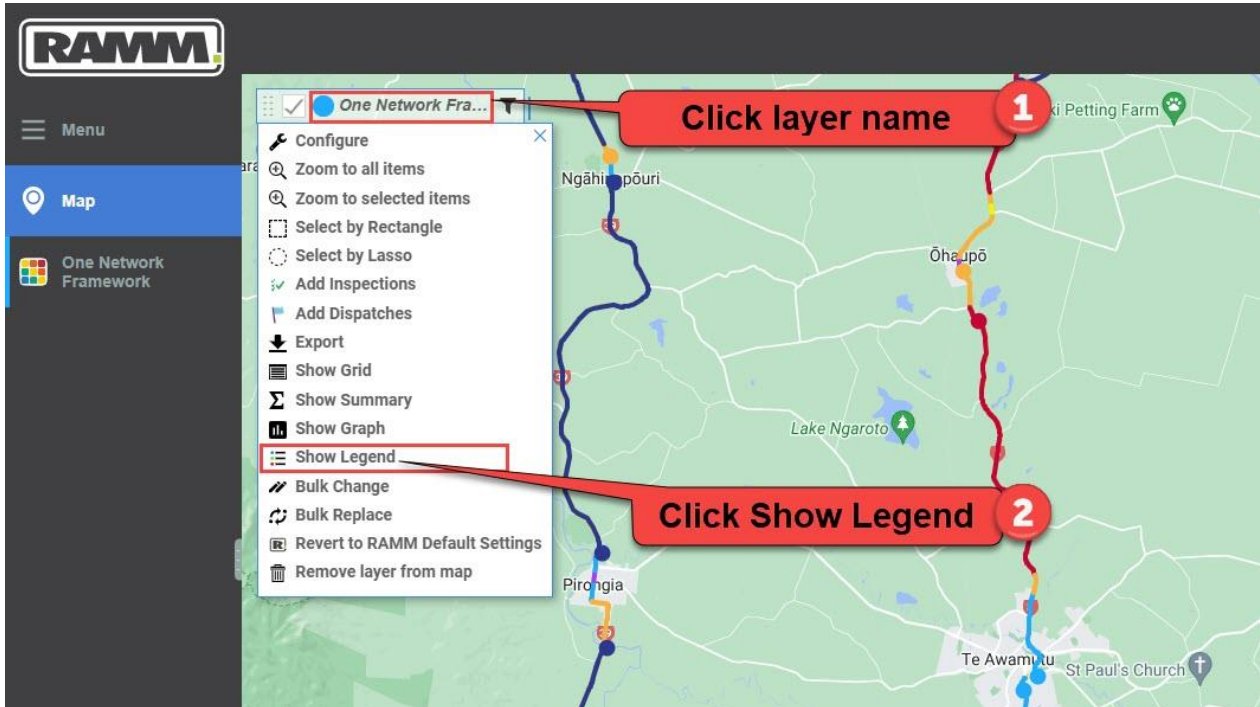
1. Click on the 'One Network Framework' layer name on the map.
2. Click 'Configure'.
3. Click on 'Type'.
4. Click 'Standard'.



The ONF map – Displaying map legend

To bring up the map legend showing each of the ONF categories and associated colours:

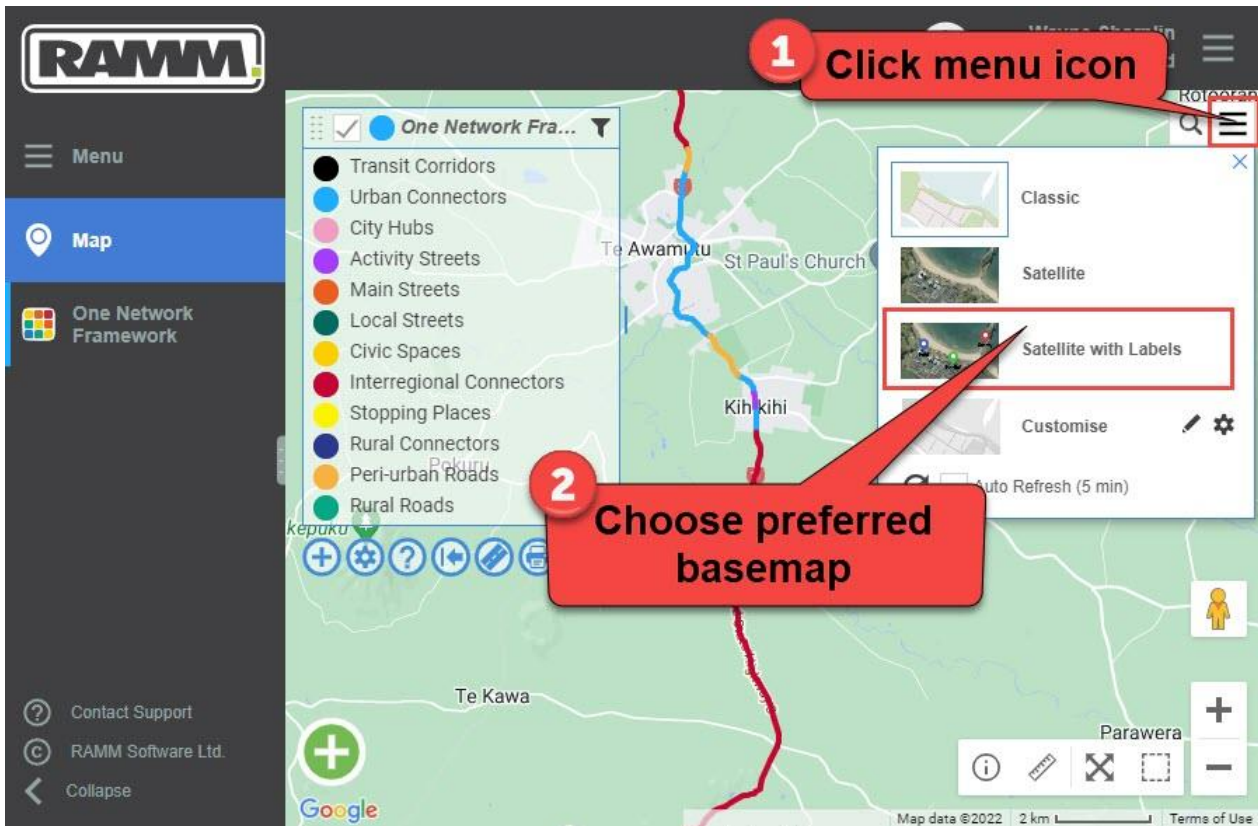
1. Click on the 'One Network Framework' layer in the map.
2. Click 'Show legend'.



The ONF map – Change the basemap

To change the map view to 'Satellite', 'Satellite with labels' or 'Customise':

1. Click on the 'Menu' icon at the top right-hand side of the map.
2. Choose your preferred basemap.



Finding and filtering missing streets in RAMM that lack an ONF classification

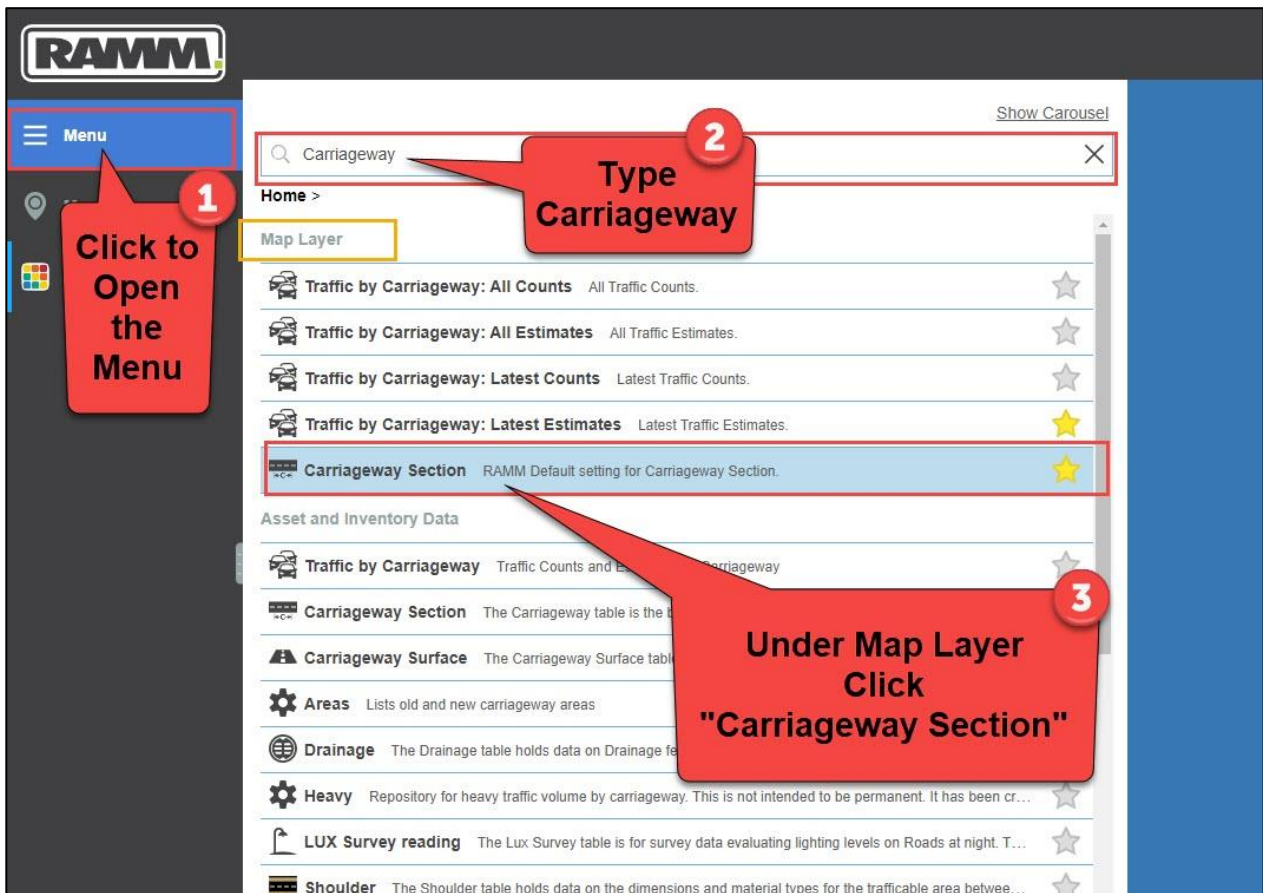
To find any roads that are missing an ONF classification:

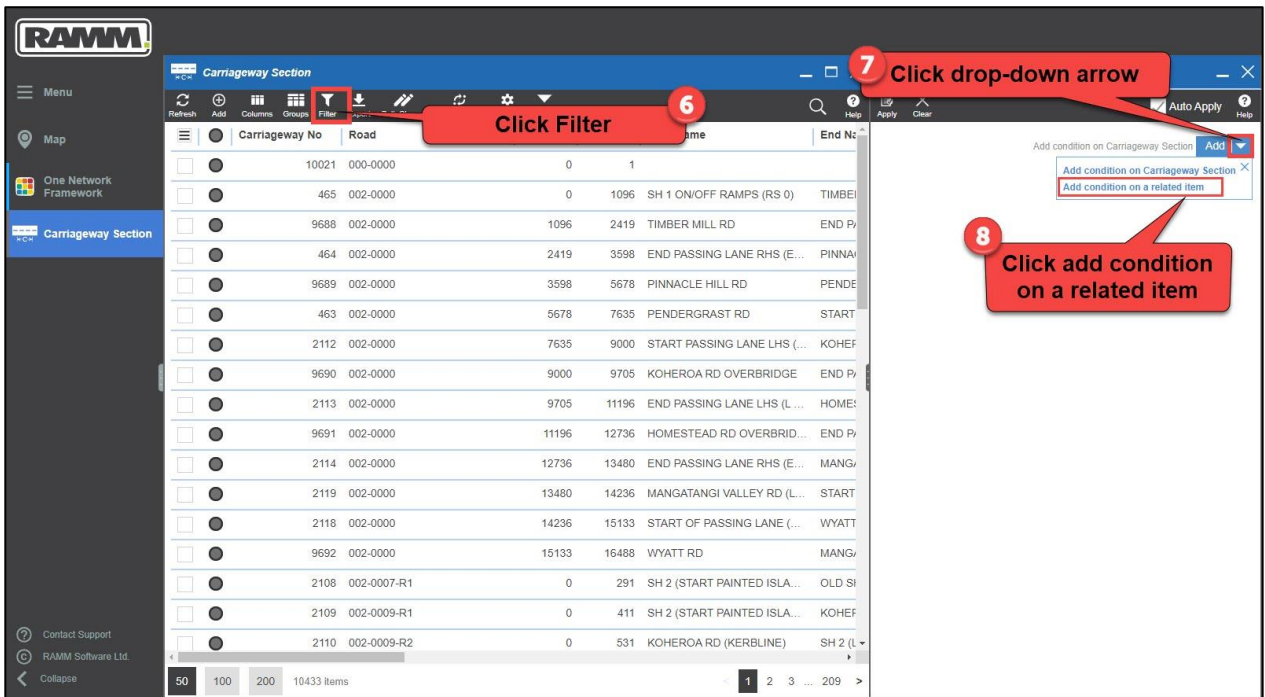
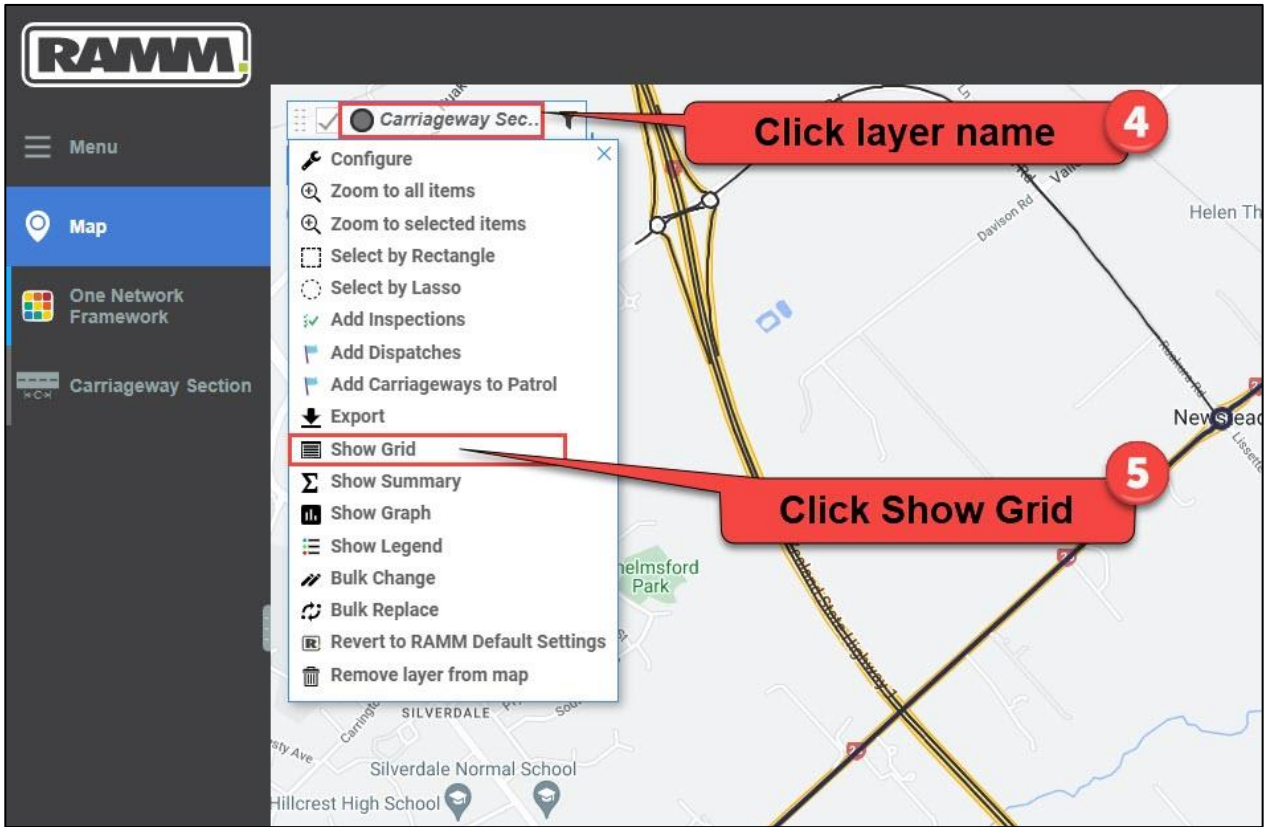
1. Click on the RAMM menu.
2. Type in 'Carriageway'.
3. Click on 'Carriageway Section'.

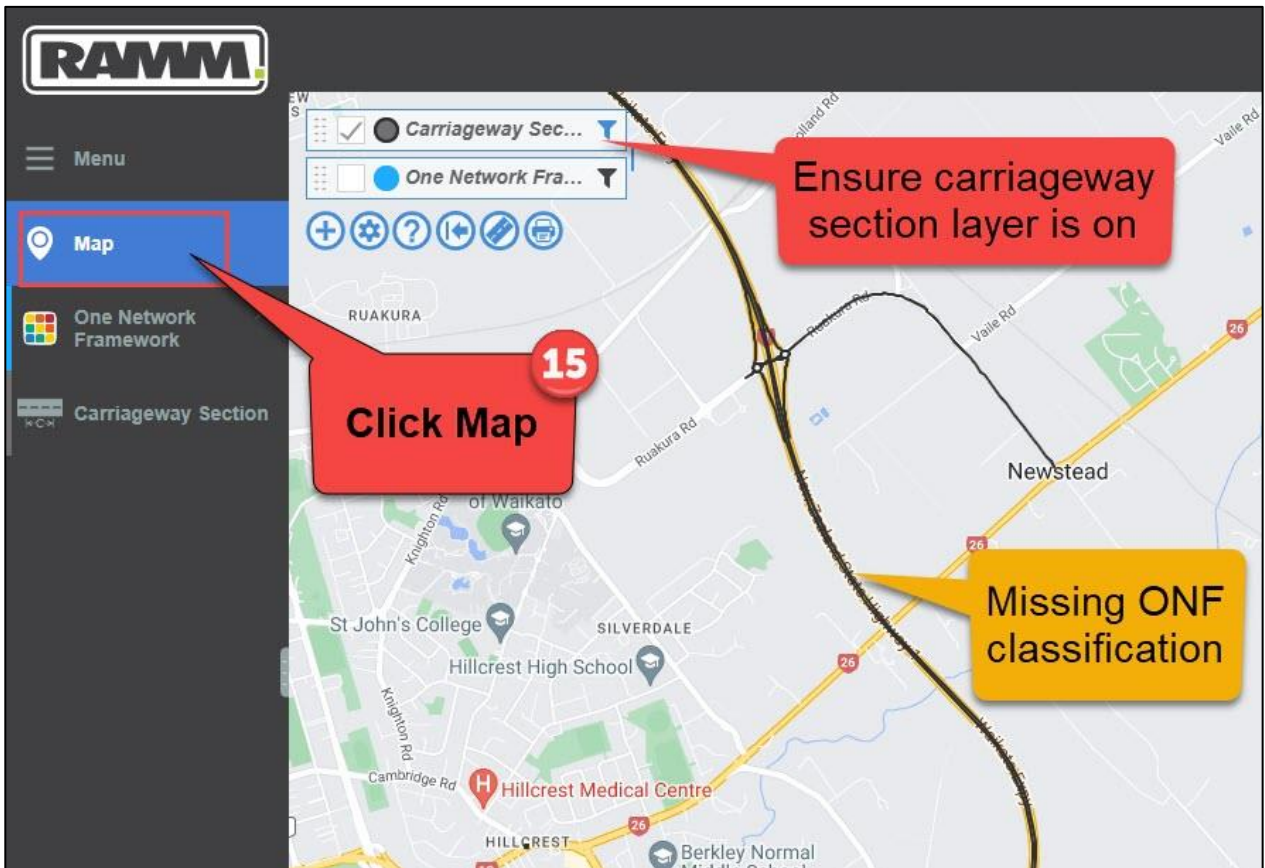
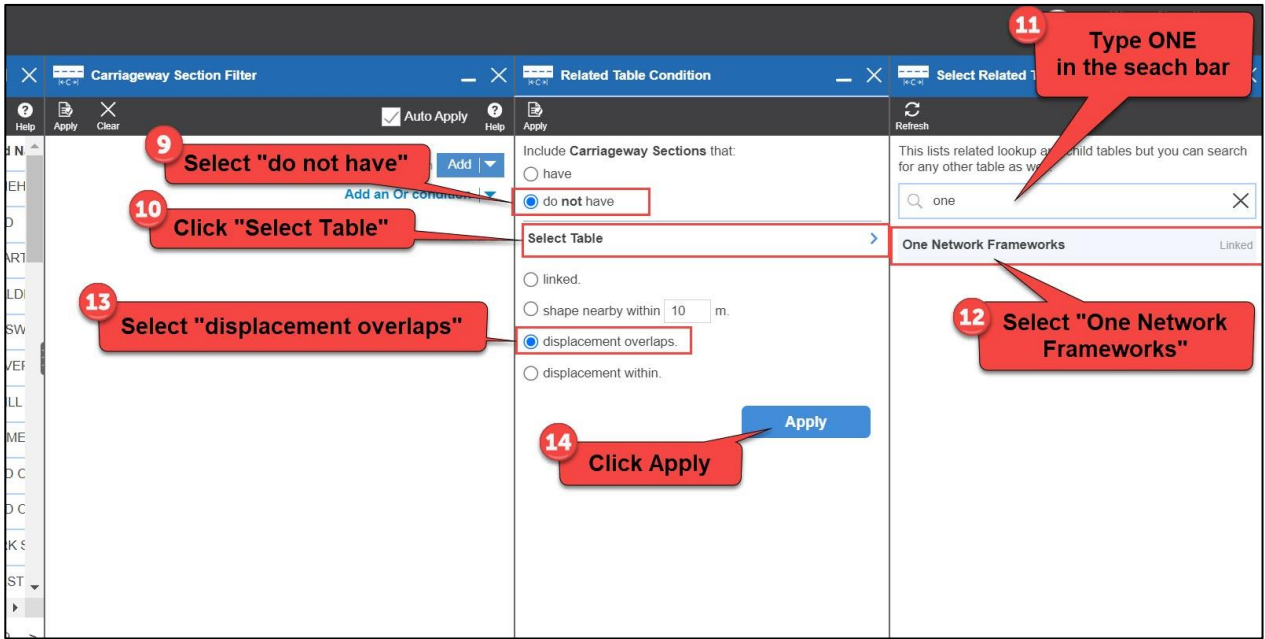
The map will then show all carriageway sections. Remember to change the view to 'Standard' from 'Clustered' to show the individual carriageways (same steps as "The ONF map – Clustered to Standard view" noted above).

4. Click on the 'Carriageway Section' layer in the map.
5. Choose 'Show Grid'.
6. Click 'Filter' on the Carriageway Section table. The Carriageway Section Filter will appear.
7. Click on the drop-down arrow.
8. Choose 'Add condition in a related item' the Related Table Condition will appear.
9. Select 'do not have'.
10. Click on 'Select Table' and Select Related Table will appear.
11. Type in One (or One Network Framework) in the Search function.
12. Select One Network Framework.
13. Select 'displacement overlaps'.
14. Click 'Apply'.
15. Then switch back to the map.

Ensure the Carriageway Section layer is on and the roads or streets with missing ONF classifications will be shown.







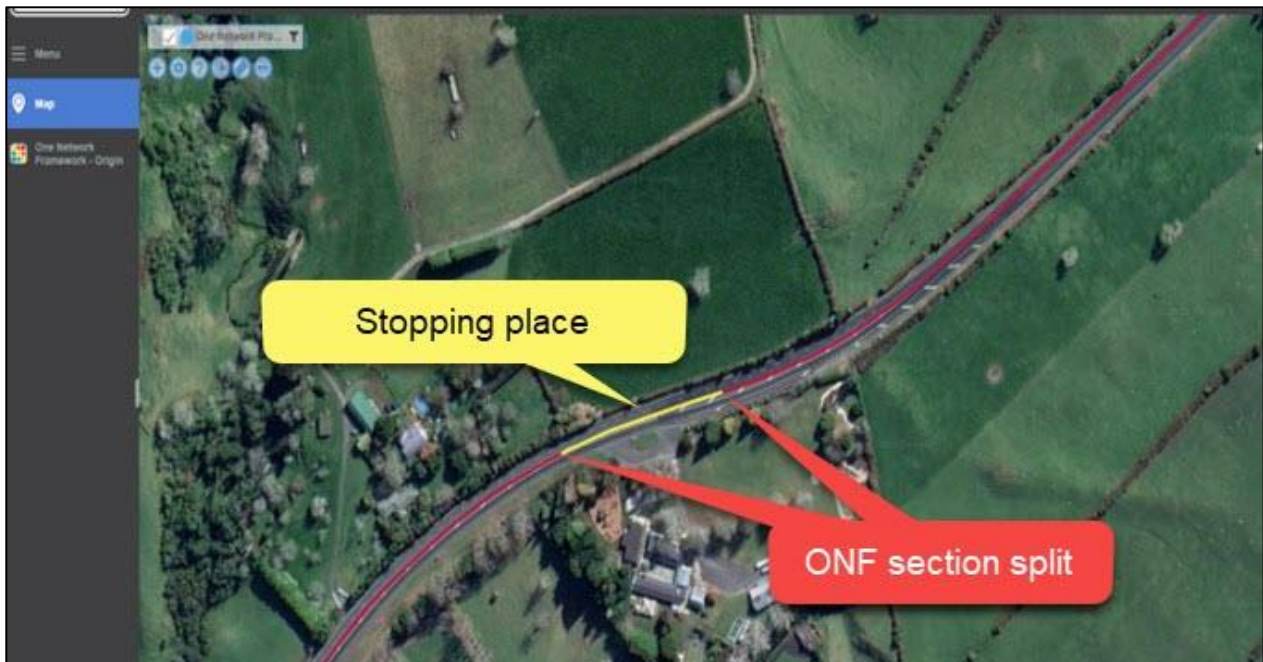
Splitting road sections to add an ONF category

There will be instances where a road or street needs to be split due to the different sections having differing functions.

For example, the section of road in the map below will need to be split at the intersection and changed to Activity Street due to the significant on-street activity generated by the shops and public pool.



Road sections also need to be split to add Stopping Places as in the example below:



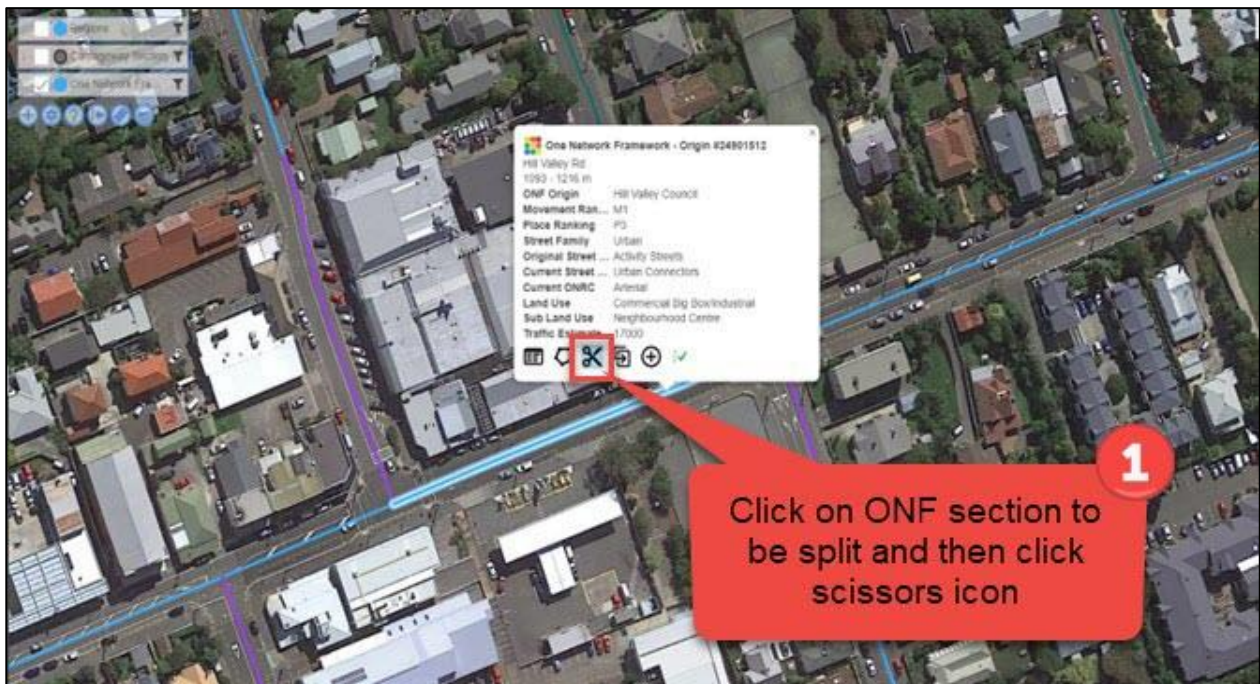
To split a road section to add an ONF category follow these steps.

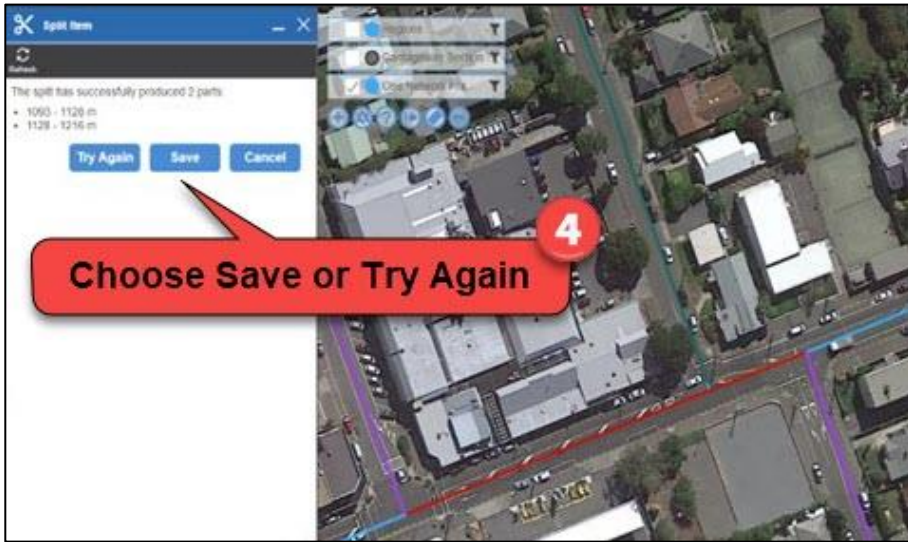
Ensure you have the One Network Framework layer on:

1. Click on the road or street in the RAMM ONF map layer and click the scissors icon.
2. Click on one side of the road or street then click on the other to draw a line through the road at the point where you want the split to be.
3. Click next.
4. If the black line shows the two lengths of the split street or road correctly click “save” to save the change. If it doesn’t click “try again”.

When you’ve saved the change the ONF for the road or street is now split (Note, this only splits the ONF section and not the underlying carriageway section).

Click on the new split section, click show detail and update the ONF classifications as needed (refer to “classifying a new road or street” section for detailed steps).



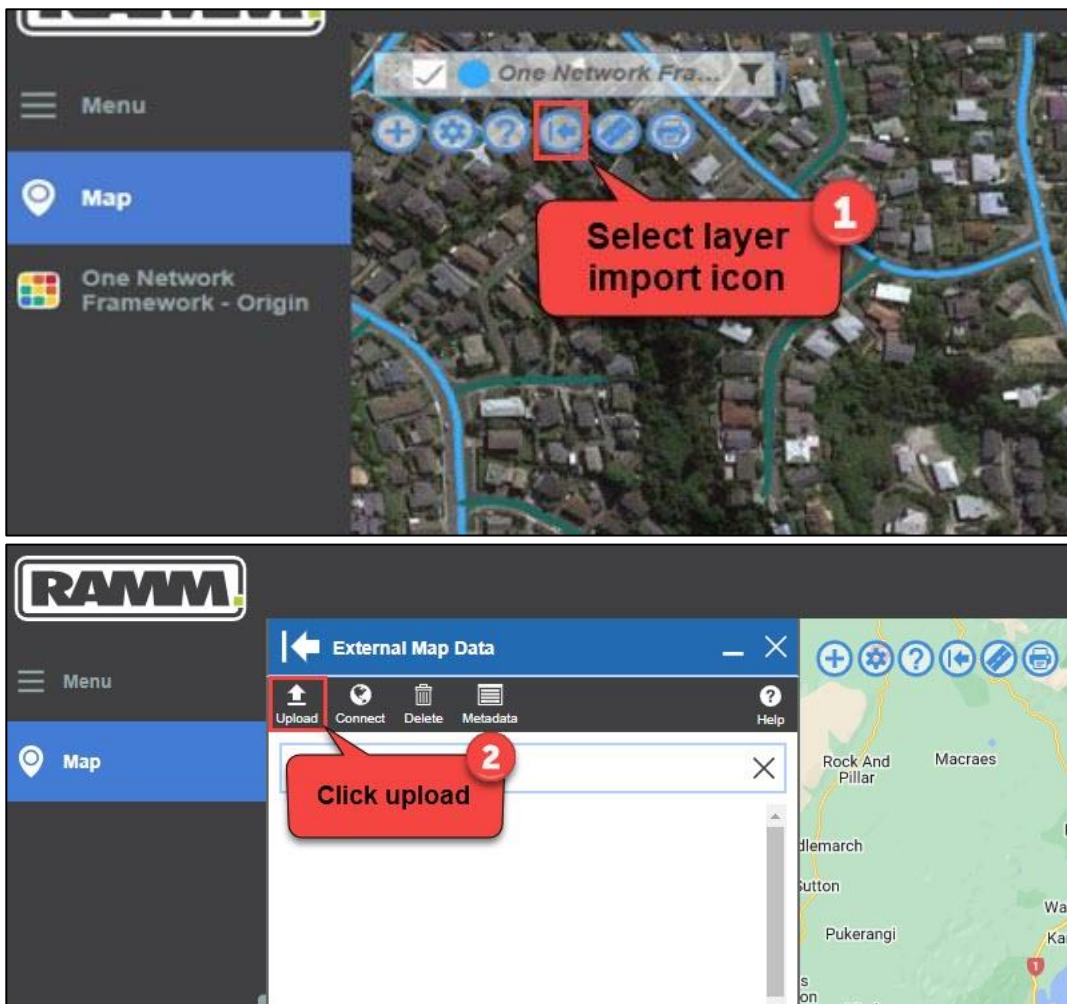


Appendix D - Importing District Plan geospatial or shape files

To add the District Plan layer to the Map, place the District Plan files in a directory:

1. Click Layer Import to open External Map Data.
2. Press Upload.
3. Drag and drop the District Plan files into the dotted box. The files will take a moment to load. RAMM will then recognise the files and assign names under 'Type' and 'Projection'.
4. Give the layer a name in the 'Description' box.
5. Write any relevant notes in the 'Notes' box.
6. Then click the red 'Colour' circle.
7. Choose a colour and change opacity to 2%.
8. Click 'Apply'.
9. Click Load.

Then you can check your ONF classification of roads and streets against the District Plan zone boundaries.



3 Drag and drop the District Plan files here

4 Type a description for the layer

5 Add any relevant notes

6 Click the red circle

Upload Map Layer

Files: Drag and drop files here to upload

Layer: Type: Unknown, Projection: Unknown, Description: [text box], Notes: [text box], Colour: [red circle]

Load

7 Choose a colour and change opacity to 2%

8 Click apply

9 Click load

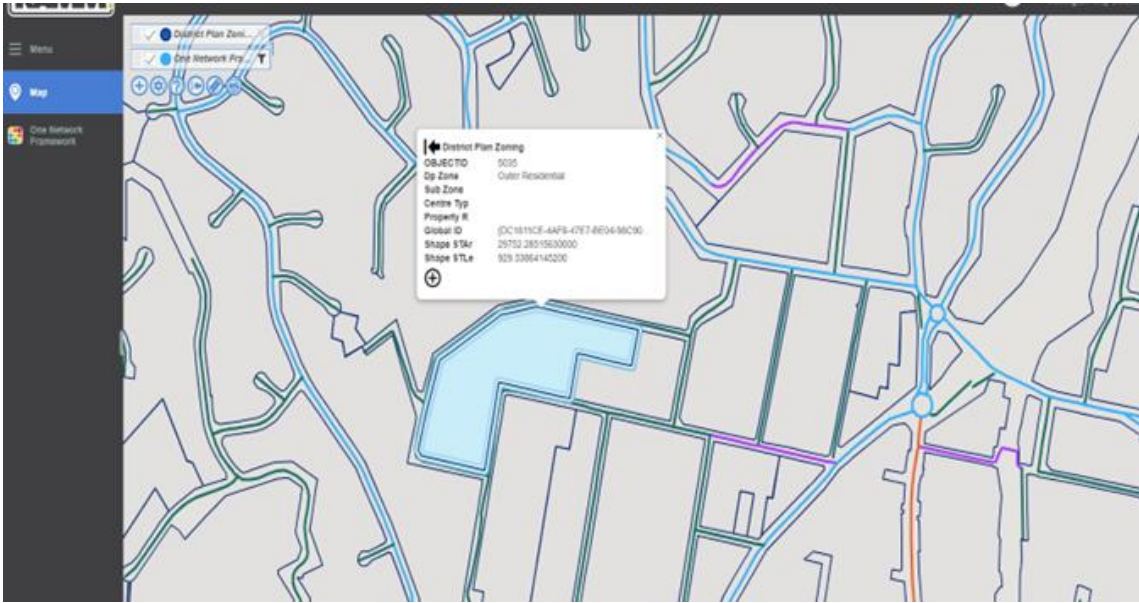
Upload Map Layer | Layer Colour

Files: Drag and drop files here to upload

Layer: Type: Unknown, Projection: Unknown, Description: [text box], Notes: [text box], Colour: [red circle]

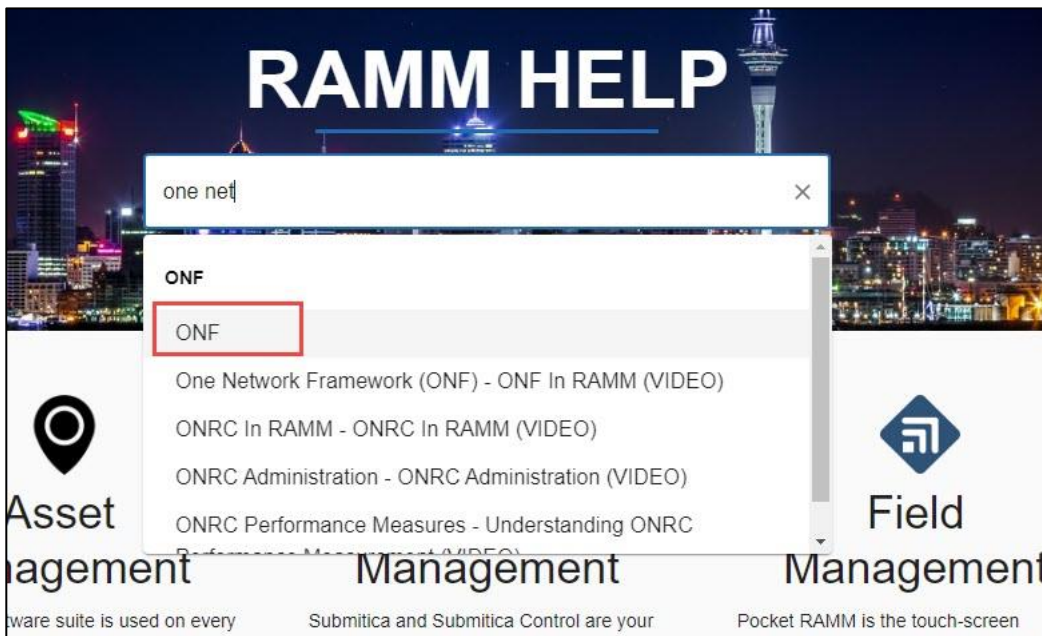
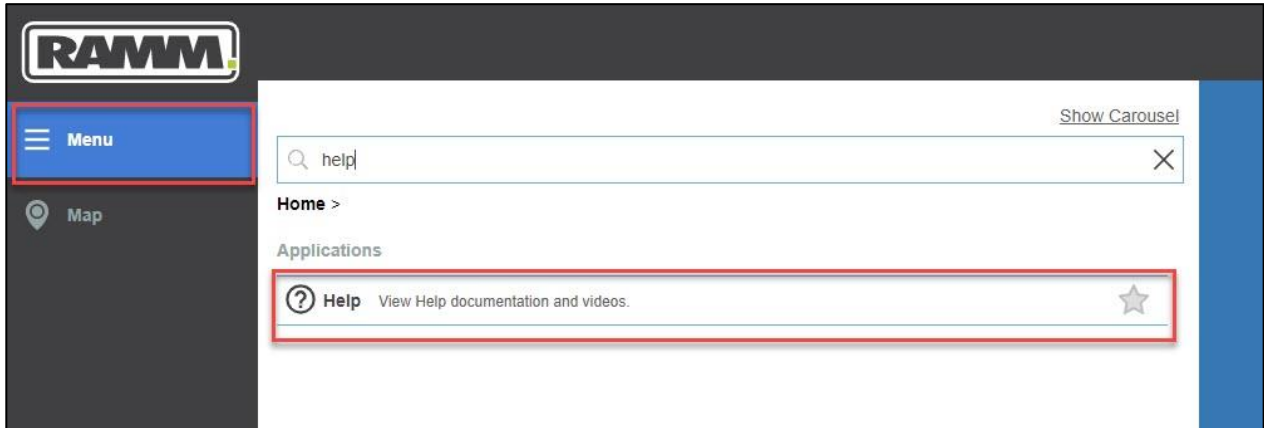
Layer Colour: Colour: [red swatch], Border: [red swatch], [color palette], #ff0000, 2%, Apply

Load



Appendix E - Finding the ONF 'Help' function in RAMM

1. Click on 'Menu' and type 'help' in the search function. Click on Help.
2. In the RAMM Help search function type in One Network Framework then click ONF.
3. Click on 'One Network Framework (ONF)' and then 'ONF in RAMM'.



RAMM Help / Asset Management / ONF

One Network Framework (ONF) ^


ONF In RAMM ^

- Introduction ▶
- NZTA Web Site ▶
- ONF items in RAMM ▶
- ONF Map layer ▶

ONF In RAMM

[Copy Link](#)

The One Network Road Classification or ONRC system has evolved into One Network Framework or ONF.



Introduction

[Copy Link](#)

OK. Let's talk about the One Network Framework in RAMM.

The One Network Road Classification or ONRC system



**Ko te Mahere ā-Rohe Waka
Whenua o Pōneke 2021**

**Wellington Regional Land
Transport Plan 2021**

Te Ihirangi

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A.3.2 Rapid transit in the Wellington Region

The Government Policy Statement on Land Transport (GPS) defines rapid transit as: “a quick, frequent, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic.”

The National Policy Statement for Urban Development (NPS-UD) shares the same definition for rapid transit service but extends it to any existing or planned service. Planned means planned in a regional land transport plan such as this RLTP.

The NPS-UD introduces a new requirement for Wellington’s regional policy statement and the district plans of Wellington City, Hutt City, Upper Hutt City, Porirua City and Kāpiti Coast District to enable building heights of at least six storeys within at least a walkable catchment of current and planned rapid transit stops. This means that rapid transit identified in the RLTP has a connection to the land-use controls in these Resource Management Act (RMA) documents. However, whether or not intensification is appropriate around rapid transit stops will be considered as part of each council’s district plan processes.

The NPS-UD also has directions to enable building heights and density commensurate to levels of existing and planned public transport generally. The RLTP and the Wellington Region’s RMA documents work together to enable more people, businesses and community services to be located in areas well-served by existing and planned public transport.

The rapid transit network and services for the Wellington Region comprise the Kāpiti, Hutt, Melling and Johnsonville rail lines. The mass rapid transit network proposed by the Let’s Get Wellington Moving programme (once the rapid

transit network and stops are confirmed) will also form part of this rapid transit network.

This corresponds with the classification of Class PT1 in Waka Kotahi’s One Network Framework. The One Network Framework provides a common language for the transport system, land use and urban planning.

The rail lines are part of Metlink’s core public transport network. Plans to upgrade this network to increase service frequency and capacity are contained in the Wellington Regional Public Transport Plan and reflected in the significant activities in section 4 *Regional programme*. The Let’s Get Wellington Moving mass rapid transit corridor will be developed as part of the Let’s Get Wellington Moving programme.

Urban intensification opportunities around public transport stops will be planned through the district plans of the Wellington Region’s district and city councils.

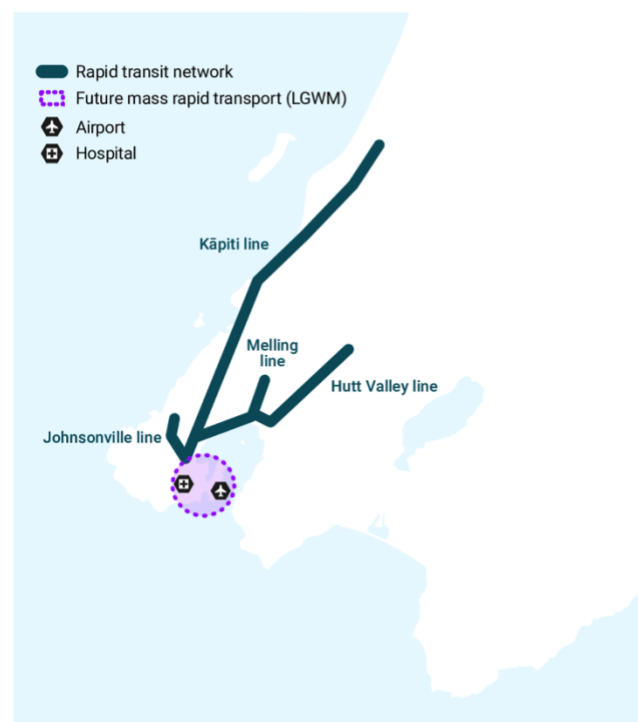


Figure 29: Rapid transit network



Table 37: One Network Framework Waka Kotahi

Class	Public Transport Service Level descriptor	Strategic Significance (Role in Public Transport Network)	Indicative vehicle volume (At peak) (Bi-directional)	Indicative People Movement (Bi-directional)	Description
PT1	Dedicated	Strategically significant corridors where “rapid transit” services are operated, providing a quick, frequent, reliable, and high-capacity service that operates on a permanent route (road, rail or sea lane) that is dedicated to public transport or largely separated from other traffic.	All metro rail corridors and dedicated corridors for non-rail public transport: all services. Buses, ferries and other non-rail public transport on largely separated corridors: >12 services per hour.	>3,000 per day	Dedicated or largely separated public transport corridors provide for the fast and efficient movement of people by rapid transit. By definition, they include dedicated busways and all metro rail lines. They are only service public transport (excepting rail lines that can also provide a goods movement function under the freight mode.

11 March 2021

File Ref: OIAP-7-18280

Tony Randle

By email: fyi-request-14721-a6e386a6@requests.fyi.org.nz

Dear Mr Randle

Request for information 2021-027

I refer to your request for information dated 18 February, which was received by Greater Wellington Regional Council (Greater Wellington) on 18 February. You have requested the following:

"1) Can the GWRC please provide the definition of "quick" it used in deciding whether a Wellington PT service meets the "rapid transit" service speed criteria outlined in the GPS?

2) Can the GWRC please provide the definition of "frequent" it used in deciding whether a Wellington PT service meets the "rapid transit" service frequency criteria outlined in the GPS?

3) Can the GWRC please provide the definition of "reliable" it used in deciding whether a Wellington PT service meets the "rapid transit" service reliability criteria outlined in the GPS?

4) Can the GWRC please provide the definition of "high-capacity" it used in deciding whether a Wellington PT service meets the "rapid transit" service capacity criteria outlined in the GPS?

5) Can the GWRC please provide the definition of "a permanent route (road or rail) that is largely separated from other traffic" it used in deciding whether a Wellington PT service meets the "rapid transit" separated from other traffic criteria outlined in the GPS ?

6) Can the GWRC please provide copies of the reports, presentations or working papers where the definitions of "rapid transit service" and/or "rapid transit stop" were analysed or discussed?

7) Can the GWRC please provide copies of the meeting or workshop agendas, presentations, minutes or meeting notes at which the definitions of "rapid transit service" and/or "rapid transit stop" were analysed or discussed?

8) Can the GWRC please provide copies of the reports, presentations or working papers where there was discussion on whether the Johnsonville Line; the Melling Line and/or any specific bus service would or would not meet the definitions of being a "rapid transit service" and/or "rapid transit stop"?

9) Can the GWRC please provide copies of the meeting or workshop agendas, presentations, minutes or meeting notes where there was discussion on whether the Johnsonville Line; the Melling Line and/or any specific bus service would or would not meet the definitions of being a "rapid transit service" and/or "rapid transit stop"?

10) Can the GWRC please provide copies of the correspondence with any central government ministry, department or agency where the definitions of "rapid transit service" and/or "rapid transit stop" were analysed or discussed?

11) Can the GWRC please provide copies of the correspondence with any other local government councils or agencies where the definitions of "rapid transit service" and/or "rapid transit stop" were analysed or discussed?

12) Can the GWRC please provide copies of the correspondence with any central government ministries, departments or agencies where there was discussion on whether the Johnsonville Line; the Melling Line and/or any specific bus service would or would not meet the definitions of being a "rapid transit service" and/or "rapid transit stop"?

13) Can the GWRC please provide copies of the correspondence with any other local government councils or agencies where there was discussion on whether the Johnsonville Line; the Melling Line and/or any specific bus service would or would not meet the Spatial Plan definitions of being a "rapid transit service" and/or "rapid transit stop"?

If the requested information is held in electronic form, it is preferred that it be provided in its complete and original electronic format. It is also preferred that any information the GWRC may believe is out of scope is NOT redacted."

Greater Wellington's response follows:

In the interests of getting this information to you as soon as possible to ensure you have time to consider it before submitting on the draft Regional Public Transport Plan (RPTP), we are providing you with the answers to parts 1-5 of your request now, and will follow up with the remaining information as soon as it is available.

Parts 1 - 5

Greater Wellington and the national guidance do not define the individual terms you have listed. As there are no specific definitions for the terms you have listed I am refusing this part of your request under section 17(g) of the Local Government Official Information and Meetings Act 1987

(the Act) as the information is not held. However, the following information about the definition of rapid transit may be of interest to you.

Greater Wellington has adopted the definitions of rapid transit used in the Government Policy Statement on Land Transport 2020 and the National Policy Statement on Urban Development (NPS-UD) in order to maintain national consistency. We have also consulted Auckland Transport with respect to its approach. Greater Wellington’s definition is consistent with Auckland Transport as we consulted with them during the workshopping of the definition. There are emails between Greater Wellington and Auckland Transport around this consultation which will be provided to you in our second response.

In proposing the rapid transit network and services for the Wellington Region contained in the RPTP, consideration was given to:

- a. The rapid transit network identified on page 46 of the Draft Wellington Regional Growth Framework dated February 2021. This is available at <https://wrgf.co.nz/wp-content/uploads/2021/02/1265-GWRC-Draft-Framework-Report-17-FEB-2021-06.pdf>
- b. Implementation guidance from the Ministry of Housing and Urban Development and the Ministry for the Environment on implementation of the intensification provisions of the NPS-UD published as "Understanding and implementing intensification provisions for the National Policy Statement on Urban Development". This is available at <https://www.mfe.govt.nz/sites/default/files/media/Towns%20and%20cities/Understanding-and-implementing-intensification-provisions-for-NPS-UD.pdf> and on page 21 states:

Examples of existing rapid transit stops include train stations on the commuter rail services in Wellington and Auckland and bus stations on Auckland’s Northern Busway.

- c. The definition of dedicated public transport service descriptors contained in the draft One Network Framework. The definition is in the “Movement and Place Classification Discussion Document” available at: <https://www.nzta.govt.nz/assets/Road-Efficiency-Group/docs/onf-movement-and-place-classification-discussion-document.pdf> and set out below:

Class	Public Transport Service Level descriptor	Strategic Significance (Role in Public Transport Network)	Corridor Headway (At peak)	People Movement (Indicative) (Bi-directional)	Description
PT1	Dedicated	Corridors where ‘rapid transit’ services are	Buses > 40 services per hour	>5000 per day	Dedicated public transport corridors provide for the fast and

Class	Public Transport Service Level descriptor	Strategic Significance (Role in Public Transport Network)	Corridor Headway (At peak)	People Movement (Indicative) (Bi-directional)	Description
		operated, providing a fast, frequent, highly reliable, and high capacity form of urban transport along a dedicated PT corridor.	Rail > All Metro services		efficient long distance movement of people by rapid transit. By definition, they include dedicated busways and all metro rail lines. They are mode exclusive, only providing facility to support public transport (excepting rail lines that can also provide a goods movement function under the freight mode, but which is exclusive use by one or the other at a time).

Please note that the One Network Framework is still a draft and undergoing review. Accordingly, it is possible for the above definition to be updated.

If you have any concerns with the decision(s) referred to in this letter, you have the right to request an investigation and review by the Ombudsman under section 27(3) of the Act.

Yours sincerely



Luke Troy
General Manager, Strategy

Wellington City Proposed District Plan - submission form

Clause 6 of the First Schedule, Resource Management Act 1991.

How to make a submission

- online at eplan.wellington.govt.nz/proposed
- email your submission to: PDPsubmissions@wcc.govt.nz
- post this form to us (no stamp needed)
- drop your completed form off to Wellington City Council reception, Level 16, 113 The Terrace.

To make sure your submission can be accepted please lodge by 5pm Monday 12 September 2022.

Privacy statement - what we do with your personal information

All submissions (including name and contact details) are published and made available to elected members and to the public from our offices and on our website. Personal information will also be used for the administration of the notified Proposed Plan process.

All information collected will be held by Wellington City Council. You have the right to ask for a copy of any personal information we hold about you, and to ask for it to be corrected if you think it is wrong. Please contact us at district.plan@wcc.govt.nz.

Your details

Name	
Postal address (including suburb)	
Phone/mobile	Email
I am making this submission: <input type="checkbox"/> as an individual <input type="checkbox"/> on behalf of an organisation. Organisation's name: Greater Wellington Regional Council	
I would like to be heard in support of my submission in person <input type="checkbox"/> Yes <input type="checkbox"/> No	
If others make a similar submission, I will consider presenting a joint case with them at a hearing. <input type="checkbox"/> Yes <input type="checkbox"/> No	

This is a submission on the Wellington City Proposed District Plan

<input type="checkbox"/> I could <input type="checkbox"/> I could not - gain an advantage in trade competition through this submission
If you could gain an advantage in trade competition through this submission answer the next question.
<input type="checkbox"/> I am <input type="checkbox"/> I am not - directly affected by an effect of the subject matter of the submission that: (a) adversely affects the environment; and (b) does not relate to trade competition or the effects of trade competition. (Please tick relevant box if applicable) Note: If you are a person who could gain an advantage in trade competition through the submission, your right to make a submission may be limited by clause 6(4) of Part 1 of Schedule 1 of the Resource Management Act 1991.

Multiple provisions can be commented on within the following section. Feel free to add more pages to your submission to provide a fuller response.

The specific provision of the plan that my submission relates to: Do you: <input type="checkbox"/> Support <input type="checkbox"/> Oppose <input type="checkbox"/> Amend
What decision are you seeking from the Council? And why?

1st fold here - fasten here once folded

J014360

2nd fold here

Free Post Authority Number 2199

**Absolutely Positively
Wellington City Council**

Me Heke Ki Pōneke

Reply



FREEPOST 2199

District Plan Team (121)

PO Box 2199

Wellington 6140

Attachment 1: Greater Wellington Regional Council Submission

To:	Wellington City Council
Submission on:	Proposed District Plan

OVERVIEW OF SUBMISSION

1. The Greater Wellington Regional Council (**Greater Wellington**) wishes to make a submission on Proposed District Plan (**the PDP**) pursuant to Schedule 1 clause 6 of the Resource Management Act 1991 (**the Act**). This submission is from Greater Wellington officers.
2. Greater Wellington congratulates Wellington City Council (**WCC**) on reaching this point and acknowledges the significant work undertaken leading up to notification. We acknowledge that many of our comments on the draft plan change have been incorporated, particularly those relating to stormwater and indigenous biodiversity.
3. This submission relates to the PDP in its entirety. Greater Wellington supports in part the PDP and seeks some amendments. Of particular interest is ensuring consistency with the Proposed Change 1 to the Regional Policy Statement for the Wellington Region (**Proposed RPS Change 1**), which was notified on 19 August 2022.
4. The general and specific reasons for Greater Wellington's relief are set out in this submission and responses to specific provisions are included in Attachment 2, to be read alongside this submission. Greater Wellington could not gain an advantage in trade competition through this submission.

POLICY FRAMEWORK

Regional Policy Statement for the Wellington Region

5. The Regional Policy Statement for the Wellington region (**RPS**) is a regional document that identifies significant resource management issues within the region and sets out the objectives, policies and methods to achieve integrated management of natural and physical resources for the Wellington region. The RPS was made operative on 24 April 2013.
6. District plans must give effect to the operative RPS. The RPS contains four types of policies: regulatory policies must be given effect to when making changes to district and regional plans (in accordance with section 75 of the Act). Consideration policies are to be considered when deciding on resource consents, notice of requirements, or a change, variation of replacement to a plan. Some of the consideration policies cease to have effect once the regulatory policies are given effect to through district or regional plans.

Proposed Change 1 to the Regional Policy Statement for the Wellington Region

7. Proposed RPS Change 1 was publicly notified on 19 August 2022.

8. There are four significant and urgent resource management issues for the region that are being addressed through Proposed RPS Change 1:
 - the impacts of climate change
 - loss and degradation of indigenous biodiversity
 - degradation of freshwater
 - lack of urban development capacity
9. Proposed RPS Change 1 provides new direction to district plans across several areas, to ensure that urban intensification occurring across the region is not at the expense of indigenous biodiversity, freshwater, coastal environments, the region's transition to being low-emission and climate resilient, and the ability for Māori to express their cultural and traditional norms.
10. The NPS-FM requires Te Mana o te Wai to be articulated and long-term visions for freshwater in the region to be embedded in the RPS. Freshwater visions for each whaitua are being developed and will be added in future changes or through submissions. Statements of Te Mana o Te Wai expressions for Rangitāne o Wairarapa and Kahungunu ki Wairarapa are included in Proposed RPS Change 1. Our four other mana whenua / tangata whenua partners are developing expressions of Te Mana o Te Wai, which are intended to be added in future changes or submissions.
11. WCC must have regard to Proposed RPS Change 1 when preparing or changing a District Plan under section 74(2)(a) of the Act.

Proposed Natural Resources Plan

12. The Proposed Natural Resources Plan includes objectives, policies, methods and rules to manage the natural resources of fresh water, air, soil, and the coastal marine area. The NRP establishes rules for activities that discharge contaminants into water or to land where the contaminant might enter water, such as wastewater and stormwater discharges. It also restricts certain uses of land within natural wetlands and beds of lakes and rivers, such as structures, vegetation clearance and earthworks. Under section 74(2)(a) of the Act, WCC must have regard to the NRP for any matter of regional significance or for which the regional council has primary responsibility under Part 4 of the Act. By the time decisions are made on the PDP, the Natural Resources Plan is likely to be operative, at which point the PDP must not be inconsistent with the Natural Resources Plan for any matter specified in section 30(1) of the Act.

The Wellington Regional Growth Framework

13. The Wellington Regional Growth Framework is a non-statutory document that describes a long-term vision for how the region will grow, change and respond to key urban development challenges and opportunities in a way that gets the best outcomes and maximises the benefits across the region. The current priorities are housing supply,

affordability and choice; transport choice and access; Iwi/Māori housing, capacity and taonga; and climate change and resilience.

AREAS OF INTEREST

14. Attachment 2 contains detailed comments on the PDP, including specific direction from both the operative RPS and Proposed RPS Change 1. The PDP must give effect to the operative RPS and have regard to Proposed RPS Change 1. In many instances the PDP is already consistent with Proposed RPS Change 1. Greater Wellington's submission seeks alignment with the direction and intent of regulatory policies that apply to district plans where necessary.
15. The following matters are of particular interest to Greater Wellington:
 - Providing for well-planned, compact and public transport oriented urban intensification which achieves the qualities and characteristics of well-functioning urban environments, and implementing the National Policy Statement for Urban Development
 - Implementing Te Whaitua Te Whanganui-a-Tara Implementation Programme, Te Mahere Wai o Te Kāhui Taiao, Te Awarua-o-Porirua Whaitua Implementation Programme and Ngāti Toa Rangatira Statement
 - Implementing the National Policy Statement for Freshwater Management and giving effect to Te Mana o Te Wai
 - Reducing greenhouse gas emissions to provide for a low-emission region, improving resilience to climate change and promoting the use of nature-based solutions
 - Seeking integrated environmental stewardship
 - Protecting indigenous biodiversity and ensuring natural character protection gives effect to the New Zealand Coastal Policy Statement
 - Taking a risk-based approach to natural hazards.

Providing for well-planned, compact and public transport oriented urban intensification which achieves the qualities and characteristics of well-functioning urban environments

16. Greater Wellington supports WCC's strategic approach to providing for development. Most of the proposed growth is within the existing urban footprint with comparatively little greenfield development proposed, which aligns with the direction of RPS Policy 31.
17. Greater Wellington questions the need for any new greenfield development in the PDP at this point, given the scale of intensification within the existing urban footprint provided for through the PDP. We do however acknowledge that the greenfield development that is proposed has sought to minimise the adverse effects of land use change.

18. Greater Wellington's General Manager for Strategy recently wrote to the WCC Chief Planning Officer regarding WCC's decision not to classify the Johnsonville Rail Line as rapid transit. The Regional Transport Committee through the Regional Land Transport Plan classified the Johnsonville Rail Line as rapid transit and recognised its role in the region's transport network. The line continues to be improved and better integrated into the broader network and plays a key role in mode shift for journeys from the north of Wellington to and from the central city as well as other key destinations. Greater Wellington is not aware of any intention to alter the current classification of the Johnsonville Rail Line as a rapid transit service within the Regional Land Transport Plan. Greater Wellington does not support WCC's decision and seeks for the zoning to be amended accordingly where appropriate.

Implementing Whaitua Implementation Programmes, Te Mahere Wai o Te Kāhui Taiao, and the Ngāti Toa statement, as part of integrated freshwater management

19. Te Whaitua Te Whanganui-a-Tara Implementation Programme (WIP) was contributed to by WCC Councillors and officers for over two years. WCC received both the WIP and Te Mahere Wai o Te Kāhui Taiao (Mana Whenua Whaitua Implementation Programme). These two documents together form the programme to restore and improve water quality and ecosystem health in Whaitua Te Whanganui-a-Tara. They reflect the views of Mana Whenua and community representatives, and provide an approach to giving effect to Te Mana o Te Wai as required by the NPS-FM. They contain recommendations for freshwater, some of which fall within the scope of the WCC District Plan, including (but not limited to):
- Protecting, naming, recognising and daylighting buried streams
 - Provisions to improve three waters infrastructure and green infrastructure performance and resilience to climate change, particularly to prevent wastewater contamination
 - Adopting the regional water standards and strengthening compliance processes for plumbing and drainage to prevent illegal cross connections
 - Mandating water sensitive urban design to achieve water quantity and water quality outcomes
 - Promoting water conservation and requiring water efficiency measures including water metering
 - Requiring setbacks from river, stream and wetland margins for new development, and fostering community connections to water
 - Retaining and enhancing natural wetlands and waterbodies.
20. Likewise, WCC Councillors and officers participated in the Te Awarua-o-Porirua Whaitua process, which led to a Whaitua Implementation Programme and Ngāti Toa Rangatira

statement. Tawa, Churton Park, parts of Johnsonville and Stebbings Valley are within the boundary of this whaitua. Recommendations for freshwater and infrastructure from these documents also apply to this District Plan review, and WCC has a responsibility for their implementation in its District Plan for the relevant areas.

21. Greater Wellington acknowledges that some of this direction has been given effect to through the design guides and the Three Waters chapter in particular. We congratulate WCC on the significant work undertaken since the Draft District Plan consultation to strengthen the Three Waters chapter and look forward to continuing to work with WCC on regulatory and non-regulatory changes for Whaitua implementation.

Implementing the National Policy Statement for Freshwater Management and giving effect to Te Mana o Te Wai

22. The WCC District Plan must give effect to the NPS-FM. In particular, Clause 3.5 of the NPS-FM directs that territorial authorities must include objectives, policies and methods in District Plans to promote positive effects, and avoid, remedy, or mitigate adverse effects (including cumulative effects), of urban development on the health and well-being of water bodies, freshwater ecosystems, and receiving environments.
23. We strongly support the direction in the Three Waters chapter to require water sensitive urban design for four or more residential units. This chapter also now recognises Te Mana o Te Wai and the need to protect and enhance the wellbeing of freshwater bodies. It takes an important step to giving effect to new Proposed RPS Change 1 direction. We have sought relief relating to additional freshwater direction in Proposed RPS Change 1, including managing water demand and financial contributions.
24. Te Mana o te Wai is a fundamental shift in approach and should not be confined to just the Three Waters chapter. Connections should be made between all freshwater-related chapters to ensure an integrated approach as required by the NPS-FM, and freshwater direction should be woven throughout the PDP from policy direction through to rules and assessment matters.
25. There is a lack of integration between the principles of the Three Waters chapter and other chapters in the PDP. The earthworks chapter in particular does not have regard for the health and wellbeing of freshwater bodies or Te Mana o Te Wai, despite being a key part of managing the effects of urban development on freshwater bodies. The Ecosystems and Indigenous Biodiversity chapter also does not recognise the need to protect and enhance the health and well-being of water bodies and freshwater ecosystems, including wetlands. There remains little direction or strength in provisions to recognise that earthworks activities or development near freshwater bodies could have effects on water quality and ecosystem health.
26. We suggest that we collaborate to ensure the PDP embeds Te Mana o te Wai including:
 - a. The hierarchy of obligations which prioritises the health and well-being of water first; the second priority is the health needs of people (such as drinking water) and the third is the ability of people and communities to provide for their social, economic and cultural well-being

- b. Actively involving Taranaki Whānui and Ngāti Toa Rangatira in freshwater management including decision-making processes, monitoring and future changes to the District Plan
- c. Implementing an integrated management approach to freshwater management in accordance with the principle of ki uta ki tai ('from the mountains to the sea').

Reducing greenhouse gas emissions to provide for a low-emission region, improving resilience to climate change and promoting the use of nature-based solutions

- 27. Greater Wellington supports the PDP's efforts to reduce greenhouse gas emissions through the strategic objectives, transport chapter, renewable energy chapter, city outcomes contributions policies and design guides. The focus on maintaining Wellington's compact urban form with the majority of urban development located within the City Centre, in and around Centres, and along major public transport corridors, supports a reduced need to travel by private motor vehicle and enhanced access to public transport, walking and cycling for more trips. This approach will contribute to reduced carbon emissions, mode shift and liveability outcomes also sought by Greater Wellington and aligns with the direction of Proposed RPS Change 1.
- 28. Proposed RPS Change 1 contains new direction around climate resilience as part of the characteristics and qualities of well-functioning urban environments. Nature-based solutions, both naturally occurring and engineered, are an integral part of the region's climate change mitigation and adaptation approach. The PDP currently recognises green infrastructure, natural features and soft engineering and their potential role in natural hazards mitigation in particular. Greater Wellington considers the PDP should go further to protect existing ecosystems and habitats providing nature-based solutions to climate change, and enable nature-based solutions in development and infrastructure as well as other climate resilience measures by recognising the wider benefits such solutions have.

Seeking integrated environmental stewardship

- 29. Greater Wellington considers that the District Plan could take a more integrated approach to implementing its overlapping strategic objectives, including biodiversity, freshwater management, and climate change. Proposed RPS Change 1 has a new overarching objective for the Wellington Region to achieve integrated management of natural and built environments that is guided by Te Ao Māori. The RPS provisions recognise that district plans have a key role in working toward this integrated management, both through provisions themselves and their implementation.
- 30. WCC should ensure that the interconnectedness and interdependencies between the natural and built environments, and Mātauranga Māori, are considered in decisions when implementing the District Plan. As an example, Proposed RPS Change 1 recognises the role that nature-based solutions play in climate change mitigation and adaptation while delivering other co-benefits. The strategic objectives, particularly SRCC-O1 –

SRCC-O4, align well with this direction, however they could more clearly provide for integration between the natural environment values, earthworks, infrastructure, freshwater, tangata whenua, natural hazards, subdivision and zones provisions, to ensure the principles of ki uta ki tai are realised. This could be through greater explanations or references in each chapter or integrating policies.

Protecting indigenous biodiversity and ensuring natural character protection gives effect to the New Zealand Coastal Policy Statement

31. Greater Wellington supports the process WCC undertook to identify Significant Natural Areas (SNAs) with significant biodiversity values and included provisions to protect these areas, as this is consistent with Policy 23 of the RPS. However, we oppose the decision not to apply SNAs to residentially zoned land, as this does not give effect to Policy 24 of the RPS.
32. Greater Wellington seeks for the mapping of natural character ratings at the broader area scale, which was completed in 2016, to be included in the PDP alongside sites of high and very high natural character, and for natural character in riparian margins (landward of the coastal environment) to be assessed.

Taking a risk-based approach to natural hazards

33. Greater Wellington broadly supports the approach the PDP has taken to natural hazards, including the incorporation of slope stability into the earthworks chapter and greater recognition of soft engineering and green infrastructure. We do not support the flood hazard modelling used for the flood hazard overlays as it does not provide a complete picture of flood hazard in Wellington City. We would like to continue to discuss the City's flood hazard with WCC. There is also no flood hazard overlay in the General Rural Zone, and the Natural Hazard and General Rural Zone chapters do not provide guidance on how flood hazard is to be considered. We suggest the regional flood hazard mapping is used in rural areas.

RELIEF SOUGHT

1. Greater Wellington seeks the following decisions from WCC:
 - Amendments to the PDP as sought in this submission;
 - The relief as set out in Attachment 2;
 - any other similar relief that would deal with Greater Wellington's concerns set out in this submission; and
 - any consequential amendments necessary to the PDP arising from this submission.

FURTHER INVOLVEMENT

34. Greater Wellington wishes to be heard in support of its submission. We would also welcome the opportunity to clarify and further discuss the matters raised.

Yours sincerely



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Wellington City Proposed District Plan – multiple submission points table

Submitter Name: Greater Wellington Regional Council

Note that these points are in addition to those made in Attachment 1 and both documents should be read together.

Chapter / Sub-part	Specific provision / matter	Position	Reason for submission	Decisions requested / relief sought
Section 32				
Section 32	Section 32	Support with amendment	To have regard to the Proposed RPS Change 1 (Policy FW.3) and give effect to the RMA.	Any changes through the process that require S32AA evaluation should include matters in Policy FW.3 as appropriate.
Section 32	Section 32	Support with amendment	To have regard to the Proposed RPS Change 1 (Policy FW.3, FW.4, 55 and UD.3) and give effect to the RMA.	Any changes through the process that require S32AA evaluation should include matters in Policy 55 as appropriate, for any new FUS or any change to relevant residential zones, commercial, industrial or mixed-use zones.
General/Whole Plan				
Whole Plan	Reference to the regional plan throughout, including appendices and schedules	Support with amendment	Inconsistent and incorrect reference to the regional plan.	Ensure consistent reference to the regional plan throughout. By the time decisions are made on the Proposed District Plan (PDP), the regional plan will be operative so should be referred to as the 'Natural Resources Plan'.
Whole Plan	Reference to RPS throughout	Support with amendment	Inconsistent and incorrect reference to the RPS in the following provisions: <ul style="list-style-type: none"> • Urban form and development introduction • Historic heritage chapter introduction • ECO chapter introduction • NFL chapter introduction • Public access chapter introduction • Coastal environment chapter introduction • MCZ chapter introduction • AIRPZ chapter introduction • APP1 	Ensure consistent reference to, "the Regional Policy Statement for the Wellington Region".
Whole Plan	Reference to effects management hierarchy throughout	Support, with amendment	References to the effects management hierarchy in matters of discretion should also extend to the consideration of biodiversity compensation.	Where the effects management hierarchy is mentioned in matters of discretion, amend to include, "...and where relevant the ability to offset or compensate biodiversity impacts".
Whole Plan	References to Subdivision Design Guide throughout Plan	Support with amendment	Reference to the Subdivision Design Guide is currently only in two places in the Subdivision chapter. The wording ' <i>The matters in the Subdivision Design Guide;</i> ' does not require evaluation for consistency with the design guide and could be strengthened. Greater Wellington acknowledges that the design guides use a rating system of importance for different guidelines, but do not consider that the current wording is strong enough.	Strengthen reference to Subdivision Design Guide to require consistency with, or appropriate consideration of, its guidelines. Ensure that the design guides are included in all necessary rules across chapters.
Whole Plan	References to Residential Design Guide throughout Plan	Support with amendment	Reference to the Residential Design Guide throughout residential and commercial zone matters of discretion could be strengthened. The wording used in policies, ' <i>Fulfils the intent of the Residential Design Guide...</i> ', should be reflected in matters of discretion. Greater Wellington also notes that the Residential Design Guide is not referenced in any rules for the High Density Residential Zone and greenfield development areas.	Strengthen reference to Residential Design Guide to require consistency with, or appropriate consideration of, its guidelines. Ensure that the design guides are included in all necessary rules across chapters.

			The Residential Design Guide provides direction on carbon reduction, urban design, stormwater, ecology, water conservation and freshwater ecosystem health, which are all contribute to achieving the PDP's strategic objectives (particularly SRCC-O1-O4 and NE-O1-O4). The Design Guide's weight as a matter of discretion should therefore reflect this. We acknowledge that the design guides use a rating system of importance for different guidelines, but do not consider that the current wording is strong enough.	
Whole Plan	References to Centres and Mixed-Use Design Guide throughout Plan	Support with amendment	<p>Reference to the Centres and Mixed-Use Design Guide throughout zones does not require evaluation for consistency with the design guide and could be strengthened.</p> <p>The Centres and Mixed-Use Design Guide provides direction on carbon reduction, urban design, stormwater, ecology, water conservation and freshwater ecosystem health, which are all contribute to achieving the PDP's strategic objectives (particularly SRCC-O1-O4 and NE-O1-O4). The Design Guide's weight as a matter of discretion should therefore reflect this. We acknowledge that the design guides use a rating system of importance for different guidelines, but do not consider that the current wording is strong enough.</p>	<p>Strengthen reference to Centres and Mixed-Use Design Guide to require consistency with, or appropriate consideration of, its guidelines.</p> <p>Ensure that the design guides are included in all necessary rules across chapters.</p>
Whole Plan	References to Centres and Rural Design Guide throughout	Support with amendment	Reference to the Rural Design Guide could be strengthened in matters of discretion. We acknowledge that the design guides use a rating system of importance for different guidelines, but do not consider that the current wording is strong enough.	Strengthen reference to Rural Design Guide to require consistency with, or appropriate consideration of, its guidelines.
Whole Plan	Reference to ECO-P1	Support with amendment	Throughout the plan ECO-P2 is incorrectly referred to, where reference should be made instead to ECO-P1.	Amend incorrect ECO-P2 cross-references to ECO-P1.
Whole Plan	Accidental discovery	Support with amendment	The earthworks, historic heritage and Sites and Areas of Significance to Māori chapters should recognise the potential for accidental discovery of archaeological sites and wahi tapu and require appropriate consents to include an accidental discovery protocol. This would give effect to Policy 22 of the RPS.	Amend the PDP to manage the accidental discovery of archaeological sites and wahi tapu to protect historic and cultural values.
Whole Plan	Te Mana o te Wai	Support with amendment	<p>Section 3.5 of the NPS-FM 2020 requires every territorial authority to include objectives, policies, and methods in its district plan to promote positive effects, and avoid, remedy or mitigate adverse effects of urban development on the health and well-being of water bodies, freshwater ecosystems and receiving environments. Further, local authorities that share jurisdiction over a catchment must co-operate in the integrated management of the effects of land use and development on freshwater.</p> <p>There is mention of achieving Te Mana o Te Wai in the Three Waters chapter, which we support. However, Te Mana o Te Wai is missing from other chapters, with no linkage established to other chapters an activity could have direct effects on water e.g. Infrastructure, Earthworks and Ecosystems and Indigenous Biodiversity.</p> <p>Throughout the plan further provisions are necessary to support the achievement of Te Mana o Te Wai and manage potential effects of activities on water bodies.</p> <p>Policy FW.3 in Proposed RPS Change 1 provides some further direction for district plans that should be considered in drafting the appropriate provisions. This includes methods to manage effects on rivers, lakes, wetlands, springs and riparian margins, including any relevant water quality attribute targets in a regional plan, ecosystem values and drinking water sources.</p> <p>In addition, further consideration of the adequacy of erosion and sediment control policies for the management of sediment-laden water from sites to water bodies; rivers, estuaries and harbours, particularly Te Awarua o Porirua is required.</p>	Amend the district plan to give effect to Section 3.5 of the NPS-FM, specifically to provide further direction on how activities are to be managed to avoid, remedy or mitigate the adverse effects of urban development on the health and well-being of water bodies.

Whole Plan	Greenhouse gas emission reduction – new provisions sought	Support with amendment	Policy CC.8 in Proposed RPS Change 1 seeks for activities regulated by the District Plan that relates to greenhouse gas emissions, to prioritise achieving a reduction in greenhouse gas emissions over offsetting emissions.	Identify the type and scale of activities within the PDP to which Policy CC.8 of Proposed RPS Change 1 applies. Include objectives, policies, rules and/or methods to prioritise reducing greenhouse gas emissions for the identified activities rather than applying emissions offsetting.
Climate resilience/nature-based solutions				
Whole Plan	Nature-based solutions in development and infrastructure planning and design – new provisions sought	Support with amendments	Proposed RPS Change 1 includes a number of provisions that recognise nature-based solutions are an integral part of the climate change mitigation and adaptation response required in the region and also provide a number of other benefits for indigenous biodiversity and community well-being. Nature-based solutions are defined as <i>'actions to protect, enhance or restore natural ecosystems, and the incorporation of natural elements into built environments, to reduce greenhouse gas emissions and/or strengthen the resilience of humans, indigenous biodiversity and the natural environment to the effects of climate change....'</i> The PDP goes some way to providing for nature-based solutions through a focus on green infrastructure and encouraging these solutions to natural hazard risks, primarily flooding and erosion and coastal hazards. Proposed RPS Change 1 however seeks that District Plans provide for these solutions to be part of infrastructure and development planning and design in order to manage issues such as water quality and natural hazard protection and increase resilience against climate change. A number of actions are set out in Policy CC.14 as measures that should be considered and provided for. To have regard to Policy CC.7 a number of provisions may be required to direct the use of nature-based solutions in infrastructure and development.	Amend the PDP to more broadly address nature-based solutions and their use not only to manage natural hazard risk but as part of the response to climate change and the effects of climate change. Policy direction and rules should set out a clear preference for implementing nature-based solutions in all infrastructure planning and land use development.
Whole Plan	Protection of nature-based solutions – new provisions sought	Support with amendments	Natural nature-based solutions already exist and perform functions that support solutions to climate change. These areas are to be mapped by Greater Wellington by June 2024. District Plans should avoid adverse effects on ecosystems providing nature-based solutions to have regard to Policy CC.12 in Proposed RPS Change 1.	The PDP should include provisions for recognising the functions of the ecosystems providing nature-based solutions to climate change and avoid adverse effects on functions, including before they are mapped. Policies should also direct the protection of areas that already perform a function as a nature-based solution, including the many wider benefits these can have.
Whole Plan	Nature-based solutions for climate resilience – new provisions sought	Support with amendments	Policy CC.4 and CC.14 of Proposed RPS Change 1 seek for actions and initiatives that contribute to climate resilient urban areas to be provided for, with a preference for the use of nature-based solutions. To have regard to these policies, the PDP should contain provisions which seek to improve the climate resilience of urban areas as part of the characteristics and qualities of well-functioning urban environments.	The PDP should include provisions which seek to improve the climate resilience of urban areas through measures identified in Policy CC.14. New development areas should be required to include actions and initiatives that contribute to the broader climate resilience of the urban area through policies and rules, and the extent to which they do this should be a matter of discretion.
Cross Boundary Matters				
Cross Boundary matters	Cross Boundary matters	Support with amendment	Emphasis on joint processing of consents would assist with giving effect to the NPS-FM. The WCC/PCC boundary should be highlighted due to its potential significance for the Porirua Stream. Any use and development, including the provision of infrastructure, affects downstream environments including Te Awarua o Porirua/Porirua Harbour, and the performance of the Porirua Wastewater Treatment Plant.	We support the joint processing of consents but consider this could be emphasized more. A significant cross boundary issue has not been identified. The WCC/PCC boundary occurs across the Porirua Stream catchment,

				with WCC lying upstream. Greater Wellington seeks that this cross-boundary issue is highlighted here.
Definitions				
Definitions	Reclamation	Support with amendment	Definition is inconsistent with the regional plan definition.	Align with regional plan definition.
Definitions	Restoration	Support with amendment	Definition is inconsistent with the regional plan definition. It is also unclear why restoration and restored have been separated out, such that 'restoration' relates only to cultural heritage.	Align with regional plan definition.
Definitions	Restored	Support with amendment	Aligns with regional plan definition of 'restoration' relating to natural heritage but is inconsistently named.	Align with regional plan definition.
Definitions	Community Scale Natural Hazard Mitigation Structures	Support	It is appropriate to define hazard mitigation structures within the District Plan, including Greater Wellington facilities such as the Seton Nossiter flood detention area and the Stebbings Valley Flood detention Dam. It is important to include in the definition those entities responsible for construction and maintain these structures, including Greater Wellington.	Retain as notified.
Definitions	Drain	Support with amendment	It is appropriate to define a drain, particularly where it forms part of a drainage network such as that operated by Greater Wellington. It is slightly inconsistent with the regional plan definition.	Align with regional plan definition.
Definitions	Green infrastructure	Support with amendment	An example would assist plan users. Proposed RPS Change 1 includes several examples in the definition for nature-based solutions. One of these examples may be suitable to include.	Amend definition to include an example, such as a constructed wetland.
Definitions	Natural Hazard Mitigation Works	Support	It is appropriate to define this term in the PDP, to assist users in applying Plan provisions.	Retain as notified.
Definitions	Natural Hazard Overlays	Support	It is appropriate to define this term in the PDP, identifying the areas of the particular hazard, including flooding, to assist users in applying the relevant Plan provisions.	Retain as notified.
Definitions	Less Hazard Sensitive Activities	Support	It is appropriate to define this term in the PDP, to assist users in applying Plan provisions.	Retain as notified.
Definitions	Potentially Hazard Sensitive Activities	Support	It is appropriate to define this term in the PDP, to assist users in applying Plan provisions.	Retain as notified.
Definitions	Hazard Sensitive Activities	Support with amendment	This list almost aligns with the definition in Proposed RPS Change 1, suggest additions to ensure consistency.	Align with the definition in Proposed RPS Change 1.
Definitions	Soft engineering natural hazard mitigation works	Support	It is appropriate to define this term as it improves ease of use of the Plan and guides the Plan user and the examples included are useful.	Retain as notified.
Definitions	New definition - Hard engineering natural hazard mitigation works	Support with amendment	The term 'hard engineering' is defined in both the RPS and regional plan. Including a definition for hard engineering natural hazard mitigation works would align with the use of a specific definition of soft engineering hazard mitigation works.	Insert new definition for hard engineering natural hazards mitigation works to align with operative RPS and regional plan as follows: <u>Engineering works that use structural materials such as concrete, steel, timber or rock armour to provide a hard, inflexible edge between the land-water interface along rivers, shorelines or lake edges. Typical structures include groynes, seawalls, revetments or bulkheads that are designed to prevent erosion of the land.</u>
Definitions	Water sensitive urban design	Support	Aligns with the regional plan definition.	Retain as notified.
Strategic Direction				
Strategic direction	AW-O1 to AW-O4	Support	Greater Wellington supports objectives AW-O1 to AW-O4 as they align with Policies FW.3 and UD.1 of Proposed RPS Change 1.	Retain as notified.
Strategic direction	Natural environment strategic objectives	Support	Greater Wellington supports the Natural Environment Strategic objectives except as noted below.	Retain as notified.
Strategic direction	NE-O2	Support with amendment	Greater Wellington supports the objective to recognise the relationship of to water as this aligns with Policy FW.3 of Proposed RPS Change 1. However, Greater Wellington considers that this objective should more widely address the values of tangata whenua and seek that those values	Amend NE-O2 as follows:

			are protected and enhanced. These amendments will ensure Policy FW.3 is more wholly given regard to.	Future subdivision and development contributes to an improvement in the quality of the City's water bodies, protects and enhances Māori freshwater values and recognises mana whenua and their relationship to water (Te Mana o Te Wai).
Strategic direction	New Objective	Support with amendment	To have regard to Proposed RPS Change 1, the use and development of land needs to be undertaken in an integrated manner recognising the many interconnections between the natural and physical resources. The interconnectedness of the whole environment should be recognised at the strategic level to guide all development in a holistic way.	Insert a new objective as follows: <u>Natural and physical resources are managed in an integrated manner recognising the importance of ki uta ki tai and the interconnectedness between ecosystems, natural processes and freshwater.</u>
Strategic direction	New Objective	Support with amendment	To have regard to Policy IM.1 in Proposed RPS Change 1, Greater Wellington considers that the objectives in 'Anga Whakamua – Moving into the future' should acknowledge the need for data and information availability in resource management decisions. This should include making decisions based on the best available information and mātauranga Māori, upholding Māori data sovereignty and requiring Māori data and mātauranga Māori to be interpreted within Te Ao Māori.	Insert a new objective to require resource management decisions to be made making use of best available information and mātauranga Māori. Ensure that where Māori data is used, sovereignty is upheld and data is interpreted within Te Ao Māori.
Strategic direction	SRCC-O1	Support with amendment	Greater Wellington supports the inclusion of a strategic objective that supports a reduction in carbon emissions. However, the objective is different to the carbon reduction target made by WCC in October 2021 to reduce city emissions by 57% by 2030 compared to 2020 levels, and then net zero by 2050. Proposed RPS Change 1 has a similar target of 50% by 2030 compared to 2019 levels, and then net zero by 2050. Greater Wellington supports WCC for setting this target and seek for this target to be reflected in the PDP. This will ensure consistency and appropriate levels of ambition with regard to WCC's contribution to the region's emission reduction targets.	The carbon reduction objective should match that made by WCC in October 2021 to reduce city emissions by 57% by 2030 compared to 2020 levels, and to net zero by 2050.
Strategic direction	Introduction to Sustainability, Resilience and Climate Change	Support with amendment	Greater Wellington supports WCC taking a science-based approach for City-wide carbon emissions target setting. We note there is an inconsistency in the references to carbon reduction objectives across strategic objectives, including 'net zero' 'zero-emission city; and 'zero carbon'.	Amend the Sustainability, Resilience and Climate Change chapter to ensure references to carbon reduction objectives are consistent and clear.
Strategic direction	SRCC-O2 – SRCC-O4	Support	Greater Wellington supports these strategic objectives. In particular SRCC-O3 recognises that working with the natural environment, adopting adaptive pathway planning and employing a risk lens to urban development, are effective principles for addressing the uncertainties inherent in climate change.	Retain as notified.
Strategic direction	Urban form and development	Support with amendments	Greater Wellington supports the objectives UFD-O2 and UFD-O3 that aim to ensure development is well connected to the transport network. However, further policy direction is required to achieve these objectives. Specifically, to have regard to Proposed RPS Change 1 (policies CC.1, CC.3 and CC.9), a new policy should be included in the PDP that prioritises development, whether it be greenfield or brownfield development, in areas where there are effective public transport links. Greater Wellington also seeks that these strategic objectives have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1.	Insert a new policy that directs the prioritisation of development in locations where there are effective public transport links. Amend wording of these strategic objectives as required to have regard to the qualities and characteristics of well-functioning urban environments, as articulated in Objective 22 of Proposed RPS Change 1. This includes (but is not limited to) urban areas that are climate resilient, contribute to the protection of the natural environment and transition to a low-emission region, are compact and well connected, support housing affordability and choice, and enable Māori to express their cultural and traditional norms. Consent decisions should need to consider how particular subdivision, use or development is contributing to the qualities and characteristics of well-functioning urban environments.
Contaminated Land				
Contaminated Land	Whole chapter	Support	Greater Wellington generally supports the approach taken on contaminated land, as this aligns with Policy 34 of the operative RPS.	Retain as notified.

Hazardous Substances				
Hazardous Substances	Introduction	Oppose	<p>2017 amendments to the RMA repealed the provisions of s30 and s31 relating to the function of regional councils and territorial authorities with respect to management of the use of, or use of land for, hazardous substances. This is no longer a function of either the WCC or Greater Wellington, and hazardous substance use is managed under the HSNO Act by the Environmental Protection Authority. Greater Wellington controls the discharge of hazardous substances only because they are a 'contaminant', and RMA s15 applies.</p> <p>Greater Wellington notes that the purpose of HSNO Act is to prevent or manage <u>any</u> adverse effects of hazardous substances, so there is no category of risk that is not managed under the HSNO Act.</p>	<p>Remove reference to Greater Wellington Regional Council's role in managing hazardous substances.</p> <p>Consider removing rules in this chapter.</p>
Three Waters				
Three Waters	Water sensitive urban design provisions	Support	<p>Greater Wellington strongly supports the direction of the three waters chapter to protect and enhance the health and well-being of freshwater bodies, and recognise this is an important step for WCC to give effect to the NPS-FM, the Te Whanganui-a-Tara Whaitua Implementation Programme, Te Mahere Wai, Te Awarua-o-Porirua Whaitua and the Ngāti Toa statement. We recognise the significant work undertaken between the draft District Plan and notification to incorporate water sensitive urban design provisions. This is an important aspect of having regard to Policy FW.3 in the Proposed RPS Change 1.</p>	<p>Retain as notified.</p>
Three Waters	Financial contributions	Support with amendment	<p>To give effect to Section 77E(2) of the RMA and have regard to Proposed RPS Change 1 (Policy FW.4).</p>	<p>Insert a new policy regarding financial contributions to be paid where stormwater treatment and management is provided offsite under a Stormwater Management Plan.</p> <p>Insert permitted, controlled or restricted discretionary activity rules with an associated permitted standard, matter of control or matter of discretion (if necessary) that requires payment of the financial contribution (where not already collected as development contribution) (separate or part of subdivision rule conditions).</p> <p>Include discretionary, non-complying or prohibited activity rule where any required financial contribution is not paid.</p> <p>The method for determining the costs of the contribution may need to be a schedule or appendix.</p>
Three Waters	Water demand – new policy	Support with amendment	<p>Greater Wellington supports the policy direction provided in the Three Waters chapter regarding development occurring where there is sufficient infrastructure to serve the demand. However, the current policies do not include consideration of how climate change may influence existing water supplies and existing demand for water. To have regard to Proposed RPS Change 1 (Policy FW.5), these considerations should be addressed through a new policy.</p>	<p>Insert a new policy to require new development to ensure adequate available water supply including consideration of how climate change may affect existing supplies and the need to develop further water supply sources as a result.</p>
Three Waters	Hydraulic neutrality provisions (THW-O3, THW-P5, THW-R5, THW-R6)	Support with amendment	<p>Proposed RPS Change 1 contains a new definition for hydrological controls which set out the requirements for managing stormwater run-off flows or volumes in relation to a site's undeveloped state, and this is referenced in Policies FW.3 and 42. The proposed hydraulic neutrality provisions should have regard to this approach.</p>	<p>Amend the PDP hydraulic neutrality provisions to have regard to Proposed RPS Change 1 in relation to hydrological controls and how they have been defined.</p>
Three Waters	Water efficiency – new policy	Support with amendment	<p>Proposed RPS Change 1 (Policy FW.2) requires district plans to include policies, rules or method to reduce the demand for water, including where practicable improving the efficiency of the end use of water. A new policy should be included to encourage water use efficiency and development design to manage water demand.</p>	<p>Insert a new policy to encourage water use efficiency and for development design to manage water demand.</p>

Three Waters	THW-P1	Support with amendment	<p>Greater Wellington supports the use of water sensitive design methods to achieve the matters listed in 1 to 5 of THW-P1. To have regard to Policy FW.3 in Proposed RPS Change 1, this policy should go further to also achieve other amenity, recreational, climate, and cultural outcomes.</p> <p>We also note that clause 5 of THW-P1 to, ‘reduce wastewater overflows,’ should specify the extent of reduction sought, as the outcome of this policy will be integral to achieving outcomes sought by Te Mahere Wai and Te Whanganui-a-Tara Whaitua Implementation Programme, as well as Proposed RPS Change 1 (Policy 42(r)) which seeks support for growth and consideration of different approaches to wastewater management to resolve overflows.</p> <p>Reducing wastewater overflows is largely around managing infrastructure capacity; direction which is given in THW-P3 and THW-P4. Greater Wellington also notes that increasing development in northern suburbs will put increasing pressure on the Porirua wastewater network.</p>	<p>Amend THW-P1 to include an additional sub-clause: <u>6. where feasible, provide for multiple uses including improving amenity, recreation, cultural, ecological and climate values.</u></p> <p>Consider specifying the extent of reduction in wastewater overflows sought, including any necessary consequential amendments.</p>
Three Waters	THW-P4	Support with amendment	<p>THW-P4 seeks for subdivision or development to occur in areas with sufficient three waters infrastructure capacity, that is in place prior to construction. Where the existing capacity is insufficient to service future development, it seeks to limit subdivision and development unless ‘alternative solutions’ can be demonstrated. Greater Wellington supports the need for sufficient infrastructure capacity prior to development, and this direction aligns with the Operative RPS.</p> <p>However, Greater Wellington considers that the PDP should provide for approved alternative wastewater systems anywhere where there are constraints on the existing network capacity, as well as where connections are not available. Septic tanks are excluded from this recommendation due to their known issues with leakage of untreated wastewater and nitrates, particularly when poorly maintained.</p> <p>Providing for alternative wastewater treatment options aligns with recommendation 35 of Te Mahere Wai and gives effect to Te Mana o Te Wai. Alternative wastewater treatment options often reduce potable water use significantly. Reducing pressure of new development on the wastewater network may also make intensification in some areas with existing network capacity constraints more feasible.</p> <p>Relevant direction from the operative RPS includes policies 16 and 45. Relevant direction from Proposed RPS Change 1 includes policies FW.2, FW.3 and FW.5, CC.14 and 42(r), FW.5 and 58. Regional plan rules would apply to discharges from all wastewater systems to manage potential impacts on groundwater and surface water quality, aquatic ecosystems and soil health. These requirements could feasibly be met by approved alternative wastewater systems in both brownfield development and greenfield development.</p>	<p>Include direction in the Three Waters chapter to provide for de-centralised wastewater re-use and treatment (of grey and black water) and disposal using alternative wastewater systems (but not septic tanks, due to their existing issues with contamination and leaching) anywhere where there are constraints on the existing network capacity, as well as where connections are not available. Where connections are available and there is network capacity, a connection to the wastewater network would still be required.</p> <p>This includes any necessary consequential amendments to provide this direction.</p>
Three Waters	Permeable surfaces	Support with amendment	<p>The direction for permeable surfaces is currently in the residential zones where the MDRS apply, and therefore does not apply to properties where there are more than four units. It would also make more sense to have permeable surface provisions in the Three Waters chapter.</p>	<p>Consider whether permeable surface requirements for more than four units, like for water sensitive urban design, could be included in this chapter.</p>
Three Waters	Standards	Support with amendment	<p>In some instances, the three waters infrastructure standards in the subdivision chapter have discrepancies from the standards in the Three Water chapter.</p>	<p>Ensure that the Three Waters rules and standards fully align with the rules and standards in the Subdivision chapter.</p>
Infrastructure				
Infrastructure	New policy and rule	Support with amendment	<p>Proposed RPS Change 1 (Policies CC.1 and CC.3) seeks District Plans enable infrastructure that supports the uptake of zero and low carbon multi-modal transport that contributes to reducing greenhouse gas emissions. To have regard to this policy, a new policy and rule should be inserted into the PDP to enable the development of this infrastructure such as public EV charging stations.</p>	<p>Insert a new rule and policy to enable the development of infrastructure required to support zero and low carbon transport and public transport.</p>

Infrastructure	New policy and rule	Support with amendment	Greater Wellington consider that the PDP should encourage greenhouse gas emission reductions and ensure decision making contributes towards achieving future greenhouse emissions targets. Part of this would be the consideration of how new or altered transport infrastructure will operate in a manner which assists in achieving those targets and requiring whole of life carbon emissions assessments. A new policy that encourages consideration of whole of life carbon emissions assessment would have regard to Proposed RPS Change 1 (policy CC.11).	Include a new policy that encourages an assessment of whole of life carbon emissions for any new or altered transport infrastructure and how new or altered transport infrastructure would assist in meeting reduction targets.
Infrastructure – Coastal Environment				
Infrastructure – Coastal Environment	INF-CE-P24	Oppose	<p>New Zealand Coastal Policy Statement (NZCPS) Policy 13(1)(a) requires that for areas of outstanding natural character, adverse effects are avoided. NZCPS Policy 13(1)(b) requires that for natural character in all other areas of the coastal environment, significant adverse effects are avoided, and all other adverse effects are avoided, remedied or mitigated.</p> <p>In order to give effect to Policy 13 of the NZCPS and to achieve the outcomes sought by CE-O1, the wording of this policy needs to be strengthened to apply to all other areas of the coastal environment.</p>	<p>Map and schedule area-scale natural character ratings in the coastal environment which are provided in the 2016 Boffa Miskell natural character assessment.</p> <p>Amend INF-CE-P24 to ensure new infrastructure is only allowed in the coastal environment where it avoids significant adverse effects and avoids, remedies or mitigates other adverse effects on natural character, to something as follows:</p> <p>New infrastructure within the coastal environment:</p> <ul style="list-style-type: none"> • Outside of high coastal natural character areas; and • Outside of coastal and riparian margins. <p><u>Allow for new infrastructure within the coastal environment where it is located outside of high coastal natural character areas and outside of coastal margins and riparian margins. Only allow for new infrastructure in the coastal environment where any significant adverse effects on natural character are avoided and other adverse effects on natural character are avoided, remedied or mitigated.</u></p>
Infrastructure – Coastal Environment	INF-CE-P25	Oppose	<p>Natural character should be managed consistently in the coastal environment across all natural character ratings (low, moderate and high), rather than only in sites of high natural character, to give effect to NZCPS Policy 13.</p> <p>Greater Wellington considers that the distinction between INF-CE-P24 and INF-CE-P25 is unnecessary and should be replaced with one policy that applies to the coastal environment.</p> <p>Further, it should be noted that providing for the functional need and operational requirement is in regard to the CMA in isolation as opposed to the terrestrial area (see NZCPS Policy 6(e)) and therefore Greater Wellington does not request this provision to be included in the provision for new infrastructure in the coastal environment.</p>	Delete provision if amending INF-CE-P24 to strengthen protection of the coastal environment as requested.
Infrastructure – Natural Hazards				
Infrastructure – Natural Hazards	INF-NH-P61	Support	This policy directs that infrastructure is only established in the natural hazard and coastal Hazard Overlays where the risk is low, the risk is mitigated, or the location is unavoidable. This is appropriate and aligned with RPS direction (Policy 29).	Retain as notified.
Infrastructure – Ecosystems and Indigenous Biodiversity				
Infrastructure – Ecosystems and Indigenous Biodiversity	INF-ECO-P37	Support with amendment	The wording of this policy is inconsistent with the ‘avoid, minimise, remedy’ direction of the effects management hierarchy in ECO-P1 and should be amended to be consistent.	Amend reference to the effects management hierarchy to ensure consistency with the ‘avoid, minimise, remedy’ direction in ECO-P1.

Infrastructure – Ecosystems and Indigenous Biodiversity	INF-ECO-S19, INF-ECO-S20, INF-NFL-S21, REG-S2	Support with amendment	Policy 24 of the RPS directs councils to protect indigenous ecosystems and habitats with significant indigenous biodiversity values. The ‘identified’ qualifier limits the consideration of effects to those values identified within the SNA at the time of plan notification. The values of most SNAs have been identified only at a high-level, and often only through desktop analysis. The assessment required to identify the scope of effects may identify additional values and this should be part of the consideration of effects at the time consent is applied for.	Amend wording to remove ‘identified’ before ‘significant biodiversity values’ when referring to adverse effects caused by activities or maintenance of biodiversity values.
Renewable Electricity Generation				
Renewable Electricity Generation	REG-O1, REG-O4, REG-P1-REG-P13	Support with amendment	<p>Greater Wellington supports the provisions and direction in this chapter, including the recognition of the contributions that renewable energy can make to greenhouse gas emissions reduction. The chapter enables small scale renewable energy generation and provides for community and large-scale renewable energy generation. This direction is consistent with Proposed RPS Change 1 climate change policies, particularly Policy 11, and connects to the SRCC strategic objectives.</p> <p>REG-O4 and REG-13 in particular seek for energy efficient subdivision and development to be encouraged, and this links to SUB-P3 which we support. Greater Wellington would support the District Plan going as far as it can to promote energy efficient design of buildings and developments, including alterations to have regard to Policy 11 of Proposed RPS Change 1.</p>	Ensure the renewable electricity generation and subdivision provisions have regard to Policy 11 of Proposed RPS Change 1 such that the District Plan goes as far as it can to promote energy efficient design of buildings and developments and enable renewable energy generation. This could also include provisions in the zones chapters.
Transport				
Transport	Provisions and Standards in the transport, subdivision, zone and development area chapters – general comment	Support with amendment	<p>Greater Wellington notes that the removal of on-site carparking required by the NPS-UD, which we support, will mean a more proactive approach to managing on-street parking across the city than in the past – e.g. more management via residential parking permits etc - to ensure the safe and efficient operation of transport corridors and equitable access.</p> <p>Greater Wellington also supports the requirement for the provision of cycling and micro-mobility parking as part of new development.</p> <p>Greater Wellington seeks both brownfield and greenfield development enabled by the PDP to ensure adequate space for public transport on roads. This includes requiring verandahs and other street frontage structures to be set back from the kerb to allow for sufficient bus accessibility.</p>	<p>Amend transport, subdivision, zone and development area standards and rules as necessary to ensure new brownfield and greenfield development enabled by the PDP provides for sufficient bus accessibility.</p> <p>Verandah and other street frontage structures along the existing road network and any new roading should be set back one metre from the edge of the kerb along existing and future bus routes, to provide adequate space for the buses to pass.</p>
Transport	TR-P1, TR-R2	Support with amendment	<p>Greater Wellington supports Policy TR-P1 but seeks amendments to have regard to Proposed RPS Change 1, specifically Policy CC.2. Proposed policy TR-P1 should be amended to ensure private vehicle use is minimised and active and public transport modes are maximised. The policy wording should be stronger than simply providing for these alternative modes.</p> <p>To have regard to Proposed RPS Change 1 Policy CC.10, any high trip generating (as per TR-S1) activity or freight distribution activity should be required to provide a travel demand management plan and this be assessed as part of the consent process. Freight distribution activities should also be located where efficient freight movements can minimise greenhouse gas emissions.</p> <p>Greater Wellington also considers the requirement to provide a travel demand management plan should extend to activities associated with subdivision, larger commercial developments where they may not trigger non-compliance with the vehicle trip generation activity rule.</p>	<p>Amend TR-P1 as follows:</p> <p>Provide for high vehicle trip generating activities where they:</p> <ol style="list-style-type: none"> 1. Safely and effectively integrate with the transport network, including planned network upgrades and service improvements; and 2a. <u>Enable reductions in greenhouse gas emissions by locating activities with significant freight servicing requirements in proximity to efficient transport networks;</u> 2. Provide for <u>Enable the uptake of pedestrian, cycling, micro-mobility and public transport modes;</u> and 3. <u>Avoid or mitigate adverse effects through the implementation of a travel demand management plan where vehicle trip generation thresholds in TR-S1 are exceeded, which identifies measures to reduce travel demand, including reducing the number of vehicle trips, offering travel choices, and influencing modes</u> <p>Include any necessary consequential amendments to rules.</p>

Transport	TR-P3	Support with amendment	Greater Wellington supports the management of activities that do not meet standards provided that the use of low or zero carbon, active or public transport modes are maximised, to have regard to Proposed RPS Change 1 Policy CC.2. Policy TR-P3 should be amended to include recognition of this and it be assessed in consent applications in restricted activity rules.	Amend TR-P3 to allow activities that do not meet standards provided the use of low or zero carbon, active or public transport modes are maximised.
Transport	New Policy	Support with amendment	Greater Wellington supports the recognition of active transport modes in the PDP, including requirements for cycle lanes, cycle and micro-mobility infrastructure and ensuring safety. However, Greater Wellington considers that additional policy direction would be required to have regard to Proposed RPS Change 1 direction (Policies CC.1 and CC.3) which directs the provision of infrastructure to promote the uptake of cycling as a means of transport. This direction would require the provision of cycle parking that is safe, convenient, and secure and end of journey facilities for staff such as showers and lockers.	Include a new policy that provides more explicit direction regarding the support for cycle transport. <u>Encourage cycle transport through the provision of cycle parking that is sheltered, convenient, safe and secure and end-of-journey facilities for staff including showers, lockers and dedicated changing spaces.</u>
Transport	TR-S3 & TR-S4	Support with amendment	It is not clear whether the needs of increasing uptake of e-bikes, including cargo and multi-passenger e-bikes have been provided for in the standards. E.g. sufficient dimensions for longer/wider e-bikes and electric charging points as per TR-S7 2 (d) relating to design requirements for on-site car parking spaces. The relevant Proposed RPS Change 1 policies are CC.1 and CC.3.	Include provision for e-bikes in standards, including a requirement for charging stations.
Transport	New standard	Support with amendment	Include a new standard that sets out the minimum end-of-trip facilities for staff to support cycling as a means of transport. This can be based on the number of cycling spaces required to be provided. For example, 1 shower and 1 locker per 10 staff cycle parks. This standard should be linked with TR-S2 and Table TR-7. The relevant Proposed RPS Change 1 policies are CC.1 and CC.3.	Insert a new standard to specify the minimum number of showers and lockers to be provided.
Natural Hazards				
Natural Hazards	Flood hazards	Support with amendment	Greater Wellington notes that intensification in any flood hazard zone is not in line with regional, national or international direction on hazards or climate change, and would impact Greater Wellington's ability to discharge its flood risk management functions. Increasing densities within Wellington City area may result in an increase in the vulnerability of people and property to flood hazards, and there will also be a need to introduce more sophisticated flood forecasting and warning systems to the region.	Continue to work with Greater Wellington to discuss the City's flood hazards in relation to the proposed intensification.
Overlays	Flood Hazard – Stream Corridor, Overland Path, Inundation	Support with amendment	The overlays shown in the PDP have been sourced from Wellington Water and do not provide a complete picture of the flooding risks across the City. Additional discussion is required to complete the flood hazard information available to users of the Plan.	Continue to work with Greater Wellington to discuss the City's flood hazards in relation to the proposed intensification.
Overlays	Flood hazard overlays in the Rural Zone	Oppose	It is important to identify areas subject to flooding hazard in the Rural area, as well as in the Residential and other zones. Currently the PDP does not provide any information on flooding hazards across the whole Rural zone. These areas will be subject to flooding and this should be shown on the Plan.	Include identified overlays in the Rural Zone, based on the regional flood hazard mapping here: Regional Exposure Assessment 1% AEP RCP8.5 2101-2120 (arcgis.com)
Natural Hazards	NH-O1	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-O1 as follows. Subdivision, use and development within the Natural Hazard Overlays minimises reduce or do not increase minimises the risk from natural hazards to people, property and infrastructure.
Natural Hazards	NH-O2	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduced’, to actively look to bring down the risk in the design and planning of the development. Greater Wellington supports the inclusion of “catchment management” in the objective as notified.	Amend NH-O2 as follows: There is reduced The risk to people, property and infrastructure from flood hazards through planned mitigation works and catchment management is minimised.

Natural Hazards	NH-O3	Support	The wording of this objective is generally consistent with the expectations of Greater Wellington in respect of natural features and RPS direction.	Retain as notified.
Natural Hazards	NH-O4	Support	This approach is appropriate.	Retain as notified.
Natural Hazards	NH-P1	Support	Greater Wellington supports a risk-based approach to manage subdivision use and development within the identified areas, specifically sensitivity to impacts and the hazard posed to lives and wellbeing. This aligns with RPS direction on natural hazards.	Retain as notified.
Natural Hazards	NH-P2	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P2 as follows: Subdivision, use and development minimises reduce or do not increase the risk to people, property and infrastructure by:...
Natural Hazards	NH-P3	Support	Allowing for less hazard sensitive activities within certain areas is considered appropriate, where the risks are acceptable and flowpaths and stream corridors will be managed in accordance with this policy.	Retain as notified.
Natural Hazards	NH-P4	Support	Where buildings containing hazard sensitive activities are located within the inundation flood hazard overlay, it is appropriate to allow additions to these buildings in certain circumstances and where the risks are acceptable.	Retain as notified.
Natural Hazards	NH-P5	Support	This approach is appropriate.	Retain as notified.
Natural Hazards	NH-P6	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P6 as follows: Provide subdivision development and use for potentially hazard sensitive activities and hazard sensitive activities within the inundation area provided that mitigation measures are incorporated to ensure the risk to people and property both on the site and on adjacent properties is minimised not increased or is reduced .
Natural Hazards	NH-P7	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P7 as follows: Manage subdivision, development and use associated with potentially hazard sensitive activities and hazard sensitive activities within the overland flowpaths by: 1. Incorporating mitigation measures that minimise the reduce or avoid an increase in risk to people and property from the 1% Annual Exceedance Probability flood;...
Natural Hazards	NH-P8	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P8 as follows: Avoid subdivision development and use associated with potentially hazard sensitive activities and hazard sensitive activities within the stream corridors, unless it can be demonstrated that: ... 2. Mitigation measures are incorporated that minimise the reduce or avoid an increase in risk to people and property from the 1% Annual Exceedance Probability Flood;...
Natural Hazards	NH-P9	Support with amendment	There is a risk here from allowing critical infrastructure in liquefaction prone areas. It is important to specify that the foundations are designed to the highest standard to minimise the risk that the building will be able to operate after an event. Good geotechnical design is able to achieve this and the clause would not add an unreasonable burden to the development design and makes it clear what is required.	Amend NH-P9 to add a clause to say that the foundation designs must be designed and certified by qualified Geotech engineer in order to prevent liquefaction induced deformation of the building and in doing so maintains its post event functionality.

Natural Hazards	NH-P10	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P10 as follows: Manage subdivision, development or use associated with potentially hazard sensitive activities, including additions to existing buildings within the Wellington Fault Overlay and Ohariu Fault Overlay by ensuring that:... 3. The activity incorporates mitigation measures that ensure the risk from fault rupture to people, property and infrastructure is minimised reduced or not increased ; or...
Natural Hazards	NH-P11	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P11 as follows: Avoid subdivision, development or use associated with hazard sensitive activities, excluding a single residential dwelling on an existing site, within the Wellington Fault Overlay and Ohariu Fault Overlay unless it can be demonstrated that:... 3. The activity incorporates mitigation measures that ensure the risk from fault rupture to people and property is minimised reduced or not increased ; or 4. For additions to existing buildings, the change in risk from fault rupture to people and property is minimised reduced or not increased .
Natural Hazards	NH-P12	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P12 as follows: Allow for potentially hazard sensitive activities and hazard sensitive activities within the Sheppard’s Fault Overlay and Terawhiti Fault Overlay with the exception of educational facilities, health care facilities and emergency facilities, where it can be demonstrated that the activity is more than 20m from either the Sheppard’s Fault or Terawhiti Fault and the development incorporates mitigation measures that ensure the risk from fault rupture to people and property is minimised reduced or not increased .
Natural Hazards	NH-P13	Support	This is appropriate.	Retain as notified.
Natural Hazards	NH-P14	Support with amendment	Amend to have regard to the Proposed RPS Change 1 Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than ‘reduce or do not increase’, to actively look to bring down the risk in the design and planning of the development.	Amend NH-P14 as follows: Manage subdivision, development and use associated within the operational port activities, passenger port facilities and rail activities within the Wellington Fault Overlay where the subdivision, development and use involves the construction of new buildings which will be occupied by members of the public, or more than 10 employees associated with the operational port activities, passenger port facilities and rail activities by ensuring that: 1. Mitigation measures are incorporated that minimises the avoid an increase in risk to people, property and infrastructure from the fault rupture of the Wellington Fault.

Natural Hazards	NH-P15	Support	It is essential to provide for the maintenance and enhancement of natural systems and features where these features reduce the risk of the hazard. This aligns with operative RPS direction (Policies 51 and 52).	Retain as notified.
Natural Hazards	NH-P16	Support with amendment	NH-P16 as notified implies that the mitigation works will be hard-engineering based. This may not be the case, but it would be good to clarify in the policy that the mitigation works could consist of a range of options as outlined in NH-P17 and Policy 52 in Proposed RPS Change 1.	Amend NH-P16 as follows: Enable natural hazard mitigation or stream and river management works undertaken by a statutory agency or their nominated contractors or agents within Natural Hazard Overlays where there is no other practicable option and these will significantly decrease the existing risk to people's lives and wellbeing, property and infrastructure.
Natural Hazards	NH-P17	Support with amendment	Amend for consistency with Policy 52 in Proposed RPS Change 1. Green infrastructure has been defined in the WCC PDP with a strong focus on engineering systems that mimic natural systems, however there are other natural hazard mitigation measures that the Proposed RPS Change directs consideration of, which aren't captured by green infrastructure. We therefore seek for this policy to be broadened.	Amend NH-P17 as follows: Encourage the use of green infrastructure, non-structural, soft engineering or Mātauranga Māori approaches when undertaking natural hazard mitigation or stream and river management works by a statutory agency or their nominated contractors or agents within Natural Hazard Overlays
Natural Hazards	NH-R1 to NH-R16	Support with amendment	Changes requested to the policies may necessitate amendments to the rules to have regard to the natural hazard direction in Proposed RPS Change 1.	Support overall approach with any amendments consequential to the policy amendments sought.
Natural Hazards	NH-R3	Support with amendment	There appears to be a numbering error in respect of the discretionary activity rule for green infrastructure.	Amend numbering to state '2', not '1' as notified.
Sites and Areas of Significance to Māori				
Sites and Areas of Significance to Māori Residential zones	Intensification adjacent to Sites and Areas of Significance to Māori	Oppose	<p>Greater Wellington requests modification to the MDRS adjacent to Sites and Areas of Significance to Māori, to ensure the values in the Sites and Areas of Significance to Māori are preserved as part of intensification activities.</p> <p>This request gives effect to the relevant Operative RPS Policies, namely:</p> <ul style="list-style-type: none"> (a) Policy 48 of the RPS, which directs that plans give particular regard to the principles of the Treaty of Waitangi and Waitangi Tribunal reports and settlement decisions relating to the Wellington region; and (b) Policy 49 of the RPS, which directs that plans recognise and provide for the exercise of kaitiakitanga; mauri, particularly in relation to fresh and coastal waters; mahinga kai and areas of natural resources used for customary purposes; and places, sites and areas with significant spiritual or cultural historic heritage value to tangata whenua. (c) Historic heritage policies 21, 22 and 46. <p>Greater Wellington acknowledges that MRZ-P4 recognises that the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga applies as a qualifying matter. However we do not consider this to go far enough and it should be extended to sites adjacent to Sites and Areas of Significance to Māori.</p> <p>The extent of modification necessary will require a situation-specific impact analysis depending on the nature of the SASM, including the need to avoid adjacent intensification in some instances.</p>	<p>Modify intensification levels through setbacks and reduced building heights for areas adjacent to Sites and Areas of Significance to Māori to the extent necessary following site-specific analysis, and to only allow intensification on sites adjacent to Sites and Areas of Significance to Māori where the associated buildings and structures will provide for tino rangatiratanga.</p> <p>This includes any necessary consequential amendments to provide this direction.</p>
Ecosystems and Indigenous Biodiversity				
Ecosystems and Indigenous	Intensification adjacent to SNAs	Oppose	Greater Wellington supports the identification of SNAs in the PDP in accordance with RPS Policies 23 and 24. In managing the effects of intensification on indigenous ecosystems and habitats, we	Modify intensification levels for areas adjacent to SNAs.

Biodiversity and residential zones			recommend WCC includes additional controls for zones where intensification may occur in areas adjacent to SNAs, such as buffer zones and ecological corridors. Such areas contribute to the long-term viability and enhancement of SNAs. Greater Wellington seeks consideration of these measures in accordance with Policy 47(a) and (b) of the operative RPS.	This includes any necessary consequential amendments to provide this direction.
Ecosystems and Indigenous Biodiversity and throughout Plan as necessary	Identifying and protecting and enhancing waterways and wetlands – new provisions sought	Support with amendment	<p>While Greater Wellington notes that WCC has stated that wetlands are sufficiently covered by the National Environmental Standards for Freshwater 2020, Greater Wellington does not support this view and considers that the PDP has a role for integrated management of adverse effects on wetlands and their functions, including those wetlands not yet identified, under NPS-FM Clause 3.5.</p> <p>Under NPS-FM Section 3.5 the PDP should contribute to the protection and enhancement of the health and well-being of water bodies and freshwater ecosystems, including wetlands, through WCC's RMA section 31 functions, as outlined in Policies FW.3 and FW.6 of Proposed RPS Change 1. This approach would help to achieve NPS-FM Policies 6 and 7 and operative RPS policy 47.</p> <p>The PDP should provide for identification and avoidance of waterways (both within and outside of SNAs) during structure planning and sub-division, such that waterways must be identified and protected prior to any development occurring. Greater Wellington does not consider the freshwater direction in the design guides to provide sufficient certainty of protection and enhancement.</p>	Insert a policy and objective to protect and enhance the health and well-being of water bodies and freshwater ecosystems, including wetlands, in the ECO chapter. This should lead into rules in the sub-division and future urban zone chapters, requiring that waterways and wetlands have been identified for structure planning or sub-division prior to any development occurring.
Ecosystems and Indigenous Biodiversity	Application of SNAs overlay	Oppose	<p>Though Greater Wellington supports WCC's identification of SNAs in line with RPS Policy 23, we oppose the omission of SNAs on private residential land from the Proposed District Plan (PDP) because:</p> <ul style="list-style-type: none"> the removal of identified SNAs from the PDP contradictory to national direction for indigenous biodiversity protection. Section 6(c) of the RMA 1991 states that 'the protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna' is a matter of national importance, and that this matter must be 'recognised and provided for' by all persons exercising functions and powers under the RMA, including local authorities under Sections 30 and 31. the removal of SNAs on private residential land from the PDP is contrary to Policy 24 of RPS. Policy 24 directs district councils to include in their district plans policies, rules and methods to protect the indigenous ecosystems and habitats identified in accordance with policy 23. Policy 24 requires district councils to protect all areas identified in accordance with policy 23 through provisions in their district plans. the removal of identified SNAs on private residential land from the PDP to be inconsistent with WCC's vision and aspirations for protecting and restoring the city's indigenous biodiversity. The Our Natural Capital: Wellington's Biodiversity Strategy and Action Plan 2015^[1] states that WCC will protect biodiversity by 'focussing on the protection of priority biodiversity sites on public and private land and rare, threatened, or locally significant species', and that it will build natural capital by 'respect[ing] the importance of indigenous biodiversity to New Zealand and its intrinsic right to exist'. We do not consider the exclusion of SNA on private residential land to align with this direction. 	Apply SNAs to all zones as intended by section 6 of the RMA and Policy 24 of the RPS.
Ecosystems and Indigenous Biodiversity	ECO-02	Support with amendment	Greater Wellington does not consider that the wording used for the coastal environment should differ from that in ECO-01.	Amend wording to 'protected and, where appropriate, restored' or remove the objective.

^[1]'Our Natural Capital: Wellington's Biodiversity Strategy and Action Plan 2015'. <https://wellington.govt.nz/~media/your-council/plans-policies-and-bylaws/plans-and-policies/a-to-z/biodiversity/files/2015/our-natural-capital-entire.pdf?la=en>

Ecosystems and Indigenous Biodiversity	ECO-O4	Support with amendment	The wording, 'maintain and restore' is inconsistent with 'protect and restore' in ECO-O1 and the related policy ECO-P4.	Amend wording in ECO-O4 to 'protect and restore'.
Ecosystems and Indigenous Biodiversity	ECO-P1	Support, with amendment.	The wording 'where practicable' is unnecessary in clause 1 as it is restated in clause 2.	Amend wording to remove 'where practicable' from clause 1.
Ecosystems and Indigenous Biodiversity	ECO-P1, APP2	Support with amendment	<p>Greater Wellington supports the inclusion of APP2 – Biodiversity Offsetting which sets out the framework for using biodiversity offsets but consider it should state the long-term outcome must be at least a 10 percent biodiversity gain or benefit to have regard to Policy 24 in Proposed RPS Change 1. Additionally, the appendix should set out the limitations where biodiversity offsetting is not appropriate.</p> <p>Policy IE.1 of Proposed RPS Change 1 directs district plans include policies, rule or methods to partner with mana whenua to managing indigenous biodiversity values. Where offsetting is required, this policy could be implemented by provisions requiring management plans for managing offset biodiversity areas and effects on significant areas. Monitoring requirements would form part of these plans and plan direction could encourage the adoption of mātauranga Māori in monitoring of indigenous species in relevant circumstances. Other relevant Proposed RPS Change 1 policies include Policy 47 and IE.2.</p>	<p>Amend to require that that biodiversity offsets shall provide at least a 10 percent net biodiversity gain.</p> <p>Amend the PDP to require partnering with mana whenua in the management of activities that affect indigenous biodiversity. Consider the requirement for management plans for consents and within those management plans a requirement for enabling tangata whenua to exercise kaitiakitanga to monitor biodiversity.</p>
Ecosystems and Indigenous Biodiversity	ECO-P4	Support with amendment	<p>While Greater Wellington recognises that mana whenua / tangata whenua exercising their role as kaitiaki have been provided for, we consider the policy requires amendment or a new policy inserted to specifically recognise mana whenua / tangata whenua involvement in the mapping of indigenous biodiversity, including to identify taonga species.</p> <p>This would be to have regard to Proposed RPS Change 1 policies IE.1 and IE.2.</p>	Amend to provide for mana whenua / tangata whenua involvement in the mapping of indigenous biodiversity, including to identify taonga species.
Ecosystems and Indigenous Biodiversity and throughout Plan	ECO-S1, ECO-S2, ECO-S3, ECO-S4, INF-ECO-S19, REG-S1	Oppose	<p>Vegetation trimming standards and rules should be amended so that they also apply to both indigenous and non-indigenous vegetation. This would make it clear that all vegetation (aside from pest plants) is to be protected in these areas, except where otherwise specified for restoration or other purposes.</p> <p>Any non-indigenous plants within SNAs that are not pest plants may provide significant habitat for indigenous biodiversity such as birds, bats and lizards. This understanding is recognised in section 6(c) of the Act which directs the protection of the "significant habitats of indigenous fauna" not the significant indigenous habitats of indigenous fauna.</p>	Amend standards throughout plan (where relevant) to change 'indigenous vegetation' to 'vegetation'.
Ecosystems and Indigenous Biodiversity	Rules	Support with amendment	Greater Wellington considers amendments are required have regard to Policies IE.1 and IE.2 of Proposed RPS Change 1. We consider the adverse effects on mahinga kai, other customary uses and access for these activities needs to be included as an assessment matter for consent applications.	Include a new matter of discretion/control to consider the adverse effects on mahinga kai, other customary uses and access for these activities.
Appendices	APP3	Support with amendment	<p>Amendments are required to principle 3. The positive effects offered should outweigh the adverse effects incurred. This recognises the inherent risks and uncertainty of compensation, thus aiming for an overall net gain from the exchange (though not in the strict technical sense of offsetting as these are like-for-unlike exchanges). This approach would align with that suggested in the definition for biodiversity compensation provided in this plan (see comment above) and with the approach taken in the NRP and in the in the NPS-IB exposure draft.</p> <p>Principle 8 is redundant for managing biodiversity compensation exchanges as it essentially just specifies what the limits of biodiversity compensation are. Compensation exchanges are always like for unlike. Further, the limits of biodiversity compensation are already detailed under the</p>	<p>Amend principle 3 to:</p> <ol style="list-style-type: none"> Scale of biodiversity compensation: The values to be lost through the activity to which the biodiversity compensation applies must be addressed by positive effects to indigenous biodiversity that are proportionate to outweigh the adverse effects on indigenous biodiversity. <p>Delete principle 8.</p>

			principle of 'limits to biodiversity compensation'. Principle 2 should be amended to incorporate direction from principle 8 into the limits of offsetting under the Plan.	Amend principle 2 to: 2. Limits to biodiversity compensation: In deciding whether biodiversity compensation is appropriate, a decision-maker must consider the principle that many indigenous biodiversity values are not able to be compensated for because: a. The indigenous biodiversity affected is irreplaceable or vulnerable; ba. The values lost are not indigenous taxa that are listed as Threatened, At-risk or Data deficient in the New Zealand Threat Classification System lists; b. There are no technically..."
Schedules	SCHED6 – Notable Trees, specifically: Reference 112: <i>Syzygium smithii</i> / <i>Acmena smithii</i> Reference 261: <i>Acer pseudoplatanus</i> Reference 306 : <i>Syzygium smithii</i>	Oppose	Greater Wellington considers Notable Tree classification for these trees inappropriate. These species are listed as Harmful Organisms in the Greater Wellington Regional Pest Management Plan 2019-2039. Legally protecting these trees permits ongoing seed source and hinders Greater Wellington's efforts to improve the biodiversity of the region.	Remove references 112, 261 and 306 from Schedule 6.
Schedules	SCHED8	Support with amendments	Greater Wellington supports WCC's identification and scheduling of SNAs in the PDP as per Policy 23 and 24 of the RPS. Based on Greater Wellington's analysis, several additional areas within WCC's jurisdiction meet one or more of the criteria in Policy 23. The inclusion of the following sites as SNAs in the PDP is requested: <ul style="list-style-type: none"> • areas of significant bird habitat in parts of Island Bay, Lyall Bay, Owhiro Bay, Tongue Point, Makara Estuary and Pipinui Point South; and • active and stabilised dunelands in Worser Bay (southern end), Seatoun Beach, Churchill Park, Island Bay (north area, playground, south end), Owhiro Bay (southeast end), Waiariki Stream and Makara Beach (east end). <p>Additionally, several site summaries for SNAs incorrectly refer to a Greater Wellington 'Biodiversity Management Area'. The correct term is 'Key Native Ecosystem' site.</p> <p>Greater Wellington recommends that WCC considers capturing all areas identified as, or overlapping with, Key Native Ecosystem (KNE) as SNAs in Appendix 8. Additionally, a SNA site name should, where possible, align with the KNE site that they are within.</p>	Include the identified additional SNA sites in SCHED8, which Greater Wellington can provide spatially. Amend site descriptions for SNAs so that 'Key Native Ecosystem sites' are referred to instead of 'Biodiversity Management Areas', e.g., "Parts of this site are included in a GWRC Biodiversity Management Area Key Native Ecosystem area ".
Natural Character				
Natural Character	Riparian margins - new policy sought	Support with amendments	Greater Wellington seeks that WCC identifies natural character ratings, at both site and area scales, in riparian margins landward of the coastal environment, as required by section 6(a) of the RMA. This work has not yet been undertaken and is necessary to managing adverse effects on natural character in riparian margins. To ensure this occurs, Greater Wellington requests a policy in the PDP to direct this work to commence. This policy should also direct Council officers to work with resource consent	Include a new process policy as follows: <u>Identification of natural character ratings in riparian margins landward of the coastal environment</u> <u>Identify in the Plan natural character ratings in riparian margins landward of the coastal environment.</u>

			<p>applicants to determine whether a natural character assessment is required in the meantime. This will indicate to Plan users that this mapping work has not yet been undertaken, and ensure that the natural character in riparian margins is appropriately preserved and protected in the interim.</p> <p>Identifying natural character ratings of riparian margins is consistent with the approach taken by Greater Wellington in Method M24(a) of the Natural Resources Plan, to identify natural character ratings in the beds of lakes and rivers, and wetlands landward of the coastal environment.</p>	<p><u>Until natural character ratings in riparian margins landward of the coastal environment are mapped in this Plan, an assessment may be required as to whether an activity is within an area of high or outstanding natural character. Wellington City Council officers will assist resource consent applicants in determining whether an assessment is required. The need for such an assessment will depend on the level or scale of potential effects and the sensitivity of the receiving environment. Any assessment shall be commensurate with the scale and significance of the effects that the use or development may have on the environment.</u></p>
Natural Character	NATC-O1	Support with amendment	<p>Greater Wellington supports the inclusion of an objective to manage the potential effects of activities on natural character in riparian margins, however it is unclear as to whether the scope of the objective relates to riparian margins both inside and outside of the coastal environment. Greater Wellington requests that amendments are made as necessary to provide clarity to plan users on which objectives apply to riparian margins in the coastal environment (CE-O1 or NATC-O1). These objectives set out the outcomes sought which the remaining provides then contribute to achieving, so it should be clear where they apply.</p> <p>Greater Wellington notes that the outcomes of NATC-O1 cannot be achieved by plan provisions, given natural character values in riparian margins landward of the coastal environment have not been identified by WCC (or mapped or scheduled in the PDP), nor is there any indication that natural character assessments will be required as part of resource consent and restoration processes, to give effect to the outcomes in which NATC-O1 seeks to achieve. Please refer to reasons and decision sought on a new process policy for riparian margin natural character mapping to commence.</p> <p>Consistent terminology should be used across the PDP when referring to restoring and rehabilitating natural character, both within and landward of the coastal environment.</p>	<p>Amend NATC-O1 (and CE-O1) as is necessary to clarify which objective applies to riparian margins in the coastal environment, or any other amendments to the same effect.</p> <p>Amend NATC-O1 to reflect the terminology recommended elsewhere in this submission, as follows:</p> <p>The natural characteristics and qualities that contribute to the natural character within riparian margins are preserved and protected from inappropriate subdivision, use and development, and restored or rehabilitated maintained or enhanced where appropriate.</p>
Natural Character	NATC-R2	Oppose	<p>Although Greater Wellington supports the restoration of natural character, it is likely that not all restoration activities will restore natural character ratings. For example, the construction of a structure (provided it is blocked off from human interference) in the coastal environment may provide roosting area for birds and thus improve the biotic values, but it may also have an impact on the abiotic and experiential values, thus may not restore the overall natural character rating of the wider character area.</p>	<p>Include permitted activity conditions to clarify which restoration activities are permitted.</p>
Natural Features and Landscapes				
Natural Features and Landscapes	NFL-O1, NFL-P1, NFL-P6	Support	Gives effect to section 6(b) of the RMA and NZCPS Policy 15(a)	Retain as notified.
Natural Features and Landscapes	NFL-P8	Support	Avoiding new plantation forestry activities in outstanding natural features and landscapes gives effect to section 6(b) of the RMA and, in the coastal environment, NZCPS Policy 15.	Retain as notified.
Public Access				
Public Access	PA-O1	Support	Gives effect to section 6(d) of the RMA.	Retain as notified.
Public Access	PA-O2	Support with amendment	An assessment of natural character in riparian margins landward of the coastal environment has not yet been undertaken, and this is necessary to protect existing natural character values.	Ensure that the natural character ratings of riparian margins, which has been sought through a new policy in the natural character chapter, are undertaken to ensure PA-O2 is achieved.
Public Access	PA-P1	Support	Gives effect to section 6(d) of the RMA.	Retain as notified.
Public Access	PA-P2	Support with amendment	An assessment of natural character in riparian margins landward of the coastal environment has not yet been undertaken.	Ensure that the natural character ratings of riparian margins, which has been sought through a new policy in the natural character chapter, are undertaken.

Public Access	PA-P3	Oppose in part	Unclear as to whether PA-P3(10) gives effect to a relevant higher order planning documents and therefore should not be included in PA-P3.	Delete sub clause (10) or amend to ensure this gives effect to higher order planning documents.
Subdivision				
Subdivision	SUB-P3	Support with amendment	<p>Greater Wellington supports the direction in this policy, and its role as a matter of discretion throughout the subdivision chapter.</p> <p>Proposed RPS Change 1 (policy FW.2) seeks for District Plans to address water demand and include provisions to improve water efficiency. An additional subclause to SUB-P3 regarding encouraging efficient water use would have regard to this policy.</p> <p>The Wellington Regional Public Transport Plan 2021 states Greater Wellington will work with its regional partners to ensure new subdivisions can accommodate public transport.</p> <p>The policy wording can be strengthened for public transport to signal that subdivisions should be designed to ensure public transport routes can be provided for, and vehicles can access those routes.</p> <p>Proposed RPS Change 1 (Policies CC.3 and CC.9 in particular) seeks for District Plans to contribute to reduction in transport-related greenhouse gas emissions. Subdivision design can aid in reducing greenhouse gas emission through actions such as the use of renewable energy, providing infrastructure to enable the use of non-fossil fuel transport and reducing urban sprawl. Policy SUB-P3 should include the need for subdivision design to support greenhouse gas emission reductions.</p>	<p>Amend wording to include ‘provide for’ public transport, encourage efficient water use and support greenhouse gas emission reductions as below:</p> <p><u>2a. Encourage the efficient use of water;</u></p> <p>5. Support walking and cycling opportunities, and provide for public transport opportunities, and enhance neighbourhood and network connectivity and safety; and</p> <p>6. Are adaptive to the effects of climate change. And</p> <p><u>7. Support greenhouse gas emission reductions</u></p>
Subdivision	SUB-P7	Support with amendments	<p>SUB-P7 requires suitable access to reticulated three waters infrastructure in urban areas and only provides for on-site wastewater disposal where connection to reticulated networks is unavailable. Greater Wellington supports this requirement to connect to reticulated networks where available.</p> <p>However, the PDP should provide for approved alternative wastewater systems anywhere where there are constraints on the existing network capacity, as well as where connections are not available. Septic tanks are excluded from this recommendation due to their known issues with leakage of untreated wastewater and nitrates, particularly when poorly maintained.</p> <p>Providing for alternative wastewater treatment options aligns with recommendation 35 of Te Mahere Wai and gives effect to Te Mana o Te Wai. Alternative wastewater treatment options often reduce potable water use significantly. Reducing pressure of new development on the wastewater network may also make intensification in some areas with existing network capacity constraints more feasible.</p> <p>Relevant direction from the operative RPS includes policies 16 and 45. Relevant direction from Proposed RPS Change 1 includes policies FW.2, FW.3 and FW.5, CC.14 and 42(r), FW.5 and 58. Regional plan rules would apply to discharges from all wastewater systems to manage potential impacts on groundwater and surface water quality, aquatic ecosystems and soil health. These requirements could feasibly be met by approved alternative wastewater systems in both brownfield development and greenfield development.</p>	<p>Include direction in the Subdivision chapter to provide for de-centralised wastewater re-use and treatment (of grey and black water) and disposal using alternative wastewater systems (but not septic tanks due to their existing issues with contamination and leaching) anywhere where there are constraints on the existing network capacity, as well as where connections are not available. Where connections are available and there is network capacity, a connection to the wastewater network would still be required.</p> <p>This includes any necessary consequential amendments to provide this direction.</p>
Subdivision	SUB-P14	Oppose	<p>Greater Wellington opposes the use of ‘provide for’ relating to subdivision in riparian margins. The proposed policy does not contribute to NATC-O1 to preserve and protect natural character within riparian margins from inappropriate subdivision.</p>	<p>Amend SUB-P14 as follows:</p> <p>Provide for subdivision within riparian margins where:</p>

			In riparian margins landward of the coastal environment, the first step to assessing the potential effects of an activity (such as subdivision) on natural character requires determining the natural character rating, both at the site and area scales. Therefore, including a new policy to direct natural character ratings to be identified in riparian margins landward of the coastal environment will ensure that potential effects can be managed as part of the assessment of environmental effects in accordance with the natural character rating.	<p>1. The natural character is protected, and</p> <p>The subdivisions is designed to minimise the adverse effects of future use and development enabled by the subdivision on the natural character. Only allow for subdivision in riparian margins where adverse effect on natural character are avoided, and other adverse effects on natural character are avoided, remedied or mitigated.</p> <p>Include a new process policy as requested in the Natural Character chapter, for WCC to identify natural character ratings in riparian margins landward of the coastal environment and, in the interim, for WCC officers to work with applicants for resource consent to determine as to whether a natural character assessment is required as part of a resource consent process.</p>
Subdivision	SUB-P25	Support	This approach is appropriate.	Retain as notified.
Subdivision	SUB-P26	Support with amendment	Suggest amendments to bring the policy in line with the Objectives 19 and 20 and Policies 51 and 52 in Proposed RPS Change 1. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.	<p>Amend SUB-P26 as follows:</p> <p>Require subdivision of land within the port and railway yards within the Wellington Fault Overlay to incorporate mitigation measures that minimise the reduce or avoid an increase in risk to people, property and infrastructure from the ground shaking and fault rupture on the Wellington Fault.</p>
Subdivision	SUB-R17	Support with amendment	Where the activity does not comply with Rule SUB-R17.1.b, i.e. the building platform is within a stream corridor, a non-complying activity status is more appropriate instead of discretionary as proposed in the notified rule. Non-complying activity status allows full scrutiny of the application as part of the consent process and sends a message to applicants that consents generally will not be granted.	Amend to Non-Complying activity status
Subdivision	SUB-R18	Support with amendment	It is appropriate to require resource consent for subdivisions that create building platforms associated with potentially hazard sensitive activities within the inundation area of the Flood Hazard Overlay. However, the activity status should be restricted discretionary, not controlled. Restricted discretionary activity status gives Council the ability to decline an application if it is considered inappropriate or the mitigation measures are inadequate. The matter listed under SUB-R18 (2) is considered appropriate for restricted activity status.	Amend activity status to restricted discretionary
Subdivision	SUB-R23 Matters of discretion 1 and 4	Support with amendment	The policies listed in matter of discretion 1 should include Policy SUB-P25.	Amend SUB-R23 to include SUB-P25 as a matter of discretion.
Subdivision	SUB-S2	Support with amendments	This would reduce the demand on reticulated water supplies, to have regard to Policies FW.2, FW.3, FW.5 and CC.14 42 (q) in Proposed RPS Change 1, and Policy 45 in the Operative RPS.	Amend standard to require new lots connecting to the Council’s water supply system to include alternate supplies for non-potable use, such as roofwater collection systems among other possible sources.
Subdivision	SUB-S3	Support with amendments	<p>The specific reference to septic tanks or soakage fields should be updated to refer to on-site domestic wastewater treatment and disposal.</p> <p>The standard should provide for using approved alternative wastewater systems for de-centralised wastewater re-use and treatment (of grey and black water) and disposal anywhere where there are constraints on the existing network capacity, as well as where connections aren’t available.</p>	<p>Amend wording of clause 2 as follows:</p> <p>Where a connection to Council’s reticulated wastewater systems is not available, all allotments must be provided with on-site wastewater systems a septic tank or soakage field or an approved alternative means to dispose of sewage in a sanitary manner’.</p>

			<p>Providing for alternative wastewater treatment options aligns with recommendation 35 of Te Mahere Wai and gives effect to Te Mana o Te Wai. Alternative wastewater treatment options often reduce potable water use significantly. Reducing pressure of new development on the wastewater network may also make intensification in some areas with existing network capacity constraints more feasible.</p> <p>Relevant direction from the operative RPS includes policies 16 and 45. Relevant direction from Proposed RPS Change 1 includes policies FW.2, FW.3 and FW.5, CC.14 and 42(r), FW.5 and 58. Regional plan rules would apply to discharges from all wastewater systems to manage potential impacts on groundwater and surface water quality, aquatic ecosystems and soil health. These requirements could feasibly be met by approved alternative wastewater systems in both brownfield development and greenfield development.</p> <p>This standard should refer to additional requirements for on-site wastewater discharge under the Natural Resources Plan.</p>	<p>Provide for the possibility of de-centralised wastewater re-use and treatment (of grey and black water) and disposal using alternative approved wastewater systems anywhere where there are constraints on the existing network capacity, as well as where connections are not available. Where connections are available and there is network capacity, a connection to the wastewater network would still be required.</p> <p>Amend to refer to additional requirements for on-site wastewater discharge under the Natural Resources Plan.</p>
Subdivision	SUB-S4	Support with amendments	These standards should refer to additional requirements for stormwater discharge under the Natural Resources Plan.	Amend to refer to additional requirements for stormwater discharge under the Natural Resources Plan.
Coastal Environment				
Schedules, Coastal Environment provisions, Natural Character Provisions	SCHED-12 and approach to natural character mapping, CE-O1 and NATC-O1	Support with amendment	<p>Greater Wellington supports the work undertaken to identify and schedule sites of high natural character in the PDP. However, Greater Wellington is concerned that the wider area scale natural character assessment has not been scheduled in the PDP.</p> <p>Adverse effects on natural character cannot be managed at a site of high natural character (referred to in the 2016 Boffa Miskell natural character assessment as ‘components’) in isolation. They need to be considered in the broader context of the coastal environment, at the area scale in which the site of high natural character is located. This wider area-scale natural character rating should be at all natural character ratings levels (low-high) to provide the appropriate context to a site.</p> <p>A proposed activity in the site of high natural character needs to consider potential effects on both the specific site (what the PDP already contains in SCHED12) and the overall area scale rating, to give effect to NZCPS Policy 13(1)(b). This is because there also needs to be an assessment of whether there will be ‘significant adverse effects’ on natural character outside of the mapped sites of high natural character in the PDP. Undertaking this assessment would be best informed by an understanding of whether the broader area has been assessed as having low, moderate or high natural character. Conversely, for an activity not in a site of high natural character (as currently scheduled), the potential effects only need to be assessed on the overall area scale rating.</p> <p>The primary function of mapping area scale natural character ratings (low – high) in the PDP is to ensure applicants do not have to undertake this work as part of applications for resource consent, to give effect to NZCPS Policy 13(1)(b). It would not be efficient or effective to require applicants for resource consent to undertake this step as part of a consent process, especially when the work has already been commissioned by WCC, presumably to be included in the PDP. Mapping the full range of natural character areas in the PDP also provides more certainty to applicants/developers on areas that are more suitable/less suitable for development based on an improved understanding of the natural character values present.</p> <p>The secondary function of mapping and scheduling area scale natural character ratings, particularly areas assessed to be low and moderate, also means that restoration efforts can be</p>	<p>Map and schedule natural character ratings at all levels (low, moderate, high) at the wider area scale in Schedule 12, as undertaken in the 2016 Boffa Miskell natural character assessment.</p> <p>Amend the title of Schedule 12, so it refers to all coastal natural character areas, rather than areas of high natural character in isolation as follows:</p> <p><i>(SCHED 12 – High Coastal Natural Character Areas)</i></p> <p>Make the 2016 Boffa Miskell natural character assessment report publicly available alongside the PDP.</p>

			<p>targeted in the areas where natural character is required to be restored. It will also give effect to the requirements of NZCPS Policy 14(a), to identify opportunities for restoration if supported by policy direction that natural character should be restored and rehabilitated in areas with moderate to low natural character (see suggested amendments in relation to proposed CE-P3).</p> <p>To ensure planners and decision makers understand the key natural character values when assessing the potential effects of an activity, and therefore support the protection of natural character, we request that the 2016 Boffa Miskell natural character assessment report is made public.</p>	
Coastal Environment	CE-O1	Support with amendment	<p>Greater Wellington support the intent of Objective CE-O1 to preserve and protect natural character ratings across the landward extent of the coastal environment, rather than just in high natural character areas/sites of high natural character; this approach gives effect to the intent of NZCPS Policy 13(1)(b). However, we request amendments to the wording of Objective CE-O1 to be more aligned with NZCPS Policies 13 and 14 consistently across the PDP, as provided in the requested amendments. This is important as 'preserved' and 'protected' are the terms used in NZCPS Policy 13 and section 6(a) of the RMA and are more directive than the term 'maintained' in terms of the outcome to be achieved.</p> <p>Greater Wellington notes that the outcome of Objective CE-O1 cannot currently be achieved by the plan provisions, given natural character ratings have not been scheduled at the area scale across the full extent of the coastal environment. The relevant policies (such as CE-P5) also do not seek to manage the effects of development on natural character values across the full extent of the landward coastal environment. Mapping and scheduling area scale natural character ratings will ensure the appropriate plan provisions are included in the approach to ensure CE-O1 can be achieved and the provisions better give effect to NZCPS Policy 13(1)(b).</p>	<p>Amend to align with NZCPS Policies 13 and 15, specifically to reflect the requirement to "preserve" and "protect" natural character as follows.</p> <p>The natural character and qualities that contribute to the natural character within the landward extent of the coastal environment are maintained preserved and protected and, where appropriate, restored or enhanced rehabilitated.</p> <p>This includes any other consequential amendments required.</p> <p>Map and schedule area scale natural character ratings (low – high) as requested.</p>
Coastal Environment	CE-O2	Support with amendment	<p>Greater Wellington supports WCC's approach to protecting high natural character values in CE-O2. However, to give effect to NZCPS Policy 13(1)(b), natural character is also required to be preserved "in all other areas of the coastal environment", rather than just sites of high natural character in isolation.</p>	<p>Amend CE-O2 to refer to sites of natural character, in addition to areas of high natural character as per requested drafting as follows:</p> <p>High Coastal natural character areas</p> <p>Adverse effects on identified characteristics and values of sites and areas of high coastal natural character in the landward extent of the coastal environment are avoided.</p>
Coastal Environment	CE-O5	Support with amendment	<p>Suggest amendments to bring the policy in line with the Objectives 19 and 20 and Policies 51 and 52 in Proposed RPS Change 1.</p>	<p>Amend wording: Subdivision, use and development in the Coastal Hazard Overlays minimises reduces or does not increase the risk to people, property, and infrastructure.</p>
Coastal Environment	CE-O6	Support	<p>This approach is appropriate.</p>	<p>Retain as notified.</p>
Coastal Environment	CE-O9	Support with amendments	<p>Amend for consistency with Policy 52 in Proposed RPS Change 1. Green infrastructure has been defined in the WCC PDP with a strong focus on engineering systems that mimic natural systems, however there are other natural hazard mitigation measures that the change to the RPS directs consideration of, which are not captured by green infrastructure. We therefore seek for this policy to be broadened.</p>	<p>Amend objective to include non-structural, soft engineering or mātauranga Māori approaches.</p>
Coastal Environment	CE-P1	Support with amendments	<p>Natural character ratings have not been scheduled at the area scale across the full extent of the coastal environment. To give effect to Policies 13, 14 and 15 of the NZCPS, the area scale natural character ratings need to be included in the PDP.</p>	<p>Amend CE-P1 to widen the scope of the policy to also refer to area scale natural character ratings, as follows:</p>

				<p>Identification of the coastal environment and of high coastal natural character areas within the coastal environment</p> <ol style="list-style-type: none"> 1. Identify and map the landward extent of the coastal environment. 2. Identify and map sites areas of very high and high natural character and area scale natural character ratings within the coastal environment and list the identified values in SCHED 12 – High-Coastal Natural Character Areas.
Coastal Environment	CE-P2	Support	This approach is appropriate.	Retain as notified.
Coastal Environment	CE-P3	Support with amendment	<p>Greater Wellington supports the overall intent of CE-P3 to restore natural character, however natural character ratings have not been scheduled at the area scale across the full extent of the coastal environment. To give effect to Policies 13, 14 and 15 of the NZCPS, and assist with identification of the appropriate areas to restore, the area scale natural character ratings need to be included in the PDP and referred to in this policy.</p>	<p>Map and schedule area scale natural character ratings (low – high) identified in the 2016 Boffa Miskell natural character assessment.</p> <p>Amend CE-P3 to refer to natural character values as follows:</p> <p>Provide for restoration or rehabilitation of the natural character values and coastal and riparian margins within the landward extent of the coastal environment by:</p> <ol style="list-style-type: none"> 1. Recognising the values present that could be enhanced restored in areas of low and moderate natural character; 2. Encouraging natural regeneration of indigenous species, including where practical the removal of pest species; 3. Rehabilitating dunes or other natural coastal features or processes; 4. Restoring or protecting riparian and coastal margins; 5. Removing redundant structures that do not have heritage or amenity value; 6. Modifying structures that interfere with coastal or ecosystem processes; or 7. Providing for mana whenua to exercise their responsibilities as kaitiaki to protect, restore and maintain values in the coastal environmentareas of indigenous biodiversity.
Coastal Environment	CE-P5	Support with amendment	<p>CE-P5 does not give effect to NZCPS Policy 13(1)(b) which is to avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in all other areas which are not outstanding, rather than just in sites of high natural character.</p> <p>The policy needs be amended so that clause 1 applies to natural character in all areas of the coastal environment.</p>	<p>Map and schedule area scale natural character ratings (low – high) identified in the 2016 Boffa Miskell natural character assessment.</p> <p>Amend CE-P5 to manage effects across all coastal natural character areas as follows.</p> <p>Use and development in high-coastal natural character areas</p> <p>Only allow use and development in high coastal natural character areas in the coastal environment where:...</p>

Coastal Environment	CE-P8	Support with amendment	<p>CE-P8 does not give effect to NZCPS Policy 13(1)(b) which is to avoid significant adverse effects and avoid, remedy or mitigate other adverse effects of activities on natural character in areas which are not outstanding, rather than just in sites of high natural character in isolation.</p> <p>Greater Wellington requests amendments to the proposed approach for the reasons set out in response to CE-O1.</p> <p>Further, allowing for the removal of indigenous vegetation in areas of low and moderate natural character could lead to a reduction in natural character and would not give effect to CE-O1.</p>	<p>Map and schedule area scale natural character ratings (low – high) identified in the 2016 Boffa Miskell natural character assessment.</p> <p>Amend CE-P8 to refer to sites of high natural character in addition to area scale natural character ratings as follows:</p> <p>Manage the removal of vegetation in the coastal environment as follows:</p> <ol style="list-style-type: none"> 1. Allow for the removal of exotic vegetation in the coastal environment outside of high coastal natural character sites and areas; 2. Allow for the removal of exotic vegetation in the coastal environment within high coastal natural character sites and areas; and 3. Only allow for the removal of indigenous vegetation in the coastal environment within high coastal natural character sites and areas that: <ol style="list-style-type: none"> a. Is of a scale that maintains the identified values; or b. Is associated with ongoing maintenance of existing public accessways.
Coastal Environment	CE-P11	Support	This approach is appropriate.	Retain as notified.
Coastal Environment	CE-P12	Support with amendment	Amendments are necessary to have regard to the RPS Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.	<p>Amend CE-P12 as follows:</p> <p>Subdivision, use and development minimises reduces the risk to people, property and infrastructure by:...</p> <p>3. Avoiding subdivision, use and development in the high hazard area unless there is a functional and operational need for the building or activity to be located in this area and incorporates mitigation measures are incorporated that reduces-minimise the risk to people, property and infrastructure.</p>
Coastal Environment	CE-P13	Support	This approach is appropriate.	Retain as notified.
Coastal Environment	CE-P15	Support	This approach is appropriate.	Retain as notified.
Coastal Environment	CE-P16	Support with amendments	Amendments are necessary to have regard to the RPS Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.	<p>Amend CE-P16 as follows:</p> <p>Provide for potentially hazard-sensitive activities in the medium coastal hazard areas, or any subdivision where the building platform for a potentially hazard-sensitive activity will be within the medium coastal hazard areas where it can be demonstrated that:</p> <ol style="list-style-type: none"> 1. The activity, building, or subdivision incorporates measures that minimise reduce or do not increase the risk to people and property from the coastal hazard; and

Coastal Environment	CE-P17	Support with amendments	<p>Amendments are necessary to have regard to the RPS Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.</p> <p>Note: there is a typo in the wording of this policy – check the word ‘demonstrate’.</p>	<p>Amend CE-P17 as follows:</p> <p>Only allow hazard-sensitive activities in the medium coastal hazard area where, or any subdivision where the building platform for a hazard-sensitive activity will be within the medium coastal hazard area, where it can be demonstrated that:</p> <ol style="list-style-type: none"> 1. The activity, building or subdivision incorporates measures that demonstrate that minimise reduce or not increase the risk to people and property from the coastal hazard, and...
Coastal Environment	CE-P18	Support with amendments	<p>Amendments are necessary to have regard to the RPS Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.</p> <p>Note: there is a typo in the wording of this policy – check the word ‘demonstrate’.</p>	<p>Amend CE-P18 as follows:</p> <p>Avoid Hazard sensitive activities and potentially hazard sensitive activities in the high coastal hazard area or any subdivision where the building platform for a potentially hazard sensitive activity or hazard sensitive activity will be within the high coastal hazard area where it can be demonstrated that:...</p> <ol style="list-style-type: none"> 2. The activity, building, or subdivision incorporates measures that demonstrate minimise that reduce or not increase the risk to people, and property from the coastal hazard; ...
Coastal Environment	CE-P19	Support	This approach is appropriate.	Retain as notified.
Coastal Environment	CE-P20	Support with amendment	<p>Amendments are necessary to have regard to the RPS Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.</p>	<p>Amend CE-P20 as follows:</p> <p>Manage subdivision, development and use associated with the Airport, operation port activities, passenger port facilities and rail activities within the Coastal Hazard Overlays where they involve the construction of new buildings which will be occupied by members of the public, or over 10 employees associated with either of these activities by ensuring that:</p> <ol style="list-style-type: none"> 1. The activity, building or subdivision incorporates measures that minimise do not increase the risk to people, property, and infrastructure; and...
Coastal Environment	CE-P21	Support	This approach is appropriate.	Retain as notified.
Coastal Environment	CE-P22	Support with amendment	<p>Amendments are necessary to have regard to the RPS Objectives 19 and 20 and Policies 51 and 52. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.</p>	<p>Amend CE-P22 as follows:</p> <p>Manage subdivision, development and use within the City Centre Zone and within all of the Coastal Hazard Overlays, where they involve the construction of new buildings which will be occupied by members of the public, employees or result in the creation of a vacant allotment by ensuring that</p>

				1. The activity, building or subdivision incorporates measures that minimise reduce or not increase the risk to people, and property; and...
Coastal Environment	CE-P23	Support	This approach is appropriate.	Retain as notified.
Coastal Environment	CE-P24, CE-P25, CE-P26	Support with amendments	Amendments are required to have regard to Policy 52 in Proposed RPS Change 1. Green infrastructure has been defined in the WCC PDP with a strong focus on engineering systems that mimic natural systems, however there are other natural hazard mitigation measures that the change to the RPS directs consideration of, which aren't captured by green infrastructure. We therefore seek for this policy to be broadened.	Amend policies to include non-structural, soft engineering or mātauranga Māori approaches.
Coastal Environment	CE-R7	Support with amendments	Greater Wellington recognises that provision has been made to control subdivision, use and development, however, we consider amendment would give effect fully to Policy 3 of the Operative RPS and support plan users by providing clarification and assisting interpretation.	Amend CE-R7.2 by inserting reference to the use of design guides to support implementation.
Coastal Environment	CE-S2	Support with amendments	Greater Wellington seeks that buildings or structures in sites of high natural character do not exceed the relevant standards. Greater Wellington also requests amendment to the mapping, to ensure the area scale ratings are mapped and scheduled in the PDP (of particular relevance for CE-S2 are the high area scale ratings) and amend CE-S2 to refer to sites of high natural character, in addition to the area scale assessments. Greater Wellington request these amendments to ensure the proposed approach gives effect to NZCPS Policy 13(1)(b).	Map and schedule area scale natural character ratings (low – high) identified in the 2016 Boffa Miskell natural character assessment. Greater Wellington requests an amendment to CE-S2 to refer to sites of high natural character, in addition to areas of high natural character. CE-S2 1. Buildings or structures in high coastal natural character sites and areas must not exceed: a. A maximum height of 5m above ground level; and b. A gross floor area of 50m ² 2. The exterior façade and roof must be finished in a colour that is contained within Groups A, B or C of BS5252 and that does not exceed a reflectance value of 30%. (Note: Some colours in Groups A, B or C of BS5252 have a reflectance value of over 30% and are therefore not compliant.) Any consequential relief as is necessary to achieve consistency with the above and to satisfy the concerns.
Planning Maps	Mapping: Natural character ratings	Oppose	The proposed mapping approach is not appropriate to achieve CE-O1, does not fully incorporate the 2016 Boffa Miskell assessment, and will be less effective in giving effect to NZCPS 13(1)(b).	Map and schedule area scale natural character ratings (in addition to the sites of high and very high natural character already included in the proposed approach) identified in Boffa Miskell's natural character assessment (2016).
Earthworks				
Earthworks	Slope stability provisions	Support	Minimising the risks associated with slope instability is consistent with hazard provisions in the RPS. Greater Wellington supports slope failure being incorporated into the earthworks chapter to manage impacts on slope stability through EW-O1, EW-P2, EW-P3 and EW-S3.	Retain as notified.
Earthworks	New policy sought	Support with amendments	Greater Wellington considers that the earthworks policies do not adequately recognise the potential impacts of sedimentation on tangata whenua values, particularly with regard to mahinga kai and access for mahinga kai purposes. A new policy should be inserted that	Insert a new policy to avoid adverse effects of earthworks on surface water bodies, Māori freshwater values, including mahinga kai and access.

			recognises the potential adverse effects of earthworks on water bodies and mahinga kai and this should also be a relevant matter of discretion for restricted discretionary rules in this chapter, to have regard to Proposed RPS Change 1 (policy FW.3).	
Earthworks	EW-P2	Support with amendment	Amend to have regard to the Objectives 19 and 20 and Policies 51 and 52 in Proposed Change 1 to RPS. Minimise is defined as “as low as reasonably practicable (ALARP)” and is in line with standard risk-based hazard management approaches. This leaves room for reduction as far as practicable but is a clearer signal than reduce or do not increase, to actively look to bring down the risk in the design and planning of the development.	Amend EW-P2 as follows: Enable the efficient use and development of land by providing for earthworks and associated structures where: 1. The risk associated with instability is minimised not increased ...
Earthworks	EW-P4	Support with amendment	Greater Wellington supports the requirement for earthworks to adopt effective erosion and sediment control measures and dust control measures for earthworks proposals. However, to have regard to Proposed RPS Change 1 (policies FW.3 and 15) and give effect to the NPS-FM, this policy should be strengthened to better protect waterways and the coastal environment. This policy should more directly require details about erosion sediment control methods that are currently incorporated as assessment matters and their provision through erosion and sediment control plans. This will aid in the understanding of requirements by plan users.	Amend EW-P4 to require erosion and sediment control measures which are designed and will be managed in accordance the principles and methods in the GWRC’s Erosion and Sediment Control Guide for Land Disturbing Activities in the Wellington Region 2021 and which are set out in an erosion and sediment control plan.
Earthworks	EW-P9, EW-P10, EW-P12	Support with amendment	The tenure of these policies is more enabling than other similar policies which ‘only allow for earthworks where..’	Replace ‘provide for’ with ‘only allow for..’ for consistency with other policies.
Earthworks	EW-P16	Support	It is essential to limit earthworks undertaken within Flood Hazard Overlays, allowing them only where the flooding risk is not increased, and the conveyance of floodwaters is not affected.	Retain as notified.
Earthworks	EW-P17	Support	It is important to restrict the earthworks undertaken on community scale natural hazard mitigation structures, only allowing these works where the form and functioning of these structures is not affected in the long term.	Retain as notified.
Earthworks	EW-P18	Support	It is appropriate to enable earthworks associated with natural hazard mitigation works where the matters listed in the policy result, including a reduction in the risk at a community scale and are part of a planned works programme.	Retain as notified.
Earthworks	EW-P19	Support	It is appropriate to provide for earthworks associated with soft engineering natural hazard mitigation works where there is a risk reduction benefit, and do not increase the risk to another property, and have a maintenance programme in place.	Retain as notified.
Earthworks	EW-P20	Support with amendment	The tenure of these policies is more enabling than other policies. These greenfield developments have the potential for significant effects on surrounding areas in terms of compatibility and effects downstream in Porirua Stream and Onepoto Arm of Porirua Harbour.	Replace ‘enable earthworks’ with ‘only allow for..’ for consistency with other policies.
Earthworks	EW-P16.2.1 Matters of discretion	Support with amendment	The notified Rule EW-R16.2.1 appears to refer to the incorrect Policy as the assessment matters. The Plan incorrectly refers to EW-P14, which is the policy relating to earthworks in outstanding natural features and landscapes.	Correct reference to EW-P16 (the specific policy relating to earthworks in Flood Hazard Overlay).
Earthworks	Earthworks rule requirements	Support with amendment	Greater Wellington notes that currently rules only have assessment matters regarding the extent and effect of non-compliance on identified, ecological values or amenity values or landscape values for earthworks in riparian areas. To have regard to the Proposed RPS Change 1 (policies FW.3 and 15) Greater Wellington considers an amendment is required to include matters of control or discretion which protect cultural values.	Include matter of control or discretion regarding the <i>potential for adverse effects on water quality of any waterbody, wahi tapu, wahi taonga and habitat of any significant indigenous species.</i>
Earthworks	EW-S3, EW-S14	Support with amendment	The Natural Resources Plan defines erosion prone land as greater than 20°. A slope of 34° or higher, as drafted, is very steep. Using this slope has the potential to create more effects on the environment than the standard would anticipate. Greater Wellington also notes that 34° is difficult to calculate on the ground.	Consider reducing the existing slope angle to 20° for consistency with the Natural Resources Plan.
Earthworks	EW-S4	Support with amendment	For consistency with the Natural Resources Plan, it is worth noting similar rules in the regional plan which occur for different purposes for the same activity. For example, Rule R70 of the Natural Resources Plan controls cleanfills and Rule R99 controls earthworks. Note also that the limits can be different between plans and rules, so all relevant provisions should be considered.	Consider including advice note referring to similar rules in the Natural Resources Plan which may be relevant.
All Zones				

All zones	MRZ-R12, MRZ-PREC01-R3, MRZ-PREC02-R2, HRZ-R11, LLRZ-R11, GRUZ-R16, NCZ-R16, LCZ-R17, COMZ-R8, MUZ-R15, MCZ-R19, CCZ-R18, GIZ-R9, NOSZ-R12, OSZ-R12, SARZ-R14, CORZ-R13, HOSZ-R4, PORTZ-R3, PORT-PREC01-R6, PORT-PREC02-R5, QUARZ-R6, STADZ-R5, TEDZ-R5, WFZ-R13, WTBZ-R9, DEV2-R42, DEV3-R26	Support with amendment	Greater Wellington supports the permitted activity status for the demolition of buildings provided that building waste is properly disposed of. This gives effect to Policy 34 of the operative RPS.	Include a rule requirement for all rules that permitted activity status is subject to building and demolition waste being disposed of at an approved facility.
Residential zones				
Residential zones	Approach to High Density Residential Zone zoning along Johnsonville Rail Line	Oppose	<p>In classifying the Johnsonville Rail Line as a rapid transit service, the Regional Transport Committee referenced the definition of rapid transit contained in the NPS-UD and considered the definitions for PT1 classification contained in Waka Kotahi’s One Network Framework that includes all metro rail corridors and the Regional Public Transport Plan.</p> <p>Local authorities identify and enable rapid transit services within the Wellington Region through the Regional Land Transport Plan and the Joint Leadership Committee. This in turn enables territorial authorities to ‘up-zone’ surrounding walkable catchment areas under NPS-UD Policy 3c. It is important to note that the identification of a rapid transit service in the Regional Land Transport Plan enables changes to district plan zoning to occur but does not require them.</p> <p>The Johnsonville Rail Line is a key part of the region’s transport network, and well placed to increase its future role. This rail line is a dedicated public transport corridor. As a dedicated corridor, it does not have the challenges of segregation with other users required on other mixed-mode corridors. It is a key component of the regional transport network and is integrated into this network.</p> <p>There are planned improvements to the infrastructure and services on the Johnsonville Rail Line, as outlined in the Regional Land Transport Plan and Regional Public Transport Plan. The region’s rapid transit network is defined as the four heavy rail lines converging on Wellington Railway Station from the north and future MRT to the south of Wellington. This network, along with the high frequency bus routes forms the core of Metlink’s public transport network. The Johnsonville Line continues to be improved and better integrated into the broader network, most recently with the rollout of Snapper across the rail network and shortly with the introduction of a new fares structure. Development of MRT through Wellington will see increased transfers between the heavy rail segments of the network and MRT, allowing seamless trips to key destinations such as the Regional Hospital. In the next few years, we anticipate the introduction of the new national ticketing system, providing for integrated ticketing across the public transport network.</p>	Recognise that the Johnsonville Railway Line is a rapid transit line as classified in the RLTP 2021 and the Wellington Regional Growth Framework and amend the zoning accordingly where appropriate.

			<p>The Government's recently released Emissions Reduction Plan sets ambitious targets for mode shift and carbon emission reductions in cities like Wellington. Achieving future Vehicle Kilometres Travelled reduction targets will require greater use of both public transport and active transport modes. The Johnsonville Rail Line will play a key part in mode shift for journeys from the north of Wellington to and from the central city and other key destinations.</p> <p>Greater Wellington is not aware of any intention to alter the current classification of the Johnsonville Rail Line as a rapid transit service within the Regional Land Transport Plan.</p>	
Residential Zones	Medium density residential zone	Support with amendment	<p>Greater Wellington supports well-planned intensification within the existing urban footprint in appropriate areas that are not subject to a qualifying matter. This approach is consistent with Policy 31 of Proposed RPS Change 1.</p> <p>Greater Wellington seeks for the provisions of the zone to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1. This includes (but is not limited to) urban areas that are climate resilient, contribute to the protection of the natural environment and transition to a low-emission region, are compact and well connected, support housing affordability and choice, and enable Māori to express their cultural and traditional norms.</p>	<p>Ensure the Medium Density Residential Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics.</p> <p>See submission point relating to residential design guide references.</p>
Residential Zones	High density residential zone	Support with amendment	<p>Greater Wellington supports well-planned intensification within the existing urban footprint in appropriate areas that are not subject to a qualifying matter. This approach is consistent with Policy 31 of Proposed RPS Change 1, except for how this zone has been applied around the Johnsonville Rail Line.</p> <p>Greater Wellington seeks for the provisions of the zone to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1. This includes (but is not limited to) urban areas that are climate resilient, contribute to the protection of the natural environment and transition to a low-emission region, are compact and well connected, support housing affordability and choice, and enable Māori to express their cultural and traditional norms.</p>	<p>Ensure the High Density Residential Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics.</p> <p>See submission point relating to residential design guide references and papakāinga design guide.</p> <p>See submission point relating to the mapping of the High Density Residential Zone and the classification of the Johnsonville Rail Line as rapid transit.</p>
Residential Zones	Large lot residential zone	Support with amendment	<p>Greater Wellington seeks for the provisions of the zone to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1. This includes (but is not limited to) urban areas that are climate resilient, contribute to the protection of the natural environment and transition to a low-emission region, are compact and well connected, support housing affordability and choice, and enable Māori to express their cultural and traditional norms.</p> <p>Greater Wellington notes that the MDRS will not apply to these lots. We therefore support that the extent of this zone appears to be relatively minimal.</p>	<p>Ensure the Large Lot Residential Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics.</p> <p>See submission point relating to residential design guide references and papakāinga design guide.</p>
Residential Zones	General Rural zone	Support with amendment	<p>The approach taken in this zone aligns with Policy 56 of Proposed RPS Change 1 and gives effect to Policy 56 in the Operative RPS.</p>	<p>See submission point about flood hazard mapping for the General Rural Zone.</p> <p>See submission point relating to rural design guide references and papakāinga design guide.</p>
Residential Zones	Commercial and mixed-use zones	Support with amendment	<p>The approach taken across these zones gives effect to operative RPS policy 30.</p> <p>Greater Wellington seeks for the provisions across these zones to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1. This includes (but is not limited to) urban areas that are climate resilient, contribute to the protection of the natural environment and transition to a low-emission region,</p>	<p>Ensure the Commercial and Mixed-use Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics.</p>

			are compact and well connected, support housing affordability and choice, and enable Māori to express their cultural and traditional norms.	See submission point relating to Centres and Mixed-Use design guide references and papakāinga design guide.
Residential Zones	General Industrial zone	Support with amendment	The approach taken in this zone aligns with Policy 32 of Proposed RPS Change 1. Greater Wellington seeks for the provisions of the industrial zone to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1.	Ensure the General Industrial Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics.
Residential Zones	Open Space Zones	Support with amendment	Greater Wellington seeks for the provisions of the Open Space Zones to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1. Greater Wellington supports the provision for customary practices in this zone.	Ensure the Open Space Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics.
Residential Zones	Special Purpose Zones	Support with amendment	Greater Wellington seeks for the provisions of the Special Purpose Zones to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1.	Ensure the Special Purpose Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics.
Residential Zones	Future Urban zone	Support with amendment	Greater Wellington supports the direction to coordinate planning and development in this chapter, as this aligns with RPS direction. Greater Wellington seeks for the provisions of the Future Urban Zone to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1. Greater Wellington seeks that the future urban zone gives effect to the NPS-FM by ensuring that freshwater bodies are required to be identified and protected during development planning.	Ensure the Future Urban Zone provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics. Ensure future urban zone provisions have regard to Proposed RPS Change 1 policies 55, UD.3 and 57 as required. Give effect to the NPS-FM by ensuring that freshwater bodies are required to be identified and protected during development planning.
Development Areas				
Development Areas	Development Area Zones and Development Plans in Appendices	Support with amendment	Greater Wellington seeks for the Development Areas to contribute to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1. Greater Wellington recognises the efforts to mitigate potential environmental and cultural impacts of greenfield development through development planning, and to provide for SNAs, amenity, open space, bus services and mixed use activities (particularly in Lincolnshire Farms). However, Greater Wellington questions the need for any new greenfield development in the PDP at this point, given the scale of intensification within the existing urban footprint provided for through the PDP.	Ensure the Development Area provisions have regard to the qualities and characteristics of well-functioning urban environments as articulated in Objective 22 of Proposed RPS Change 1, by including necessary objectives, policies, permitted standards and rules that provide for these qualities and characteristics. Consider whether greenfield development is necessary in the PDP at this stage given: <ul style="list-style-type: none"> the scale of intensification provided for within the existing urban footprint whether the proposed greenfield development areas can provide for well-functioning urban environments the potential environmental and cultural impacts of greenfield development, for example the extensive earthworks required, and whether they can be appropriately mitigated while still providing appropriate amenities and density

Lincolnshire Farm	DEV2-P1	Support with amendment	<p>Suggest amendment to align with what is included in the Upper Stebbings and Glenside West Policies and signal the importance of including public transport and active modes in developments.</p> <p>The Regional Public Transport Plan 2021 states Greater Wellington will work with its regional partners to ensure new developments can accommodate public transport.</p>	<p>Amend sub-clause 8 as follows:</p> <p>The road and access network provides high connectivity key connections to a well-connected transport network, including roads, public transport links and walking and cycling routes that assist in reducing carbon emissions and traffic congestion and provide a high-quality street environment for people</p>
Design Guides				
Design Guides	General	Support with amendment	The design guides are one part of how the District Plan can give effect to the NPS-FM, and should rate freshwater matters with appropriate weight throughout the guides. The current ratings for guidelines for stormwater, freshwater bodies and water conservation are currently rated as having lowest weight in the residential design guide for example.	<p>Amend design guides as necessary to give effect to the NPS-FM, including by rating freshwater guidelines to recognise their importance.</p> <p>Also apply ratings for freshwater matters equally between rural and urban design guides.</p>
Design Guides	All design guides	Support with amendment	The Regional Standard for Water Services is not referenced directly through design guides, which provides technical engineering detail and contains specific infrastructure requirements for development.	<p>Reference the Regional Standard for Water Services in design guides.</p> <p>Ensure emphasis on water conservation throughout guides, including mandate for the use of rainwater tanks and other best practices for water conservation such as low-flow devices, in new developments.</p>
Design Guides	Subdivision Design Guide G21	Support with amendment	Greater Wellington supports the intent of this guideline, however the current phrasing could suggest that piping streams is a way to avoid adverse effects on water quality.	<p>Suggest amending to:</p> <p>'Streams or wetlands should not be disturbed. However, where development does impact a stream (such as piping streams), alternative design solutions for stormwater management must be provided that will not adversely affect the waterway's quality or ecological health, such as piping streams.'</p>
Design Guides	Subdivision Design Guide G21	Support with amendments	<p>Greater Wellington supports this guideline but oppose the first bullet point. Existing natural wetlands should not be used as stormwater treatment devices. Using natural wetlands as stormwater devices requires disruptive maintenance activities, so constructed wetlands built for that purpose are required. Natural wetlands should not be affected by the development and improved where possible.</p> <p>Greater Wellington strongly supports the identification and protection of existing watercourses and wetlands, but care should be taken not to encourage potentially damaging activities in them.</p>	Amend wording of first bullet point to avoid suggesting utilization of natural wetlands and watercourses as stormwater devices.
Design Guides	Rural design guide	Support with amendments	There is no mention of on-site wastewater in the rural design guide, which represents a potential contaminant source in the rural environment.	Include mention of on-site wastewater system installation, discharge fields, treatment/maintenance and potential adverse effects in the rural design guide.
Design Guides and throughout Plan	Papakāinga design guide	Support with amendment	<p>Greater Wellington supports the Papakāinga Design Guide and the approach to providing for papakāinga using guiding Kaupapa, as long as this design guide does not undermine tino rangatiratanga. Currently the District Plan only references this design guide for Tapu Te Ranga land in the Medium Density Residential Zone.</p> <p>We note that there is no papakāinga chapter, nor are papakāinga activities specifically provided for in the zone chapters. The PDP does not provide for papakāinga on Māori owned land or ancestral land.</p>	<p>Ensure the approach to providing for the occupation, use, development and ongoing relationship of mana whenua / tangata whenua with their ancestral land, and enabling Māori to express their cultural and traditional norms, has regard to direction from Policies UD.1 and UD.2 in Proposed RPS Change 1.</p> <p>The PDP should include a Papakāinga chapter and provide for papakāinga on Māori owned land or ancestral land throughout the zone chapters.</p> <p>Clarify how the Papakāinga Design Guide will apply in areas outside the Tapu Te Ranga land.</p>

Designations				
Designations	Greater Wellington Regional Council designations	Support	Support the retention of the designations.	Retain as notified.
Designations	Seton Nossiter flood detention Dam	Support in part	Greater Wellington notes that the development and residential intensification proposed upstream and downstream of Seton Nossiter Dam will affect its level of service. While we acknowledge the hydraulic neutrality provisions in the Three Waters chapter, any new development will still affect the dam.	Retain as notified.
Designations	Stebbing's Valley Flood detention Dam and associated designations	Support in part	Greater Wellington notes that the development and residential intensification proposed upstream and downstream of Stebbings Valley Dam will affect its level of service. While we acknowledge the hydraulic neutrality provisions in the Three Waters chapter, any new development will still affect the dam and associated infrastructure.	Retain as notified.
Appendices				
Appendices	APP10	Support	Greater Wellington supports the requirement for masterplans for the Inner Harbour Port Precinct and Multi User Ferry Precinct and recognition in the draft Plan of the need to enhance access by active modes and public transport and to ensure good transport network integration.	Retain as notified.

Waka Kotahi NZ Transport Agency Reference: 2022-1092

12 September 2022

Wellington City Council
Attn: Policy Planning Team
PO Box 2199
Wellington 6140

Via email: Wellington City Council submissions page

Dear Wellington Planning Team,

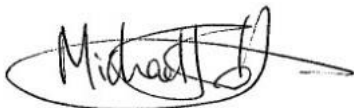
Submission on Proposed Wellington District Plan

Attached is the Waka Kotahi NZ Transport Agency submission on the Proposed Wellington District Plan.

We welcome the opportunity to discuss the contents of our submission with council officers as required.

If you have any questions, please contact me.

Yours sincerely



Mike Scott
Principal Planner– Poutiaki Taiao / Environmental Planning
System Design, Transport Services

Phone: 021 453 680

Email: mike.scott@nzta.govt.nz

FORM 5, CLAUSE 6 OF SCHEDULE 1, RESOURCE MANAGEMENT ACT 1991

Submission on Proposed Wellington District Plan

To: Wellington City Council
Attn: Policy Planning Team
PO Box 2199
Wellington 6140

Via Wellington City Council submission page
(<https://eplan.wellington.govt.nz/proposed/rules/0/301/0/0/0/31>)

From: Waka Kotahi NZ Transport Agency
PO Box 5084,
Lambton Quay
WELLINGTON 6145

1. This is a submission on the following:

The Proposed Wellington District Plan notified on 18 July 2022.

2. Waka Kotahi NZ Transport Agency (Waka Kotahi) could not gain an advantage in trade competition through this submission.

3. Role of Waka Kotahi

Waka Kotahi is a Crown Entity established by Section 93 of the Land Transport Management Act 2003 (LTMA). The objective of Waka Kotahi is to undertake its functions in a way that contributes to an effective, efficient, and safe land transport system in the public interest. Waka Kotahi roles and responsibilities include:

- Managing the State Highway system, including planning, funding, designing, supervising, constructing, maintaining and operating the system.
- Managing funding of the land transport system, including auditing the performance of organisations receiving land transport funding.
- Managing regulatory requirements for transport on land and incidents involving transport on land.
- Issuing guidelines for and monitoring the development of regional land transport plans.

Waka Kotahi interest in this proposal stems from its role as:

- A transport investor to maximise effective, efficient and strategic returns for New Zealand.
- A planner of the land transport network to integrate one effective and resilient network for customers.
- Provider of access to and use of the land transport system to shape smart efficient, safe and responsible transport choices.
- The manager of the State Highway system and its responsibility to deliver efficient, safe and responsible highway solutions for customers.

4. Government Policy Statement on Land Transport

Waka Kotahi also has a role in giving effect to the Government Policy Statement on Land Transport (GPS). The GPS is required under the LTMA and outlines the Government's strategy to guide land transport investment over the next 10 years. The four strategic priorities of the GPS 2021 are safety, better travel options, climate

change and improving freight connections. A key theme of the GPS is integrating land use, transport planning and delivery. Land use planning has a significant impact on transport policy, infrastructure and services provision, and vice versa. Once development has happened, it has a long-term impact on transport. Changes in land use can affect the demand for travel, creating both pressures and opportunities for investment in transport infrastructure and services, or for demand management. For these reasons, Waka Kotahi seeks full utilisation of the tools available to Council to enable development in the most accessible urban areas.

5. Waka Kotahi view on the Proposal

- a. Waka Kotahi supports the intent and content of the National Policy Statement on Urban Development (NPS-UD). This Policy Statement recognises the national significance of having well-functioning urban environments that enable people and communities to provide for their social, economic and cultural well-being and for their health and safety. The NPS-UD has a strong focus on ensuring that increased densities are provided in the most accessible parts of urban areas, where communities are able to access jobs, services and recreation by active and public transport modes.
- b. Waka Kotahi also supports the requirements of the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021. It seeks the full implementation of these requirements, including the introduction of the Medium Density Residential Standards (MDRS) and related provisions in eligible zones. These standards should only be modified to accommodate qualifying matters, and should be modified only to the extent required to accommodate these matters. Qualifying matters should be supported by a strong evidence base to ensure a robust application.
- c. In respect of the Proposed Wellington District Plan, Waka Kotahi is generally supportive of the proposed changes and provisions put forward by Wellington City Council.
- d. Waka Kotahi view on specific topics are set out in the following paragraphs. These views are supported by the text in Table 1, which outlines Waka Kotahi's submission points where further information, clarification or a change in approach are sought. Table 1 also sets out submission points on specific provisions in the Plan Change.
- e. The application of 'walkable catchment' & application of commensurate densities
 - i. Policy 3 of the NPS sets out various requirements in respect of providing for increased densities and heights in the Central City, Metropolitan Centre Zones, and walkable catchments from existing and planned rapid transit stops, the edge of City Centre Zones and the edge of Metropolitan Centre Zones. It also directs councils to amend other residential zones to enable building heights and densities of urban form commensurate with the level of commercial activity and community services in those zones.
 - ii. Waka Kotahi supports the application of a minimum walkable catchment of 1500m from the edge of the Central City Zone, within which District Plan provisions should be amended to enable a minimum of 6 storey developments. The catchment should be measured along pedestrian infrastructure rather than 'how the crow flies'. It is considered that a catchment of 1500m will enable the realisation of benefits associated with high densities, including access to services, employment and recreation. A large base population will also support existing and future public and active transport mode initiatives.
 - iii. For Metropolitan Centre Zones and existing or planned rapid transit stops, the walkable catchment should be a minimum of 800m. This distance recognises the critical importance of these matters in contributing towards a well-functioning urban environment where more people have easier access to more services.
 - iv. Waka Kotahi considers that Council should take a long-term, enabling view of development in the Local Centre Zone and that this should be reflected in the densities proposed.
 - v. Detailed feedback on Wellington City Council's approach to Policy 3 is set out in Table 1 below.

- f. Assessment of Special Character Precincts against other criteria
- i. Wellington City Council is proposing special character precincts to be applied as a qualifying matter in many of the central suburbs of Wellington. The extent of the controls in the most accessible areas of the city and the stringent nature of the provisions which would prevent removal of existing dwellings and/or their replacement with denser forms of development is not supported by Waka Kotahi. Waka Kotahi considers that special character is one aspect of urban development that needs to be carefully weighed up against the benefits of increased densities, including potential reduction in greenhouse gas emissions and vehicle kilometres travelled. This approach is consistent with a strategic planning approach that considers the benefits and costs of different zoning provisions. The weighting exercise that has been done does not appropriately consider the wider costs from the application of these precincts. Without a weighting exercise, which includes the benefits of development in these key locations, the potential opportunity cost of retaining/introducing Special Character Precincts and the extent that they have been applied is not known.
- g. Reverse Sensitivity (Noise and Vibration)
- i. Waka Kotahi is generally supportive of the direction of the notified noise chapter which introduces requirements for building in proximity to State Highway. These provisions generally support the upzoning by protecting the health and amenity of future residents of the new dwellings. Waka Kotahi seeks to work together with the council as the proposed plan progresses to incorporate mapped noise contours rather than a blanket rule. If a blanket distance is the preferred approach of the Council, a distance of 100m is more appropriate in ensuring that dwellings are appropriately designed for their environment.
- ii. There are presently no provisions within the operative plan to manage noise and vibration. This means that, where there are enabling density provisions that have immediate legal effect, applicants will be able to build to greater densities but are not currently required to manage the effects of noise and vibration. Waka Kotahi considers that the noise and vibration provisions should have immediate legal effect, where the density provision that have immediate legal effect are in play. Waka Kotahi is concerned about the risk of intensification occurring in proximity to road noise traffic on state highways which are not designed to appropriately mitigate the noise and vibration effects in the existing environment, and people in those dwellings should be protected from potential health effects.
- iii. Waka Kotahi submits that the Council address this gap. In order to provide for a healthy indoor noise environment for residents of new buildings in the Medium- and High-Density Residential Zones in the transitional period before the proposed district-wide noise provisions are made operative, the reverse sensitivity provisions should be included as a qualifying matter to the application of the Medium and High-Density Residential Standards for Wellington City.
- h. The HSAA sets out that financial contribution provisions may be included or changed as part of the IPI process (s. 77). Waka Kotahi supports the use of financial contributions as a financial tool to contribute towards public realm improvement projects, and seeks that consideration be given to initiatives and/or infrastructure that supports mode shift.
- i. Greenfield Rezonings – Kilbirnie Bus Barns, Lincolnshire Farm, Upper Stebbings & Glenside West. Waka Kotahi seeks that rezoning of this scale should be supported by a comprehensive Structure Plan process that considers all aspects of the proposal, including transportation requirements, three waters, open space and commercial needs.
- j. Trip generation:
- i. Waka Kotahi supports the intent of the Transport section and are generally supportive of the provisions in the chapter. However, we do have concerns around the trip generation number that has been used. This seems high for any 'activity' in the District Plan and could have potential safety and efficiency implications on the transport network, specifically the state highway network. Waka Kotahi therefore requests that any the trip generation for any 'activity' is 100 vehicles per day to allow Waka Kotahi the possibility to comment on potential resource consents that generate over 100 vehicles per day.

- k. Signs:
 - i. Waka Kotahi is pleased with the direction of the signs chapter, with specific provisions that relate to digital billboards and their effects. Waka Kotahi also supports the consideration of effects including cumulative to road safety as a result of signage. The chapter as notified is consistent with the goals in the RLPT to improve safety on the roads in the region by restricting signs where they are inappropriate or unsafe. A non-complying activity status is sought for any digital billboard that is oriented to be viewed from state highway, or within 100m from a state highway intersection, which is supported by the objectives, policies, standards, and general direction of the chapter. In addition to this, Waka Kotahi recommends that the interaction between the rules in the rule table are made clearer to minimise confusion for applicants.
- l. Further to the specific submission points above and in the table below, Waka Kotahi has an interest in any matter that may affect the safe and efficient functionality of the land transport network for all modes and users.

6. The submission of Waka Kotahi is:

- (i) Waka Kotahi supports, is neutral, and opposes the Proposed Wellington District plan to the extent outlined in this submission. Specific submission points are included in the attached table.

Change No.	Chapter	Plan Provision	Support / Oppose	Reasons	Relief Sought
1	Definitions	Access	Support	Support the definition of access.	Retain the definition of access as notified
2	Definitions	Access lot	Support	Support definition of access lot as it has a more comprehensive explanation.	Retain definition of “access lot” only.
3	Definitions	Access allotment	Oppose	Redundant as it duplicates definition of access lot and access strip.	Remove definition and consequential changes in the plan to change “access allotment” to “access lot”
4	Definitions	Access strip	Oppose	Redundant as it duplicates definition of access allotment and access lot	Remove definition and consequential changes in the plan to change “access strip” to “access lot”
5	Definitions	Active transport	Add	There is currently no definition for active transport, but several references to it in the PDP. For the sake of clarity, Waka Kotahi seeks that a definition be provided, and that the definition include cycling, micro-mobility and walking (including to and from public transport journeys).	There is currently no definition for active transport, but several references to it in the PDP. For the sake of clarity, Waka Kotahi seeks that a definition be provided, and that the definition include cycling, micro-mobility and walking (including to and from public transport journeys).
6	Definitions	Additional infrastructure	Support	Support the definition of additional infrastructure.	Retain definition of additional infrastructure as notified.
7	Definitions	Ancillary Transport Network Infrastructure	Support with amendments	The list appears to be illustrative and not exhaustive. Waka Kotahi seeks that it be amended to say “...transport network and includes, but is not limited to:” Also, “rapid transit stops and shelters” should be specifically included in this definition.	Amend to “... <i>transport network and includes, but is not limited to:</i> ” Also, “rapid transit stops and shelters” should be specifically included in this definition.

8	Definitions	Cycle	Support	Support the definition of cycle.	Retain the definition of cycle as notified.
9	Definitions	Design speed	Support	Support the definition of design speed.	Retain the definition of design speed as notified
10	Definitions	Development infrastructure	Support	Support the definition of development infrastructure	Retain the definition of development infrastructure, but note broken link to the definition in SCA-O2.
11	Definitions	Digital sign	Support with amendments	Amendments needed to include <u>and/or</u> between electronic graphics and text using electronic screens to make it clear that the clauses are not necessarily conjunctive.	Amend the definition to include <u>and/or</u> between electronic graphics and text using electronic screens
12	Definitions	Education facility / educational facility.	Support with amendments	One definition is superfluous, but both terms are used in the PDP. Waka Kotahi preference is for the definition of "Educational facility" to be used throughout the PDP, so that child-care facilities are also clearly subject to reverse sensitivity (as they will then come under the definition of sensitive activity).	Remove "education facility" and retain "educational facility" is throughout the plan
13	Definitions	Habitable room	Support	Support the definition of habitable room for reverse sensitivity purposes.	Retain definition of habitable room as notified.
14	Definitions	Heavy vehicle	Support	Support the definition of heavy vehicle as different size vehicles can affect the transport network differently.	Retain the definition of heavy vehicle as notified.
15	Definitions	Illuminated sign	Support	Support the definition of illuminated signs as it includes internally or externally illuminated signs.	Retain the definition of illuminated signs as notified.
16	Definitions	Maintenance and repair	Support	Support the definition of maintenance and repair.	Retain the definition of maintenance and repair as notified.
17	Definitions	Micromobility device	Support	Support the definition of Micromobility device.	Retain the definition of Micromobility device as notified

18	Definitions	Network utility operator	Neutral	Waka Kotahi is concerned that this definition (though set by the national planning standard) may exclude operators of the state highway, as roads are often defined as the network managed by the territorial authority	Amend references to “network utility operator” where it appears in the plan to “network utility operator and state highway network operator”.
19	Definitions	Operating speed	Support	Support the definition of operating speed.	Retain the definition of operating speed as notified.
20	Definitions	Official sign	Support with amendments	Support the definition, however, please note there are two definitions for official sign.	Retain as notified as this aligns with the national planning standard definitions and the additional official sign definition be deleted. means all signs required or provided for under any statute or regulation or are otherwise related to aspects of public safety
21	Definitions	Public accessway	Support	Support the definition of public accessway as it provides for a passageway for pedestrian access.	Retain definition of public accessway as notified.
22	Definitions	Public transport activity	Support	Support the definition of public transport activities.	Retain definition of public transport activity as notified.
23	Definitions	Rapid transit stops	Support	Support the definition of rapid transit stops as it provides for rapid transit stops that are existing or planned.	Retain definition of rapid transit stops as notified.
24	Definitions	Regionally significant infrastructure	Support	Support the definition of regionally significant infrastructure as it provides for the Strategic Transport Network.	Retain definition of regionally significant infrastructure as notified.
25	Definitions	Reverse sensitivity	Support	Support the definition of reverse sensitivity as it provides for the operation of an existing lawfully established activity (state highway network) to be compromised, constrained or curtailed by the more recent establishment or alteration of another activity which may be sensitive to the actual, potential or perceived	Retain definition of reverse sensitivity as notified.

				environmental effects generated by the existing activity.	
26	Definitions	Sensitive activity	Support	Support the definition of sensitive activity as these have the potential to be affected by reverse sensitivity	Retain definition of sensitive activity as notified.
27	Definitions	Sign	Support	Support the definition of sign.	Retain definition of sign as notified.
28	Definitions	Streetscape	Support	Support the definition of streetscape as it includes road.	Retain definition of streetscape as notified.
29	Definitions	Target speed	Oppose	Definition has been removed from this chapter but Table 1 still has target speed.	Relates to INF-Table 1. Waka Kotahi does not agree with providing a table that includes target speed. The posted speed should be the output of the process, and the relevant considerations in the table should be the desired form and function of the road.
30	Definitions	Transport network	Support with amendments	Although rapid transit stops, and shelters has it's own definition it should be specifically included in this definition also.	Add rapid transit stops and shelters to this definition.
31	Definitions	Upgrading	Support	Support the definition of upgrading as it applies to infrastructure.	Retain definition of upgrading as notified.
32	Definitions	Vehicle	Support	Support the definition of vehicle.	Retain definition of vehicle as notified.
33	Definitions	Vehicle crossing	Support	Support the definition of vehicle crossing.	Retain definition of vehicle crossing as notified.
34	Definitions	Vehicle movement	Support	Support the definition of vehicle movement	Retain definition of vehicle movement as notified
35	Part 1 – General provisions	Legal effect of rules	Support with amendments	The operative district plan does not contain provisions to manage noise and vibration effects to new noise sensitive activities established alongside state highway. Where there is intensification of noise sensitive activities proposed which has immediate legal effect (such as in HRZ and	Waka Kotahi seeks that Noise-R3 rules are applied as a qualifying matter for the period before the rules become operative to align with permitted residential development in MRZ and HRZ which has immediate legal effect.

				<p>MRZ zones) the related provisions in the NOISE chapter to manage the effects should also have immediate legal effect (e.g rules in Noise-R3).</p> <p>Waka Kotahi is concerned about the risk of intensification occurring alongside state highways which is not designed to appropriately mitigate noise and vibration effects in the existing environment, and the adverse human health and nuisance effects to occupants as a result. In the interim period before the district plan provisions become operative, noise should be introduced as a qualifying matter to manage these effects.</p>	
36	Part 2 - Anga Whakamua – Moving into the future	AW-O1, AW-O2, AW-O3 and AW-O4	Support	Waka Kotahi supports these strategic objectives as written.	Retain as notified
37	Part 2 – Tāone Kāwana – Capital City	CC-O1, CC-O2, CC-O3	Support	Waka Kotahi supports these strategic objectives as written and notes that these objectives align with the Government Policy Statement on Land Transport 2021/22-2030/31 (GPS)	Retain as notified
38	Part 2 – Te Ohaoha, Mōhiotanga me te Taurikura ā-Tāone – City Economy, Knowledge and Prosperity	CEKP-O2	Support with amendments	This should also include a description of the “commercial zone” and spell out expectations around access and connectivity for that zone.	Include a description of the anticipated role and function of the commercial zone
39	Part 2 – Ngā Wāhi Aronehe me ngā Wāhi Tapu o te Mana Whenua –	HHSASM-O1, HHSASM-O2, HHSASM-O3,	Support	Waka Kotahi supports these strategic objectives as written.	Retain as notified

	Historic Heritage and Sites and Areas of Significance to Māori				
40	Part 2 – Te Taiao Māori – Natural Environment	NE-O2	Support with amendments	Improving water quality is an extremely high threshold, though Waka Kotahi agrees that gradual improvement is necessary not all works, specifically maintenance activities, can improve water quality. Instead, we seek that all works shall not worsen water quality.	Amend wording as follows: <i>Future subdivision and development contributes to an improvement in maintains the quality of the City’s water bodies, and recognises mana whenua and their relationship to water (Te Mana o Te Wai).</i>
41	Part 2 – Ngā Rawa me te Tūāhanga ā-Rautaki o te Tāone – Strategic City Assets and Infrastructure	SCA-O1	Support with amendments	Additional wording is sought to give effect to carbon reduction.	Amend as follows: <i>Infrastructure is established, operated, maintained, and upgraded in Wellington City so that:</i> <ol style="list-style-type: none"> 1. <i>The social, economic, cultural, and environmental benefits of this infrastructure are recognised;</i> 2. <i>The City is able to function safely, efficiently and effectively;</i> 3. <i>The infrastructure network is resilient in the long term; and</i> 4. <i>Future growth and development is enabled and can be sufficiently serviced.</i> 5. <i><u>Infrastructure shall be delivered in a way which provides for carbon reduction targets.</u></i>
42	Part 2 – Ngā Rawa me te Tūāhanga ā-Rautaki o te Tāone – Strategic City Assets and Infrastructure	SCA-O2,	Support	Waka Kotahi supports this strategic objective as written specifically: “1. Can meet the development infrastructure costs associated with the development”	Retain as notified

				As this directs the cost of development where infrastructure capacity is not planned nor existing to be met by the developer. This objective also notes that any new infrastructure shall be a very high threshold for consideration to avoid urban sprawl.	
43	Part 2 – Ngā Rawa me te Tūāhanga ā- Rautaki o te Tāone – Strategic City Assets and Infrastructure	SCA-O3,	Support	Waka Kotahi supports this strategic objective as written as this objective applies a high threshold of “significant benefits” directing that new infrastructure should be well planned for.	Retain as notified
44	Part 2 – Ngā Rawa me te Tūāhanga ā- Rautaki o te Tāone – Strategic City Assets and Infrastructure	SCA-O4,	Support	Waka Kotahi supports this strategic objective as written.	Retain as notified
45	Part 2 – Ngā Rawa me te Tūāhanga ā- Rautaki o te Tāone – Strategic City Assets and Infrastructure	SCA-O5	Support	Waka Kotahi supports this strategic objective as written as it enables a balanced approach to infrastructure delivery.	Retain as notified
46	Part 2 – Ngā Rawa me te Tūāhanga ā- Rautaki o te Tāone – Strategic City Assets and Infrastructure	SCA-O6	Support with amendmen ts	Waka Kotahi supports this strategic objective as written with the addition of reference to adverse health effects.	Amend as follows: <i>Infrastructure operates efficiently and safely and is protected from incompatible development and activities that may create reverse sensitivity effects <u>or adverse health effects.</u></i>
47	Part 2 – Te Whakaukatan ga, Te Manawaroa me te	SRCC-O1	Support with amendmen ts	As written, O1.3 does not reference the move needed away from private cars to other transport modes, which has additional benefits not captured by O1.1. Freeing	Amend as follows: <i>The City’s built environment supports:</i>

	Ahuarangi Hurihuri – Sustainability, Resilience and Climate Change			up carparking spaces for greener uses, having less embodied energy (in the vehicle fleet) & having greater transport resilience in the event of an earthquake are examples of this.	<ol style="list-style-type: none"> 1. A net reduction in the City's carbon emissions by 2050; 2. More energy efficient buildings; 3. An increase in the use of renewable energy sources; and 4. <u>Multi-modal transport options including but not limited to walking, cycling, and public transport, and</u> 5. Healthy functioning of native ecosystems and natural processes.
48	Part 2 – Te Whakaukatanga, Te Manawaroa me te Āhuarangi Hurihuri – Sustainability, Resilience and Climate Change	SRCC-O4	Support with amendments	Waka Kotahi supports this strategic objective as written with the additional reference to the need to reduce carbon as an option prior to storing the produced carbon	Amend as follows: <i>Land use, subdivision and development design integrates natural processes that provide opportunities for <u>carbon reduction, carbon storage, natural hazard risk reduction and support climate change adaptation.</u></i>
49	Part 2 – Te Āhua Tāone me te Whanaketanga - Urban Form and Development	UFD-O1	Support	Waka Kotahi supports this strategic objective as written and notes that this objective aligns well with the Government Policy Statement on Land Transport 2021/22-2030/31 (GPS).	Retain as notified
50	Part 2 – Te Āhua Tāone me te Whanaketanga - Urban Form and Development	UFD-O2	Support with amendments	Waka Kotahi would like to see direction in this section for new greenfield developments to include some areas dedicated to 'central neighbourhood' functions, to meet the day-to-day needs of future residents without the need for private vehicle travel.	Amend as follows: <i>Urban development in identified greenfield areas:</i> <ol style="list-style-type: none"> 1. <i>Is environmentally and ecologically sensitive;</i> 2. <i>Makes efficient use of land;</i> 3. <i>Is well-connected to the public transport network, and</i> 4. <i>Reinforces the City's compact urban form; and</i> 5. <i><u>A mix and distribution of land uses within greenfield area to provide opportunities for</u></i>

					<i>business activities and employment, community facilities and open space close to where people live.</i>
51	Part 2 – Te Āhua Tāone me te Whanaketanga - Urban Form and Development	UFD-O7	Support	Waka Kotahi supports this strategic objective as written and notes that this objective aligns well with the Government Policy Statement on Land Transport 2021/22-2030/31 (GPS).	Retain as notified
52	Part 2 – Te Āhua Tāone me te Whanaketanga - Urban Form and Development	UFD-O2	Support with amendments	It would be helpful if the District Plan identified under what specific circumstances “where possible” pertains too. As currently written the objective is subjective.	Amend for clarity
53	Part 2- HH – Te Takenga ā-Hītori - Historic Heritage	HH-P9	Support with amendments	Support direction of policy, Waka Kotahi consider that the wording should be amended to be less subjective – the policy requires an assessment of options and heritage values to be undertaken. Waka Kotahi agree that relocation should only be undertaken where other options are not available. The Council officer or decision maker will need to be satisfied that this has been demonstrated – it does therefore not need to be written into the condition.	Amend as follows: ... 3. <i>In the case of relocation, there are no practical alternatives</i> alternatives have been explored and relocation is considered by Council to be a reasonable option
54	Part 2- HH – Te Takenga ā-Hītori - Historic Heritage	HH-P15	Support with amendments	Support direction of policy, Waka Kotahi consider that the wording should be amended to be less subjective – the policy requires an assessment of options and heritage values to be undertaken. Waka Kotahi agree that relocation should only occur if there all alternatives have been explored. The Council officer or decision maker will need to be satisfied that this has been demonstrated – it does therefore not need to be	Amend as follows: ... and relocation is considered by Council to be a reasonable option .

				written into the condition.	
55	Part 2- HH – Te Takenga ā-Hītori - Historic Heritage	HH-P16	Support with amendments	Support direction of policy, Waka Kotahi consider that the wording should be amended to be less subjective – the policy requires an assessment of options and heritage values to be undertaken. Waka Kotahi agree that demolition should only occur if there all alternatives have been explored. The Council officer or decision maker will need to be satisfied that this has been demonstrated – it does therefore not need to be written into the condition.	Amend as follows: <i>... and total demolition is considered by Council to be a reasonable option.</i>
56	Part 2- HH – Te Takenga ā-Hītori - Historic Heritage	HH-P21	Support	Support policy as worded – demolition of scheduled sites should only occur if it can be demonstrated that there are no reasonable alternatives	Retain as notified
57	Part 2- HH – Te Takenga ā-Hītori - Historic Heritage	HH-R2	Support	Support rule as proposed, as it enables the demolition of non-scheduled buildings and structures.	Retain as notified
58	Part 2- HH – Te Takenga ā-Hītori - Historic Heritage	HH-R9	Support	Support discretionary activity status for demolition of heritage buildings	Retain as notified
59	Part 2- HH – Te Takenga ā-Hītori - Historic Heritage	HH-R12	Support	Support permitted activity status for total demolition repositioning, or removal of identified non-heritage building or structure in heritage area.	Retain as notified
60	Part 2 - INF – Tūāhanga - Infrastructure	INF-O1, O2, O3, O4 and O5	Support	Support these objectives as they refer to infrastructure more broadly and all roads form part of the infrastructure definition, manage adverse effects on infrastructure, provide for infrastructure availability and support transport network	Retain as notified.

61	Part 2 - INF – Tūāhanga - Infrastructure	INF – P1, P2, P3, P4, P5, P6 and P7	Support	Support policies as worded as they provide for infrastructure, the coordination of infrastructure with land use, subdivision and development growth, any technological advances and undergrounding of infrastructure in urban areas where feasible. P6 manages the effects of upgrades or development of new infrastructure on sensitive activities. P7 deals with the adverse effects of new activities on the existing infrastructure.	Retain as notified.
62	Infrastructure	INF-P9	Support	Support	Retain as notified
63	Part 2 - INF – Tūāhanga - Infrastructure	INF-10 and 11	Support	Support the policies wording as P10 refers to Waka Kotahi New Zealand Transport Agency's One Network Framework. P11 enables safe and effective connections between sites and the transport network	Retain as notified.
64	Part 2 - INF – Tūāhanga - Infrastructure	INF-P12	Support	Support this policy as this is common for other infrastructure to be included in state highway road reserves.	Retain as notified.
65	Part 2 - INF – Tūāhanga - Infrastructure	INF-Rx	Add rule	<p>INF-R3 provides for the "upgrading of existing aboveground infrastructure" as a permitted activity where INF-S1, INF-S3, INF-S4 and INF-S12 are met.</p> <p>It is considered that this rule could be interpreted as applying to the operation, maintenance and repair of the transport network, however:</p> <p>INF-S1 is specific to radiofrequency so it irrelevant.</p> <p>INF-S3 is specific to earthworks so is relevant.</p>	<p>Add a rule for the <u>operation, maintenance, repair and upgrading</u> of the transport network:</p> <p><u>INF-RX Operation, maintenance, repair and upgrading of the transport network.</u></p> <p><u>Activity status: permitted</u></p> <p><u>Where compliance is achieved with INF-S3 and INF-S18.</u></p> <p><u>Activity status: restricted discretionary</u></p> <p><u>Where compliance with the requirements of INF-S3 and INF-S18 cannot be achieved.</u></p>

				<p>INF-S4 is specific to utilities so is irrelevant.</p> <p>INF-S12 is specific to buildings, structures and activities in the National Grid Yard so is irrelevant.</p> <p>INF-S13, S15, S16, S17 are specific to roads and transport but are not applicable.</p> <p>INF-S18 applies to bus shelters but is not applicable.</p> <p>“Infrastructure” and “Transport Network” are both defined in the interpretation section, but there are no rules specific to the upgrade of the transport network.</p> <p>INF-O5 specifically recognises the benefits of the transport network, which would include the benefits from upgrades.</p> <p>INF-P9 specifically enables upgrading of the transport network, but there is not specific corresponding rule.</p> <p>Accordingly, it could be interpreted that the upgrading of the transport network is not covered by INF-R3 and a resource consent application would not be assessed against the appropriate standards.</p>	<p><u>Matters of discretion are:</u></p> <p><u>The matters set out in INF-P1 and INF-P3.</u></p>
66	Part 2 - INF – Tūāhanga - Infrastructure	INF-S13 and Table 1	Support with amendments	Roads should be designed to suit the desired form and function (under the One Network Framework), with the posted speed limit being an output of that process, rather than an input and aligned with the current speed management review.	Align existing posted speed limits with the One Network Framework and current speed management review.

				For more guidance, please seek further input from the Speed Management Programme Team.	
67	Part 2 - INF – Tūāhanga - Infrastructure	INF-S16.7	Support with amendments	Waka Kotahi seeks a longer setback for driveways on local roads that intersect with a state highway, in accordance with New Zealand Transport Agency Planning Policy Manual: Appendix 5B – Accessway standards and guidelines, Table App5B/3. See Appendix A	Amend to include a standard requiring that roads intersecting a state highway intersection comply with the New Zealand Transport Agency Planning Policy Manual: Appendix 5B – Accessway standards and guidelines, Table App5B/3 – Guidelines for minimum accessway spacing requirements (see Appendix A of this submission).
68	Part 2 - INF – Tūāhanga - Infrastructure	INF - Table 5	Oppose	Waka Kotahi seeks longer sight distances, especially for the higher speeds, in alignment with New Zealand Transport Agency Planning Policy Manual: Appendix 5B – Accessway standards and guidelines, Table App5B/1. See Appendix B.	Amend to standards in alignment with New Zealand Transport Agency Planning Policy Manual: Appendix 5B Accessway standards and guidelines, Section 5B/1 Sight distances. (see Appendix B of this submission)
69	Part 2 Tūāhanga – Ngā Pūnaha Hauropi me te Kanorau Koiora Taketake - Infrastructure – Ecosystems and Indigenous Biodiversity	INF-ECO-P33	Support	Support this policy as under the maintenance and repair definition it 'means any work or activity necessary to continue the operation or functioning of existing infrastructure.' Waka Kotahi consider this sufficient to cover off health and safety risks such as vegetation control to preserve sight lines.	Retain as notified.
70	Part 2 - Other Infrastructure Chapters: -Coastal Environment	INF-CE-P14, P15, P16, P17, P18, P19, P20, P21, P22, P23, P24, P25, R27, R28, R29, R30, R31, R32, R33 and R34;	Support	These provisions provide clear guidance in how to balance different interests where infrastructure overlaps with other areas and values.	Retain as notified.

71	Part 2 - Other Infrastructure Chapters: --Ecosystems And Indigenous Biodiversity	INF-ECO-P33, P34, P35, P36, P37, R41, R42, R43, S19 & S20	Support	These provisions provide clear guidance in how to balance different interests where infrastructure overlaps with other areas and values.	Retain as notified.
72	Part 2 - Other Infrastructure Chapters: -Natural Features and Landscapes	INF-NFL-P38, P39, P40, P41, P42, P43, P44, P45, P46, P47, P48, P49, P50, R48, R49, R50, R51, R52 & S21	Support	These provisions provide clear guidance in how to balance different interests where infrastructure overlaps with other areas and values.	Retain as notified.
73	Part 2 - Other Infrastructure Chapters: -Natural Hazards	INF-NH-P61, R58, R59 & R60	Support	These provisions provide clear guidance in how to balance different interests where infrastructure overlaps with other areas and values.	Retain as notified.
74	Part 2 - Other Infrastructure Chapters: -Other Overlays	INF-OL-P62, R61, R62, R63, R64, R65 & R66	Support	These provisions provide clear guidance in how to balance different interests where infrastructure overlaps with other areas and values.	Retain as notified.
75	Part 2 Tūnuku Transport	TR-O1	Support in part	Support this objective as it provides for the management on land use activities and development on the transport network.	Amend to include <u>6. The proposal leads to a reduced reliance on fossil fuels over time.</u>
76	Part 2 Tūnuku Transport	TR-P1, P3	Support	Support these policies as they protect the transport network and manage activities that do not meet standards.	Retain as notified.
77	Part 2 Tūnuku Transport	TR-P2	Support with amendment	Direct access onto the state highway has the potential to cause significant traffic and safety effects. Policy direction should reflect this by qualifying the enabled activities	Amend the policy as follows: <i>Enable on-site transport facilities and driveways that:</i> <ol style="list-style-type: none"> 1. <i>Provide for the safe and effective use of the site and functioning of the transport network;</i> 2. <i>Meet the reasonable demands of site users;</i> <i>and</i>

					<p>3. <i>Promote the uptake and use of pedestrian, cycling, micromobility and public transport modes; and</i></p> <p>4. <i>Do not compromise the safe and efficient function of the state highway network.</i></p>
78	Part 2 Tūnuku Transport	TR-Rx	Add rule	Waka Kotahi requests that any change of land use involving direct access onto the state highway require consent, at least a restricted discretionary activity, with discretion restricted to the matters in TR-P3.	<p>Add new rule:</p> <p><u>TR-Rx Change of land use for activities having direct access to the state highway</u></p> <p><u>Restricted discretionary activity</u></p> <p><u>Discretion restricted to the matters in TR-P3.</u></p>
79	Part 2 Tūnuku Transport	TR-R5	Support with amendments	Two R5's but are slightly different activities.	Check the rule numbers.
80	Part 2 Tūnuku Transport	TR-S1 and Table 8	Oppose	<p>Waka Kotahi consider 200 vehicles per day to be a high number for any activity within the district plan. It was not clear from the support documents where this number has come from.</p> <p>Waka Kotahi seeks to work with Council to determine appropriate thresholds for specific activities accessing both the state highway and local roads.</p>	<p>Amend to institute a threshold of 100 car equivalent vehicle movements per day where a proposal accesses the state highway, and lower thresholds where the safety of the transport network warrants it.</p> <p>Note – car equivalent movements are defined as (as noted in the New Zealand Transport Agency Planning Policy Manual: Appendix 1 – Glossary):</p> <ul style="list-style-type: none"> • 1 car to and from the property = 2 equivalent car movements • 1 truck to and from property = 6 equivalent car movements • 1 truck and trailer to and from property = 10 equivalent car movements
81	Part 2 Tūnuku Transport	TR-S5 & S6	Support with amendments.	Waka Kotahi requests the provisions be made clearer that, where there is a new activity, the driveway classification and design is relative to that new activity.	Amend for clarity

82	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-P3	Support	Support policy as worded as it allows for trimming or pruning of notable trees where the works prevent interface with footpaths, property, or network utilities. This will provide for trimming or pruning or notable trees where it is essential for the safe and efficient operation of State Highway infrastructure.	Retain as notified
83	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-P6	Support	Support policy as worded, as it allows repositioning or relocating of notable trees where necessary to enable development and operation of infrastructure. It is noted that there is no rule to enable repositioning or relocating of notable trees for these purposes. Waka Kotahi submit that a rule be included to enable repositioning, relocation, or destruction for purposes specified in Tree-P6.	Retain as notified
84	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-P7	Support with amendments	Support policy with amendment to enable destruction of a notable tree where necessary for purposes of maintaining or developing infrastructure. It is noted that the policy requires repositioning and relocation to be explored in the first instance. Waka Kotahi also submit that a rule be included in this chapter to enable demolition where is necessary in enabling efficient development and operation of infrastructure	Amend as follows: <i>Tree-P7 Destruction</i> <i>Only allow the destruction of notable trees where it can be demonstrated that:</i> <ol style="list-style-type: none"> 1. <i>The tree poses a serious and imminent threat to the safety of people or property; or</i> 2. <i>The tree is dead, or in a state of terminal decline; or</i> 3. <i><u>Destruction of the tree is necessary to enable the efficient development and operation of infrastructure</u></i> 4. <i>There are no reasonable alternatives including:</i> <ol style="list-style-type: none"> a. <i>Trimming and pruning; and</i> b. <i>Repositioning and relocation.</i>

85	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-R1.1	Support	Support permitted activity status for trimming and pruning of notable trees for specified purposes – the permitted activity status enables Waka Kotahi to trim or prune notable trees where necessary to enable maintaining the safety and operation of infrastructure – including provision for emergency works.	Retain as notified
86	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-R2.1	Support	Support permitted activity status as it will enable Waka Kotahi to undertake works within the root zone for the purposes of undergoing maintenance and/or repair of infrastructure.	Retain as notified
87	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-R3.1	Support	Support the inclusion of emergency works in the permitted activity status for destruction, relocation, or removal of notable trees.	Retain as notified
88	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-R3	Add rule	New rule proposed to enable relocation, removal, or destruction of notable trees for maintenance and development of infrastructure. A restricted discretionary activity status is appropriate as it enables Council to assess whether the activity is necessary for the specified purposes, methods, and whether alternatives have been sufficiently explored.	<p>Add rule:</p> <p><u>Tree-R3x.</u></p> <p><u>Activity status: Restricted Discretionary</u></p> <p><u>Where</u></p> <p>a. <u>The relocation, removal, or destruction of notable trees is for the purposes of maintaining or upgrading infrastructure.</u></p> <p><u>Matter of discretion are:</u></p> <p>b. <u>Methods of relocation, removal, or destruction</u></p> <p>c. <u>Feasibility of alternatives</u></p> <p><u>Public safety and benefit</u></p>
89	Part 2 Ngā Rākau Rangatira Notable Trees	TREE-R4	Support	Support discretionary activity status for all other land use activities as it provides pathway for other relocation, removal, or destruction of notable trees for	Retain as notified

				infrastructure development and maintenance purposes.	
90	Part 2 Ngā Rākau Rangatira Notable Trees	Standards Tree-S1 to TREE S-4	Support	Support standards as worded.	Retain as notified
91	Part 2 Wawaetanga Subdivision	Subdivision Chapter Generally	Support with amendments	Subdivision close to the state highway corridor should be at least restricted discretionary, and (as noted elsewhere), if there is a blanket distance from the state highway, it should be 100m. At subdivision stage there can be better options available to manage noise exposure rather than leaving it to treating individual houses, which does not protect outdoor amenity and can constrain residents to having to use mechanical ventilation.	Amend to require consent (at least restricted discretionary) for subdivision within 100m of a state highway.
92	Part 2 Wawaetanga Subdivision	SUB-O1	Support with amendments	An additional outcome sought for subdivision activities to ensure that development considers land use and transport in an integrated manner throughout both the urban and rural areas as all development should consider the connections to the movement of people.	Amend as follows: ... 6. <i>The provision of electricity connections to the legal boundary or each allotment; and</i> 7. <i>Any consent notices, covenants, easements or other legal instruments necessary; and</i> 8. <i><u>Any potential adverse effects of site development on the efficient use and operation of the roading and state highway network.</u></i>
93	Part 2 Wawaetanga Subdivision	SUB-P3	Support with amendments	Waka Kotahi requests that an additional clause be added, providing for local and other centres in proposed subdivisions to support reduced reliance on private vehicle travel & reduced emissions.	Amend to add: <i><u>7. Considers the ability of future residents to meet their day-to-day needs within the immediate area.</u></i>

				Most large-scale subdivisions, whether it be brownfield or greenfield development, will still contribute to the vitality of the nearest commercial centre. As such, the proximity of the nearest centre should be considered across the board not just in new development areas.	
94	Part 2 Wawaetanga Subdivision	SUB-P6	Support	Waka Kotahi specifically supports matter 3. "Do not increase the risk of reverse sensitivity effects arising on existing lawfully established activities	Retain as notified
95	Part 2 Wawaetanga Subdivision	SUB-R1	Support with amendmen ts	Waka Kotahi seeks an additional matter of control relating to the management of adverse effects on noise.	Amend as follows: <i>6. The provision of electricity connections to the legal boundary or each allotment; and</i> <i>7. Any consent notices, covenants, easements or other legal instruments necessary; and</i> <i>8. Any potential adverse effects of site development on the efficient use and operation of the roading and state highway network.</i>
96	Part 2 Wawaetanga Subdivision	SUB-R4	Support with amendmen ts	Waka Kotahi concurs that subdivision for the sole purpose of providing infrastructure should be a controlled activity however, this rule should reference that it must be sought by a Network Utility Operator and this rule should not be subject to S6 (minimum dimension size) as this would result in an unnecessary burden on acquiring sites to deliver necessary infrastructure outcomes. Non-compliance with SUB-R4 should be retained as a Restricted Discretionary activity	Amend as follows: <i>Subdivision to create a new allotment for infrastructure</i> <i>1. Activity status: Controlled</i> <i>Where:</i> <i>a. <u>Subdivision is sought by a Network Utility Operator and</u></i> <i>b. <u>Compliance is achieved with the following standards for any balance allotment:</u></i> <i>i. <u>SUB-S1; and</u></i> <i>ii. <u>SUB-S6; and</u></i> <i><u>SUB-S7.</u></i>
97	Part 2 Wawaetanga Subdivision	SUB-S1 (Access)	Support with	Waka Kotahi seeks the addition of a note pertinent to this standard.	Amend as follows: <i>Every allotment must have practical, physical and legal</i>

			amendments		<p>access directly to a formed legal road or by way of a registered right-of-way.</p> <p><i>Note, please refer to the requirements of Waka Kotahi NZ Transport Agency and Part IV of the Government Roading Powers Act 1989 with regard to vehicle entrances onto state highways.</i></p>
98	Part 2 Wawaetanga Subdivision	SUB-Sx	New standard	<p>Waka Kotahi seeks an additional standard which subdivision activities shall be assessed against when located within specified distances of the state highway network.</p> <p>It is widely accepted nationally and internationally that noise from transport networks have the potential to cause adverse health and amenity effects on people living nearby. That potential has been documented by authoritative bodies such as the World Health Organisation (WHO)¹ including the publication Environmental noise guidelines for the European region in October 2018 (WHO Europe Guidelines)². The WHO Europe Guidelines are based on a critical review of academic literature and followed a rigorous protocol to assess the evidence of adverse effects.</p> <p>With respect to sound from transport networks, the WHO Europe Guidelines note the potential for the following adverse effects:</p> <ul style="list-style-type: none"> i. sleep disturbance; ii. high annoyance; iii. hypertension; and iv. ischaemic heart disease. 	<p><i>New standard:</i></p> <p><u><i>SUB-Sx Subdivision resulting in the creation of new sites 100m of a State Highway (measured from the nearest painted edge of the carriageway).</i></u></p> <p><u><i>Assessment criteria where the standard is infringed:</i></u></p> <ol style="list-style-type: none"> 1. <u><i>The potential adverse effects of noise generated from the road network.</i></u> 2. <u><i>The potential adverse effects of site development on the efficient use and operation of the state highway network and the suitability of any mitigation measures relating to noise and vibration to enable the continued operation of the network.</i></u> 3. <u><i>Whether any consultation with Waka Kotahi NZ Transport Agency has occurred and the outcome of that consultation.</i></u> 4. <u><i>Whether a consent notice with regard to reverse sensitivity effects on the State Highway network is proposed.</i></u> 5. <u><i>Whether any proposed building platform or development should be</i></u>

¹ World Health Organisation, Guidelines for community noise, 1999; World Health Organisation, Night noise guidelines for Europe, 2009; World Health Organisation, Burden of disease from environmental noise, 2011

² World Health Organisation, Environmental noise guidelines for the European region, 2018.

				<p>State highways pass through both urban and rural areas throughout the Wellington City District and most have sufficient traffic volumes to generate sound above WHO Europe Guideline levels, indicating there will be impacts on human health and amenity where noise-sensitive activities locate nearby.</p> <p>Applying the metric setback approach is a moderately efficient and effective method of managing noise effects on human health when compared to alternatives such as do nothing, modelling a setback, or creating a 'no build' yard zone. In the future, Waka Kotahi may seek a change to this standard to reflect modelling data which is a highly efficient and effective method of management.</p>	<p><u>restricted to parts of the site.</u></p> <p>6. <u>Whether there are any special topographical features or ground conditions which may mitigate effects on the operation of the State Highway network.</u></p>
99	Part 2 Te Oro Noise	Chapter	Support with amendments	<p>See comments in Part 1 – Introduction. Waka Kotahi seeks that the rules in NOISE-R3 have immediate legal effect to ensure a healthy indoor noise environment for all dwellings in close proximity to the state highway corridor.</p>	<p>Waka Kotahi seek that Noise-R3 rules to have immediate legal effect.</p>
100	Part 2 Te Oro Noise	NOISE-O1	Support	<p>Waka Kotahi supports the inclusion of this objective to protect the health and amenity of occupants from noise. Waka Kotahi promotes the protection of noise sensitive activities from adverse noise and effects in the existing environment.</p>	<p>Retain as notified</p>
101	Part 2 Te Oro Noise	NOISE-O2	Support	<p>Waka Kotahi supports the inclusion of this objective to protect existing and authorised activities that generate high levels of noise. This will enable the continued operation of</p>	<p>Retain as notified</p>

				existing state highway operations.	
102	Part 2 Te Oro Noise	NOISE-P2	Support	Waka Kotahi supports the proposed policy which enables construction activity subject to appropriate management of effects. Construction is an essential activity in relation to the state highway network and it is not always practicable to achieve specific noise limits, so the approach should be to focus on managing effects.	Retain as notified
103	Part 2 Te Oro Noise	NOISE-P3	Support	Waka Kotahi supports the proposed policy which provides for higher noise levels to be generated within State Highway networks. This protects the continued operation of the existing state highway operations and the associated noise effects	Retain as notified.
104	Part 2 Te Oro Noise	NOISE-P4	Support with amendments	Waka Kotahi supports this policy with the inclusion of the identified state highway corridor mapped. Waka Kotahi is currently mapping noise contours along its entire network and would support the use of those contours to identify the relevant area. This would be likely to substantially reduce the area subject to acoustic attenuation requirements.	Retain policy wording as notified and include state highway corridor on planning maps.
105	Part 2 Te Oro Noise	NOISE-P6	Support	Support policy wording that restricts development of noise sensitive activities where noise and acoustic insulation standards are not met.	Retain as notified
106	Part 2 Te Oro Noise	NOISE-R2	Support	Support permitted hours and thresholds for construction, maintenance, earthworks, and demolition works, and RD activity status where not met.	Retain as notified

107	Part 2 Te Oro Noise	NOISE-R3.1	Support with amendments	<p>Support rule, with amendment to have immediate legal effect and to require compliance with ventilation standards.</p> <p>In lieu of the provision having immediate legal effect, Waka Kotahi seeks that this rule be included as a qualifying matter for development in the Medium- and High-Density Zones.</p>	Amend rule to require compliance with and <u>NOISE-S6 (Ventilation Requirements)</u> and amend rule so that it has immediate legal effect.
108	Part 2 Te Oro Noise	NOISE-R3.2	Support with amendments	<p>Support the inclusion of this rule, with default distance from State Highway to be extended to 100m or otherwise incorporate the Waka Kotahi noise contours along state highways so that the provisions only apply as needed. Waka Kotahi would prefer that the noise contours are included rather than a blanket rule of 100m. As above, Waka Kotahi also support this with amendment to have immediate legal effect and condition to comply with ventilation standard.</p> <p>In lieu of the provision having immediate legal effect, Waka Kotahi seeks that this rule be included as a qualifying matter for development in the Medium- and High-Density Zones.</p> <p>It is noted that Waka Kotahi would generally define distances from edge of traffic lane (as that where is the source of noise is)</p>	<p>Amend rule as follows (or amend to adopt Waka Kotahi noise contours) and amend rule so that it has immediate legal effect.</p> <p>2. <i>Activity status: Permitted</i></p> <p><i>Where:</i></p> <p>a. <i>Compliance with <u>NOISE-S5 (Moderate Noise Areas)</u> and <u>NOISE-S6 (Ventilation Requirements)</u> is achieved within:</i></p> <ul style="list-style-type: none"> <i>i. The area between 40m and 80m - 100m of a State Highway;</i> <i>ii. The area between 40m and 100m of a Railway corridor;</i> <i>iii. City Centre Zone;</i> <i>iv. Mixed Use Zone;</i> <i>v. Neighbourhood Centre Zone;</i> <i>vi. Local Centre Zone;</i> <i>vii. Metropolitan Centre Zone;</i> <i>viii. Outer Port Noise Overlay; and</i>

					<p>ix. Outer Air Noise Overlay.</p> <p>Note: Distances from a state highway or railway corridor shall be measured from the closest habitable room to the closest point of a state highway or railway designation.</p>
109	Part 2 Te Oro Noise	NOISE-R3.3	Support with amendments	<p>Support restricted discretionary activity status where NOISE-S4 or NOISE-S5 cannot be achieved. The wording of NOISE-R3.3b is confusing and seems to contradict with R3.1, Waka Kotahi interpret that this is intended to apply to those activities that do not comply with the requirements of NOISE-S4 and NOISE-S5, AND are within land subject to R3.2. This should be amended to be made more clear.</p> <p>The rule should also be amended to include non-compliance with the ventilation standards.</p>	<p>Amend as follows:</p> <p>3. Activity status: Restricted Discretionary</p> <p>Where:</p> <p>a. Compliance with the requirements of <u>NOISE-S4, or NOISE-S5, or NOISE-S6</u> cannot be achieved; <i>and</i></p> <p>b. Any the noise sensitive activity is proposed on a site within land subject to <u>NOISE-R3.2</u>; <i>or</i></p> <p>c. Two residential units are proposed on a site within the Inner Air Noise Overlay; <i>or and</i></p> <p>d. Four or more residential units are proposed on a site within the Outer Air Noise Overlay.</p> <p>Matters of discretion are:</p> <p>1. The matters of assessment in <u>NOISE-S4</u> and <u>NOISE-S5</u>; and</p> <p>2. The extent and effect of non-compliance with any relevant standard as specified in the associated assessment</p>

					<p>criteria for the infringed standard.</p> <p><i>Note: This rule does not oblige Wellington International Airport Limited (WIAL) to provide or upgrade mechanical ventilation or noise insulation in a residential unit which has already received such treatment</i></p>
110	Part 2 Te Oro Noise	NOISE-R3.4	Support with amendments	<p>As above, Waka Kotahi does not understand the intent of this rule and requests that the wording is amended to clarify that any noise sensitive activity within the areas in NOISE-R3.1.a (including within 40m of the state highway) is a discretionary activity. If this is the intention, this conflicts with the permitted activity status for noise sensitive activities in these areas that comply with the stated standards. Waka Kotahi supports this rule if it is a discretionary activity for noise sensitive activities that do not comply with permitted activity conditions for NOISE-R3.1.a</p>	<p>Amend as follows:</p> <p>4. <i>Activity status: Discretionary</i></p> <p><i>Where:</i></p> <p>a. <i>Any noise sensitive activity is proposed on a site within land subject to NOISE-R3.1 where NOISE-S4 and NOISE-S6 cannot be achieved; and</i></p> <p>b. <i>Three or more residential units are proposed on a site within the Inner Air Noise Overlay.</i></p> <p><i>Note: This rule does not oblige Wellington International Airport Limited (WIAL) to provide or upgrade mechanical ventilation or noise insulation in a residential unit which has already received such treatment.</i></p>
111	Part 2 Te Oro Noise	NOISE-S2.1	Support	<p>Waka Kotahi considers that the use of NZS 6803 for construction noise is appropriate</p>	<p>Retain as notified</p>
112	Part 2 Te Oro Noise	NOISE-S4	Support with amendments	<p>For noise sensitive activities within 20m of State Highway, buildings should also be constructed to mitigate for road vibration – to avoid adverse effects to human health and property as a</p>	<p>Add the following:</p> <p>5. <i><u>For noise sensitive activities within 20m of a state highway, buildings must be designed, constructed and</u></i></p>

				<p>result of vibration in the environment. Note should be added for clarity on how to calculate state highway noise levels for the design.</p>	<p><u><i>maintained to achieve road vibration levels not exceeding 0.3 mm/s vw,95;</i></u></p> <p><u><i>Note: for activities within 40m of a State Highway, the design should be based on the measured or predicted road-traffic noise levels plus 3 dB;</i></u></p>
113	Part 2 Te Oro Noise	NOISE-S5	Support with amendments	<p>Refer to comments on NOISE-R3.2 regarding the distance from the State Highway.</p> <p>Note should be added for clarity on how to calculate State Highway noise levels for the design.</p> <p>Correct the noise metric for road noise to be consistent with the requirements of the National Planning Standards.</p>	<p>Amend as follows:</p> <p>...</p> <p>4. <i>The requirements of (a) above do not apply where an acoustic design certificate signed by a suitably qualified acoustic engineer, confirms the level of noise incident on the most exposed part of the exterior of any habitable room can be shown, under a reasonable maximum use scenario, to not exceed the following noise limits at all points 1.5m above ground level, and any part of the floor levels above ground:</i></p> <ul style="list-style-type: none"> a. <i>Less than 55 dB L_{Aeq} (1h) for rail noise; or</i> b. <i>Less than 57 dB L_{Aeq} (24h) for road noise; or</i> c. <i>Less than 57 dB L_{Aeq} (1 hr) for port noise.</i> <p>...</p> <p><u><i>Note: for activities within 100m of a State Highway, the design should be based on the measured or predicted road-traffic noise levels plus 3 dB.</i></u></p>

114	Part 2 Te Oro Noise	Assessment criteria of NOISE-S4 and NOISE-S5	Oppose	Waka Kotahi considers the assessment criteria for activities that do not meet the permitted standards for NOISE-S4 and NOISE-S5 to be inappropriate as it invites re-litigation of the bottom line which is that internal conditions need to be healthy to protect the amenity, well-being, and health of occupants. Assessment criteria should instead consider the extent of the exceedance or non-compliance, and the effects on occupants and noise-generating activities as a result.	Amend as follows: <i>Assessment criteria where the standard is infringed:</i> <ol style="list-style-type: none"> 1. <u>Extent of the exceedance.</u> 2. <u>Human health effects on occupants and their ability to achieve an acceptable level of amenity as a result of the exceedance.</u> 3. <u>Reverse sensitivity effects to existing noise-generating activities.</u> 4. <u>Where within 100m of a state highway or railway corridor, extent of consultation with infrastructure providers who are generating the noise.</u> 5. Background noise levels and any special character of noise from any existing activities, the nature and character of any changes to the sound received at any receiving site and the degree to which such sounds are compatible with the surrounding activities; 6. The ability to achieve acceptable outdoor acoustic amenity; 7. Any mitigation of the noise proposed, in accordance with a best practicable option approach (e.g. site layout and design, design and location of structures, buildings and equipment and the timing of operations); 8. The ability to mitigate adverse effects through the imposition of conditions such as noise attenuation; and
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115	Part 2 Te Oro Noise	NOISE-S6	Support with amendments	The ventilation system must be adequate to provide thermal comfort so that residents have a free choice not to open windows.	<p>Amend as follows:</p> <ol style="list-style-type: none"> 1. <i>The minimum external to internal noise reduction levels in <u>NOISE-S4</u> and <u>NOISE-S5</u> must be achieved at the same time as the ventilation requirements of the New Zealand Building Code. An alternative means of ventilation must be provided unless compliance with the above acoustic insulation standards can be met with ventilating windows open. An alternative ventilation system must be adjustable by the occupant to control the ventilation rate in increments up to a high air flow setting that provides at least six air changes per hour, with relief for equivalent volumes of spill air. The system must not generate more than 35 dB LAeq(30s) when measured 1 metre away from any grille or diffuser.</i> 2. <i>Where bedrooms rely on openable windows to meet the ventilation requirements of the New Zealand Building Code, and where these windows must remain closed to achieve compliance with <u>NOISE-S4</u> and <u>NOISE-S5</u> acoustic insulation</i>

					<p><i>standards, a positive supplementary source of fresh air ducted from outside an alternative ventilation system is required at the time of fit-out. For the purposes of this requirement, a bedroom is any room intended to be used for sleeping. The supplementary source of air is to achieve a minimum of 7.5 litres per second per person. An alternative ventilation system must be adjustable by the occupant to control the ventilation rate in increments up to a high air flow setting that provides at least six air changes per hour, with relief for equivalent volumes of spill air. The system must not generate more than 35 dB LAeq(30s) when measured 1 metre away from any grille or diffuser; and</i></p> <p>3. Confirmation of compliance with this standard will be required by a qualified professional.</p> <p><i>Note: This standard applies in addition to, and does not affect the requirements of, the Building Act 2004.</i></p>
116	Part 2 Ngā Rākau Rangatira Notable Trees	CE-P8	Support with amendments	Support in principle, policy should be amended to provide for indigenous vegetation removal for the maintenance of public roads as well as accessways, to align with CE-R6 and CE-S1	<p>Amend as follows:</p> <p><i>Manage the removal of vegetation in the coastal environment as follows:</i></p> <ol style="list-style-type: none"> 1. <i>Allow for the removal of vegetation in the coastal environment outside of high coastal natural character areas;</i> 2. <i>Allow for the removal of exotic vegetation in the coastal</i>

					<p><i>environment within high coastal natural character areas; and</i></p> <p>3. <i>Only allow for the removal of indigenous vegetation in the coastal environment within high coastal natural character areas that:</i></p> <p>a. <i>Is of a scale that maintains the identified values; or</i></p> <p>b. <i>Is associated with ongoing maintenance of existing public accessways <u>and</u> <u>public roads</u>.</i></p>
117	Part 2 Ngā Rākau Rangatira Notable Trees	CE-R6	Support	Support permitted activity standard for indigenous vegetation removal subject to compliance with CE-S1 as it provides for removal of indigenous vegetation as a permitted activity where it is necessary for the safe and efficient operation of any formed public road	Retain as notified.
118	Part 2 Ngā Rākau Rangatira Notable Trees	CE-S1	Support	Support wording as notified as it provides for removal of indigenous vegetation as a permitted activity where it is necessary for the safe and efficient operation of any formed public road.	Retain as notified.
119	Part 2 Ngā Mahi Apu Whenua - Earthworks	P1 Sch1	Support	Support that the provisions do not relate to infrastructure activities– as this enables Waka Kotahi to undertake works to infrastructure as provided for by the infrastructure chapter.	Retain the following as notified: <i>The provisions of this Chapter do not apply in relation to activities provided for in the Infrastructure Chapter, unless specifically stated in the rule or standard concerned'</i>
120	Part 2 Ngā Mahi Apu Whenua - Earthworks	EW-P6	Support	Support wording of policy as notified as it provides for management of effects on the transport network	Retain as notified.
121	Part 2 Ngā Mahi Apu	EW-R1	Support	Support earthworks as a permitted activity for the purposes of piling, trenching, and geotechnical	Retain as notified.

	Whenua - Earthworks			investigations, and restricted discretionary where standards are not complied with	
122	Part 2 Ngā Mahi Apu Whenua - Earthworks	EW-R4	Support	Support permitted activity status for earthworks for the purposes of maintaining public walking or cycling tracks in open space zones and restricted discretionary where standards are not complied with.	Retain as notified.
123	Part 2 Ngā Mahi Apu Whenua - Earthworks	EW-R5	Support	Support permitted activity status for earthworks for the purposes of constructing public walking or cycling tracks in open space zones and restricted discretionary where standards are not complied with.	Retain as notified.
124	Part 2 Ngā Mahi Apu Whenua - Earthworks	EW-S4	Support with amendments	Support standard but should include stabilising the material in the truck bed to prevent clean fill material from falling onto the road and should also provide direction to ensure that truck wheels do not truck mud and/or debris into the road reserve. This inclusion would be consistent with EW-P6	Amend as follows: <ol style="list-style-type: none"> 1. <i>The combined volume of cut material resulting from earthworks transported off the site and cleanfill material required for earthworks transported onto the site must not exceed:</i> <ol style="list-style-type: none"> a. <i>2,000m³ in the City Centre, Centres, Mixed use and General industrial zones; or</i> b. <i>200m³ in all other Zones.</i> 2. <i><u>Transported material must be stabilised, and the truck wheels must be kept clean, to prevent the falling or trucking of material into the road reserve.</u></i>
125	Part 2 Ngā Tohu - Signs	Chapter	Support in part	Waka Kotahi is generally happy with the direction of the chapter, particularly with specific provisions on digital	Amend rule table to ensure it is clear that links between rules are made more clear.

				billboards, and the consideration of effects (including cumulative) on road safety in general. This chapter as notified will encourage signs in suitable and safe locations, while restricting those that are inappropriate or may have adverse safety effects. Waka Kotahi interprets the rule table such that a third-party advertising digital sign will require consent (or to comply with) SIGN-R4 and SIGN-R5, but would suggest that the links are made more clear	
126	Part 2 Ngā Tohu - Signs	SIGN-P1	Support	Support the policy wording as notified, signs have a number of effects to consider, which the policy covers.	
127	Part 2 Ngā Tohu - Signs	SIGN-P2	Support with amendments	Support the intent of the policy and the consideration of effects from digital billboards. Waka Kotahi considers that the wording be amended to consider effects that are particularly significant with the nature of digital billboards – being the cumulative effects of multiple digital billboards in proximity to each other and Waka Kotahi suggests they are not provided for in any high speed environments (70km/h or higher) as overseas research has found a statistically significant increase in injury crashes in high speed areas.	Amend policy as follows: ... 6. <i>The sign is not visible from a state highway or any road with a speed limit of 70km/h or higher; and</i> 7. <i>Cumulative effects of digital billboards are managed.</i>
128	Part 2 Ngā Tohu - Signs	SIGN-R1	Support	Support rule as notified which provides for official signs as a permitted activity.	Retain as notified
129	Part 2 Ngā Tohu - Signs	SIGN-R2	Oppose	Waka Kotahi does not support temporary signs as a permitted activity on the state highway. Any temporary signs should require the approval of Waka Kotahi, Waka Kotahi suggest that SIGN-S10 is amended to exclude signs that are	Amend to ensure that the rule does not apply to the state highway

				oriented to be read from state highway	
130	Part 2 Ngā Tohu - Signs	SIGN-R5.x	New rule	<p>Support digital billboard rules and activity statuses subject to amendments made to standards as per our submission points. Waka Kotahi supports the direction to avoid any digital billboards that are oriented to be read from state highway and request an additional NC rule for any digital billboard oriented to be read from state highway or within 100m of a state highway intersection is included to support this.</p> <p>To ensure that the public are aware of their consent requirements, it is recommended that a note is added to clarify that digital signage also needs to comply with all other relevant SIGN rules.</p>	<p>Add rule:</p> <p><u>SIGN-R5.4</u></p> <p><u>Activity status: Non-complying</u></p> <p><u>Where:</u></p> <p>a. <u>A digital billboard is oriented to be read from state highway, including on-ramps and off-ramps, or 100m from any intersection with state highway .</u></p> <p>Add note to R5 as follows: <u>Digital signs must also comply with or apply for consent under any other relevant rule in the activity table – e.g R4 and R5 apply to digital third party signs.</u></p>
131	Part 2 Ngā Tohu - Signs	SIGN-R8	Support	Support activity status of discretionary for signs not provided for.	Retain as drafted.
132	Part 2 Ngā Tohu - Signs	SIGN-S1	Support with amendments	Support 5m2 maximum area for signs oriented to be read from the state highway network – Waka Kotahi prefers the wording 'oriented to be read from' rather than 'facing' the state highway as it is clearer. Therefore request that the wording is amended accordingly.	<p>Amend standard as follows:</p> <p><u>SIGN-S1 Maximum area of any sign</u></p> <p>1. <u>The following maximum sign areas for any sign must be complied with:</u></p> <p>...</p> <p><u>f. signs oriented to be read from facing the State Highway Network</u></p>
133	Part 2 Ngā Tohu - Signs	SIGN-S2	Support with amendments	Support 5m2 maximum area for signs oriented to be read from the state highway network – Waka Kotahi prefers the wording 'oriented to be read from' rather than	<p>Amend standard as follows:</p> <p><u>SIGN-S2 Maximum total area of signs</u></p>

				'facing' the state highway as it is clearer. Therefore request that the wording is amended accordingly.	1. <i>The following maximum total area of signs per site must be complied with:</i> ... <i>e. signs oriented to be read from facing the State Highway Network, including on-ramps and off-ramps</i>
134	Part 2 Ngā Tohu - Signs	SIGN-S5	Support with amendments	Support controls on illumination for any signage visible from state highway, as per previous submission points, Waka Kotahi request that the wording is amended.	Amend standard as follows: <i>SIGN-S5 Signs located on a building or structure</i> ... <i>4. Where the sign is oriented to be read from facing the state highway network including on-ramps and off-ramps, or is visible from any intersection with the state highway, the sign must not be internally illuminated.</i>
135	Part 2 Ngā Tohu - Signs	SIGN-S6	Support with amendments	Waka Kotahi considers that as with SIGN-S5, there should be similar controls on illumination for Verandah signs that are oriented to be read from the State Highway network.	Amend standard as follows: <i>SIGN-S6 Verandah Signs</i> ... <i>4. Where the sign is oriented to be read from the state highway network including on-ramps and off-ramps, or is visible from any intersection with the state highway, the sign must not be internally illuminated.</i>
136	Part 2 Ngā Tohu - Signs	SIGN-S7	Support with amendments	Waka Kotahi supports the inclusion of standards that relate to traffic safety. Standard S7.2 is unclear – Waka Kotahi understands this to mean that digital signs are not permitted within 100m of an intersection, which is supported and is consistent with the targets in the RLPT. If this is the intention, this should be reflected in SIGN-S8.1 S7.7 is supported to manage the cumulative effects of advertising signage.	Amend as follows: <i>SIGN-S7 Traffic safety</i> <i>1. Where any sign is oriented to be read from located adjacent to any road, the sign must not contain any flashing or moving lights.</i> <i>2. Where any sign is located within 100m of an intersection and visible oriented to be read from a legal road, the sign must not be digital only contain static messaging and images.</i> <i>3. Signs must not be shaped or use images or colours, including changeable messages, that</i>

					<p>could be mistaken for a traffic control device in colour, shape or appearance.</p> <p>4. Signs must not obstruct the line of sight of any corner, bend, intersection or vehicle or rail crossing.</p> <p>5. Signs must not obstruct, obscure or impair the view of any traffic or railway sign or signal.</p> <p>6. All signs within 10m of a legal road must comply with the minimum lettering height in Table 11 – SIGN: Minimum lettering heights below.</p>
137	Part 2 Ngā Tohu - Signs	Sign-S8	Support with amendments	<p>Waka Kotahi supports the inclusion of standards to manage the effects of digital billboards. Additions and changes are requested to manage the effects of digital billboards.</p> <p>As per our interpretation of S7.2, which Waka Kotahi supports, the standard should be amended to restrict digital billboards within 100m of an intersection. In addition, drivers should not be able to see more than one digital billboard at any one time.</p> <p>Waka Kotahi recommends that no digital billboards are located in environments where the posted speed limit is 70km/h or higher, as evidence does find a statistically significant increase in crashes in the presence of digital billboards in higher speed environments.</p> <p>Waka Kotahi also consider that dwell time should be determined based on the principle that no more than 5% of drivers should view an image change. 15 seconds may be appropriate in some circumstances, but each should be assessed on a case by case basis.</p>	<p>Amend as follows:</p> <ol style="list-style-type: none"> 1. Digital signs must not: <ol style="list-style-type: none"> a. Flash or contain moving images, moving text or moving lights; b. Obstruct or obscure, including partially, any traffic control device; c. Play music or sound; d. Provide advertising over multiple messages which are displayed across transitioning screens; e. Contain phone numbers, email addresses, web addresses, physical addresses, or contact details or logos; f. Contain more than 40 characters; or g. <u>Be oriented to be read from located adjacent to a State Highway, including on ramps and off ramps.</u> h. Impair the ability of Air Traffic Control to guide aircraft, or pilots to operate aircraft. i. <u>be located within 100m of an intersection</u> j. <u>be located where there are any other digital billboards in a driver's field of vision.</u> k. <u>be oriented to be read from any road where the posted speed limit exceeds 70km/h</u> 2. Each image on a digital sign shall: <ol style="list-style-type: none"> a. Be static only; b. Be displayed for a minimum of 15 seconds for roads with posted

				<p>Dissolving of images is preferred to flashing, blinking, fading, or scrolling.</p>	<p><i>speed limits of less than and equal to 80km/h, and an appropriate dwell time determined so that no more than 5 per cent of drivers are exposed to image changes. and a minimum of 35 seconds for roads with a posted speed limit of greater than 80km/h;</i></p> <p><i>c. Transition to another image within 0.1 to 0.5 seconds; and</i></p> <p><i>d. Transition to another image without flashing, blinking, fading, or scrolling, or dissolving.</i></p> <p><i>3. In the event of a malfunction, a digital sign shall default to a blank screen.</i></p> <p><i>4. Illumination of any sign shall:</i></p> <p><i>a. Automatically adjust to allow for ambient light levels; and</i></p> <p><i>b. Not result in the illuminance of a roadway by over 4 lux in residential and rural areas and 20 lux in all other areas; and</i></p> <p><i>c. Shall not exceed:</i></p> <p><i>i. Daytime: 5,000cd/m²</i></p> <p><i>ii. Dawn and dusk: 600cd/m²</i></p> <p><i>iii. Night-time: 250cd/m²</i></p>
138	Part 2 Ngā Tohu - Signs	SIGN-S10	Support with amendments	<p>Waka Kotahi does not support temporary signs visible from the state highway as a permitted activity and therefore request that SIGN-S10 is amended to restrict signs visible from the State Highway that can occur without consent. 60 days is a long time for a sign to be permitted without the approval of Waka Kotahi.</p>	<p>Amend as follows:</p> <p><i>1. The sign shall not be displayed any earlier than 28 days prior to the event or activity the sign is advertising, and for no longer than 60 days in total.</i></p> <p><i>2. The sign must be removed within 7 days of the completion of the event or activity.</i></p> <p><i>3. <u>The sign must not be oriented to be read from any state highway including on ramps and off ramps.</u></i></p>
139	Part 2 Ngā Tohu - Signs	SIGN-S12	Support with amendments	<p>Waka Kotahi considers that as with SIGN-S5, there should be similar controls on illumination for signs on a heritage building that are oriented to be read from the state highway network.</p>	<p>Add the following:</p> <p><i>3. <u>Where the sign is oriented to be read from the state highway network including on-ramps and off-ramps, or is visible from any intersection with the state highway, the sign must not be internally illuminated.</u></i></p>

140	Part 2 Ngā Mahi Taupua – Temporary Activities	Chapter	Oppose	<p>These activities have the potential to have significant impact on the safe and efficient operation of the transport network, particularly those of a larger scale, or directly accessing the state highway network</p> <p>Traffic generated from events is not considered to be adequately managed through this chapter or through the transport chapter.</p> <p>Temporary events for which anticipated numbers exceed 100 vehicles on any day which are accessed from the state highway should require a traffic management plan. The transport chapter does not make it clear that the trip generation applies to temporary events. Permitted rules in this chapter should be also required to comply with the trip generation rules in the transport chapter.</p> <p>See submission point on trip generation which Waka Kotahi request are adopted.</p>	Amend to include trip generation triggers, above which the activity status should be restricted discretionary, with discretion restricted to traffic and safety effects.
141	Part 3 He Rohe Pokapū Paekiritata - Neighbourhood Centre Zone	All provisions	Support with amendments	<p>the term “roading network” is used in several places, and the term is not defined.</p> <p>Waka Kotahi particularly supports the provision for public transport, consideration of function of the transport network, the discouragement of carparking visible at street edge along an active frontage and the quality design outcomes.</p>	Amend the reference to “transport network”, to ensure that it captures all transport modes.
142	Part 3 He Rohe Pokapū Haukāinga -	All provisions	Support with amendments	the term “roading network” is used in several places, and the term is not defined.	Amend the reference to “transport network”, to ensure that it captures all transport modes. .

	Local Centre Zone			Waka Kotahi particularly supports the provision for public transport, consideration of function of the transport network, the discouragement of carparking visible at street edge along an active frontage and the quality design outcomes	
143	Part 3 He Rohe Arumoni - Commercial Zone	All provisions	Neutral	This zone seems to apply only to a block of land on Curtis Street. Waka Kotahi would like the policy direction to be clearer about expectations for this area, especially the integration of active and public transport in its development (and especially given that it is currently a vacant site).	Retain as notified.
144	Part 3 – He Rohe Whakamahinga Rau - Mixed Use Zone	All provisions	Support	Waka Kotahi supports provision for active and public transport, consideration of function of the transport network, the discouragement of carparking visible at street edge along an active frontage and the quality design outcomes.	Retain as notified.
145	Part 3 – He Rohe Paetata Tāone - Metropolitan Centre Zone	All provisions	Support	Waka Kotahi supports provision for public transport, consideration of function of the transport network, the discouragement of carparking visible at street edge along an active frontage and the quality design outcomes.	Retain as notified.
146	Part 3 He Rohe Pokapū Tāone - City Centre Zone	All provisions	Support	Waka Kotahi supports providing for access to active and public transport activity options, discouraging carparking at ground level and the quality design outcomes.	Retain as notified.
147	Part 3 He Rohe Ahumai Whānui - General	All provisions	Neutral	Waka Kotahi supports the provisions in this zone.	Retain as notified.

	Industrial Zone				
148	Part 3– He Rohe Ahoaho - Open Space Zone	OSZ – Other relevant district plan provisions	Support with amendments	<p>Some of the activities permitted in this chapter have the potential to generate significant traffic and have a significant impact on the safe and efficient operation of the transport network if not managed appropriately. As trip generation is proposed to be managed in the traffic chapter, specific reference should be included to that chapter.</p> <p>Permitted rules in this chapter should be also required to comply with the trip generation rules in the transport chapter.</p> <p>Note that Waka Kotahi is seeking a permitted trip generation threshold of 100 equivalent car movements per day for any activity accessed from the state highway</p>	<p>Add note:</p> <p><u>All activities in this chapter must comply with the trip generation thresholds in the transport chapter</u></p>
149	Part 3– He Rohe Ahoaho - Open Space Zone	OSZ-O2	Support	Waka Kotahi supports the inclusion of this objective which requires effects on the surrounding area to be managed effectively.	Retain as notified.
150	Part 3– He Rohe Ahoaho - Open Space Zone	OSZ-P1	Support with amendments	<p>Some of the activities permitted in this chapter have the potential to generate significant traffic and have a significant impact on the safe and efficient operation of the transport network – particularly those that are of a larger scale or directly access the state highway network. Waka Kotahi requests that the wording of the policy is amended to include consideration of wider effects on the transport network.</p>	<p>Amend as follows:</p> <p>Enabled activities</p> <p><i>Enable a wide range of recreational activities, and a limited range of other activities that are compatible with the predominant purpose, character and amenity of the Open Space Zone, while ensuring that their scale and intensity is appropriate and adverse effects on the wider environment, including the transport network, are managed.</i></p>

151	Part 3– He Rohe Ahoaho - Open Space Zone	OSZ-P3	Support with amendments	Some of the activities permitted in this chapter have the potential to generate significant traffic and have a significant impact on the safe and efficient operation of the transport network – particularly those that are of a larger scale or directly access the state highway network. Waka Kotahi requests that the wording of the policy is amended to include consideration of wider effects on the transport network.	Amend as follows: Potentially compatible activities ... 1. <i>The activity maximises the use of existing buildings; and</i> 2. <i>Any reverse sensitivity effects can be appropriately managed; and</i> 3. <i><u>Effects on the wider environment, including the transport network, are managed.</u></i>
152	Part 3– He Rohe Ahoaho - Open Space Zone	OSZ-R1 OSZ-R2 OSZ-R6 OSZ-R10	Oppose	<p>These activities have the potential to have significant impact on the safe and efficient operation of the transport network, particularly those of a larger scale, or directly accessing the state highway network</p> <p>Traffic generated from events is not considered to be adequately managed through this chapter or through the transport chapter.</p> <p>Activities in this chapter which exceed 100 equivalent car movements per day where they are accessed from state highway should require a traffic management plan. Permitted rules in this chapter should be also required to comply with the trip generation rules in the transport chapter.</p> <p>The permitted activity status of these activities is opposed with the trip generation thresholds proposed in the plan as notified.</p>	<p>If activities are to retain permitted activity status:</p> <ul style="list-style-type: none"> • See submission point on trip generation which Waka Kotahi request are adopted. • Reference to the trip generation thresholds should be included in this chapter – and in the rule table of the activities referenced in this submission point.

153	Part 3– He Rohe Ahoaho - Open Space Zone	OSZ-R11	Support	Support discretionary activity status for activities not provided for as this will enable effects to be assessed and managed, including those to the transport network.	Retain as notified.
154	Part 3 He Rohe Hākinakina/Kōringa Tinana - Sport and Active Recreation Zone	SARZ - Other relevant district plan provisions	Support with amendments	<p>Some of the activities permitted in this chapter have the potential to generate significant traffic and have a significant impact on the safe and efficient operation of the transport network if not managed appropriately. As trip generation is proposed to be managed in the traffic chapter, specific reference should be included to that chapter.</p> <p>Permitted rules in this chapter should be also required to comply with the trip generation rules in the transport chapter.</p> <p>Note that Waka Kotahi is seeking a permitted trip generation threshold of 100 equivalent car movements per day for any activity accessed from the state highway.</p>	<p>Add note:</p> <p><u>All activities in this chapter must comply with the trip generation thresholds in the transport chapter.</u></p>
155	Part 3 He Rohe Hākinakina/Kōringa Tinana - Sport and Active Recreation Zone	SARZ-O2	Support	Waka Kotahi supports the inclusion of this objective which requires effects on the surrounding area to be managed effectively.	Retain as notified
156	Part 3 He Rohe Hākinakina/Kōringa Tinana - Sport and Active Recreation Zone	SARZ-P1	Support with amendments	Some of the activities permitted in this chapter have the potential to generate significant traffic and have a significant impact on the safe and efficient operation of the transport network – particularly those that are of a larger scale or directly access the state highway network. Waka	<p>Amend as follows:</p> <p><i>Enabled activities</i></p> <p><i>Enable a wide range of recreational activities that are compatible with the purpose, character and amenity values of the Sport and Active Recreation Zone, or which enhance the public use and</i></p>

				Kotahi requests that the wording of the policy is amended to include consideration of wider effects on the transport network.	<i>enjoyment of the open space, while ensuring that their scale and intensity is appropriate <u>and adverse effects on the wider environment, including the transport network, are managed.</u></i>
157	Part 3 He Rohe Hākinakina/Koringa Tinana - Sport and Active Recreation Zone	SARZ-P3	Support with amendments	Some of the activities permitted in this chapter have the potential to generate significant traffic and have a significant impact on the safe and efficient operation of the transport network – particularly those that are of a larger scale or directly access the state highway network. Waka Kotahi request that the wording of the policy is amended to include consideration of wider effects on the transport network.	Amend as follows: <ul style="list-style-type: none"> 5. <i>Any maritime activities and associated facilities adjoining the coast or a water body have a functional need or operational need for a coastal location; and</i> 6. <i>Any adverse residential amenity effects will be minimised.; <u>and</u></i> 7. <i><u>Effects on the wider environment, including the transport network, are managed.</u></i>
158	Part 3 He Rohe Hākinakina/Koringa Tinana - Sport and Active Recreation Zone	SARZ-R1 SARZ-R2 SARZ-R4 SARZ-R5 SARZ-R6	Oppose	<p>These activities have the potential to have significant impact on the safe and efficient operation of the transport network, particularly those of a larger scale, or directly accessing the state highway network</p> <p>Traffic generated from events is not considered to be adequately managed through this chapter or through the transport chapter.</p> <p>Activities in this chapter which exceed 100 equivalent car movements per day where they are accessed from state highway should require a traffic management plan. Permitted rules in this chapter should be also required to comply with the trip generation rules in the transport chapter.</p>	<p>If activities are to retain permitted activity status:</p> <ul style="list-style-type: none"> • See submission point on trip generation which Waka Kotahi request are adopted. • Reference to the trip generation thresholds should be included in this chapter – and in the rule table of the activities referenced in this submission point.

				The permitted activity status of these activities is opposed with the trip generation thresholds proposed in the plan as notified.	
159	Part 3 He Rohe Hākinakina/Koringa Tinana - Sport and Active Recreation Zone	SARZ-R13	Support	Support discretionary activity status for activities not provided for as this will enable effects to be assessed and managed, including those to the transport network.	Retain as notified
160	Part 3 - All zones	All zones that provide for noise sensitive activities	Neutral	Waka Kotahi considers that adding a note to zones which provide for noise sensitive activities to draw applicants' attention to the reverse sensitivity provisions would be beneficial for aiding public interpretation on the planning provisions that apply	Add note: <u>Note: As well as provisions in the zone new buildings or alterations to existing buildings for noise sensitive activities are required to comply with the provisions in the NOISE chapter, which include sound insulation as a requirement in certain areas or limiting the establishment of noise sensitive activities in some cases.</u>
161	Part 3 - He Rohe Tuawhenua Whānui - General Rural Zone	All provisions	Neutral	Areas zoned General Rural Zone as notified does not contain land accessed from state highway, if the extent of General Rural Zones area changes, Waka Kotahi may be interested.	No relief sought.
162	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-P1	Support with amendments	Waka Kotahi supports the provision of appropriately scaled residential activities where they do not result in adverse effects to the roading network. Policy wording should be revised to enable the management of the effects on the roading network from residential activities.	Amend as follows: <i>Residential activities</i> <i>Allow residential activities in the Large Lot Residential Zone that result in a low density of building form and open character, and that do not adversely affect the safety and efficiency of the roading network.</i>
163	Part 3 He Rohe Kāinga Wehewehe - Large Lot	LLRZ-P2	Support with amendments	Waka Kotahi supports the provision of appropriately scaled non-residential activities where they do not result in adverse effects to the roading network.	Amend as follows: <i>Enabled non-residential activities</i> <i>Provide for home business, visitor</i>

	Residential Zone			Policy wording should be revised to enable the management of the effects on the roading network from non-residential activities	<p><i>accommodation, supported residential care activities, and childcare service activities to occur where:</i></p> <ol style="list-style-type: none"> 1. <i>the scale is such that the low-density amenity of the Large Lot Residential Zone is maintained; and</i> 2. <i><u>the safety and efficiency of the roading network will be maintained.</u></i>
164	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-P4	Support	Waka Kotahi supports the wording as notified which provides for appropriately scaled community facility activities where they do not result in adverse effects to the roading network.	Retain as notified
165	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-P5	Support with amendments	Waka Kotahi supports the policy direction to avoid activities which are incompatible but consider the wording should include those activities which adversely affect the roading network.	<p>Amend as follows:</p> <p><i>Inappropriate activities</i></p> <p><i>Avoid activities that are incompatible with the purpose and the amenity values of the Large Lot Residential Zone, <u>or which have an adverse effect on the safety and efficiency of the roading network.</u></i></p>
166	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-P7	Support	Waka Kotahi supports the wording as notified which provides for appropriately scaled educational facility activities where they do not result in adverse effects to the roading network.	Retain as notified
167	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-P8	Support with amendments	Waka Kotahi supports the policy direction, as it requires buildings to ensure that infrastructure has capacity – and consider the wording should be amended to provide for all public infrastructure.	<p>Amend as follows</p> <p><i>Infrastructure</i></p> <p><i>Ensure that new buildings can be appropriately serviced by either on-site or council reticulated <u>public infrastructure that is able to accommodate the demand generated by the proposed activity within the building.</u></i></p>

168	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-R2	Support	Waka Kotahi supports the permitted activity status and rules for home business activities, and the restricted discretionary activity status where the rules are not complied with. Waka Kotahi also supports that the effects on the roading network are included as a matter of discretion for restricted discretionary activities. This rule provides for small-scale activities while enabling the management of effects to the transport network from larger scale activities.	Retain as notified.
169	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-R3	Support	Waka Kotahi supports the permitted activity status and rules for Visitor Accommodation activities, and the restricted discretionary activity status where the rules are not complied with. Waka Kotahi also supports that the effects on the roading network are included as a matter of discretion for restricted discretionary activities. This rule provides for small-scale activities while enabling the management of effects to the transport network from larger scale activities.	Retain as notified.
170	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-R4	Support	Waka Kotahi supports the permitted activity status and rules for Childcare services, and the discretionary activity status where the rules are not complied with. This rule provides for small-scale activities while enabling the management of effects to the transport network from larger scale activities. Childcare activities can have significant effects on the transport network and a discretionary activity status is therefore appropriate.	Retain as notified.
171	Part 3 He Rohe Kāinga Wehewehe -	LLRZ-R5	Support	Waka Kotahi supports the permitted activity status and rules for supported	Retain as notified.

	Large Lot Residential Zone			residential care activities, and the restricted discretionary activity status where the rules are not complied with. Waka Kotahi also supports that the effects on the roading network are included as a matter of discretion for restricted discretionary activities. This rule provides for small-scale activities while enabling the management of effects to the transport network from larger scale activities.	
172	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-R6	Support with amendments	<p>Waka Kotahi supports the provision for some rural activities in the zone as a permitted activity where the activities will not adversely affect the safety or efficiency of the transport network, and therefore consider that the rule should be amended to ensure that trip generation as a result of these permitted activities is minimal.</p> <p>Waka Kotahi supports the discretionary activity status where the permitted standards are not met as this enables managing adverse effects to the transport network.</p>	<p>Amend as follows:</p> <p>Activity Status: <i>Permitted</i></p> <p><i>Where:</i></p> <p>a. <i>The activity is limited to:</i></p> <ul style="list-style-type: none"> i. <i>The grazing and keeping of livestock;</i> ii. <i>Equestrian activities; and</i> iii. <i>Horticulture.; <u>and</u></i> <p><u>b. <i>Vehicle movements generated by the activity comply with the trip generation thresholds in the transport chapter.</i></u></p>
173	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-R7; LLRZ-R8	Support	These activities can have significant effects on the transport network and a discretionary activity status is therefore appropriate and enable managing adverse effects on the transport network	Retain as notified.
174	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-R9	Support	Waka Kotahi supports the activity status of non-complying for activities not listed – this enables the management of any adverse effects on the safety and function of the transport network	Retain as notified.

175	Part 3 He Rohe Kāinga Wehewehe - Large Lot Residential Zone	LLRZ-S1	Support with amendments	Residential activities that are not permitted should be assessed for any adverse effect on infrastructure and the transport network	<p>Amend as follows: ...</p> <p><i>4. Whether the topography of the site mitigates or exacerbates effects; and</i></p> <p><i>5. The extent to which site layout or landscaping has been incorporated into the design to mitigate any resulting amenity effects; and</i></p> <p><i>6. Whether the proposal will have any adverse effects on infrastructure capacity or the safety and efficiency of the transport network and how any effects will be managed.</i></p>
176	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	Extent of proposed zoning / walkable catchments	Oppose	<p>Waka Kotahi does not agree that the ten-minute walkable catchments as proposed in the notified plan realise the development capacity required by the NPS-UD. It is noted that there was some analysis undertaken to determine a ten-minute walkable catchment, however given the planned changes in the district and wider region to enable mode-shift, the walkable catchments should consider the planned future environment and outcomes sought under the RLTP.</p> <p>Given the level of amenities and services in Wellington City Centre and the districts' other centres, the commuter habits of Wellington Residents, and planned improvements to walking, cycling and public transport links, Waka Kotahi advocates for Wellington City Council to include walkable catchments that better reflect actual (and anticipated future) patterns. Enabling higher densities in key areas</p>	<p>High density residential zoning to be applied to:</p> <ul style="list-style-type: none"> • A minimum 1.5km catchment from the edge of the city centre zone. • A minimum 800m catchment from the edge of all metropolitan zones and the edge of all existing and planned rapid transit stops – including those along the Johnsonville line. • A 400m walkable catchment from the edge of Local Centre Zones. <p>The catchment should be measured along pedestrian infrastructure (existing and planned) rather than 'as the crow flies'</p>

			<p>will support the Council's plans to improve multi-modal connectivity – such as the bike network plan that is being developed.</p> <p>Waka Kotahi considers that a much larger catchment from the edge of the city centre zone of at least 1.5 km is appropriate, at least 800m from metropolitan zones and existing and planned rapid transit stops, and 400m from local centre zones.</p> <p>A larger catchment around the city centre zone will enable the realisation of benefits associated with higher densities, including access to services, employment, and recreation. A large base population will also support existing and future public and active transport mode initiatives. This is supported by the number of options available to Wellington commuters including the uptake of travel modes such as e-bikes, e-scooters.</p> <p>For Metropolitan Centre Zones and existing or planned rapid transit stops, the walkable catchment of 800m recognises the critical importance of these matters in contributing towards a well-functioning urban environment where more people have easier access to more services.</p> <p>Waka Kotahi considers that Council should take a long-term, enabling view of development in the local centre and neighbourhood centre zones and that this should be reflected in the densities proposed.</p> <p>In addition to this, Waka Kotahi considers that the</p>	
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				<p>Johnsonville line should be classified as mass rapid transit to align with the Regional Growth Framework, the regional land transport and the regional public transport plan. Waka Kotahi notes that Wellington City Council is of the view that the Johnsonville line does not currently meet the definition for mass rapid transit, however frequency and reliability are planned to be improved through activities outlined in the RLTP. Given that policy 3 of the NPS-UD applies to both (i) existing and planned rapid transit stops, Waka Kotahi considers that the stops along the Johnsonville line would meet this definition and therefore the High Density Residential Zoning should apply in a walkable catchment (of at least 800m) from the edge of all train stations along the Johnsonville line and all other planned rapid transit stops. Enabling density in these areas will support the transport outcomes sought across the region – including the planned improvements to rail.</p>	
177	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	Maximum densities enabled	Oppose	<p>The NPS-UD requires councils to enable buildings of at least 6 storeys within at least a walkable catchment of existing and planned rapid transit stops, the edge of city centre zones, and the edge of metropolitan centre zones, with building heights and densities of urban form commensurate with the level of commercial activity and community services in other centre zones.</p> <p>As many centres as possible should be up-zoned to the fullest extent possible to</p>	<p>The provisions in the High Density residential zone should be amended to enable higher densities to better align with the NPS-UD.</p> <p>Waka Kotahi recommend that greater building heights are enabled – to provide for densities that are commensurate to the services available. Waka Kotahi considers this is best determined by an assessment undertaken by Wellington District Council to determine what densities are commensurate in different areas across the district, or otherwise</p>

				<p>provide for local services for people who will be living in the walkable catchments. Enabling additional densities in these areas will also support provision of public transport and active transport infrastructure in the future by concentrating population. Council should take long term view where there are uncertainties. This achieves the objectives of the NPS-UD in creating well-functioning urban environment</p> <p>Waka Kotahi notes that the notified plan changes documents did not include an assessment on the commensurate density in the various areas around Wellington. In absence of this assessment, Waka Kotahi is of the view that a six-storey maximum in the high-density residential zones is not likely to be commensurate with the level of services in the various centres. A maximum of six storeys may be appropriate around some local centre zones, but Waka Kotahi considers that higher buildings should be enabled in walkable catchments from the edge of the city centre, metropolitan centre zones, as well as around rapid transit stops. Waka Kotahi considers that enabling buildings of up to twelve storeys subject to resource consent would be appropriate in the context of the Wellington City district.</p>	<p>the following maximum building heights are included:</p> <ul style="list-style-type: none"> • Maximum of six storeys in a walkable catchment of local centre zones • Maximum of twelve storeys in a walkable catchment of city centre, metropolitan centre zones and within a walkable catchment of existing and planned rapid transit stops.
178	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	Special Character Precincts	Oppose	<p>Waka Kotahi does not consider that the extent of special character precincts and the way that they have been applied is supported by the NPS-UD, the limitations will affect the ability of Waka Kotahi to deliver on key</p>	<p>Undertake further assessment to weigh the benefits of character protection against the wider opportunity costs of development limitations in key areas.</p> <p>Amend underlying zoning to Medium or High-Density Zone,</p>

	<p>He Rohe Kāinga Mātoru- Waenga - Medium Density Residential Zone</p>		<p>strategic priorities (such as mode shift and emissions reduction) without the densities to support the ambitious targets.</p> <p>The special character precincts are proposed as a qualifying matter and are intended to protect the 'concentration of consistent character and prevent its future erosion. The NPS-UD is explicit in its direction that the amenity standards of our urban environments will change and evolve and clearly favours providing for change in urban form over protection of existing amenity standards. Many of the precincts are within the walkable catchment and therefore not zoned as High Density Residential.</p> <p>Waka Kotahi considers the extent and nature of special character protection inappropriately limits the development capacity and evolution of Wellington urban form that the NPS-UD seeks to enable. Waka Kotahi consider that the extent and nature of special character area precincts is contrary to the purpose of the NPS-UD. Objective 4 requires that 'New Zealand's urban environments, including their amenity values, develop and change over time in response to the diverse and changing needs of people, including their amenity values', and policy 6 requires that planning decisions that affect urban environments have particular regard to the following matters:</p> <p>'(b) that the planned urban built form in those RMA planning documents may involve significant changes to an area, and those changes</p>	<p>depending on locations within walkable catchments and provide for Special Character Areas as an overlay.</p> <p>Either remove the demolition control or include provisions that provide for demolition only as part of an approval for a replacement development.</p> <p>Provide for special character by instituting design controls in the overlays which allow for special character to be considered and incorporated in design while enabling levels of development anticipated by the zones.</p>
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				<p>(i) may detract from amenity values appreciated by some people but improve amenity values appreciated by other people, communities, and future generations, including by providing increased and varied housing densities and types; and</p> <p>(ii) are not, of themselves, an adverse effect'</p> <p>The evaluation report provided to support the inclusion of these as a qualifying matter does not adequately address why development is inappropriate in these areas and weigh that against the national significance of urban development, including addressing the opportunity costs of the limitations. The evaluation report also does not consider the inclusion and extent of the special character area precincts as a qualifying matter, with consideration to the direction of the NPS-UD which specifically provides for the detraction of amenity values in some areas to enable intensification.</p> <p>The section 32 report does not sufficiently assess the limitations on development – it identifies the cost to landowners as they will have to apply for resource consent, but does not assess the potential societal costs, wider economic costs, or costs to infrastructure</p>	
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			<p>delivery, urban form, or mode-shift as a result of not enabling development to its fullest potential in central city suburbs which are the most accessible locations in the region. This is particularly relevant given the controls proposed are so restrictive (including the demolition controls) that they would prevent the vast majority of feasible development from occurring in these areas.</p> <p>The section 32 report also identifies that the evaluation undertaken has shown that the proposed district plan as notified is providing for sufficient development capacity to meet the requirements of the NPS-UD. It does not address that the NPS-UD requires direction for higher development in certain areas to support compact urban form and walkability of centres. It also doesn't address the limitation on the walkable catchment that the Character Areas would impose.</p> <p>In the report for Wellington City Council titled 'Wellington City Commercially Feasible Residential Capacity Assessment' dated June 2022 apartments and terraced housing typologies (the typologies that are anticipated in the higher density residential zone) make up a significant proportion of realisable yield (refer table 3 of the report), and the suburbs where special character areas are proposed are identified as areas with among the highest feasible capacity for these typologies. Intensification should be promoted and enabled closest to the centres in the first instance, which is in line</p>	
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				with Wellington City's own development projections. The implications of character protection controls on development capacity and the foregone benefits that would result from more compact urban form have not been adequately addressed.	
179	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	P1 Sch 1	Support with amendments	Waka Kotahi supports the direction to enable a range of housing types and densities in the High Density residential zone. As per our earlier submission point Waka Kotahi consider that enabling up to twelve stories is appropriate in certain areas where the density is supported by services.	Amend as follows: <i>The High Density Residential Zone provides for a range of housing types at a greater density and scale than the Medium Density Residential Zone. It gives effect to the requirements of the RMA to allow for three residential units of up to three storeys on a site, and also by enabling multi-unit housing of up to six twelve storeys in appropriate areas through a resource consent process subject to standards and design guidance.</i>
180	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-O1	Support with amendments	Waka Kotahi supports this objective with amendments that better reflect the type of development anticipated in the zone. In addition, Waka Kotahi supports enabling appropriately scaled commercial and mixed use activities to support the higher density provided for.	Amend as follows: Purpose The High Density Residential Zone provides for predominantly residential activities <u>and mixed use activities that support urban living</u> , and a variety of housing types and sizes that respond to: 1. Housing needs and demand; and 2. The neighbourhood's planned urban built character, including 3-storey buildings, <u>and higher density residential living such as apartments of up to twelve storeys.</u>

181	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-O2	Support with amendments	Waka Kotahi considers that higher densities should be explicitly provided for and expected in the zone, to better align with the direction of the NPS-UD to achieve a compact urban form.	<p>Amend as follows:</p> <p><i>Efficient use of land</i></p> <p><i>Land within the High Density Residential Zone is used efficiently for residential development that:</i></p> <ol style="list-style-type: none"> 1. <i>Increases housing supply and choice;</i> 2. <i>May be of a Provides for a greater density and scale than the Medium Density Residential Zone; and</i> 3. <i>Contributes positively to a more intensive high-density urban living environment</i>
182	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P1	Support with amendments	Waka Kotahi considers that to support the higher densities, commercial activities (particularly at ground floor) should be enabled and encouraged where they are integrated with residential development.	<p>Amend as follows:</p> <p><i>Enabled activities</i></p> <p><i>Enable residential activities and other activities that are compatible with the purpose of the High Density Residential Zone, while ensuring their scale and intensity is consistent with the amenity values anticipated for the Zone, including:</i></p> <ol style="list-style-type: none"> 1. <i>Home business;</i> 2. <i>Boarding houses;</i> 3. <i>Visitor accommodation;</i> 4. <i>Supported residential care;</i> 5. <i>Childcare services; and</i> 6. <i>Community gardens.</i> 7. <i><u>Commercial activities where they are integrated with residential development</u></i>
183	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P2	Support with amendments	Waka Kotahi considers that higher densities should be explicitly provided for and expected in the zone, to better align with the direction	<p>Amend as follows:</p> <p><i>Housing supply and choice</i></p> <p><i>Enable a variety of housing</i></p>

	Residential Zone			of the NPS-UD to achieve a compact urban form. This should include provision for apartments of appropriate heights and dwellings of four storeys.	<i>typologies with a mix of densities within the zone, including 3- 4-storey townhouses attached and detached dwellings, and <u>low-rise apartments of up to twelve-storeys in height in suitable locations, and residential buildings of up to 6-storeys in height.</u></i>
184	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P3	Support with amendments	Waka Kotahi considers that to support the higher densities, commercial activities (particularly at ground floor) should be enabled and encouraged where they are integrated with residential development.	Amend as follows: <i>Housing needs</i> <i>Enable housing to be designed to meet the day-to-day needs of residents, and encourage a variety of housing types, sizes and tenures, <u>and commercial activities where appropriately integrated into residential development,</u> to cater for people of all ages, lifestyles and abilities.</i>
185	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P4	Support with amendments	Given that higher densities and a more urban form are anticipated in the High Density Residential Zone, Waka Kotahi considers that the permitted level of development should be higher – to support the urban change outcomes in the NPS-UD.	Amend as follows: <i>Medium density residential standards</i> <i>Apply the medium density residential standards across the High Density Residential Zone except in circumstances where a qualifying matter is relevant (including matters of significance such as historic heritage and the relationship of Māori and their culture and traditions with their ancestral lands, water, sites, wāhi tapu, and other taonga), <u>and enable higher permitted threshold of development due to the more urban character of the High Density Residential Zone.</u></i>
186	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P6	Support with amendments	Waka Kotahi considers that multi-unit housing should be appropriately designed and insulated to mitigate noise effects from the existing environment in the interests of the human health of occupants. As per previous submission points, Waka Kotahi	Amend as follows: ... <i>3. Provides an adequate and appropriately located area on site for the management, storage and collection of all waste, recycling and organic waste potentially</i>

				considers that commercial activities should be encouraged and supported where appropriate and integrated with residential development.	<p><i>generated by the development; and</i></p> <p>4. <i>Is adequately serviced by three waters infrastructure or can address any constraints on the site; and</i></p> <p>5. <i>Where located in proximity to legally established activities that emit noise (such as State Highways), buildings for noise sensitive activities are designed to mitigate noise and vibration effects to occupants.</i></p> <p>6. <i>For higher density developments, options to incorporate mixed-uses such as commercial activities have been explored.</i></p>
187	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P7	Support with amendments	Waka Kotahi considers that retirement villages in urban areas should be suitably located to ensure that they are not car-centric developments. Consideration of location, access to services for residents with varying degrees of mobility should be included in any development proposal.	Amend as follows: ... 4. <i>Is adequately serviced by three waters infrastructure or can address any constraints on the site; and</i> 5. <i>Is of an intensity, scale and design that is consistent with the amenity values anticipated for the Zone; and</i> 6. <i>Is suitably located and designed to enable multi-modal connectivity.</i>
188	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P8	Support with amendments	Waka Kotahi considers that housing should be appropriately designed and insulated to mitigate noise effects from the existing environment in the interests of the human health of occupants. As per previous submission points, Waka Kotahi considers that commercial activities should be encouraged and supported	Amend as follows: ... 4. <i>Achieve attractive and safe streets, and</i> 5. <i>Where located in proximity to legally established activities that emit noise (such as State Highways), are designed to mitigate noise and vibration effects on sensitive receivers</i>

				where appropriate and integrated with residential development.	6. <u>For higher density developments, options to incorporate mixed-uses such as commercial activities at ground floor have been explored.</u>
189	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P11	Support	Support policy wording as it requires consideration of passive surveillance.	Retain as notified
190	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P13	Support with amendments	As per previous submission points, Waka Kotahi considers that commercial activities should be encouraged and supported where appropriate and integrated with residential development.	Amend as follows: 5. <u>Enabling ease of access for people of all ages and mobility.;</u> <u>and/or</u> 6. <u>Incorporating non-residential uses to provide for mixed use development.</u>
191	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-P14	Support with amendments	As per previous submission points, Waka Kotahi considers that commercial activities should be encouraged and supported where appropriate and integrated with residential development.	Amend as follows: ... 1. <u>Maintain the safety and efficiency of the transport network; and</u> 2. <u>Are adequately serviced by three waters infrastructure or can address any constraints on the site; and</u> 3. <u>are integrated into residential developments where possible</u>
192	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density	HRZ-R2	Support with amendments	Support provision for three dwellings per site, given the zoning there may be opportunity to provide for higher densities as a permitted activity – such as four dwellings of up to four	Amend as follows: <i>Residential activities, excluding retirement villages, supported residential care activities and boarding houses</i>

	Residential Zone			storeys subject to permitted activity standards and restricted discretionary activity status supported where that can't be achieved. Support notification preclusion where resource consent is required.	<p><i>Activity status: Permitted</i></p> <p><i>Where:</i></p> <p><i>No more than three four residential units occupy the site</i></p>
193	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ Rules: Land Use Activities	Add Rule	Waka Kotahi considers that the inclusion of a permitted land use rule to provide for mixed use development in multi-unit housing supports the outcomes of the zone and in the NPS-UD.	<p>Add Rule:</p> <p><u>HRZ-R2x</u></p> <p><u>Commercial activities</u></p> <p><u>Activity status permitted</u></p> <p><u>Where</u></p> <p><u>a. They are integrated into a multi-unit residential development;</u></p> <p><u>b. In apartment buildings, commercial activities are at street level.</u></p>
194	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-R7	Support with amendments	Waka Kotahi supports the permitted activity status for childcare service activities for up to 10 children, the effects of larger scale activities of this nature should be assessed through a resource consent and the RD activity status for childcare activities exceeding 10 children at a time is considered appropriate. Traffic effects should be added as a matter of discretion as childcare activities can generate high volumes of traffic. In urban areas, childcare services should be located and designed to facilitate alternative transport modes – e.g located in densely populated areas with good walking connections. In addition, a matter of discretion should be included to support multi-use development, provision to include childcare facilities	<p>Amend as follows:</p> <p>...</p> <p><i>Matters of discretion are:</i></p> <ol style="list-style-type: none"> 1. <i>The extent to which the intensity and scale of the activity may adversely impact on the amenity values of nearby residential properties and the surrounding neighbourhood.</i> 2. <i>The extent to which childcare facilities are integrated into residential development</i> 3. <i>Traffic generation and effects on the road network, and</i> 4. <i>How alternative modes will be supported.</i>

				into residential developments where possible	
195	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-R8	Support with amendments	Support the restricted discretionary activity status for retirement villages provided that HRZ-P7 is revised to require consideration to multi-modal connectivity	Retain as drafted, provided changes to HRZ-P7 is updated as per our submission point
196	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-R9	Support with amendments	In interests of amenity and services for urban environments, Waka Kotahi considers that commercial activities should be included as a restricted discretionary activity. Access to appropriately located and scaled commercial activities improves amenity for residents in urban environments and creates for walkable environments. Waka Kotahi supports this rule provided that commercial services are included and HRZ-P14 is revised to include provision for integrated residential developments.	Amend to include commercial activities, and revise HRZ-P14 as per our submission point HRZ-R9 Community facility, <u>commercial activity</u> , health care facility, emergency facility, education facility (excluding child care services)
197	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-R10	Support	Support discretionary activity status for activities not provided for so that the effects of incompatible activities can be assessed and managed.	Retain as notified
198	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-R13	Support with amendments	Support construction of residential buildings as a permitted activity subject to standards, Waka Kotahi considers that the permitted density should be increased to enable the built urban form and better align with the outcomes of the NPS-UD. Waka Kotahi supports this if amendments are made to the referenced standards as per our submission point, and if the permitted number	Amend as follows: Construction, addition or alteration of buildings and structures where no more than three <u>four</u> residential units occupy the site

				<p>of buildings is increased to four to enable more capacity in urban areas.</p> <p>Restricted discretionary activity status is supported where permitted activity standards are not met.</p>	
199	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-R14	Support with amendments	<p>Restricted Discretionary Activity status is supported for construction of multi-unit houses, subject to our submission points on standards, objectives, and policies referred to in the rule.</p>	Retain as notified
200	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-R16	Support with amendments	<p>To ensure visibility over the road corridor, Waka Kotahi requests that this rule is amended to ensure that no structures or buildings in the road reserve are provided for where it is controlled by Waka Kotahi unless approval has been provided.</p>	<p>Amend as follows:</p> <p><i>HRZ-R16 Buildings and structures on or over a legal road</i></p> <p><u>Where the legal road is controlled by Waka Kotahi, written approval has been provided from Waka Kotahi authorising the building or structure.</u></p> <p>1. Activity status: Restricted Discretionary ...</p>
201	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S1	Support with amendments	<p>Waka Kotahi considers that this standard should be amended to enable greater densities (heights and number of dwellings) to promote a more urban form. It is considered that dwellings of this scale that comply with the permitted activity standards should not require resource consent and better aligned with the outcomes of the NPS-UD.</p>	<p>Amend as follows:</p> <p><i>HRZ-S1 Building height control 1 where no more than three four residential units occupy the site</i></p> <p><i>Buildings and structures must not exceed 11 14 metres in height above ground level, except that 50% of a building's roof in elevation, measured vertically from the junction between wall and roof, may exceed this height by 1 metre, where the entire roof slopes 15° or more, as shown in Diagram 5 below:</i></p>

202	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S2	Support with amendments	Waka Kotahi supports the direction to enable a range of housing types and densities in the High Density residential zone. As per our earlier submission point Waka Kotahi consider that enabling up to twelve stories is appropriate in certain areas where the density is supported by services.	<p>Amend as follows:</p> <p><i>HRZ-S2 Building height control 2 for multi-unit housing or a retirement village</i></p> <ol style="list-style-type: none"> 1. <i>Buildings and structures must not exceed <u>21-42</u> metres in height above ground level,</i> <p><i>This standard does not apply to:</i></p> <ol style="list-style-type: none"> a. <i>Fences or standalone walls;</i> b. <i>Solar panel and heating components attached to a building provided these do not exceed the height by more than 500mm; and</i> c. <i>Satellite dishes, antennas, aerials, chimneys, flues, architectural or decorative features (e.g. finials, spires) provided that none of these exceed 1m in diameter and do not exceed the height by more than 1m</i> <p><i>Assessment criteria where the standard is infringed:</i></p> <ol style="list-style-type: none"> 1. <i>Streetscape and visual amenity effects;</i> 2. <i>Dominance, privacy and shading effects on adjoining sites;</i> 3. <i>Effects on the function and associated amenity values of any adjacent open space zone; and</i> 4. <i>Wind effects.</i> 5. <i><u>Contribution to built urban form and outcomes sought under the NPS-UD</u></i>
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203	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S4	Support with amendments	All boundary setbacks should have immediate legal effect to align with the MDRS requirements, and to avoid confusion where boundary setbacks are applied from both the operative and district plan. It is noted the intention of the NPS-UD is to enable urban environments to evolve and change, enabled by the national standards.	Amend standards so that it has immediate legal effect.
204	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S5	Support	Support building coverage standard as it aligns with the MDRS requirements.	Retain as drafted
205	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S6	Support	Support outdoor living space standard as it aligns with MDRS requirements.	Retain as drafted
206	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S7	Support	Support outlook space standard as it aligns with the MDRS requirements	Retain as drafted
207	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S8	Support	Support the windows to street standard as it aligns with the MDRS requirements.	Retain as drafted

208	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S9	Support	Support the landscaped area standard as it aligns with the MDRS requirements	Retain as drafted
209	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S15	Neutral	Neutral – Waka Kotahi notes that there are no HIRB or boundary setback standards – neutral position on privacy separation standard instead.	No relief sought
210	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ -S16	Oppose	Waka Kotahi considers this standard should be removed as it is unnecessarily restrictive to development – residential developments are already required to consider residential development guide and require consent as a RD activity – unsure of the intended purpose of restricting depth, Waka Kotahi is concerned about the implications where large multi-unit residential developments are proposed. Waka Kotahi considers that this standard and HRZ-S17 may be better addressed with a building coverage standard that enables densities sought by the NPS-UD for urban areas.	Delete standard and references to it within chapter.
211	Part 3 He Rohe Wharenoho Mātoru-Nui - High Density Residential Zone	HRZ-S17	Oppose	Waka Kotahi considers this standard should be removed as it is unnecessarily restrictive to development – residential developments are already required to consider residential development guide and require consent as a RD activity – especially with the inclusion of proposed standard HRZ-S17. Waka Kotahi is concerned about the implications where large multi-unit residential	Delete standard and references to it within chapter.

				developments are proposed. Waka Kotahi considers that this standard and HRZ-S16 may be better addressed with a building coverage standard that enables densities sought by the NPS-UD for urban areas. Waka Kotahi note that the assessment criteria for this one is the dominance, privacy, and shading effects on adjoining sites – if this is retained the assessment criteria should be restricted to on-site amenity to address the effects of the infringement.	
212	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ- PREC01 MRZ PREC02	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character.	Wellington City Council to undertake weighting exercise to determine extent of protection required on balance with achieving outcomes in NPS-UD.
213	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ PREC03	Support with amendments	Support higher densities being enabled in the medium density residential zone, it is noted that as per our submission point on character areas, the opinion of Waka Kotahi is that character is more suitable as an overlay. Where higher densities are suitable and anticipated, the high-density residential zone could apply as all higher densities require consent as a restricted discretionary activity. Waka Kotahi considers that the precinct would be more appropriate as an overlay, and/or the area rezoned to high density residential zone. If this precinct is retained, as per our earlier submission point, a further weighting exercise needed to justify inclusion and extent of	Providing for higher densities is supported. Where permitted MDRS rules are not applied, Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD

				provisions related to special character.	
214	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC01-O1 MRZ-PREC02-O1	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character.	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
215	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC03-O1	Neutral	Waka Kotahi is neutral on the inclusion of this objective, where changes as per our earlier submission point on the Oriental Bay Height precinct are taken on board.	No relief sought
216	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-P6	Support with amendments	<p>Waka Kotahi considers that multi-unit housing should be appropriately designed and insulated to mitigate noise effects from the existing environment in the interests of the human health of occupants.</p> <p>As per previous submission points, Waka Kotahi considers that commercial activities should be encouraged and supported where appropriate and integrated with residential development.</p>	<p>Amend wording as follows: ...</p> <ol style="list-style-type: none"> 3. <i>Provides an adequate and appropriately located area on site for the management, storage and collection of all waste, recycling and organic waste potentially generated by the development; and</i> 4. <i>Is adequately serviced by three waters infrastructure or can address any constraints on the site; and</i> 5. <i>Where located in proximity to legally established activities that emit noise (such as State Highways), buildings for noise sensitive activities are designed to mitigate noise and vibration effects to occupants.</i> 6. <i>For higher density developments, options to incorporate mixed-uses such as commercial activities have been explored.</i>

217	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-P7	Support with amendments	<p>Waka Kotahi considers that multi-unit housing should be appropriately designed and insulated to mitigate noise effects from the existing environment in the interests of the human health of occupants.</p> <p>As per previous submission points, Waka Kotahi considers that commercial activities should be encouraged and supported where appropriate and integrated with residential development including retirement villages.</p> <p>Waka Kotahi considers that retirement villages should be suitably located to ensure that they are not car-centric developments. Consideration of location, access to services for residents with varying degrees of mobility should be included in any development proposal.</p>	<p>Amend as follows: ...</p> <ol style="list-style-type: none"> 4. Is adequately serviced by three waters infrastructure or can address any constraints on the site; and 5. Is of an intensity, scale and design that is consistent with the amenity values anticipated for the Zone;:- 6. <u>Is suitably located and designed to enable multi-modal connectivity; and</u> 7. <u>Where located in proximity to legally established activities that emit noise (such as State Highways), buildings for noise sensitive activities are designed to mitigate noise and vibration effects to occupants.</u>
218	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-P11	Support	Support provision for passive surveillance on roads	Retain as notified
219	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-P12	Support	Support wording as notified, which requires the consideration of effects on the road network as a result of multi-unit housing in areas where there are known capacity issues is endorsed.	Retain as notified
220	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-P15	Support with amendments	As per previous submission points, Waka Kotahi considers that mixed-use activities should be encouraged and supported where appropriate and integrated with residential development.	<p>Amend as follows: ...</p> <ol style="list-style-type: none"> 5. <i>Maintain the safety and efficiency of the transport network; and</i> 6. Are adequately serviced by three waters infrastructure or can

					address any constraints on the site.; and 7. <u>are integrated into residential developments where possible</u>
221	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ- PREC01-P1	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
222	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ- PREC01-P2	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
223	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ- PREC01-P5	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
224	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ- PREC01-P6	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
225	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ- PREC02-P1 MRZ- PREC03-P1	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
226	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium	MRZ-R2	Support	Support permitted activity status for three dwellings subject to standards and no limit in the Oriental Bay Height Precinct, and	Retain as notified

	Density Residential Zone			restricted discretionary activity status where this can't be achieved.	
227	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R3	Support with amendments	Support permitted activity standards for home business as it limits potential traffic effects on the roading network. Support restricted discretionary activity status for where the standards are not met. Please refer to our submission points on the standards.	Retain as notified and amend standards as per our submission points.
228	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R7	Support with amendments	Waka Kotahi supports the permitted activity status for childcare service activities for up to 10 children, the effects of larger scale activities of this nature should be assessed through a resource consent and the RD activity status for childcare activities exceeding 10 children at a time is considered appropriate. Traffic effects should be added as a matter of discretion as childcare activities can generate high volumes of traffic. In urban areas, childcare services should be located and designed to facilitate alternative transport modes – e.g located in densely populated areas with good walking connections. In addition, a matter of discretion should be included to support multi-use development, provision to include childcare facilities into residential developments where possible	Amend as follows: <i>Matters of discretion are:</i> <ol style="list-style-type: none"> 1. <i>The extent to which the intensity and scale of the activity may adversely impact on the amenity values of nearby residential properties and the surrounding neighbourhood;</i> 2. <i>The extent to which childcare facilities are integrated into residential development;</i> 3. <i>Expected traffic generation and effects on the road network; and</i> 4. <i>how alternative modes will be supported.</i>
229	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R8	Support with amendments	Support the restricted discretionary activity status for retirement villages provided that MRZ-P7 is revised to require consideration to multi-modal connectivity.	Retain as notified, provided changes to MRZ-P7 are made as per our submission point

230	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R9	Support with amendments	In interests of amenity and services for urban environments, Waka Kotahi considers that commercial activities should be included as a restricted discretionary activity. Access to appropriately located and scaled commercial activities improves amenity for residents in urban environments and creates for walkable environments. Waka Kotahi supports this rule provided that commercial services are included and MRZ-P15 is revised to include provision for integrated residential developments.	Amend as follows: <i>MRZ-R9 Community facility, commercial activity, health care facility, emergency facility, education facility (excluding child care services).</i>
231	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R10	Support	Support discretionary activity status for activities not provided for so that the effects of incompatible activities can be assessed and managed	Retain as notified.
232	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ rule table	Support with amendments	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character.	Undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD
233	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R13	Support with amendments	Support permitted activity status to construct up to three dwellings that comply with standards, provided that further weighting assessment is done on restrictions on character precincts, mount Victoria north townscape precinct and oriental bay height precinct as well, and provided that changes are made to standards as per our submission points. Support restricted discretionary activity status where the permitted activity rule conditions are not met.	See earlier submission points on character precincts and retain as notified.

234	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R14	Support with amendments	Support restricted discretionary activity status for multi-unit housing or a retirement village – if changes are made to standards as per our submission points.	Retain as notified and amend standards as per our submission points
235	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-R16	Support with amendments	To ensure visibility over the road corridor, Waka Kotahi requests that this rule is amended to ensure that no structures or buildings in the road reserve are provided for where it is controlled by Waka Kotahi unless approval has been provided.	Amend as follows: <i>MRZ-R16 Buildings and structures on or over a legal road</i> 1. <i>Activity status: Restricted Discretionary</i> <u>Where the legal road is controlled by Waka Kotahi, written approval has been provided from Waka Kotahi authorising the building or structure.</u>
236	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC01-R4	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character.	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
237	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC01-R5	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character.	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
238	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC01-R7	Neutral	To ensure visibility over the road corridor, Waka Kotahi requests that this rule is amended to ensure that no structures or buildings in the road reserve are provided for where it is controlled by	Amend as follows: <i>MRZ-PREC01-R7 Buildings and structures on or over a legal road</i> a. <u>Where the legal road is controlled by Waka Kotahi, written approval has been provided from</u>

				Waka Kotahi unless approval has been provided.	<u>Waka Kotahi authorising the building or structure.</u> 1. Activity status: Restricted Discretionary
239	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC02-R3	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character.	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
240	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC02-R5	Neutral with amendments.	To ensure visibility over the road corridor, Waka Kotahi requests that this rule is amended to ensure that no structures or buildings in the road reserve are provided for where it is controlled by Waka Kotahi unless approval has been provided.	Amend as follows: <i>MRZ-PREC02-R5 Buildings and structures on or over a legal road</i> 1. Activity status: Restricted Discretionary <u>Where the legal road is controlled by Waka Kotahi, written approval has been provided from Waka Kotahi authorising the building or structure.</u>
241	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-PREC03-R4	Neutral	Refer to submission point on character precincts. Further weighting exercise needed to justify inclusion, nature and extent of provisions related to special character.	Wellington City Council to undertake weighting exercise to determine extent and nature of protection required on balance with achieving outcomes in NPS-UD.
242	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density	MRZ-PREC03-R4	Neutral with amendments	To ensure visibility over the road corridor, Waka Kotahi requests that this rule is amended to ensure that no structures or buildings in the road reserve are provided for where it is controlled by	Amend as follows: <i>MRZ-PREC03-R6</i> <i>Buildings and structures on or over a legal road</i> 1. Activity status: Restricted Discretionary

	Residential Zone			Waka Kotahi unless approval has been provided.	<u>Where the legal road is controlled by Waka Kotahi, written approval has been provided from Waka Kotahi authorising the building or structure.</u>
243	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-S1	Support	Support standard, is consistent with MDRS requirements	Retain as notified
244	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-S2	Support	Support standard, support that up to four storeys are provided for multi-unit developments in some areas. Waka Kotahi would support greater heights for multi-unit developments that are subject to resource consent as well	Retain as notified
245	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-S3	Support	Support standard as notified, as it aligns with the MDRS requirements.	Retain as notified
246	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-S4	Support with amendments	All boundary setbacks should have immediate legal effect to align with the MDRS requirements, and to avoid confusion where boundary setbacks are applied from both the operative and district plan. It is noted the intention of the NPS-UD is to enable urban environments to evolve and change, enabled by the national standards.	Amend standard so that it has immediate legal effect.

247	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ-S5; MRZ-S8	Support	Support standards as notified, as they align with the MDRS requirements.	Retain as notified
248	Part 3 He Rohe Kāinga Mātoru-Waenga - Medium Density Residential Zone	MRZ- PREC03-S1 MRZ- PREC03-S2 MRZ- PREC03-S3	Neutral	Waka Kotahi is neutral on the specific standards that relate to the Oriental Bay Height Precinct – for the most part they enable more intensive development.	Retain as notified
249	Part 3 He Rohe Taunga Wakareran-gi - Airport Zone	AIRPZ-O2	Support with amendment	This objective should explicitly support the integration of the airport with the public transport network, given the wide ranging benefits to the public in terms of convenience, connectivity, alleviation of congestion, carbon reduction.	Amend as follows: <i>The dual character of the Airport Zone as a working environment and a regional / international gateway is balanced, recognising:</i> <ol style="list-style-type: none"> 1. <i>The Airport's role as an air and land transport hub that provides for the safe and efficient movement of people and goods;</i> 2. <i>There will be development that reflects the purpose of the Airport Zone, and for airport related purposes that provide the Airport with other forms of support; and</i> 3. <i>A higher standard of design may be necessary where large buildings or structures are adjacent to or visible from the public domain, and</i> 4. <i>The wide-ranging benefits of convenient connection of the airport to the city's public transport network</i>
250	Part 3 He Rohe Taunga Wakareran-gi - Airport Zone	AIRPZ-O5	Support	Support the decarbonisation of airport activities but should be explicit about the goal of providing integrated public	Retain as notified.

				transport to and from the airport.	
251	Part 3 He Rohe Kāinga ā te Wāheke - Future Urban Zone	FUZ-O1.	Support	Waka Kotahi supports greenfield development insofar as it is necessary to provide for residential development and business growth, does not compromise potential gains from intensification and does not adversely affect the safety and efficiency of the roading network.	Retain as notified.
252	Part 3 He Rohe Kāinga ā te Wāheke - Future Urban Zone	FUZ- O2	Support with amendments	Waka Kotahi supports providing for rural activities in the zone until the land is urbanised.	Amend for clarity on if new rural activities are being enabled.
253	Part 3 He Rohe Kāinga ā te Wāheke - Future Urban Zone	FUZ-R8	Support	This rule means the construction of a building is a Discretionary Activity which we support to potential assess any adverse effect on infrastructure and the transport network.	Retain as notified
254	Part 3 He Rohe Kāinga ā te Wāheke - Future Urban Zone	FUZ-S1	Support with amendments	Waka Kotahi considers it appropriate to provide for greater density in the zone.	Amend to allow a permitted height of 11m +1m for pitched roof.
255	Part 3 He Rohe Kāinga ā te Wāheke - Future Urban Zone	FUZ-S3	Support with amendments	Waka Kotahi considers it appropriate to provide for denser development in this area.	Amend to provide for setbacks in keeping with the medium density residential standards.
256	Part 3 He Rohe Hōhipera - Hospital Zone	All provisions	Support	Supportive of residential development and activities being provided for close to the hospital.	Retain as notified.
257	Part 3 He Rohe Keri Kōhatu - Quarry Zone	QUARZ-PREC01-S7	Support	Support that access is sole via an authorised crossing from State Highway 1.	Retain as notified.
258	Part 3 He Rohe Whare Ātea - Stadium Zone	STADZ-P2, P3 and P5	Support	Supportive of promoting pedestrian and cycling access and accessibility for all ages and mobility.	Retain as notified.

259	Part 3 He Rohe Mātātoru - Tertiary Education Zone	TERT-P6.4 and 6.5	Support	Supportive of promoting pedestrian and cycling access and accessibility for all ages and mobility.	Retain as notified.
260	Part 3 Ngā Whare Pāhi o Killbirnie - Killbirnie Bus Barns	Chapter in General	Support	Supportive of the development being consistent with the “Bus Barn – Concept Plan” to achieve the integrated land use outcomes.	Retain as notified.
261	Part 3 Ngā Whare Pāhi o Killbirnie - Killbirnie Bus Barns	DEV1-APP-R7	Support with amendments	Pedestrian linkages through the Bus Barn area should be a non-negotiable to enable a well connected transport route.	Amend as follows: <i>... but depending on the final design and layout of development on the site it may not be possible to provide ‘active edges’ strictly in accordance with District Plan definition along the full length of the internal road... as any divergence from providing good pedestrian linkages should be subject to further consideration.</i>
262	Part 3 Te Pāmu o Lincolnshire - Lincolnshire Farm	Chapter in General	Support with amendments	Supportive of the Development Plan to guide the growth with the following amendments: a) Access on to the Johnsonville Porua Motorway (SH1) at the Grenada Drive intersection may require upgrades to ensure no level of service deficiency as identified in the “Lincolnshire Farm Transport Review – June 2021 Tonkin and Taylor Ltd”. Further investigation should be made into this. Development should be managed until such time that appropriate mitigation has been determined or funding identified. b) Needs a specific to integrated transport including multi-modal connections needs to be	Include a proviso that planned development shall only occur once the infrastructure upgrades, including the SH1 and Grenada Drive intersection, have been completed. Include specific reference to all development within the Lincolnshire Farm area to facilitate multi-modal connections.

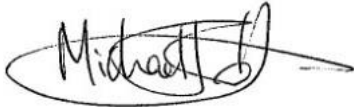
				provided for. DEV-O2 and DEV-O3 generally direct development to consider integration but it is not explicit to transportation.	
263	Part 3 Upper Stebbings and Glenside West	Chapter in General	Support with amendments	Supportive of the Development Plan to guide the growth with the following outcomes sought: a) The Tonkin Taylor “Transport Assessment Upper Stebbings” identifies a Level of Service F is anticipated at the intersection between Westchester Drive/ Middleton Road / Westchester Drive East, prior to the approach on to state highway 1. As such, development should be managed until such time that appropriate mitigation has been determined or funding identified. b) Provisions are required to enable integrated transport options including multi-modal connections. DEV3-O2 and DEV3-O3 generally direct development to consider integration but it is not explicit to transportation	Include a proviso that planned development shall only occur once the infrastructure upgrades, including the SH1 and Westchester Drive intersection, have been completed. Include specific reference to all development within the Upper Stebbings and Glenside West area to facilitate multi-modal connections.
264	Part 3 – Designations	NZTA – Waka Kotahi	Support	Waka Kotahi thanks WCC for the inclusion of the recommended designation details during the Draft DP phase. Waka Kotahi supports in full the proposed designations as drafted.	Retain As Notified

7. Waka Kotahi seeks the following decision from the local authority:

- (i) Waka Kotahi seeks relief on the matters outlined in the table.
- (ii) Any other relief that would provide for the adequate consideration of potential effects on the safe and efficient operation of the land transport network for all modes and users.

8. Waka Kotahi does wish to be heard in support of this submission.

9. **If others make a similar submission, Waka Kotahi will consider presenting a joint case with them at the hearing.**
10. **Waka Kotahi is willing to work with the Wellington City Council in advance of a hearing.**



Mike Scott
Principal Planner– Poutiaki Taiao / Environmental Planning
System Design, Transport Services
Pursuant to an authority delegated by Waka Kotahi NZ Transport Agency

Date: 12 September 2022.

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Appendix A

Table App5B/3 – Guidelines for minimum accessway spacings

Posted speed limit (km/h)	85 th percentile operating speed (or if not known, posted speed plus 10 km/h)	Recommended minimum distance between accessway and nearest intersection (m)	Recommended minimum distance between local road accessway and intersection (m)	Recommended minimum distance between accessways (m)	Desirable ⁴ spacings between accessways and between intersections and accessways on national state highways carrying over 10,000 vpd.
Not applicable	50	30	20	-	125
50	60	30	20	-	160
60	70	30	20	-	220
70	80	100	45	40	305
80	90	100	45	100	400
90	100	200	60	200	500
100	110	200	60	200	500

Appendix B

Table App5B/1 – Sight distance standards²

Posted speed limit (km/h)	85 th percentile operating speed, measured at the site (or if above not known, posted speed plus 10 km/h)	Minimum sight distance standard (m)
Not applicable	50	89
50	60	113
60	70	140
70	80	170
80	90	203
90	100	240
100	110	282

THE GREAT

WELLINGTON REGIONAL STORY



KO TE PAE TAWHITI LONG TERM PLAN

2021-2031



Greater Wellington
Te Pane Matua Taiao

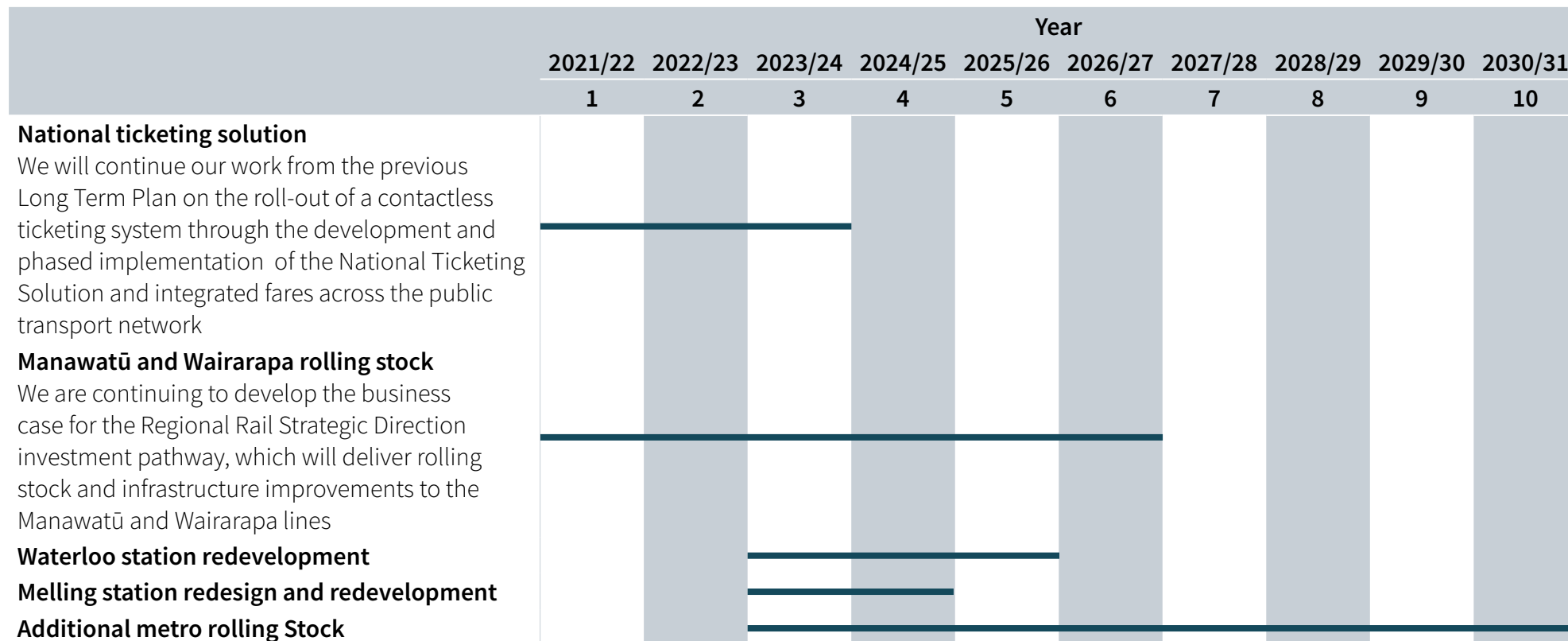
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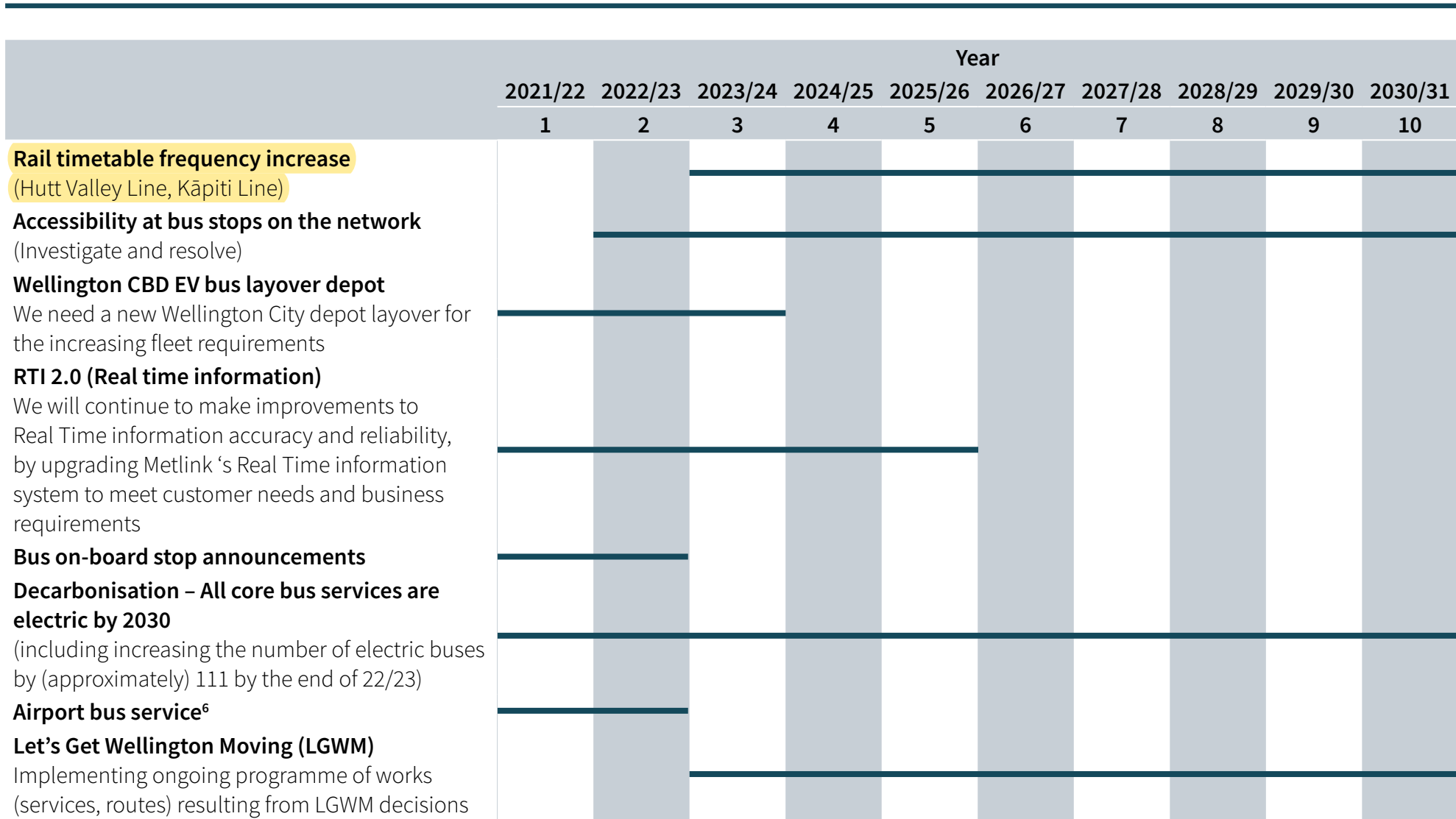
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⁶ Subject to inclusion in the final Wellington Regional Public Transport Plan



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WELLINGTON RAIL PROGRAMME BUSINESS CASE

WELLINGTON'S STRATEGIC RAIL PLAN

July 2022



Revision Schedule

Rev No	Date	Description	Name	Prepared by	Checked by	Reviewed by	Approved by
0.1	3/12/21	First Draft PBC	DW, SR, CLL, DW	DW, SR, CLL, DW	SW, SC	DW	DW
0.2	24/12/21	Draft PBC for Peer Review	DW, SR, CLL, DW	DW, SR, CLL, DW	SL	MS	DW
0.3	19/06/22	Draft Final PBC	DW, SR, DW	DW, SR, DW	DW	DW	DW
0.4	25/07/22	Final PBC	DW, SR	DW, SR	SC	MS	DW

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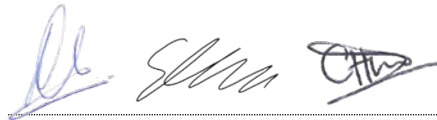
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Executive Summary

This Wellington Rail Programme Business Case (PBC) has been prepared by Stantec New Zealand and Greater Wellington Regional Council (GWRC) in collaboration with KiwiRail, Transdev New Zealand (GWRC's current rail service operator), and Waka Kotahi New Zealand Transport Agency (Waka Kotahi). It replaces the Wellington Regional Rail Plan and sets out a new customer-driven strategic plan for the region's rail system for the next 30 years, outlining what is required beyond current investment to help drive the region's economic development and social wellbeing in an environmentally and socially sustainable and resilient manner. It covers the passenger services and infrastructure needed to deliver a modern transit system, and the network infrastructure required to support this system while also enabling a growing freight operation, both within the region and linking into the neighbouring Horizons Region. The PBC thus provides the investment pathway needed to achieve the long-term vision of the New Zealand Rail Plan in the region.

Background

Rail is a critical component of Wellington's transport system. It forms the backbone of GWRC's extensive Metlink network of public transport services north of the Wellington CBD, where three quarters of region's population lives, and it provides a crucial link to the region and between the North and South islands, which is strategically important to the national transport system.

Metlink rail services radiate out over four key lines – the Johnsonville, Kāpiti, Wairarapa and Hutt lines – as well as the short Melling branch, which are collectively known as the Wellington metro rail network. The network has been electrified and emission-free since 1955 (aside from Wairarapa services), contributing strongly to the region's position as the least carbon-emitting. The 400,000 residents of the rail service area have access to 2,250 Metlink rail services in a typical week, and customers made 14.32 million trips in the year prior to the COVID-19 pandemic, when peak services were close to capacity. This patronage was more than 20 per cent higher than a decade earlier, a growth rate double that of population, with the extra growth reflecting a strong customer response to improvements to infrastructure, rolling stock, and services. The 42,000 daily peak trips accounted for over 40 per cent of peak trips from the north and around 20 per cent of all peak trips into the Wellington CBD.

KiwiRail's freight and passenger services also use the network – more than one hundred freight trains and sixteen inter-regional passenger trains in a typical week. The Kāpiti Line has a prominent role as the southern end of the North Island Main Trunk (NIMT) railway from Auckland, with freight services connecting most parts of the North Island to local industry, international shipping, and the South Island via the interisland ferry connection. The tourist-focused Northern Explorer from Auckland and the weekday peak Capital Connection (Manawatū Line) commuter service from Palmerston North also use that line. The Hutt and Wairarapa lines connect forestry-related freight traffic from Wairarapa to the port and provide access to KiwiRail's primary engineering facility at Gracefield.

Rail sits outside of the Let's Get Wellington Moving (LGWM) programme, as do all other transport system elements north of Ngauranga Gorge, which lies just to the north of the Wellington CBD. LGWM will provide mass transit to the south and east of Wellington City, which will complement the rail system that makes up the rapid transit system to the north, and interface with it at Wellington Station to enhance cross-region travel options and support mode shift. The success of the two programmes is consequently interlinked.

Growth Context

The region's rail system will need to respond to significant population growth over the coming decades. The 2021 Wellington Regional Growth Framework (RGF), a spatial plan developed by central government, local government, and iwi stakeholders, anticipates that the Wellington-Horowhenua region will need to accommodate an additional 200,000 people, a 35 per cent increase, and 100,000 jobs in the next 30 years. Three quarters of this growth is expected to occur to the north, along the eastern and western growth corridors that follow the primary rail corridors as shown in Figure 1. A substantial proportion of this growth is expected to occur in areas of the region with longer rail journey times, reflecting land cost and availability and recent improvements to the road link between Wellington and the Kāpiti and Horowhenua districts.

The RGF identifies the Metlink rail service as a key enabler of the growth to the north. It envisages intensification around railway stations and improved connections to stations to enable much of the additional transport demand associated with the expected growth to be borne by rail. Intensification around railway stations (as rapid transit stops) is required by the National Policy Statement on Urban Development (NPS-UD). The RGF recognises that rail capacity upgrades will be necessary to enable and meet this demand.

Option Development

A long list of nearly two hundred potential interventions expected to respond to the problems and help to achieve the investment objectives was developed with stakeholders in an ‘all ideas welcome’ environment through a series of meetings and workshops early in the option development phase of the PBC. Duplicates, specific minor works, business-as-usual, interventions considered not to contribute to an investment objective or enable an objective, and those that were out of scope were excluded at the early assessment stage. Interventions that remained following the early assessment were organised into the eight rail system investment programmes outlined in Table 1. All, other than the Do-Nothing and Do-Minimum programmes, sought to address all key problem areas, although each had a different focus and addressed each problem area to a greater or lesser extent or over a shorter or longer timeframe.

Table 1: Programme long list

Programme	Summary
Do-Nothing	Manage rail system decline while prioritising other modes. Lowest direct cost, but highest transport system and environmental cost.
Do-Minimum	Maintain a basic rail system while focusing investment on other modes. Low direct cost but high transport system and environmental cost.
Minor Improvements	Demand management with a focus on low-cost improvements to reliability, safety, and resilience. Lower direct cost but high transport system and environmental cost.
Moderate Improvements	Demand management with a focus on improvements to reliability, safety, and resilience, moderate capacity uplift, and station improvements. Moderate direct cost but still sizeable transport system and environmental cost.
Train Size Focus	Focus on maximising train size while holding frequency in the medium term to boost capacity while delaying the need to invest in below rail infrastructure. Supported by a wide range of reliability, safety, resilience, and customer-focused improvements. Higher direct cost but lower transport system and environmental cost.
Frequency Focus	Focus on maximising frequency, particularly during peak periods, before later increasing train size as needed. Supported by a wide range of reliability, safety, resilience, and customer-focused improvements. Higher direct cost but lower transport system and environmental cost.
Mixed Focus	Balance train size and frequency, by pragmatically increasing train size first where frequency is difficult to enable, and frequency first where it is easier to implement. Supported by a wide range of reliability, safety, resilience, and customer-focused improvements. Higher direct cost but lower transport system and environmental cost.
Drive Mode Shift	Remove all barriers to a high frequency, reliable, and comfortable passenger rail experience, and accelerate network capacity improvements, to drive mode shift within the required horizon. Supported by a wide range of safety, resilience, and customer-focused improvements. Highest direct cost but lowest transport system and environmental cost.

Long List Assessment

The programmes were evaluated using a two-stage process. Long list programmes were firstly outlined at a high-level, then assessed by stakeholders against the five investment objectives and five other criteria using multi-criteria analysis (MCA), with the Do-Minimum option as the baseline for comparison. The results were sensitivity tested using eleven weighting systems.

The long list assessment showed that the Drive Mode Shift programme consistently ranked as the best programme, with the best or equal-best score across most criteria (including all investment objectives) and most sensitivity tests, although it was the poorest scoring option against the deliverability and affordability criteria and sensitivity tests. The Mixed Focus programme scored similarly and generally in second place behind the Drive Mode Shift programme but was much better performing against the deliverability and affordability criteria and sensitivity tests. These programmes were taken forward to the short list as the best scoring programmes.

The Moderate Improvements programme was selected to take forward to the short list as a more deliverable and affordable alternative. It provided the best balance between deliverability and affordability criteria, and the investment objective, outcome, and policy-focused criteria. It can be regarded as a ‘middling’ option with neither significant advantages nor disadvantages, although it would only partially realise the investment objectives.

The Train Size Focus and Frequency Focus programmes scored well, but did not offer the same investment objective, outcome, and policy-focused advantages as the Drive Mode Shift and Mixed Focus programmes, or the deliverability and affordability advantages of the Moderate Improvements programme. These were consequently discounted, along

with the Do-Nothing, Do-Minimum, and Minor Improvements programmes, which scored poorly against the investment objective, outcome, and policy-focused criteria. The Do-Minimum programme was carried forward for comparison purposes only.

Short List Assessment

The three shortlisted programmes were further developed to define critical aspects, identify next steps and bundling, better define cost estimates, better understand timeframes, better understand operational issues, undertake more detailed patronage forecasting, and undertake initial economic analyses based on early-estimate benefits and costs. Table 2 provides the results of the initial economic analyses, showing that all three programmes would provide a positive return on investment, with the Drive Mode Shift programme offering the best potential value in terms of its positive mid and upper range incremental benefit cost ratio (BCR) and net present value (NPV), despite having the highest cost.

Table 2: Shortlisted programme value (60-year evaluation period)

	Benefit (\$m)	Cost (\$m)	Inc Benefit (\$m)	Inc Cost (\$m)	BCR	Inc BCR	NPV (\$m)
Moderate Improvements	\$1,780 - \$2,200	\$1,000	-	-	1.8 - 2.2	-	\$780 - \$1,200
Mixed Focus	\$2,450 - \$3,360	\$2,080	\$670 - \$1,160	\$1,080	1.2 - 1.6	0.6 - 1.1	\$370 - \$1,280
Drive Mode Shift	\$4,080 - \$5,890	\$3,820	\$1,630 - \$2,530	\$1,740	1.1 - 1.5	0.9 – 1.5	\$260 - \$2,070

The developed short list programmes were then reassessed by stakeholders through a second MCA process using an expanded scoring framework and the following wider set of criteria:

- The five investment objectives and overarching success factor (increased rail usage)
- Two policy alignment criteria: national policies, and regional policies and investment
- Six deliverability and wider outcomes criteria: funding availability, construction/engineering difficulty, consenting degree of difficulty, programme impacts from delays, economic impacts, and impacts to services during construction.

The status quo situation was used as the baseline for comparison. Results were sensitivity tested using three workshop and eleven other weightings, which emphasised specific criteria or criteria groupings, with the highest workshop priorities being given to the overarching success factor, economic outcomes, and improved safety.

The short list assessment reconfirmed the findings of previous assessment, finding the Drive Mode Shift programme to be the best programme, having the best or equal-best score across most criteria, including all investment objectives, the critical success factor, and the policy alignment criteria. Other than the Do-Minimum, it was the poorest scoring option against the deliverability and wider outcomes criteria, except for economic outcomes, reflecting the challenge of delivering a large programme of works quickly to meet mode shift requirements. It ranked as the first-choice option in most sensitivity tests, including all workshop tests.

The Mixed Focus programme generally ranked second to the Drive Mode Shift programme, again with a similar pattern to the previous assessment. Critically, it was well behind against the capacity and attractiveness investment objectives since it would deliver on these much later than the Drive Mode Shift programme. In contrast, it performed much better against the deliverability and wider outcomes criteria, mostly due to this delayed delivery. It ranked as the second-choice option in most sensitivity tests.

The Moderate Improvements programme again provided the best balance between the objective and policy focused criteria and the deliverability-focused criteria. It again offered neither significant advantages nor disadvantages, although it would only partially realise the investment objectives and would not support significant growth or mode shift in the short or medium term. It ranked as the third-choice option in most sensitivity tests, only coming first in the consenting focus test, reflecting its minimal infrastructure investment in the short and medium terms.

The Drive Mode Shift programme was selected as the best programme to take forward as the preferred programme based on the above assessments and conclusions.

Preferred Programme

The preferred programme delivers a 'fit for purpose', resilient, and safe rail system, enhances customer experience to encourage mode shift, and supports this with the capacity needed to meet and drive high patronage growth, providing:

- Highly connected stations in communities where people work, live, play and learn
- Accommodating stations that make any wait both pleasant and productive
- Frequent services that are faster and more convenient than by car
- Reliable services that recover quickly from disruption
- Links that facilitate convenient connections for national freight customers
- Infrastructure and safety systems that enable transport without undue conflict.

The programme includes a wide range of improvements, key elements of which are summarised in Figure 2, including:

- **Station access improvements** to make active and public transport more attractive as access modes, which will support first and last mile accessibility, reduce the reliance on private vehicle and park and ride in line with zero carbon objectives, and support intensification near stations as envisaged by the RGF and NPS-UD.
- **Improvements to all aspects of station amenity** across the network, including to accessibility, shelter, and information, which will ensure that accessibility obligations to disabled customers are met, that the waiting and overall customer journey experience is first-class, and that it is attractive to new customers for mode shift. These improvements will support increased at-station transit-oriented development where feasible.
- Progressive **service frequency improvements**, from the current 20-minute peak frequency to a 15-minute, then 10-minute, and finally 6-minute peak (turn up and go) frequency at most stations on the Hutt and Kāpiti lines, along with an improved 15-minute off-peak frequency within the electrified area and significantly improved service levels on long-distance services, which will provide better travel options for customers, support the region's growth, and deliver the capacity needed to drive and accommodate the required mode shift.
- Supporting **electric multiple unit (EMU) fleet expansion** to enable the higher frequencies, and replacement and expansion of the mixed and obsolete long-distance Wairarapa and Manawatū train fleets with new low emission trains to reduce rail emissions and provide system bridging capacity in first decade.
- **Network resilience and operational flexibility upgrades**, including improvements to slopes, bridges, culverts, track infrastructure, areas subject to sea level rise and storm surge, and operational patterns and maintenance, which will make the Wellington rail system safer and more resilient, particularly in the face of climate change, and ensure that it can recover quickly when events occur to minimise customer impact.
- **Wellington throat capacity improvements**, including a fourth main to enable the operational separation of Hutt and Kāpiti services, northern access to EMU stabling, and separated access to the Wellington freight terminal, which will significantly reduce conflict between passenger and freight services and improve network and service resilience and reliability.
- **Full duplication between Pukerua Bay and Paekakariki** (North-South Junction), a key single-track constraint with several tunnels, and addition of a third main in the Porirua-Tawa area, which will enable higher passenger frequencies and improve service resilience and reliability on the Kāpiti Line. This will make rail a more attractive travel option on that line, where population growth is expected to be highest, and ensure continued freight access to the network as passenger frequencies increase.
- **Duplicated approach to the Waikanae Station**, including a bridge and second platform, which will reduce conflict between passenger and freight services, improve service resilience and reliability, and enable higher passenger frequencies on the Kāpiti and Manawatū lines.
- **Network resignalling**, which will remove restrictions on the number of peak hour services, safely enable future frequency improvements, and improve operational flexibility, resilience, and reliability.
- **Traction power upgrades**, including additional substations and wider enabling power network upgrades, which will overcome current limitations and enable higher future train frequencies.
- **Rail network segregation** at all places where reasonably practicable, including improved fencing and grade separation of pedestrian and vehicle level crossings, which will significantly improve safety and the experience of surrounding communities as frequencies increase.
- **Continuous improvement of systems, processes, and capability**, including improved asset management.

Key Improvements



Figure 2: Key improvements

Table 3 shows the strong alignment of the preferred programme with the five investment objectives.

Table 3: Alignment with the investment objectives

Objective	Preferred Programme	Alignment
Support a sustainable future	<ul style="list-style-type: none"> 34 per cent increase in peak hour passenger arrivals by 2032, and 82 per cent by 2052 (excluding long-distance), relative to 2019 Expected mode shift to rail of between 14.2 per cent and 20.5 per cent by 2031, with a similar reduction in vehicle kilometres travelled (11.8 million km per annum in the latter case) Mode shift related emission reductions of approximately 3 per cent (3,435 tonnes) per annum by 2031. 	High
Provide capacity that supports access and growth	<ul style="list-style-type: none"> EMU fleet expansion from 166 to 366 cars by 2048 Long distance rolling stock fleet replacement and expansion from 32 to 88 carriage equivalents by 2028 Continued access and increased reliability for freight services. 	High
Attractive and easy to use	<ul style="list-style-type: none"> Progressive increases in frequency from 3 trains per hour (tph) to 10 tph at most stations in peak periods by 2042 Increase from 3 to 4 tph at most stations in off-peak periods Station accessibility and customer experience improvements, including improved shelter at all stations, improved cycle facilities at 38 stations, improved disabled access at 21 stations, community hubs/facilities at 13 stations, improved bus connection facilities at 10 stations, active modes change facilities at 10 stations, and maintenance to prevent flooding and improve attractiveness. 	High
Adaptable to disruptions	<ul style="list-style-type: none"> Improved network infrastructure and operations to minimise the likelihood and effect of disruption and mitigate climate change impacts Removal of bottlenecks, track changes, and a new signalling system to reduce conflict between trains, improve flexibility and reliability, and aid recovery from events Annual resilience benefits of \$9.1m by 2032 and \$17.9m by 2052. 	High
Improve safety for all	<ul style="list-style-type: none"> New signalling system to provide modern engineering control and significantly reduce the likelihood of train collisions Grade separation of 15 road level crossings to remove the risk of collision between trains and vehicles Grade separation of 6 pedestrian level crossings to remove the risk of collision between trains and pedestrians Improved fencing to reduce risk of accidental track access. 	High

The final programme has a BCR range of 1.1 to 1.5 (with a sensitivity range of 0.9 to 1.8), based on discounted economic benefits of between \$4,430m (lower patronage) and \$5,760m (higher patronage), and discounted economic costs of \$3,880m, over the 60-year evaluation period. Benefits are split across wider economic (24 per cent), road user (20 per cent), public transport user (19 per cent), land use (18 per cent), rail freight (14 per cent), and other benefits (6 per cent). The programme has a recommended National Land Transport Programme priority order rating of 2, based on the BCR range, a very high Government Policy Statement on Land Transport Alignment rating, and a high Scheduling rating.

Financial Case

The expected (P50) preferred programme cost and revenue estimates are shown in Table 4, for the initial four three-year planning cycles of the programme, the remaining period, and the overall programme. Around 69 per cent of capital costs relate to below rail infrastructure (rail network infrastructure and network segregation), and 25 per cent to rolling stock (train fleet expansion and replacement). The balance relates to above rail infrastructure (station, station precinct, and station access improvements). The 95th percentile (P95) cost is 57 per cent higher at \$15,629.7m reflecting a similar increase in the capital cost P95 estimate.

Table 4: Expected programme cost and revenue estimates (2022 \$m)

Category	2021-24	2024-27	2027-30	2030-33	2033-52	Total
Capital	\$27.6	\$504.1	\$1,269.7	\$1,380.5	\$4,164.2	\$7,346.1
Network Maintenance	\$89.6	\$147.5	\$137.3	\$153.3	\$1,031.6	\$1,559.3
Service Operating	\$174.0	\$261.7	\$279.7	\$308.2	\$2,383.8	\$3,407.4
Fare Revenue	(\$113.1)	(\$179.3)	(\$192.9)	(\$210.6)	(\$1,686.8)	(\$2,382.7)
Total Net Cost	\$178.1	\$734.0	\$1,493.8	\$1,631.4	\$5,892.8	\$9,930.1

Figure 3 outlines the annual and accumulating P50 capital costs of the programme, showing the large amount of up-front investment in enabling infrastructure that is required in the first half of the programme, particularly between 2027-28 and 2035-36. The timing and scale of service level improvements and associated train fleet requirements will be able to be accelerated or decelerated depending on government priorities and the level of demand once this infrastructure is in place, taking account of relevant lead times, providing some flexibility.

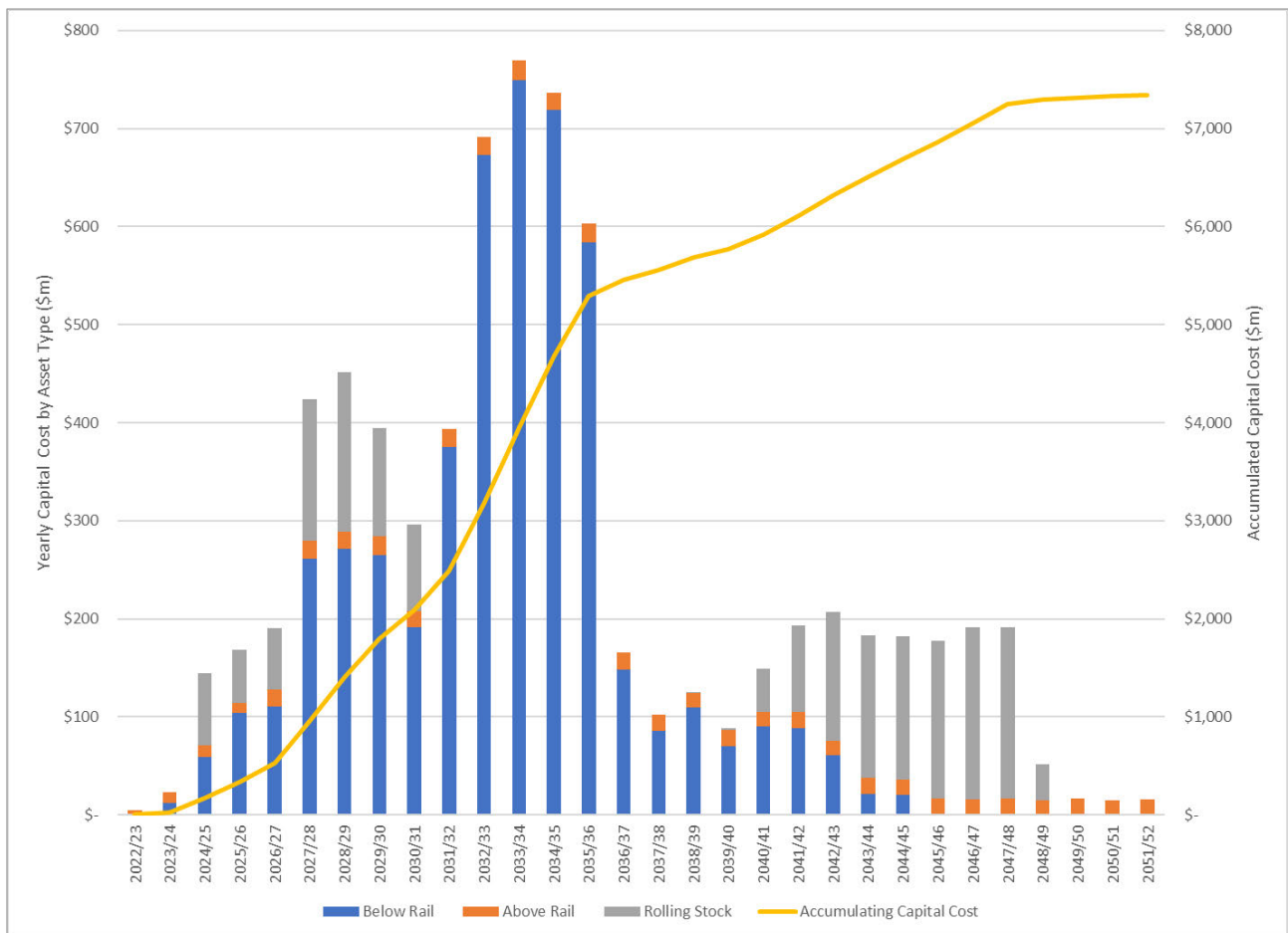


Figure 3: Annual and accumulating capital costs by asset type (2022 \$m)¹

Funding arrangements have not been confirmed, but it is expected that contributions will come from passenger fares, regional council and territorial council rates and debt funding, the National Land Transport Fund through Waka Kotahi, Crown funding, the Climate Emergency Response Fund, new policy and regulatory approaches such as congestion

¹ Below rail capital costs relate to KiwiRail network infrastructure. Above rail capital costs relate passenger-focused fixed infrastructure. Rolling stock capital costs relate to the trains that operate on the network.

Table 2-1: Summary of characteristics by line

	Johnsonville Line	Kāpiti Line	Wairarapa Line	Hutt Line (incl. Melling Line)
Length	10.5 km	55.4 km to Waikanae (NIMT continues to Palmerston North and Auckland)	58.6 km north of Upper Hutt (line continues to Woodville but the Masterton-Pahiatua section is not currently used by scheduled services)	Hutt 32.4 km Melling 3.0 km from Petone
Service area population (30 June 2019)⁹	50,000	125,000 (plus 130,000 north to Palmerston North)	48,000	155,000
Stations (excluding Wellington Station)	8	13	8 (also stop at 3 Hutt stations)	18 (16 Hutt and 2 Melling)
Stations with park and ride facilities	5	11	5	12 (11 Hutt and 1 Melling)
Peak service level at Wellington (each way)	4 per hour	7 per hour	3 per day	6 Hutt and 3 Melling per hour
Interpeak service level (each way)	2 per hour	3 per hour	2 per day	3 Hutt and 1 Melling per hour
Annual patronage (2019 FY)	1.46m	6.01m	0.78m	6.08m
Patronage change over decade (2019 vs 2009 FY)	15%	33%	15%	12%
Avg. daily morning peak patronage (June 2019)	1,743	7,826	1,252	8,468
Morning peak patronage change (2019 vs 2009)	11%	29%	24%	16%
KiwiRail passenger services per weekday¹⁰	-	3	-	-
Freight services per 24-hour mid-week period¹¹	-	14	4	4 (from Wairarapa)
Track arrangement	Single track with passing loops	Double track other than 3.5 km single track section between Paekākāriki and Pukerua Bay, and 1.0 km single track at Waikanae	Single track with passing loops north of Upper Hutt (services use double track the Hutt Line south of Upper Hutt)	Hutt Line double track Melling branch single track
Electrification Status	Electrified	Electrified to Waikanae – not electrified north of there	Not electrified	Electrified

⁹ Statistics NZ subnational population estimates by territorial authority on 30 June 2019, combined with 2018 Census statistical area data for the rail-served areas of Wellington City.

¹⁰ Includes the weekday peak Capital Connection from Palmerston North and alternating-day Northern Explorer from Auckland.

¹¹ Excludes shunting services.

Table 4-1: Key physical constraints

Line	Area	Constraints/Issues
All	Wellington Station Approach	Existing assets (maintenance facility, stabling and maintenance yards) KiwiRail freight yard
	Kaiwharawhara	Interislander terminal SH1 and Hutt Road
Johnsonville	Ngaio Gorge	Single track (capacity) Slope stability Five tunnels Wadestown escarpment Kaiwharawhara Stream General steep gradients and sharp curves
	Crofton Downs to Raroa	Single track (capacity) Residential houses Khandallah Rd/Cockayne Road/Burma Road Two tunnels Slope stability General steep gradients and sharp curves
	Johnsonville	Single track (capacity) Slope stability Moorefield Road Johnsonville Mall
Kāpiti	Kaiwharawhara to Glenside	Tawa Tunnels and SH1 overbridge
	Glenside to Tawa	SH1 Porirua Stream Slope stability
	Tawa Basin	Residential houses Porirua Stream Level crossings at Tawa Street, McLellan Street, and Collins Avenue
	Porirua – Plimmerton	Porirua Stream SH59 Porirua Harbour Level crossings at Pascoe Ave and Steyne Avenue
	Plimmerton to Pukerua Bay	Taupo Swamp Slope stability
	Pukerua Bay to Paekakariki	SH59 Paekakariki Escarpment (Slope stability) NSJ single track (capacity) Beach Rd level crossing
	Mackays to Raumati	SH1 Raumati Escarpment (Slope stability)
	Paraparaumu	Old SH1 Level crossings at Kapiti Road and Otaihanga Road Residential and commercial properties

Train Sized Focus Programme Summary

Timeframe	Intervention Type	Intervention Name	Indicative Cost
0-5	Infrastructure - Civil	Slope Stabilisation- address seismic/storm risk	\$10m - \$100m
0-5	Infrastructure - Civil	Improvements to station subway drainage to reduce flooding risk	\$10m - \$100m
0-5	Infrastructure - Power	Power supply upgrade on Kapiti Line (short term)	\$1m - \$10m
0-5	Infrastructure - Signalling	Wellington A signal Box Upgrade (short-term to enable RS1 timetable)	\$1m - \$10m
0-5	Infrastructure - Signalling	Network wide resignalling	\$100m - \$500m
0-5	Infrastructure - Signalling	Automatic Train Protection (ATP)	\$100m - \$500m
0-5	Infrastructure - Signalling	Wairarapa Line Signalling and Infrastructure and other infrastructure upgrades for LD rolling stock	\$100m - \$500m
0-5	Infrastructure - Stations	Station access planning+D15 to maximise connections to communities and catchments	<\$1m
0-5	Infrastructure - Stations	All stations to be accessible for mobility impaired and other users e.g. prams etc	\$10m - \$100m
0-5	Infrastructure - Track	Provide a northern access to the Wellington EMU stabling yard	\$1m - \$10m
0-5	Infrastructure - Track	Improve mainline access to Wellington freight terminal to reduce performance impact on passenger train services (at grade)	Unknown
0-5	Infrastructure - Track	Plimmerton Turnback	\$1m - \$10m
0-5	Infrastructure - Track	Reconfigure Wellington station 'throat' Layout (Kaiwharawhara to Wellington Station section) (Short term, NZUpgrade)	\$1m - \$100m
0-5	Infrastructure - Track	Protect operational land such as the easement of land on west side of KiwiRail corridor through Thorndon area which may have future operational benefits	Opex only
0-5	Maintenance	Catching up on asset renewals and maintenance, before it fails i.e. No deferred maintenance	\$10m - \$100m
0-5	Operational - Other	Wellington Metro Rail operations centre Train Control , Rail operations and Station security (neutral - independent of operators)	\$10m - \$100m
0-5	Operational - Other	Integrated/electronic ticketing -One pass - all modes - tickets	\$1m - \$10m
0-5	Operational - Planning	Run express trains with fewer stops from outer stations such as Waikanae/ Paraparumu/Upper Hutt etc.	Opex only
0-5	Operational - Staffing	Change of roles of onboard staff once integrated ticketing introduced +Onboard transport security personnel (in DM)	Opex only
0-5	Rolling Stock	Long distance rolling stock for Wairarapa and Palmerston North services- (DMMU) (DO Minimum)	\$100m - \$500m
0-5	Study	Study into optimisation of stations and station additions - e.g. Glenside, Queen Elizabeth Park, Raumati as well as reduction where the stations are too close together	<\$1m
0-5	Study	Study on future rail lines and use of existing lines. Evaluation of Extension of Melling, changes to Johnsonville, Wainuiomata Line, East-West Links etc	\$1m - \$10m
0-5	Study	North-South Junction Capacity Improvements (Generic Study)	\$1m - \$10m
5-10	Infrastructure - Civil	Improve condition and capacity of drains and culverts	\$10m - \$100m
5-10	Infrastructure - Crossing	Install automatic gates on all pedestrian level crossings	\$10m - \$100m
5-10	Infrastructure - Power	Long term power supply upgrade - Hutt Valley Line	\$10m - \$100m
5-10	Infrastructure - Power	Long term power supply upgrade - Melling Line	\$10m - \$100m
5-10	Infrastructure - Power	Long term power supply upgrade - Johnsonville Line	\$10m - \$100m
5-10	Infrastructure - Stations	Interchange locations in suburban areas where services can be terminated to facilitate for maintenance or service disruptions	\$10m - \$100m
5-10	Infrastructure - Stations	Covered secure cycle/multi modal facilities at all stations	<\$1m
5-10	Infrastructure - Stations	Change facility for cyclist at stations	<\$1m
5-10	Infrastructure - Stations	Electric Car charging in station carparks	<\$1m
5-10	Infrastructure - Stations	Increased shelter at stations that match passenger flows	\$1m - \$10m
5-10	Infrastructure - Stations	Ongoing investment to improve stations and trains to meet growing customer expectations (high quality)	\$10m - \$100m
5-10	Infrastructure - Stations	Improved real time information across the network to communicate to customers during disruptions (audio, visual and app)	Opex only
5-10	Infrastructure - Stations	Wayfinding signage & digital signagesolutions to increase information at stations	\$1m - \$10m
5-10	Infrastructure - Stations	Platform markers for Wheelchair bikes 8/6/4/2	<\$1m
5-10	Infrastructure - Track	Increased train stabling capacity at outer stations for operational efficiencies	\$10m -100m
5-10	Infrastructure - Track	More crossovers	\$1m - \$10m
5-10	Maintenance	New maintenance technologies to enable efficient maintenance to reduce staff exposure to risk from trains movements	Opex only
5-10	Maintenance	Fleet maintenance overnight - enabler	Opex only
5-10	Operational - Data and Analytics	Improved collection and analysis of passenger data	<\$1m
5-10	Operational - Data and Analytics	Automated analytics from CCTV data for improved customer security	\$1m - \$10m
5-10	Operational - Planning	All day regular services between Wellington and North of Otaki	Opex only
5-10	Operational - Planning	Improve bus connections to stations to maximise efficiency and access to communities/ catchments	Opex only
5-10	Operational - Planning	All day regular services between Wellington and North of Upper Hutt	Opex only
5-10	Rolling Stock	Additional trains to respond to demand and service requirements	\$100m - \$500m
5-10	Rolling Stock	Additional rolling stock (variation to LDRS order) to respond to demand and service requirements on the WEMN	\$100m - \$500m
10-20	Infrastructure - Civil	Improve resilience of rail bridges across network to seismic events	\$10m - \$100m
10-20	Infrastructure - Civil	Reduce foreshore risk to low lying Porirua to Plimmerton section of Kapiti Line - sea level rise and storm events	\$100m - \$500m
10-20	Infrastructure - Crossing	Close or grade separate level crossings - Hutt Valley	\$10m - \$100m
10-20	Infrastructure - Other	Wifi on trains or provide 4G cell phone coverage through tunnels	\$1m - \$10m
10-20	Infrastructure - Power	Further power supply upgrade to enable frequency and capacity (long-term)	\$10m - \$100m
10-20	Infrastructure - Stations	Second platform at Waikanae station	\$1m - \$10m
10-20	Infrastructure - Stations	Platform train interface without ramps	\$100m - \$500m
10-20	Infrastructure - Stations	Crime prevention through environmental design at stations (including access points, carparks, train replacement stops etc)	<\$1m
10-20	Infrastructure - Stations	Station sustainability (More extensive)- solar panels for lighting power- LED lighting -Recycling	<\$1m
10-20	Infrastructure - Track	Invest in higher quality track to reduce risk of speed restrictions in hot weather	Unknown
10-20	Infrastructure - Track	Shorten North - South Junction single track section from approx 3.3 km to around 1 to 1.5 km by daylighting Tunnels 3 and 7	\$100m - \$500m
10-20	Infrastructure - Track	Wellington to Kaiwharawhara Quadruplication including grade separation of Freight yard access (further investment beyond ID 32)	\$10m - \$100m
10-20	Operational - Planning	Seasonal timetables to cope with weather conditions, winter or summer	Opex only
10-20	Operational - Planning	Train crews dedicated to specific routes during peak periods	Opex only
10-20	Operational - Staffing	Deploy additional infrastructure maintenance staff outside of Wellington	Opex only
10-20	Other	Develop stations as community hubs	\$10m - \$100m
10-20	Rolling Stock	Replace existing Matangi fleet 2040 onwards (oldest trains will be 30 years old by 2040)	\$100m - \$500m
10-20	Rolling Stock	Train capacity indicators for passengers	<\$1m
10-20	Rolling Stock	Additional EMUs for increased service frequency (may be part of the Matangi replacement)	\$100m - \$500m
20-30	Infrastructure - Civil	Duplicate NIMT overbridge south of Waikanae	\$10m - \$100m
20-30	Infrastructure - Crossing	Close or grade separate level crossings - Kapiti	\$10m - \$100m
20-30	Infrastructure - Depot	New multiple Unit depot out of Central Wellington e.g. tsunami risk and land value optimisation	\$10m - \$100m
20-30	Infrastructure - Other	Segregate network from surroundings to improve safety of infrastructure; platforms, level crossings, fences, walls	\$10m - \$100m
20-30	Infrastructure - Stations	Staff amenities at outer stations	\$1m - \$10m
20-30	Infrastructure - Track	Improve Johnsonville Line track configuration to improve capacity	\$10m - \$100m
30+	Infrastructure - Crossing	Close or grade separate level crossings - Johnsonville	\$10m - \$100m
30+	Infrastructure - Power	Long term power supply upgrade - Kapiti Line	\$10m - \$100m
30+	Infrastructure - Stations	Longer trains and platforms to address capacity on existing services	\$10m - \$100m
30+	Infrastructure - Track	Implement outcome of North South Junction Capacity Improvements Study	\$500m +
30+	Infrastructure - Track	Double Track Waikanae to Otaki	Opex only

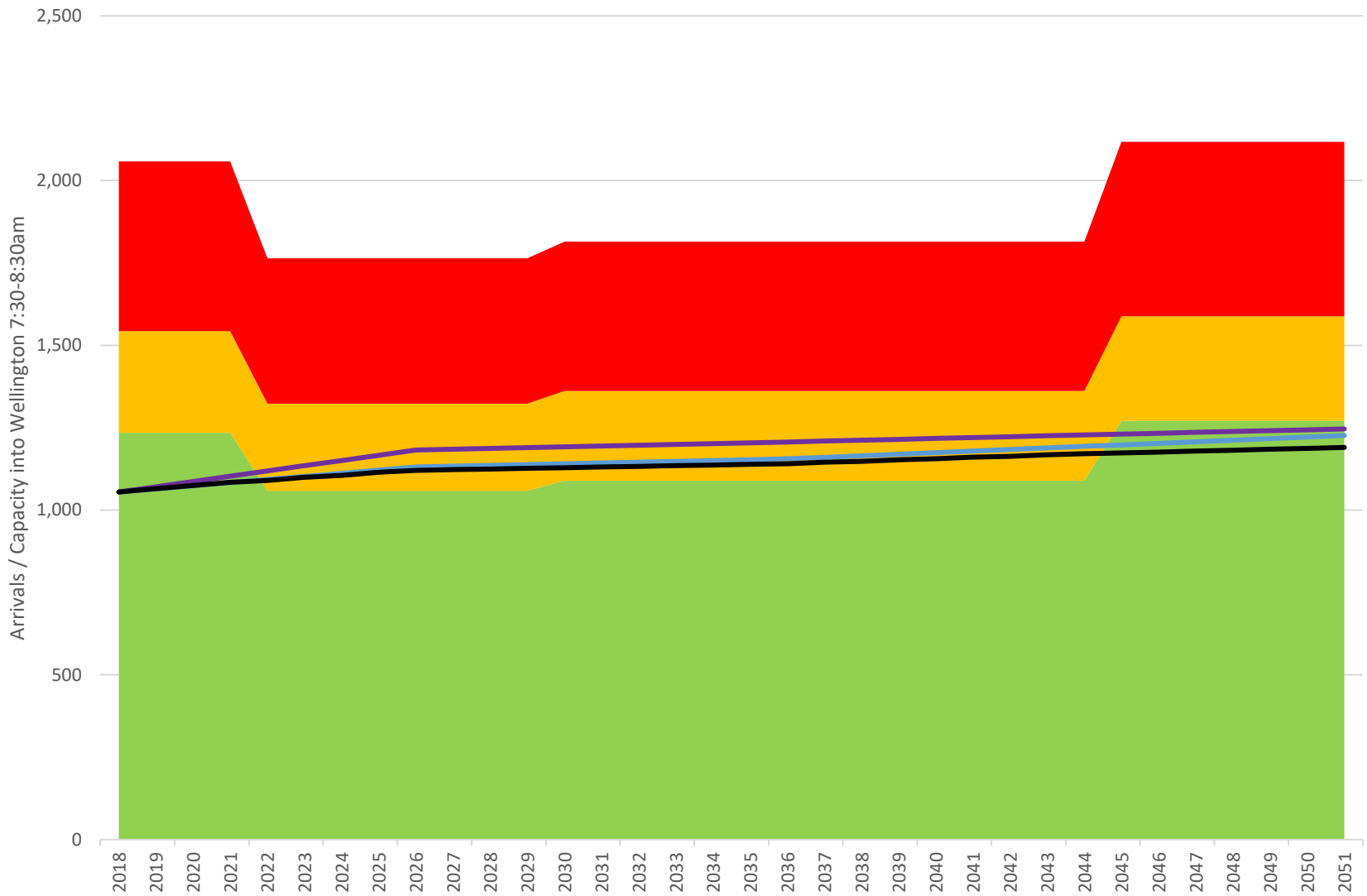
Appendix B Programme Interventions

Study Name	Items Included	Implementation Start Time		
		Moderate Improvements	Mixed Focus	Drive-Mode Shift Programme
Customer Habit and Optimisation Study	Study into optimisation of stations and station additions - e.g. Glenside, Queen Elizabeth Park, Raumati as well as reduction where the stations are too close together	20-30	0-5	0-5
	Look at how station zoning changes habits in accessing station. E.g. people driving further to get a cheaper zone	20-30	0-5	0-5
	Targeted Peak pricing to help spread peak demand	20-30		
	Charging for parking to manage demand	20-30		
	Extend the suburban service frequency span in response to developments and patronage	20-30	5-10	5-10
Future Network Form Study	Improve Johnsonville Line track configuration to improve capacity		30+	20-30
	Study on future rail lines and use of existing lines. Evaluation of Extension of Melling, changes to Johnsonville, Wainuiomata Line, East-West Links etc	20-30	0-5	0-5
	Second Remutaka tunnel			30+
North-South Junction Capacity Improvements	Convert Johnsonville branch to Light rail deploy displaced EMUs on rest of network			30+
	Study into the network constraints which prevent additional services. Looks at signalling, single & double track sections and express services	0-5	0-5	0-5
North-South Junction Capacity Improvements	Tram-Trains able to run over both heavy rail network and future light rail south of Station			30+
	North-South Junction Capacity Improvements (Generic Study)	0-5	0-5	0-5
Rail Network Resilience & Operations IBC	Slope Stabilisation- address seismic/storm risk	0-5	0-5	0-5
	Improve resilience of rail bridges across network to seismic events		5-10	5-10
	Reduce foreshore risk to low lying Porirua to Plimmerton section of Kapiti Line - sea level rise and storm events	10-20	10-20	10-20
	Improve condition and capacity of drains and culverts	0-5	0-5	0-5
	New multiple Unit depot out of Central Wellington e.g. tsunami risk and land value optimisation		30+	30+
	Improved freight loop at Porirua to ensure freight trains can continue to operate between more frequent services		10-20	0-5
	Increased train stabling capacity at outer stations for operational efficiencies		10-20	5-10
	More crossovers		5-10	0-5
	Invest in higher quality track to reduce risk of speed restrictions in hot weather		5-10	5-10
	New interlocking for Woburn siding access to reduce track occupancy time for shunts		5-10	0-5
Kāpiti Rail IBC	Duplicate NIMT overbridge south of Waikanae and approach	5-10	5-10	5-10
	Second platform at Waikanae station	10-20	5-10	5-10
	Double Track Waikanae to Otaki		30+	5-10
Rail Network Segregation IBC	Install automatic gates on all pedestrian level crossings	5-10	5-10	5-10
	Close or grade separate level crossings - Hutt Valley	10-20	5-10	5-10
	Close or grade separate level crossings - Wairarapa	30+	30+	10-20
	Close or grade separate level crossings - Kapiti	30+	5-10	5-10
	Close or grade separate level crossings - Johnsonville	30+	30+	30+
Matangi Replacement SSBC	Segregate network from surroundings to improve safety of infrastructure; platforms, level crossings, fences, walls	30+	10-20	5-10
	Wifi on trains or provide 4G cell phone coverage through tunnels	10-20	10-20	0-5
	Platform train interface without ramps	10-20	10-20	10-20
	Replace existing Matangi fleet 2040 onwards (oldest trains will be 30 years old by 2040)	10-20	10-20	10-20
	Train capacity indicators for passengers	10-20	10-20	5-10
Rail Network Electrification SSBC	Additional EMUs for increased service frequency (may be part of the Matangi replacement)	20-30	10-20	10-20
	Electrification North of Upper Hutt - Featherston			30+
	Electrification North of Waikanae (To Otaki)			5-10
	Power supply upgrade on Kapiti Line (short term)	20-30		
	Long term power supply upgrade - Kapiti Line		20-30	5-10
	Long term power supply upgrade - Hutt Valley Line		5-10	5-10

	Long term power supply upgrade - Melling Line		5-10	5-10
	Long term power supply upgrade - Johnsonville Line		5-10	5-10
	Electrification North of Featherston - Masterton			30+
	Electrification Otaki to Levin			5-10
	Electrification Levin to Palmerston North			5-10
Wellington Station IBC	Provide a northern access to the Wellington EMU stabling yard	0-5	0-5	0-5
	Improve mainline access to Wellington freight terminal to reduce performance impact on passenger train services (at grade)	0-5	0-5	0-5
	Reconfigure Wellington station 'throat' Layout (Kaiwharawhara to Wellington Station section) (Short term, NZUpgrade)	0-5	0-5	0-5
	Protect operational land such as the easement of land on west side of KiwiRail corridor through Thorndon area which may have future operational benefits	0-5	0-5	0-5
	Wellington to Kaiwharawhara Quadruplication including grade separation of Freight yard access (further investment beyond iD 32)	10-20	5-10	5-10
Signalling IBC	Wellington A signal Box Upgrade (short-term to enable RS1 timetable)	0-5	0-5	0-5
	Network wide resignalling	0-5	0-5	0-5
Smarter Connections	Improvements to station subway drainage to reduce flooding risk	0-5	0-5	0-5
	Interchange locations in suburban areas where services can be terminated to facilitate for maintenance or service disruptions	5-10	5-10	5-10
	Station access planning+D15 to maximise connections to communities and catchments	0-5	0-5	0-5
	Covered secure cycle\multi modal facilities at all stations	0-5	5-10	0-5
	Change facility for cyclist at stations	0-5	5-10	0-5
	Electric Car charging in station carparks	0-5	5-10	0-5
	Improve bus connections to stations to maximise efficiency and access to communities/ catchments	5-10	5-10	5-10
Station Improvements SSBC (by line)	Staff amenities at outer stations		20-30	10-20
	All stations to be accessible for mobility impaired and other users e.g. prams etc	0-5	0-5	0-5
	Increased shelter at stations that match passenger flows	0-5	0-5	0-5
	Ongoing investment to improve stations and trains to meet growing customer expectations (high quality)	0-5	0-5	0-5
	Crime prevention through environmental design at stations (including access points, carparks, train replacement stops etc)	5-10	5-10	0-5
	Platform screen Doors/ gates			30+
	Station sustainability (More extensive)			
	- solar panels for lighting power			
	- LED lighting			
	-Recycling	10-20	10-20	10-20
	Wayfinding signage & digital signage			
	solutions to increase information at stations	0-5	0-5	0-5
	Platform markers for Wheelchair bikes 8/6/4/2	0-5	0-5	0-5
	Develop stations as community hubs / TOD	10-20	5-10	5-10
Improved Maintenance Practices	New infrastructure maintenance technologies to enable safe and efficient maintenance	0-5	0-5	0-5
	Fleet maintenance overnight - enabler	10-20	5-10	5-10
Analytics Package	Improved collection and analysis of passenger data	0-5	0-5	0-5
	Automated analytics from CCTV data for improved customer security	5-10	0-5	0-5
Operational	Wellington Metro Rail operations centre Train Control , Rail operations and Station security (neutral - independent of operators)	5-10	5-10	5-10
	Integrated/electronic ticketing -One pass - all modes - tickets	0-5	0-5	0-5
	Train crews dedicated to specific routes during peak periods	5-10	10-20	5-10
	Off peak service offering improvements (frequency and operational hours)		10-20	0-5
	Deploy additional infrastructure maintenance staff outside of Wellington		10-20	5-10
Wellington Transport Network Operational Resilience	increase no. of rail replacement buses/ availability of drivers to cover rail service failures	0-5	0-5	0-5
	Bi directional running	5-10	5-10	5-10
Outside of GWRC Control, input to Rail Network Eligible	Increase use of electric traction propulsion for freight			5-10
LNIRIM	Additional rolling stock (variation to LDRS order) to respond to demand and service requirements on the WEMN		5-10	5-10
	Long distance rolling stock for Wairarapa and Palmerston North services- (DMMU) (DO Minimum)	0-5	0-5	0-5

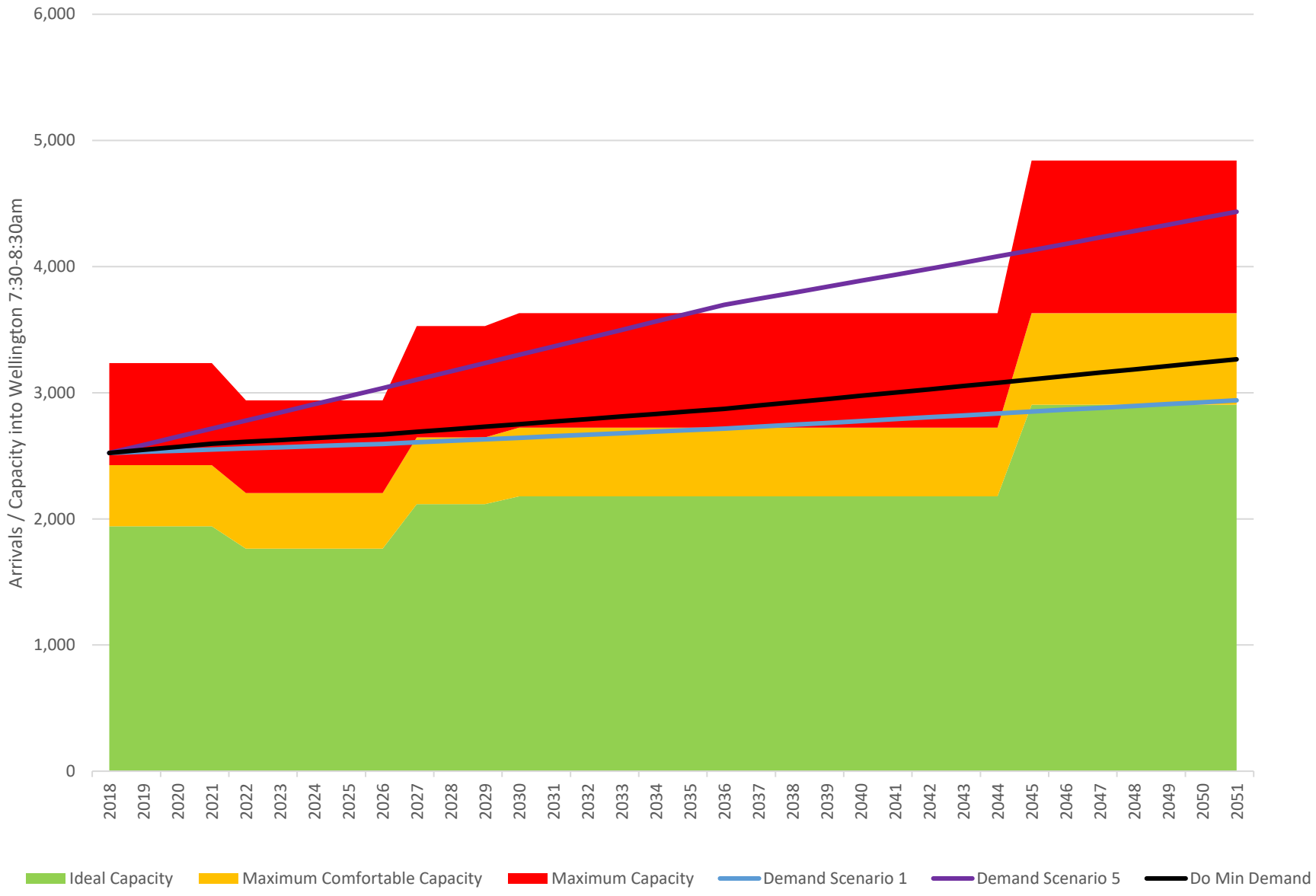
Appendix C Programme Summary Graphs

Do Minimum Johnsonville Capacity Analysis



■ Ideal Capacity
 ■ Maximum Comfortable Capacity
 ■ Maximum Capacity
 — Demand Scenario 1
 — Demand Scenario 5
 — Do Min Demand

Do Minimum Taita Capacity Analysis





Ministry for the
Environment
Manatū Mō Te Taiao



**MINISTRY OF HOUSING
AND URBAN DEVELOPMENT**

Understanding and implementing intensification provisions for the National Policy Statement on Urban Development

New Zealand Government

Disclaimer

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1 Introduction

1.1 Purpose

This guidance has been developed to help local authorities understand and interpret the provisions for intensification and in the National Policy Statement on Urban Development 2020 (NPS-UD). The specific provisions of the NPS-UD are Objective 3, Policies 3 to 5 and clauses 3.31 to 3.34 of subpart 6. The guidance provides methods, tools and examples to help implement these provisions effectively.

Local authorities can use this guidance to prepare principles for zoning to help inform and support the required plan changes. This guidance can also be used to understand the individual components of the intensification provisions (eg, accessibility, walkability, demand) to determine the intensification outcomes on the ground. This document is not intended to be a step-by-step guide to preparing plan changes to give effect to the NPS-UD intensification provisions. Plan changes and outcomes depend on the local context and local authorities will need to give effect to the intensification provisions in their local context.

Note the examples used in this guide are relatively basic examples which are intended to provide an indication of how the application of the provisions may work.

1.2 Scope

All local authorities that contain all or part of an urban environment are required to implement the relevant intensification provisions. The NPS-UD defines urban environment as an area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:

- (a) is, or is intended to be, predominantly urban in character; and
- (b) is or is intended to be, part of a housing and labour market of at least 10,000 people.

The NPS-UD groups urban environments into three tiers.¹ Each tier has different policy requirements and implementation timeframes. The requirements for tier 1 urban environments are more directive than the requirements for tier 2 and 3 urban environments.

This guidance includes:

- a description of the intent of the NPS-UD intensification provisions, including an explanation of the expected outcomes of the intensification provisions
- methods, tools and examples to help tier 1, 2 and 3 local authorities implement the provisions.

Tier 1 local authorities are required to ensure that in metropolitan centre zones, building heights and density of the urban form reflects demand for housing and business space. This guidance provides

¹ Refer to the interpretation section (Part 1, clause 1.4) of the NPS-UD, specifically for the definitions of “urban environment”, “tier 1 urban environment”, “tier 2 urban environment” and “tier 3 urban environment”. Also, refer to appendix 1 of the NPS-UD for classification of tier 1 and tier 2 urban environments. Tier 3 urban environments include all of those not listed in the appendix.

detail on how local authorities could reconcile demand with a possible urban form, but it does not provide detail on calculating demand. Guidance on calculating demand for both residential and business space is covered in the guidance on housing and business development capacity assessments. This will be made available on the Ministry for the Environment's [website](#).

Local authorities will need to consider the intensification provisions for any private plan changes they receive or plan changes they initiate. Guidance on the responsive planning requirements of the NPS-UD can be found on the Ministry for the Environment's [website](#). In addition to meeting the intensification requirements, local authorities will also need to ensure development outcomes described for zones in your district plans are consistent with the intensification provisions (clauses 3.36 and 3.37). The intent of monitoring the consistency of the development outcomes with the intensification outcomes required is to ensure district plans – specifically the plan provisions (eg, objectives, policies, rules and assessment criteria cumulatively) – do not unnecessarily undermine development outcomes.

This intensification guide should not be read in isolation. Applying the intensification requirements should also take into account the other objectives, policies and requirements of the NPS-UD. In particular, intensification outcomes need to contribute to well-functioning urban environments (as described in Policy 1), noting that intensification done well can make a major contribution to this.

1.3 Structure of the guide

This guide describes each of the components local authorities will need to consider when implementing the intensification provisions. It provides information on how to measure or determine accessibility, walkability and appropriate heights and densities. The guidance also provides examples of how to consider these matters together to apply the intensification provisions effectively in district plans and regional policy statements.

Also included in this guide is an explanation and examples for applying the qualifying matters, when it has been determined through evidence that exceptions to the intensification provisions are required.

The guide is divided into a number of sub-sections, each addressing a policy area or a component of analysis that forms a part of implementation. This is followed by a worked example of how local authorities should consider these aspects together to work out how best to use them in determining heights and densities and an appropriate zoning pattern. A high-level summary of the structure is described below.

The first sub-sections suggest methods to produce analysis or evidence, including:

- clarification of definitions relating to the city centre and metropolitan centre zones
- understanding how to measure demand in metropolitan centres
- methods and tools that can be used to measure accessibility, including understanding definitions of planned and existing public and active transport
- **how to determine walkable catchments for metropolitan centre zones and for planned and existing rapid transit stops.**

The later sub-sections outline how the evidence can be combined and used to determine locations suitable for intensification and what level of this might be appropriate, including:

- enabling development capacity in city centres

- determining heights and densities in metropolitan centres and in walkable catchments
- enabling heights and densities commensurate to the level of accessibility and relative demand
- applying qualifying matters, including understanding how ‘other’ matters may apply.

The last section of the guide provides a full worked example of how to collectively consider the above matters to apply the intensification provisions effectively in district plans and regional policy statements.

1.4 Timing of implementation

To better enable intensification in our urban environments, many local authorities will be required to implement new policies under the NPS-UD and make changes to their planning documents. The intensification requirements and timeframes for tier 1, 2 and 3 local authorities are summarised in table 1 below.

Table 1: Intensification requirements and timeframes for tier 1, 2 and 3 local authorities

	Tier 1	Tier 2	Tier 3
Implementation timeframes	Plan changes to give effect to intensification provisions notified as soon as practicable and no later than two years after commencement of the NPS-UD		Plan changes to give effect to intensification provisions notified as soon as practicable after commencement of the NPS-UD
Implementation requirements	Provide for and enable the benefits of urban intensification through regional policy statements and district plans (ie, insert objective/s supporting intensification outcomes, new zone policies, changes to rules and rezoning)		
	City Centre Zone – enable building heights and density to realise as much development capacity as possible	Enable building heights and density commensurate to the level of accessibility or relative demand	
	Metropolitan Centre Zone – enable building heights of at least six storeys		
	Walkable catchments – enable building heights of six storeys within walkable catchments of rapid transit stops, city centre zones and metropolitan centre zones		
	All other locations – enable building heights and density commensurate to the level of accessibility and relative demand		

1.5 What happens before the intensification plan changes are notified

Local authorities might receive resource consents or private plan changes which seek greater heights and densities (on the basis of the NPS-UD direction) before intensification plan changes directed in the NPS-UD are notified or take effect. In these instances, local authorities and other decision-makers considering resource consents must, under [section 104\(1\)\(b\)](#) of the Resource Management Act (RMA), have regard to “any relevant provisions” in a national policy statement (NPS). This is even before territorial authorities have amended their district plans to give effect to the intensification requirements. Except where otherwise specified in an NPS, this applies from the date of commencement of the NPS. Note that “any relevant provisions” includes any part of the NPS-UD. This means the preliminary provisions in Part 1, the objectives and policies in Part 2 and the implementation provisions in Part 3. All are “provisions” of the NPS, which may or may not be relevant to a particular resource consent.

Local authorities will need to amend their plans to give effect to the intensification provisions in the NPS-UD (Objective 3, Policies 3 to 5 and subpart 6 of Part 3). Before these plan changes take effect, the intensification provisions will need to be relevant to any resource consent application being considered for a development in areas covered by those provisions.

Private plan change requests lodged before a council-initiated plan change to implement the NPS-UD must give effect to the NPS-UD. This is a stronger direction than the requirement to “have regard to” an NPS in RMA section 104 for resource consents. On this basis, local authorities will need to consider whether the request gives effect to the intensification provisions when making decisions.

2 Intent and rationale of intensification policies

The intensification provisions are intended to ensure that in urban areas, intensification in desirable and suitable locations is enabled in plans. This is to support well-functioning urban environments and improve housing affordability through competitive land markets.

Some of the outcomes that are expected to be realised through the implementation of the intensification provisions are shown in figure 1 below.

Figure 1: Expected outcomes of the intensification provisions



Enabling higher-density development in locations with good access and amenity means people can live close to where they work, learn, shop or connect with friends and family. Such options let residents avoid congestion and long commute times. Businesses can also access more potential workers, customers and other businesses.

The intensification provisions are particularly important where they apply in areas close to current or planned rapid transit and frequent public transport services, as well as places where people can access many opportunities within walking distance. The provisions recognise the benefits of integrating transport and land-use policy. They allow for transport investment that can induce land-use change by encouraging greater supply of development capacity, thereby lifting the number of people living in high-amenity areas. This can help improve the economic case for public and active transport investments, for example by increasing the likely number of people using public transport services. Intensification is also important to support the reduction of greenhouse gas emissions and therefore has a role in climate change mitigation.

3 Key changes from National Policy Statement on Urban Development Capacity

The intensification provisions were not in the National Policy Statement on Urban Development Capacity (NPS-UDC 2016) and are new to the NPS-UD.

Local authorities often struggle to provide sufficient opportunities for higher-density development for a range of reasons, such as opposition from existing land owners, bias towards the status quo and concerns regarding amenity.

Lack of access to well-integrated, higher-density housing has played a role in the current constrained supply of housing. In addition, historically rigid controls in the locations that are now subject to the intensification provisions have increased the price of housing in urban environments and reduced the supply of higher-density development. This is a particular issue in places that are well connected to active and public transport and close to urban centres where people can access jobs, services and amenities.

4 Definitions

Part 1, clause 1.4 of the NPS-UD provides interpretations of terms used in the policy statement. The terms that are particularly relevant to the intensification provisions are reproduced below:

- **active transport** means forms of transport that involve physical exercise, such as walking or cycling and includes transport that may use a mobility aid such as a wheelchair
- **community services** means the following:
 - (a) community facilities²
 - (b) educational facilities³
 - (c) those commercial activities that serve the needs of the community
- **planned** in relation to forms or features of transport, means planned in a regional land transport plan prepared and approved under the Land Transport Management Act 2003
- **public transport** means any existing or planned service for the carriage of passengers (other than an aeroplane) that is available to the public generally by means of:
 - (a) a vehicle designed or adapted to carry more than 12 persons (including the driver); or
 - (b) a rail vehicle; or
 - (c) a ferry
- **rapid transit service** means any existing or planned frequent, quick, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic
- **rapid transit stop** means a place where people can enter or exit a rapid transit service, whether existing or planned.

Other definitions relevant to the intensification provision include:

- **city centre** is the city centre zone as described in Standard 8 (Zone Framework Standard) of the national planning standards (the standards); or a reference to the nearest equivalent zone, for local authorities that have not yet implemented the Zone Framework in the standards (see clause 1.4(4))
- **metropolitan centre** is the metropolitan centre zone as described in Standard 8 (Zone Framework Standard) of the standards; or a reference to the nearest equivalent zone, for local authorities that have not yet implemented the Zone Framework in the standards.

The key definitions and concepts are discussed in further detail in the following sections of the guide.

² Community facility is defined in the national planning standards.

³ Educational facility is defined in the national planning standards.

5 Analysis and evidence to support implementing the intensification provisions

To give effect to the intensification provisions, local authorities will need to understand, measure and determine:

- demand in metropolitan centre zones
- accessibility
- walkable catchments.

The sub-sections below provide further guidance on each of these components.

5.1 Relevant policies

Policy 3: In relation to tier 1 urban environments, regional policy statements and district plans enable:

- (a) in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification; and
- (b) in metropolitan centre zones, building heights and density of urban form to reflect demand for housing and business use in those locations, and in all cases building heights of at least 6 storeys; and
- (c) building heights of least 6 storeys within at least a walkable catchment of the following:
 - (i) existing and planned rapid transit stops
 - (ii) the edge of city centre zones
 - (iii) the edge of metropolitan centre zones; and
- (d) in all other locations in the tier 1 urban environment, building heights and density of urban form commensurate with the greater of:
 - (i) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or
 - (ii) relative demand for housing and business use in that location.

Policy 5: Regional policy statements and district plans applying to tier 2 and 3 urban environments enable heights and density of urban form commensurate with the greater of:

- (a) the level of accessibility by existing or planned active or public transport to a range of commercial and community services; or
- (b) the relative demand for housing and business use in that location.

5.2 Definition of city centre and metropolitan centre zones

Where a local authority has not adopted the standards, then the nearest equivalent zone must be used. The standards define a 'city centre' to be "areas used predominantly for a broad range of commercial, community, recreational and residential activities. The zone is the main centre for the district or region". The standards define a 'metropolitan centre' to be "areas used predominantly for a broad range of commercial, community, recreational and residential activities. The zone is a focal point for sub-regional urban catchments". Local authorities should rely on the zone descriptions and intent in the standards and compare and align this with their current zoning to work out what the nearest equivalent zone is.

5.3 Measuring demand in metropolitan centre zones

Local authorities are required to prepare a housing and business development capacity assessment (HBA) for all tier 1 and tier 2 urban environments. HBAs provide information on the demand and supply of housing and business land, and the impact of planning and infrastructure decisions on that demand and supply. HBAs will support local authorities to ensure well-evidenced decision-making.

A local authority can choose how it segments its demand (and supply) by location for its HBA. Tier 1 local authorities are required to use demand assessments to determine appropriate height limits and densities under the intensification provisions across their urban areas. For this reason, local authorities may want to carefully consider these locations. Any demand assessment by location should also take into consideration the requirement to consider demand specifically in and around metropolitan centres.

Suitable height and density is calculated as part of an HBA for a tier 1 urban environment. **Section 6.5.3** Determining relative demand for housing and business use of this guide outlines how demand and other factors could be used to determine appropriate heights and densities. More information on calculating demand will be made available on the Ministry for the Environment's [website](#).

5.4 Measuring accessibility

Well-functioning urban environments provide communities with good access to social, economic and cultural opportunities (Objective 1 and Policy 1). There is a clear link between good accessibility and social, economic and cultural wellbeing, and the health and safety of all people.

Accessibility refers to the 'level of service' as a whole and defines people's overall ability to reach desired services and activities (together called opportunities). Assessment typically examines the time, cost and amenity of accessing services and activities via different modes.

5.4.1 The purpose of planning for and providing good accessibility

Planning for and providing good accessibility makes it efficient and affordable for all people to safely access activities and social and economic opportunities such as work, education, healthcare and community services.

You can provide and improve good accessibility in many ways. For example, compact, mixed-use urban developments can enable many people to access opportunities within close proximity (eg, by walking or cycling). Rapid transit and frequent public transport services can enable people to access adjoining communities and opportunities in other parts of the city and avoid congestion at peak travel times as well as parking costs. Private vehicles can also allow people to travel long distances and access opportunities that are further away, although travel can often be affected by peak-hour congestion.

Planning for good accessibility enables prosperous communities by maximising access to opportunities while minimising travel costs and avoiding the social and economic cost of trips unable to be made.

A system view of accessibility considers the relative costs and ease of access, as well as gaps in access and service provision for important main services and destinations.

5.4.2 The accessibility requirements

Policy 1 of the NPS-UD requires that planning decisions contribute to well-functioning urban environments. Good accessibility (Policy 1(c)) is a feature of well-functioning urban environments and can be enhanced by increasing building heights and density (Policy 3 and 5). Policies 3(d)(i) and 5 require regional policy statements and district plans to enable building heights and density of urban form **commensurate with the level of accessibility** by existing and planned active or public transport to a range of commercial activities and community services.

- Local authorities need to link height/density limits with accessibility, by allowing for greater density in areas where people can easily access many jobs, services and amenities.
- Areas with the highest accessibility tend to also be places with the highest demand, where people can easily reach jobs and amenities by walking or cycling and/or using public transport.

Local authorities will need to assess the existing and planned level of accessibility to determine appropriate height and density limits in urban areas. Local authorities should be able to demonstrate how their spatial and district plans, resource consents and other RMA decisions contribute to the outcomes outlined in district plan policies. Local authorities should also be proactive in removing barriers to accessibility, for example through:

- designing new roads and connections to enable increased and safe use of active and public transport
- planning improvements to walking and cycling infrastructure, and public transport services
- encouraging mixed-use developments with a variety of housing, business and community services.

5.4.3 How to assess or determine accessibility

Accessibility can be assessed at a strategic national and regional planning level. It can also be assessed at a sub-regional and detailed neighbourhood planning level, for example, the journey to work, school and local services. An accessibility assessment can contribute to understanding the effects of proposed subdivisions, open-space provision, road, footway and cycle-path connections,

and other development applications through plan changes, resource consent applications and applications for notices of requirement.

In assessing or determining good accessibility to inform ideal and/or suitable locations and attributes for intensification, there are three key factors you need to consider as set out below:

1. People and demands

Accessibility needs vary over time, life stage and the degree of individual / household mobility. When considering accessibility needs, it is essential to consider mobility requirements at an individual and household level. For instance, a family with young children will prioritise accessibility and mobility needs around managing time and cost constraints to meet competing family demands and commuting. A retired couple will prioritise access to healthcare and extended family, but will probably drive less and possibly be less able to walk longer distances. A young couple are more likely to prioritise a broader range of social activities with a wide group of friends. The accessibility needs of these and other demographic groups vary enormously, regardless of whether these groups can access a car on a regular basis. The definition of accessibility used in the NPS-UD is one that embraces all people with varying needs and abilities.

2. Land-use proximity

A major determinant of accessibility is how close people live to economic activities and community services. Higher density, mixed-use development increases the number of people that can live close to these services and activities, making local economic activity more viable and enabling multiple-purpose trips. The locations of economic activity and community services change over time, driven in part by changes in accessibility. Proximity should translate into convenience, meaning that different land uses within an area should be easily accessed by a range of transport modes that support multi-purpose trips.

3. Transport system connectivity

Good accessibility is achieved when multiple origins and destinations are connected by a choice of safe and convenient travel options, including walking, cycling and public transport networks. Urban form contributes to viable public transport networks and safe, convenient connections by active modes. Multi-modal connectivity is achieved through creating transit-oriented urban centres which are accessible by walking and cycling and that have an appropriate mix of housing, jobs and services. This increases mode choice and enables mode shift. Walking and cycling require improved roads and pathways, more closely spaced connections and direct connections to public transport.

To measure accessibility or assess changes due to land-use or transport interventions, you will require data on where people live, the location of destinations, and the cost, time and ease of travelling between these destinations for users of each mode and for each component of the journey.

When assessing accessibility, you will also need to consider walkability as a key component of accessibility when implementing Policies 3(d)(1) and 5. Refer to [section 5.5](#) Walkable catchments for further information.

Typical measures of accessibility can be based on:

- the time required to reach each service (ie, on a door-to-door basis including any time waiting for a connecting service)
- the number and quality of opportunities that can be reached (eg, a general hospital has a broader range of higher-value services than a doctor's surgery)
- indices of relative accessibility based on both of the above
- value (ie, cost to reach each service including time) compared to the value provided.

5.4.4 Process for estimating accessibility

Availability of the accessibility tool and the StoryMaps interim accessibility tool

Waka Kotahi NZ Transport Agency is developing a comprehensive tool to provide detailed indicators of accessibility by walking, cycling and public transport. When available, a link to the tool will be available on the Ministry for the Environment's [website](#).

In the meantime, we suggest you use the Waka Kotahi StoryMap tool. Waka Kotahi provides accessibility data in the tool, which is designed to share centralised data relevant to understanding transport problems and the benefits of investment in land transport. The tool is available to Waka Kotahi's co-investors, partners and all local authorities.

To request access to the tool, email investment.benefits@nzta.govt.nz. Confirmation of registration will be provided directly to the requesting organisation.⁴

Viewing accessibility results

The Waka Kotahi StoryMap accessibility tool shows the number of jobs accessible to an urban population by public transport within 45 minutes and by cycling within 30 minutes. The definition of urban areas is based on Census mapping information, which is similar but not identical to administrative boundaries. Census-mapping information is more useful for analysis purposes in this case.

At this stage, the interim accessibility tool can only provide accessibility indices on existing transport networks. The tool does not yet have the functionality to allow analysis of planned active mode or public transport networks.

The process for viewing accessibility results is as follows:

1. Locate the urban area of interest by zooming and panning the map as required.
2. Using the legend and content boxes, identify 'public transport' or 'cycling' accessibility data. Only use one data set at a time.

⁴ Further information about Waka Kotahi NZ Transport Agency's Benefits Framework and the associated measures with data in the tool are available [on the NZTA website](#).

3. Centre the map on the screen at an appropriate zoom level and take a screenshot of the available accessibility 'heat maps'.
4. Switch between public transport and cycling content boxes to ensure accessibility data for both modes are captured through a screenshot.

Accessibility results are sourced from SA1 (Statistical Area 1) based data. You can interrogate accessibility to jobs data within an urban area by clicking on specific SA1 areas. This will show the number of jobs available to the centroid of that SA1 area by driving (30 minutes), public transport (45 minutes) and cycling (30 minutes).

Interpreting accessibility results

All accessibility indices are measured on the basis of weekday (Tuesday) morning peak analysis in March 2020 (pre-COVID-19 lockdown). In the assessment, you should consider the frequency and capacity of the services available. The analysis uses jobs as a proxy for a range of commercial and community services that are commonly co-located. The distribution of jobs relative to the assessed population will vary according to the specific characteristics of the urban area.

Public transport indices

Access to public transport services is from the centroid of the closest SA1 unit. All data are shown for 45-minute inclusive public transport journey times and include a maximum of 800-metres walking distance to and from public transport services within this journey time. This is a practical time and distance for evaluating accessibility for intensification purposes.

The threshold at which the StoryMap tool can most effectively inform the intensification requirements (Policies 3 and 5) is at, or greater than, the 75th percentile index of the 'jobs available' metrics. The 75th percentile represents the top quarter of accessible jobs in that urban area (ie, the proportion of jobs within the urban area that are accessible within 45 minutes by public transport). Figure 2 below shows the 75th percentile accessibility index for public transport access in Dunedin, while Figure 3 shows the total number of jobs accessible by public transport.

Figure 2: 75th percentile accessibility index for public transport access for SA1s in Dunedin, for March 2020

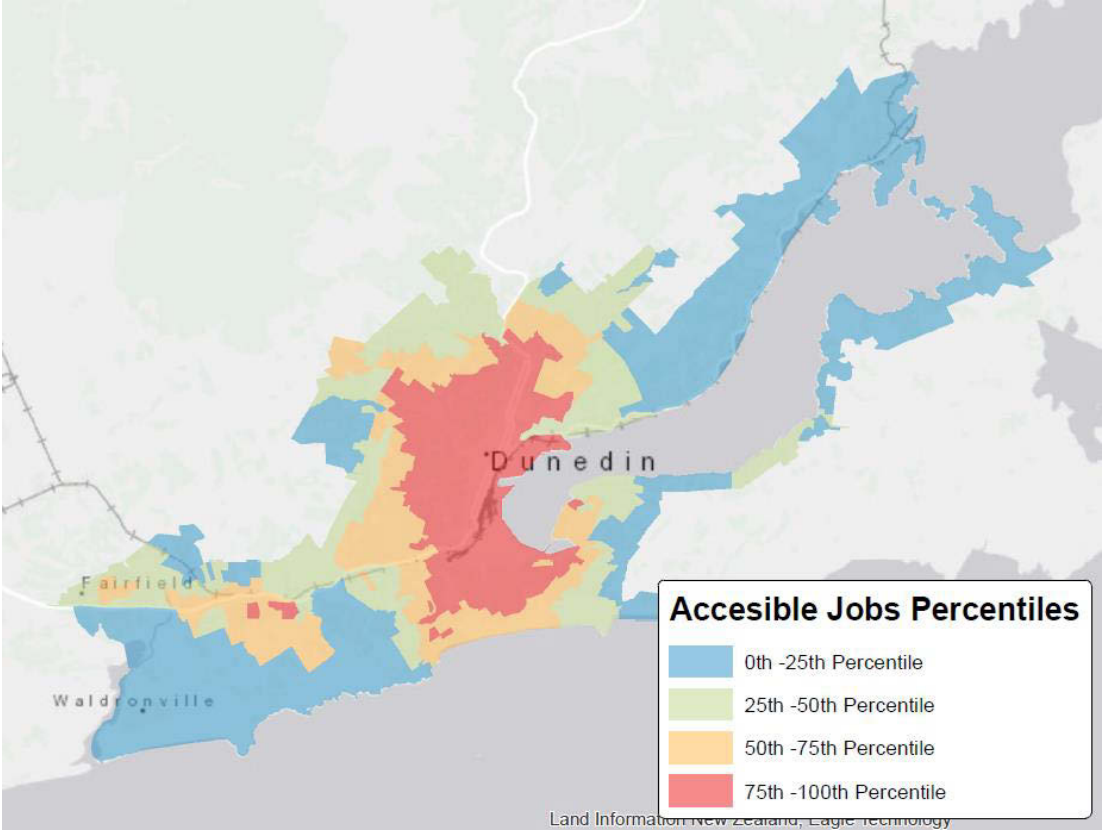
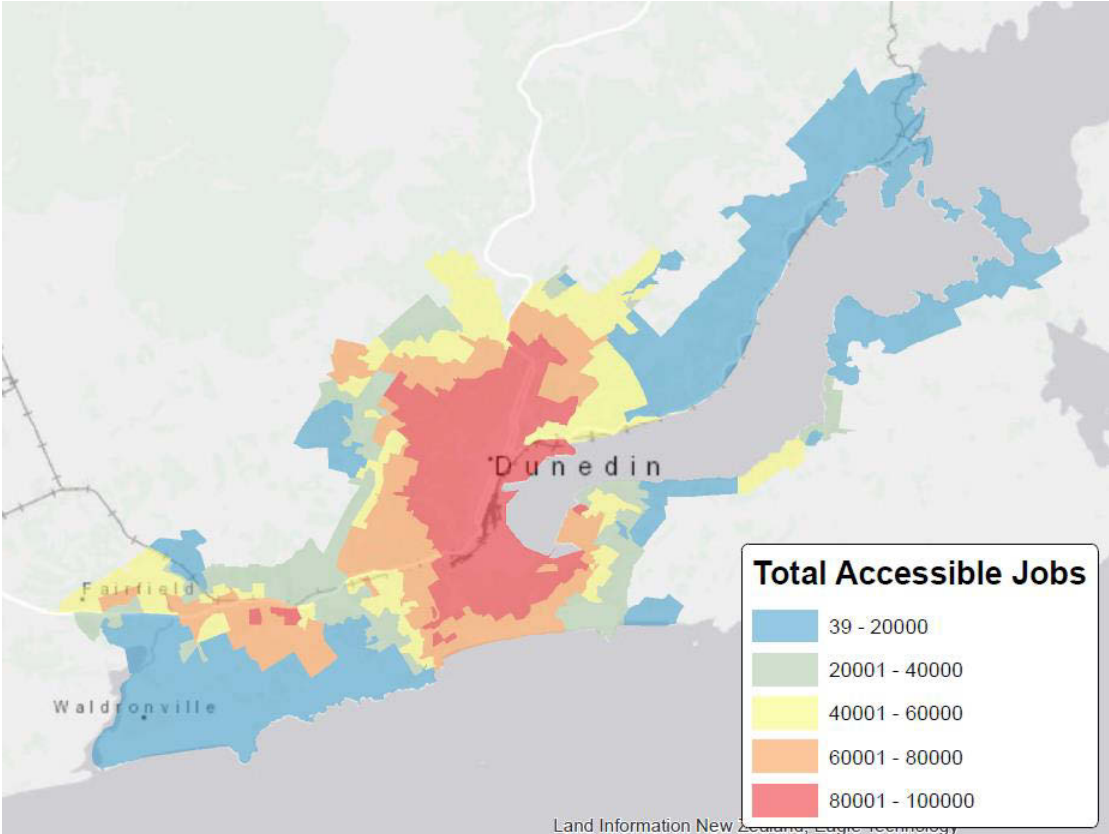


Figure 3: Total number of jobs accessible by public transport access for SA1s in Dunedin, for March 2020



Walking and cycling indices

You should view the walking and cycling indices as a starting point for analysis to determine the extent and scale of intensification.

We recommend you use the cycling indices to determine intensification in the absence of a detailed public transport network. Guidance on determining accessibility by walking is provided in [section 5.5](#) below on walkability.

The map-based cycle network includes cycle-specific infrastructure, such as off-road routes and paths, which are almost always available to pedestrians also.

A useful threshold for determining where the intensification requirements of Policies 3 and 5 are expected to apply would be at, or greater than, the 75th percentile index of the 'jobs available' metrics. The 75th percentile represents the top quarter of accessible jobs in that urban area.

Application to Policies 3 and 5

The information produced by using the accessibility tools outlined above identifies where most people can access most jobs easily by active modes and public transport. This analysis is the starting point for identifying where the relevant intensification provisions should apply.

5.5 Walkable catchments

A walkable catchment is the area that an average person could walk from a specific point to get to multiple destinations. A walkable catchment of 400 metres is typically associated with a five-minute average walk and 800 metres with a 10-minute average walk. These distances are also affected by factors such as land form (eg, hills take longer to walk up and can be an obstacle to walking), connectivity or severance (eg, the lack of ease and safety of crossing roads, highways and intersections), and the quality of footpaths. Walkable catchments can be determined either using a simple, radial pedshed analysis or a more detailed GIS (geographic information systems) network analysis.

Policy 3(c) of the NPS-UD requires tier 1 local authorities to amend their regional policy statements and district plans to enable building heights of at least six storeys within walkable catchments of existing and planned rapid transit stops and the edge of both city centre zones and metropolitan centre zones. This will require tier 1 local authorities to first determine the locations of these stops and zones, decide appropriate metrics or attributes for walkable catchments, and then use spatial analysis and other methods to determine the catchments.

Tier 2 and tier 3 local authorities do not have directive intensification requirements related to walkable catchments. However, understanding walkability and walkable catchments around public transport stops and networks and centres (city, metropolitan, local and neighbourhood) is a useful tool in thinking about what is accessible and locations that are likely to be appropriate for supporting intensification, as required under policy 5(a).

More reference material that may support you in understanding and determining walkable catchments can be found in [Resources](#).

5.5.1 Important definitions for determining walkable catchments

Existing rapid transit stops

The NPS-UD defines a rapid transit stop as a place where people can enter or exit a rapid transit service. Rapid transit services are fast, frequent, reliable and high-capacity public transport services, which operate on a permanent route (road or rail) and that are generally separated from other traffic. Examples of existing rapid transit stops include train stations on the commuter rail services in Wellington and Auckland and bus stations on Auckland’s Northern Busway.

For the purposes of determining walkable catchments for existing rapid transit stops, we suggest you use the pedestrian entrances and exits to the stops or stations. These better represent the location of the station as part of the pedestrian network than the station’s centre point, which is often represented as a dot in the middle of the tracks and/or busway. Figure 4 below shows the pedestrian entrances to Kingsland Station in Auckland, compared to the station centre point.

Figure 4: Example of pedestrian entrances to a rapid transit stop compared to the station centre point (Kingsland Station, Auckland)



Planned rapid transit stops

The NPS-UD defines a planned rapid transit stop as one that is planned in a regional land transport plan (RLTP) under the Land Transport Management Act 2003.

Planned rapid transit stops identified in an RLTP are often only an intention to plan or build a station at some point in the future. Often the RLTP provides no specific information on the station’s location. For example, the Auckland RLTP (2018) notes a number of new stations will be built for the Eastern Busway but does not show on a map where these will be. In other cases, an RLTP may only show on a map an approximate indication of where a proposed station may be.

The planning for some transport projects may be set out in other documents before these projects are added to an RLTP. Because of this, it may make sense for local authorities to use other transport planning documents to support their understanding of planned rapid transit stops and other proposed public transport and active mode infrastructure. This could include infrastructure proposed in:

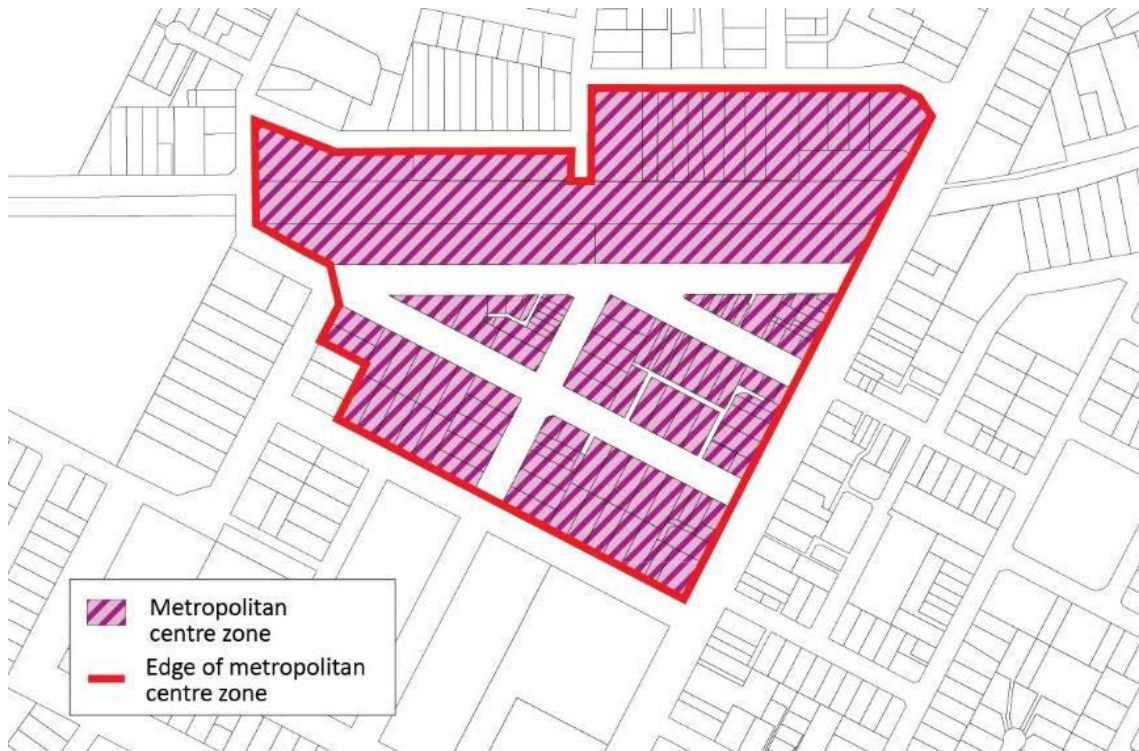
- regional spatial plans
- master planning and structure planning documents
- future development strategies
- infrastructure plans
- national infrastructure funding documents (such as the New Zealand Upgrade Programme)
- central-local government infrastructure agreements (such as the Auckland Transport Alignment Project).

It is difficult to determine a walkable catchment for a rapid transit stop before the exact location of a stop has been determined. Determining the walkable catchment requires you to assess the optimal corridor and/or location for a stop, including the potential for uplift, structure planning, transport network planning and detailed design work. Therefore, it is essential you ensure transport planning for public transport and active modes is done in an integrated and iterative way alongside land-use planning. This will be especially pertinent when considering the requirements of the NPS-UD intensification provisions, in both greenfield areas and existing urban areas.

Edge of city centre and metropolitan centre zones

Intensification will also need to be enabled within walkable catchments on the edge of city centre and metropolitan centre zones. For this, the 'edge' of the zone could be defined as the outside edge of the parcels, or groups of parcels, zoned as either city centre zone or metropolitan centre zone, including any streets or open space that may be within that area. An example is shown in Figure 5.

Figure 5: Example of edge of metropolitan centre zone



5.5.2 Size of walkable catchments

The walkability of a neighbourhood is determined by a range of factors. The general rule used by many organisations, including by the Ministry for Environment’s [Urban Design Toolkit \(Third edition\)](#), is that a walkable catchment is often around 800 metres.

The 800-metre distance was determined by assuming most people would be happy to walk 10 minutes to access services and amenities, and that they walk at a walking speed averaging 1.3 metres per second across the journey (Munro, 2009). The vast majority of people walk at speeds between 0.8 metres per second and 1.8 metres per second (2.9 kilometres per hour and 6.5 kilometres per hour) (New Zealand Transport Agency, 2009). Australian state government policies and the Ministry for the Environment’s toolkit for urban design consider pedsheds (another term for walkable catchment) to be within a five- to 10-minute walk of an activity, node or urban amenity (Allen, 2018).

While the 800-metre catchment may be a good starting point, the draw of certain amenities will influence how far people are willing to walk to access them, and is likely to influence the size of a walkable catchment. While walkable catchments of 400 to 800 metres will be suitable for most tier 1 urban environments, it may be appropriate for larger tier 1 urban environments to consider greater distances in some situations. For example, where rapid transit is of high frequency, there is potential for higher densities and other factors such as high amenity along adjacent main routes and corridors.

Research in Auckland of pedestrians’ trips to train stations (rapid transit stops) showed half of the people surveyed walked further than 800 metres to a train station. Using this information, Auckland Transport suggested a range of sizes for desirable walkable catchments for town and neighbourhood centres and amenities. These ranged from 400 metres (a five- to 10-minute walk), and 1000 metres or a 20-minute walk for town centres and rapid transit stops, to 1200 metres for intermediate or high schools (Auckland Transport, 2018).

5.5.3 Different locations will have different-sized walkable catchments

Not all places are equal and different locations with different characteristics may often have different-sized walkable catchments. We should expect walkable catchments of rapid transit stops and a city centre to be larger than those of metropolitan centre zones, particularly in larger tier 1 urban environments. This is because city centres are likely to be larger, have more services and amenities, and be better connected than a metropolitan centre. Also, the convenience of using rapid transit and the connections that rapid transit services often offer, mean people are prepared to travel further to use them than other modes of public or active transport.

The centre's size can also affect the size of the catchment. For example, a smaller metropolitan centre with fewer services and amenities than a larger centre, will also be likely to have a smaller walkable catchment. Additionally, a city or a metropolitan centre with a rapid transit stop located within or close by, is also likely to have a larger walkable catchment than a centre without a rapid transit stop.

Although it is up to each local authority to determine the size of walkable catchments appropriate for local circumstances, we offer the following recommendations consistent with long-standing academic and international best practice:

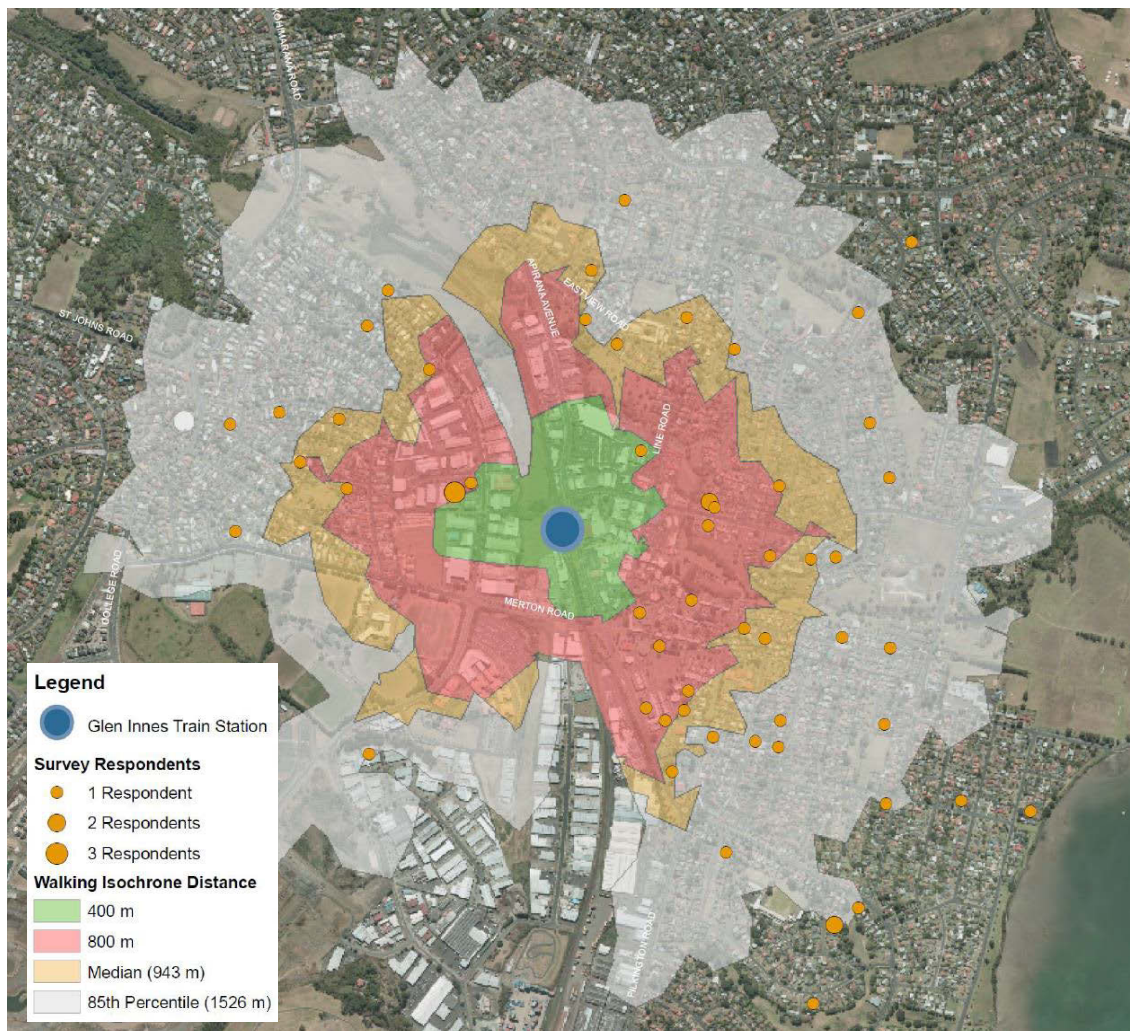
1. A distance of 800 metres from each main entrance to a transit stop is considered a minimum walkable catchment in all urban areas.
2. For larger tier 2 and all tier 1 local authorities, we suggest this threshold is extended further to account for local factors that include:
 - Street layout – are the streets laid out in a grid, or well connected through footpaths and open space that permit easier connectivity?
 - Severance – are major pieces of infrastructure or natural landscape interrupting or channelling convenient pedestrian movement?
 - Topography – how hilly or steep an area is will affect how easy or difficult it is for people to walk within a period of time.
 - Connectivity – are there footpaths on both sides of the roads? Is there access via pathways that run through reserves and open space? Are there pedestrian crossings?
 - Urban amenity – what other activities, such as local retail, pharmacy or green space, exist in streets within the extended catchment that would encourage local walking activity and multi-purpose trips?
 - Street lighting – are streets well lit, including through local footpath connections, to ensure that vulnerable groups feel secure?
 - Passive security – are footpaths and pedestrian routes overlooked by buildings with active frontages or otherwise designed to meet the security needs of vulnerable groups (noting that increased density can improve passive security)?
 - Mobility needs – is the street layout and accessible design suitable for those with mobility needs, specifically those using wheelchairs or with pushchairs, those using walking aids and other groups who may not be physically able to walk as far or as fast?
 - Other considerations – matters such as traffic light-controlled intersections, especially those that require pedestrians to wait for multiple lights to travel across a road, means a pedestrian's travel distance in a fixed period of time will be shorter.

5.5.4 Calculating walkable catchments

The most suitable way for tier 1 local authorities to calculate walkable catchments is to use spatial data and GIS. Tier 1 local authorities should have ready access to GIS software, digital road and pedestrian networks, which will enable a network analysis to determine walkable catchments. If you do not own and maintain your own digital road network that includes pedestrian access information, you can purchase these from a number of commercial providers.

You can calculate basic network catchments in GIS software, often known as isochrones, although these catchments may not always accurately represent true walkable catchments. An example is shown in Figure 6. Often, digital street and pedestrian networks do not take into account well-known walking paths and/or routes, such as those found in public parks, or other shortcuts. We recommend you check these software-generated catchments using other information, such as aerial photography and local knowledge, to ensure their accuracy.

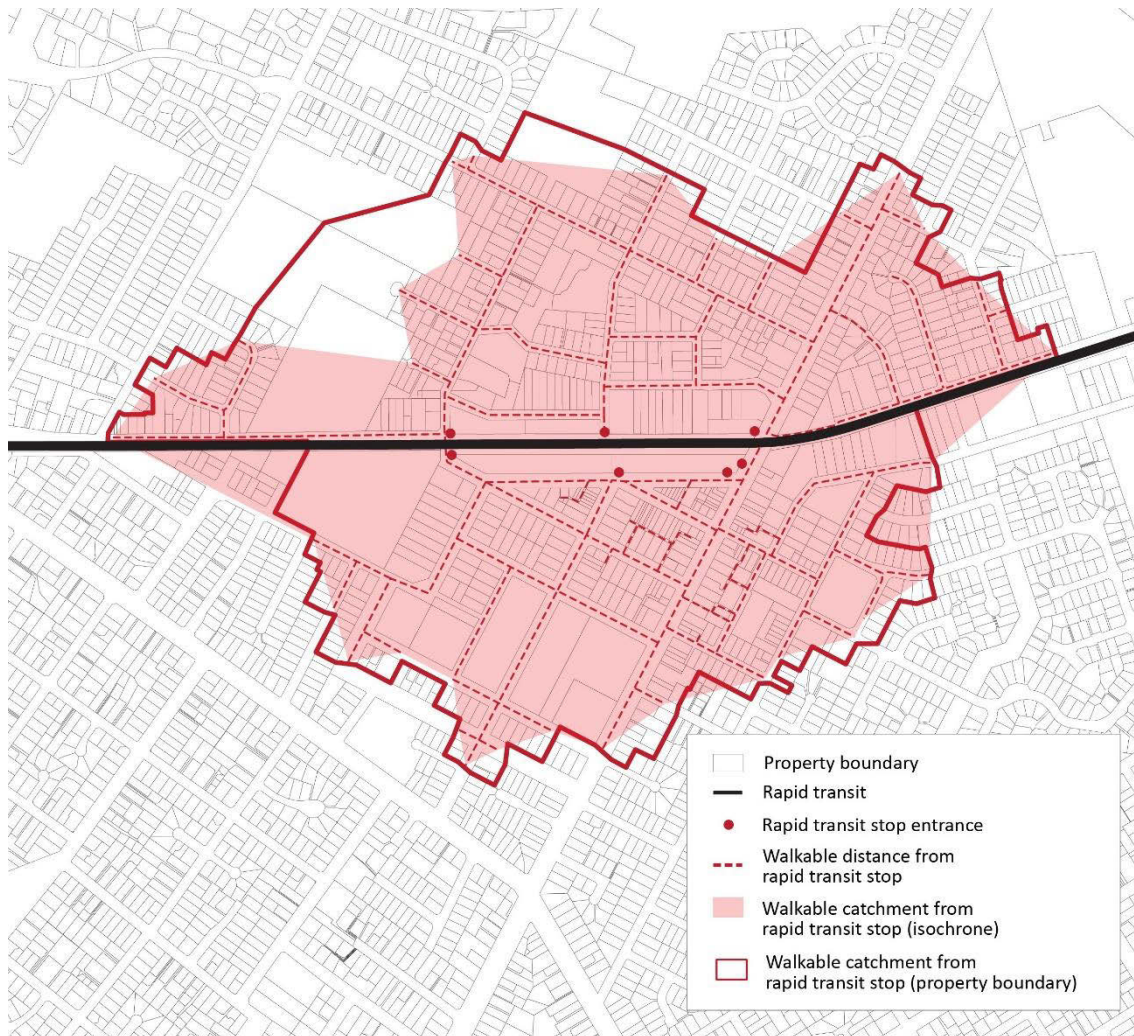
Figure 6: Example of ArcGIS generated walkable catchment isochrone for Glen Innes rail station in Auckland (Chung, 2012)



You may also want to consider using GIS-generated catchments as a guide to creating more formalised walking catchments based on property boundaries. This is because GIS-generated catchments will often cut across property boundaries, especially where properties are large. One benefit of having property-based catchments is they may help later when considering how to zone properties. Figure 7 below shows an example of the difference between a GIS-generated catchment

(isochrone) and a sense-checked, property-based catchment. This sort of assessment may also show where you could establish future walking connections.

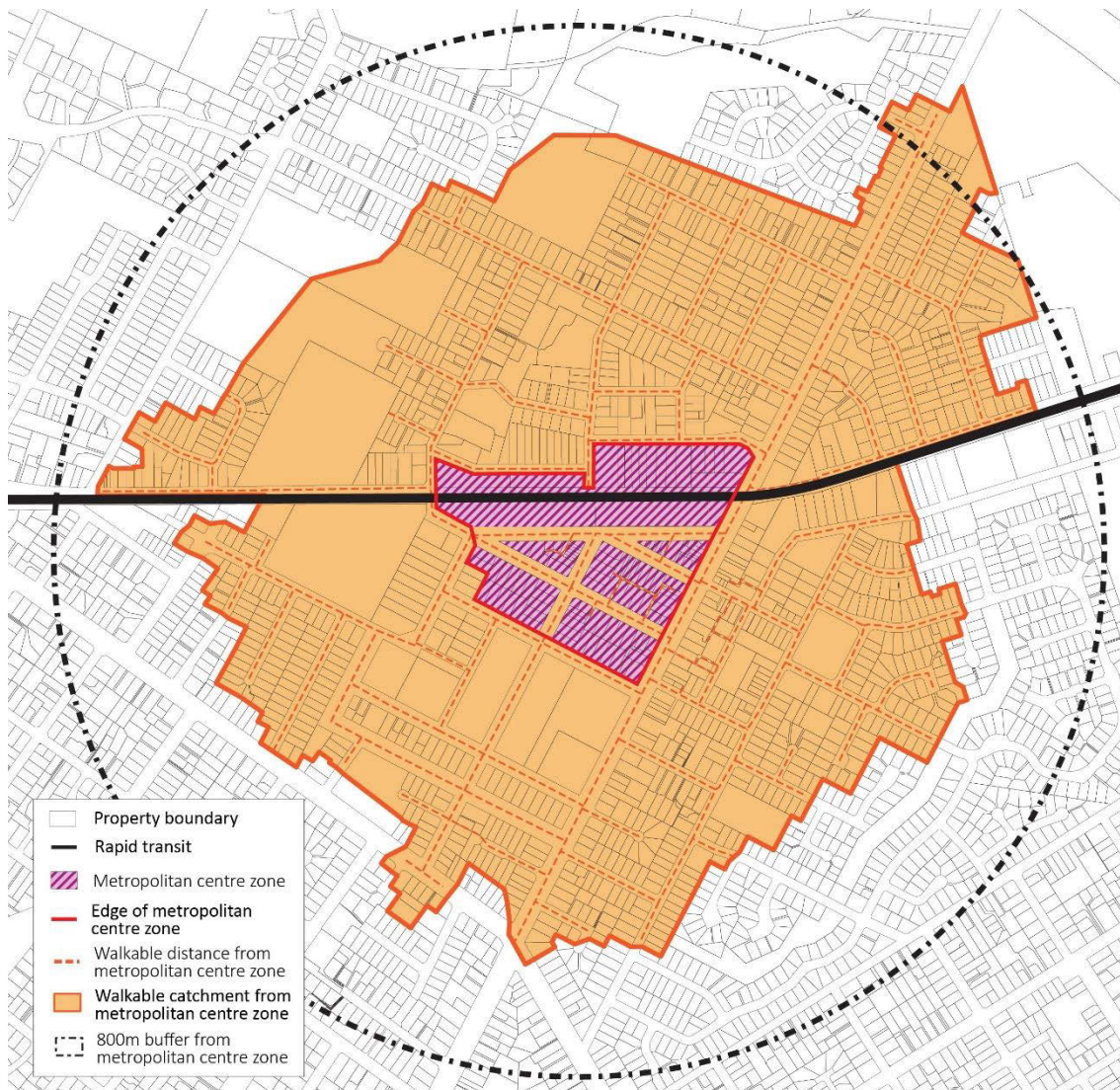
Figure 7: Example of GIS-generated catchment (isochrone) and property-based catchment for rapid transit stop



In the past, when complex digital road networks, including pedestrian access and the GIS network modelling tools to analyse them, were limited in availability and functionality, often radial circles from the centre point of an urban centre were used as a proxy for a walkable catchment. This technique is known as *pedshed* analysis. A link to a method for producing a pedshed by Active Healthy Communities can be found in [Resources](#).

It is common practice to use an 800-metre diameter circle to represent a 10-minute walk for most people in a community. While these circles may have proved to be a useful proxy in the past, they often misrepresented the actual size of a centre's walkable catchment – for example, including land that did not effectively form part of the catchment or areas not accessible via the pedestrian network (Munro, 2009). Figure 8 below shows the difference in size between a property-based, 800-metre walkable catchment and an 800-metre radius circle from a centre point.

Figure 8: Example of difference between an 800-m walkable catchment from the edge of a metropolitan centre zone and an 800-m radius circle from the centre of metropolitan centre zone



While the use of a pedshed circle to illustrate catchments can be used to conceptualise locations, it is not appropriate for tier 1 local authorities to use as a proxy when considering walkable catchments. However, this approach may be suitable for tier 2 and tier 3 local authorities with smaller urban environments to understand areas that may be suitable for intensification under Policy 5(a).

Local authorities have discretion when determining what radius best matches the likely pedshed based on the local context. This may mean, in some areas, a smaller radius of 400–600 metres, for example, is appropriate for tier 2 and 3 local authorities. Pedshed analysis of city and town centres could provide a suitable indicator of locations with high levels of accessibility, especially in terms of active transport modes to a range of commercial activities and community services. Where possible, we recommend local authorities use a GIS network analysis approach.

6 Determining heights and densities to support implementing the intensification provisions

Policies 3 and 5 of the NPS-UD direct the levels and type of intensification that local authorities must enable in urban environments. The following sub-sections step through the different intensification requirements across tier 1, 2 and 3 urban environments and in particular:

- the anticipated outcomes
- principles to consider
- high-level suggestions for how to approach the work required to give effect to these policies.

District plans include a package of controls relating to built form that manage a range of effects. These controls are still relevant when giving effect to the intensification provisions.

The intensification provisions are not intended to direct local authorities to have no controls. Plans will still have development controls, however local authorities need to pay careful attention to controls that affect height and density. If the controls in a plan undermine or restrict the ability to enable intensification as directed and prevent intensification outcomes from being achieved, then those controls need to be reviewed. This does not necessarily mean removing those controls from plans, but carefully reviewing and testing each control to ensure it is balanced to enable intensification.

None of the intensification requirements are intended to override or undermine good quality urban design or quality urban environments.

You should read and consider the other provisions in the NPS-UD together with the intensification requirements. Also, local authorities should continue to ensure the intensification outcomes will support well-functioning urban environments and sensible zoning patterns. ‘Sensible zoning patterns’ refers to zoning that takes into account how the package of zones work together. Refer to [section 6.4](#) Walkable catchments (Policy 3(c)) for further detail on this concept.

The heights and densities that should be enabled by local authorities in Policies 3 and 5 will look different across urban environments. The policies require local authorities to consider the local context, while applying the principles and policy intent as outlined in [section 5](#) and [section 6](#) of this guidance. A guiding principle is that more height and density should be enabled where evidence indicates it would be appropriate. This may include areas:

- with higher residential and business demand – for example, those with good views and/or outlooks, close to open space or with good access to jobs and other amenities
- within walkable catchments of centres or rapid transit stops
- with good accessibility that support access to planned and existing forms of public transport.

When considering where to enable intensification, note that locations with both high demand and accessibility are the most suitable. However, you do not need both good accessibility and relative

demand to enable greater heights and densities. Intensification must be enabled even if you only have high demand and low accessibility or vice versa.

6.1 Relevant policies

Policy 3: In relation to tier 1 urban environments, regional policy statements and district plans enable:

- (a) in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification; and
- (b) in metropolitan centre zones, building heights and density of urban form to reflect demand for housing and business use in those locations, and in all cases building heights of at least 6 storeys; and
- (c) building heights of least 6 storeys within at least a walkable catchment of the following:
 - (i) existing and planned rapid transit stops
 - (ii) the edge of city centre zones
 - (iii) the edge of metropolitan centre zones; and
- (d) in all other locations in the tier 1 urban environment, building heights and density of urban form commensurate with the greater of:
 - (i) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or
 - (ii) relative demand for housing and business use in that location

Policy 5: Regional policy statements and district plans applying to tier 2 and 3 urban environments enable heights and density of urban form commensurate with the greater of:

- (a) the level of accessibility by existing or planned active or public transport to a range of commercial and community services; or
- (b) the relative demand for housing and business use in that location.

6.2 Enabling as much development capacity as possible in city centre zones (Policy 3(a))

In city centre zones, tier 1 local authorities are required to enable building heights and density of urban form to support as much development capacity as possible. This is to maximise the benefits of intensification. In practice, 'as much as possible' means removing unnecessary and unreasonable barriers to accommodate the maximum amount of development capacity that can be realised. Removing these barriers will help to enable greater up-zoning in city centres where intensification will have the greatest benefits.

Practically, 'as much as possible' will likely look different in various urban environments. City centres are a step up in the zoning hierarchy from metropolitan centres, so enabling as much development capacity as possible is expected to mean greater than six storeys (because six storeys is the minimum

for metropolitan centres). Tier 1 local authorities should be considering the level of demand and accessibility in determining what heights and densities can be enabled. In practice, this may mean:

- no maximum building heights or maximum gross floor area (GFA) standards in city centre zones or large parts of city centre zones
- development standards that may limit building height and density, where there is evidence that doing so will contribute to a well-functioning urban environment and achieving the objectives of the NPS-UD as a whole.

In giving effect to this policy requirement, local authorities need to step through the following:

- Consider what ‘as much as possible’ is going to mean in the city centre, taking into account local circumstances and factors – specifically, the level of demand and accessibility should be key considerations.
- Consider if any of the qualifying matters (eg, matters of national importance, open space, heritage orders or other matters) apply to the city centre. Also, look at to what extent heights and densities may need to be modified to accommodate the qualifying matter. (The qualifying matters set out the matters local authorities need to consider in enabling ‘as much as possible’.)
- Review the current city centre controls and determine if they are enabling enough to support the outcomes intended in the NPS-UD and by Policy 3(a). This means checking the controls are enabling as much development capacity as possible to maximise the benefits of intensification. If not, the controls will need to be amended accordingly.
- In maximising the benefits of intensification, consider whether enough intensification has been enabled to support outcomes such as transport choice, accessibility and climate emissions reduction. If you are not maximising the benefits of intensification due to other factors (eg, character), ensure the effects of doing so have been taken into account using adequate evidence in a section 32 report.
- As directed by Policy 6, consider what ‘as much as possible’ will mean for the urban environment in terms of urban form, amenity changes and the benefits of urban development. Local authorities will need to ensure the specific outcome of enabling as much development capacity as possible is consistent with the wider NPS-UD policy direction.
- Consider if the outcome and/or decision on what ‘as much as possible’ means for the city centre environment will ensure that a well-functioning urban environment is achieved.

In some urban environments, there may be circumstances or factors, which are linked to the qualifying matters in the NPS-UD (subpart 6, clause 3.33), that will mean these will need maximum height limits or GFAs in city centre zones. Any such decisions will need to be supported by robust evidence and analysis. Where heights and density within city centres are scaled below maximum levels due to other circumstances or factors, the trade-offs of this approach should be clearly articulated in a section 32 report.

Local authorities will need to ensure they enable as much development capacity as possible and that the outcomes will deliver a well-functioning urban environment, which enables all people and communities to provide for their social, economic and cultural wellbeing and for their health and safety, now and into the future.

Subpart 7 of the NPS-UD requires local authorities to ensure objectives, policies and rules in district plans are consistent with the outcomes required by the intensification provisions. To ensure as much development capacity as possible is enabled in city centre zones, local authorities will need to:

- clearly articulate the development outcomes intended in the city centre zone objectives
- review and, if necessary, update the rule framework to ensure development controls relating specifically to heights and densities will not undermine intensification and that the cumulative effects of district plan provisions are consistent with the outcomes required.

6.3 Metropolitan centre zones (Policy 3(b))

The requirement for tier 1 local authorities to enable at least six storeys in metropolitan centres is intended to ensure there are sufficient opportunities to enable more people to live in, and more businesses and community services to be located in, areas with high demand and good access and well-served by existing or planned public transport. In most cases, metropolitan centre zones will exhibit most, if not all, of these attributes.

Tier 1 local authorities are required, at a minimum, to enable at least six storeys within metropolitan centre zones. The six storeys is a minimum and not a target, with Policy 3 requiring building heights and density of urban form to reflect demand for housing and business use. There may be cases where higher heights and densities than the six-storey minimum as directed might be appropriate, for example:

- where there is a high level of demand – this could include areas with good outlooks or views, or areas adjoining or near open space, which provide higher levels of amenity
- areas with more jobs or access to job opportunities
- areas where multiple modes of transport are accessible – both public and active.

In these types of scenarios, amongst others, it would be considered appropriate to enable more intensification than the minimum requirement. This would mean, for example, that if there was demand for residential and commercial space in a metropolitan centre that required more than six storeys, then that would be what should be enabled.

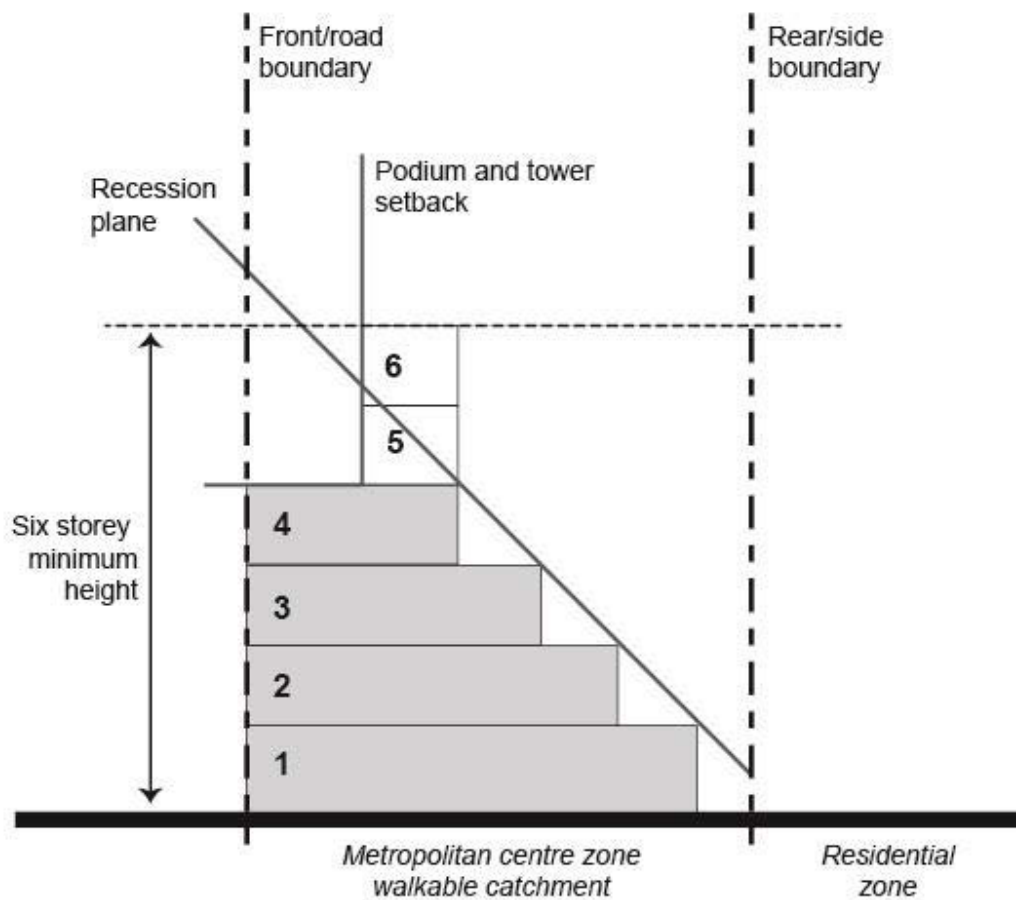
For the avoidance of doubt, the six-storey minimum is the minimum district plans must enable and not a minimum development rule. For example, local authorities are not required to set objectives, policies and rules to prevent the construction of buildings less than six storeys. While plans must enable six or more storeys, a developer or land owner can still choose to construct a four-storey building. Instead, district plans just need to be enabling, with the controls supporting the minimum height (six storeys or more) and as much yield of developable space across a site as appropriate, without compromising well-functioning urban environments. This will include:

- reviewing and, if necessary, updating provisions to enable these outcomes to be achieved, including understanding how the package of controls affects the delivery of both the minimum storey requirements and the total developable space yields. This will require understanding how the provisions relate to (but are not limited to) gross floor area, yard and podium setbacks and recession planes
- enabling maximum yield across a site – this doesn't mean density controls cannot be used but rather they shouldn't undermine or restrict these outcomes

- enabling different building typologies that support a greater yield across a site (eg, height and density).

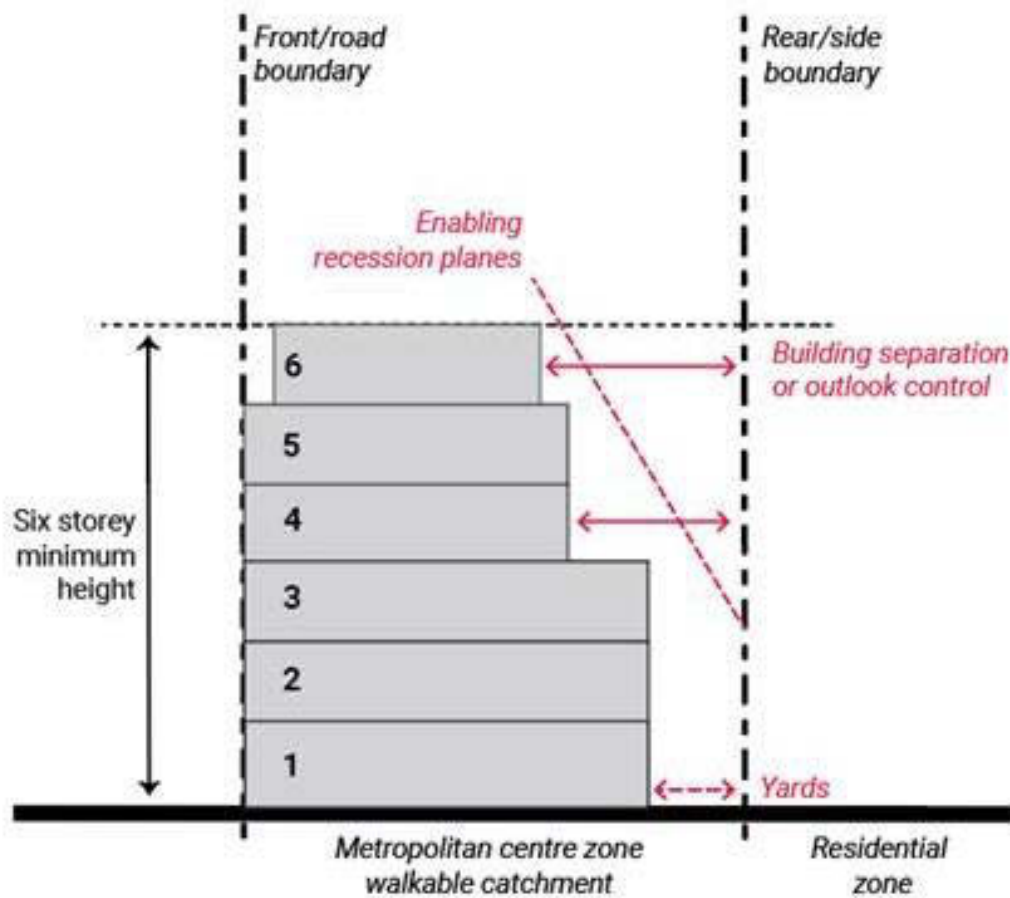
The below example (Figure 9) shows how a package of district plan rules could prevent or undermine six storeys from being realised on sites in the walkable catchment of a metropolitan centre zone. In this case, the application of rules (eg, setback from the front or road boundary and height in relation to boundary from the adjoining residential zone) in practice only allows four storeys to be realised and prevents the six minimum storeys being achieved.

Figure 9: Example of how a package of district plan controls could prevent the six-storey minimum being achieved in a metropolitan centre zone walkable catchment



Instead, local authorities should ensure the package of district plan rules allows six storeys to be realised on sites. Figure 10 below shows how district plan rules and controls can enable six storeys. In this case, recession planes may still be appropriate but need to enable flexibility at upper floors. In combination with other controls (eg, yards), increased recession plane angles and projection heights can support taller buildings. For example, these recession planes can still enable adequate daylight or sunlight to adjacent sites or zones, as well as encourage some building setback at upper levels to reduce perceived building height and visual dominance. Local authorities should also consider providing a gradual step down in zones and where to locate zone boundaries to avoid interface issues with adjoining zones.

Figure 10: Example of how a package of district plan controls could enable the six-storey minimum in a metropolitan centre zone walkable catchment



6.4 Walkable catchments (Policy 3(c))

The minimum height is also six storeys for areas within a walkable catchment of rapid transit stops, or the edge of city centre and metropolitan centre zones (refer [section 5.5](#) Walkable catchments). Again, six storeys is the minimum and not a target and, in many cases, local authorities should enable higher than six storeys, especially where there is evidence higher buildings would be appropriate, including when:

- the HBA for the urban environment shows there is high demand for residential and commercial space in a walkable catchment
- a walkable catchment of a city centre zone or metropolitan centre zone also falls within a walkable catchment of a rapid transit stop
- a walkable catchment enables access to planned and existing forms of public transport, especially frequent public transport services.

While enabling a minimum of six storeys is required within walkable catchments of city centre and metropolitan zones and rapid transit stops, it is likely there are cases where higher heights and greater density (ie, greater than six storeys) are appropriate within these walkable catchments that local authorities should consider. This will depend on local circumstances and evidence. An example might include:

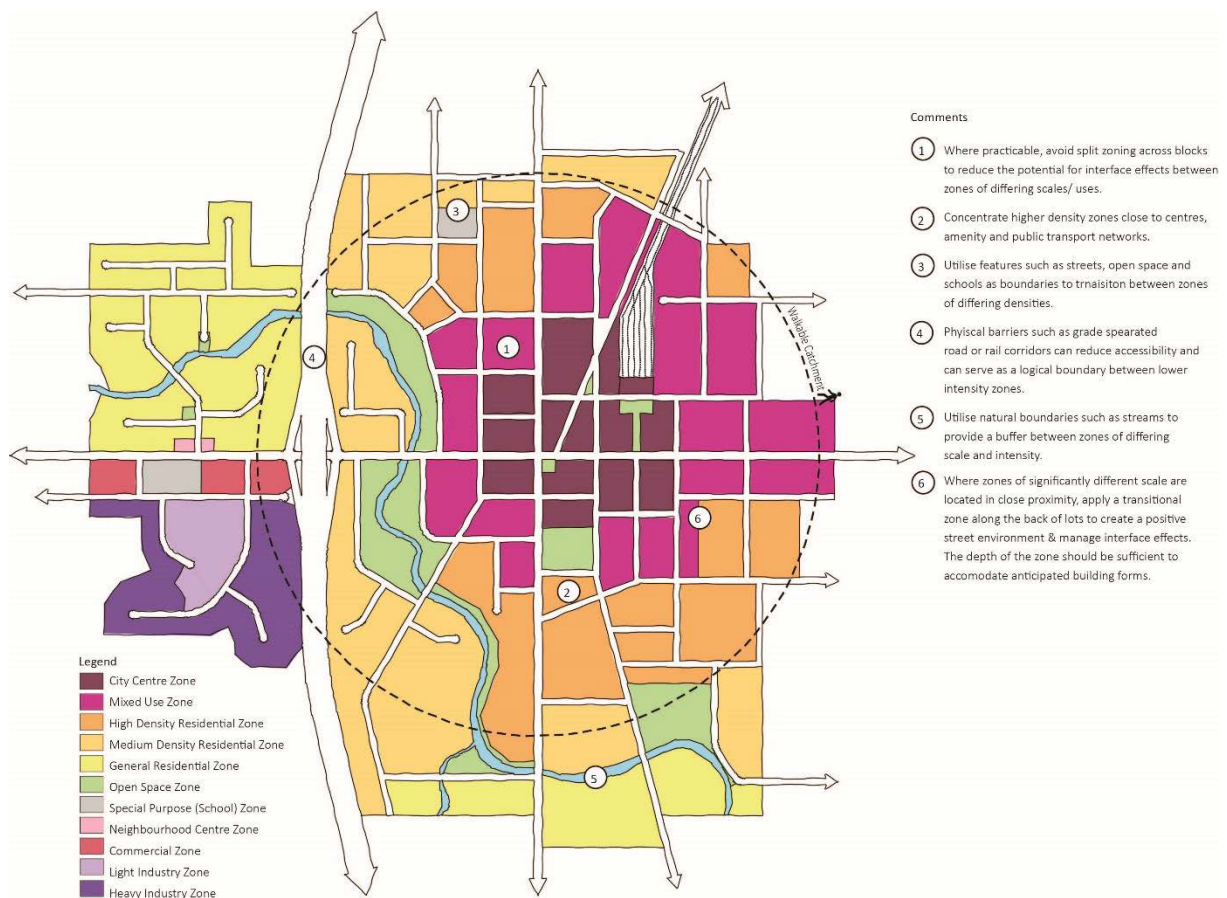
- Local authorities may wish to graduate or step down building heights, from the edge of their city centre or metropolitan centre zones that may have height limits considerably higher than six storeys, to the minimum six storeys that must be enabled inside, and to the edge of, walkable catchments.

As noted earlier, when enabling a minimum of six storeys within walkable catchments, local authorities should take care to ensure an appropriate zoning pattern is achieved. This is necessary to ensure there is consistency in the way areas are zoned and to ensure issues that can arise where different zones interface do not impact on delivering the other objectives of this NPS, such as well-functioning urban environments. Some key considerations for intensification in achieving sensible zoning patterns include:

- consistency in the way areas are zoned and how the different zones are applied
- interface of zones and avoiding putting zones side by side – this could include using steps down in zones to avoid the impacts on more sensitive zones
- integrating zones and trying to align or create more natural transitions between compatible zones.

In achieving a sensible zoning pattern as described above, local authorities will still need to ensure they enable at least the relevant height minimums. Figure 11 below provides one example of a sensible zoning pattern for intensification, achieving a gradual step down.

Figure 11: Sensible zoning patterns for intensification achieving a gradual step down



6.5 Enabling building heights and density commensurate with accessibility and demand (Policies 3d and 5)

Policy 3(d) for tier 1 local authorities and Policy 5 for tier 2 and 3 local authorities of the NPS-UD requires building heights and densities of urban form to be enabled commensurate with the:

- level of accessibility by existing or planned active and public transport to a range of commercial activities and community services, or
- relative demand for housing and business use in that location.

For tier 1 urban areas, this will be for all areas outside of city centre and metropolitan centre zones, as well as walkable catchments of existing and planned rapid transit stops and the edge of city centre and metropolitan centre zones.

Tier 2 and tier 3 urban areas will need to apply Policy 5 to their entire urban area.

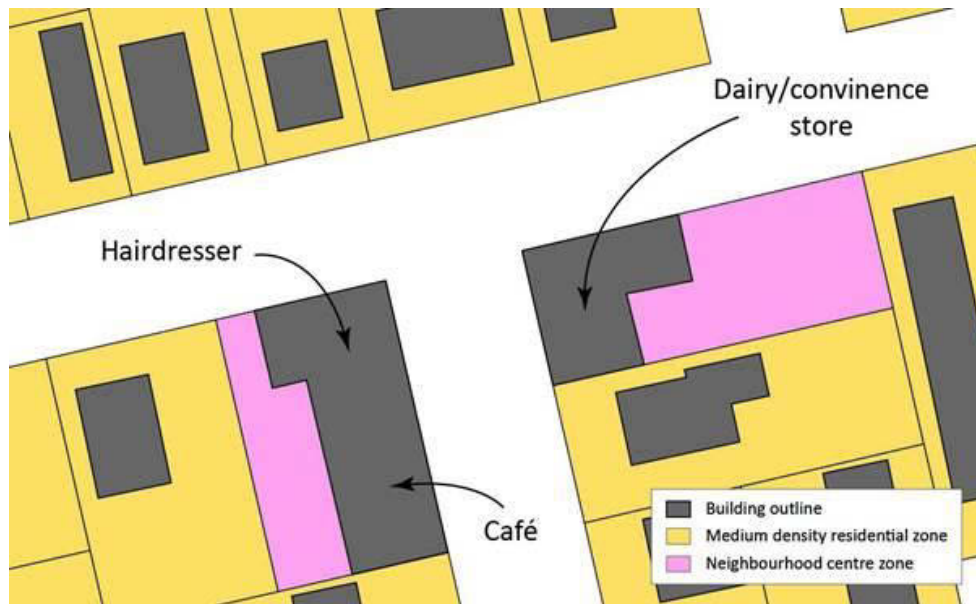
6.5.1 A 'range' of commercial activities and community services

Commercial activities include those that serve the needs of the community (eg, shops) and provide people with employment. Community services include health care, education (including universities and tertiary training institutes), cultural activities (eg, museums, galleries, churches) and land or venues for sport and recreation.

A 'range' of services should be thought of as a variety of commercial and community services that serve the needs of the catchment when implementing this policy. For example, a doctor and/or pharmacy, school and/or kindergarten and a café and shops would be considered as providing a range of services. The locations that provide a range of activities and services are likely to be places that are easily accessible to a wide range of people. These locations will often be commercial centres within urban areas, ranging in size from smaller local or town centres through to larger metropolitan centres or even city centres (in the case of tier 2 and tier 3 urban environments).

This also means a small set of neighbourhood shops, for example with amenities such as a dairy, hairdresser and butcher, would not likely be considered to be providing a range of services. An example of neighbourhood shops that would not be considered to provide a range of services is shown in Figure 12 below.

Figure 12: Example of neighbourhood shops that do not provide a 'range of services'



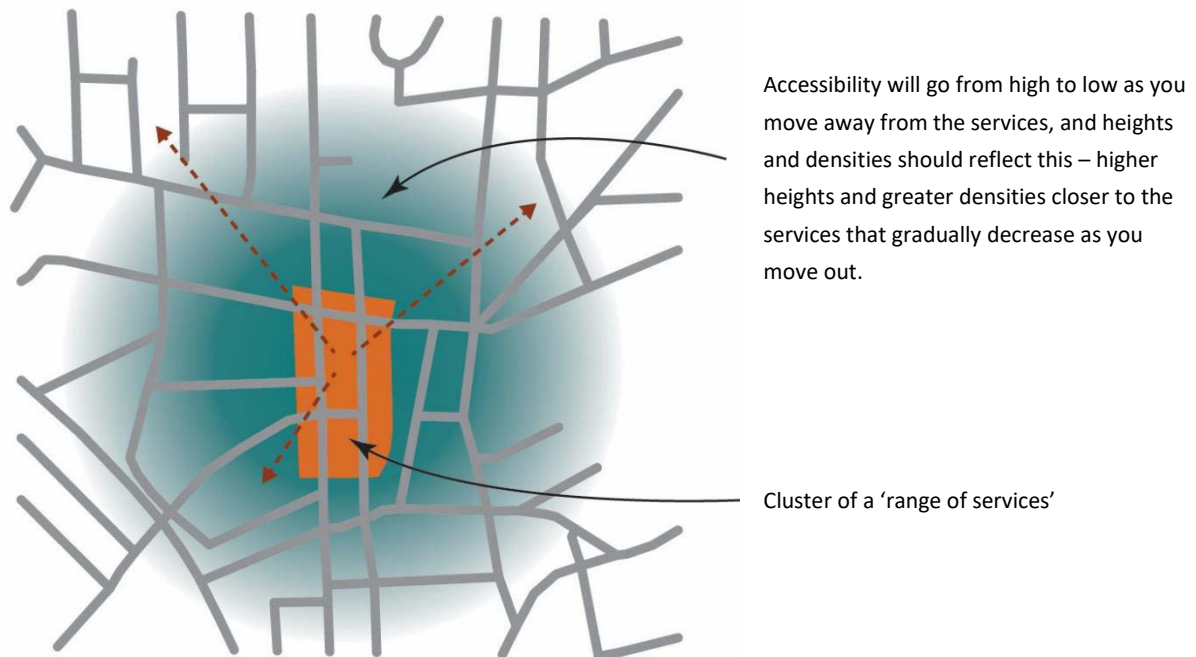
6.5.2 Determining the level of accessibility to a range of services

Guidance on accessibility is provided in [section 5.4](#) Measuring accessibility above. This section should be referred to when determining accessibility.

Areas closer to a range of services will have a higher level of accessibility than areas further away from services. This means the level of accessibility will range from higher to lower, depending on the distance from a range of services. Heights and densities enabled must be commensurate to the level of accessibility. This means areas with high accessibility (ie, those areas closest to a range of services) should have greater heights and densities enabled which (depending on the level of demand) may gradually decrease as you move away from the services and as accessibility reduces. If you have both high demand and high accessibility, you may find heights and densities do not gradually decrease like they could if you were intensifying based on high levels of accessibility only.

Below, Figure 13 shows how accessibility to a range of services, represented by a town centre, decreases as you move further away from them. In such a case, district plan rules should reflect that heights and densities would need to be greater the closer or more accessible they are to services. This figure illustrates accessibility by active modes. The area that is considered accessible by public transport could be much larger (if frequent public transport services operate in this area).

Figure 13: Example of a 'range of services' interacting with accessibility only and how this influences heights and density



6.5.3 Determining relative demand for housing and business use

Determining relative demand for housing and business use to enable commensurate heights and density or urban form will be undertaken differently for tier 1, 2 and 3 local authorities.

In preparing the intensification plan changes, some principles or types of areas where demand is often high and intensification is likely to be appropriate could include:

- areas with high land prices relative to others
- locations close to open space and recreation opportunities
- areas within, or close to, centres
- areas with good transport opportunities – including frequent public transport, multi-mode transport opportunities (eg, public transport, walking and cycling) and freight
- areas close to key services including, schools, hospitals and supermarkets
- areas close to a range of business activities
- locations with good views, outlook and amenity, including areas with water views or green space outlooks.

Determining and understanding relative demand in tier 1, 2 and 3 urban areas could be achieved through a number of different methods. As a general starting point for all local authorities, land price is a good proxy to consider in understanding demand; areas with high land prices indicate the areas are more desirable to live in. When combined with capital values in an area, this will help highlight locations where it is desirable and/or feasible to deliver intensification.

Methods to understand and determine demand that local authorities may use include:

- using information produced as part of an HBA for tier 1 and 2 local authorities
- using population and growth projections and statistics for the areas or regions – this may be particularly helpful for tier 3 local authorities
- analysing recent resource consent data to highlight areas where there may be high demand, such as:
 - areas where a number of consents have been lodged for housing and business use
 - the number of consents seeking to infringe standards such as maximum building height, building coverage and height in relation to boundary gross floor area, or
 - other development controls that impact on the development potential of a site
- surveying consumer preferences under scenarios where higher-density housing is permitted using highly flexible zoning and building rules (ie, unconstrained demand for a greater range of housing types and prices). Additionally, local authorities could engage with the development sector to understand preference
- monitoring economic indicators such as land prices. As noted above, these can be used as a proxy to indicate demand; if comparable land prices are high, it would suggest there is higher relative demand.

One particular method an HBA can use to understand areas of high demand in an urban area is analysing the capital value-to-land value ratio of properties. This is detailed in [the Guide on Evidence and Monitoring](#), which was produced to support the implementation of the National Policy Statement on Urban Development Capacity (2016).

A high land value-to-capital value ratio can indicate the land is in a location of high demand and the land use is under-capitalised. This is likely to mean it is feasible to redevelop for greater intensification. For example, when the relative price of a land parcel rises, it is a signal people want to live and work in that location. Land with low capitalisation is easier and more profitable for development because most of the value is in the land (as shown in the [cost-benefit analysis for the NPS-UD](#)). Under-capitalisation might also be in relation to a disparity between the current and possible land use, such as what is there now and what could be provided if greater density was enabled. This indicates these places could be suitable for intensification.

The matrix shown in table 2 below shows how local authorities could use this metric to understand and identify areas most suitable for intensification.

Table 2: Capitalisation and land value and suitability for redevelopment and intensification

	Low land value	High land value
High capitalisation	<p>Low value land and high capitalisation, unlikely to be redeveloped</p> <p>Areas of low demand, likely not suitable for intensification</p>	<p>Valuable land and high capitalisation, limited likelihood of redevelopment</p> <p>Areas of some demand, may suitable for intensification</p>
Low capitalisation	<p>Low value land and low capitalisation, unlikely to be redeveloped</p> <p>Areas of some demand, may suitable for intensification</p>	<p>Valuable land and low capital value, likelihood of redevelopment</p> <p>Areas of most demand, most suitable for intensification</p>

The Ministry of Housing and Urban Development (HUD) have done some work on understanding the costs of growth. This work includes developing a methodology for local authorities to understand and measure the wider costs and benefits of different forms of urban development in different locations. We also expect the methodology could be used as an input into HBAs and to assess appropriate areas for intensification. The methodology will be available by the end of 2020.

When determining demand, tier 3 local authorities could also look to their centre type zones (city centre, town centre, neighbourhood centre), where demand and access is likely to be greatest, as starting points for locations that are best suited for intensification.

While tier 3 local authorities are not required to undertake an HBA, they must undertake basis evaluations and analysis as directed in subpart 3, clause 3.9 of the NPS-UD – for example, analysing the price of and rents for dwellings can assist in understanding housing demand. They may also wish to apply and consider the principles of an HBA to determine demand including:

- current supply of housing and whether there is additional demand
- housing affordability across the district
- location of housing
- dwelling typologies – for example, is there a shortage or desire for a particular typology
- number of dwellings that can reasonably be expected to be realised.

Heights and densities enabled in urban areas must be commensurate to the level of demand. This means areas with high demand should enable greater heights and densities than areas with low or no demand.

6.5.4 What this means for intensification outcomes

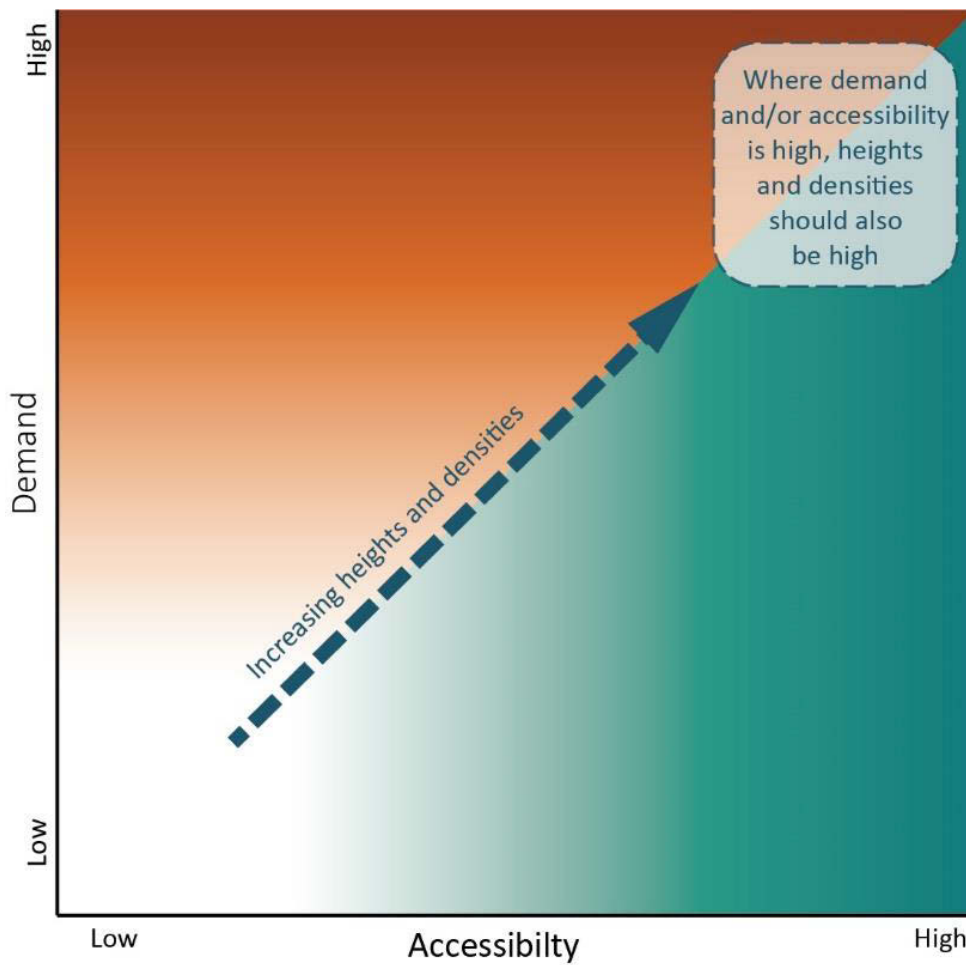
Enabling heights and density of urban form commensurate to accessibility and demand is going to look different across urban environments of varying size. It is important local authorities remember:

- you do not need both good accessibility and higher relative demand to enable greater heights and densities
- if you have high demand but no/low/moderate accessibility you still need to ensure greater heights and densities are enabled
- if you have high accessibility but no/low/moderate demand you still need to ensure heights and densities that reflect the level of accessibility are enabled
- if you have both high demand and high accessibility then you should be seeking to enable more height and density in those areas, as these are the most suitable to accommodate intensification.

In all the above situations, it is important intensification is enabled in a way consistent with meeting the definition of well-functioning urban environments (Policy 1).

Figure 14 below illustrates visually how you could think about enabling heights and densities when assessing a location against demand and accessibility. By plotting on the graph a location's demand and accessibility, you can understand the extent to which you should enable density and heights. The higher a location's accessibility or demand, the more enabling your density and heights will need to be.

Figure 14: Example framework for determining heights and densities for other areas in tier 1 urban environments



The building height and density of urban form that is enabled through development standards will result in different housing typologies and business uses.

Different housing typologies exist (see Figure 15 below) which result in a range of heights and densities. These include:

- detached single-level houses
- townhouses
- duplex and multiplex houses
- terrace housing
- apartments.

Figure 15: Spectrum of housing typologies



In general, terrace housing and apartments will have greater heights and densities than townhouses and detached single-level houses. Local authorities will need to think about the spectrum of typologies and outcomes that are appropriate to be enabled, based on the level of accessibility and demand. For example, if you have high accessibility and high demand it could be appropriate to enable apartments and more intensive business uses in an area.

6.5.5 Amending district plans

The level of accessibility and demand will be different across urban areas. Therefore, local authorities should consider options for implementing the intensification provisions through changes to regional policy statements and district plans. In giving effect to the intensification provisions, this could mean:

- rezoning areas to enable greater building height and density
- amending the development standards for an existing zone to enable commensurate heights and densities
 - there may be instances where most of an existing zone is suitable for intensification, with a small area that might not be suitable because it does not meet the accessibility or demand criteria. For consistent zoning outcomes, local authorities may decide to enable greater height and density throughout the zone
- using other planning tools such as:
 - precincts: in instances where there are various pockets across urban zones suited to intensification, but it is inappropriate to enable greater building heights and densities across the entire zone, local authorities could consider using a precinct to enable greater heights and densities within specific areas of an existing zone. Refer to Standard 12 (District Spatial Layers Standards) of the standards for further information on precincts
 - specific control: the standards provide for ‘specific controls’ to spatially identify where a site or area has provisions that are different from other spatial layers, or where district-wide provisions apply to that site or area. Particular areas of a zone may be suited to intensification, but it is inappropriate to enable greater building heights and densities across the whole zone. In these instances, local authorities could consider using a specific control to enable greater heights and densities within specific areas of an existing zone. Refer to

Standard 12 (District Spatial Layers Standards) of the standards for further information on specific controls.

6.6 Qualifying matters – application

The directive intensification outcomes in Policy 3 for tier 1 local authorities are designed to enable higher densities in locations where it is most suited. However, there may be some areas that are not suitable for higher levels of intensification, or any intensification because of a qualifying matter. Where a qualifying matter applies, this does not mean intensification should not be enabled, rather that local authorities should carry out a comprehensive analysis and must seek to enable the greatest heights and densities possible while managing the specific qualifying matter (clause 3.32 and 3.33).

6.6.1 Relevant policy

Policy 4: Regional policy statements and district plans applying to tier 1 urban environments modify the relevant building height or density requirements under Policy 3 only to the extent necessary (as specified in subpart 6) to accommodate a qualifying matter in that area.

Subpart 6, clause 3.32 Qualifying matters

- (1) In this National Policy Statement, **qualifying matter** means any of the following:
- (a) a matter of national importance that decision-makers are required to recognise and provide for under section 6 of the Act
 - (b) a matter required in order to give effect to any other National Policy Statement
 - (c) any matter required for the purpose of ensuring the safe or efficient operation of nationally significant infrastructure
 - (d) open space provided for public use, but only in relation to the land that is open space
 - (e) an area subject to a designation or heritage order, but only in relation to the land that is subject to the designation or heritage order
 - (f) a matter necessary to implement, or ensure consistency with, iwi participation legislation
 - (g) the requirement to provide sufficient business land suitable for low density uses to meet expected demand under this National Policy Statement
 - (h) any other matter that makes high-density development as directed by Policy 3 inappropriate in an area, but only if the requirements of clause 3.33(3) are met.

Subpart 6, clause 3.33 Requirements if qualifying matter applies

- (1) This clause applies if a territorial authority is amending its district plan and intends to rely on Policy 4 to justify a modification to the direction in Policy 3 in relation to a specific area.
- (2) The evaluation report prepared under section 32 of the Act in relation to the proposed amendment must

- (a) demonstrate why the territorial authority considers that:
 - (i) the area is subject to a qualifying matter; and
 - (ii) the qualifying matter is incompatible with the level of development directed by Policy 3 for that area; and
 - (b) assess the impact that limiting development capacity, building height or density (as relevant) will have on the provision of development capacity; and
 - (c) assess the costs and broader impacts of imposing those limits.
- (3) A matter is not a qualifying matter under clause 3.32(1)(h) in relation to an area unless the evaluation report also:
- (a) identifies the specific characteristic that makes the level of development directed by Policy 3 inappropriate in the area, and justifies why that is inappropriate in light of the national significance of urban development and the objectives of this National Policy Statement; and
 - (b) includes a site-specific analysis that:
 - (i) identifies the site to which the matter relates; and
 - (ii) evaluates the specific characteristics on a site-specific basis to determine the spatial extent where intensification needs to be compatible with the specific matter; and
 - (iii) evaluates an appropriate range of options to achieve the greatest heights and densities directed by Policy 3, while managing the specific characteristics.

6.6.2 Qualifying matters

When giving effect to the Policy 3 (a, b, c and d) of the NPS-UD, tier 1 local authorities may modify, but only if necessary, the intensification requirements as directed if one of the qualifying matters in the NPS-UD apply. Qualifying matters mean any of the matters listed in subpart 6, clause 3.32. The matters are very specific, with the exception of 3.32(h) relating to ‘other matters’, which may also qualify for making higher-density development inappropriate. Where local authorities wish to use clause 3.32(h), a more robust evidence base is required to justify why intensification requires modification through a site-specific analysis, and also the requirements in clause 3.33(3) must be met. Some examples of what might be anticipated to be raised as an ‘other matter’ include:

- special character
- viewshafts
- less significant hazard risk, that is not covered by s6 of the RMA.

Where a qualifying matter is applicable for a tier 1 local authority, this does not mean intensification is excluded from an area, but instead that it is to be modified only to the extent necessary to accommodate the qualifying matter.

In addition, in the case of ‘other’ matters, it does not mean local authorities cannot have viewshafts or special character, for example. These can be retained where evidence supports their need. The qualifying matters simply provide the scope for local authorities to modify the level of intensification if it is required to protect the specific matter.

Local authorities will need to consider what qualifying matter is applicable carefully and then undertake a detailed assessment to determine the most appropriate level of intensification. This may look like:

- reduced building heights from the applicable minimum height required
- lower densities than the applicable minimum density required
- no intensification (although this is expected to be an exception).

This assessment will only be required if one of matters listed in clause 3.32(a–g) means that intensification will be limited.

6.6.3 Process to applying a qualifying matter

For any qualifying matter listed in subpart 6, clause 3.32 (a–g), for a tier 1 local authority to modify the intensification levels below those anticipated in Policy 3, an evaluation report must be prepared under section 32 of the RMA. This section 32 report must include and consider the following aspects in light of the requirements in subpart 6, clause 3.33:

- identify spatially, by location, where the qualifying matter applies, for example, a map showing the area to be assessed for a qualifying matter
- determine why an area is considered subject to a qualifying matter
- determine why the qualifying matter makes an area and/or site incompatible with the level of development directed by Policy 3 for that area
- assess the impact that limiting the development capacity, building height or density will have on providing development capacity overall
- assess the costs, benefits and broader impacts of imposing lower intensification levels in the area
- identify the appropriate alternative level of intensification for the area.

If a local authority believes there is an ‘other’ qualifying matter which is applicable under **subpart 6, clause 3.32(h)**, then a more detailed and robust assessment and higher evidential standard is required. In addition to the above matters, the following further evidence base must be prepared:

- identifying the specific characteristic or ‘other matter’ that makes the level of development directed by Policy 3 inappropriate
- justifying in the form of a detailed analysis and mapping to demonstrate why intensification is inappropriate (in light of the qualifying matter, the national significance of urban development and objectives of the NPS)
- conducting a site-specific analysis of the ‘other matter’ and where it needs to apply, such as the exact boundaries where intensification is inappropriate. Local authorities will need to undertake a site-by-site assessment, identifying the extent of the site or sites in the area subject to a qualifying matter. They will need to evaluate the specific characteristics on a site-specific basis to determine the spatial extent where intensification needs to be compatible with the specific matter
- evaluating an appropriate range of options of alternative heights and densities that could be applied to establish the best option to achieve the greatest heights and densities directed by Policy 3, while managing the specific characteristics.

Note that a blanket overlay approach to applying the qualifying matter is not appropriate. The qualifying matter should only apply to the specific, spatial extent required.

In practice, this means that:

- local authorities will need to justify their decisions on what ‘as much development capacity as possible’ means for determining heights and densities for a city centre zone with robust evidence in a section 32 report. They will also need to take into account any justifications under subpart 6, clause 3.33
- in metropolitan centres and other locations that require height limits of at least six storeys, local authorities will only need to provide justification where they believe a height limit needs to be less than six storeys, with site-specific analysis required if heights are being lowered due to an ‘other matter’
- local authorities will need to justify any height limits or densities lower than what is standard in their plans for that zone, in other areas identified as suitable for intensification, either due to being in a location of high demand or having good access
- local authorities may review, reduce or remove spatial application of ‘other’ matters, such as viewshafts, following assessment to enable greater intensification.

If tier 1 local authorities wish to modify heights and densities of intensification because of a qualifying matter, it is important they provide a robust evidence base and section 32 analysis, which clearly articulates the trade-offs of having less intensification.

They should answer the following questions in their analysis:

- What is the qualifying matter?
- Why is the qualifying matter something that is being considered within the specific location?
- What would be the implications of enabling intensification as directed by Policy 3?
- What area does the qualifying matter cover or what is the spatial extent?
- Why does the qualifying matter require heights and densities to be reduced and by how much?
- Are there alternative approaches or mitigations that could be put in place to avoid the need to reduce intensification? If not, why?
- How does limiting or reducing intensification in the area impact development capacity?
- What alternative to building height and density is appropriate without compromising the qualifying matter? What are the options?
- What are the trade-offs of not intensifying as directed?

Local authorities need to be mindful that just because a qualifying matter may apply or have been identified over a specific area, this does not mean intensification is inappropriate or should not be enabled. The level of intensification that may be enabled within areas where a qualifying matter applies may vary due to site-specific factors. Several different outcomes may be reached following the robust analysis and evaluation required under subpart 6, clause 3.33. For example:

- no intensification may be appropriate
- intensification as directed may not be achievable across the area but some intensification can be enabled

- areas within the extent of the qualifying matter may require lower intensification requirements, whereas intensification as directed by Policy 3 may be achievable in other sites within the wider spatial extent due to site-specific factors (eg, topography).

6.6.4 Qualifying matter ('other matter') – worked example

Figure 16: Step 1 – Identify the other qualifying matter or specific characteristic



Identify what the 'other' qualifying matter is – what is the specific characteristic, for example, view shaft, special character overlay that makes intensification as directed inappropriate.

Identify the area that the specific qualifying matter/specific characteristic applies, for example, the spatial extent.

Justify and clearly demonstrate why the qualifying matter needs to be considered and why intensification in the specific area is inappropriate in light of the importance of urban development and the objectives of the NPS-UD.

Figure 17: Step 2 – Undertake a site-specific analysis of all sites with the area that the qualifying matter applies



Undertake a site-specific analysis of all sites within the area that the qualifying matter applies.

Identify what the implications of enabling intensification as directed by Policy 3 would be.

Evaluate how and why the qualifying matter applies to each individual site.

Consider and clearly articulate the trade-offs of not enabling intensification as intended.

Undertake a cost-benefit analysis of a lower level of intensification.

Determine whether there are other mitigations or alternative approaches that could be put in place to avoid the need to reduce intensification.

Figure 18: Step 3 – Determine whether there are site-specific factors that may affect the level of intensification that can be realised eg, topography



Determine whether there are site-specific factors that may affect the level of intensification that can be realised, for example, topography.

Evaluate a range of options for each site within the qualifying matter area to achieve the greatest heights and densities possible, while managing the specific qualifying matter – for example, determine the different heights and densities that could be enabled without compromising the qualifying matter.

Figure 19: Step 4 – Determine and spatially identify where the qualifying matter applies



Following the site-specific assessments, determine and spatially identify:

- sites where the qualifying matter needs to apply and a lower level of intensification is required
- sites where the qualifying matter does not apply to the site and intensification as directed can be enabled.

The detailed assessment may result in local authorities wishing to remove or reduce the extent of the specific matter, for example, viewshaft or special character areas, to enable intensification as directed, if appropriate.

Figure 20: Step 5 – Enable intensification to the extent appropriate while managing the specific characteristic of the qualifying matter



Enable intensification to the extent appropriate while managing the specific characteristic of the qualifying matter.

This might mean that areas within the spatial extent covered by the qualifying matter have different levels of intensification enabled.

7 Full worked example of applying intensification provisions to determine heights or densities

This section of the guide takes you through an example to show how you need to consider the requirements of the intensification provisions. The example shows how you could apply the provisions to determine heights and densities in and around a metropolitan centre with a rapid transit stop and how this could translate to a zoning pattern.

There will be other factors beyond the ones shown in this example you may need to consider in zoning an area, including applying other provisions from the NPS-UD. This example presumes that open space and special zoning remain the same, while all other zones may be changed through applying the intensification provisions. This is reflected in the map figures.

Figure 21 below is a legend for the maps and aspects common to many of the figures in this section. Any additional features that you should note are shown in the legend for each individual map.

The example uses the standard zones set out in the national planning standards.

Figure 21: Legend/key for diagrams















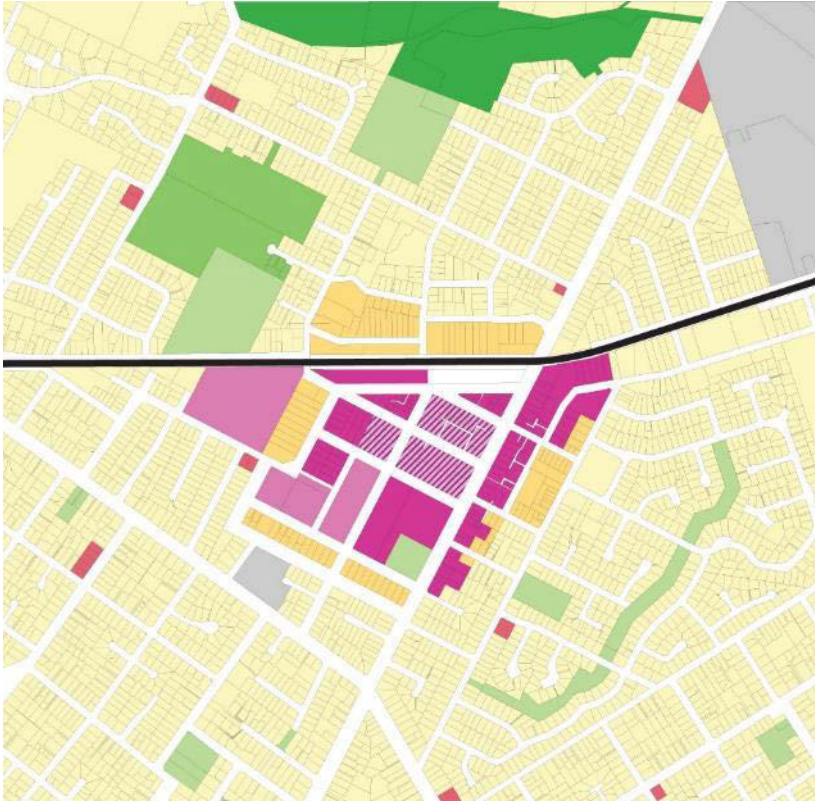
	Property boundary		Open space zone
	Rapid transit line		Sport and active recreation zone
	Metropolitan centre zone		Natural open space zone
	Mixed use zone		High density residential zone
	Large format retail zone		Medium density residential zone
	Commercial zone		General residential zone
	Special purpose zones		Low density residential zone

Figure 22: Current zoning pattern for a metropolitan centre that includes a rapid transit stop



In this example, current metropolitan centre zoning is surrounded by mixed-use zoning and large format retail, which is further surrounded by areas of a high-density, residential zone. Most of the urban area in this example is currently zoned low-density, residential zone.

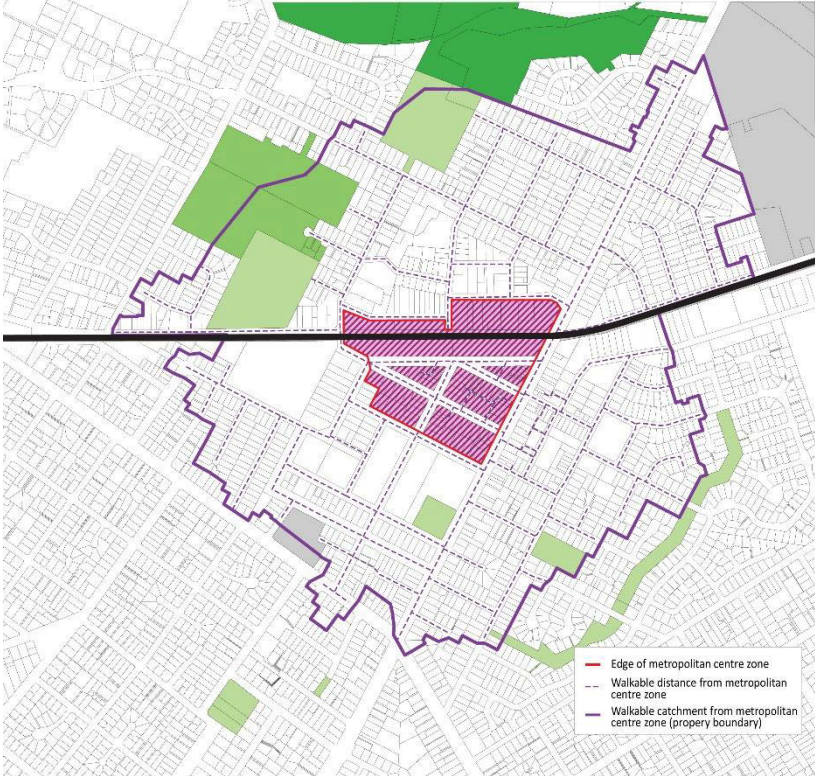
As part of applying the intensification provisions, the location of all of these zones would need to be reviewed.

Figure 23: Determine the extent of the metropolitan centre zone



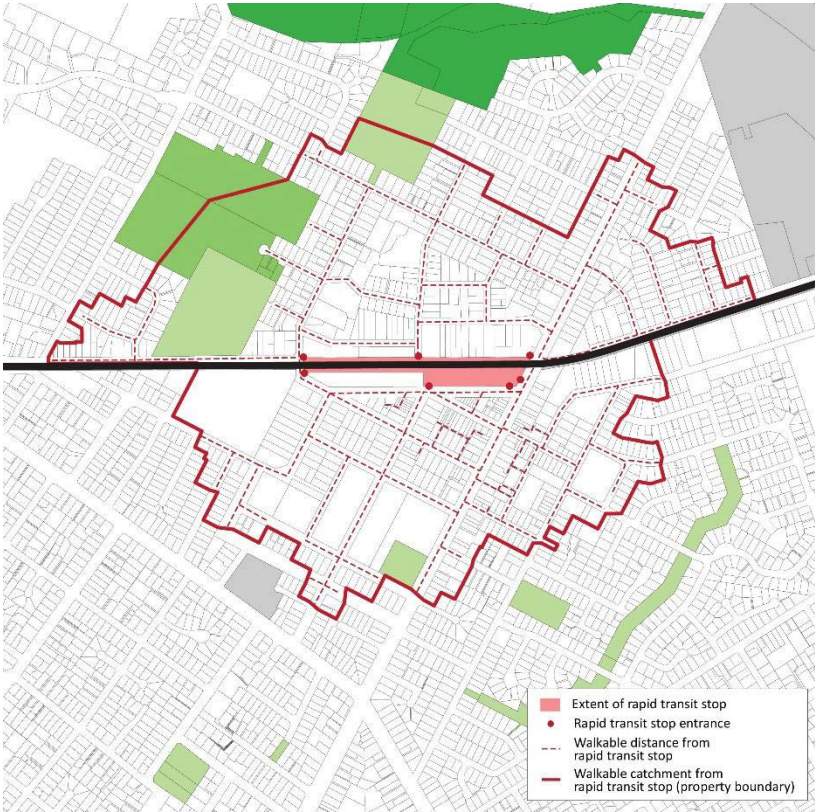
In this example, a review of the extent of the metropolitan centre zone was undertaken. It was decided it was appropriate to make the zone larger to accommodate demand.

Figure 24: Walkable catchment from edge of metropolitan centre zone



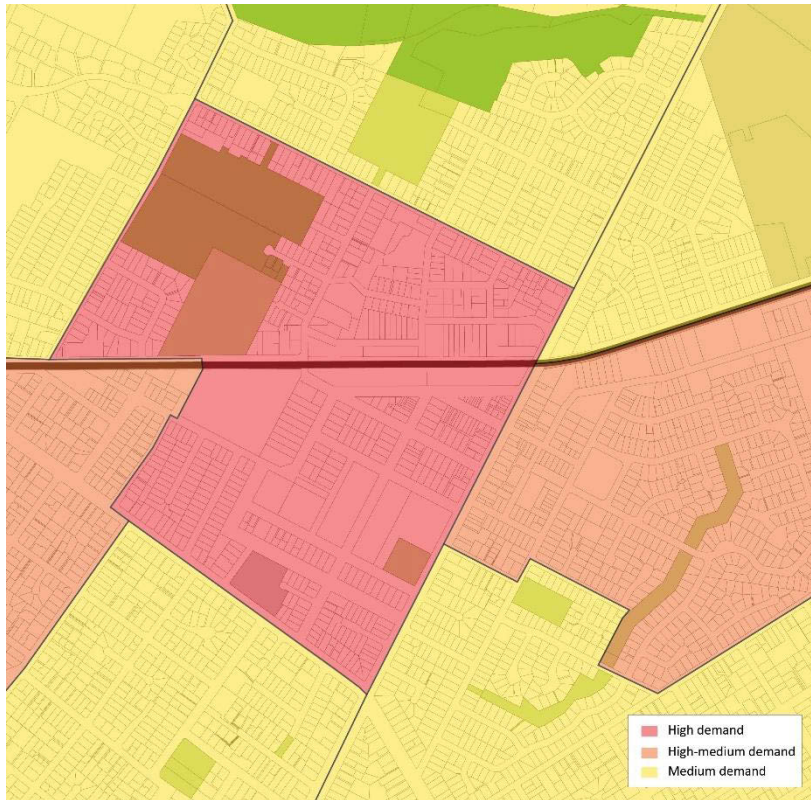
Using the extent of the metropolitan centre zone, the edge is determined. Then using GIS network analysis, the walkable catchment from the edge of the zone is determined.

Figure 25: Walkable catchment from rapid transit stop



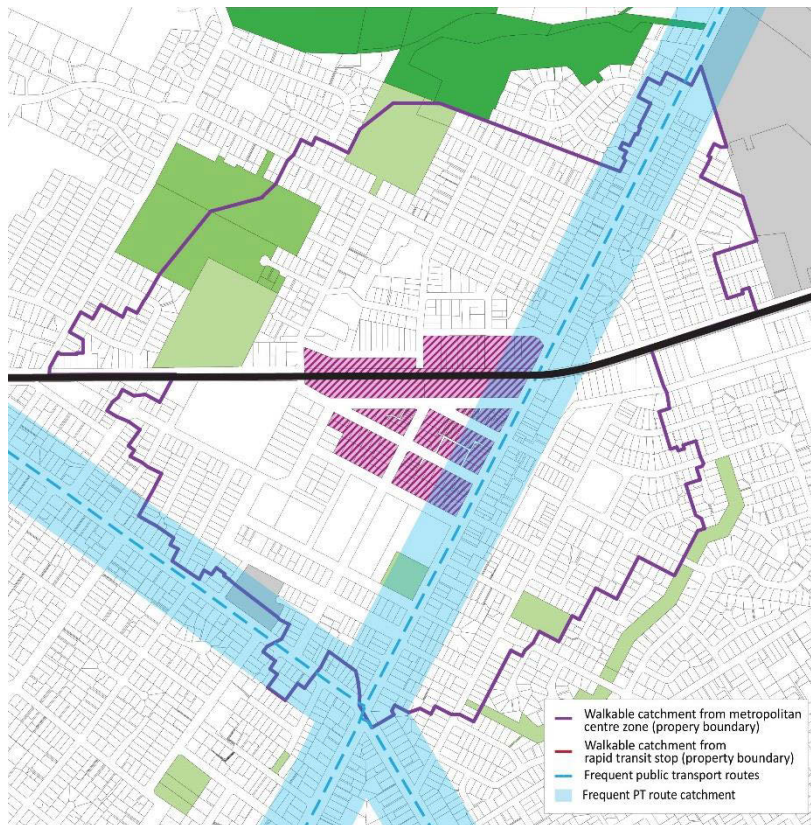
The entrances to the rapid transit stop are identified on this map. Using these as part of GIS network analysis, the walkable catchment from the rapid transit stop is determined.

Figure 26: Identifying areas of higher demand



Using information produced as part of an HBA or other evidence, identify the areas with greater demand relative to elsewhere in the urban environment.

Figure 27: Accessibility to commercial activities and community services



Information from accessibility assessments will be used to identify areas with high access to a “range of commercial activities and community services” by active or public transport. These areas are shown on the map as being the walkable catchments of the metropolitan centre (which contains a range of services).

In addition to this, areas served by public transport, such as rapid transit and frequent bus routes, have also been deemed accessible.

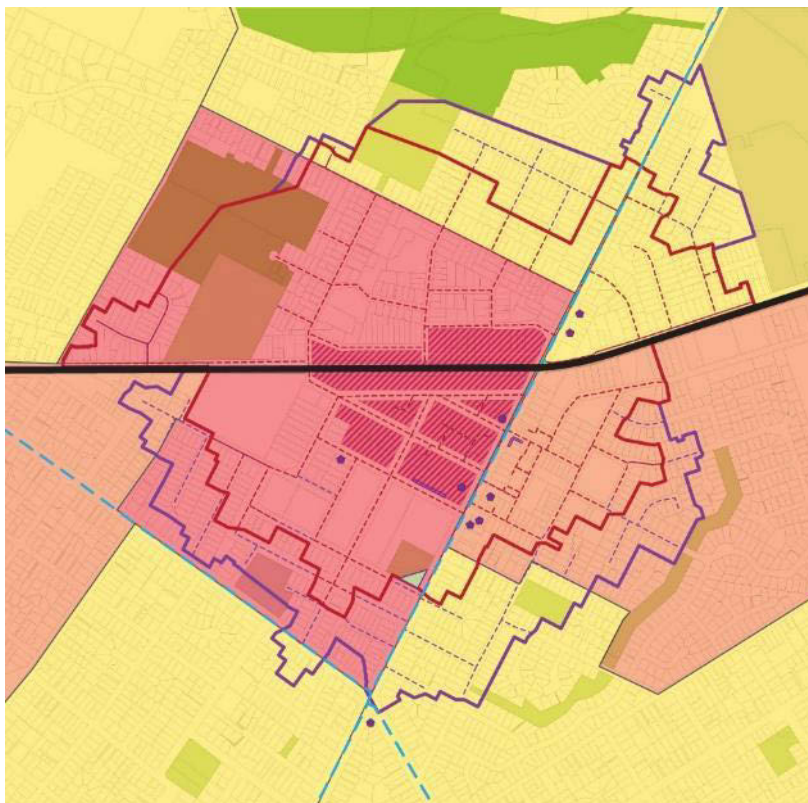
Figure 28: Identifying any qualifying matters (heritage site and areas) that may apply



In this case, there are several heritage sites and areas that need to be noted when determining heights and densities. Each site will need to have a section 32 assessment of the relevant qualifying matter to determine what the appropriate level of intensification will be.

In this map example, the heritage items have been assessed as preventing any intensification. The provisions for heritage areas not located on open space-zoned land control building heritage features only. As intensification through increased heights is not limited by the presence of these heritage features (given that redevelopment can incorporate them), the assessment has determined this matter does not impact intensification.

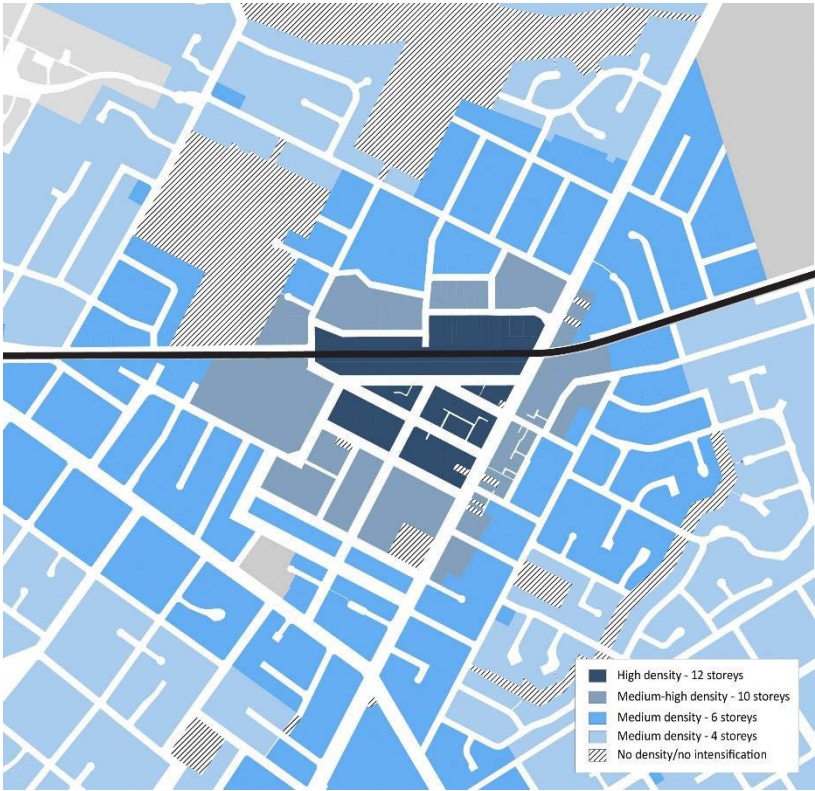
Figure 29: Map showing all factors that need to be considered to determine heights and densities for each location



While all factors that need to be considered do not need to be shown visually on a map like this, you need to demonstrate that you have considered each component.

In places where many factors requiring intensification overlap – such as high demand, high accessibility and walkable catchment of rapid transit stops – we would expect to see rules that are the most enabling and heights above the minimum required for each of the components.

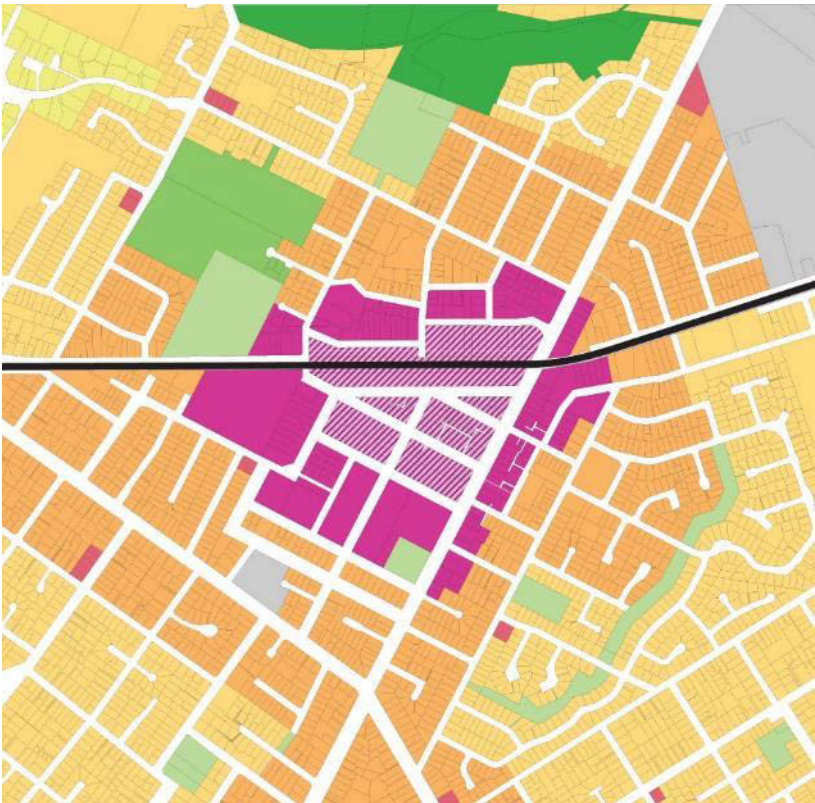
Figure 30: Map using the combined information to apply appropriate heights and densities to a location



Using the combined information to apply appropriate heights and densities to a location can be done either by calculating these first and then assigning zoning to fit, or by applying a range of appropriate zones.

In this example, you can see that qualifying matters have been applied to sites and, where relevant, no intensification is to be enabled.

Figure 31: Map showing new zoning pattern determined, reflecting the requirements of the intensification (and other) provisions



Note the application of a sensible zoning pattern, which takes into account neighbouring zones and other requirements, is to be expected and zoned outcomes will not always need to match catchments perfectly.

Note, in some cases, a change in zoning may not be necessary. The existing zoning may be suitable with a change in controls to enable intensification, or a precinct could be applied.

8 Resources

Pedestrian planning and design guide

Waka Kotahi NZTA, 2009

<https://www.nzta.govt.nz/resources/pedestrian-planning-guide/>

People, places, spaces urban design guide

Ministry for the Environment, 2002

<https://www.mfe.govt.nz/publications/rma/people-places-spaces-mar02>

Urban Design Toolkit (Third edition)

Ministry for the Environment, 2006

<https://www.mfe.govt.nz/sites/default/files/urban-design-toolkit-third-edition.pdf>

Roads and streets framework

Auckland Transport, 2018

<https://at.govt.nz/media/1976084/roads-and-streets-framework-webcompressed.pdf>

Urban street and road design guide

Auckland Transport, 2019

<https://at.govt.nz/media/1980686/urban-street-and-road-design-guide.pdf>

PedShed analysis

Active Healthy Communities, 2020

<http://www.activehealthycommunities.com.au/plan/gis-analysis/walking-cycling-pedshed-analysis/>

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BEFORE THE ENVIRONMENT COURT

Decision No: [2013] NZEnvC 159
ENV-2010-WLG-000127

IN THE MATTER of an appeal under Cl 14 of
Schedule 1 to the Resource
Management Act 1991

BETWEEN JOHNSONVILLE COMMUNITY
ASSOCIATION
INCORPORATED
Appellant

AND WELLINGTON CITY COUNCIL
Respondent

Court: Environment Judge C J Thompson
Environment Commissioner W R Howie
Environment Commissioner E H von Dadelszen
Hearing: at Wellington: 24, 25 June 2013. Site visit 26 June 2013
Counsel: T H Bennion for the Johnsonville Community Association Inc
K M Anderson and A M White for the Wellington City Council

DECISION ON APPEAL

Decision issued: 16 JUL 2013
The appeal is allowed in part – see para [65]
Costs are reserved



Introduction

[1] After hearings before Commissioners between April and June 2010, the Wellington City Council adopted proposed District Plan Change 72 (PC 72). PC 72 grew out of a number of factors, eg a review of the Johnsonville Town Centre Plan, the Council's monitoring of infill development in Wellington suburbs, and the view that population growth and consequent housing demand in the City should best be focused into the *spine* running from Johnsonville to Kilbirnie.

[2] Part of the process behind PC 72 was a consideration of what were then known as *Areas of Change* where the Council would encourage residential intensification in nominated areas. In the course of considering the proposed plan, the *Areas of Change* came to be called *Medium Density Residential Areas* (MDRA) and that is the term that has been used since.

[3] This appeal concerns only the proposed MDRA for Johnsonville. This was the most controversial element of the Plan Change, both as to its areal extent and to the height and coverage of buildings which might be allowed by it. As a result of the submissions and hearings, the following changes to the proposed Johnsonville MDRA were recommended and approved by the Council:

- (1) The maximum permitted building height was reduced from 10m to 8m. An additional 30 percent (up to 10.4m) more height could be approved as part of a *discretionary (restricted)* activity resource consent application.
- (2) A new standard requiring front units or dwellings to be oriented to face the street with main entrances being located on the street elevations.
- (3) A minimum physical separation of 7m between the front unit on a site and any units constructed to the rear.
- (4) Additional design guidance was set out in the Residential Design Guide to address streetscape and character, integration of medium density housing, topography and lot orientation, solar access and privacy and treatment of mass earthworks.

[4] The Johnsonville MDRA has been divided into two sub-areas – MDRA 1 and MDRA 2. For ease of reference, we annex as Appendix 1 a copy of Plan Map 23



which shows the areas of MDRA coloured orange and marked MDR 1 and MDR 2. (The Town Centre is coloured pale pink and is, as one might assume, at the centre of the Map). Some verbal description of the areas needs to be given also. The boundaries of both sub-areas have been based on residents having good access to the Town Centre: - taken as being within 10 minutes walking time, a topic to which we shall return. Most of MDRA 1 is a block of largely residential lots to the northwest of the Town Centre. Its northern boundary is Ironside Road and its southern is on Frankmoore Avenue. There has been a significant degree of infill housing there already, some of which is of the quality mentioned in para [19] and which gives some weight to the appellant's concerns about residential amenity. There is also a much smaller piece of MDRA 1 on the southern side of Broderick Road, with its western boundary against the Johnsonville commuter railway line.

[5] MDRA 2 is much larger in extent, and is in five pieces. One is to the west of the Town Centre with its southern boundary on Broderick Road and its northern on Woodlands Road. It is largely well-established residential, with churches and the like well established also. The second extends quite a long way south between the eastern side of Moorefield Road and the railway line. It too is well-established residential, (mostly 1940s -1950s State housing) with one or two professional practices in former houses. There has been some infill housing of varying quality there also. The third piece is the largest, covering the higher ground between the railway line in the west with Pollen Street and Johnsonville Road/SH1 along the south and east. This too is established residential, mostly State housing of the 1940s and 1950s, and again with some infill of varying types and quality.

[6] The remaining two pieces of MDRA 2 have quite distinct features, and we discuss them separately at paras [54] to [59].

[7] The differences between MDRA 1 and MDRA 2 are summarised in the explanation to Policy 4.2.3.2:

... [The areas of MDRA 1] contain a significant number of smaller infill and multi-units creating a relatively intensive urban character. The provisions that apply to these areas seek to facilitate the continuation of these existing patterns. No minimum lot dimensions are required in recognition of the character of existing development and



the fragmented subdivision patterns which would inhibit site amalgamation. Similarly there is no request for ground level open space in recognition that these areas are already intensely developed. ... the emphasis will be on providing quality multi-use areas that can double as both vehicle manoeuvring spaces and usable outdoor space.

For MDRA 2 the explanation is:

... a slightly less intense, more suburban style of development. This area includes land that is slightly further removed from the town centre, with more existing open space. Requiring minimum lot dimensions will provide additional flexibility as to how buildings are massed on site and provides scope for different building forms and layouts. It will also help ensure that buildings can be oriented to face the street and will reduce the number of driveways required. ...

The parties' positions

[8] The Johnsonville Community Association Inc (JCA) is a successor to the Johnsonville Progressive Association, which was the original appellant. The JCA was opposed to the Johnsonville MDRA in its entirety, and its original grounds set out in its Notice of Appeal (which was completed without the benefit of legal advice) included complaints about the adequacy of Council consultation in the preparation of PC 72, and about other matters of process. In an *ab initio* hearing such as an appeal to this Court, those matters would have been of very limited relevance, but fortunately the Association consulted Mr Bennion after the Council's evidence was exchanged, and with his advice the issues put forward by the Association have been refined to:

- Whether the effects on existing amenity through MDRAs creating a “new, more intensively urban character” ... can be dealt with simply by policies and explanations in the District Plan proper and the Residential Design Guide as amended, or whether some other specific guidance is needed to maintain and enhance amenity, in particular, by way of a Johnsonville specific MDRA design guide;
- Whether community infrastructure supports all of the areas proposed for MDRA;
- Whether MDRAs are suitable across all of the areas proposed;
- Demand for MDRAs in the Johnsonville area.

Mr Bennion went on to summarise his client's position in these paragraphs:



- (a) The plan change fails because it cannot in any meaningful sense be said to have had regard to the maintenance and enhancement of amenity values where it provides for significant change;
- (b) The community infrastructure cannot support all of the areas of change proposed and so Part 2 is breached, in particular health and safety for residents if housing developments are without proper infrastructure.

[9] As mentioned, its original position was that the MDRA should be entirely abandoned, but it adapted that view to accord with the evidence of its planner witness, Mr David Armour, and its traffic engineer, Ms Harriet Fraser. At least in terms of amenity, the Association's end position is that the Plan Change should not be pursued unless and until there is a better understanding and guidance on what the *new amenity* should be – and that could perhaps be achieved through a design Guide specific to MDRAs. If though, the Court comes to the view that amenity can be maintained through existing mechanisms, the Association contends that its extent should be limited to the areas outlined by Mr Armour.

[10] We shall discuss these issues further – mainly in the course of working through the Part 2 issues.

[11] Mr Karlis Abolins was a s274 party to the appeal. Sadly, he passed away before the appeal was heard, but his position was assumed by members of his family and one of his daughters, Ms Amanda Abolins-Reid, gave evidence as their representative, but the family did not participate in the balance of the hearing. They own one of the five residential properties at 2 – 10 Middleton Road which comprise a small and somewhat isolated piece of the proposed MDRA 2, at the corner of Middleton Road and Helston Road. They oppose the imposition of an MDRA on those properties.

[12] What has particularly brought PC 72 into focus for the Abolins family is that in respect of the two properties immediately to the north of their property, an application has been made (and we understand is presently suspended, pending the



outcome of this appeal) for a resource consent to enable a 21 unit housing development. The Abolins family believe that this will have a serious adverse effect on the amenity of their property and the surrounding area. In particular, they are concerned about:

- a loss of privacy and potentially a significant increase in noise of residential activity and people in vehicles moving in and out of the neighbouring property;
- the density and character of such a development would be out of context with the existing character of the neighbourhood;
- the scale of the proposed building would be ... *overwhelming and consuming to the urban environment*;
- the belief that there will be inadequate onsite parking provided, leading to parking issues on the surrounding streets, and that such a large number of dwellings will increase traffic volumes onto Middleton Road, which it will struggle to manage;
- an increase in the issues about pedestrian safety moving around the Middleton Road/Helston Road etc, roundabout intersections;
- issues about adverse effects from earthworks and construction matters.

[13] We note here that the current proposal for 8-10 Middleton Road is to be assessed as a *Discretionary (Restricted)* activity under both the operative Plan and the Plan as it would be if PC 72 becomes operative so, strictly, the same outcome could come to pass under either scenario, although guidelines and policies may influence a different outcome. But a *real life* application does help in considering what might happen, or happen more frequently, if PC 72, with its emphasis on housing intensification, is approved.

[14] The Council is content with the boundaries of the MDRA as they now stand, and the contents of the proposed Objectives, Policies and Rules relating to it. In short, it supports the original 2010 decision. It points out that the process of change to a more intensive form and pattern under PC 72 will be gradual – there will not be an overnight transition – and good guidelines are likely to produce a much better long term outcome than has been achieved under the present, rather ad hoc, position.



The legal framework for considering Plan Changes

[15] The legal framework begins with sections 72 – 76 and incorporates, by reference, sections 31 and 32. The process of analysis, once the matter is before the Court, has been reviewed in a number of decisions of the Court. We agree with Ms Anderson’s submission that, as was the case in, eg *Purdie v Wellington CC* [2010] NZEnvC 83, in the circumstances of this Council-initiated Plan Change, and the issues raised in the appellant’s evidence the otherwise lengthy list of factors can be compressed. We consider whether the terms of the Plan Change:

- accord with and assist the Council in carrying out its functions so as to meet Part 2;
- take account of effects on the environment;
- are consistent with, or give effect to (as appropriate) applicable national, regional and local planning documents; and
- meet the requirements of s32 RMA, including whether the policies and rules are the most appropriate for achieving the objectives of the plan.

[16] It would be helpful to set out the relevant portions of s32, bearing in mind that because of the date of notification of PC 72 (29 September 2009), the version to be applied is as it existed before the 2009 Amendment Act came into force on 1 October 2009.

32 Consideration of alternatives, benefits, and costs

(1) In achieving the purpose of this Act, before a proposed plan, ... change, or variation is publicly notified, ... an evaluation must be carried out by— ...

(c) the local authority, for a policy statement or a plan (except for plan changes that have been requested and the request accepted under clause 25(2)(b) of Part 2 of Schedule 1);

(2) A further evaluation must also be made by—

(a) a local authority before making a decision under clause 10 or clause 29(4) of the Schedule 1; ...

(3) An evaluation must examine—

(a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and



(b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.

...

(4) For the purposes of the examinations referred to in subsections (3) ... , an evaluation must take into account—

(a) the benefits and costs of policies, rules, or other methods; and

(b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

(5) The person required to carry out an evaluation under subsection (1) must prepare a report summarising the evaluation and giving reasons for that evaluation.

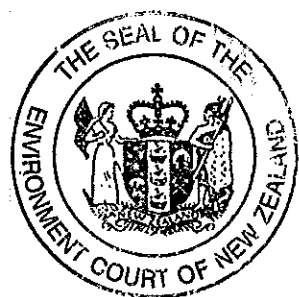
[17] There is no presumption that the terms of the Plan Change are appropriate (or not). What is required of the Court is simply to seek an optimum planning solution based on the information and options put before it.

The population issue

[18] We have already mentioned the Council's view that the bulk of population growth in Wellington City should be accommodated along the so-called *spine* of the City between Johnsonville and Kilbirnie. The Council's expectation (and it was not challenged) is that the City's population will grow by some 30,000 by 2031, and that it will require a further c15,000 housing units by that date – ie c800 housing units pa. The housing units will, as one might expect, be a mix of lower density stand-alone houses, medium density townhouse/terrace housing, and high density apartments. The expectation is that Johnsonville will have, by 2031, some 25% of the medium density, and 4% of high density development. In actual numbers, that translates to a total of 1112 additional dwelling units in the MDRA and the Johnsonville Town Centre by 2031, or some 59 dwelling units pa.

Infill housing experience

[19] As is outlined in the Council's non-statutory discussion document *Promoting Quality of Space – a targeted approach to infill housing in Wellington City* (May 2007), the experience with infill housing in and around the City has not been an entirely happy one. The document has this introductory note:



... There is evidence in some areas that poorly designed infill housing is impacting on valued suburban character and amenity. There is also concern that infill development and intensification is being encouraged (or at least allowed) in areas that have poor access to public transport or are not well-serviced by infrastructure.

Johnsonville has not escaped those effects, and the Boffa Miskell character assessment done for the Council in 2008 confirms that the *existing environment* has been adversely affected accordingly. We are inclined to accept the Council's view that continuing or replicating the miscellany of styles, sizes and layouts of some of the existing housing stock, particularly in the MDRA 1 area, will certainly not be the best planning solution available. PC 72, through setting a new standard or character, is one of a number of steps, so we were told, that the Council has and is taking to address such issues.

Walking times and distances

[20] One of the criteria used by the Council to locate areas around the Johnsonville town centre that might be suitable for medium density residential development was the walking time or walking distance from the MDRA to the Town Centre. If the walking distance to the town centre was less than 800m, or the walking time was less than 10mins, then the area was, in the original proposal, considered by the Council as potentially suitable as an MDRA.¹

[21] Because the walkability of routes into the Town Centre is affected by the delays incurred by having to cross busy roads and by the terrain (steps and steep slopes) the 10 minute walking time, rather than the 800m radius which took no account of terrain etc, was adopted by the Council to identify suitable MDRAs.²

[22] Ms Lucie Desrosiers, the Council's consultant urban designer, said she considered that:

... Council has used sophisticated computer modelling analysis to define the extent of the area accessible within 10 minutes walk including consideration of slope, presence or absence of footpaths and delays at road crossings. In my professional opinion, the work undertaken by Council to determine walking times to the town centre is

¹ Desrosiers EIR para 5.

² Desrosiers EIR para 13.



sophisticated and sound and provided a good starting point in defining the boundaries of the MDRA³

Ms Desrosiers attached the Council's working paper *Walkability and access to public transport and town centres May 2007*, on which she relied, as Appendix 2 to her rebuttal evidence.

[23] That paper provided a table of the assumed times taken to cross various roads and formulae to calculate the walking time taken to traverse the route, taking into account whether the route was uphill or downhill and how steep it was, including the presence of steps. The formulae were not expressed in a clear way and the final formula that calculated the walking time taken in seconds contained inconsistent units. The speed of walking in m/s was divided by the adjusted distance in metres. That gave a unit of sec^{-1} to which was added the road crossing delay, in seconds. The result does not make sense.

[24] Ms Desrosiers was not able to explain the apparent difficulty posed by the formulae used to estimate the walking time over the various routes and on which the Council relied in setting the extent of the MDRAs.

[25] Ms Anderson called Mr Shean Audain, a GIS expert with the Council, to assist the Court with this problem. He explained that the Council had used the methodology widely throughout the city particularly to identify suitable areas for medium density residential development. He expressed confidence that the results gave good indications of the actual walking times. However, he was unable to explain the problem with the formula and, in his own words, *cringed* about its expression.

[26] As the results produced from this methodology for several areas of the city have proven to be realistic, according to Mr Audain, we might assume that the formula should have been expressed as the walking time in seconds is the distance divided by the speed plus the road crossing time delay and that in fact the analysis has proceeded in this way. But we were not given evidence confirming this.

³ Desrosiers EIR para 21.3.



[27] Mr Audain assured us that notwithstanding the erroneous formula he was confident that the walking time estimates were reliable. To a point, we are prepared to accept Mr Audain's evidence that the results of the walking times may be relied upon, but we note that *sophisticated computer modelling* always needs a stern reality test *on the ground* and, when found wanting, corrections need to be made. Other factors modify the areas suitable for medium density residential development including the nature of the walking routes and the nature of the areas themselves. We discuss those matters elsewhere. We pick up this point in discussing two parts of the MDRA 2 which give us concern – see paras [54] to [59]. For those parts of the MDRA the formulae, in our view, produce quite unrealistic results.

Planning and non-statutory documents

[28] During the course of the Hearing we were referred to a number of planning documents, regional and district, statutory and non-statutory. Specifically, in support of PC 72 we were directed specifically to Policies 30 and 31 of the operative Regional Policy Statement (2013). Policy 30 identifies Johnsonville as a *suburban centre* and requires the Wellington District Plan to include policies, rules and /or methods to enable and manage a range of land use activities that maintain and enhance the viability and vibrancy of Johnsonville. Policy 31 requires the Wellington District Plan to identify key centres and other locations with good access to the strategic public transport network suitable for higher density/ mixed use development and to include policies, rules and/or methods to encourage such density and use around these centres and locations. We consider that the provisions of PC 72 do, in terms of s75 RMA, *give effect to* the regional document.

[29] The non-statutory *Wellington Urban Development Strategy* (2006) clarified that the areas best able to serve the needs of future population growth were around the key centres and transport nodes. The concept of the *growth spine* encouraging the growth of housing and employment in key centres linked by a public transport spine between Johnsonville and the Wellington Airport was developed from this Strategy.



[30] Among the many other non-statutory documents considered were : the *Johnsonville Town Centre Plan* (2008), the *Wellington City Transport Strategy*, the *Wellington Regional Land Transport Strategy 2010-40*, the *Wellington Regional Public Transport Plan 2011-2021*, the *Centres Policy* (2008), the *New Zealand Urban Design Protocol* (2006), and the *Draft Johnsonville Design Guide* (April 2012). These documents clarified that such zones should be relatively close to commercial centres and transport hubs, accessible for pedestrians, and subject to planning controls to protect the amenity of existing and new residents.

[31] These non-statutory documents provide many laudable aspirational visions and statements designed to provide for the future needs of the community. However since these documents do not have the status of rules, and given that it is accepted that some of the poor standard in-fill development has produced significant privacy, access, and general residential issues, it is understandable that the appellant, and others concerned about PC 72, are concerned about how effective these documents will be in preventing further unattractive in-fill development in their suburb. We return to the issue of the Design Guide(s) under a discrete head.

[32] Another issue of basic importance, but one which is not linked to the statutory planning requirements, is the walking distance/time criterion which we were told was a major factor assisting the Council in delineating the land to be designated as the MDRAs. It is our opinion that some of the potential pedestrian routes linking the proposed MDRA to the Town Centre and/or traffic routes, while theoretically falling within the 10 minute walking criterion, are not practicable and we discuss the two most affected areas in detail in paras [54] to [59]. We understand improvements to the footpath infrastructure and to the roundabouts (at the northern end of the Town Centre) are planned to serve the people who are expected to live in the proposed MDRAs, but we also understand that funding for some of these improvements will be contestable by other areas of the City.

[33] While the appropriateness of the MDRA in Johnsonville was accepted by the appellant's witnesses, there remained disagreement about their appropriate extent, the topographical and practical difficulties faced by pedestrians negotiating the



potential routes within the times suggested, the lack of cultural, entertainment and employment opportunities in the Johnsonville Town Centre and concerns about the planning controls over development, including the lack of a Residential Design Guide specific to Johnsonville.

Other issues

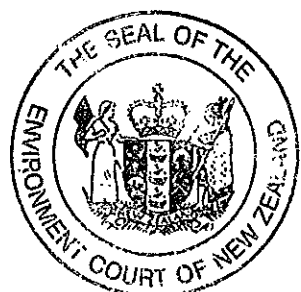
[34] Some issue was made, by Mr Armour in particular, of the absence of entertainment or cultural facilities in and around Johnsonville Town Centre. There are, it was said, only two pubs, no cinema or theatre, limited restaurants and only one, or perhaps two, chartered clubs and they are struggling with dwindling membership. The argument being made was that this lack of social infrastructure meant that the suburb was unsuitable for intensification of its housing stock.

[35] We confess to struggling with the logic of that. All entertainment facilities are highly responsive to customer demand. Pre-television, suburban cinemas were common. Some, by re-inventing themselves as multi-screen complexes, usually with a cafe/restaurant on site, have revived. Suburban pubs will prosper or fail according to demand, particularly when they are within walking distance of residential streets and the legally and socially unacceptable issue of drink-driving can be side-stepped. Chartered Clubs have the same issues. For success, it is rather self-evident that restaurants require both a good reputation for product and service, and a location where there is a critical mass of patronage.

[36] If such facilities are regarded as desirable, their absence, we would have thought, tells in favour of encouraging, in a guided way, the intensification of housing within walking distance of the very places where one might expect a new cinema or pub to be established, not the other way around.

Demand

[37] The Association suggested that, apart from all else, there was no, or insufficient demand for medium density housing in the area, and that the MDRA(s) were therefore a pointless exercise. We need to point out, first, that planning is permissive. PC 72 would not require every piece of land in the MDRA areas to be



developed in that way. If someone wished to build a conventional single-unit dwelling there, that can be done. What PC 72 does is to provide the opportunity for more intense development, in an area thought likely to be attractive for it, and for it to be done in a way that will provide reasonable assurance of an outcome that is acceptable from an amenity point of view. Whether that opportunity will actually be taken up remains to be seen.

Part 2

[38] There are no issues of particular importance to Māori, in terms of s8 or s6(e). Nor are there other matters declared to be of *national importance* in terms of s6.

[39] There are issues arising under s7, to which the Court is required to ... *have particular regard*. They are: ...

- (b) The efficient use and development of natural and physical resources:
- (c) The maintenance and enhancement of amenity values: ...
- (f) Maintenance and enhancement of the quality of the environment:
- (g) Any finite characteristics of natural and physical resources: ...

[40] As the comment already made about experience with some infill housing in the past might indicate, there can be tension between these issues. It may, in one sense, be *efficient* to utilise the finite resource of housing land in close proximity to town centres by filling it to capacity with housing units. But it is unlikely that such a single-minded course will maintain, let alone enhance, amenity values (ie ... *those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes* - see s2) - or the quality of the environment.

[41] In his submissions, Mr Bennion described the issues around s7(c) and (f) as being ... *at the heart of the appeal*. And he pointed to the evidence of Mr Armour as providing expert support for the proposition that amenity would suffer if the Plan Change goes ahead in its present form.

[42] Mr Armour's concerns relating to amenity were that the PC 72 provisions as stated in the Residential Design Guide were a complete change from the Policy in the



Operative Plan which reflected attempts to protect existing amenity by requiring developments to be compatible with the surrounding area. The Residential Design Guide included the statement that

... complementing existing character is not a factor in designated Medium Density Residential Areas. New buildings will help to establish a new more intensively urban character while representing a change from the existing condition.

He also believed the increased site coverage would allow more bulky and *out of scale* residential development which would be out of character and that some minimum open space would be needed for MDRA 1.

[43] It is clear that in the past there has been poor piecemeal infill development in Johnsonville and that medium density is part of existing character of the proposed MDRAs. Bu the reason for not requiring Johnsonville MDRAs to complement existing character is that some of the previous development is so poor that no one wants to replicate it.

[44] Mr Armour accepted that the proposed bulk and location provisions, including recession planes, yards, ground-level open space (except for MDRA 1), lot configuration, streetscape etc, are apt planning controls to apply to protect the amenity of neighbours and will also include new guidelines on access and traffic and, by implication, that those new standards will in general be higher than currently in force.

[45] Subject to the comments to be made about the possible benefit of a Design Guide specific the Johnsonville MDRA issues, our overall view is that as proposals for multi-unit development will have to go through the consent application process, plus provide a Design Statement and be assessed against the *Residential Design Guide*, there is reasonable assurance that poor quality development would not result. Taken together, the objectives, policies, rules, permitted activity standards and the *Residential Design Guide* are aimed at encouraging and permitting high quality medium density residential development over a number of years, while allowing multi -unit developments to be assessed through the resource consent process. These provisions should help maintain and improve amenity in the suburb.



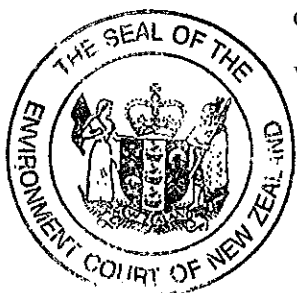
General and specific design guide

[46] This may be a convenient point to discuss the issues about design guides. As we have mentioned, the District Plan has a generic Design Guide. In considering PC 72 the Hearing Committee suggested that a complementary Design Guide, specific to MDRAs, would be useful. That was not greeted with enthusiasm and the Council did not adopt the idea. Reflection has led us to the view that it is a proposal with use and merit.

[47] The *Residential Design Guide* forms part of the District Plan and it has a clear purpose: to provide ... *design assessment criteria for developments subject to resource consent*. Under the four headings: *Character, Site Planning, Building Design* and *Open Space*, the guide is clearly focussed on helping Council staff assist applicants at the pre- application phase to understand the urban design issues of concern to the Council, and to assist them in providing the Design Statement required to accompany every application for Multi Unit development, and to be used to assess any proposal for a second or subsequent unit on a site.

[48] This *Residential Design Guide* is meant to be relevant for all the residential areas of the City. However, it became clear that part of Chapter 1, *Character*, was not relevant to Johnsonville. As a result of the Council's decision, the introduction to that chapter stated that *Complementing existing character is not a factor in designated Medium Density Residential Areas*, and went on to clarify that *....all development in those areas should follow the principles of good urban design as described in other parts of this guide and establish positive precedent for the other development that will follow*. Ms Desrosiers agreed that Guideline 1.1 (page 5) relating to *Assessing and complementing neighbourhood character* was not relevant in assessing resource consents in the MDRAs, but that the other 13 Guidelines under that heading remained relevant.

[49] The *Johnsonville Medium Density Residential Areas Draft Design Guide* was drafted as a result of the Plan Change Hearing Committee's recommendation. This document appears to be aimed at a different audience: the citizens of Johnsonville who were concerned about the outcomes (i.e. what the suburb might look like) if the



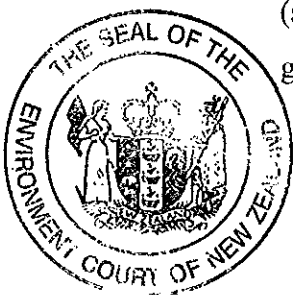
MDRAs and the generic *Residential Design Guide* were to be put in place. As we have noted, their concern is understandable, given some poor standard in-fill development in recent years.

[50] This Draft Design Guide has a clear statement of purpose: The design guidance is intended to provide tailored, street specific guidelines which recognise the different characteristics of the streets within the Johnsonville MDRA, and encourage new multi-unit development to be designed in response to those characteristics. This Guide includes matters not contained in the other document: - more definitions; character descriptions of the four specific parts of Johnsonville designated for MDRAs, and an analysis of the roading hierarchy. These Guidelines focus on a development's contribution to and enhancement of the street and public spaces.

[51] Ms Desrosiers stated that she did not believe the separate *Johnsonville Design Guide* was needed since the *Residential Design Guide* addressed the issues of amenity, sunlight access and privacy raised by the appellant. She also said that the provisions in the District Plan had been tailored to the Johnsonville context, the two sub areas (MDRA 1 and MDRA 2) reflected the site conditions, and the Council Hearings Committee made changes to the building height provisions. Because the *Johnsonville Design Guide* could not override the rules and standards in the District Plan, she believed that there was a risk of repeating material already in the District Plan and *Residential Design Guide*, rather than providing any additional protection sought by the appellant.

[52] But the *Johnsonville Design Guide* does serve a different purpose from the District Plan and *Residential Design Guide* in providing information and guidelines not available anywhere else. In particular it clarifies for the appellant, and others sharing its concerns, the character of the areas in which intensification will be encouraged, and the likely appearance of the suburb as a result.

[53] We cannot help but think that if it were completed and amended appropriately (some areas deleted and some drawings amended to reflect the actual rules and guidelines) and perhaps attached as an Appendix to the *Residential Design Guide* (as



originally requested by the Council's Hearing Committee), it would be a useful and informative document, supporting the District Plan.

The portion of MDRA 2 east of the motorway

[54] Part of the proposal in PC 72 is the quite large piece of MDRA 2 on the hillside to the east of the Town Centre, and separated from it by the Motorway. Largely, it consists of the west side of the quite recently developed residential street of Sheridan Terrace, and both sides of the even more recently developed Creswell Place – indeed house construction is taking place on the southern portions of Creswell Place at present.

[55] There are two principal issues which concern us about this part of the proposal. The first is the pedestrian access to and from the Town Centre. We have previously discussed the basis on which walking times were assessed. Obviously enough, the Motorway is an impassable barrier to surface-level walking. There are two pedestrian subways beneath it – one from the foot of Burgess Road to the northern Town Centre and the other from a long and steep walkway down from Sheridan Terrace and exiting into Disraeli Street, towards the southern end of the Town Centre. The Burgess Street walkway is reasonable enough, in terms of gradient and accessibility, as a means of foot access to the shops and services of the Town Centre, but realistically could service only the northern part of Sheridan Terrace.

[56] The Disraeli Street subway is a very different beast. The pathway descending down to its eastern portal from the residential street above is both lengthy and steep, interspersed with several flights of dauntingly steep, shallow and poorly formed steps. Even the reasonably fit would find carrying shopping up to the road above a stern challenge, and anyone with mobility issues, or pushing a baby buggy, or accompanied by small children, would find it all but impassable for practical purposes. For most people and for most purposes, day-to-day access to and from this part of Johnsonville and the Town Centre by this route is not a really practical proposition.



[57] The other issue is that of land availability for medium density development. It needs to be understood that Sheridan Terrace and Cresswell Place are recent, and current, housing developments. The lot sizes certainly appear to be no greater than the modern standard, single dwelling, lots – far from the fabled suburban *quarter acre* of 50 or 60 years ago. Moreover, the buildings on them are modern single unit houses with reasonably substantial floor plates, occupying a substantial part of the usable lot. The prospect of them being redeveloped as multiple-dwelling lots at any time in the foreseeable future is negligible.

The portion of MDRA 2 at the corner of Middleton and Helston Roads

[58] This piece of the MDRA 2 comprises five existing lots containing houses of varying sizes and quality. The Abolins property (see para [11]) is one of them. The properties front onto Middleton Road, opposite the knoll on which stands the prominent Anglican Church. The rear of the properties back onto the on-ramp to the Motorway at the northern end of the Town Centre. To the south of the properties is the western end of the bridge carrying Helston Road across the motorway and its on-ramp. Helston Road, Moorefield Road, Ironside Road, Bassett Road and Middleton Road intersect at, or very close to, a large roundabout in front of the southernmost of the MDRA properties. Anyone leaving any of these MDRA properties on foot and wishing to get to the Town Centre is faced with either crossing Helston Road on or near the roundabout, then Moorefield Road (where there is presently a zebra crossing) then re-crossing Moorefield Rd (where there is another zebra crossing near the medical centre). Alternatively, there is a yet longer and more fraught route crossing Middleton Road, Bassett Road and Ironside Road (none of which have crossings) and then across the Moorefield Road crossing near the medical centre. In non-peak traffic periods, these routes might well be *doable* within 10 minutes, but at peaks it is not hard to imagine them taking at least that, if not longer. At either time, those with mobility issues, or managing a baby buggy or small children would also find this route difficult and even harrowing.

[59] We understand that this block of properties was not originally considered for MDRA status, but became so at the suggestion of the then owner of the property at 8-



10 Middleton Road, over which a resource consent for a multi-unit development is now pending.

The balance of the MDRA

[60] While one might debate the accessibility of some parts of the proposed areas, particularly perhaps those around the higher ground of the Fraser Avenue area, on the whole we think that the 10 minute walk criterion can be made out for them, and that the lot sizes and housing styles are likely, over time, to lend themselves to in-fill housing, and to the extensions and renovations of existing properties. If they can be done under a reasonably consistent design guide in terms (at the least) of orientation to the street, spacing between units, site coverage and the like, the outcome, without being regimented, is at least going to be more acceptable in amenity effects than some of what has occurred so far.

[61] Having considered again what the Association has expressed as its concerns, we see no substantial reason to differ from the view come to by the Council for the balance of the Johnsonville MDRA.

Section 290A – the Council’s decision

[62] Section 290A requires the Court to *have regard to* the Council’s decision. That does not create a presumption that it is correct but it does, implicitly at least, call for an explanation if we should come to disagree with it. We have considered the Council’s decision and come to similar overall conclusions for the majority of the area of the proposed MDRA, but have come to disagree, for the reasons we have attempted to set out, with the decisions about the area to the east of the Motorway and the small area at the Helston Road/Middleton Road intersection.

Summary of conclusions

[63] We set out the broad framework of matters to be considered at para [15]. Drawing together the threads of what we have discussed, we consider that the majority of the proposed Johnsonville MDRA regime will meet the purpose of the Act, the sustainable management of natural and physical resources, will take account of effects on the environment, are consistent with higher level planning documents,



meet the requirements of s32 and are the optimum planning solution of those presented to us. We do however consider that a useful purpose would be served in continuing with the hearing Committee's suggestion of a Johnsonville MDRA specific design guide, and we invite the Council to reconsider the existing document and present a revised (if necessary) version to us by 30 August 2013, for inclusion as an Appendix to the generic document.

[64] For the reasons we have set out, we do not consider that the two proposed MDRA areas, east of the Motorway and at the corner of Helston and Middleton Roads, meet the tests we set out at para [15], and they should not form part of the Plan Change.

Result

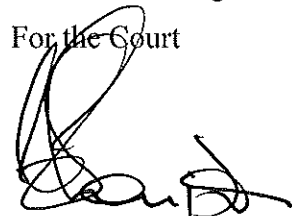
[65] The appeal is allowed to the extent just outlined in paras [53], [63] and [64]. For the balance, the decision of the Council is confirmed. Insofar as the issue of the design Guide is concerned, this decision should be considered as Interim.

Costs

[66] It is the general practice of the Court not to award costs on appeals against Plan provisions, and we do not encourage any application here. But as a matter of formality we shall reserve costs. Any application should be lodged within 15 working days of the issuing of this decision, and any response lodged within a further 10 working days.

Dated at Wellington this 16th day of July 2013

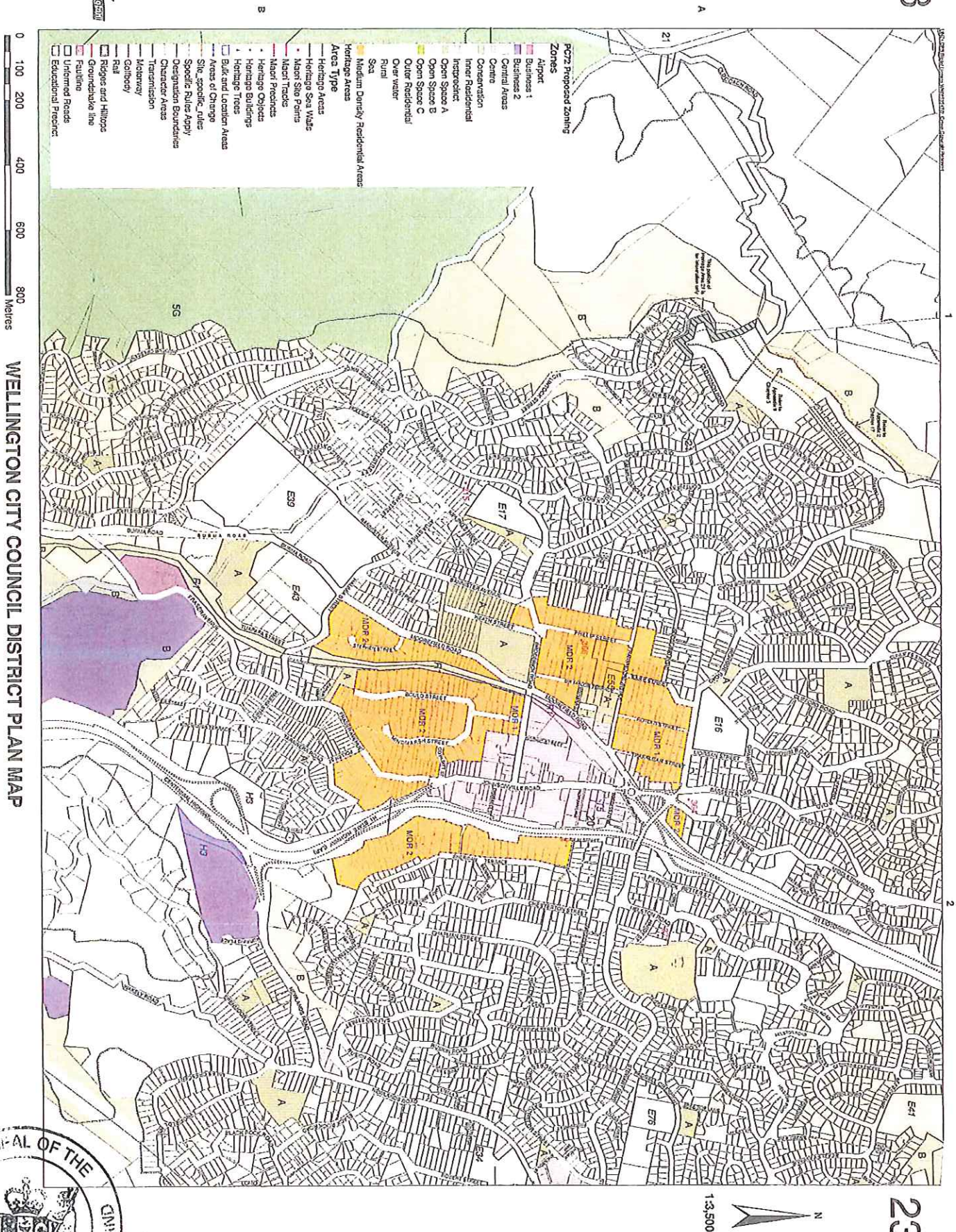
For the Court



C J Thompson
Environment Judge



APPENDIX 1



WELLINGTON CITY COUNCIL DISTRICT PLAN MAP



**Before the Environment Court
At Wellington**

ENV-2010-WLG-0001279

In the matter of Resource Management Act 1991

And

In the matter of appeals under clause 14 of the First Schedule of that Act in relation to District Plan Change 72 (Residential Review)

Between **Johnsonville Community Association Incorporated**

Appellant

And **Karlis Abolins**

Section 274 Party

And **Wellington City Council**

Respondent

Rebuttal statement of evidence of Lucie Desrosiers

Date: 24 May 2012



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Introduction

- 1 My full name is Lucie Desrosiers. I have the qualifications and experience set out in my Evidence in Chief, dated 20 December 2012. I repeat the confirmation given in that statement that I have read and agree to comply with the Code of Conduct for Expert Witnesses.
- 2 I have read and considered the evidence filed by the appellant and on behalf of Karlis Abolins. I have prepared the following brief of evidence in reply to the matters raised in that evidence.

Extent of MDRA zones

- 3 In paragraph 75 (and elsewhere) of her evidence, Ms Fraser recommends that the extent of the MDRA be reduced to being within 400m walk of commuter bus stops.
- 4 I disagree with this recommendation on two counts. Firstly, I do not agree that commuter bus stops provide a sound basis for long term land use decisions. Secondly, I do not agree that the 10 minutes' walk yardstick used to define the boundaries of the MDRA is excessive, as implied in Ms Fraser's recommendation. My reasons are as follows.
- 5 The Johnsonville Town Centre Plan (Adopted November 2008) states that in defining the town centre area, 'a nominal boundary of 800 metres (or 10 minutes) walking distance **from the town centre**¹ was used. It explains that distances of 400m and 800m generally equate to five and 10 minutes' walk and that 'these are commonly accepted as being the areas within which higher proportions of people will walk to public transport facilities or to use the town centre'. The same document goes on to recommend an action to allow 'the development of high quality medium density housing (ie town houses and terraced housing) in

¹ Johnsonville Town Centre Plan, Wellington City Council, Adopted November 2008, page 3 (Attachment 17, McSweeney EIC).

areas with good walking access **to the town centre**², this being defined as five to 10 minutes' walk to the centre.

- 6 It is important to note that it is access to a range of facilities (shops, library, recreation centre, swimming pool, train station, etc), not just bus stops, which was the primary consideration when Council identified suitable areas for medium density residential development. The Hearing Decision report, quite rightly in my opinion, puts 'proximity to centres and employment' at the top of the list of such considerations.³
- 7 Regarding the suitability of the '10 minutes' walk' yardstick to delineate the extent of the MDRA, I concede that there are no hard rules as to how far people will walk to reach shops and services, including public transport services. However, the '400m to 800m yardstick' used by Council to define the initial extent of the MDRA is commonly used in the town planning field in New Zealand and abroad to inform land use decisions such as that proposed under Plan Change 72.
- 8 The UK's Urban Design Compendium states that 'Local facilities bring residents together, reinforce community and discourage car use. [...] There should be local shops, the bus stop, the health centre and perhaps a primary school within a walking distance of (say) 10 minutes (800 metres)'.⁴
- 9 The New South Wales Government's Planning Guidelines for Walking and Cycling (December 2004) states that 'the NSW Government is developing centre profiles for areas across Sydney within 800m of railway stations and 400m of major bus stops. This is being carried out as part of the Sydney Region

² Ibid., page 15.

³ Wellington City Council, Committee Decision on District Plan Change 72, August 2010, page 37 (Volume 3, WCC Evidence, Tab 4).

⁴ Urban Design Compendium, English Heritage and Housing Corporation, September 2007, page 35.

Metropolitan Development Program to assess the opportunities for renewal (creation of accessible centres) in areas with good access to public transport'.⁵

- 10 Data obtained from Greater Wellington Regional Council (see Appendix 1 of this evidence) confirms that a good proportion of train users in Johnsonville regularly walk 800m, roughly 10 minutes, or more to reach the station. The data is based on train user surveys undertaken in 2011 and provides a representative sample of where people walk from to get to the station. The data shows that in the AM peak, 63% of people getting to the station on foot walk more than 400m to reach the station and 31% walk more than 800m. Outside of the AM peak, 57% walk more than 400m and 26% walk more than 800m. In both cases, the majority of people getting to the station on foot walk more than the 400m suggested by Ms Fraser as the basis for establishing the boundary of the MDRA.
- 11 It is important to note that in the case of PC72, the 10 minutes' walk yardstick was refined by the use of sophisticated computer modelling which took into consideration the local topography and the delays associated with crossing roads to identify areas of high accessibility to both the town centre and public transport infrastructure.
- 12 The Wellington City Urban Development Strategy's Working Paper 11: Walkability and access to public transport and town centres (May 2007) was prepared to support the identification of potential 'Areas of Change', now MDRA, through the identification of areas of high accessibility to town centres and public transport stops. This document spells out the methodology used to identify areas of high accessibility. It is attached as Appendix 2. It states:

This works stream feeds into Part 2 by spatially analysing residential areas to determine their level

⁵ New South Wales Government, Planning Guidelines for Walking and Cycling, December 2004, page 18.

of walkability to key centres and proximity of these areas to public transport infrastructure. Walkability and proximity to centres and public transport infrastructure are important factors to take into account for growth management [...]. In the main, this is because places closer to public transport and centres generally offer a wider range of transport choices which can lead to substantial efficiencies and avoid an over-reliance on the car.⁶

13 It goes on to state that 'determining levels of proximity and walkability in Wellington City is complicated by factors such as topography, footpaths access, infrastructure barriers, etc.'⁷ and 'it was recognised early on that due to Wellington's topography, slope would have to be a factor when considering walking access. For this reason, walking time was used. This considered both slope, and time impedances such as crossing busy streets'.⁸

14 The computer modelling consequently factors all these constraints into the analysis of walkability. The report further confirms that the parameters used in the GIS analysis included:

- Walkable areas surrounding public transport stops and key town and local centres servicing residential areas [...].
- Walking time for hilly areas vs walking time for flat areas.
- Presence of footpaths [and] road crossings.
- Infrastructure barriers such as roads, rails, streams, etc.
- Frequency of public transport and time of service (including bus and rail).⁹
- 'Topography and slope.'¹⁰

15 With regards to pedestrian delays when crossing roads, the document states that 'established crossing points such as zebra

⁶ Appendix 2 to this evidence, Appendix A page 1.

⁷ Ibid.

⁸ Ibid.

⁹ Ibid., page 4.

¹⁰ Ibid. Appendix A, page 1.

crossings and traffic light crossings¹¹ were included in the GIS model and that 'to calculate the time taken to traverse a crossing, slope was considered as well as additional time impedance to reflect waiting time due to large volume traffic flows or traffic-light phases'.¹² The document states the various time impedances used for different situations (zebra, traffic lights, local street, principal roads, sub-collector roads, etc) and the reasons behind each one.

16 With regard to the speed of walking, the document states that this is dependent on slope and that international best practice was used to inform this aspect of the GIS model.

17 All in all, it is my opinion that the GIS analysis provides a realistic picture of the areas with high accessibility to the town centre. It is however important to note that the proposed boundaries of the MDRA were not based on accessibility alone.

18 The Committee's Decision report explains how the boundaries provided by the walkability analysis were refined and the extent of the MDRA reduced to come to the proposed PC72 boundaries. It states:

The boundaries of the Johnsonville [MDRA] were carefully considered. Initially, the boundaries were defined on the proximity to the Town Centre, but further refinements were made to take into account other considerations such as character, topography, pedestrian accessibility, roading capacity and the potential for properties to be redeveloped'.¹³

19 Various submissions were received through the plan change process and the boundaries of the MDRA were adjusted to reflect the outcome of this process. All sites included in the final MDRA boundary are located within the area of high accessibility.

¹¹ Ibid, Appendix A, page 4.

¹² Ibid.

¹³ Wellington City Council, Committee's Decision on Plan Change 72, August 2010, page 60 (Volume 3, WCC Evidence, Tab 4).

- 20 It is my opinion that the approach adopted by Council to define the boundaries of the MDRA, first based on accessibility to the town centre and further refined through the consideration of other constraints, is sound and robust.

Conclusion on extent of MDRA zone

- 21 Accordingly, I disagree with Ms Fraser's recommendation that the boundary should be based on a 400m walking distance to commuter bus stops because:

21.1 It is the proximity to the town centre, subject to the availability of frequent public transport services (including train services which provide access to the regions' greatest concentration of jobs and services in the CBD), which was sought. As highlighted by Ms Fraser, the location of bus stops is subject to change and therefore does not provide a sound basis for land use decisions such as that proposed by PC72.

21.2 A 10 minute walking distance is an internationally accepted yardstick to direct land use intensification around centres and I see no justification in this particular location to reduce this to 5 minutes.

21.3 Council has used sophisticated computer modelling analysis to define the extent of the area accessible within 10 minutes walk including consideration of slope, presence or absence of footpaths and delays at road crossings. In my professional opinion, the work undertaken by Council to determine walking times to the town centre is sophisticated and sound and provided a good starting point in defining the boundaries of the MDRA.

21.4 The accessibility mapping was only the starting point for the identification of the MDRA boundaries and other criteria (character, topography, pedestrian accessibility, roading capacity and redevelopment potential) and

submissions from property owners have guided WCC in setting the MDRA boundaries.

- 22 All in all, I believe that the boundaries of the MDRA are based on thorough and appropriate analysis and should be maintained.

State and character of existing housing stock

- 23 In paragraph 13 of his evidence, Mr Armour states he that he does not support my conclusion that the presence of medium density housing dwellings within the Johnsonville MDRA and the varied state and character of the existing housing stock make the area capable of absorbing further densification in the form of medium density housing as contemplated by the plan change.

- 24 My evidence in chief highlights the presence of a number of existing medium density residential developments located within the area proposed for the MDRA zones (see Appendix 2 of my evidence in chief). Mr Armour's evidence goes further by providing an exhaustive list of existing medium density residential developments in each one of the sub-areas he identified, totalling over 20 properties. My opinion is that medium density residential development is an established development form within the proposed MDRA and part of the area's character.

- 25 As explained in my evidence in chief, the area of the proposed MDRA is not uniform in built form or character and the age of the building stock varies significantly. In contrast to parts of the City which were developed during one period and where buildings exhibit strong consistency of style or form, Johnsonville has seen gradual development, infill and renewal with the resulting variety in building types (detached houses, duplex, town houses, apartments), form (single storey, two storey, hipped roof, single slope roof, etc) and style (from early Housing Corporation villas to modern architecture). This variety makes the proposed MDRA better able to accommodate new developments than areas of homogenous building stock.

26 With regard to the state of the housing stock, it is relevant to note that the area has a high number of older properties which were designed to satisfy the lifestyle expectations of their era and built before the introduction of energy efficiency requirements in the NZ Building Code. While it is not possible to know for certain the level of improvements which have taken place internally to bring the units up to modern standards of insulation and accommodation, it is likely that a certain number of older properties fall short of modern expectations and could, over time, be replaced by modern dwellings. It is my opinion that the varied age and state of the housing stock offers opportunities for redevelopment, including opportunities for medium density residential development. Therefore, I do not agree that the age and standard of the existing housing stock renders the area unsuitable for medium density residential development.

27 Furthermore, given the 8m maximum building height associated with both the MDRA and the Outer Residential Area Zoning, future developments will be of a similar height regardless of the zoning which applies. This, in addition to the proposed District Plan urban design provisions listed in my evidence in chief and the requirement for any multi-unit proposal to be assessed against the Residential Design Guide, provide a sound framework for the development of new buildings which are appropriate in character and scale for the area and neighbourhood in which they are located (PC72 Objective 4.2.3 Urban Form).

On site amenity

28 In Section 11 (page 18, first paragraph) of his evidence, Mr Armour states, in relation to the lack of requirement for ground level open space in the MDRA 1, that the requirement for on site residential amenity should not be 'traded off' because of accessibility to a Town Centre.

29 There is an inherent correlation between residential proximity to a centre and the proportion of amenity space which is shared rather than privately owned.

30

In areas with good access to public open spaces (parks, reserves, etc) and other recreational facilities (swimming pool, sports grounds, sports centre, recreation centre, etc), it is reasonable for some residents to choose not to own and have to maintain a private open space. This is particularly the case for people seeking a lower maintenance residential unit such as a terraced house or apartment, including elderly people, singles, young professionals and childless couples. Ultimately, living in a lower maintenance property which has a balcony rather than a large garden area is a matter of choice and providing such choice is essential in catering for the needs of the whole community.

31

The proposed Johnsonville MDRA 1 has access to all-weather sports pitches and a future sports centre at Alex Moore Park; public open space at Johnsonville Memorial Park; a recreation centre; a Bowling Club; and a swimming pool. Given the proximity of the MDRA 1 to these facilities, a residential unit with little or no **ground level** open space may be a perfectly logical choice for the types of residents listed above.

32

It must be noted that while the District Plan Residential Area Standards do not set a minimum area of ground level open space for the Johnsonville MDRA 1, the Residential Design Guide has expectations that residential units are provided with the 'type and quality of open space that is appropriate to the dwelling type' (Objective O4.2). In relation to above ground dwellings, the Residential Design Guide (Guideline 4.4) states:

Every apartment should have access to a useable area of private open space and this is most likely to be in the form of a balcony. (...) Balconies will be both private and sunny and will typically be in the order of 10m² with a minimum dimension of 2 metres. Smaller balconies and decks may be appropriate, but only where apartments are small'.¹⁴

33

My opinion is that the flexibility built in Objective O4.2 ('To provide a type and quality of open space that is appropriate for the

¹⁴ Residential Design Guide, page 21 (Volume 3, WCC Evidence, Tab 5).

dwelling type') and Guideline G4.4 ('Use balconies or roof terraces to meet the private open space requirement for above ground dwellings' which allows for 'smaller balconies and decks but only where apartments are small') allows open space to be tailored to the needs of potential residents while supporting the creation of high quality medium density residential developments. Consequently, I believe that the Residential Design Guide is a more sophisticated tool than a prescriptive minimum open space standard to guide the provision of private open space in the Johnsonville MDRA 1.

Date: 24 May 2013



Lucie Desrosiers

.....
Lucie Desrosiers

Appendix 1



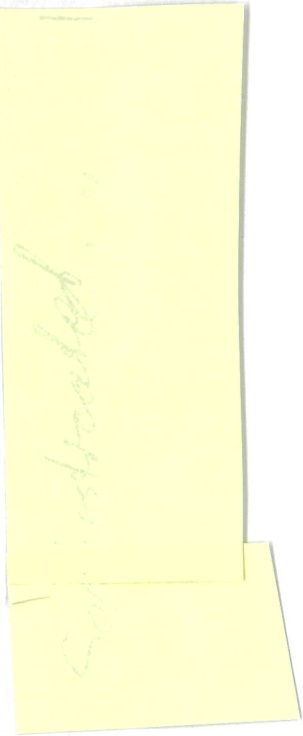
Appendix 1: Johnsonville rail passenger information (Greater Wellington Regional Council – Rail Passenger Surveys 2011)

Rail Boardings at Johnsonville by Access Distance & Time Period

Distance Band	Rail Boardings at Johnsonville Station		
	AM Peak, Walk Access	% of Total	AM Peak, Non-Walk Access
0 - 200m	24	20%	24
200 - 400m	21	17%	-
400 - 600m	21	17%	3
600 - 800m	17	14%	45
800 - 1000m	17	14%	62
1000m+	21	17%	137
Total	120	100%	271
			392

Distance Band	Rail Boardings at Johnsonville Station		
	Inter-peak, Walk Access	% of Total	Inter-peak, Non-Walk Access
0 - 200m	46	32%	-
200 - 400m	15	11%	8
400 - 600m	31	21%	-
600 - 800m	15	11%	15
800 - 1000m	-	0%	-
1000m+	39	26%	31
Total	147	100%	54
			202

Notes: All distances have been converted from straight line (crowfly) to an estimate of the actual distance using a factor of 1.3; The surveyed data is controlled to actual boarding numbers - 392 (AM) and 202 (IP) come from rail boarding counts undertaken in September 2011; AM Peak = 2hr period between 7am and 9am; Inter-peak = 6 hour period between 9am and 3pm.



Appendix 2



Analysing Walkable Access in Wellington City

Introduction

This document sets out the GIS methodology for measuring walkable access levels to centres and public transport stops.

This work stream feeds into Part 2 by spatially analysing residential areas to determine their levels of walkability to key centres and proximity of these areas to public transport infrastructure. Walkability and proximity to centres and public transport infrastructure are important factors to take into account for growth management, particularly in a city like Wellington that pursues a compact city approach. In the main this is because places closer to public transport and centres generally offer a wider range of transport choices which can lead to substantial efficiencies and avoid an over-reliance on the car. This is particularly relevant for commuter traffic.

Determining levels of proximity and walkability in Wellington City is complicated by factors such as topography, footpath access, infrastructure barriers etc. This is a key issue that will need to be resolved in the methodology to ensure the analysis reflects reality as much as possible.

Overall Work Specification Objectives

This work is part of the overall aim of accommodating future growth by encouraging sensitive infill development in locations (including appropriate centres) that are, or will be, well served by public transport. More specifically:

- To spatially identify residential areas that are close to key centres and public transport infrastructure (and conversely which areas are not)
- To determine which of these areas have high levels of accessibility (and conversely which areas do not).

Key Parameters

The following key parameters were taken into account in determining accessibility and walkability:

- Area surrounding public transport stops
- Area surrounding key town and local centres servicing residential areas – these being Tawa, Johnsonville, Karori, Newtown, Kilbirnie, Miramar, and Island Bay.
- Frequency and time of service (to generally align with trolley route and commuter traffic)
- Accessibility and walkability to stops and centres.
- Topography & slope
- Presence of paths
- Infrastructural barriers
- Walking time for hilly areas vs walking time for flat area

Approach Taken

Traditionally, planning involved the proximity to council infrastructure and facilities as distance in all directions. This does not account for impedances to pedestrians such as steep slope, traffic and non traversable terrain such as private property. (See Fig 1)

The model created assumes pedestrians would most likely use Footpaths and tracks as a preferred route to walk along.

A network dataset was created based on the Footpath Centrelines maintained by Roading Operations, Park walking tracks maintained by Parks and Gardens, and other data captured during the network development phase. The Network Analyst extension within ArcGIS was used to analyse the walkable access.

It was recognised early on that due to Wellington's topography, slope would have to be a factor when considering walking access. For this reason, walking time was used. This considered both slope, and time impedances such as crossing busy streets. Slope was calculated once the walk access features were converted into 3D, and total time was calculated from this.

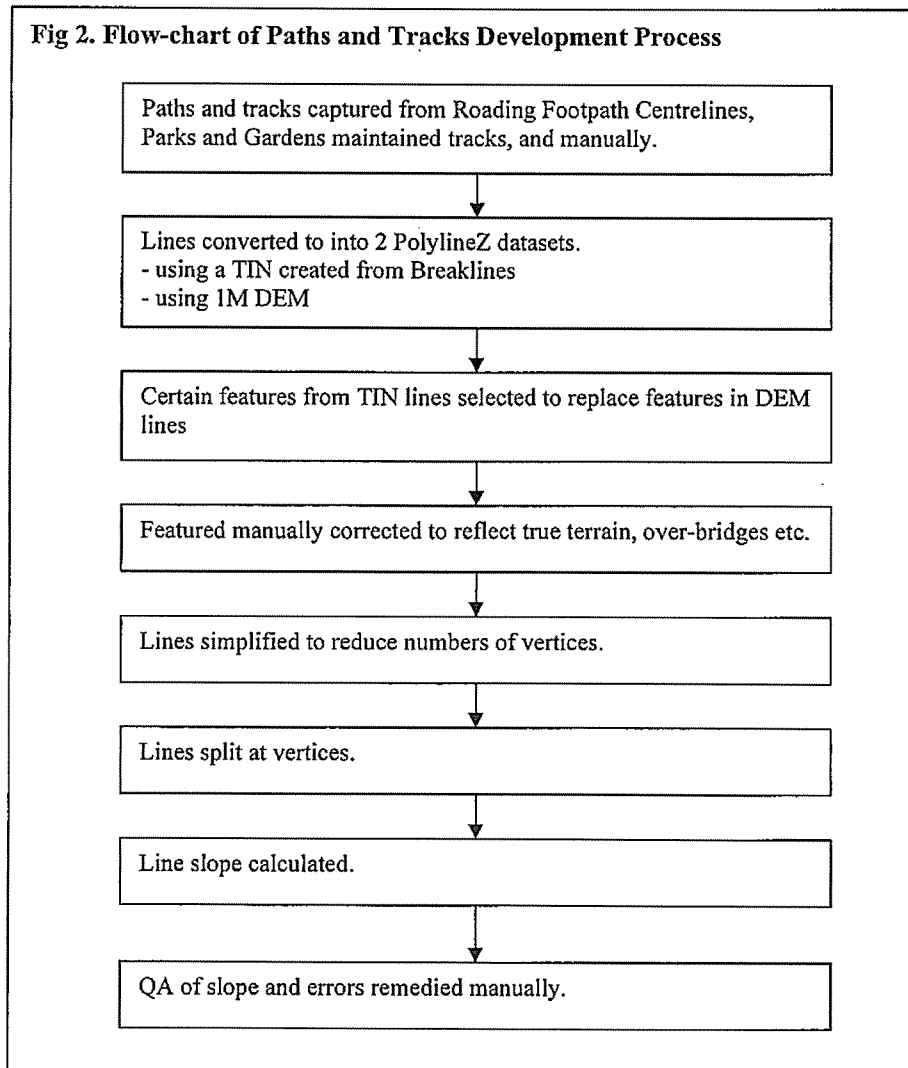
Footpath Network Creation

The Footpath centrelines were the basis for developing a walkable access network. Parks and Gardens maintained tracks were also used, with some extra footpaths and links between paths added manually to enhance network connectivity. These were areas such as Civic Square and other areas where footpaths were not currently captured.

The path and track features were converted to 3D using the 3D Analyst extension over both a TIN (triangular irregular network) created from breaklines, and 1m DEM¹ (digital elevation model). A manual process was used to correct paths and tracks where 3D surface errors existed, such as over-bridges and tunnels.

The path and track lines were simplified which removed unnecessary points and smoothed out some of the errors derived from conversion to 3D.

The lines were then broken into 2 point segments to allow for slope calculation. A slope field was then added and calculated. A QA of slope revealed some errors (ie. slope of 70 degrees etc.) which were corrected manually.



¹ A 5m DEM was used for Parks and Gardens maintained tracks that fell outside of the 1m DEM coverage

Calculations and Assumptions

The speed at which pedestrians walk is dependant on slope. However, little research into a relationship between slope and walking speed has been conducted to date. A table of walking efficiency was located from "A GIS-based decision support system for the management of SAR operations in mountain areas"². This was graphed in MS Excel and was then used to fit regression lines and create formulas for slope vs walking speed. The formulas fit with a R² value of over 0.98. The formulas were used in ArcGIS field calculator to calculate walking speed and then walking time for each line segment in both directions.

Speed/Slope Formula:

$$\chi = \text{Slope } (-90^\circ < \chi < 90^\circ)^*$$

(* See notes below)

$$f = \text{Speed (km/hour)}^*$$

$$f (-12.02 < \chi < 12.63) = 0.00002 \chi^4 + 0.0006 \chi^3 - 0.00221 \chi^2 - 0.1421 \chi + 5$$

$$f (\chi \leq -12.02) = 5.5885 e^{0.0548 \chi}$$

$$f (\chi \geq 12.63) = 2.5342 e^{-0.0471 \chi}$$

Time/speed formula:

Tf = Time forward (geometric direction)

l3D = 3D length (m)

Tb = Time back (geometric direction)

l2D = 2D length (m)

ω = Wait time (sec)

$$S = \text{Speed (m/s)} = \frac{f}{3.6}$$

$$l3D = \frac{l2D}{\cos(|\chi|)}$$

$$Tf = \frac{S}{l3D} + \omega$$

$$Tb = \frac{S}{l3D} + \omega^*$$

Notes

As walking speed peaks at about 6° downhill, the model has to calculate the speed/time based on the whether the pedestrian is walking in (+) or (-) geometric direction.

- If the pedestrian is walking in a (-) geometric direction, ie. walking the opposite way to the way the line is drawn (To-From), Network Analyst uses Tb (Time_back)
- If the pedestrian is walking in a (+) geometric direction, ie. walking the same way to the way the line is drawn (From-To), Network Analyst uses Tf (Time_fwd)

The Speed/Slope formula used to calculate f and thus Tb assumes slope reversed ie. -1χ

Fig 4. Network Analyst Evaluators Specifying the Time Parameters for each Direction

Source	Direction	Element	Type	Value
Footpath_nw	From-To	Edge	Field	Time_fwd
Footpath_nw	To-From	Edge	Field	Time_back
Network_datasets_ND_3...		Junction		

² A GIS-based decision support system for the management of SAR operations in mountain areas

Marco CIOLLI, Luca MENGON, Alfonso VITTI, Paolo ZATELLI and Fabio ZOTTELE

Fig 6. 5 Min Walk from Public Transport Services in Karori

Urban Footprint 5 Min Walk from Stops, Service Frequency 10 Min or More 5 Min Walk from All Stops



Glossary

Breaklines Lines that represents a distinct interruption in the slope of a surface, such as a ridge, road, or stream

DEM
(Digital elevation model) A raster or grid of cells that has elevation values for each cell. The elevation values can be used for elevation and slope analysis.

Service Areas Areas generated by Network Analyst calculated from input data and parameters. Created by creating polygons joining the line ends of accrued cost (time) along the footpath network.

TIN
(Triangular Irregular Network) A vector data structure that partitions geographic space into contiguous, non-overlapping triangles. The vertices of each triangle are sample data points with x-, y-, and z-values. These sample points are connected by lines to form Delaunay triangles. TINs are used to store and display surface models.

References

A GIS-based decision support system for the management of SAR operations in mountain areas

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Ministry for the
Environment
Manatū Mō Te Taiao



**MINISTRY OF HOUSING
AND URBAN DEVELOPMENT**

Understanding and implementing intensification provisions for the National Policy Statement on Urban Development

New Zealand Government

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1 Introduction

1.1 Purpose

This guidance has been developed to help local authorities understand and interpret the provisions for intensification and in the National Policy Statement on Urban Development 2020 (NPS-UD). The specific provisions of the NPS-UD are Objective 3, Policies 3 to 5 and clauses 3.31 to 3.34 of subpart 6. The guidance provides methods, tools and examples to help implement these provisions effectively.

Local authorities can use this guidance to prepare principles for zoning to help inform and support the required plan changes. This guidance can also be used to understand the individual components of the intensification provisions (eg, accessibility, walkability, demand) to determine the intensification outcomes on the ground. This document is not intended to be a step-by-step guide to preparing plan changes to give effect to the NPS-UD intensification provisions. Plan changes and outcomes depend on the local context and local authorities will need to give effect to the intensification provisions in their local context.

Note the examples used in this guide are relatively basic examples which are intended to provide an indication of how the application of the provisions may work.

1.2 Scope

All local authorities that contain all or part of an urban environment are required to implement the relevant intensification provisions. The NPS-UD defines urban environment as an area of land (regardless of size, and irrespective of local authority or statistical boundaries) that:

- (a) is, or is intended to be, predominantly urban in character; and
- (b) is or is intended to be, part of a housing and labour market of at least 10,000 people.

The NPS-UD groups urban environments into three tiers.¹ Each tier has different policy requirements and implementation timeframes. The requirements for tier 1 urban environments are more directive than the requirements for tier 2 and 3 urban environments.

This guidance includes:

- a description of the intent of the NPS-UD intensification provisions, including an explanation of the expected outcomes of the intensification provisions
- methods, tools and examples to help tier 1, 2 and 3 local authorities implement the provisions.

Tier 1 local authorities are required to ensure that in metropolitan centre zones, building heights and density of the urban form reflects demand for housing and business space. This guidance provides

¹ Refer to the interpretation section (Part 1, clause 1.4) of the NPS-UD, specifically for the definitions of “urban environment”, “tier 1 urban environment”, “tier 2 urban environment” and “tier 3 urban environment”. Also, refer to appendix 1 of the NPS-UD for classification of tier 1 and tier 2 urban environments. Tier 3 urban environments include all of those not listed in the appendix.

detail on how local authorities could reconcile demand with a possible urban form, but it does not provide detail on calculating demand. Guidance on calculating demand for both residential and business space is covered in the guidance on housing and business development capacity assessments. This will be made available on the Ministry for the Environment's [website](#).

Local authorities will need to consider the intensification provisions for any private plan changes they receive or plan changes they initiate. Guidance on the responsive planning requirements of the NPS-UD can be found on the Ministry for the Environment's [website](#). In addition to meeting the intensification requirements, local authorities will also need to ensure development outcomes described for zones in your district plans are consistent with the intensification provisions (clauses 3.36 and 3.37). The intent of monitoring the consistency of the development outcomes with the intensification outcomes required is to ensure district plans – specifically the plan provisions (eg, objectives, policies, rules and assessment criteria cumulatively) – do not unnecessarily undermine development outcomes.

This intensification guide should not be read in isolation. Applying the intensification requirements should also take into account the other objectives, policies and requirements of the NPS-UD. In particular, intensification outcomes need to contribute to well-functioning urban environments (as described in Policy 1), noting that intensification done well can make a major contribution to this.

1.3 Structure of the guide

This guide describes each of the components local authorities will need to consider when implementing the intensification provisions. It provides information on how to measure or determine accessibility, walkability and appropriate heights and densities. The guidance also provides examples of how to consider these matters together to apply the intensification provisions effectively in district plans and regional policy statements.

Also included in this guide is an explanation and examples for applying the qualifying matters, when it has been determined through evidence that exceptions to the intensification provisions are required.

The guide is divided into a number of sub-sections, each addressing a policy area or a component of analysis that forms a part of implementation. This is followed by a worked example of how local authorities should consider these aspects together to work out how best to use them in determining heights and densities and an appropriate zoning pattern. A high-level summary of the structure is described below.

The first sub-sections suggest methods to produce analysis or evidence, including:

- clarification of definitions relating to the city centre and metropolitan centre zones
- understanding how to measure demand in metropolitan centres
- methods and tools that can be used to measure accessibility, including understanding definitions of planned and existing public and active transport
- **how to determine walkable catchments for metropolitan centre zones and for planned and existing rapid transit stops.**

The later sub-sections outline how the evidence can be combined and used to determine locations suitable for intensification and what level of this might be appropriate, including:

- enabling development capacity in city centres

- determining heights and densities in metropolitan centres and in walkable catchments
- enabling heights and densities commensurate to the level of accessibility and relative demand
- applying qualifying matters, including understanding how ‘other’ matters may apply.

The last section of the guide provides a full worked example of how to collectively consider the above matters to apply the intensification provisions effectively in district plans and regional policy statements.

1.4 Timing of implementation

To better enable intensification in our urban environments, many local authorities will be required to implement new policies under the NPS-UD and make changes to their planning documents. The intensification requirements and timeframes for tier 1, 2 and 3 local authorities are summarised in table 1 below.

Table 1: Intensification requirements and timeframes for tier 1, 2 and 3 local authorities

	Tier 1	Tier 2	Tier 3
Implementation timeframes	Plan changes to give effect to intensification provisions notified as soon as practicable and no later than two years after commencement of the NPS-UD		Plan changes to give effect to intensification provisions notified as soon as practicable after commencement of the NPS-UD
Implementation requirements	Provide for and enable the benefits of urban intensification through regional policy statements and district plans (ie, insert objective/s supporting intensification outcomes, new zone policies, changes to rules and rezoning)		
	City Centre Zone – enable building heights and density to realise as much development capacity as possible	Enable building heights and density commensurate to the level of accessibility or relative demand	
	Metropolitan Centre Zone – enable building heights of at least six storeys		
	Walkable catchments – enable building heights of six storeys within walkable catchments of rapid transit stops, city centre zones and metropolitan centre zones		
	All other locations – enable building heights and density commensurate to the level of accessibility and relative demand		

1.5 What happens before the intensification plan changes are notified

Local authorities might receive resource consents or private plan changes which seek greater heights and densities (on the basis of the NPS-UD direction) before intensification plan changes directed in the NPS-UD are notified or take effect. In these instances, local authorities and other decision-makers considering resource consents must, under [section 104\(1\)\(b\)](#) of the Resource Management Act (RMA), have regard to “any relevant provisions” in a national policy statement (NPS). This is even before territorial authorities have amended their district plans to give effect to the intensification requirements. Except where otherwise specified in an NPS, this applies from the date of commencement of the NPS. Note that “any relevant provisions” includes any part of the NPS-UD. This means the preliminary provisions in Part 1, the objectives and policies in Part 2 and the implementation provisions in Part 3. All are “provisions” of the NPS, which may or may not be relevant to a particular resource consent.

Local authorities will need to amend their plans to give effect to the intensification provisions in the NPS-UD (Objective 3, Policies 3 to 5 and subpart 6 of Part 3). Before these plan changes take effect, the intensification provisions will need to be relevant to any resource consent application being considered for a development in areas covered by those provisions.

Private plan change requests lodged before a council-initiated plan change to implement the NPS-UD must give effect to the NPS-UD. This is a stronger direction than the requirement to “have regard to” an NPS in RMA section 104 for resource consents. On this basis, local authorities will need to consider whether the request gives effect to the intensification provisions when making decisions.

2 Intent and rationale of intensification policies

The intensification provisions are intended to ensure that in urban areas, intensification in desirable and suitable locations is enabled in plans. This is to support well-functioning urban environments and improve housing affordability through competitive land markets.

Some of the outcomes that are expected to be realised through the implementation of the intensification provisions are shown in figure 1 below.

Figure 1: Expected outcomes of the intensification provisions



Enabling higher-density development in locations with good access and amenity means people can live close to where they work, learn, shop or connect with friends and family. Such options let residents avoid congestion and long commute times. Businesses can also access more potential workers, customers and other businesses.

The intensification provisions are particularly important where they apply in areas close to current or planned rapid transit and frequent public transport services, as well as places where people can access many opportunities within walking distance. The provisions recognise the benefits of integrating transport and land-use policy. They allow for transport investment that can induce land-use change by encouraging greater supply of development capacity, thereby lifting the number of people living in high-amenity areas. This can help improve the economic case for public and active transport investments, for example by increasing the likely number of people using public transport services. Intensification is also important to support the reduction of greenhouse gas emissions and therefore has a role in climate change mitigation.

3 Key changes from National Policy Statement on Urban Development Capacity

The intensification provisions were not in the National Policy Statement on Urban Development Capacity (NPS-UDC 2016) and are new to the NPS-UD.

Local authorities often struggle to provide sufficient opportunities for higher-density development for a range of reasons, such as opposition from existing land owners, bias towards the status quo and concerns regarding amenity.

Lack of access to well-integrated, higher-density housing has played a role in the current constrained supply of housing. In addition, historically rigid controls in the locations that are now subject to the intensification provisions have increased the price of housing in urban environments and reduced the supply of higher-density development. This is a particular issue in places that are well connected to active and public transport and close to urban centres where people can access jobs, services and amenities.

4 Definitions

Part 1, clause 1.4 of the NPS-UD provides interpretations of terms used in the policy statement. The terms that are particularly relevant to the intensification provisions are reproduced below:

- **active transport** means forms of transport that involve physical exercise, such as walking or cycling and includes transport that may use a mobility aid such as a wheelchair
- **community services** means the following:
 - (a) community facilities²
 - (b) educational facilities³
 - (c) those commercial activities that serve the needs of the community
- **planned** in relation to forms or features of transport, means planned in a regional land transport plan prepared and approved under the Land Transport Management Act 2003
- **public transport** means any existing or planned service for the carriage of passengers (other than an aeroplane) that is available to the public generally by means of:
 - (a) a vehicle designed or adapted to carry more than 12 persons (including the driver); or
 - (b) a rail vehicle; or
 - (c) a ferry
- **rapid transit service** means any existing or planned frequent, quick, reliable and high-capacity public transport service that operates on a permanent route (road or rail) that is largely separated from other traffic
- **rapid transit stop** means a place where people can enter or exit a rapid transit service, whether existing or planned.

Other definitions relevant to the intensification provision include:

- **city centre** is the city centre zone as described in Standard 8 (Zone Framework Standard) of the national planning standards (the standards); or a reference to the nearest equivalent zone, for local authorities that have not yet implemented the Zone Framework in the standards (see clause 1.4(4))
- **metropolitan centre** is the metropolitan centre zone as described in Standard 8 (Zone Framework Standard) of the standards; or a reference to the nearest equivalent zone, for local authorities that have not yet implemented the Zone Framework in the standards.

The key definitions and concepts are discussed in further detail in the following sections of the guide.

² Community facility is defined in the national planning standards.

³ Educational facility is defined in the national planning standards.

5 Analysis and evidence to support implementing the intensification provisions

To give effect to the intensification provisions, local authorities will need to understand, measure and determine:

- demand in metropolitan centre zones
- accessibility
- walkable catchments.

The sub-sections below provide further guidance on each of these components.

5.1 Relevant policies

Policy 3: In relation to tier 1 urban environments, regional policy statements and district plans enable:

- (a) in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification; and
- (b) in metropolitan centre zones, building heights and density of urban form to reflect demand for housing and business use in those locations, and in all cases building heights of at least 6 storeys; and
- (c) building heights of least 6 storeys within at least a walkable catchment of the following:
 - (i) existing and planned rapid transit stops
 - (ii) the edge of city centre zones
 - (iii) the edge of metropolitan centre zones; and
- (d) in all other locations in the tier 1 urban environment, building heights and density of urban form commensurate with the greater of:
 - (i) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or
 - (ii) relative demand for housing and business use in that location.

Policy 5: Regional policy statements and district plans applying to tier 2 and 3 urban environments enable heights and density of urban form commensurate with the greater of:

- (a) the level of accessibility by existing or planned active or public transport to a range of commercial and community services; or
- (b) the relative demand for housing and business use in that location.

5.2 Definition of city centre and metropolitan centre zones

Where a local authority has not adopted the standards, then the nearest equivalent zone must be used. The standards define a 'city centre' to be "areas used predominantly for a broad range of commercial, community, recreational and residential activities. The zone is the main centre for the district or region". The standards define a 'metropolitan centre' to be "areas used predominantly for a broad range of commercial, community, recreational and residential activities. The zone is a focal point for sub-regional urban catchments". Local authorities should rely on the zone descriptions and intent in the standards and compare and align this with their current zoning to work out what the nearest equivalent zone is.

5.3 Measuring demand in metropolitan centre zones

Local authorities are required to prepare a housing and business development capacity assessment (HBA) for all tier 1 and tier 2 urban environments. HBAs provide information on the demand and supply of housing and business land, and the impact of planning and infrastructure decisions on that demand and supply. HBAs will support local authorities to ensure well-evidenced decision-making.

A local authority can choose how it segments its demand (and supply) by location for its HBA. Tier 1 local authorities are required to use demand assessments to determine appropriate height limits and densities under the intensification provisions across their urban areas. For this reason, local authorities may want to carefully consider these locations. Any demand assessment by location should also take into consideration the requirement to consider demand specifically in and around metropolitan centres.

Suitable height and density is calculated as part of an HBA for a tier 1 urban environment. **Section 6.5.3** Determining relative demand for housing and business use of this guide outlines how demand and other factors could be used to determine appropriate heights and densities. More information on calculating demand will be made available on the Ministry for the Environment's [website](#).

5.4 Measuring accessibility

Well-functioning urban environments provide communities with good access to social, economic and cultural opportunities (Objective 1 and Policy 1). There is a clear link between good accessibility and social, economic and cultural wellbeing, and the health and safety of all people.

Accessibility refers to the 'level of service' as a whole and defines people's overall ability to reach desired services and activities (together called opportunities). Assessment typically examines the time, cost and amenity of accessing services and activities via different modes.

5.4.1 The purpose of planning for and providing good accessibility

Planning for and providing good accessibility makes it efficient and affordable for all people to safely access activities and social and economic opportunities such as work, education, healthcare and community services.

You can provide and improve good accessibility in many ways. For example, compact, mixed-use urban developments can enable many people to access opportunities within close proximity (eg, by walking or cycling). Rapid transit and frequent public transport services can enable people to access adjoining communities and opportunities in other parts of the city and avoid congestion at peak travel times as well as parking costs. Private vehicles can also allow people to travel long distances and access opportunities that are further away, although travel can often be affected by peak-hour congestion.

Planning for good accessibility enables prosperous communities by maximising access to opportunities while minimising travel costs and avoiding the social and economic cost of trips unable to be made.

A system view of accessibility considers the relative costs and ease of access, as well as gaps in access and service provision for important main services and destinations.

5.4.2 The accessibility requirements

Policy 1 of the NPS-UD requires that planning decisions contribute to well-functioning urban environments. Good accessibility (Policy 1(c)) is a feature of well-functioning urban environments and can be enhanced by increasing building heights and density (Policy 3 and 5). Policies 3(d)(i) and 5 require regional policy statements and district plans to enable building heights and density of urban form **commensurate with the level of accessibility** by existing and planned active or public transport to a range of commercial activities and community services.

- Local authorities need to link height/density limits with accessibility, by allowing for greater density in areas where people can easily access many jobs, services and amenities.
- Areas with the highest accessibility tend to also be places with the highest demand, where people can easily reach jobs and amenities by walking or cycling and/or using public transport.

Local authorities will need to assess the existing and planned level of accessibility to determine appropriate height and density limits in urban areas. Local authorities should be able to demonstrate how their spatial and district plans, resource consents and other RMA decisions contribute to the outcomes outlined in district plan policies. Local authorities should also be proactive in removing barriers to accessibility, for example through:

- designing new roads and connections to enable increased and safe use of active and public transport
- planning improvements to walking and cycling infrastructure, and public transport services
- encouraging mixed-use developments with a variety of housing, business and community services.

5.4.3 How to assess or determine accessibility

Accessibility can be assessed at a strategic national and regional planning level. It can also be assessed at a sub-regional and detailed neighbourhood planning level, for example, the journey to work, school and local services. An accessibility assessment can contribute to understanding the effects of proposed subdivisions, open-space provision, road, footway and cycle-path connections,

and other development applications through plan changes, resource consent applications and applications for notices of requirement.

In assessing or determining good accessibility to inform ideal and/or suitable locations and attributes for intensification, there are three key factors you need to consider as set out below:

1. People and demands

Accessibility needs vary over time, life stage and the degree of individual / household mobility. When considering accessibility needs, it is essential to consider mobility requirements at an individual and household level. For instance, a family with young children will prioritise accessibility and mobility needs around managing time and cost constraints to meet competing family demands and commuting. A retired couple will prioritise access to healthcare and extended family, but will probably drive less and possibly be less able to walk longer distances. A young couple are more likely to prioritise a broader range of social activities with a wide group of friends. The accessibility needs of these and other demographic groups vary enormously, regardless of whether these groups can access a car on a regular basis. The definition of accessibility used in the NPS-UD is one that embraces all people with varying needs and abilities.

2. Land-use proximity

A major determinant of accessibility is how close people live to economic activities and community services. Higher density, mixed-use development increases the number of people that can live close to these services and activities, making local economic activity more viable and enabling multiple-purpose trips. The locations of economic activity and community services change over time, driven in part by changes in accessibility. Proximity should translate into convenience, meaning that different land uses within an area should be easily accessed by a range of transport modes that support multi-purpose trips.

3. Transport system connectivity

Good accessibility is achieved when multiple origins and destinations are connected by a choice of safe and convenient travel options, including walking, cycling and public transport networks. Urban form contributes to viable public transport networks and safe, convenient connections by active modes. Multi-modal connectivity is achieved through creating transit-oriented urban centres which are accessible by walking and cycling and that have an appropriate mix of housing, jobs and services. This increases mode choice and enables mode shift. Walking and cycling require improved roads and pathways, more closely spaced connections and direct connections to public transport.

To measure accessibility or assess changes due to land-use or transport interventions, you will require data on where people live, the location of destinations, and the cost, time and ease of travelling between these destinations for users of each mode and for each component of the journey.

When assessing accessibility, you will also need to consider walkability as a key component of accessibility when implementing Policies 3(d)(1) and 5. Refer to [section 5.5](#) Walkable catchments for further information.

Typical measures of accessibility can be based on:

- the time required to reach each service (ie, on a door-to-door basis including any time waiting for a connecting service)
- the number and quality of opportunities that can be reached (eg, a general hospital has a broader range of higher-value services than a doctor's surgery)
- indices of relative accessibility based on both of the above
- value (ie, cost to reach each service including time) compared to the value provided.

5.4.4 Process for estimating accessibility

Availability of the accessibility tool and the StoryMaps interim accessibility tool

Waka Kotahi NZ Transport Agency is developing a comprehensive tool to provide detailed indicators of accessibility by walking, cycling and public transport. When available, a link to the tool will be available on the Ministry for the Environment's [website](#).

In the meantime, we suggest you use the Waka Kotahi StoryMap tool. Waka Kotahi provides accessibility data in the tool, which is designed to share centralised data relevant to understanding transport problems and the benefits of investment in land transport. The tool is available to Waka Kotahi's co-investors, partners and all local authorities.

To request access to the tool, email investment.benefits@nzta.govt.nz. Confirmation of registration will be provided directly to the requesting organisation.⁴

Viewing accessibility results

The Waka Kotahi StoryMap accessibility tool shows the number of jobs accessible to an urban population by public transport within 45 minutes and by cycling within 30 minutes. The definition of urban areas is based on Census mapping information, which is similar but not identical to administrative boundaries. Census-mapping information is more useful for analysis purposes in this case.

At this stage, the interim accessibility tool can only provide accessibility indices on existing transport networks. The tool does not yet have the functionality to allow analysis of planned active mode or public transport networks.

The process for viewing accessibility results is as follows:

1. Locate the urban area of interest by zooming and panning the map as required.
2. Using the legend and content boxes, identify 'public transport' or 'cycling' accessibility data. Only use one data set at a time.

⁴ Further information about Waka Kotahi NZ Transport Agency's Benefits Framework and the associated measures with data in the tool are available [on the NZTA website](#).

3. Centre the map on the screen at an appropriate zoom level and take a screenshot of the available accessibility 'heat maps'.
4. Switch between public transport and cycling content boxes to ensure accessibility data for both modes are captured through a screenshot.

Accessibility results are sourced from SA1 (Statistical Area 1) based data. You can interrogate accessibility to jobs data within an urban area by clicking on specific SA1 areas. This will show the number of jobs available to the centroid of that SA1 area by driving (30 minutes), public transport (45 minutes) and cycling (30 minutes).

Interpreting accessibility results

All accessibility indices are measured on the basis of weekday (Tuesday) morning peak analysis in March 2020 (pre-COVID-19 lockdown). In the assessment, you should consider the frequency and capacity of the services available. The analysis uses jobs as a proxy for a range of commercial and community services that are commonly co-located. The distribution of jobs relative to the assessed population will vary according to the specific characteristics of the urban area.

Public transport indices

Access to public transport services is from the centroid of the closest SA1 unit. All data are shown for 45-minute inclusive public transport journey times and include a maximum of 800-metres walking distance to and from public transport services within this journey time. This is a practical time and distance for evaluating accessibility for intensification purposes.

The threshold at which the StoryMap tool can most effectively inform the intensification requirements (Policies 3 and 5) is at, or greater than, the 75th percentile index of the 'jobs available' metrics. The 75th percentile represents the top quarter of accessible jobs in that urban area (ie, the proportion of jobs within the urban area that are accessible within 45 minutes by public transport). Figure 2 below shows the 75th percentile accessibility index for public transport access in Dunedin, while Figure 3 shows the total number of jobs accessible by public transport.

Figure 2: 75th percentile accessibility index for public transport access for SA1s in Dunedin, for March 2020

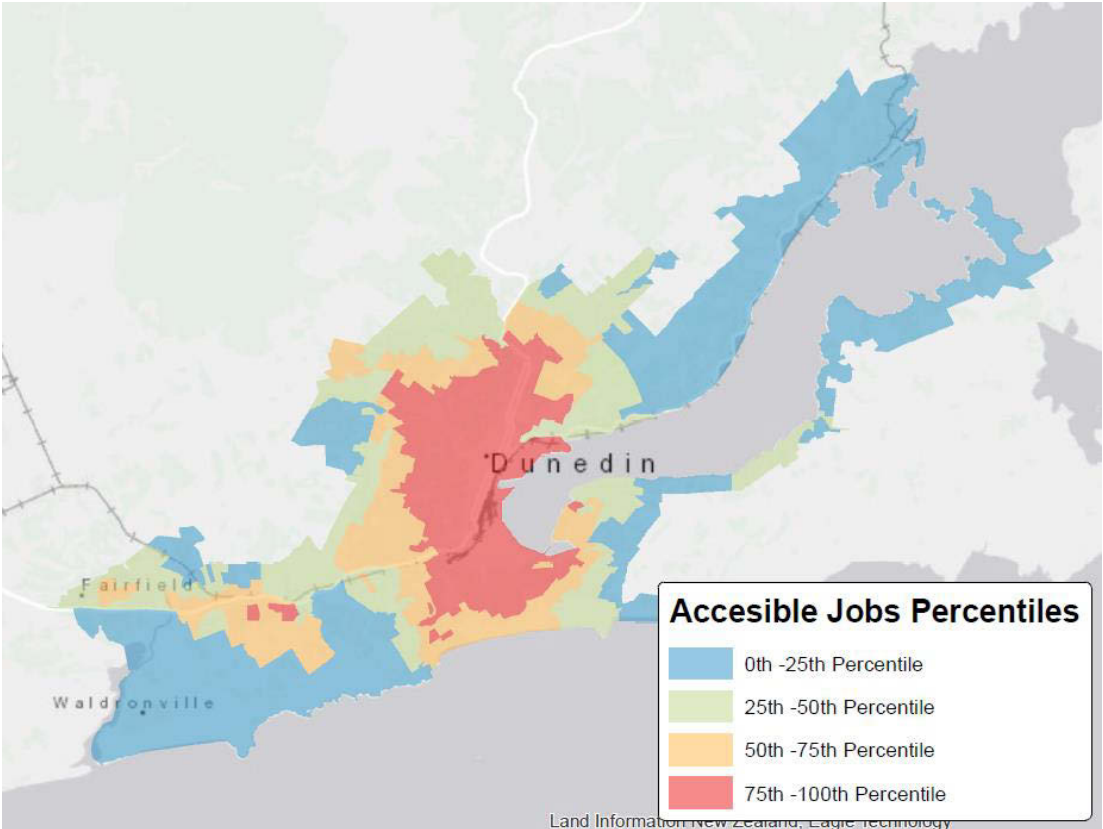
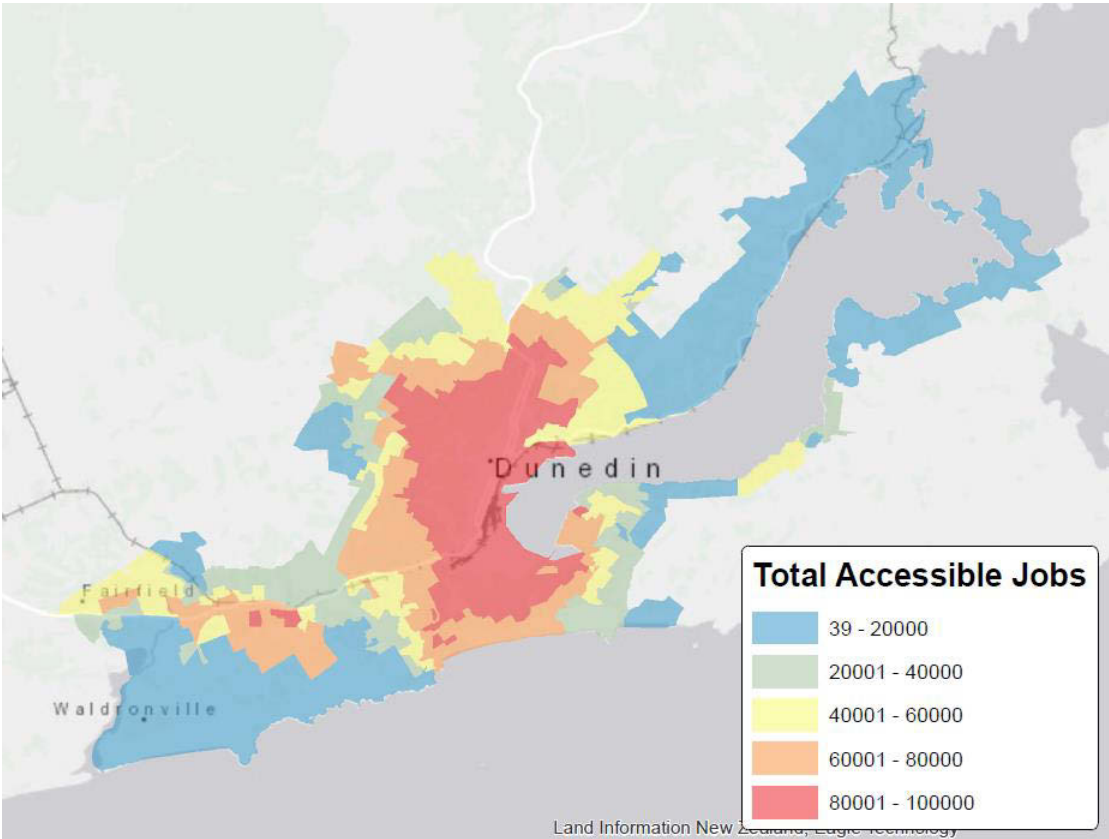


Figure 3: Total number of jobs accessible by public transport access for SA1s in Dunedin, for March 2020



Walking and cycling indices

You should view the walking and cycling indices as a starting point for analysis to determine the extent and scale of intensification.

We recommend you use the cycling indices to determine intensification in the absence of a detailed public transport network. Guidance on determining accessibility by walking is provided in [section 5.5](#) below on walkability.

The map-based cycle network includes cycle-specific infrastructure, such as off-road routes and paths, which are almost always available to pedestrians also.

A useful threshold for determining where the intensification requirements of Policies 3 and 5 are expected to apply would be at, or greater than, the 75th percentile index of the 'jobs available' metrics. The 75th percentile represents the top quarter of accessible jobs in that urban area.

Application to Policies 3 and 5

The information produced by using the accessibility tools outlined above identifies where most people can access most jobs easily by active modes and public transport. This analysis is the starting point for identifying where the relevant intensification provisions should apply.

5.5 Walkable catchments

A walkable catchment is the area that an average person could walk from a specific point to get to multiple destinations. A walkable catchment of 400 metres is typically associated with a five-minute average walk and 800 metres with a 10-minute average walk. These distances are also affected by factors such as land form (eg, hills take longer to walk up and can be an obstacle to walking), connectivity or severance (eg, the lack of ease and safety of crossing roads, highways and intersections), and the quality of footpaths. Walkable catchments can be determined either using a simple, radial pedshed analysis or a more detailed GIS (geographic information systems) network analysis.

Policy 3(c) of the NPS-UD requires tier 1 local authorities to amend their regional policy statements and district plans to enable building heights of at least six storeys within walkable catchments of existing and planned rapid transit stops and the edge of both city centre zones and metropolitan centre zones. This will require tier 1 local authorities to first determine the locations of these stops and zones, decide appropriate metrics or attributes for walkable catchments, and then use spatial analysis and other methods to determine the catchments.

Tier 2 and tier 3 local authorities do not have directive intensification requirements related to walkable catchments. However, understanding walkability and walkable catchments around public transport stops and networks and centres (city, metropolitan, local and neighbourhood) is a useful tool in thinking about what is accessible and locations that are likely to be appropriate for supporting intensification, as required under policy 5(a).

More reference material that may support you in understanding and determining walkable catchments can be found in [Resources](#).

5.5.1 Important definitions for determining walkable catchments

Existing rapid transit stops

The NPS-UD defines a rapid transit stop as a place where people can enter or exit a rapid transit service. Rapid transit services are fast, frequent, reliable and high-capacity public transport services, which operate on a permanent route (road or rail) and that are generally separated from other traffic. Examples of existing rapid transit stops include train stations on the commuter rail services in Wellington and Auckland and bus stations on Auckland’s Northern Busway.

For the purposes of determining walkable catchments for existing rapid transit stops, we suggest you use the pedestrian entrances and exits to the stops or stations. These better represent the location of the station as part of the pedestrian network than the station’s centre point, which is often represented as a dot in the middle of the tracks and/or busway. Figure 4 below shows the pedestrian entrances to Kingsland Station in Auckland, compared to the station centre point.

Figure 4: Example of pedestrian entrances to a rapid transit stop compared to the station centre point (Kingsland Station, Auckland)



Planned rapid transit stops

The NPS-UD defines a planned rapid transit stop as one that is planned in a regional land transport plan (RLTP) under the Land Transport Management Act 2003.

Planned rapid transit stops identified in an RLTP are often only an intention to plan or build a station at some point in the future. Often the RLTP provides no specific information on the station’s location. For example, the Auckland RLTP (2018) notes a number of new stations will be built for the Eastern Busway but does not show on a map where these will be. In other cases, an RLTP may only show on a map an approximate indication of where a proposed station may be.

The planning for some transport projects may be set out in other documents before these projects are added to an RLTP. Because of this, it may make sense for local authorities to use other transport planning documents to support their understanding of planned rapid transit stops and other proposed public transport and active mode infrastructure. This could include infrastructure proposed in:

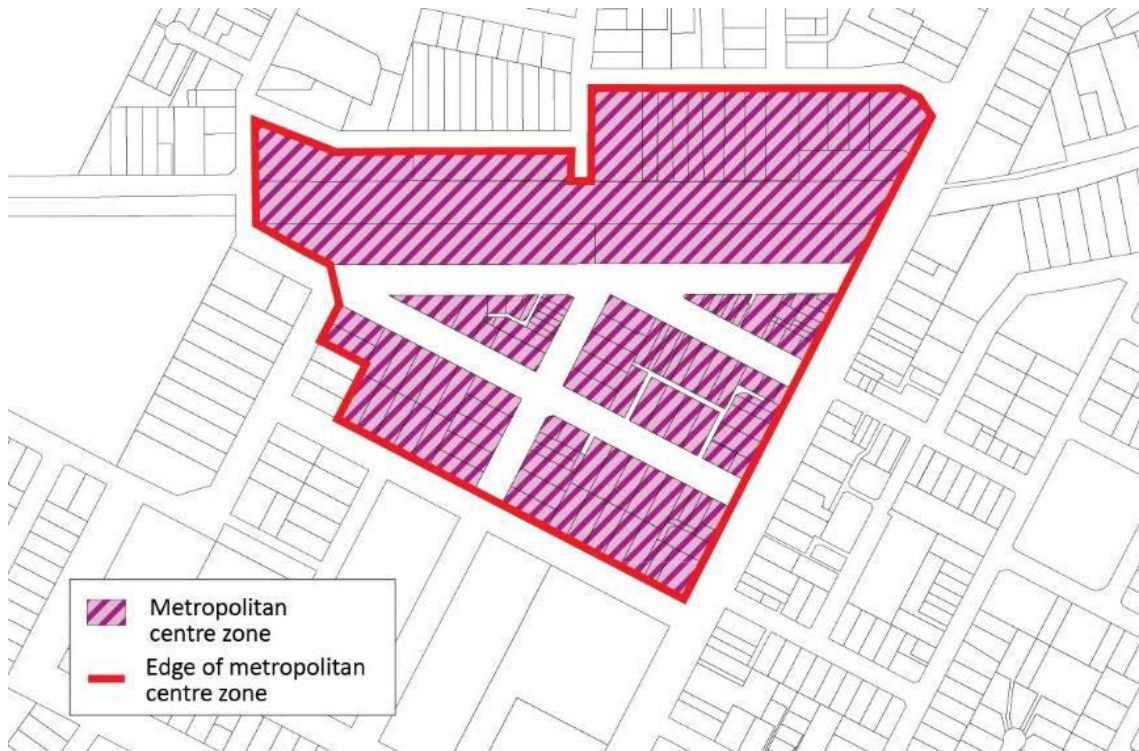
- regional spatial plans
- master planning and structure planning documents
- future development strategies
- infrastructure plans
- national infrastructure funding documents (such as the New Zealand Upgrade Programme)
- central-local government infrastructure agreements (such as the Auckland Transport Alignment Project).

It is difficult to determine a walkable catchment for a rapid transit stop before the exact location of a stop has been determined. Determining the walkable catchment requires you to assess the optimal corridor and/or location for a stop, including the potential for uplift, structure planning, transport network planning and detailed design work. Therefore, it is essential you ensure transport planning for public transport and active modes is done in an integrated and iterative way alongside land-use planning. This will be especially pertinent when considering the requirements of the NPS-UD intensification provisions, in both greenfield areas and existing urban areas.

Edge of city centre and metropolitan centre zones

Intensification will also need to be enabled within walkable catchments on the edge of city centre and metropolitan centre zones. For this, the 'edge' of the zone could be defined as the outside edge of the parcels, or groups of parcels, zoned as either city centre zone or metropolitan centre zone, including any streets or open space that may be within that area. An example is shown in Figure 5.

Figure 5: Example of edge of metropolitan centre zone



5.5.2 Size of walkable catchments

The walkability of a neighbourhood is determined by a range of factors. The general rule used by many organisations, including by the Ministry for Environment’s [Urban Design Toolkit \(Third edition\)](#), is that a walkable catchment is often around 800 metres.

The 800-metre distance was determined by assuming most people would be happy to walk 10 minutes to access services and amenities, and that they walk at a walking speed averaging 1.3 metres per second across the journey (Munro, 2009). The vast majority of people walk at speeds between 0.8 metres per second and 1.8 metres per second (2.9 kilometres per hour and 6.5 kilometres per hour) (New Zealand Transport Agency, 2009). Australian state government policies and the Ministry for the Environment’s toolkit for urban design consider pedsheds (another term for walkable catchment) to be within a five- to 10-minute walk of an activity, node or urban amenity (Allen, 2018).

While the 800-metre catchment may be a good starting point, the draw of certain amenities will influence how far people are willing to walk to access them, and is likely to influence the size of a walkable catchment. While walkable catchments of 400 to 800 metres will be suitable for most tier 1 urban environments, it may be appropriate for larger tier 1 urban environments to consider greater distances in some situations. For example, where rapid transit is of high frequency, there is potential for higher densities and other factors such as high amenity along adjacent main routes and corridors.

Research in Auckland of pedestrians’ trips to train stations (rapid transit stops) showed half of the people surveyed walked further than 800 metres to a train station. Using this information, Auckland Transport suggested a range of sizes for desirable walkable catchments for town and neighbourhood centres and amenities. These ranged from 400 metres (a five- to 10-minute walk), and 1000 metres or a 20-minute walk for town centres and rapid transit stops, to 1200 metres for intermediate or high schools (Auckland Transport, 2018).

5.5.3 Different locations will have different-sized walkable catchments

Not all places are equal and different locations with different characteristics may often have different-sized walkable catchments. We should expect walkable catchments of rapid transit stops and a city centre to be larger than those of metropolitan centre zones, particularly in larger tier 1 urban environments. This is because city centres are likely to be larger, have more services and amenities, and be better connected than a metropolitan centre. Also, the convenience of using rapid transit and the connections that rapid transit services often offer, mean people are prepared to travel further to use them than other modes of public or active transport.

The centre's size can also affect the size of the catchment. For example, a smaller metropolitan centre with fewer services and amenities than a larger centre, will also be likely to have a smaller walkable catchment. Additionally, a city or a metropolitan centre with a rapid transit stop located within or close by, is also likely to have a larger walkable catchment than a centre without a rapid transit stop.

Although it is up to each local authority to determine the size of walkable catchments appropriate for local circumstances, we offer the following recommendations consistent with long-standing academic and international best practice:

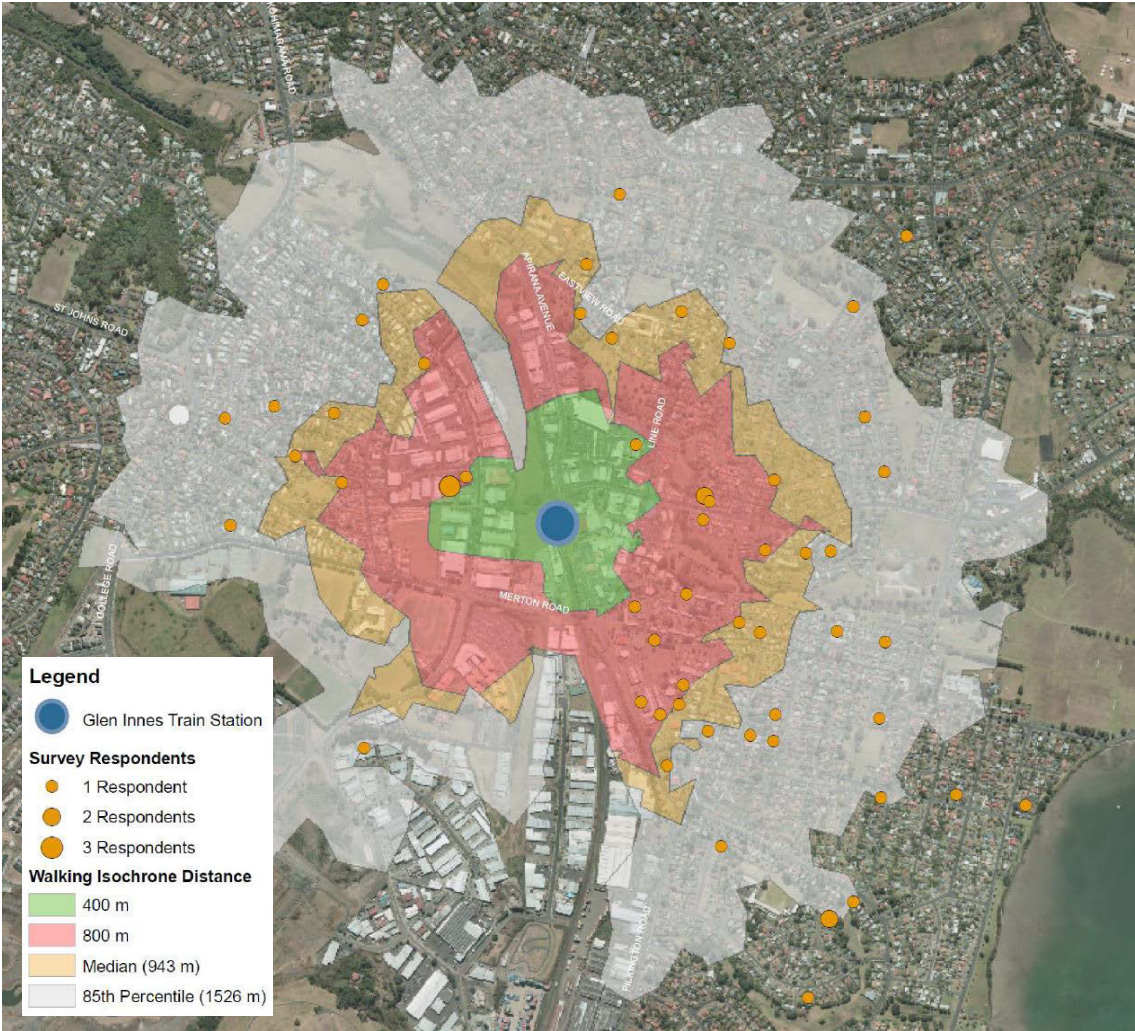
1. A distance of 800 metres from each main entrance to a transit stop is considered a minimum walkable catchment in all urban areas.
2. For larger tier 2 and all tier 1 local authorities, we suggest this threshold is extended further to account for local factors that include:
 - Street layout – are the streets laid out in a grid, or well connected through footpaths and open space that permit easier connectivity?
 - Severance – are major pieces of infrastructure or natural landscape interrupting or channelling convenient pedestrian movement?
 - Topography – how hilly or steep an area is will affect how easy or difficult it is for people to walk within a period of time.
 - Connectivity – are there footpaths on both sides of the roads? Is there access via pathways that run through reserves and open space? Are there pedestrian crossings?
 - Urban amenity – what other activities, such as local retail, pharmacy or green space, exist in streets within the extended catchment that would encourage local walking activity and multi-purpose trips?
 - Street lighting – are streets well lit, including through local footpath connections, to ensure that vulnerable groups feel secure?
 - Passive security – are footpaths and pedestrian routes overlooked by buildings with active frontages or otherwise designed to meet the security needs of vulnerable groups (noting that increased density can improve passive security)?
 - Mobility needs – is the street layout and accessible design suitable for those with mobility needs, specifically those using wheelchairs or with pushchairs, those using walking aids and other groups who may not be physically able to walk as far or as fast?
 - Other considerations – matters such as traffic light-controlled intersections, especially those that require pedestrians to wait for multiple lights to travel across a road, means a pedestrian's travel distance in a fixed period of time will be shorter.

5.5.4 Calculating walkable catchments

The most suitable way for tier 1 local authorities to calculate walkable catchments is to use spatial data and GIS. Tier 1 local authorities should have ready access to GIS software, digital road and pedestrian networks, which will enable a network analysis to determine walkable catchments. If you do not own and maintain your own digital road network that includes pedestrian access information, you can purchase these from a number of commercial providers.

You can calculate basic network catchments in GIS software, often known as isochrones, although these catchments may not always accurately represent true walkable catchments. An example is shown in Figure 6. Often, digital street and pedestrian networks do not take into account well-known walking paths and/or routes, such as those found in public parks, or other shortcuts. We recommend you check these software-generated catchments using other information, such as aerial photography and local knowledge, to ensure their accuracy.

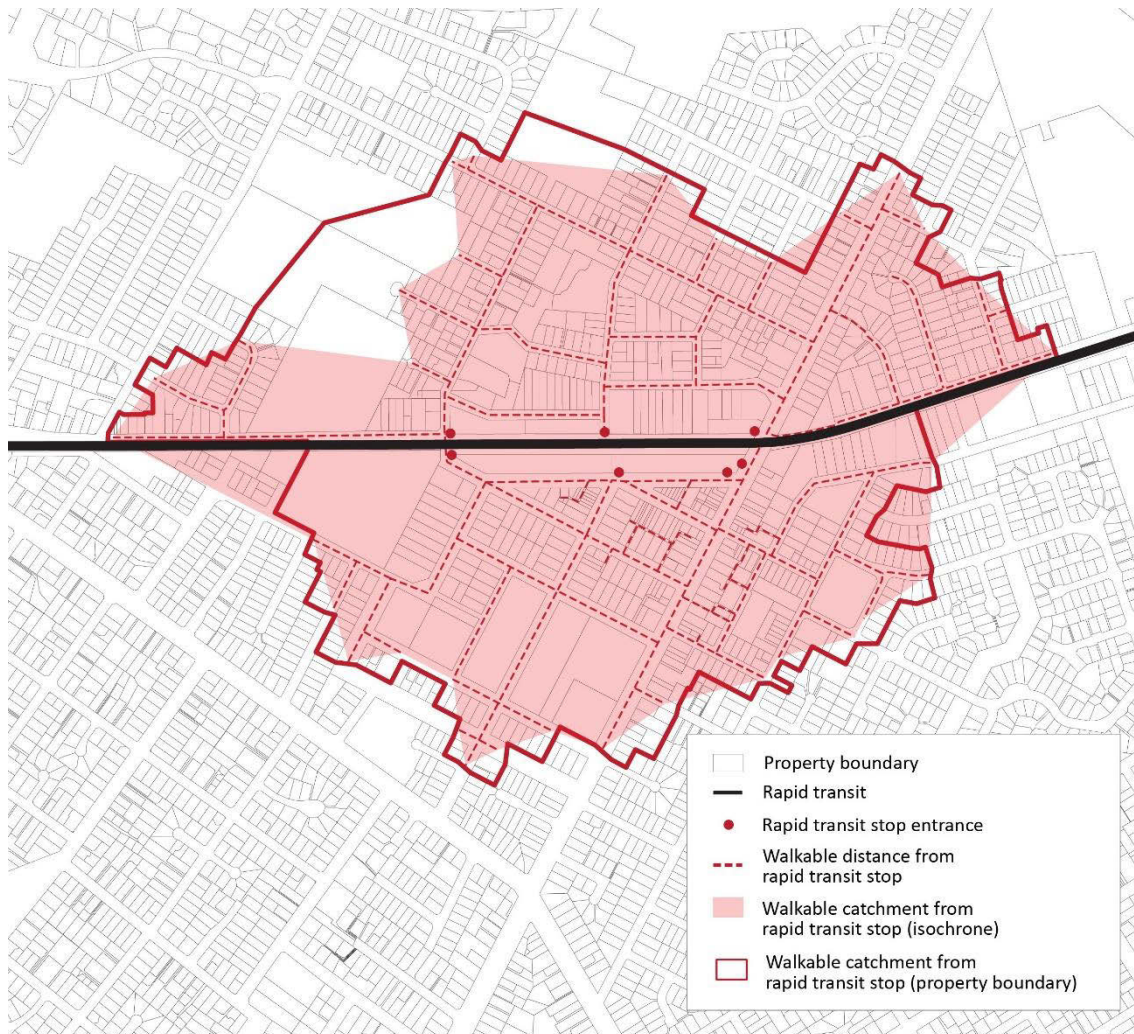
Figure 6: Example of ArcGIS generated walkable catchment isochrone for Glen Innes rail station in Auckland (Chung, 2012)



You may also want to consider using GIS-generated catchments as a guide to creating more formalised walking catchments based on property boundaries. This is because GIS-generated catchments will often cut across property boundaries, especially where properties are large. One benefit of having property-based catchments is they may help later when considering how to zone properties. Figure 7 below shows an example of the difference between a GIS-generated catchment

(isochrone) and a sense-checked, property-based catchment. This sort of assessment may also show where you could establish future walking connections.

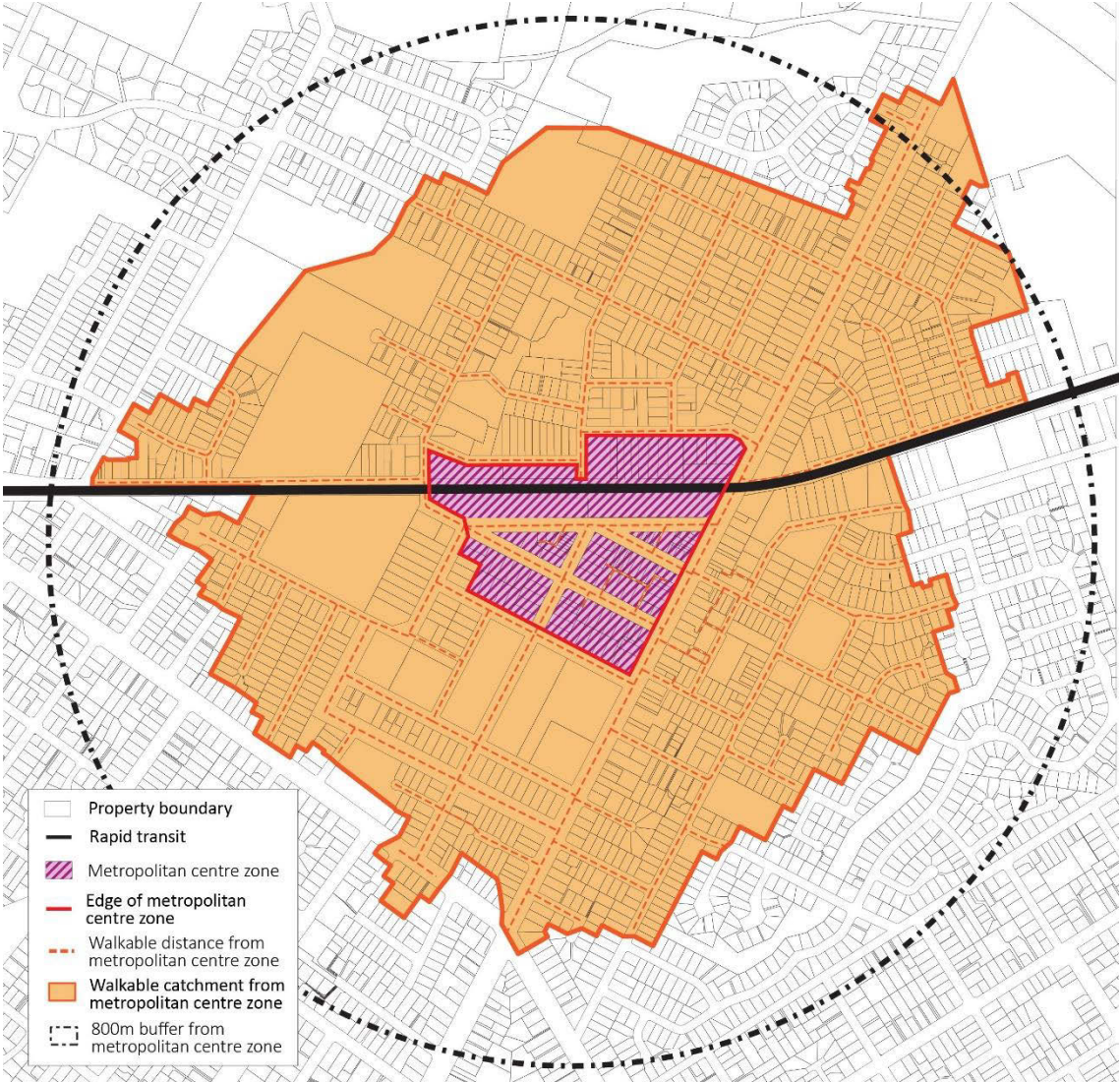
Figure 7: Example of GIS-generated catchment (isochrone) and property-based catchment for rapid transit stop



In the past, when complex digital road networks, including pedestrian access and the GIS network modelling tools to analyse them, were limited in availability and functionality, often radial circles from the centre point of an urban centre were used as a proxy for a walkable catchment. This technique is known as *pedshed* analysis. A link to a method for producing a pedshed by Active Healthy Communities can be found in [Resources](#).

It is common practice to use an 800-metre diameter circle to represent a 10-minute walk for most people in a community. While these circles may have proved to be a useful proxy in the past, they often misrepresented the actual size of a centre's walkable catchment – for example, including land that did not effectively form part of the catchment or areas not accessible via the pedestrian network (Munro, 2009). Figure 8 below shows the difference in size between a property-based, 800-metre walkable catchment and an 800-metre radius circle from a centre point.

Figure 8: Example of difference between an 800-m walkable catchment from the edge of a metropolitan centre zone and an 800-m radius circle from the centre of metropolitan centre zone



While the use of a pedshed circle to illustrate catchments can be used to conceptualise locations, it is not appropriate for tier 1 local authorities to use as a proxy when considering walkable catchments. However, this approach may be suitable for tier 2 and tier 3 local authorities with smaller urban environments to understand areas that may be suitable for intensification under Policy 5(a).

Local authorities have discretion when determining what radius best matches the likely pedshed based on the local context. This may mean, in some areas, a smaller radius of 400–600 metres, for example, is appropriate for tier 2 and 3 local authorities. Pedshed analysis of city and town centres could provide a suitable indicator of locations with high levels of accessibility, especially in terms of active transport modes to a range of commercial activities and community services. Where possible, we recommend local authorities use a GIS network analysis approach.

6 Determining heights and densities to support implementing the intensification provisions

Policies 3 and 5 of the NPS-UD direct the levels and type of intensification that local authorities must enable in urban environments. The following sub-sections step through the different intensification requirements across tier 1, 2 and 3 urban environments and in particular:

- the anticipated outcomes
- principles to consider
- high-level suggestions for how to approach the work required to give effect to these policies.

District plans include a package of controls relating to built form that manage a range of effects. These controls are still relevant when giving effect to the intensification provisions.

The intensification provisions are not intended to direct local authorities to have no controls. Plans will still have development controls, however local authorities need to pay careful attention to controls that affect height and density. If the controls in a plan undermine or restrict the ability to enable intensification as directed and prevent intensification outcomes from being achieved, then those controls need to be reviewed. This does not necessarily mean removing those controls from plans, but carefully reviewing and testing each control to ensure it is balanced to enable intensification.

None of the intensification requirements are intended to override or undermine good quality urban design or quality urban environments.

You should read and consider the other provisions in the NPS-UD together with the intensification requirements. Also, local authorities should continue to ensure the intensification outcomes will support well-functioning urban environments and sensible zoning patterns. ‘Sensible zoning patterns’ refers to zoning that takes into account how the package of zones work together. Refer to [section 6.4](#) Walkable catchments (Policy 3(c)) for further detail on this concept.

The heights and densities that should be enabled by local authorities in Policies 3 and 5 will look different across urban environments. The policies require local authorities to consider the local context, while applying the principles and policy intent as outlined in [section 5](#) and [section 6](#) of this guidance. A guiding principle is that more height and density should be enabled where evidence indicates it would be appropriate. This may include areas:

- with higher residential and business demand – for example, those with good views and/or outlooks, close to open space or with good access to jobs and other amenities
- within walkable catchments of centres or rapid transit stops
- with good accessibility that support access to planned and existing forms of public transport.

When considering where to enable intensification, note that locations with both high demand and accessibility are the most suitable. However, you do not need both good accessibility and relative

demand to enable greater heights and densities. Intensification must be enabled even if you only have high demand and low accessibility or vice versa.

6.1 Relevant policies

Policy 3: In relation to tier 1 urban environments, regional policy statements and district plans enable:

- (a) in city centre zones, building heights and density of urban form to realise as much development capacity as possible, to maximise benefits of intensification; and
- (b) in metropolitan centre zones, building heights and density of urban form to reflect demand for housing and business use in those locations, and in all cases building heights of at least 6 storeys; and
- (c) building heights of least 6 storeys within at least a walkable catchment of the following:
 - (i) existing and planned rapid transit stops
 - (ii) the edge of city centre zones
 - (iii) the edge of metropolitan centre zones; and
- (d) in all other locations in the tier 1 urban environment, building heights and density of urban form commensurate with the greater of:
 - (i) the level of accessibility by existing or planned active or public transport to a range of commercial activities and community services; or
 - (ii) relative demand for housing and business use in that location

Policy 5: Regional policy statements and district plans applying to tier 2 and 3 urban environments enable heights and density of urban form commensurate with the greater of:

- (a) the level of accessibility by existing or planned active or public transport to a range of commercial and community services; or
- (b) the relative demand for housing and business use in that location.

6.2 Enabling as much development capacity as possible in city centre zones (Policy 3(a))

In city centre zones, tier 1 local authorities are required to enable building heights and density of urban form to support as much development capacity as possible. This is to maximise the benefits of intensification. In practice, 'as much as possible' means removing unnecessary and unreasonable barriers to accommodate the maximum amount of development capacity that can be realised. Removing these barriers will help to enable greater up-zoning in city centres where intensification will have the greatest benefits.

Practically, 'as much as possible' will likely look different in various urban environments. City centres are a step up in the zoning hierarchy from metropolitan centres, so enabling as much development capacity as possible is expected to mean greater than six storeys (because six storeys is the minimum

for metropolitan centres). Tier 1 local authorities should be considering the level of demand and accessibility in determining what heights and densities can be enabled. In practice, this may mean:

- no maximum building heights or maximum gross floor area (GFA) standards in city centre zones or large parts of city centre zones
- development standards that may limit building height and density, where there is evidence that doing so will contribute to a well-functioning urban environment and achieving the objectives of the NPS-UD as a whole.

In giving effect to this policy requirement, local authorities need to step through the following:

- Consider what ‘as much as possible’ is going to mean in the city centre, taking into account local circumstances and factors – specifically, the level of demand and accessibility should be key considerations.
- Consider if any of the qualifying matters (eg, matters of national importance, open space, heritage orders or other matters) apply to the city centre. Also, look at to what extent heights and densities may need to be modified to accommodate the qualifying matter. (The qualifying matters set out the matters local authorities need to consider in enabling ‘as much as possible’.)
- Review the current city centre controls and determine if they are enabling enough to support the outcomes intended in the NPS-UD and by Policy 3(a). This means checking the controls are enabling as much development capacity as possible to maximise the benefits of intensification. If not, the controls will need to be amended accordingly.
- In maximising the benefits of intensification, consider whether enough intensification has been enabled to support outcomes such as transport choice, accessibility and climate emissions reduction. If you are not maximising the benefits of intensification due to other factors (eg, character), ensure the effects of doing so have been taken into account using adequate evidence in a section 32 report.
- As directed by Policy 6, consider what ‘as much as possible’ will mean for the urban environment in terms of urban form, amenity changes and the benefits of urban development. Local authorities will need to ensure the specific outcome of enabling as much development capacity as possible is consistent with the wider NPS-UD policy direction.
- Consider if the outcome and/or decision on what ‘as much as possible’ means for the city centre environment will ensure that a well-functioning urban environment is achieved.

In some urban environments, there may be circumstances or factors, which are linked to the qualifying matters in the NPS-UD (subpart 6, clause 3.33), that will mean these will need maximum height limits or GFAs in city centre zones. Any such decisions will need to be supported by robust evidence and analysis. Where heights and density within city centres are scaled below maximum levels due to other circumstances or factors, the trade-offs of this approach should be clearly articulated in a section 32 report.

Local authorities will need to ensure they enable as much development capacity as possible and that the outcomes will deliver a well-functioning urban environment, which enables all people and communities to provide for their social, economic and cultural wellbeing and for their health and safety, now and into the future.

Subpart 7 of the NPS-UD requires local authorities to ensure objectives, policies and rules in district plans are consistent with the outcomes required by the intensification provisions. To ensure as much development capacity as possible is enabled in city centre zones, local authorities will need to:

- clearly articulate the development outcomes intended in the city centre zone objectives
- review and, if necessary, update the rule framework to ensure development controls relating specifically to heights and densities will not undermine intensification and that the cumulative effects of district plan provisions are consistent with the outcomes required.

6.3 Metropolitan centre zones (Policy 3(b))

The requirement for tier 1 local authorities to enable at least six storeys in metropolitan centres is intended to ensure there are sufficient opportunities to enable more people to live in, and more businesses and community services to be located in, areas with high demand and good access and well-served by existing or planned public transport. In most cases, metropolitan centre zones will exhibit most, if not all, of these attributes.

Tier 1 local authorities are required, at a minimum, to enable at least six storeys within metropolitan centre zones. The six storeys is a minimum and not a target, with Policy 3 requiring building heights and density of urban form to reflect demand for housing and business use. There may be cases where higher heights and densities than the six-storey minimum as directed might be appropriate, for example:

- where there is a high level of demand – this could include areas with good outlooks or views, or areas adjoining or near open space, which provide higher levels of amenity
- areas with more jobs or access to job opportunities
- areas where multiple modes of transport are accessible – both public and active.

In these types of scenarios, amongst others, it would be considered appropriate to enable more intensification than the minimum requirement. This would mean, for example, that if there was demand for residential and commercial space in a metropolitan centre that required more than six storeys, then that would be what should be enabled.

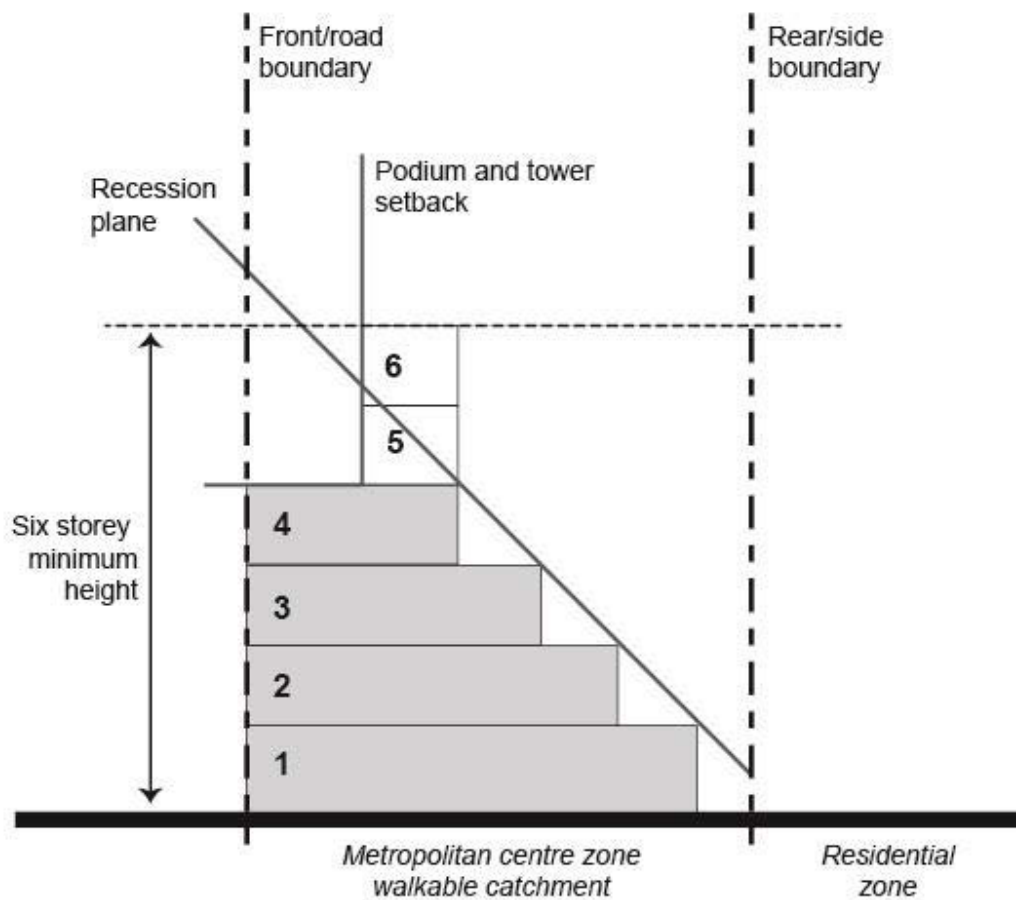
For the avoidance of doubt, the six-storey minimum is the minimum district plans must enable and not a minimum development rule. For example, local authorities are not required to set objectives, policies and rules to prevent the construction of buildings less than six storeys. While plans must enable six or more storeys, a developer or land owner can still choose to construct a four-storey building. Instead, district plans just need to be enabling, with the controls supporting the minimum height (six storeys or more) and as much yield of developable space across a site as appropriate, without compromising well-functioning urban environments. This will include:

- reviewing and, if necessary, updating provisions to enable these outcomes to be achieved, including understanding how the package of controls affects the delivery of both the minimum storey requirements and the total developable space yields. This will require understanding how the provisions relate to (but are not limited to) gross floor area, yard and podium setbacks and recession planes
- enabling maximum yield across a site – this doesn't mean density controls cannot be used but rather they shouldn't undermine or restrict these outcomes

- enabling different building typologies that support a greater yield across a site (eg, height and density).

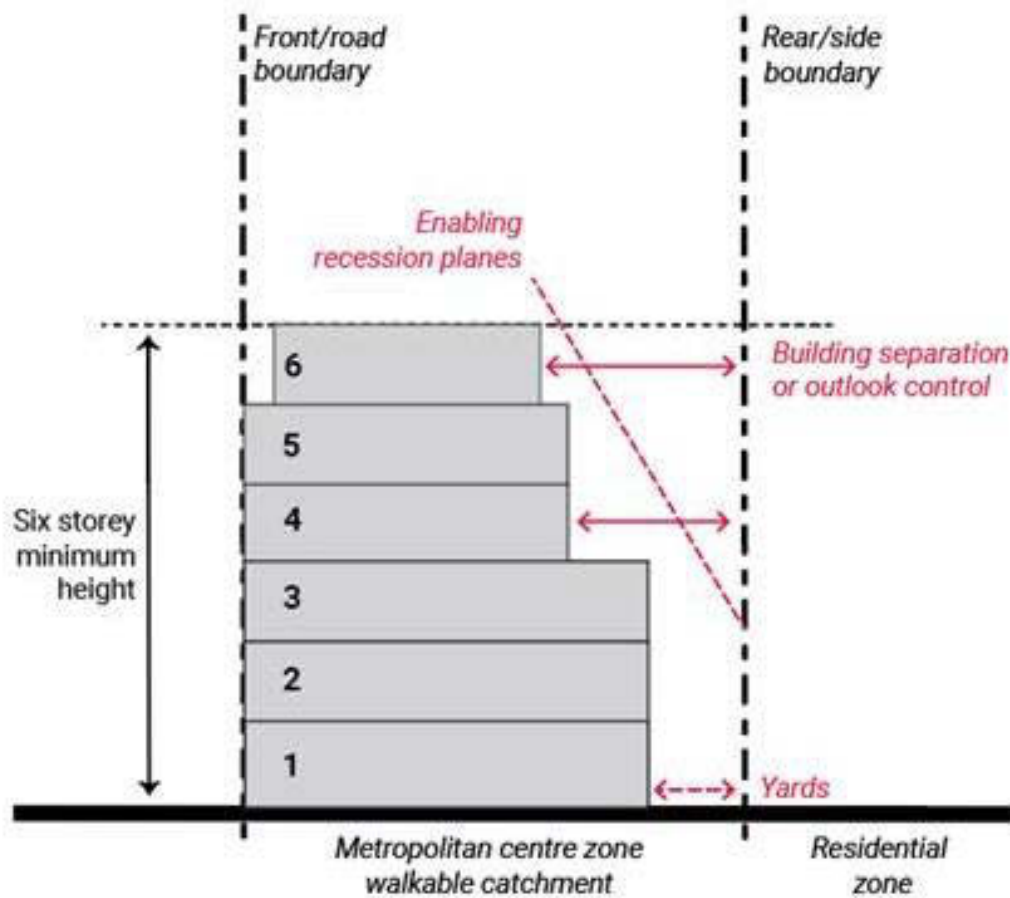
The below example (Figure 9) shows how a package of district plan rules could prevent or undermine six storeys from being realised on sites in the walkable catchment of a metropolitan centre zone. In this case, the application of rules (eg, setback from the front or road boundary and height in relation to boundary from the adjoining residential zone) in practice only allows four storeys to be realised and prevents the six minimum storeys being achieved.

Figure 9: Example of how a package of district plan controls could prevent the six-storey minimum being achieved in a metropolitan centre zone walkable catchment



Instead, local authorities should ensure the package of district plan rules allows six storeys to be realised on sites. Figure 10 below shows how district plan rules and controls can enable six storeys. In this case, recession planes may still be appropriate but need to enable flexibility at upper floors. In combination with other controls (eg, yards), increased recession plane angles and projection heights can support taller buildings. For example, these recession planes can still enable adequate daylight or sunlight to adjacent sites or zones, as well as encourage some building setback at upper levels to reduce perceived building height and visual dominance. Local authorities should also consider providing a gradual step down in zones and where to locate zone boundaries to avoid interface issues with adjoining zones.

Figure 10: Example of how a package of district plan controls could enable the six-storey minimum in a metropolitan centre zone walkable catchment



6.4 Walkable catchments (Policy 3(c))

The minimum height is also six storeys for areas within a walkable catchment of rapid transit stops, or the edge of city centre and metropolitan centre zones (refer [section 5.5](#) Walkable catchments). Again, six storeys is the minimum and not a target and, in many cases, local authorities should enable higher than six storeys, especially where there is evidence higher buildings would be appropriate, including when:

- the HBA for the urban environment shows there is high demand for residential and commercial space in a walkable catchment
- a walkable catchment of a city centre zone or metropolitan centre zone also falls within a walkable catchment of a rapid transit stop
- a walkable catchment enables access to planned and existing forms of public transport, especially frequent public transport services.

While enabling a minimum of six storeys is required within walkable catchments of city centre and metropolitan zones and rapid transit stops, it is likely there are cases where higher heights and greater density (ie, greater than six storeys) are appropriate within these walkable catchments that local authorities should consider. This will depend on local circumstances and evidence. An example might include:

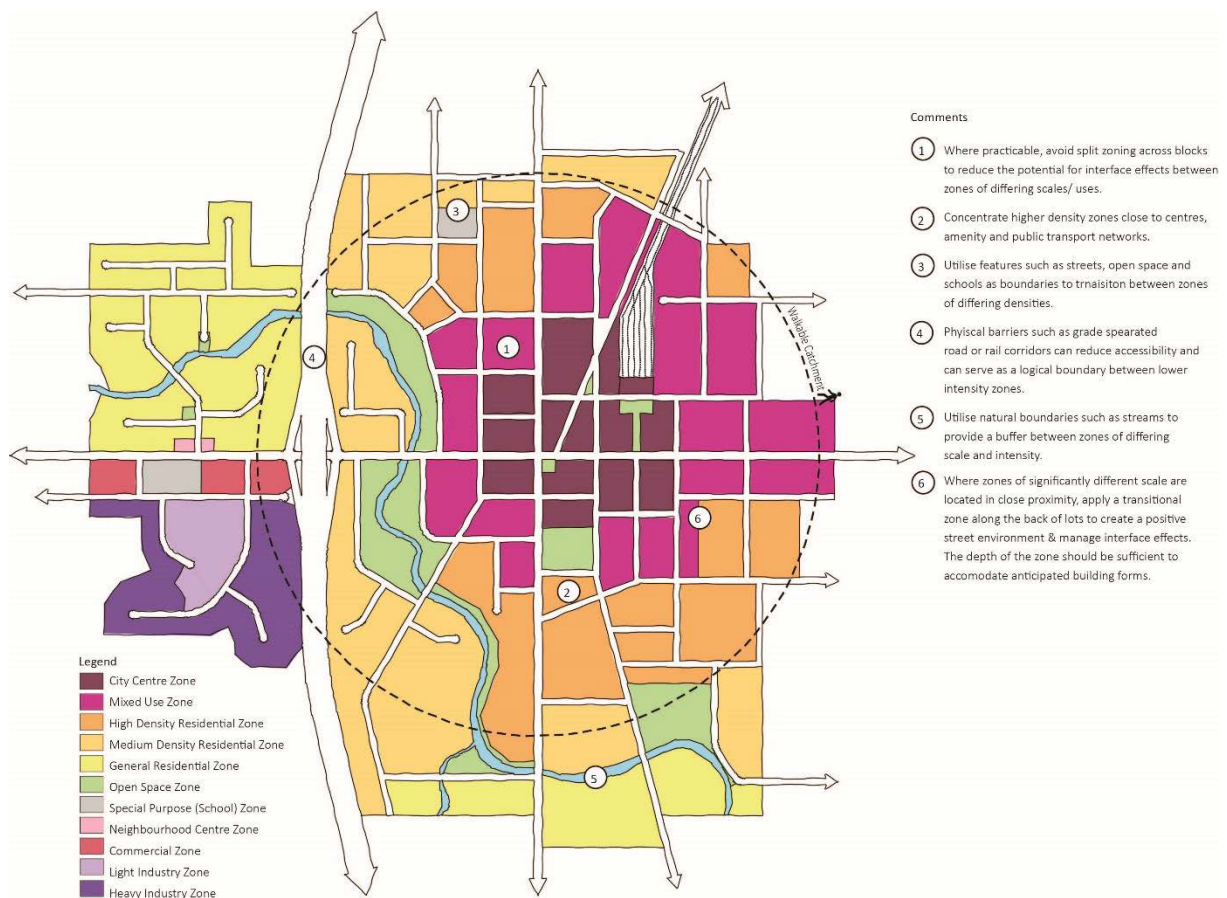
- Local authorities may wish to graduate or step down building heights, from the edge of their city centre or metropolitan centre zones that may have height limits considerably higher than six storeys, to the minimum six storeys that must be enabled inside, and to the edge of, walkable catchments.

As noted earlier, when enabling a minimum of six storeys within walkable catchments, local authorities should take care to ensure an appropriate zoning pattern is achieved. This is necessary to ensure there is consistency in the way areas are zoned and to ensure issues that can arise where different zones interface do not impact on delivering the other objectives of this NPS, such as well-functioning urban environments. Some key considerations for intensification in achieving sensible zoning patterns include:

- consistency in the way areas are zoned and how the different zones are applied
- interface of zones and avoiding putting zones side by side – this could include using steps down in zones to avoid the impacts on more sensitive zones
- integrating zones and trying to align or create more natural transitions between compatible zones.

In achieving a sensible zoning pattern as described above, local authorities will still need to ensure they enable at least the relevant height minimums. Figure 11 below provides one example of a sensible zoning pattern for intensification, achieving a gradual step down.

Figure 11: Sensible zoning patterns for intensification achieving a gradual step down



6.5 Enabling building heights and density commensurate with accessibility and demand (Policies 3d and 5)

Policy 3(d) for tier 1 local authorities and Policy 5 for tier 2 and 3 local authorities of the NPS-UD requires building heights and densities of urban form to be enabled commensurate with the:

- level of accessibility by existing or planned active and public transport to a range of commercial activities and community services, or
- relative demand for housing and business use in that location.

For tier 1 urban areas, this will be for all areas outside of city centre and metropolitan centre zones, as well as walkable catchments of existing and planned rapid transit stops and the edge of city centre and metropolitan centre zones.

Tier 2 and tier 3 urban areas will need to apply Policy 5 to their entire urban area.

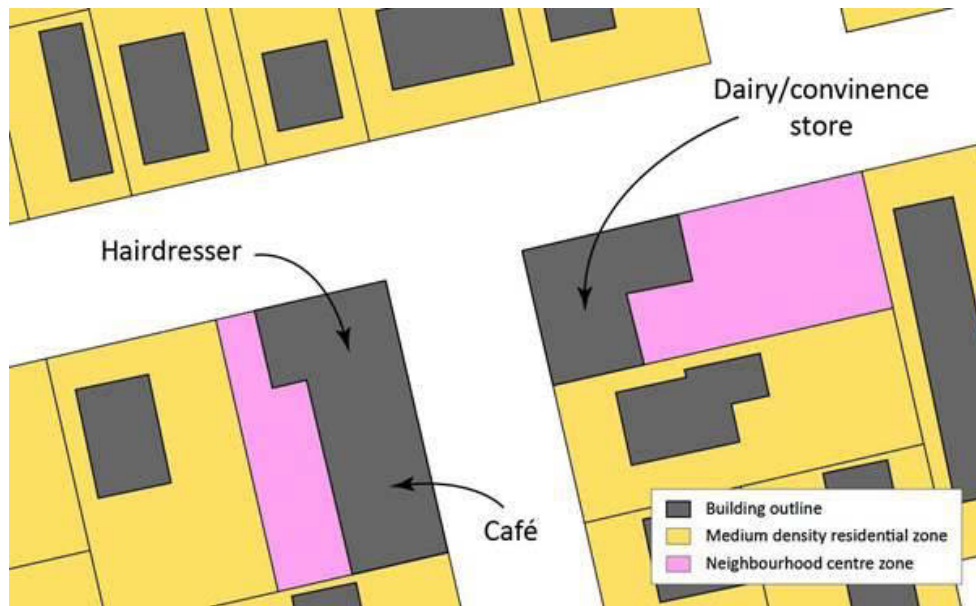
6.5.1 A 'range' of commercial activities and community services

Commercial activities include those that serve the needs of the community (eg, shops) and provide people with employment. Community services include health care, education (including universities and tertiary training institutes), cultural activities (eg, museums, galleries, churches) and land or venues for sport and recreation.

A 'range' of services should be thought of as a variety of commercial and community services that serve the needs of the catchment when implementing this policy. For example, a doctor and/or pharmacy, school and/or kindergarten and a café and shops would be considered as providing a range of services. The locations that provide a range of activities and services are likely to be places that are easily accessible to a wide range of people. These locations will often be commercial centres within urban areas, ranging in size from smaller local or town centres through to larger metropolitan centres or even city centres (in the case of tier 2 and tier 3 urban environments).

This also means a small set of neighbourhood shops, for example with amenities such as a dairy, hairdresser and butcher, would not likely be considered to be providing a range of services. An example of neighbourhood shops that would not be considered to provide a range of services is shown in Figure 12 below.

Figure 12: Example of neighbourhood shops that do not provide a 'range of services'



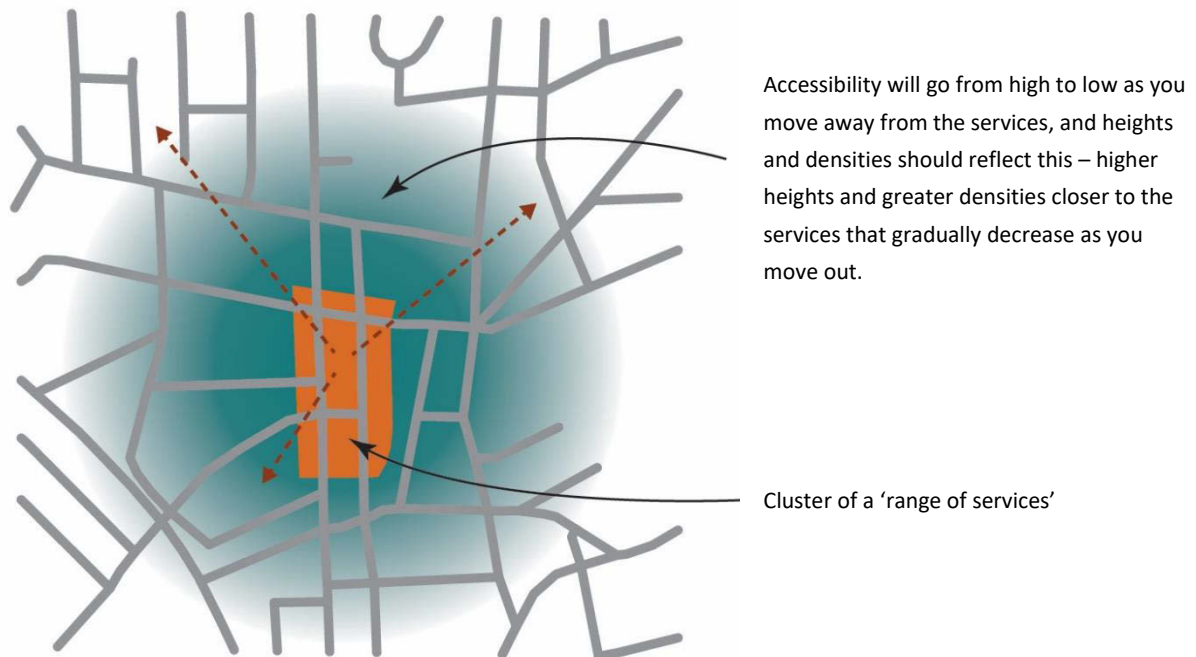
6.5.2 Determining the level of accessibility to a range of services

Guidance on accessibility is provided in [section 5.4](#) Measuring accessibility above. This section should be referred to when determining accessibility.

Areas closer to a range of services will have a higher level of accessibility than areas further away from services. This means the level of accessibility will range from higher to lower, depending on the distance from a range of services. Heights and densities enabled must be commensurate to the level of accessibility. This means areas with high accessibility (ie, those areas closest to a range of services) should have greater heights and densities enabled which (depending on the level of demand) may gradually decrease as you move away from the services and as accessibility reduces. If you have both high demand and high accessibility, you may find heights and densities do not gradually decrease like they could if you were intensifying based on high levels of accessibility only.

Below, Figure 13 shows how accessibility to a range of services, represented by a town centre, decreases as you move further away from them. In such a case, district plan rules should reflect that heights and densities would need to be greater the closer or more accessible they are to services. This figure illustrates accessibility by active modes. The area that is considered accessible by public transport could be much larger (if frequent public transport services operate in this area).

Figure 13: Example of a 'range of services' interacting with accessibility only and how this influences heights and density



6.5.3 Determining relative demand for housing and business use

Determining relative demand for housing and business use to enable commensurate heights and density or urban form will be undertaken differently for tier 1, 2 and 3 local authorities.

In preparing the intensification plan changes, some principles or types of areas where demand is often high and intensification is likely to be appropriate could include:

- areas with high land prices relative to others
- locations close to open space and recreation opportunities
- areas within, or close to, centres
- areas with good transport opportunities – including frequent public transport, multi-mode transport opportunities (eg, public transport, walking and cycling) and freight
- areas close to key services including, schools, hospitals and supermarkets
- areas close to a range of business activities
- locations with good views, outlook and amenity, including areas with water views or green space outlooks.

Determining and understanding relative demand in tier 1, 2 and 3 urban areas could be achieved through a number of different methods. As a general starting point for all local authorities, land price is a good proxy to consider in understanding demand; areas with high land prices indicate the areas are more desirable to live in. When combined with capital values in an area, this will help highlight locations where it is desirable and/or feasible to deliver intensification.

Methods to understand and determine demand that local authorities may use include:

- using information produced as part of an HBA for tier 1 and 2 local authorities
- using population and growth projections and statistics for the areas or regions – this may be particularly helpful for tier 3 local authorities
- analysing recent resource consent data to highlight areas where there may be high demand, such as:
 - areas where a number of consents have been lodged for housing and business use
 - the number of consents seeking to infringe standards such as maximum building height, building coverage and height in relation to boundary gross floor area, or
 - other development controls that impact on the development potential of a site
- surveying consumer preferences under scenarios where higher-density housing is permitted using highly flexible zoning and building rules (ie, unconstrained demand for a greater range of housing types and prices). Additionally, local authorities could engage with the development sector to understand preference
- monitoring economic indicators such as land prices. As noted above, these can be used as a proxy to indicate demand; if comparable land prices are high, it would suggest there is higher relative demand.

One particular method an HBA can use to understand areas of high demand in an urban area is analysing the capital value-to-land value ratio of properties. This is detailed in [the Guide on Evidence and Monitoring](#), which was produced to support the implementation of the National Policy Statement on Urban Development Capacity (2016).

A high land value-to-capital value ratio can indicate the land is in a location of high demand and the land use is under-capitalised. This is likely to mean it is feasible to redevelop for greater intensification. For example, when the relative price of a land parcel rises, it is a signal people want to live and work in that location. Land with low capitalisation is easier and more profitable for development because most of the value is in the land (as shown in the [cost-benefit analysis for the NPS-UD](#)). Under-capitalisation might also be in relation to a disparity between the current and possible land use, such as what is there now and what could be provided if greater density was enabled. This indicates these places could be suitable for intensification.

The matrix shown in table 2 below shows how local authorities could use this metric to understand and identify areas most suitable for intensification.

Table 2: Capitalisation and land value and suitability for redevelopment and intensification

	Low land value	High land value
High capitalisation	<p>Low value land and high capitalisation, unlikely to be redeveloped</p> <p>Areas of low demand, likely not suitable for intensification</p>	<p>Valuable land and high capitalisation, limited likelihood of redevelopment</p> <p>Areas of some demand, may suitable for intensification</p>
Low capitalisation	<p>Low value land and low capitalisation, unlikely to be redeveloped</p> <p>Areas of some demand, may suitable for intensification</p>	<p>Valuable land and low capital value, likelihood of redevelopment</p> <p>Areas of most demand, most suitable for intensification</p>

The Ministry of Housing and Urban Development (HUD) have done some work on understanding the costs of growth. This work includes developing a methodology for local authorities to understand and measure the wider costs and benefits of different forms of urban development in different locations. We also expect the methodology could be used as an input into HBAs and to assess appropriate areas for intensification. The methodology will be available by the end of 2020.

When determining demand, tier 3 local authorities could also look to their centre type zones (city centre, town centre, neighbourhood centre), where demand and access is likely to be greatest, as starting points for locations that are best suited for intensification.

While tier 3 local authorities are not required to undertake an HBA, they must undertake basis evaluations and analysis as directed in subpart 3, clause 3.9 of the NPS-UD – for example, analysing the price of and rents for dwellings can assist in understanding housing demand. They may also wish to apply and consider the principles of an HBA to determine demand including:

- current supply of housing and whether there is additional demand
- housing affordability across the district
- location of housing
- dwelling typologies – for example, is there a shortage or desire for a particular typology
- number of dwellings that can reasonably be expected to be realised.

Heights and densities enabled in urban areas must be commensurate to the level of demand. This means areas with high demand should enable greater heights and densities than areas with low or no demand.

6.5.4 What this means for intensification outcomes

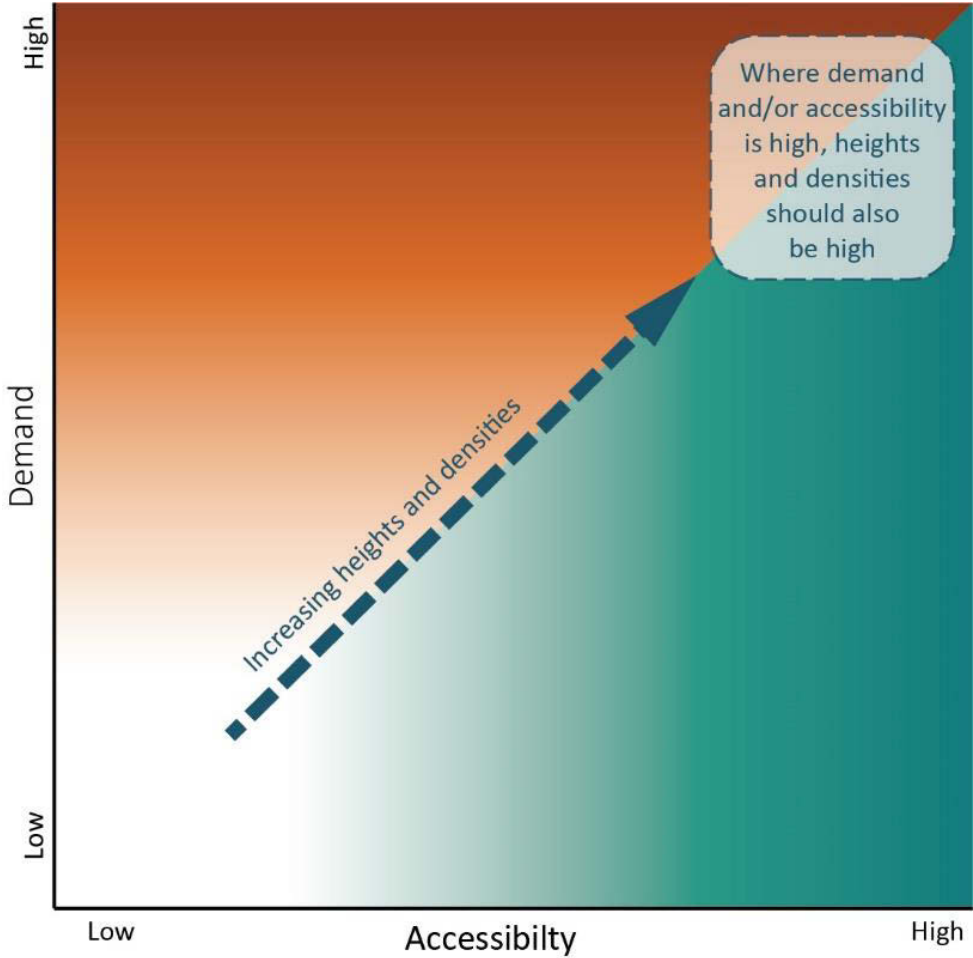
Enabling heights and density of urban form commensurate to accessibility and demand is going to look different across urban environments of varying size. It is important local authorities remember:

- you do not need both good accessibility and higher relative demand to enable greater heights and densities
- if you have high demand but no/low/moderate accessibility you still need to ensure greater heights and densities are enabled
- if you have high accessibility but no/low/moderate demand you still need to ensure heights and densities that reflect the level of accessibility are enabled
- if you have both high demand and high accessibility then you should be seeking to enable more height and density in those areas, as these are the most suitable to accommodate intensification.

In all the above situations, it is important intensification is enabled in a way consistent with meeting the definition of well-functioning urban environments (Policy 1).

Figure 14 below illustrates visually how you could think about enabling heights and densities when assessing a location against demand and accessibility. By plotting on the graph a location's demand and accessibility, you can understand the extent to which you should enable density and heights. The higher a location's accessibility or demand, the more enabling your density and heights will need to be.

Figure 14: Example framework for determining heights and densities for other areas in tier 1 urban environments



The building height and density of urban form that is enabled through development standards will result in different housing typologies and business uses.

Different housing typologies exist (see Figure 15 below) which result in a range of heights and densities. These include:

- detached single-level houses
- townhouses
- duplex and multiplex houses
- terrace housing
- apartments.

Figure 15: Spectrum of housing typologies



In general, terrace housing and apartments will have greater heights and densities than townhouses and detached single-level houses. Local authorities will need to think about the spectrum of typologies and outcomes that are appropriate to be enabled, based on the level of accessibility and demand. For example, if you have high accessibility and high demand it could be appropriate to enable apartments and more intensive business uses in an area.

6.5.5 Amending district plans

The level of accessibility and demand will be different across urban areas. Therefore, local authorities should consider options for implementing the intensification provisions through changes to regional policy statements and district plans. In giving effect to the intensification provisions, this could mean:

- rezoning areas to enable greater building height and density
- amending the development standards for an existing zone to enable commensurate heights and densities
 - there may be instances where most of an existing zone is suitable for intensification, with a small area that might not be suitable because it does not meet the accessibility or demand criteria. For consistent zoning outcomes, local authorities may decide to enable greater height and density throughout the zone
- using other planning tools such as:
 - precincts: in instances where there are various pockets across urban zones suited to intensification, but it is inappropriate to enable greater building heights and densities across the entire zone, local authorities could consider using a precinct to enable greater heights and densities within specific areas of an existing zone. Refer to Standard 12 (District Spatial Layers Standards) of the standards for further information on precincts
 - specific control: the standards provide for ‘specific controls’ to spatially identify where a site or area has provisions that are different from other spatial layers, or where district-wide provisions apply to that site or area. Particular areas of a zone may be suited to intensification, but it is inappropriate to enable greater building heights and densities across the whole zone. In these instances, local authorities could consider using a specific control to enable greater heights and densities within specific areas of an existing zone. Refer to

Standard 12 (District Spatial Layers Standards) of the standards for further information on specific controls.

6.6 Qualifying matters – application

The directive intensification outcomes in Policy 3 for tier 1 local authorities are designed to enable higher densities in locations where it is most suited. However, there may be some areas that are not suitable for higher levels of intensification, or any intensification because of a qualifying matter. Where a qualifying matter applies, this does not mean intensification should not be enabled, rather that local authorities should carry out a comprehensive analysis and must seek to enable the greatest heights and densities possible while managing the specific qualifying matter (clause 3.32 and 3.33).

6.6.1 Relevant policy

Policy 4: Regional policy statements and district plans applying to tier 1 urban environments modify the relevant building height or density requirements under Policy 3 only to the extent necessary (as specified in subpart 6) to accommodate a qualifying matter in that area.

Subpart 6, clause 3.32 Qualifying matters

- (1) In this National Policy Statement, **qualifying matter** means any of the following:
 - (a) a matter of national importance that decision-makers are required to recognise and provide for under section 6 of the Act
 - (b) a matter required in order to give effect to any other National Policy Statement
 - (c) any matter required for the purpose of ensuring the safe or efficient operation of nationally significant infrastructure
 - (d) open space provided for public use, but only in relation to the land that is open space
 - (e) an area subject to a designation or heritage order, but only in relation to the land that is subject to the designation or heritage order
 - (f) a matter necessary to implement, or ensure consistency with, iwi participation legislation
 - (g) the requirement to provide sufficient business land suitable for low density uses to meet expected demand under this National Policy Statement
 - (h) any other matter that makes high-density development as directed by Policy 3 inappropriate in an area, but only if the requirements of clause 3.33(3) are met.

Subpart 6, clause 3.33 Requirements if qualifying matter applies

- (1) This clause applies if a territorial authority is amending its district plan and intends to rely on Policy 4 to justify a modification to the direction in Policy 3 in relation to a specific area.
- (2) The evaluation report prepared under section 32 of the Act in relation to the proposed amendment must

- (a) demonstrate why the territorial authority considers that:
 - (i) the area is subject to a qualifying matter; and
 - (ii) the qualifying matter is incompatible with the level of development directed by Policy 3 for that area; and
 - (b) assess the impact that limiting development capacity, building height or density (as relevant) will have on the provision of development capacity; and
 - (c) assess the costs and broader impacts of imposing those limits.
- (3) A matter is not a qualifying matter under clause 3.32(1)(h) in relation to an area unless the evaluation report also:
- (a) identifies the specific characteristic that makes the level of development directed by Policy 3 inappropriate in the area, and justifies why that is inappropriate in light of the national significance of urban development and the objectives of this National Policy Statement; and
 - (b) includes a site-specific analysis that:
 - (i) identifies the site to which the matter relates; and
 - (ii) evaluates the specific characteristics on a site-specific basis to determine the spatial extent where intensification needs to be compatible with the specific matter; and
 - (iii) evaluates an appropriate range of options to achieve the greatest heights and densities directed by Policy 3, while managing the specific characteristics.

6.6.2 Qualifying matters

When giving effect to the Policy 3 (a, b, c and d) of the NPS-UD, tier 1 local authorities may modify, but only if necessary, the intensification requirements as directed if one of the qualifying matters in the NPS-UD apply. Qualifying matters mean any of the matters listed in subpart 6, clause 3.32. The matters are very specific, with the exception of 3.32(h) relating to ‘other matters’, which may also qualify for making higher-density development inappropriate. Where local authorities wish to use clause 3.32(h), a more robust evidence base is required to justify why intensification requires modification through a site-specific analysis, and also the requirements in clause 3.33(3) must be met. Some examples of what might be anticipated to be raised as an ‘other matter’ include:

- special character
- viewshafts
- less significant hazard risk, that is not covered by s6 of the RMA.

Where a qualifying matter is applicable for a tier 1 local authority, this does not mean intensification is excluded from an area, but instead that it is to be modified only to the extent necessary to accommodate the qualifying matter.

In addition, in the case of ‘other’ matters, it does not mean local authorities cannot have viewshafts or special character, for example. These can be retained where evidence supports their need. The qualifying matters simply provide the scope for local authorities to modify the level of intensification if it is required to protect the specific matter.

Local authorities will need to consider what qualifying matter is applicable carefully and then undertake a detailed assessment to determine the most appropriate level of intensification. This may look like:

- reduced building heights from the applicable minimum height required
- lower densities than the applicable minimum density required
- no intensification (although this is expected to be an exception).

This assessment will only be required if one of matters listed in clause 3.32(a–g) means that intensification will be limited.

6.6.3 Process to applying a qualifying matter

For any qualifying matter listed in subpart 6, clause 3.32 (a–g), for a tier 1 local authority to modify the intensification levels below those anticipated in Policy 3, an evaluation report must be prepared under section 32 of the RMA. This section 32 report must include and consider the following aspects in light of the requirements in subpart 6, clause 3.33:

- identify spatially, by location, where the qualifying matter applies, for example, a map showing the area to be assessed for a qualifying matter
- determine why an area is considered subject to a qualifying matter
- determine why the qualifying matter makes an area and/or site incompatible with the level of development directed by Policy 3 for that area
- assess the impact that limiting the development capacity, building height or density will have on providing development capacity overall
- assess the costs, benefits and broader impacts of imposing lower intensification levels in the area
- identify the appropriate alternative level of intensification for the area.

If a local authority believes there is an ‘other’ qualifying matter which is applicable under **subpart 6, clause 3.32(h)**, then a more detailed and robust assessment and higher evidential standard is required. In addition to the above matters, the following further evidence base must be prepared:

- identifying the specific characteristic or ‘other matter’ that makes the level of development directed by Policy 3 inappropriate
- justifying in the form of a detailed analysis and mapping to demonstrate why intensification is inappropriate (in light of the qualifying matter, the national significance of urban development and objectives of the NPS)
- conducting a site-specific analysis of the ‘other matter’ and where it needs to apply, such as the exact boundaries where intensification is inappropriate. Local authorities will need to undertake a site-by-site assessment, identifying the extent of the site or sites in the area subject to a qualifying matter. They will need to evaluate the specific characteristics on a site-specific basis to determine the spatial extent where intensification needs to be compatible with the specific matter
- evaluating an appropriate range of options of alternative heights and densities that could be applied to establish the best option to achieve the greatest heights and densities directed by Policy 3, while managing the specific characteristics.

Note that a blanket overlay approach to applying the qualifying matter is not appropriate. The qualifying matter should only apply to the specific, spatial extent required.

In practice, this means that:

- local authorities will need to justify their decisions on what ‘as much development capacity as possible’ means for determining heights and densities for a city centre zone with robust evidence in a section 32 report. They will also need to take into account any justifications under subpart 6, clause 3.33
- in metropolitan centres and other locations that require height limits of at least six storeys, local authorities will only need to provide justification where they believe a height limit needs to be less than six storeys, with site-specific analysis required if heights are being lowered due to an ‘other matter’
- local authorities will need to justify any height limits or densities lower than what is standard in their plans for that zone, in other areas identified as suitable for intensification, either due to being in a location of high demand or having good access
- local authorities may review, reduce or remove spatial application of ‘other’ matters, such as viewshafts, following assessment to enable greater intensification.

If tier 1 local authorities wish to modify heights and densities of intensification because of a qualifying matter, it is important they provide a robust evidence base and section 32 analysis, which clearly articulates the trade-offs of having less intensification.

They should answer the following questions in their analysis:

- What is the qualifying matter?
- Why is the qualifying matter something that is being considered within the specific location?
- What would be the implications of enabling intensification as directed by Policy 3?
- What area does the qualifying matter cover or what is the spatial extent?
- Why does the qualifying matter require heights and densities to be reduced and by how much?
- Are there alternative approaches or mitigations that could be put in place to avoid the need to reduce intensification? If not, why?
- How does limiting or reducing intensification in the area impact development capacity?
- What alternative to building height and density is appropriate without compromising the qualifying matter? What are the options?
- What are the trade-offs of not intensifying as directed?

Local authorities need to be mindful that just because a qualifying matter may apply or have been identified over a specific area, this does not mean intensification is inappropriate or should not be enabled. The level of intensification that may be enabled within areas where a qualifying matter applies may vary due to site-specific factors. Several different outcomes may be reached following the robust analysis and evaluation required under subpart 6, clause 3.33. For example:

- no intensification may be appropriate
- intensification as directed may not be achievable across the area but some intensification can be enabled

- areas within the extent of the qualifying matter may require lower intensification requirements, whereas intensification as directed by Policy 3 may be achievable in other sites within the wider spatial extent due to site-specific factors (eg, topography).

6.6.4 Qualifying matter ('other matter') – worked example

Figure 16: Step 1 – Identify the other qualifying matter or specific characteristic



Identify what the 'other' qualifying matter is – what is the specific characteristic, for example, view shaft, special character overlay that makes intensification as directed inappropriate.

Identify the area that the specific qualifying matter/specific characteristic applies, for example, the spatial extent.

Justify and clearly demonstrate why the qualifying matter needs to be considered and why intensification in the specific area is inappropriate in light of the importance of urban development and the objectives of the NPS-UD.

Figure 17: Step 2 – Undertake a site-specific analysis of all sites with the area that the qualifying matter applies



Undertake a site-specific analysis of all sites within the area that the qualifying matter applies.

Identify what the implications of enabling intensification as directed by Policy 3 would be.

Evaluate how and why the qualifying matter applies to each individual site.

Consider and clearly articulate the trade-offs of not enabling intensification as intended.

Undertake a cost-benefit analysis of a lower level of intensification.

Determine whether there are other mitigations or alternative approaches that could be put in place to avoid the need to reduce intensification.

Figure 18: Step 3 – Determine whether there are site-specific factors that may affect the level of intensification that can be realised eg, topography



Determine whether there are site-specific factors that may affect the level of intensification that can be realised, for example, topography.

Evaluate a range of options for each site within the qualifying matter area to achieve the greatest heights and densities possible, while managing the specific qualifying matter – for example, determine the different heights and densities that could be enabled without compromising the qualifying matter.

Figure 19: Step 4 – Determine and spatially identify where the qualifying matter applies



Following the site-specific assessments, determine and spatially identify:

- sites where the qualifying matter needs to apply and a lower level of intensification is required
- sites where the qualifying matter does not apply to the site and intensification as directed can be enabled.

The detailed assessment may result in local authorities wishing to remove or reduce the extent of the specific matter, for example, viewshaft or special character areas, to enable intensification as directed, if appropriate.

Figure 20: Step 5 – Enable intensification to the extent appropriate while managing the specific characteristic of the qualifying matter



Enable intensification to the extent appropriate while managing the specific characteristic of the qualifying matter.

This might mean that areas within the spatial extent covered by the qualifying matter have different levels of intensification enabled.

7 Full worked example of applying intensification provisions to determine heights or densities

This section of the guide takes you through an example to show how you need to consider the requirements of the intensification provisions. The example shows how you could apply the provisions to determine heights and densities in and around a metropolitan centre with a rapid transit stop and how this could translate to a zoning pattern.

There will be other factors beyond the ones shown in this example you may need to consider in zoning an area, including applying other provisions from the NPS-UD. This example presumes that open space and special zoning remain the same, while all other zones may be changed through applying the intensification provisions. This is reflected in the map figures.

Figure 21 below is a legend for the maps and aspects common to many of the figures in this section. Any additional features that you should note are shown in the legend for each individual map.

The example uses the standard zones set out in the national planning standards.

Figure 21: Legend/key for diagrams















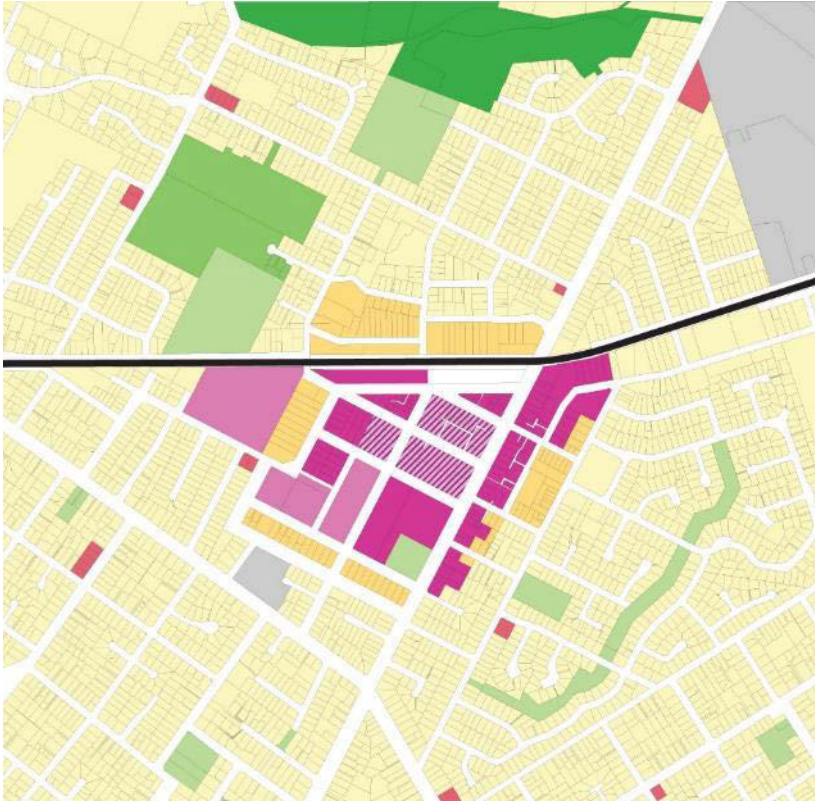
	Property boundary		Open space zone
	Rapid transit line		Sport and active recreation zone
	Metropolitan centre zone		Natural open space zone
	Mixed use zone		High density residential zone
	Large format retail zone		Medium density residential zone
	Commercial zone		General residential zone
	Special purpose zones		Low density residential zone

Figure 22: Current zoning pattern for a metropolitan centre that includes a rapid transit stop



In this example, current metropolitan centre zoning is surrounded by mixed-use zoning and large format retail, which is further surrounded by areas of a high-density, residential zone. Most of the urban area in this example is currently zoned low-density, residential zone.

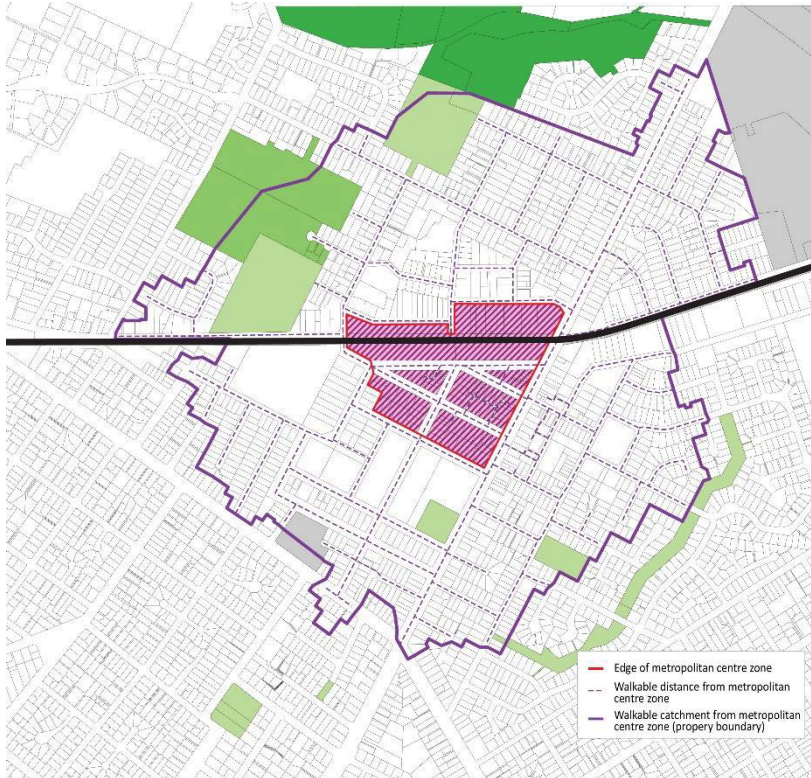
As part of applying the intensification provisions, the location of all of these zones would need to be reviewed.

Figure 23: Determine the extent of the metropolitan centre zone



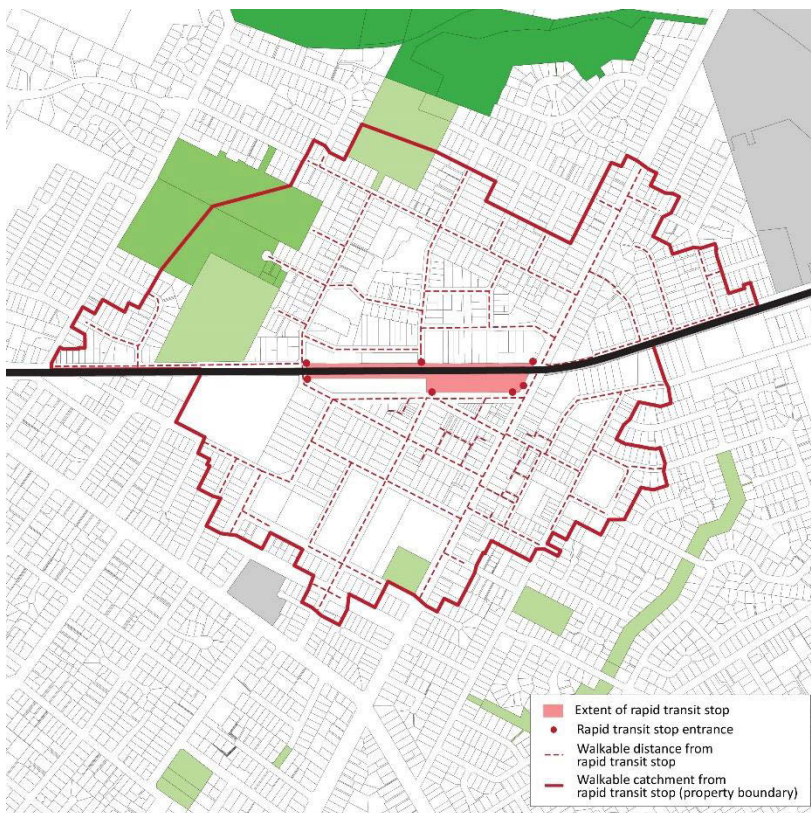
In this example, a review of the extent of the metropolitan centre zone was undertaken. It was decided it was appropriate to make the zone larger to accommodate demand.

Figure 24: Walkable catchment from edge of metropolitan centre zone



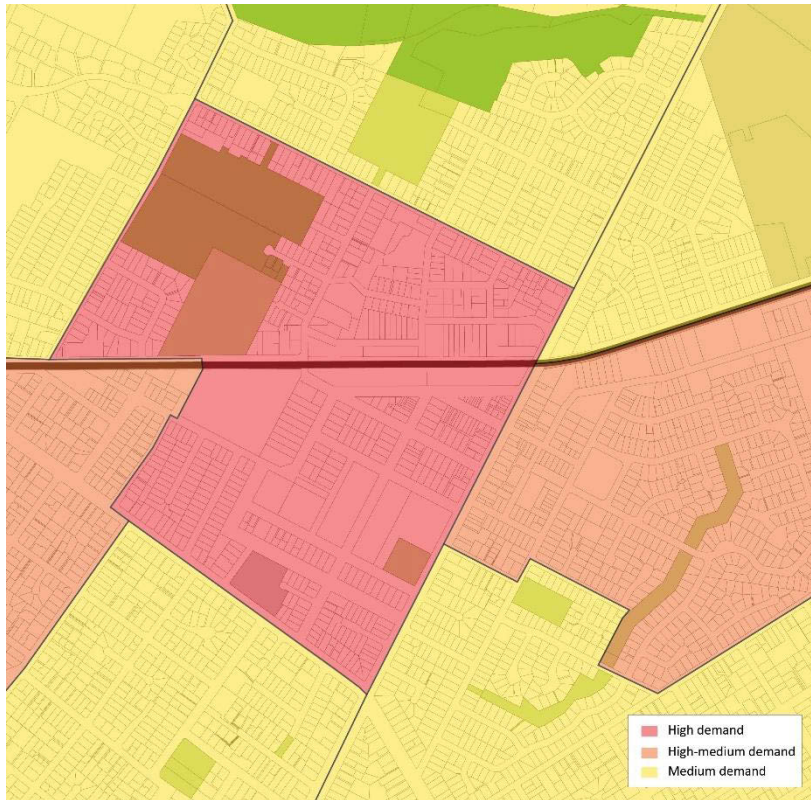
Using the extent of the metropolitan centre zone, the edge is determined. Then using GIS network analysis, the walkable catchment from the edge of the zone is determined.

Figure 25: Walkable catchment from rapid transit stop



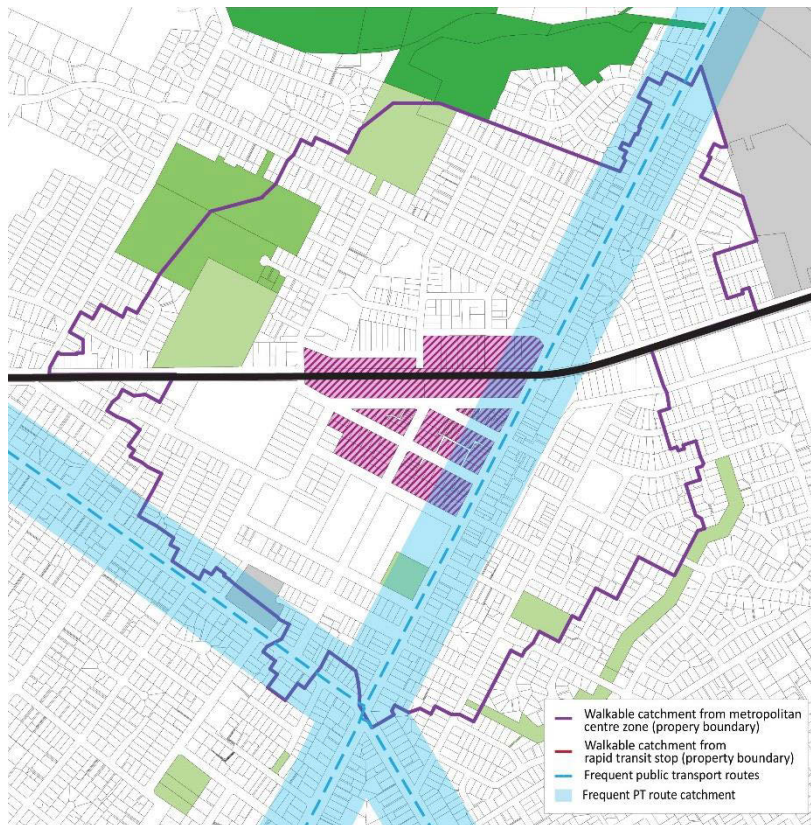
The entrances to the rapid transit stop are identified on this map. Using these as part of GIS network analysis, the walkable catchment from the rapid transit stop is determined.

Figure 26: Identifying areas of higher demand



Using information produced as part of an HBA or other evidence, identify the areas with greater demand relative to elsewhere in the urban environment.

Figure 27: Accessibility to commercial activities and community services



Information from accessibility assessments will be used to identify areas with high access to a “range of commercial activities and community services” by active or public transport. These areas are shown on the map as being the walkable catchments of the metropolitan centre (which contains a range of services).

In addition to this, areas served by public transport, such as rapid transit and frequent bus routes, have also been deemed accessible.

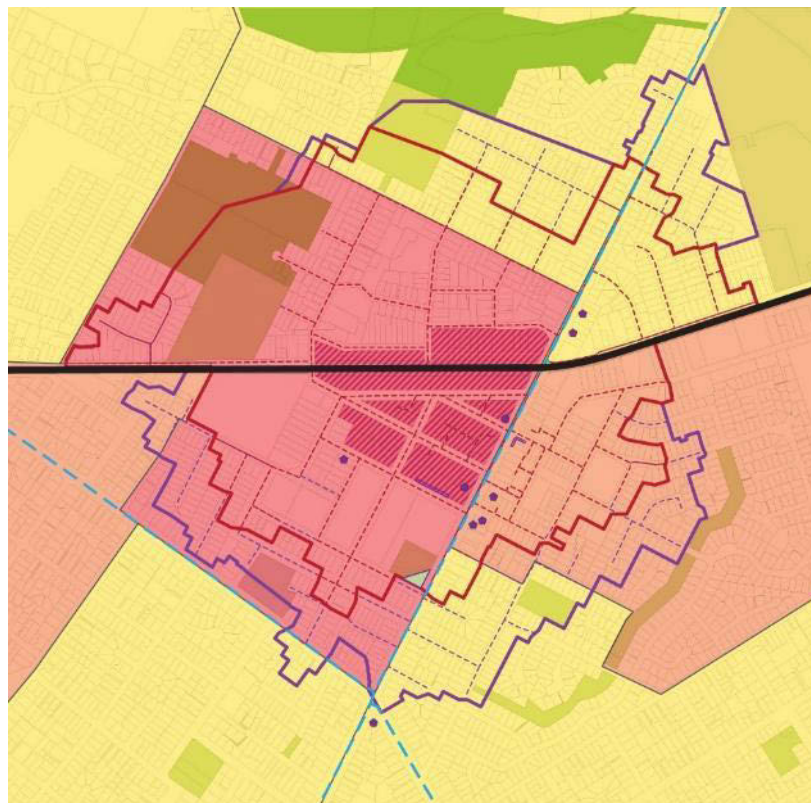
Figure 28: Identifying any qualifying matters (heritage site and areas) that may apply



In this case, there are several heritage sites and areas that need to be noted when determining heights and densities. Each site will need to have a section 32 assessment of the relevant qualifying matter to determine what the appropriate level of intensification will be.

In this map example, the heritage items have been assessed as preventing any intensification. The provisions for heritage areas not located on open space-zoned land control building heritage features only. As intensification through increased heights is not limited by the presence of these heritage features (given that redevelopment can incorporate them), the assessment has determined this matter does not impact intensification.

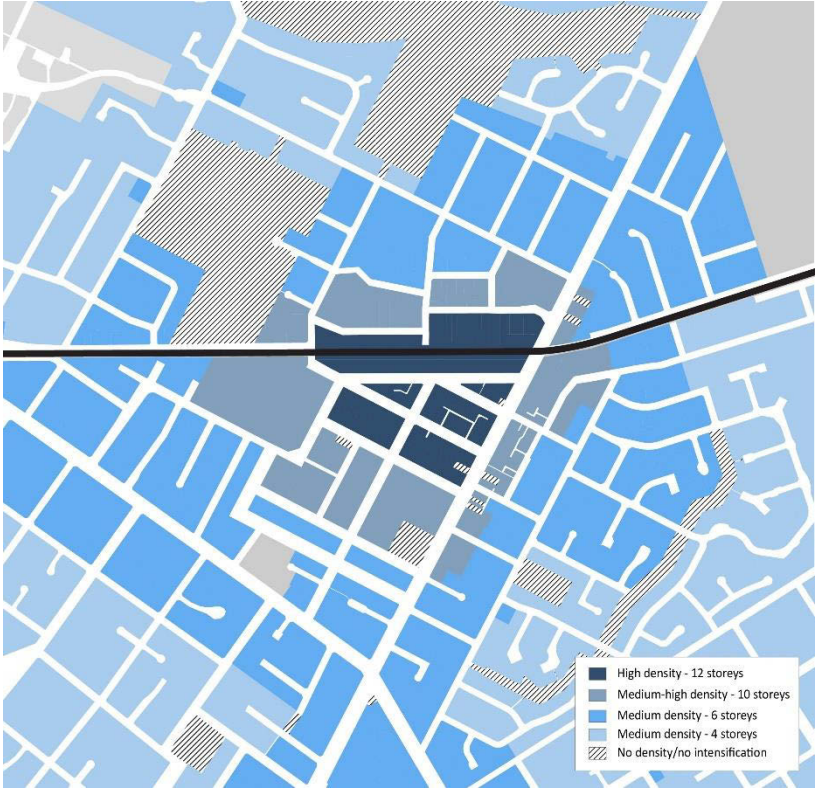
Figure 29: Map showing all factors that need to be considered to determine heights and densities for each location



While all factors that need to be considered do not need to be shown visually on a map like this, you need to demonstrate that you have considered each component.

In places where many factors requiring intensification overlap – such as high demand, high accessibility and walkable catchment of rapid transit stops – we would expect to see rules that are the most enabling and heights above the minimum required for each of the components.

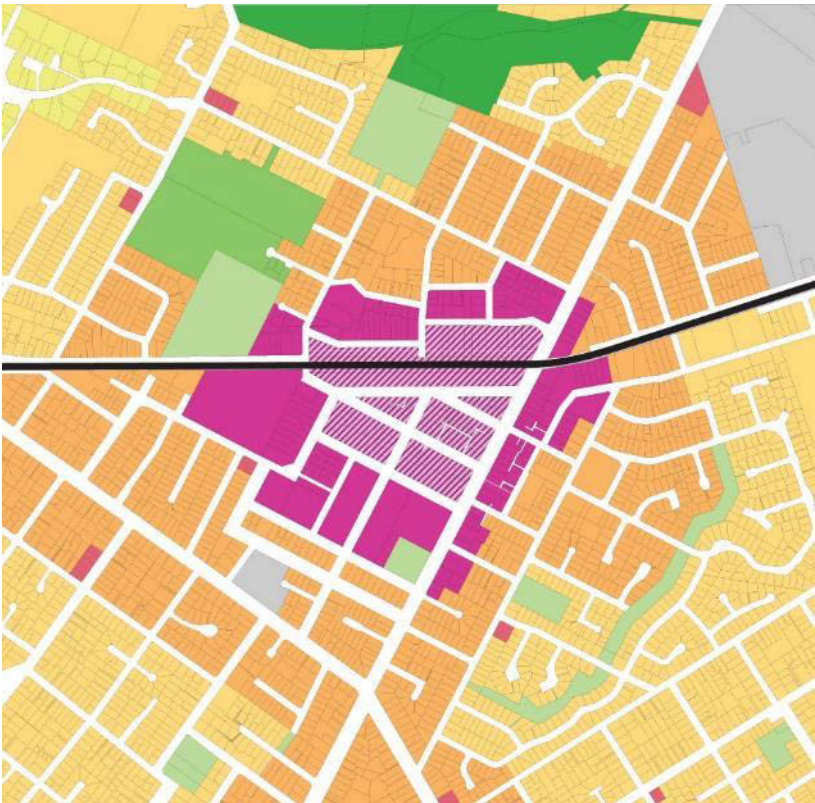
Figure 30: Map using the combined information to apply appropriate heights and densities to a location



Using the combined information to apply appropriate heights and densities to a location can be done either by calculating these first and then assigning zoning to fit, or by applying a range of appropriate zones.

In this example, you can see that qualifying matters have been applied to sites and, where relevant, no intensification is to be enabled.

Figure 31: Map showing new zoning pattern determined, reflecting the requirements of the intensification (and other) provisions



Note the application of a sensible zoning pattern, which takes into account neighbouring zones and other requirements, is to be expected and zoned outcomes will not always need to match catchments perfectly.

Note, in some cases, a change in zoning may not be necessary. The existing zoning may be suitable with a change in controls to enable intensification, or a precinct could be applied.

8 Resources

Pedestrian planning and design guide

Waka Kotahi NZTA, 2009

<https://www.nzta.govt.nz/resources/pedestrian-planning-guide/>

People, places, spaces urban design guide

Ministry for the Environment, 2002

<https://www.mfe.govt.nz/publications/rma/people-places-spaces-mar02>

Urban Design Toolkit (Third edition)

Ministry for the Environment, 2006

<https://www.mfe.govt.nz/sites/default/files/urban-design-toolkit-third-edition.pdf>

Roads and streets framework

Auckland Transport, 2018

<https://at.govt.nz/media/1976084/roads-and-streets-framework-webcompressed.pdf>

Urban street and road design guide

Auckland Transport, 2019

<https://at.govt.nz/media/1980686/urban-street-and-road-design-guide.pdf>

PedShed analysis

Active Healthy Communities, 2020

<http://www.activehealthycommunities.com.au/plan/gis-analysis/walking-cycling-pedshed-analysis/>

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Absolutely Positively
Wellington City Council
Me Heke Ki Pōneke

Accessible Wellington

The Accessible Journey Action Plan

June 2019



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Foreword by Justin Lester; Mayor of Wellington

Wellington is a city where many people want to live. We want to welcome everyone and ensure the city's attractions are available to everyone.

With steep hills and narrow streets, it's not the easiest place to get around, and it is even more challenging for those with mobility issues, whether due to disability, age or having young children in prams and pushchairs.

However, with planning and forethought we can include everyone in all aspects of city life. This is important because we are the capital city and should be at the forefront of accessibility planning and design.

We have a unique opportunity to lead the way for other cities in taking an accessibility-friendly approach to accessibility development.

Last year we had our first Wellington Accessibility Awards, which recognised businesses, initiatives and people who help make the city more accessible.

Some are taking up the challenge themselves but we need a city-wide approach if we want to really be the people-centred capital we aspire to be.

And it's the little things such as street furniture, accessible signage and seating that combine with the larger aspects, such as footpath and road design and public transport features that will make all the difference.

As Mayor of Wellington, I fully support this Accessible Wellington action plan and look forward to the positive change it makes.

Justin Lester
Mayor of Wellington

Foreword by AAG Chairs

As the current co-chairs of the Accessibility Advisory Group we welcome the Accessible Wellington Action Plan. We see it as a positive step ahead for many different journeys, the journey we as disabled people make through Wellington city and one for Wellington City Council as they explore new ways of understanding accessibility and how to work with the disability community.

The Accessible Journey is a very important one for disabled people as it impacts our ability to participate as Wellingtonians. It enables us to access education, employment and health services. It also allows us to participate and for us to be socially involved. It also affects our ability to be contributing citizens.

This Accessible Wellington Action Plan is being released at the same time as a world-wide wave of heightened awareness of the responsibility local government agencies have towards establishing accessible environments as part of their role in creating sustainable cities and communities.

It is a living document. We look forward to seeing it evolve.

Gratitude must go to Michael Bealing, Nick Ruane, Alice Bates, Crispian Franklin and Geoff Lawson who were instrumental in the development of this action plan.

Tristram Ingham and Rachel Noble

Introduction

We want all people in Wellington to be able to participate in all aspects of city life on an equal basis.

This means providing accessible services, communication channels, facilities, transport options, and buildings and public spaces to help make Wellington more accessible and inclusive for everyone.

Improving the city's accessibility will make it more inclusive and help the city remain attractive to residents and visitors of any age and ability.

Approximately 24% of people in New Zealand have a disability. This is much higher for people over 65 years of age, with 59% of people having some kind of disability. Physical limitations are the most common type of impairment (Stats NZ). There are also 3,500 mobility card holders in Wellington, most being over the age of 65.

Parents with young children can also have negative experiences if the city is not built with accessibility in mind.

In 2017 there were 6,057 births in the Wellington region (Stats NZ), which provides an indication of the number of people travelling with pushchairs and soon-to-be young children who need providing for.

We want to build on our reputation as an inclusive and socially responsible city that is accessible, safe and easy to get around and where all people can participate in city life and have a say about its future.

This plan is to act as our guide and will enhance people's independence and ability to participate, engage in, and benefit from, key Council services.

The plan sets out specific actions, will include measurable criteria, such as timeframes and action owners, and is a starting point for both coordinating what the Council is already doing and recommending key actions for the next three years. This is considered to be a living document, and over time, additional actions may be included.

Legislation

New Zealand ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)¹ in 2008. The Convention is a key document in the area of accessibility.

The purpose of the Convention is *‘to promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity.’*

The Convention is important as it clarifies the rights of persons with disabilities and sets out responsibilities to respect those rights. The Convention promotes accessible social development and has been described as a human rights treaty and a development tool.

The New Zealand Disability Strategy (NZDS) was guided by the principles of the UNCRPD. The Council supports the achievement of the goals of the Convention and its Optional Protocol (A/RES/61/106).

¹ www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html

National policy

The New Zealand Disability Strategy 2016-2026 has identified eight outcomes which contribute towards making New Zealand a non-disabling society. Outcome 5 relates to Accessibility - We access all places, services and information with ease and dignity. The Strategy sets out what “our future looks like and what needs to happen” for Outcome 5.

This is that:

- *‘We have access to warm, safe and affordable housing that meets our needs and enables us to make choices about where we go to school or work and to fully participate as members of our families, whānau and communities.*
- *We can get from one place to another easily and safely, for example from home to school, work or to a friend’s house. We can also access all public buildings, spaces and facilities with dignity and on an equal basis with others.*
- *We feel safe taking public transport to get around and are treated well when we do so. Our needs are also appropriately considered when planning for new transport services. Private transport services are responsive to and inclusive of us. For those of us who need it, there is access to specific transport options that are affordable, readily available and easy to use.*
- *Information and communications are easy for us to access in formats and languages that are right for us, including in our country’s official languages of Te Reo Māori and New Zealand Sign Language. This helps us to be independent because we do not have to rely on other people. We use technology on the same basis as everyone else; those of us who need specific technology solutions will have access to these in a way that is innovative, progressive and helps to eliminate barriers. The evolving opportunities presented by new technology helps us to achieve our goals.*
- *Our accessible communities are free of barriers (for example, access to shops, banks, entertainment, churches, parks, and so on), which enables us to participate and contribute on an equal basis with non-disabled people.’*

Links to the Council Direction

This Action Plan aligns to our Towards 2040: Smart City strategy - and links closely to the following two pillars:

People-centred city

Wellington's people-centred city will be healthy, vibrant, affordable and resilient, with a strong sense of identity and 'place'. This will be expressed through urban form, openness and accessibility for its current and future populations.

Connected city

As a connected city, Wellington's people, places and ideas access networks - regionally, nationally and globally. Connections are:

- physical - allowing for ease of movement of people and goods
- virtual - in the form of world-class ICT infrastructure
- social - allowing people to connect to each other and their communities.

The approach outlined in this action plan also aligns with the Positive Ageing Policy, Central City Framework, and the Wellington Urban Growth Plan 2014-2043.

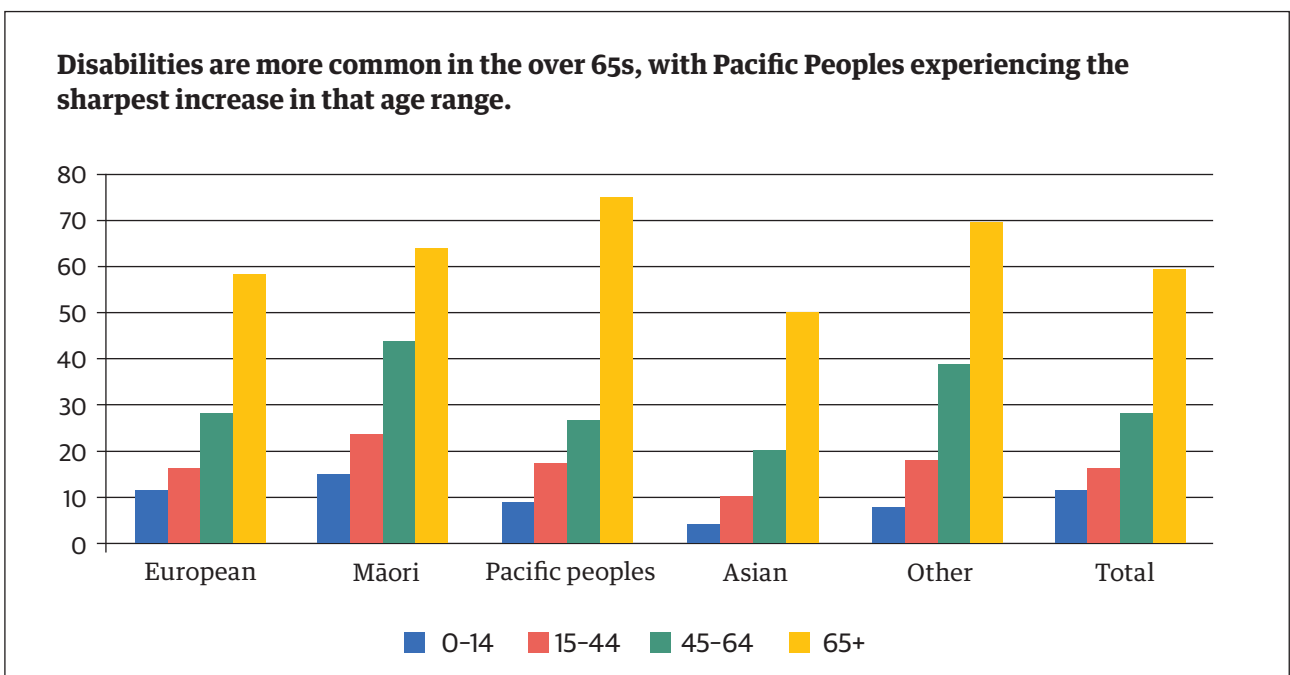
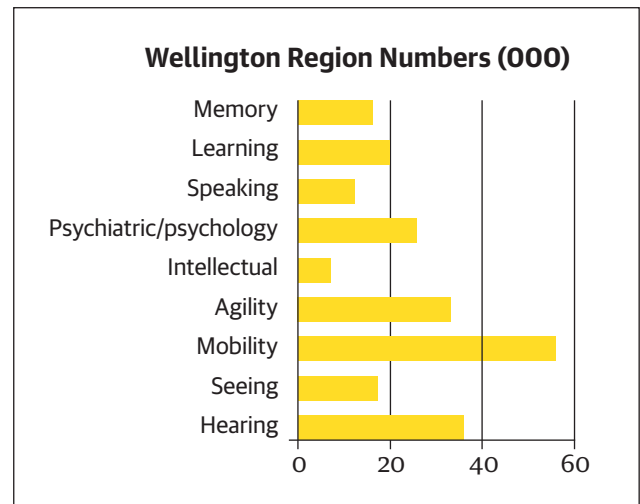
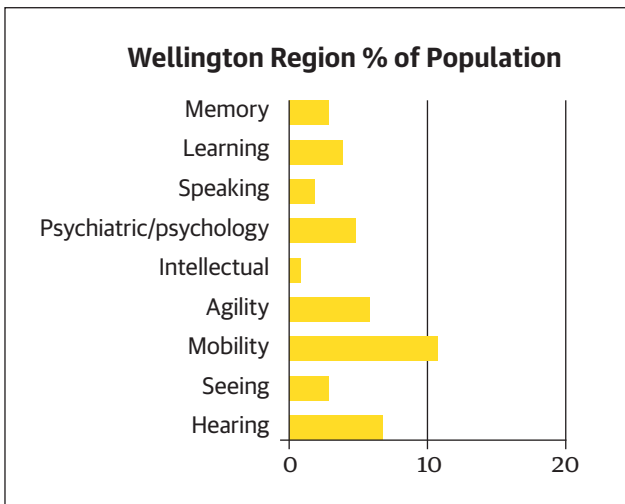
It also aligns to existing work streams - including the Let's Get Wellington Moving programme of work and the updated urban growth plan Planning for Growth being developed.

Working with the community

The Council’s Accessibility Advisory Group has guided the development of this plan. Parents with pushchairs, seniors, those temporarily injured, the disability community, and carers in Wellington were also consulted during the development of this plan.

Key data

Figures from Stats NZ show that 22% of people in the Wellington Region have an impairment. Mobility impairments are the most common in the region followed by hearing and agility.



How accessible is Wellington?

Mobility is the most common form of impairment in Wellington. People with mobility impairments find it more difficult to travel to and through the city, and are more impacted by a poor or unreliable transport network and construction works occurring on roads and footpaths.

While many areas of Wellington are highly accessible, Wellington is experiencing strong population growth resulting in more city development (and associated construction disruption), and construction relating to the earthquake-prone building strengthening programme is also impacting on the overall accessibility of the city.

Additionally, the Lets Get Wellington Moving programme of work will also see construction occurring in the central city and along key arterial routes for many years into the future.

Considering that mobility is the most common form of impairment, and key areas of the city will see higher levels of construction disruption for the foreseeable future, additional survey work was carried out to better understand accessibility issues.

The survey was targeted towards those with a disability, older people and parents with young children and asked for feedback on a journey they regularly take and how difficult or easy this is for them.

Out of the 577 survey responses:

- 82% of survey respondents experience difficulties during a trip they take regularly.
- Most people who completed the survey are travelling around Wellington on foot, followed by bus or driving. Respondents experienced the most difficulty with pavements in the city.
- 36% of respondents considered that accessibility in Wellington has remained *about the same* over the last five year period. However, around a third (30%) believe it has become *better* (6%) or *much better* (24%).
- Just under half (42%) of respondents thought Wellington was either *accessible* (33%) or *very accessible* (9%).
- 16% of respondents also reported that pavements are the most positive part of a journey followed by good public transport. This shows when pavements are or aren't accessible it makes a big impact on the ease of a person's journey.

This sets the scene for a positive action plan to continue to address the issues of accessibility and to enable participation in city life.

The focus of this Action Plan

The New Zealand Disability Strategy 2016 includes a description of an accessible future where “we can get from one place to another easily and safely, for example from home to school, work or to a friend’s house. We can also access all public buildings, spaces and facilities with dignity and on an equal basis with others”.

This ‘accessible journey’ has been used as a way to visualise chronologically the accessibility tasks of users. It highlights potential opportunities and points of contacts with the Council. The journeys which people carry out on a daily basis such as going to the shops, attending an event or visiting friends are important to enable everyone to participate in city life.

The barriers to the accessible journey for disabled people cover information about services, arranging a service, getting from home to the pick-up point, using the service to go to a destination and returning home. (The Accessible Journey: Human Rights Commission, 2005)

New Zealand Building Code Clause D1 Access Routes defines an ‘accessible route’ as;

An access route usable by people with disabilities. It shall be a continuous route that can be negotiated unaided by a wheelchair user. The route shall extend from street boundary or car parking area to those spaces within the building required to be accessible to enable people with disabilities to carry out normal activities and processes within the building.

The Action Plan builds on the ‘Accessible Journey’ concept that was chosen with the Accessibility Advisory Group (AAG). For the purposes of this action plan the accessible journey will be a broader definition that is a combination of the two above. It will not be limited to arriving at a building or place and then use of and movement within the building or place. An accessible journey also includes:

- all the decisions made early in the journey through to the destination
- how information is sourced about travel
- the accessibility of the building or place.

In this way, the complete journey is understood and the barriers to access are identified.

Overall aspirational goals

Goal		Description	What this will look like
<p>All people, residents and visitors, are confident accessing the information they need to participate in Wellington city life, they are able to get to and from all venues and use the service at a destination with ease.</p>	<p>Access to Information</p>	<p>There is easy access to information about the Council and business services, entertainment, hospitality, events, education and recreation.</p>	<p>People can find information in an accessible format about the accessibility of the venue, facilities or event – and how to get there and back.</p> <p>Information on the Council websites is in an accessible format and compliant with the NZ Standards: Web Accessibility Standard 1.0 and Web Usability Standard 1.2, and amendments.</p> <p>All tourist attractions, hospitality venues, hotels, restaurants and cafés publish statements on venue accessibility.</p> <p>Greater Wellington Regional Council and other transport stakeholders have accessibility information publicly available for their transport and public transport routes.</p>
	<p>Access in the built environment</p>	<p>There are efficient accessible transport options (including mobility parking, active mode routes, multi-node routes and clear signage and wayfinding).</p>	<p>Mobility parks are in the places that are of use to people, they are available and not being misused.</p> <p>These mobility parks and all kerb cuttings are compliant with NZS4121:2001.</p> <p>Pedestrian facilities meet the Guidelines for facilities for blind and vision impaired pedestrians – RTS 14</p> <p>Accessible signs are provided throughout the city including links to further information and/or YouTube NZSL explanations.</p>
	<p>Access to venues</p>	<p>There is accessible access to services (e.g. public buildings, restaurants, theatres, accommodation, business providers).</p>	<p>Accessible facilities are available that are fit for purpose.</p> <p>Staff are helpful and knowledgeable about accessibility.</p> <p>Guides and programmes are in accessible formats, audio descriptions and closed loop audio at events.</p>
	<p>There is accessible access to buildings and movement throughout these buildings.</p>	<p>More buildings, public places and homes are compliant with the MBIE accessibility requirements/guidelines.</p> <p>Council facilities and tourist attractions, hospitality venues, hotels, restaurants and cafés in Wellington will be compliant with NZS4121:2001 (and subsequent amendments).</p>	

Goal		Description	What this will look like
	Accessibility Leadership	There is strong messaging from the Council on the importance of accessibility	The Council will plan and forecast for future accessibility requirements, and support this with internal capability to enable the uptake of novel or disruptive technologies that address accessibility.
			The Council will encourage tourist attractions, hospitality venues, hotels, restaurants and cafés in Wellington to publicise the achievement of and compliance with accessibility standards.
			The Council will raise the awareness of accessibility by creating spaces that showcase universal design and accessible venues/businesses; and by running accessible events in these spaces.
			Our consultation and engagement is in line with Ministry of Health guidelines: "A Guide to Community Engagement with People with Disabilities".

2019–22 Accessible Action Plan - Key Actions

Action 1: Accessibility in Strategic Planning

Building data to track our progress over time

Accessibility and universal design should be embedded in the long-term vision for the city and taken into account in developing and reporting on the Long-Term Plan, Annual Plan and strategy documents.

This action can be delivered within existing budgets.

Action	Timeframe	Owner
The Council will monitor the wellbeing outcomes for citizens within Wellington on the basis of disability, and work with key stakeholders (e.g. national government, Regional Council, and the District Health Board) to mitigate any inequity identified.	Annual	WCC (Policy, Research and Evaluation team)
Carry out a survey where people provide regular feedback on the accessibility of the city. Review the survey results and track accessibility progress.	Annual	WCC (Research team)WCC (Policy team)
The Council actively pursues opportunities such as the Lightning Lab to enable it to identify new and innovative solutions to accessibility barriers.	Annual	WCC (Policy team)
Establish a regular 'Accessibility Hui' made up of staff from across the Council. The group will be interlinked and share both skills and resources.	Establish 2019 Meetings bi-monthly.	WCC (Policy team)

Action 2: Access to Information

Provide usable up-to-date information on accessible Wellington

Access to information is vital so people can make choices about where they can go safely. Currently the information is not consolidated in one place neither is it driven from a user perspective. This action focuses on delivering the right information in a format so the accessible community can make good decisions.

The Council developed an accessibility map as part of the 2012-2015 action plan. Additional information can be added, for example, venue information or allowing people to enter information through a ‘live’ function, such as “there

is scaffolding on this street”; “a stair rail is missing”. The current map also appears not to be well known and its placement on the website and an accessibility communication strategy needs to be considered.

A review of this map will be carried out with the accessibility community and community partners. This will include what accessibility features people would like to see on the map to enhance their accessible journey and will explore alternatives for communicating accessibility about the city beyond visual maps. This action can be delivered within existing budgets.

Action	Timeframe	Owner
Develop a page through Engagement HQ that allows people to engage with the Council about what information would be of most use and how that information would be provided.	6 months	WCC (Policy team)
Following feedback, explore if the site can then be used to test - providing the information wanted, in the form needed. (Will rely on people engaging with the site to source the information.)	12 months	WCC (Policy team)
Establish a working group of stakeholders to develop scope and deliver a plan that will: <ul style="list-style-type: none"> Engage with the accessibility community to determine what information would be useful Preferred ways to access this information Determine if the current Accessible Wellington Map meets the needs of the community Develop a communications and marketing plan 	12 months	WCC (Policy team)
Work with partners and accessibility consumers to develop a platform that integrates and displays accessible information in appropriate formats	As above	WCC (Policy team)

Action 3: Accessible Spaces

The accessible space will act as a starting point within the city for full accessibility.

This project seeks to create accessibility spaces across the city that champion and model good accessible design and practice. The spaces will address the physical accessibility of the environment as well as also promoting an accessible culture within the businesses that operate in the location.

This will require considering accessibility and how it can be carried out at a much higher standard to which it currently is and raising the bar. Universal Design principles will be applied to the space, street and buildings. The space will be designed with the accessibility community

who will input on what the new higher standard should look and feel like.

We will work with businesses to assist them to operate in an accessible way ensuring that customers and potential staff with accessibility requirements will be able to fully participate within the space.

The aim is to create spaces that people can feel confident visiting knowing that no pre-planning is required about the accessibility of the space and its venues before visiting. People will be confident about the space and participating in events and activities. The space will educate Wellingtonians on what full accessibility looks like and how good accessibility benefits everyone.

Action	Timeframe	Owner
Work with the Urban Design team to identify an upcoming project that would fit with the Accessibility Space concept.	2019/20	Cross Council Initiative
Work with the community in a co-design process to identify what a high standard of accessibility and Universal Design would look like for the space.	2020	Cross Council Initiative
Work with businesses in the space to improve and become fully accessible.	2020	Cross Council Initiative
Hold events that are accessible and raise awareness of accessibility.	2020/21	Cross Council Initiative

Action 4: Accessible Reviews

Sharing best practice to inform, educate and lift standards

There is an opportunity for people who experience a disability to write their own reviews about places visited in the city so that the whole community can learn from the experience of others and venues get feedback on their accessibility from personal experience. The Council would explore partnership opportunities to establish this. The review information would be publicly available and can be used by all people when planning a trip.

The reviews will work in conjunction with the existing strategy of encouraging venues to meet accessibility guidelines. This could include a rating system to

encourage businesses and venues to improve accessibility.

There are existing international examples and these sites encourage businesses to address reviewer comments by improving accessibility. Over time we would work towards all tourist attractions, hospitality venues, hotels, restaurants and cafés in Wellington publishing a statement on their venue’s accessibility (per NZS4121:2001 and subsequent amendments).

Our role will be around advocacy and facilitation and therefore the costs to the Council are expected to be low and be delivered from within existing resources.

Action	Timeframe	Owner
To investigate partnership opportunities with stakeholders and companies already working on accessibility assessments to create publicly available reviews of Wellington’s places, spaces and venues.	2019/20	WCC (Policy team)
Establish a working group of stakeholders and people of interest to test functionality and to gauge potential uptake and interest in the Review tools.	2020	WCC (Policy team)
Create the Wellington based content with partners.	2020/21	WCC (Policy team) and Partner
Work with the communications team to promote the Review tools and raise awareness of it to the public. Develop a communications plan to promote venue accessibility across the city.	2020/21	WCC (Policy team and Communications and Engagement team). Potential for partner also
Maintain the Review tools to ensure the content is relevant and up to date.	Ongoing	WCC (Policy team)

Action 5: Gathering feedback on accessibility

Allowing public to feedback on 'accessible journeys' through Wellington

We need to give the accessible community the opportunity to easily and quickly provide feedback on accessibility issues they face that can then be addressed by the Council.

It is proposed to build a tool that would build on the accessible journey exercise that was carried out with the Council's Accessibility Advisory Group, to engage and allow the wider public to report on positive and negative parts of any journey they undertake.

This feedback tool could be live or run for set periods of time, for example, over

the summer for three months. It would gather accessible *issues* and *ideas* for improvements that people experience so that these can then be actioned.

The information that is gathered could then be considered by the Council and inform future investment plans. A communications plan would be built around this initiative which would raise awareness and be a channel for broader accessibility messages.

The first stage of this action is to work with stakeholders to refine scope, functionality and likely uptake of any tool. Potential costs will also be determined through this initial scoping phase.

Action	Timeframe	Owner
Establish a working group of stakeholders and people of interest to test functionality and potential uptake of an app or a survey.	2020	WCC (Policy team)
Work to refine app or survey and questions to record an accessible journey along with accessible usability of the tool.	2020	WCC (Policy team)
Work with Wellington City Council communications team to promote the tool and raise awareness of it to the public.	2020	WCC (Policy with Communications and Engagement Team).
Run app or survey for a three month period allowing feedback to be received on journeys.	2020	WCC (Research and Policy teams)
Once the tool run period has concluded, analyse and then present results to Wellington City Council business units for action/investment	Ongoing	WCC (Policy with relevant teams that feedback relates to).
Repeat the above four actions each year. Tailor the tool and questions as needed.	Ongoing	WCC (Policy team)

Action 6: Urban Design

Ensure that the design of public spaces incorporates universal design principles.

Results from the *Getting Around Wellington* survey showed that city design, particularly the pavements and the quality of Wellington’s streets, make a big difference to the ease of people’s journeys. Comments in the survey included street clutter and other barriers that people experience already. Better designed streets, managing footpaths and public spaces, and removing potential barriers that block these spaces, will create more accessible journeys around the city.

This will be considered through a reviewed Footpath Management Policy or any new City Design guidelines.

Feedback was also received through the survey on the accessibility of some of Wellington’s parks.

Action	Timeframe	Owner
Develop an infrastructure investment/upgrade plan to increase the kerb cuttings that comply with NZS4121:2001 specifications.	2020/21	WCC (Policy team) WCC (Transport and Infrastructure)
Review of the Footpath Management Policy and development of guidelines for the design of public spaces including: <ul style="list-style-type: none"> Street furniture Accessible Signage – Use of braille, large font, high contrast, easily readable signs and other tools that can link to additional information. Non-obstruction – review of standards for the location of street furniture and sandwich board retail signs Seating – ensure that public space seating is included at regular intervals throughout the city (for those with limited walking/standing capacity) and that seating has arms to permit easy transfers. 	2020	WCC (Policy team) WCC (City Design)

Action 7: Mobility parking

Mobility parks are fit-for-purpose

The Council adopted a Mobility Parking Policy in 2005, which aims to ensure Wellington is a liveable place for people with limited mobility by enhancing their ability to participate in employment, social, cultural and political life and their access to services and resources. The policy only covers Council-provided mobility parking spaces and does not cover mobility parking spaces on private land, such as at supermarkets and retail outlets.

In 2005, there were 23 Council-provided on-street mobility spaces. This increased to 55 spaces in the central area or 1.7 percent of all metered spaces. This

was planned to be close to 2 percent of parking in line with Australian and Canadian cities.

CCS Disability Action (CCS) provides mobility parking permits, advocacy and information sharing in the disability sector New Zealand-wide. They have developed an app, Access Aware, that allows people to report information on Mobility Parks. The Council has been trialling the alert function of the app. Reporting of potential mobility parking misuse of a Council-controlled parking space is sent in real time to the Council's parking enforcement team so they can monitor the use and respond to potential misuse of the mobility parking spaces.

Action	Timeframe	Owner
Work with CCS to share information on Mobility Parking in Wellington. Information includes creating a data base that is crowdsourced about the amount, location and type of mobility parking space in Wellington. The database will cover both Council-provided and other mobility parking spaces.	2019	WCC (Policy team)
Review the Mobility Parking Policy (2005) as part of the Parking Policy Review.	2019/20	WCC (Policy team)
Following review of the CBD mobility parks. a. Hold a workshop to review the current Council on-street mobility parking spaces b. use the information from the workshop, plus survey results, to develop an action plan for improving the provision of Council on-street mobility parking spaces in Wellington.	2019/20	WCC (Transport and Infrastructure) WCC (Research and Policy teams)

Action 8: Accessible Navigation

Investigating options for assisting with navigation of the city with ease

We have piloted BlindSquare for people who are blind or have low vision or a print disability. With the BlindSquare iPhone navigation app and Kontakt.io beacons, people with sight loss can explore their city with independence. As app-users pass shops and businesses that are ‘BlindSquare Enabled’, the app provides a spoken description of the business, including its name, what goods or services it provides and the shop layout. The app also provides other information such as the names of the roads they are walking along, or where the bus stops are.

This area is rapidly moving with new technology development.

Action	Timeframe	Owner
Continue to explore ways to assist people navigate their way around the city.	Ongoing	Community Networks

Action 9: Accessible Democracy

Participate in democracy and have a say in how the city is run

The Council has a duty to enable all people to have a voice in the topics and issues shaping the city. Everyone who lives in Wellington should have access to voting in elections and be able to have a say in the topics that affect them.

Action	Timeframe	Owner
Audit the accessibility of council buildings, and council-related public buildings against NZS4121:2001.	TBC	Investigating
Accessibility of Committee rooms at 113 The Terrace.	Ongoing	Democratic Services
Options for closed loop audio for WCC public meetings will be investigated.	2019/20	Democratic Services
The availability of NZSL Interpreters for WCC public meetings on request will be advertised more prominently.	2019/20	Democratic Services
Accessibility awareness raising and training of staff.	2019 and then ongoing.	Policy and Communications Team
Accessible consultation and engagement. <ul style="list-style-type: none"> • Produce Council Consultation and Engagement Guidelines • Promote use and implementation of the Guidelines 	6 months and then ongoing.	Engagement

Ongoing Actions

The Council will continue to deliver the following as part of its business as usual activities which address accessibility issues and access to information.

Access to Venues	We will continue to improve the levels of accessibility compliance at Council venues. We will do this through continuing accessibility audits, and staff training to improve building accessibility and customer service.
	We will look at options of inclusive play where practical and possible when we undertake upgrades to play spaces and the development of new play spaces.
	Building consents will continue to be assessed on any required accessibility standards. Compliance with those standards will be enforced on the building code accessibility standards.
Access to Wellington	We will ensure that Mobility Parking installations are in the right places and that they meet as practical as possible the accessibility standards in the road.
	Our street upgrade programmes will include accessibility pavement upgrades to ensure that our streets are increasingly accessible for all.
	Within our Open Space Access Plan 2016 we will identify the paths and walkways that have sealed surfaces and flat pathways for mobility users.
	We will review whether more accessible tracks need to be constructed.
	We will continue to support the annual Accessibility Awards, recognising businesses, initiatives and people who help make Wellington more accessible.
Access to Information	We will ensure that Council information – including emergency and emergency preparedness messaging is accessible.
	We will ensure that the Council and affiliated websites are compliant with the NZ Standards: Web Accessibility Standard 1.0 and Web Usability Standard 1.2, and subsequent amendments.

Accessibility Leadership	We will work with other stakeholders to improve accessibility as an integrated approach is often needed..
	We will involve the Accessibility Advisory Group, technical accessibility advisors, and the wider disability community, in service development initiatives.
	We will work with GWRC and other transport stakeholders to ensure accessibility-specific information is made publicly available (online, in app format, and in other digital/non-digital media) for all transport and public transport routes.
	The Council will support/advocate for national standards for mobility parking, integrated ticketing and shared fare structures on public transport in Wellington, accessible options for public transport without requirements for prior bookings or reservations, including accessible bus stop design, methods of signalling the need for assistance on bus stops, and accessibility training of staff to assist passengers safely embark/disembark public transport.

Action Plan 2023 onwards

Once the action plan has run its duration a review of the 2019-2022 Action Plan will be carried out and a refreshed plan produced.

Action Plan on a Page

Accessible Wellington

An inclusive and socially responsible city that is accessible, safe and easy to get around.

Areas of Focus

Leadership and Advocacy <ul style="list-style-type: none"> Strategic plan and forecasting capability for future accessibility requirements. Monitor inequities outcomes for citizens within Wellington. Working with other stakeholders to ensure an integrated approach to accessibility. Public Transport Infrastructure and use. 		
Access to Information Good information is available about the built environment of Wellington.	Access in the Built Environment The city is planned to enable all people to access it.	Access to Venues Buildings and movement through them are accessible, facilities are also available.

Scope

Direct <ul style="list-style-type: none"> Public streets, roads and pavements Council owned buildings and facilities Public parking - mobility parking and enforcement 	<ul style="list-style-type: none"> Council owned housing Consents and compliance Council events Governance 	Indirect <ul style="list-style-type: none"> Public transport Private businesses and property
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Actions

Access to information <ul style="list-style-type: none"> Access to information Accessibility map upgrades on WCC website. Improved wayfinding Accessible information provided to the blind and visually impaired about businesses and the built environment. Accessibility information of destinations The reviews are a source of information about accessibility of places that people can find on the website. Accessible democracy All people have a voice and are able to engage in the topics that affect them. 	Access to the city <ul style="list-style-type: none"> Improving mobility parking provision Work with CCS a the Access Aware app. Review Mobbity Parking Policy. Pilot of parking sensors recognising chips in mobility parking passes. Annual accessibility feedback tool Feedback provided on accessibility of the city. Information feeds into Annual Plan process. Implementation Plan can be formed based on feedback. City design Improved public space and street design to increase accessibility and remove barriers. Accessibility spaces Development of spaces that champion accessibility within the city. 	Access to venues <ul style="list-style-type: none"> Venue accessibility insight Feedback provided on accessibility. Insight is provided to owners of venues and facilities Accessibility information resource A place for informatin about how to improve accessibility and shared knowledge and experiences.
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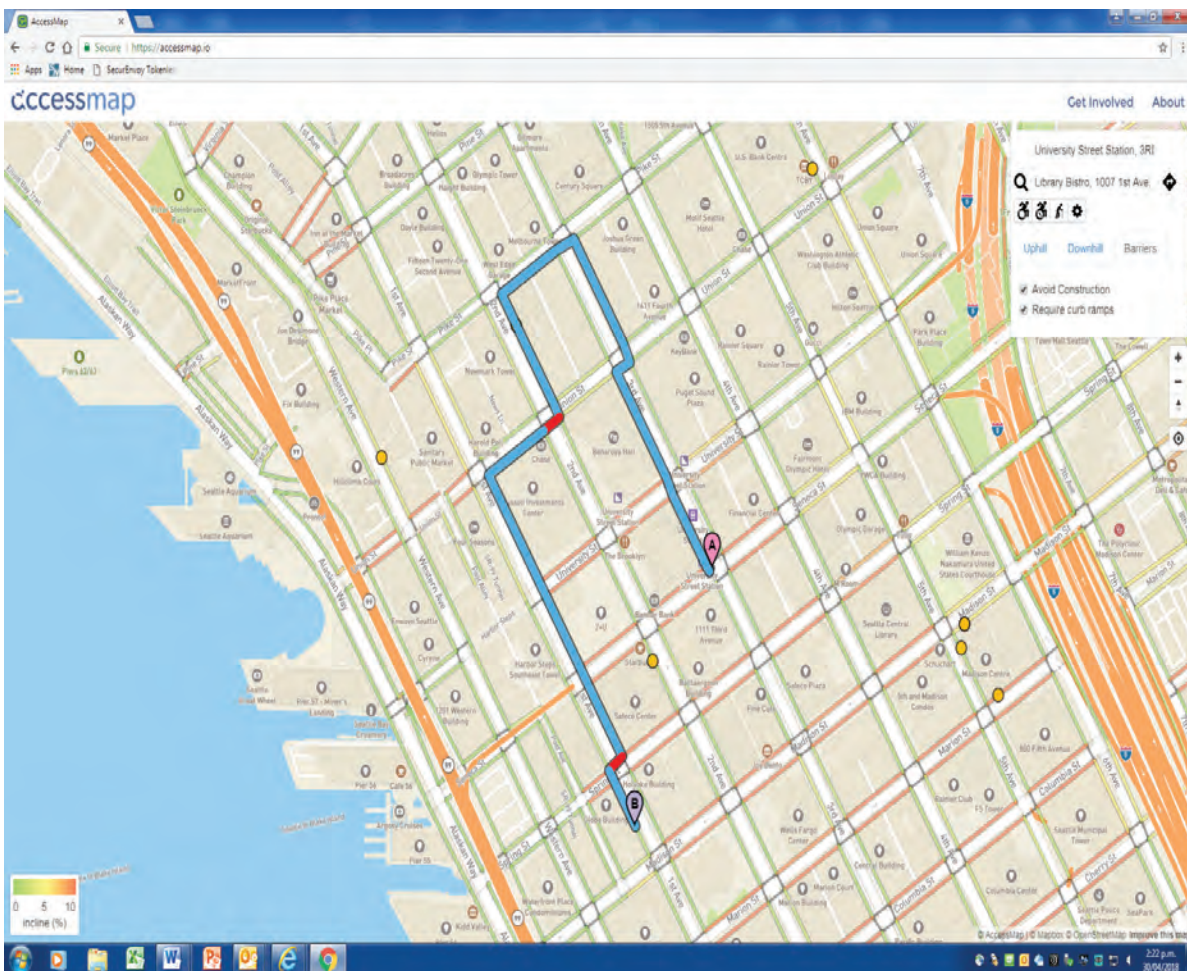
Ongoing - Business as usual actions

International Case Studies and further reading

Seattle: Access Map the sidewalk mapping app.

AccessMap is a map-based app used in Seattle that plans accessible routes through the city. Pedestrians with limited mobility can be provided with a route to a destination that is accessible and will avoid features such as inclines that would be problematic or even an accessibility barrier. Google maps does not currently provide such an accessibility feature.

The University of Washington's Taskar Center for Accessible Technology, which created the map currently gathers information on elevation, crossings, sidewalks and kerb ramps from existing databases. The project is now entering the next step and is crowdsourcing extra information such as pavement widths and handrails.



EU Access City Awards

The Access City Award is for cities in Europe that are making it easy for everyone to live there. The Awards are for cities that work to make buildings, parks, transport and many other public areas more accessible for people with disabilities and the elderly.

In 2018, the city of Breda in the Netherlands won the award.

“In Breda, public places such as parks and stores are accessible to everyone. Digital technologies ensure that all citizens can get around using public transport. And Breda’s investments pay off. Tourism is thriving thanks to the city’s commitment to inclusion. In the near future, the European Accessibility Act will complement Breda’s efforts by setting European accessibility standards for key products and services. Our combined efforts at local and European level are a game changer for the more than 80 million Europeans with disabilities.”



In 2017 the city of Chester was the winner of the award. The city has gone beyond legal minimum requirements for accessibility to ensure the city is used by all.

Chester is an historic city famous for its 3.2 km City Walls which form the most complete circuit of Roman, Saxon and Medieval walls in the UK. It is also well known for the Rows, unique elevated walkways above the four main streets. As an Ancient Monument, access to the City Walls has had to be tackled with great care and sensitivity. Ramps and level access have been introduced over many years and are now at 11 locations. All sections of the elevated Rows have been made accessible with a combination of ramps, level access routes, a lift and escalator. Access points are widely advertised on panels around the city and in the city centre access leaflet.

To enable disabled people needing specialist facilities to enjoy the city for longer, four Changing Places units have been provided. These are larger than standard accessible toilets and include equipment such as hoists, an adjustable height changing bed, washbasin and shower.

The city also improved how people get around with 129 accessible buses. Improved access to municipal buildings allows greater access to participating in city life and the city’s website aims to comply with international standards providing accessible information for people.

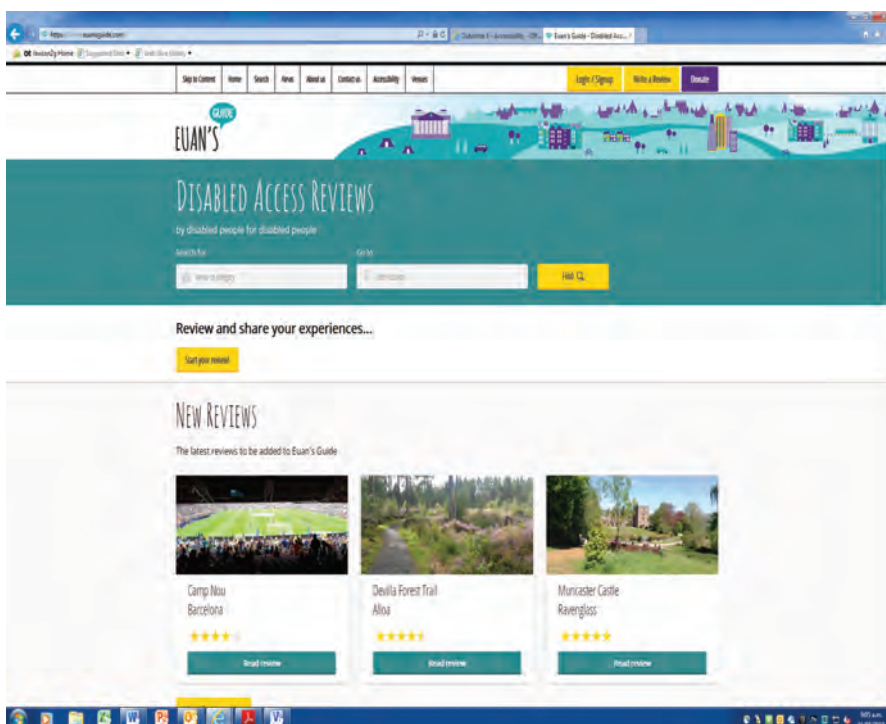
Euan's Guide - euansguide.com

Euan's Guide is the accessibility review website that aims to 'remove the fear of the unknown' and inspire people to try new places. The website was founded in 2013 by brother and sister, Euan and Kiki MacDonald, after Euan became a powerchair user. After spending hours of their time making enquiries about access at places they wanted to go, the duo realised that they could not be alone in their search for access information. This idea became Euan's Guide, a digital charity that is helping to open up towns and cities to people struggling with accessibility everywhere.

Individuals, their friends and families can use the website to search for

listings and reviews of venues across the UK and beyond. Listings include information about accessible toilets, wheelchair access, hearing loops and multiple other access features that exist at any one particular venue. The cornerstone of Euan's Guide however is its community of independent reviewers, who share their photos and experiences of restaurants, hotels, train stations, attractions and anywhere else they may have visited. By sharing their experiences people can give others an idea of what to expect when they visit somewhere new for the first time.

It now provides accessibility information on about 6,000 venues across the UK.



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Definitions

Accessibility - We access all places, services and information with ease and dignity. (*New Zealand Disability Strategy, 2016-2026*).

Co-design - People with accessibility needs are consulted on and actively involved in the development and implementation of legislation and policies concerning housing (home ownership, social housing and private rentals), transport (public and private), public buildings and spaces and information, communication and technology.

Public building - is a building that is open and can be used by the public.

Facilities - applies to building facilities, lifts and toilets but also public external facilities such as tracks, toilets, shelters, seating etc. Facilities can be within buildings and venues.

Venues - the place where something happens, especially an organized event such as a concert, conference, or sports competition. *Universal design* - is good design that works for everyone: It is about making sure everything is accessible to, understood by and used to the greatest extent possible by everyone, without adaptation or requiring little adaptation. Incorporating universal design early on is cost-effective.

- Universal design is often referred to in relation to the built environment, but it applies to services, supports, the curriculum and technologies as well.
- Universal design is distinct from accessible design. Accessible design represents the minimum accessibility requirements in built design, whereas universal design seeks accessible design outcomes that work for everyone.
(*New Zealand Disability Strategy 2016*)

Accessible Format - That a document or piece of information has been made with consideration of accessibility. Some formats suit one type of impairment more than another and a combination may be required depending on the audience:

- visual impairments - audio, audio description, Braille, Moon, telephone
- learning disabilities and literacy difficulties - audio, audio description, easy read, easy access, Makaton, subtitles
- hearing - Sign Language, Makaton, subtitling, textphone, SMS
- co-ordination difficulties - large print, audio, audio description, telephone (gov.co.uk)

BEFORE THE ENVIRONMENT COURT

Decision No: [2013] NZEnvC 159
ENV-2010-WLG-000127

IN THE MATTER of an appeal under Cl 14 of
Schedule 1 to the Resource
Management Act 1991

BETWEEN JOHNSONVILLE COMMUNITY
ASSOCIATION
INCORPORATED
Appellant

AND WELLINGTON CITY COUNCIL
Respondent

Court: Environment Judge C J Thompson
Environment Commissioner W R Howie
Environment Commissioner E H von Dadelszen
Hearing: at Wellington: 24, 25 June 2013. Site visit 26 June 2013
Counsel: T H Bennion for the Johnsonville Community Association Inc
K M Anderson and A M White for the Wellington City Council

DECISION ON APPEAL

Decision issued: 16 JUL 2013
The appeal is allowed in part – see para [65]
Costs are reserved



Introduction

[1] After hearings before Commissioners between April and June 2010, the Wellington City Council adopted proposed District Plan Change 72 (PC 72). PC 72 grew out of a number of factors, eg a review of the Johnsonville Town Centre Plan, the Council's monitoring of infill development in Wellington suburbs, and the view that population growth and consequent housing demand in the City should best be focused into the *spine* running from Johnsonville to Kilbirnie.

[2] Part of the process behind PC 72 was a consideration of what were then known as *Areas of Change* where the Council would encourage residential intensification in nominated areas. In the course of considering the proposed plan, the *Areas of Change* came to be called *Medium Density Residential Areas* (MDRA) and that is the term that has been used since.

[3] This appeal concerns only the proposed MDRA for Johnsonville. This was the most controversial element of the Plan Change, both as to its areal extent and to the height and coverage of buildings which might be allowed by it. As a result of the submissions and hearings, the following changes to the proposed Johnsonville MDRA were recommended and approved by the Council:

- (1) The maximum permitted building height was reduced from 10m to 8m. An additional 30 percent (up to 10.4m) more height could be approved as part of a *discretionary (restricted)* activity resource consent application.
- (2) A new standard requiring front units or dwellings to be oriented to face the street with main entrances being located on the street elevations.
- (3) A minimum physical separation of 7m between the front unit on a site and any units constructed to the rear.
- (4) Additional design guidance was set out in the Residential Design Guide to address streetscape and character, integration of medium density housing, topography and lot orientation, solar access and privacy and treatment of mass earthworks.

[4] The Johnsonville MDRA has been divided into two sub-areas – MDRA 1 and MDRA 2. For ease of reference, we annex as Appendix 1 a copy of Plan Map 23



which shows the areas of MDRA coloured orange and marked MDR 1 and MDR 2. (The Town Centre is coloured pale pink and is, as one might assume, at the centre of the Map). Some verbal description of the areas needs to be given also. The boundaries of both sub-areas have been based on residents having good access to the Town Centre: - taken as being within 10 minutes walking time, a topic to which we shall return. Most of MDRA 1 is a block of largely residential lots to the northwest of the Town Centre. Its northern boundary is Ironside Road and its southern is on Frankmoore Avenue. There has been a significant degree of infill housing there already, some of which is of the quality mentioned in para [19] and which gives some weight to the appellant's concerns about residential amenity. There is also a much smaller piece of MDRA 1 on the southern side of Broderick Road, with its western boundary against the Johnsonville commuter railway line.

[5] MDRA 2 is much larger in extent, and is in five pieces. One is to the west of the Town Centre with its southern boundary on Broderick Road and its northern on Woodlands Road. It is largely well-established residential, with churches and the like well established also. The second extends quite a long way south between the eastern side of Moorefield Road and the railway line. It too is well-established residential, (mostly 1940s -1950s State housing) with one or two professional practices in former houses. There has been some infill housing of varying quality there also. The third piece is the largest, covering the higher ground between the railway line in the west with Pollen Street and Johnsonville Road/SH1 along the south and east. This too is established residential, mostly State housing of the 1940s and 1950s, and again with some infill of varying types and quality.

[6] The remaining two pieces of MDRA 2 have quite distinct features, and we discuss them separately at paras [54] to [59].

[7] The differences between MDRA 1 and MDRA 2 are summarised in the explanation to Policy 4.2.3.2:

... [The areas of MDRA 1] contain a significant number of smaller infill and multi-units creating a relatively intensive urban character. The provisions that apply to these areas seek to facilitate the continuation of these existing patterns. No minimum lot dimensions are required in recognition of the character of existing development and



the fragmented subdivision patters which would inhibit site amalgamation. Similarly there is no request for ground level open space in recognition that these areas are already intensely developed. ... the emphasis will be on providing quality multi-use areas that can double as both vehicle manoeuvring spaces and usable outdoor space.

For MDRA 2 the explanation is:

... a slightly less intense, more suburban style of development. This areas includes land that is slightly further removed from the town centre, with more existing open space. Requiring minimum lot dimensions will provide additional flexibility as to how buildings are massed on site and provides scope for different building forms and layouts. It will also help ensure that buildings can be oriented to face the street and will reduce the number of driveways required. ...

The parties' positions

[8] The Johnsonville Community Association Inc (JCA) is a successor to the Johnsonville Progressive Association, which was the original appellant. The JCA was opposed to the Johnsonville MDRA in its entirety, and its original grounds set out in its Notice of Appeal (which was completed without the benefit of legal advice) included complaints about the adequacy of Council consultation in the preparation of PC 72, and about other matters of process. In an *ab initio* hearing such as an appeal to this Court, those matters would have been of very limited relevance, but fortunately the Association consulted Mr Bennion after the Council's evidence was exchanged, and with his advice the issues put forward by the Association have been refined to:

- Whether the effects on existing amenity through MDRAs creating a “new, more intensively urban character” ... can be dealt with simply by policies and explanations in the District Plan proper and the Residential Design Guide as amended, or whether some other specific guidance is needed to maintain and enhance amenity, in particular, by way of a Johnsonville specific MDRA design guide;
- Whether community infrastructure supports all of the areas proposed for MDRA;
- Whether MDRAs are suitable across all of the areas proposed;
- Demand for MDRAs in the Johnsonville area.

Mr Bennion went on to summarise his client's position in these paragraphs:



- (a) The plan change fails because it cannot in any meaningful sense be said to have had regard to the maintenance and enhancement of amenity values where it provides for significant change;
- (b) The community infrastructure cannot support all of the areas of change proposed and so Part 2 is breached, in particular health and safety for residents if housing developments are without proper infrastructure.

[9] As mentioned, its original position was that the MDRA should be entirely abandoned, but it adapted that view to accord with the evidence of its planner witness, Mr David Armour, and its traffic engineer, Ms Harriet Fraser. At least in terms of amenity, the Association's end position is that the Plan Change should not be pursued unless and until there is a better understanding and guidance on what the *new amenity* should be – and that could perhaps be achieved through a design Guide specific to MDRAs. If though, the Court comes to the view that amenity can be maintained through existing mechanisms, the Association contends that its extent should be limited to the areas outlined by Mr Armour.

[10] We shall discuss these issues further – mainly in the course of working through the Part 2 issues.

[11] Mr Karlis Abolins was a s274 party to the appeal. Sadly, he passed away before the appeal was heard, but his position was assumed by members of his family and one of his daughters, Ms Amanda Abolins-Reid, gave evidence as their representative, but the family did not participate in the balance of the hearing. They own one of the five residential properties at 2 – 10 Middleton Road which comprise a small and somewhat isolated piece of the proposed MDRA 2, at the corner of Middleton Road and Helston Road. They oppose the imposition of an MDRA on those properties.

[12] What has particularly brought PC 72 into focus for the Abolins family is that in respect of the two properties immediately to the north of their property, an application has been made (and we understand is presently suspended, pending the



outcome of this appeal) for a resource consent to enable a 21 unit housing development. The Abolins family believe that this will have a serious adverse effect on the amenity of their property and the surrounding area. In particular, they are concerned about:

- a loss of privacy and potentially a significant increase in noise of residential activity and people in vehicles moving in and out of the neighbouring property;
- the density and character of such a development would be out of context with the existing character of the neighbourhood;
- the scale of the proposed building would be ... *overwhelming and consuming to the urban environment*;
- the belief that there will be inadequate onsite parking provided, leading to parking issues on the surrounding streets, and that such a large number of dwellings will increase traffic volumes onto Middleton Road, which it will struggle to manage;
- an increase in the issues about pedestrian safety moving around the Middleton Road/Helston Road etc, roundabout intersections;
- issues about adverse effects from earthworks and construction matters.

[13] We note here that the current proposal for 8-10 Middleton Road is to be assessed as a *Discretionary (Restricted)* activity under both the operative Plan and the Plan as it would be if PC 72 becomes operative so, strictly, the same outcome could come to pass under either scenario, although guidelines and policies may influence a different outcome. But a *real life* application does help in considering what might happen, or happen more frequently, if PC 72, with its emphasis on housing intensification, is approved.

[14] The Council is content with the boundaries of the MDRA as they now stand, and the contents of the proposed Objectives, Policies and Rules relating to it. In short, it supports the original 2010 decision. It points out that the process of change to a more intensive form and pattern under PC 72 will be gradual – there will not be an overnight transition – and good guidelines are likely to produce a much better long term outcome than has been achieved under the present, rather ad hoc, position.



The legal framework for considering Plan Changes

[15] The legal framework begins with sections 72 – 76 and incorporates, by reference, sections 31 and 32. The process of analysis, once the matter is before the Court, has been reviewed in a number of decisions of the Court. We agree with Ms Anderson’s submission that, as was the case in, eg *Purdie v Wellington CC* [2010] NZEnvC 83, in the circumstances of this Council-initiated Plan Change, and the issues raised in the appellant’s evidence the otherwise lengthy list of factors can be compressed. We consider whether the terms of the Plan Change:

- accord with and assist the Council in carrying out its functions so as to meet Part 2;
- take account of effects on the environment;
- are consistent with, or give effect to (as appropriate) applicable national, regional and local planning documents; and
- meet the requirements of s32 RMA, including whether the policies and rules are the most appropriate for achieving the objectives of the plan.

[16] It would be helpful to set out the relevant portions of s32, bearing in mind that because of the date of notification of PC 72 (29 September 2009), the version to be applied is as it existed before the 2009 Amendment Act came into force on 1 October 2009.

32 Consideration of alternatives, benefits, and costs

(1) In achieving the purpose of this Act, before a proposed plan, ... change, or variation is publicly notified, ... an evaluation must be carried out by— ...

(c) the local authority, for a policy statement or a plan (except for plan changes that have been requested and the request accepted under clause 25(2)(b) of Part 2 of Schedule 1);

(2) A further evaluation must also be made by—

(a) a local authority before making a decision under clause 10 or clause 29(4) of the Schedule 1; ...

(3) An evaluation must examine—

(a) the extent to which each objective is the most appropriate way to achieve the purpose of this Act; and



(b) whether, having regard to their efficiency and effectiveness, the policies, rules, or other methods are the most appropriate for achieving the objectives.

...

(4) For the purposes of the examinations referred to in subsections (3) ... , an evaluation must take into account—

(a) the benefits and costs of policies, rules, or other methods; and

(b) the risk of acting or not acting if there is uncertain or insufficient information about the subject matter of the policies, rules, or other methods.

(5) The person required to carry out an evaluation under subsection (1) must prepare a report summarising the evaluation and giving reasons for that evaluation.

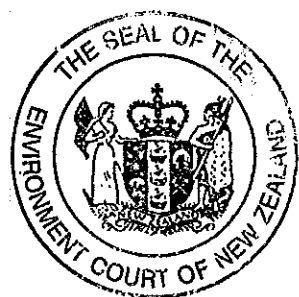
[17] There is no presumption that the terms of the Plan Change are appropriate (or not). What is required of the Court is simply to seek an optimum planning solution based on the information and options put before it.

The population issue

[18] We have already mentioned the Council's view that the bulk of population growth in Wellington City should be accommodated along the so-called *spine* of the City between Johnsonville and Kilbirnie. The Council's expectation (and it was not challenged) is that the City's population will grow by some 30,000 by 2031, and that it will require a further c15,000 housing units by that date – ie c800 housing units pa. The housing units will, as one might expect, be a mix of lower density stand-alone houses, medium density townhouse/terrace housing, and high density apartments. The expectation is that Johnsonville will have, by 2031, some 25% of the medium density, and 4% of high density development. In actual numbers, that translates to a total of 1112 additional dwelling units in the MDRA and the Johnsonville Town Centre by 2031, or some 59 dwelling units pa.

Infill housing experience

[19] As is outlined in the Council's non-statutory discussion document *Promoting Quality of Space – a targeted approach to infill housing in Wellington City* (May 2007), the experience with infill housing in and around the City has not been an entirely happy one. The document has this introductory note:



... There is evidence in some areas that poorly designed infill housing is impacting on valued suburban character and amenity. There is also concern that infill development and intensification is being encouraged (or at least allowed) in areas that have poor access to public transport or are not well-serviced by infrastructure.

Johnsonville has not escaped those effects, and the Boffa Miskell character assessment done for the Council in 2008 confirms that the *existing environment* has been adversely affected accordingly. We are inclined to accept the Council's view that continuing or replicating the miscellany of styles, sizes and layouts of some of the existing housing stock, particularly in the MDRA 1 area, will certainly not be the best planning solution available. PC 72, through setting a new standard or character, is one of a number of steps, so we were told, that the Council has and is taking to address such issues.

Walking times and distances

[20] One of the criteria used by the Council to locate areas around the Johnsonville town centre that might be suitable for medium density residential development was the walking time or walking distance from the MDRA to the Town Centre. If the walking distance to the town centre was less than 800m, or the walking time was less than 10mins, then the area was, in the original proposal, considered by the Council as potentially suitable as an MDRA.¹

[21] Because the walkability of routes into the Town Centre is affected by the delays incurred by having to cross busy roads and by the terrain (steps and steep slopes) the 10 minute walking time, rather than the 800m radius which took no account of terrain etc, was adopted by the Council to identify suitable MDRAs.²

[22] Ms Lucie Desrosiers, the Council's consultant urban designer, said she considered that:

... Council has used sophisticated computer modelling analysis to define the extent of the area accessible within 10 minutes walk including consideration of slope, presence or absence of footpaths and delays at road crossings. In my professional opinion, the work undertaken by Council to determine walking times to the town centre is

¹ Desrosiers EIR para 5.

² Desrosiers EIR para 13.



sophisticated and sound and provided a good starting point in defining the boundaries of the MDRA³

Ms Desrosiers attached the Council's working paper *Walkability and access to public transport and town centres May 2007*, on which she relied, as Appendix 2 to her rebuttal evidence.

[23] That paper provided a table of the assumed times taken to cross various roads and formulae to calculate the walking time taken to traverse the route, taking into account whether the route was uphill or downhill and how steep it was, including the presence of steps. The formulae were not expressed in a clear way and the final formula that calculated the walking time taken in seconds contained inconsistent units. The speed of walking in m/s was divided by the adjusted distance in metres. That gave a unit of sec^{-1} to which was added the road crossing delay, in seconds. The result does not make sense.

[24] Ms Desrosiers was not able to explain the apparent difficulty posed by the formulae used to estimate the walking time over the various routes and on which the Council relied in setting the extent of the MDRAs.

[25] Ms Anderson called Mr Shean Audain, a GIS expert with the Council, to assist the Court with this problem. He explained that the Council had used the methodology widely throughout the city particularly to identify suitable areas for medium density residential development. He expressed confidence that the results gave good indications of the actual walking times. However, he was unable to explain the problem with the formula and, in his own words, *cringed* about its expression.

[26] As the results produced from this methodology for several areas of the city have proven to be realistic, according to Mr Audain, we might assume that the formula should have been expressed as the walking time in seconds is the distance divided by the speed plus the road crossing time delay and that in fact the analysis has proceeded in this way. But we were not given evidence confirming this.

³ Desrosiers EIR para 21.3.



[27] Mr Audain assured us that notwithstanding the erroneous formula he was confident that the walking time estimates were reliable. To a point, we are prepared to accept Mr Audain's evidence that the results of the walking times may be relied upon, but we note that *sophisticated computer modelling* always needs a stern reality test *on the ground* and, when found wanting, corrections need to be made. Other factors modify the areas suitable for medium density residential development including the nature of the walking routes and the nature of the areas themselves. We discuss those matters elsewhere. We pick up this point in discussing two parts of the MDRA 2 which give us concern – see paras [54] to [59]. For those parts of the MDRA the formulae, in our view, produce quite unrealistic results.

Planning and non-statutory documents

[28] During the course of the Hearing we were referred to a number of planning documents, regional and district, statutory and non-statutory. Specifically, in support of PC 72 we were directed specifically to Policies 30 and 31 of the operative Regional Policy Statement (2013). Policy 30 identifies Johnsonville as a *suburban centre* and requires the Wellington District Plan to include policies, rules and /or methods to enable and manage a range of land use activities that maintain and enhance the viability and vibrancy of Johnsonville. Policy 31 requires the Wellington District Plan to identify key centres and other locations with good access to the strategic public transport network suitable for higher density/ mixed use development and to include policies, rules and/or methods to encourage such density and use around these centres and locations. We consider that the provisions of PC 72 do, in terms of s75 RMA, *give effect to* the regional document.

[29] The non-statutory *Wellington Urban Development Strategy* (2006) clarified that the areas best able to serve the needs of future population growth were around the key centres and transport nodes. The concept of the *growth spine* encouraging the growth of housing and employment in key centres linked by a public transport spine between Johnsonville and the Wellington Airport was developed from this Strategy.



[30] Among the many other non-statutory documents considered were : the *Johnsonville Town Centre Plan* (2008), the *Wellington City Transport Strategy*, the *Wellington Regional Land Transport Strategy 2010-40*, the *Wellington Regional Public Transport Plan 2011-2021*, the *Centres Policy* (2008), the *New Zealand Urban Design Protocol* (2006), and the *Draft Johnsonville Design Guide* (April 2012). These documents clarified that such zones should be relatively close to commercial centres and transport hubs, accessible for pedestrians, and subject to planning controls to protect the amenity of existing and new residents.

[31] These non-statutory documents provide many laudable aspirational visions and statements designed to provide for the future needs of the community. However since these documents do not have the status of rules, and given that it is accepted that some of the poor standard in-fill development has produced significant privacy, access, and general residential issues, it is understandable that the appellant, and others concerned about PC 72, are concerned about how effective these documents will be in preventing further unattractive in-fill development in their suburb. We return to the issue of the Design Guide(s) under a discrete head.

[32] Another issue of basic importance, but one which is not linked to the statutory planning requirements, is the walking distance/time criterion which we were told was a major factor assisting the Council in delineating the land to be designated as the MDRAs. It is our opinion that some of the potential pedestrian routes linking the proposed MDRA to the Town Centre and/or traffic routes, while theoretically falling within the 10 minute walking criterion, are not practicable and we discuss the two most affected areas in detail in paras [54] to [59]. We understand improvements to the footpath infrastructure and to the roundabouts (at the northern end of the Town Centre) are planned to serve the people who are expected to live in the proposed MDRAs, but we also understand that funding for some of these improvements will be contestable by other areas of the City.

[33] While the appropriateness of the MDRA in Johnsonville was accepted by the appellant's witnesses, there remained disagreement about their appropriate extent, the topographical and practical difficulties faced by pedestrians negotiating the



potential routes within the times suggested, the lack of cultural, entertainment and employment opportunities in the Johnsonville Town Centre and concerns about the planning controls over development, including the lack of a Residential Design Guide specific to Johnsonville.

Other issues

[34] Some issue was made, by Mr Armour in particular, of the absence of entertainment or cultural facilities in and around Johnsonville Town Centre. There are, it was said, only two pubs, no cinema or theatre, limited restaurants and only one, or perhaps two, chartered clubs and they are struggling with dwindling membership. The argument being made was that this lack of social infrastructure meant that the suburb was unsuitable for intensification of its housing stock.

[35] We confess to struggling with the logic of that. All entertainment facilities are highly responsive to customer demand. Pre-television, suburban cinemas were common. Some, by re-inventing themselves as multi-screen complexes, usually with a cafe/restaurant on site, have revived. Suburban pubs will prosper or fail according to demand, particularly when they are within walking distance of residential streets and the legally and socially unacceptable issue of drink-driving can be side-stepped. Chartered Clubs have the same issues. For success, it is rather self-evident that restaurants require both a good reputation for product and service, and a location where there is a critical mass of patronage.

[36] If such facilities are regarded as desirable, their absence, we would have thought, tells in favour of encouraging, in a guided way, the intensification of housing within walking distance of the very places where one might expect a new cinema or pub to be established, not the other way around.

Demand

[37] The Association suggested that, apart from all else, there was no, or insufficient demand for medium density housing in the area, and that the MDRA(s) were therefore a pointless exercise. We need to point out, first, that planning is permissive. PC 72 would not require every piece of land in the MDRA areas to be



developed in that way. If someone wished to build a conventional single-unit dwelling there, that can be done. What PC 72 does is to provide the opportunity for more intense development, in an area thought likely to be attractive for it, and for it to be done in a way that will provide reasonable assurance of an outcome that is acceptable from an amenity point of view. Whether that opportunity will actually be taken up remains to be seen.

Part 2

[38] There are no issues of particular importance to Māori, in terms of s8 or s6(e). Nor are there other matters declared to be of *national importance* in terms of s6.

[39] There are issues arising under s7, to which the Court is required to ... *have particular regard*. They are: ...

- (b) The efficient use and development of natural and physical resources:
- (c) The maintenance and enhancement of amenity values: ...
- (f) Maintenance and enhancement of the quality of the environment:
- (g) Any finite characteristics of natural and physical resources: ...

[40] As the comment already made about experience with some infill housing in the past might indicate, there can be tension between these issues. It may, in one sense, be *efficient* to utilise the finite resource of housing land in close proximity to town centres by filling it to capacity with housing units. But it is unlikely that such a single-minded course will maintain, let alone enhance, amenity values (ie ... *those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes* - see s2) - or the quality of the environment.

[41] In his submissions, Mr Bennion described the issues around s7(c) and (f) as being ... *at the heart of the appeal*. And he pointed to the evidence of Mr Armour as providing expert support for the proposition that amenity would suffer if the Plan Change goes ahead in its present form.

[42] Mr Armour's concerns relating to amenity were that the PC 72 provisions as stated in the Residential Design Guide were a complete change from the Policy in the



Operative Plan which reflected attempts to protect existing amenity by requiring developments to be compatible with the surrounding area. The Residential Design Guide included the statement that

... complementing existing character is not a factor in designated Medium Density Residential Areas. New buildings will help to establish a new more intensively urban character while representing a change from the existing condition.

He also believed the increased site coverage would allow more bulky and *out of scale* residential development which would be out of character and that some minimum open space would be needed for MDRA 1.

[43] It is clear that in the past there has been poor piecemeal infill development in Johnsonville and that medium density is part of existing character of the proposed MDRAs. Bu the reason for not requiring Johnsonville MDRAs to complement existing character is that some of the previous development is so poor that no one wants to replicate it.

[44] Mr Armour accepted that the proposed bulk and location provisions, including recession planes, yards, ground-level open space (except for MDRA 1), lot configuration, streetscape etc, are apt planning controls to apply to protect the amenity of neighbours and will also include new guidelines on access and traffic and, by implication, that those new standards will in general be higher than currently in force.

[45] Subject to the comments to be made about the possible benefit of a Design Guide specific the Johnsonville MDRA issues, our overall view is that as proposals for multi-unit development will have to go through the consent application process, plus provide a Design Statement and be assessed against the *Residential Design Guide*, there is reasonable assurance that poor quality development would not result. Taken together, the objectives, policies, rules, permitted activity standards and the *Residential Design Guide* are aimed at encouraging and permitting high quality medium density residential development over a number of years, while allowing multi -unit developments to be assessed through the resource consent process. These provisions should help maintain and improve amenity in the suburb.



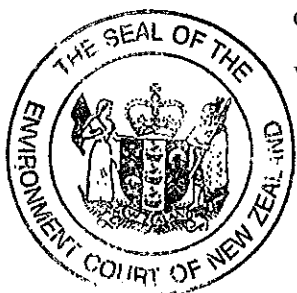
General and specific design guide

[46] This may be a convenient point to discuss the issues about design guides. As we have mentioned, the District Plan has a generic Design Guide. In considering PC 72 the Hearing Committee suggested that a complementary Design Guide, specific to MDRAs, would be useful. That was not greeted with enthusiasm and the Council did not adopt the idea. Reflection has led us to the view that it is a proposal with use and merit.

[47] The *Residential Design Guide* forms part of the District Plan and it has a clear purpose: to provide ... *design assessment criteria for developments subject to resource consent*. Under the four headings: *Character, Site Planning, Building Design and Open Space*, the guide is clearly focussed on helping Council staff assist applicants at the pre- application phase to understand the urban design issues of concern to the Council, and to assist them in providing the Design Statement required to accompany every application for Multi Unit development, and to be used to assess any proposal for a second or subsequent unit on a site.

[48] This *Residential Design Guide* is meant to be relevant for all the residential areas of the City. However, it became clear that part of Chapter 1, *Character*, was not relevant to Johnsonville. As a result of the Council's decision, the introduction to that chapter stated that *Complementing existing character is not a factor in designated Medium Density Residential Areas*, and went on to clarify that*all development in those areas should follow the principles of good urban design as described in other parts of this guide and establish positive precedent for the other development that will follow*. Ms Desrosiers agreed that Guideline 1.1 (page 5) relating to *Assessing and complementing neighbourhood character* was not relevant in assessing resource consents in the MDRAs, but that the other 13 Guidelines under that heading remained relevant.

[49] The *Johnsonville Medium Density Residential Areas Draft Design Guide* was drafted as a result of the Plan Change Hearing Committee's recommendation. This document appears to be aimed at a different audience: the citizens of Johnsonville who were concerned about the outcomes (i.e. what the suburb might look like) if the



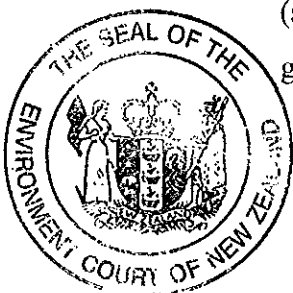
MDRAs and the generic *Residential Design Guide* were to be put in place. As we have noted, their concern is understandable, given some poor standard in-fill development in recent years.

[50] This Draft Design Guide has a clear statement of purpose: The design guidance is intended to provide tailored, street specific guidelines which recognise the different characteristics of the streets within the Johnsonville MDRA, and encourage new multi-unit development to be designed in response to those characteristics. This Guide includes matters not contained in the other document: - more definitions; character descriptions of the four specific parts of Johnsonville designated for MDRAs, and an analysis of the roading hierarchy. These Guidelines focus on a development's contribution to and enhancement of the street and public spaces.

[51] Ms Desrosiers stated that she did not believe the separate *Johnsonville Design Guide* was needed since the *Residential Design Guide* addressed the issues of amenity, sunlight access and privacy raised by the appellant. She also said that the provisions in the District Plan had been tailored to the Johnsonville context, the two sub areas (MDRA 1 and MDRA 2) reflected the site conditions, and the Council Hearings Committee made changes to the building height provisions. Because the *Johnsonville Design Guide* could not override the rules and standards in the District Plan, she believed that there was a risk of repeating material already in the District Plan and *Residential Design Guide*, rather than providing any additional protection sought by the appellant.

[52] But the *Johnsonville Design Guide* does serve a different purpose from the District Plan and *Residential Design Guide* in providing information and guidelines not available anywhere else. In particular it clarifies for the appellant, and others sharing its concerns, the character of the areas in which intensification will be encouraged, and the likely appearance of the suburb as a result.

[53] We cannot help but think that if it were completed and amended appropriately (some areas deleted and some drawings amended to reflect the actual rules and guidelines) and perhaps attached as an Appendix to the *Residential Design Guide* (as



originally requested by the Council's Hearing Committee), it would be a useful and informative document, supporting the District Plan.

The portion of MDRA 2 east of the motorway

[54] Part of the proposal in PC 72 is the quite large piece of MDRA 2 on the hillside to the east of the Town Centre, and separated from it by the Motorway. Largely, it consists of the west side of the quite recently developed residential street of Sheridan Terrace, and both sides of the even more recently developed Creswell Place – indeed house construction is taking place on the southern portions of Creswell Place at present.

[55] There are two principal issues which concern us about this part of the proposal. The first is the pedestrian access to and from the Town Centre. We have previously discussed the basis on which walking times were assessed. Obviously enough, the Motorway is an impassable barrier to surface-level walking. There are two pedestrian subways beneath it – one from the foot of Burgess Road to the northern Town Centre and the other from a long and steep walkway down from Sheridan Terrace and exiting into Disraeli Street, towards the southern end of the Town Centre. The Burgess Street walkway is reasonable enough, in terms of gradient and accessibility, as a means of foot access to the shops and services of the Town Centre, but realistically could service only the northern part of Sheridan Terrace.

[56] The Disraeli Street subway is a very different beast. The pathway descending down to its eastern portal from the residential street above is both lengthy and steep, interspersed with several flights of dauntingly steep, shallow and poorly formed steps. Even the reasonably fit would find carrying shopping up to the road above a stern challenge, and anyone with mobility issues, or pushing a baby buggy, or accompanied by small children, would find it all but impassable for practical purposes. For most people and for most purposes, day-to-day access to and from this part of Johnsonville and the Town Centre by this route is not a really practical proposition.



[57] The other issue is that of land availability for medium density development. It needs to be understood that Sheridan Terrace and Cresswell Place are recent, and current, housing developments. The lot sizes certainly appear to be no greater than the modern standard, single dwelling, lots – far from the fabled suburban *quarter acre* of 50 or 60 years ago. Moreover, the buildings on them are modern single unit houses with reasonably substantial floor plates, occupying a substantial part of the usable lot. The prospect of them being redeveloped as multiple-dwelling lots at any time in the foreseeable future is negligible.

The portion of MDRA 2 at the corner of Middleton and Helston Roads

[58] This piece of the MDRA 2 comprises five existing lots containing houses of varying sizes and quality. The Abolins property (see para [11]) is one of them. The properties front onto Middleton Road, opposite the knoll on which stands the prominent Anglican Church. The rear of the properties back onto the on-ramp to the Motorway at the northern end of the Town Centre. To the south of the properties is the western end of the bridge carrying Helston Road across the motorway and its on-ramp. Helston Road, Moorefield Road, Ironside Road, Bassett Road and Middleton Road intersect at, or very close to, a large roundabout in front of the southernmost of the MDRA properties. Anyone leaving any of these MDRA properties on foot and wishing to get to the Town Centre is faced with either crossing Helston Road on or near the roundabout, then Moorefield Road (where there is presently a zebra crossing) then re-crossing Moorefield Rd (where there is another zebra crossing near the medical centre). Alternatively, there is a yet longer and more fraught route crossing Middleton Road, Bassett Road and Ironside Road (none of which have crossings) and then across the Moorefield Road crossing near the medical centre. In non-peak traffic periods, these routes might well be *doable* within 10 minutes, but at peaks it is not hard to imagine them taking at least that, if not longer. At either time, those with mobility issues, or managing a baby buggy or small children would also find this route difficult and even harrowing.

[59] We understand that this block of properties was not originally considered for MDRA status, but became so at the suggestion of the then owner of the property at 8-



10 Middleton Road, over which a resource consent for a multi-unit development is now pending.

The balance of the MDRA

[60] While one might debate the accessibility of some parts of the proposed areas, particularly perhaps those around the higher ground of the Fraser Avenue area, on the whole we think that the 10 minute walk criterion can be made out for them, and that the lot sizes and housing styles are likely, over time, to lend themselves to in-fill housing, and to the extensions and renovations of existing properties. If they can be done under a reasonably consistent design guide in terms (at the least) of orientation to the street, spacing between units, site coverage and the like, the outcome, without being regimented, is at least going to be more acceptable in amenity effects than some of what has occurred so far.

[61] Having considered again what the Association has expressed as its concerns, we see no substantial reason to differ from the view come to by the Council for the balance of the Johnsonville MDRA.

Section 290A – the Council’s decision

[62] Section 290A requires the Court to *have regard to* the Council’s decision. That does not create a presumption that it is correct but it does, implicitly at least, call for an explanation if we should come to disagree with it. We have considered the Council’s decision and come to similar overall conclusions for the majority of the area of the proposed MDRA, but have come to disagree, for the reasons we have attempted to set out, with the decisions about the area to the east of the Motorway and the small area at the Helston Road/Middleton Road intersection.

Summary of conclusions

[63] We set out the broad framework of matters to be considered at para [15]. Drawing together the threads of what we have discussed, we consider that the majority of the proposed Johnsonville MDRA regime will meet the purpose of the Act, the sustainable management of natural and physical resources, will take account of effects on the environment, are consistent with higher level planning documents,



meet the requirements of s32 and are the optimum planning solution of those presented to us. We do however consider that a useful purpose would be served in continuing with the hearing Committee's suggestion of a Johnsonville MDRA specific design guide, and we invite the Council to reconsider the existing document and present a revised (if necessary) version to us by 30 August 2013, for inclusion as an Appendix to the generic document.

[64] For the reasons we have set out, we do not consider that the two proposed MDRA areas, east of the Motorway and at the corner of Helston and Middleton Roads, meet the tests we set out at para [15], and they should not form part of the Plan Change.

Result

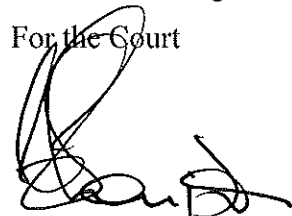
[65] The appeal is allowed to the extent just outlined in paras [53], [63] and [64]. For the balance, the decision of the Council is confirmed. Insofar as the issue of the design Guide is concerned, this decision should be considered as Interim.

Costs

[66] It is the general practice of the Court not to award costs on appeals against Plan provisions, and we do not encourage any application here. But as a matter of formality we shall reserve costs. Any application should be lodged within 15 working days of the issuing of this decision, and any response lodged within a further 10 working days.

Dated at Wellington this 16th day of July 2013

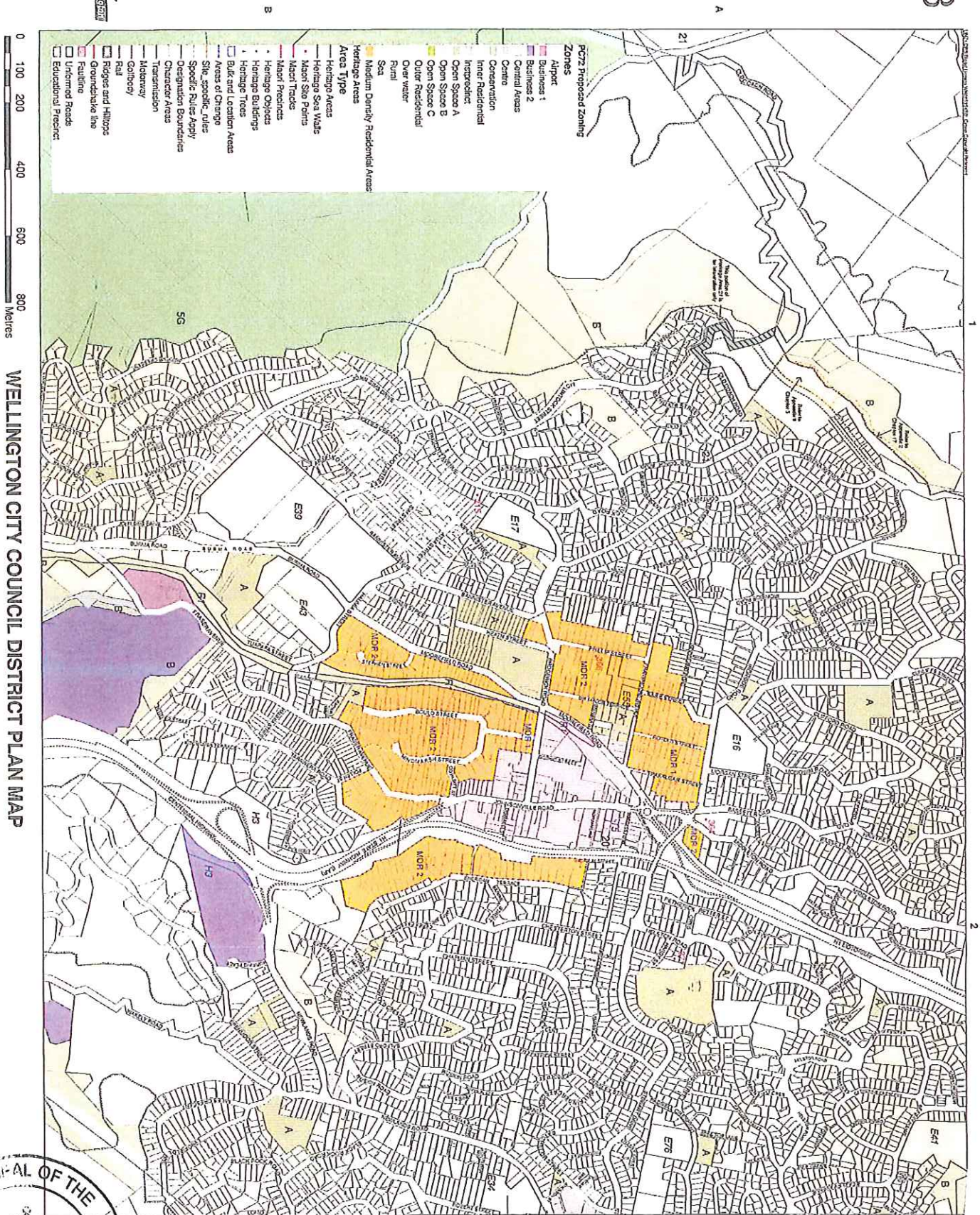
For the Court

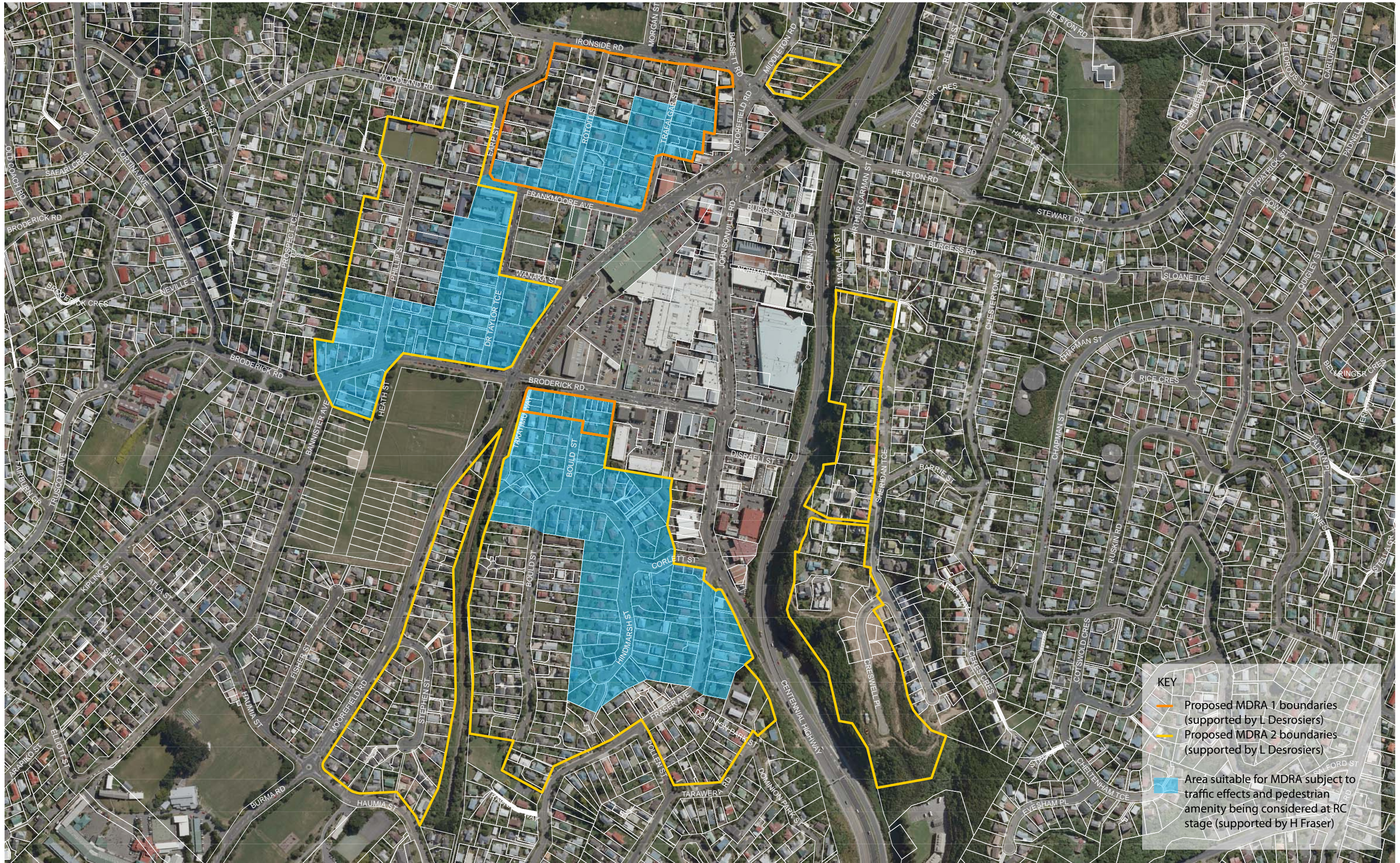


C J Thompson
Environment Judge



APPENDIX 1





PC72 Johnsonville MDRA - Boundaries

Expert Conference 31 May 2013

Before the Environment Court

ENV-2010-WLG-0001279

In the Matter of: the Resource Management Act 1991

And

In the Matter of: appeals under clause 14 of the First Schedule of that Act in relation to District Plan Change 72 (Residential Review)

Between: Johnsonville Community Association
Incorporated

Appellant

And: Karlis Abolins

Section 274 party

And: Wellington City Council

Respondent

**Statement of Evidence of
Harriet Barbara Fraser**

Harriet Fraser
Tel: 04 526 2979
Mob: 027 668 5872
Email: harriet@harrietfraser.co.nz
PO Box 40170
Upper Hutt 5140

24 April 2013

Statement Of Evidence Of Harriet Barbara Fraser BEng(Hons), MSc, MIPENZ, CPEng, IntPE

INTRODUCTION

1. My name is Harriet Barbara Fraser. I am a Chartered Professional Engineer and a Member of the Institution of Engineers of NZ. I hold a Bachelor of Civil Engineering degree from Imperial College, University of London and a Masters' degree of Science in Transportation Planning and Engineering awarded with distinction by the University of Leeds. My background of experience includes 20 years consultancy experience in traffic and transportation matters. From August 1998 to August 2012 I worked as a Principal Transportation Planner in the firm of Traffic Design Group Limited practicing as a transportation planning and traffic engineering specialist throughout New Zealand. Since September 2012 I have been working as a sole practitioner in the field of transportation planning and traffic engineering.
2. I have successfully completed the MfE training and certification programme for Commissioners, Making Good Decisions.
3. I have read the Code of Conduct for Expert Witnesses in the Environment Court Consolidated Practice Note 2011. I agree to comply with this Code of Conduct. This evidence is within my area of expertise, except where I state I am relying on what I have been told by another person. I have not omitted to consider material facts known to me that might alter or detract from the opinions that I express.

BACKGROUND & INVOLVEMENT

4. In this matter, I have been asked by Johnsonville Community Association to examine the potential traffic and transportation effects arising from proposed Plan Change 72 to the Wellington City District Plan.
5. I was not involved in the original Plan Change 72 hearing.
6. In preparing this evidence I have visited the central Johnsonville area on four separate occasions to further familiarise myself with the local traffic conditions.

SCOPE OF EVIDENCE

7. My evidence will cover:
- (i) the transportation components of Plan Change 72 as they relate to the proposed Medium Density Residential Areas (MDRAs) in Johnsonville;
 - (ii) a description of the existing traffic and transportation environment;
 - (iii) a description of the anticipated future traffic and transportation environment;
 - (iv) area-wide traffic and transportation concerns regarding the proposed MDRAs;
 - (v) local traffic and transportation concerns regarding the proposed MDRAs;
 - (vi) comments on the Wellington City Council evidence; and
 - (vii) overall summary and conclusion.

PROPOSED PLAN CHANGE 72

8. As I understand, the original concept included twelve possible Areas of Change in which Council would encourage residential intensification. The criteria used to select these possible Areas of Change included:
- (i) proximity to centres and employment;
 - (ii) availability of public transport; and
 - (iii) carrying capacity of existing infrastructure and services.
9. In developing Plan Change 72 the proposed MDRA for Johnsonville was reduced in size to allow for accessibility from residential areas into Johnsonville centre of no more than 5-10 minutes walking distance. Some eight separate MDRAs were identified in Johnsonville.
10. Council is anticipating that some 1,112 additional dwellings are constructed within the overall Johnsonville MDRA during the period up to 2031.

11. My understanding is that multi-unit developments within the MDRA will be assessed as a discretionary activity (restricted) and that with regard to traffic matters the discretion is restricted to:
- 5.3.7.1 *design (including bulk, height and scale), external appearance, and siting (including landscaping, parking areas, vehicle manoeuvring and site access)*
 - 5.3.7.2 *provision of parking and site access*
12. Under Plan Change 72 the traffic related residential rules that would apply to multi-unit developments within the Johnsonville MDRA are:
- 5.6.1.3 **Vehicle Parking**
On-site parking shall be provided as follows:
 - *residential activities: minimum 1 space per household unit*
 - *visitor parking for multi-unit developments: a minimum 1 dedicated space for every four household units for any proposal that results in 7 units or more*
 - *all parking must be provided and maintained in accordance with sections 1, 2 and 5 of the joint Australian and New Zealand Standard 2890.1 – 2004, Parking Facilities, Part 1: Off-Street Car Parking*
 - 5.6.1.4 **Site Access**
 - 5.6.1.4.1 *No vehicle access is permitted to a site across any restricted road frontage identified on District Plan Maps 43 to 46.*
 - 5.6.1.4.2 *Site access for vehicles must be formalised by a legal right of way instrument where not directly provided from a public road, and must be provided and maintained in accordance with Section 3 of the joint Australian and New Zealand Standard 2890.1 – 2004, Parking Facilities, Part 1: Off-Street Car Parking.*
 - 5.6.1.4.3 *There shall be a maximum of one vehicular access to a site, except that a site with more than one road frontage may have one access per frontage (unless the second frontage is to a State Highway).*
 - 5.6.1.4.4 *The maximum width of any vehicular access is:*
 - *in Medium Density Residential Areas 3.7metres for sites containing up to 6 units, and 6.0 metres for sites containing 7 or more units.*
 - 5.6.1.4.5 *On sites with frontage to a secondary street no access shall be provided to a primary street or state highway.*

13. Plan Change 72 includes the following objective and policies with regard to achieving convenient and safe access in residential areas:
- 4.2.12 *To enable efficient, convenient and safe access for people and goods within Residential Areas***
 - 4.2.12.1 *Seek to improve access for all people, particularly people travelling by public transport, cycle or foot, and for people with mobility restrictions.*
 - 4.2.12.2 *Manage the road network to avoid, remedy or mitigate the adverse effects of road traffic within Residential Areas.*
 - 4.2.12.3 *Provide for and, in certain circumstances, require extensions to the existing road network.*
 - 4.2.12.4 *Require appropriate parking, loading and site access for activities in Residential Areas.*
 - 4.2.12.5 *Manage the road system in accordance with a defined road hierarchy.*
 - 4.2.12.6 *Protect and enhance access to public spaces in all areas of the city.*
14. It is my understanding that Council’s intention is for multi-unit developments in MDRAs assessed under rule 5.3.7 to be assessed on a non-notified basis, unless special circumstances exist that warrants limited notification or public notification.
15. Later in my evidence I will discuss the implications of the potential local traffic effects associated with the development of multi-unit residential developments in line with the proposed District Plan requirements.

EXISTING TRAFFIC ENVIRONMENT

Road Hierarchy

16. I have included in Attachment 1 photos, street cross-section details, traffic volume data and road hierarchy classifications for the streets included within the proposed MDRAs.

17. The road hierarchies are taken from the District Plan and the characteristics of the different classifications are included in the Council's Code of Practice for Land Development and are summarised in the table below.

Street Classification	Traffic volumes (vpd)	Minimum Parking Provision	Minimum Traffic Provision	Minimum Cycle Provision	Minimum Total Carriageway	Footpath Provision	Max Gradient
Local	Up to 500	2*2.0	2*3.5	none	11m	2*1.5	10%
Collector	Up to 3,000	2*2.0	2*3.5	2*1.5	14m	2*2.0	10%
Principal	Up to 7,000	2*2.5	2*3.5 plus 1*2.0 median	2*1.5	17m	2*2.0	6.7%

Table 1: Code of Practice for Land Development Requirements

18. Later on in my evidence I compare the existing street cross-sections with the above provisions. With regard to their intended functions the Code of Practice includes the following descriptions:

Principal Roads

- (i) provide access to arterial roads and to motorways;
- (ii) have a dominant through vehicular movement and carry the major public transport routes;
- (iii) access to property may be restricted and rear servicing may be required; and
- (iv) parking is provided on separate parking lanes.

Collector Roads

- (i) distribute the vehicular traffic between and within local areas and form a link between principal roads and secondary roads;
- (ii) permitted to serve up to 500 household units; and
- (iii) where residential development continues in an area that requires a collector road to serve more than 500 household units (both existing households and the new development) then additional collector roads must be provided to access the residential area.

Local Roads

- (i) primary function of providing direct access to properties fronting the road and through which only traffic having origin and destination in that locality will pass;
 - (ii) pedestrian and local amenity values are predominant; and
 - (iii) traffic lanes may be shared with parked vehicles.
19. Again, I will provide commentary later on in my evidence on the ability of the streets within the MDRAs to fulfil their intended traffic function. In addition to the functions set out in the previous paragraphs, all the streets need to allow for access by emergency vehicles the largest of which are the fire service vehicles. For such purposes a clear passageway of no less than 3.5m in width is required to achieve compliance with the New Zealand Building Code.
20. With regard to the Johnsonville Triangle, Moorefield Road and Johnsonville Road are Principal Roads and Broderick Road is a Collector Road. Traffic counts recorded by Council in 2010 show these three sides of the Triangle carrying up to 15,594vpd, 17,773vpd and 10,224 vpd respectively. As such they are all carrying traffic flows well in excess of the flows anticipated for Principal Roads.

Parking Activity

21. In preparing my evidence I arranged for sample parking data to be collected for the streets included in the proposed MDRAs. This data along with my own observations shows that at the busiest times almost all the unrestricted kerbside parking on the following streets is occupied during weekday business hours:
- (i) Corlett Street
 - (ii) Hindmarsh Street (Bould St to Corlett St)
 - (iii) Bould Street (Broderick Rd to Hindmarsh St)
 - (iv) Takatimu Way (public section)
 - (v) Moorefield Road (Broderick Rd to Johnsonville Rd)

- (vi) Dr Taylor Terrace
- (vii) Wanaka Street
- (viii) Frankmoore Avenue (Phillip St to Moorefield Rd)
- (ix) Rotoiti Street
- (x) Trafalgar Street
- (xi) Ironside Road (east of Morgan St)
- (xii) Fraser Avenue (from Johnsonville Rd up to the first bend)

22. I also noted that parking on Phillip Street got very busy around school drop off and pick up times. The initial section of Bould Street to the south of Hindmarsh Street also gets used heavily for commuter parking. Some commuter use of Hindmarsh Street to the south of Corlett Street was also observed.

Pedestrian Provision and Activity

23. The number and widths of footpaths within the proposed MDRAs are included in Attachment 1. As set out previously the Council requirement, as included in the Code of Practice for Land Development, is to provide two 1.5m wide footpaths on Local Roads and two 2.0m wide footpaths on Collector and Principal Roads.
24. Of the streets within the proposed MDRAs, Tarawera Place does not have any footpaths and the following streets only have a single footpath:
- (i) Sheridan Terrace
 - (ii) Middleton Road
 - (iii) Earp Street (north of Woodland Rd)
 - (iv) Woodland Road
 - (v) Frankmoore Avenue (west of Phillip St)
 - (vi) Moorefield Road (south of Broderick Rd)
 - (vii) Takitumu Way

- (viii) Fraser Avenue (immediately south of Corlett St)
 - (ix) Pollen Street
 - (x) Heath Street
25. Many of the footpaths throughout the proposed MDRAs are less than 1.5m wide. The photographs included in Attachment 2 provide an indication of the quality of some of the pedestrian paths.
26. The Pedestrian Planning and Design Guide produced by NZTA includes the following useful guidance with regard to assessing the walkability of a community.

Characteristic	Definition
Connected	Does the network provide direct access for pedestrians to the places they wish to reach? Do paths connect well to public transport and to surrounding networks?
Legible	Are walking networks clearly signposted and are they published in local maps? Can visitors find their way? Do users intuitively sense how to use the facilities?
Comfortable	Are routes unpolluted by excessive noise and fumes? Are paths wide enough with even surfaces and gentle gradients? Is there shelter from the elements and places to rest?
Convenient	Are routes continuous, efficient, unimpeded by obstacles, and undelayed by other path users and road traffic?
Pleasant	Are the pedestrian spaces enjoyable, interesting, quiet and clean with qualities encouraging lingering and social interaction?
Safe	Are road crossing places and driveway crossings safe from traffic danger and do all the surfaces provide a good grip when wet and provide even surfaces free from trip hazards?
Secure	Does the walking environment discourage antisocial and criminal behaviour due to the application of crime prevention through environmental design?
Universal	Are facilities suitable for mobility and vision-impaired pedestrians through gentle gradients, visual contrast, audible and tactile features?
Accessible	Are popular destinations within easy walking distance?

Table 2: Primary Characteristics of Walkable Communities

27. As included within the detail of Attachment 2, I consider that many of the pedestrian routes within the MDRAs do not meet a number of these walkable characteristics.
28. Other particular challenges for pedestrians within the existing environment include:
- (i) crossing Broderick Road in the vicinity of Bould Street;
 - (ii) crossing Johnsonville Road in the vicinity of Fraser Avenue to access the southbound commuter bus stop; and
 - (iii) crossing any of the streets in the immediate vicinity of the two roundabouts to the north of the Triangle.
29. Photos 1 and 2 below show the environment for pedestrians wishing to cross Broderick Road in the vicinity of the Bould Street intersection.



Photo 1: Looking East along Broderick Road from Bould Street



Photo 2: Looking West along Broderick Road from Bould Street

30. I have observed that the desire line for pedestrians from the Bould Street catchment who wish to access the train or bus services within the Triangle is to walk straight across Broderick Road and through the various car park areas. This involves crossing Broderick Road in a location where there is no median or pedestrian refuge, noting that this section of road can carry traffic volumes of up to 9,591vpd as recorded by Council in 2010.
31. Pedestrians crossing Johnsonville Road (22,242vpd) in the vicinity of Fraser Avenue are required to cross a very busy road with traffic turning into and out of both Fraser Avenue and Corlett Street. Some pedestrians were observed walking towards the SH1 off ramp and using the grassed island to break the crossing into two more manageable parts.
32. Pedestrians travelling between Middleton Road and the Johnsonville Triangle are required to cross Helston Road (11,970vpd) which comprises three traffic lanes with a narrow median refuge immediately to the east of the northernmost of the roundabouts. The next step is to cross Moorefield Road (23,423vpd) via the zebra crossing located between the two roundabouts. The final step is to cross Moorefield Road again (15,594vpd) to the west of the southernmost roundabout. Pedestrians wishing to access the train and bus services can walk along the northern side of Moorefield Road and then cross via the zebra crossing. Pedestrian access from the

Middleton Road direction into Johnsonville Road at peak times of traffic activity would necessitate a 100m diversion along Moorefield Road to the zebra crossing and then at least another 100m through carparks and between buildings within the northern part of the Triangle.

33. In preparing my evidence I counted pedestrian movements into and out of each of Bould Street and Corlett Street during a weekday morning traffic peak. Up to some 43 pedestrian movements per hour were counted into or out of Bould Street with eight being school children and many of the balance being commuters who had been seen parking a vehicle in a kerbside space. Pedestrian activity on Corlett Street was much quieter with only 10 pedestrians counted during the weekday morning peak hour. Given that the residential catchment for the two streets includes an estimated 170 households, existing commuter pedestrian activity associated with residents of the area is quiet despite the proximity to the shopping centre and public transport services.

Public Transport

34. Train services connect Wellington to Johnsonville with stations at Raroa and central Johnsonville. Commuter bus services connecting Johnsonville with Wellington and Porirua can be accessed adjacent to the train station or on Johnsonville Road close to the intersection with Fraser Avenue or on Middleton Road.
35. Access to the Johnsonville Road southbound bus stop involves crossing a wide and busy section of Johnsonville Road in the vicinity of the Fraser Avenue intersection. The Middleton Road northbound bus stop is located on a section of road that does not have a footpath. In this location pedestrians are required to cross a busy road without a median or pedestrian refuge to provide protection and split the crossing into two more manageable components.
36. With regard to acceptable walking distances to public transport services, Council's Code of Practice for Land Development includes the following guidance at Page 17 point 2:

'Land development should be otherwise designed to maximise the number of sites within 400m walking distance of a designated public transport stop.'

37. In Attachment 3 I have attempted to show the approximate extent of a 400m walking distance between the MDRAs and either the Johnsonville public transport interchange or the commuter bus stops on Johnsonville Road. As shown the coverage only extends partially into the MDRAs and does not reach the proposed MDRA to the east of the motorway.
38. In response to the proposed redevelopment of the Johnsonville Mall, Greater Wellington Regional Council commissioned the Johnsonville Town Centre Public Transport Operations Review which was reported on in August 2009. The Executive Summary of this report includes the following statement:

'The present bus route network, which brings all buses together at Johnsonville station, while facilitating transfer between modes, results in indirect and illegible bus routes (with buses having different inbound and outbound routes) and longer journey times for through bus passengers. This also means that Johnsonville town centre itself is poorly served by buses, because the emphasis is on serving the interchange.'

39. There are no other bus stops serving the Wellington and Porirua bound commuter routes within a 400 to 500m radius of the Johnsonville public transport interchange. There is no direct public transport service connecting Johnsonville to the Hutt Valley, passengers are required to use at least two buses.
40. The Wellington City Bus Review prepared for the Greater Wellington Regional Council in November 2011 included the following comment on the public transport infrastructure in the northern suburbs:

'There are two large-scale infrastructure issues in this area that are deeply problematic.

(i) Inadequate bus access to Johnsonville station. A major rail hub in a regional activity centre will always need a substantial number of bus lines terminating there, because the buses need to both serve the activity centre and connect with the trains. The current configuration in this area, which requires buses to circulate through a mall carpark, is unacceptable and needs to be studied to create an appropriate facility.

(ii) Ngauranga Gorge provides no protection for buses in peak congestion. This affects all bus services between Johnsonville-Newlands and the City, and

is a major disadvantage for all bus services in this corridor. Further population growth along the Kapiti Coast should be expected to make this problem worse. NZTA should study strategies for making this unique chokepoint link more usable by all transport modes.'

41. As such this most recent review found some serious deficiencies in the existing public transport arrangement.

Residential Trip Generation Rates

42. I have used Wellington City Council traffic counts along with an estimate of household numbers taken from Google Maps to determine local residential trip generation rates for the southern ends of Bould Street and Hindmarsh Street. The analysis is summarised in the table below.

Area Served	No. of households	WCC Traffic Count AADT (vpd)	Trip Generation Rate (vpd per household)
Bould Street (South of No.23)	75	508 (March 2013)	6.8
Hindmarsh Street (South of No.26)	29	244 (2008)	8.4

Table 3: Local Trip Generation Rates

43. Accordingly, local residential trip generation rates are shown to be in the range of 6.8 to 8.4 vehicle movements per day (vpd) per household. The higher value for Hindmarsh Street may be a reflection of the more hilly access with residents preferring to drive rather than walk given the grades on both Hindmarsh and Corlett Streets.

Census Travel Data

44. I have looked at the New Zealand Census data with regard to the number of vehicles owned by a household and the mode of travel used to access work.
45. The overall average vehicle ownership for the three area units comprising Johnsonville North, Johnsonville South and Johnsonville East was 1.3 vehicles per household in 1996 and 2001 increasing to 1.4 in 2006. The three area units included some 2541 households in 2006. Both the number of households and the average number of vehicles per household increased during the period 1996 to 2006.

46. I have extracted the journey to work data from the Greater Wellington Regional Council document Census 2006: Journey to Work Analysis. Johnsonville is included in the Wellington North journey to work sector which also includes Newlands, Churton Park and Khandallah. The table below shows the proportion of Wellington North residents using each of the travel modes to access work. I have included data for Wellington CBD residents and the region as a whole for comparison purposes.

Travel Mode	Wellington North	Wellington CBD	Region
Private Auto	51.0%	13.9%	46.9%
Company Auto	10.0%	2.7%	10.7%
Car Passenger	7.9%	2.2%	6.3%
Train	6.9%	1.3%	6.9%
Bus	13.1%	6.7%	9.0%
Walk	3.3%	66.0%	10.5%
Bicycle	1.7%	1.0%	2.0%
Motorcycle	1.1%	0.4%	1.0%
Other/ Not Stated	4.9%	5.8%	6.7%

Table 4: 2006 Residence Sector Journey to Work Modal Share

47. As shown the Wellington North residents have a very different modal share from the CBD residents. Almost 70% of Wellington North residents travel to work by car compared to 19% of the CBD residents. The modal share patterns for Wellington North and the region as a whole are similar with the main exceptions being the higher bus use and lower choice of walking of Wellington North residents.
48. I also note that with 10% of Wellington North journey to work trips being made in a company vehicle, these vehicles will also be parked at or close to their homes outside work hours.

49. Similarly, I have also looked at mode choice for workers travelling into the Wellington North area. The mode split for these trips is shown in the table below.

Travel Mode	Wellington North	Wellington CBD	Region
Private Auto	58.1%	30.2%	46.9%
Company Auto	16.0%	4.8%	10.7%
Car Passenger	5.8%	7.0%	6.3%
Train	2.6%	16.0%	6.9%
Bus	4.3%	17.8%	9.0%
Walk	6.4%	16.6%	10.5%
Bicycle	1.2%	2.4%	2.0%
Motorcycle	0.7%	1.2%	1.0%
Other/ Not Stated	5.0%	4.0%	6.7%

Table 5: 2006 Workplace Sector Journey to Work Mode Share

50. As shown around 80% of people working in the Wellington North area travel to work by car compared to 42% in Wellington CBD and 64% region-wide. Both public transport use and active modes are used less to access work in Wellington North than in the CBD or on average across the whole region.
51. Accordingly there is a strong reliance on car use for both Wellington North residents accessing their work and also for workers travelling into the Wellington North area.

Summary

52. I have summarised the existing traffic and transportation situation as follows:
- (i) the roads around the Johnsonville Triangle are all carrying traffic flows well in excess of the flows anticipated for Collector and Principal Roads;
 - (ii) almost all the unrestricted kerbside parking on streets close to the Triangle are occupied during weekday business hours;
 - (iii) many of the pedestrian routes within the MDRAs do not meet a number of the walkable characteristics as included in the NZTA Pedestrian Planning and Design Guide;

- (iv) there are a number of existing locations around or near the Triangle which are particularly challenging for pedestrians with regard to crossing heavily trafficked streets;
- (v) the existing public transport arrangement serves the interchange of passengers between services better than it serves the town centre and immediate residential environs;
- (vi) the bus services provide the best access to the regional employment centres with the train only serving destinations to the south. There is no direct commuter bus service between Johnsonville and the Hutt Valley;
- (vii) local residential trip rates have been calculated at 6.8 to 8.4 vpd per household;
- (viii) the overall average vehicle ownership for Johnsonville is 1.4 vehicles per household;
- (ix) in addition to privately owned vehicles, many residents have the use of a company vehicle which will be parked at or close to their homes outside work hours; and
- (x) both public transport use and active modes are used less to access work in Wellington North than throughout the Wellington region as a whole.

FUTURE TRAFFIC ENVIRONMENT

Forecast MDRA Traffic Activity

53. Council have estimated that some 1,112 additional dwellings might be constructed throughout the Johnsonville MDRAs during the period up to 2031. Based on the measured residential trip generation rates included earlier in my evidence this level of development could be expected to generate additional traffic volumes of 7,560 to 9,340vpd. As a result of this level of development at least some additional 650 to 800 vehicles per hour can be expected on the local road network at peak times, being the weekday commuter peaks and the Saturday midday peak.

54. With regard to parking demands if each additional dwelling includes a single on-site parking space, based on local car ownership statistics an overall overspill of some 445 spaces into kerbside spaces could be expected. Depending on the size of the developments and whether the threshold is passed to provide on-site visitor parking, up to a further 280 kerbside spaces could reasonably be occupied by visitor parking. Further additional parking demands can also be expected associated with the residents who have the use of a company car.
55. I discuss the ability of the local road network to accommodate this additional traffic and parking activity later in my evidence.

Johnsonville Mall Redevelopment

56. In September 2009 resource consent was granted for the expansion of the Johnsonville Mall. Key features of the proposal include:
- (i) an increase in retail floor space from around 15,000m² to 38,000m²;
 - (ii) Gothic and Hawea Streets remain as public roads;
 - (iii) four vehicle connections, one onto each of Johnsonville Road and Broderick Road and two accesses onto Moorefield Road;
 - (iv) the Gothic Street intersection with Broderick Road and the southernmost Moorefield Road access will be signalised;
 - (v) some 1,300 to 1,400 on-site carpark spaces, including replacement of 23 park and ride spaces;
 - (vi) loss of some 56 kerbside spaces in addition to the 23 park and ride spaces that are replaced within the site;
 - (vii) expectation that the loss of kerbside parking will be off-set by the removal of reliance on on-street parking for staff.
57. The transportation assessment that accompanied the resource consent included forecast increases in traffic accessing the Triangle as a result of the proposed redevelopment of 981 vehicle movements between 4:00pm and 6:30pm on

weekdays and 1,701 vehicle movements between 11:00am and 2:00pm on Saturdays.

58. The resource consent included conditions that the following roading improvements be made prior to the opening of the expanded mall to address existing congestion both around the Triangle and associated with the State Highway, to future proof for future traffic growth and to enable capacity improvements to support the redeveloped shopping centre:
- (i) capacity improvements to the Moorefield Road/ Broderick Road signals;
 - (ii) capacity improvements to the Johnsonville Road/ Broderick Road signals;
 - (iii) capacity improvements to the Johnsonville Road/ Moorefield Road roundabout;
 - (iv) capacity improvements to the Middleton Road/ Helston Road roundabout;
 - (v) mid-block widening of Moorefield Road and Broderick Road;
 - (vi) new signalised intersections for the mall accesses; and
 - (vii) replacement of existing zebra crossing with a new signalised pedestrian crossing in the northern section of Moorefield Road between Frankmoore Avenue and Johnsonville Road.
59. These improvements are estimated to have a cost of some \$14,200,000 which will be paid for by the mall owners, NZTA and Council. In the event that the mall redevelopment does not go ahead, Council have set aside \$5,750,000 for transport related improvements.
60. Further to these improvements it is my understanding that NZTA intend to signalise the intersection of Fraser Avenue and Corlett Street with Johnsonville Road along with the dual laning of the SH1 off ramp.
61. Background traffic growth rates of 1.5% and 0.5% per annum between 2006 and 2016 were included for trips to and from the north and south of Johnsonville respectively. These growth rates precede the MDRA concept and are in line with

historic growth rates and as such include no proper allowance for the level of development anticipated in the MDRAs.

62. The modelled performance of the local road network for the existing (2006 Base) and forecast (2016 with mall redevelopment) scenarios is summarised in Table 12 on page 84 of the resource consent transportation assessment and repeated here in the following table.

Intersection	Weekday PM Peak				Saturday Peak			
	2006 Base		2016 With Development		2006 Base		2016 With Development	
	Level of Service	Ave Delay (s/veh)	Level of Service	Ave Delay (s/veh)	Level of Service	Ave Delay (s/veh)	Level of Service	Ave Delay (s/veh)
Johnsonville/ Helston R'bout	B	16	A	10	B	11	A	10
Johnsonville/ Moorefield R'bout	B	19	B	12	B	12	B	11
Johnsonville/ Broderick Signals	E	74	E	63	E	72	E	65
Broderick/ Moorefield Signals	E	66	D	51	D	45	D	42

Table 6: Modelled Base and Forecast Intersection Delays

63. As shown, while the capacity improvements associated with the planned intersection works are expected to enable the network to accommodate the forecast additional mall traffic and some background traffic growth, the forecast traffic performance of the Johnsonville Road/ Broderick Road signals and the Broderick Road/ Moorefield Road signals shows levels of service of E and D respectively. The associated forecast average delays for 2016 with the mall redevelopment are only slightly improved from the base case.
64. Accordingly and in my view, small traffic additions in central Johnsonville in particular to and from the south could result in traffic conditions deteriorating to existing levels of congestion or worse.

65. With regard to pedestrian amenity, with the planned roading improvements pedestrians walking between the Bould Street area and the public transport hub or the shopping centre will need to divert to one of the adjacent signalised intersections as Broderick Road in this location will have five traffic lanes and a turning bay within a flush median creating a very wide and unprotected crossing environment.

Allowing for 1.5% per annum background traffic growth and the forecast additional traffic activity associated with the redeveloped mall the traffic circulating around the two roundabouts at the northern end of the Triangle can be expected to increase as summarised below:

Roundabout	Base 2006 (vph)	Background Traffic Increase 2006-2016 (vph)	New Mall Traffic (vph) ¹	2016 Estimated Hourly Traffic Flow (vph)
Johnsonville Rd/ Helston Rd				
Weekday PM Peak Hour	2,250	338	100	2,688
Saturday Peak Hour	2,109	316	155	2,580
Johnsonville Rd/ Moorefield Rd				
Weekday PM Peak Hour	2,832	425	194	3,451
Saturday Peak Hour	2,752	413	298	3,463

Note: 1. Assumed that 50% of the weekday PM peak period modelled traffic activity occurs during the peak hour. Similarly assumed that 40% of the Saturday peak period modelled traffic activity occurs during the peak hour.

Table 7: Forecast Traffic Activity at Northern Roundabouts

66. As shown, traffic flows at these already busy roundabouts is expected to increase by up to 700 vehicles an hour with no associated improvement to pedestrian crossing facilities.
67. With regard to public transport operations, at the time that the mall redevelopment was granted consent it was envisaged that the bus interchange would relocate onto Moorefield Road with buses continuing to circulate through the mall site to access the new interchange.

Public Transport Changes

68. The Regional Council review of public transport in Johnsonville, which took place after consent was granted for the mall expansion and was reported on in August 2009, included the recommendation that the through bus services, that is the main commuter services to and from Wellington and Porirua, travel along Johnsonville Road and do not divert to the train station. Such an arrangement while likely to improve the travel times for these services but would adversely affect the accessibility of residents in the areas to the west of Moorefield Road to the commuter bus services.
69. With the decision made to retain the Johnsonville rail line, the 2011 Wellington City Bus Review suggested:
- 'deleting the competing express [bus] services except during the peak commute period.'*
70. The Review also identified policy options for the northern suburbs being:
- '(i) Clarify that the line is not meant to compete for Johnsonville-Wellington trips, only trips involving intermediate stations. This would mean retaining the duplicating express network accepting substantially lower patronage potential on the rail line.*
- (ii) Study the line as a possible extension of any light rail project that might emerge from the Wellington Spine Study....'*
71. Accordingly there is considerable uncertainty regarding the future nature of Johnsonville's public transport system.

Summary

72. Future changes to the local traffic and transportation environment can be summarised as follows:
- (i) Council have estimated that up to some 1,112 additional dwellings might be constructed in central Johnsonville by 2031. I estimate that with this level of residential activity additional traffic flows of up to 9,340vpd or 800vph could

result. This level of increase in hourly traffic flows is larger than anticipated as a result of the mall expansion;

- (ii) additional parking demands associated with this level of development are estimated to amount to some 445 overspill residential spaces, around 280 visitor spaces as well as demands associated with parking company vehicles at or near residential properties. It is unlikely that the capacity exists for such increases. This level of demand will put enormous pressure on the local streets and will require very particular management to ensure an appropriate balance in serving residential, commuter and park and ride parking needs;
- (iii) roading improvements an estimated cost of \$14,200,000 have been identified as needed to accommodate the traffic associated with the mall expansion. It is estimated that the mall redevelopment will add up to 570 vph onto the local road network at peak times;
- (iv) the forecast average delays for 2016 with the mall redeveloped and associated road upgrades completed are only slightly improved from the base case;
- (v) the road upgrades and associated traffic increases as a result of the mall expansion exacerbate existing pedestrian problem areas at Bould Street and the northern roundabouts;
- (vi) it is possible that the main commuter bus stop will be relocated to Johnsonville Road. This will adversely affect the accessibility of commuter bus services for residents in the areas to the west of Moorefield Road; and
- (vii) following the 2011 Wellington City Bus Review considerable uncertainty remains regarding the future of Johnsonville's bus and rail services.

AREA-WIDE CONCERNS

MDRA Walking Distance Criteria

73. My understanding is that the MDRA's have largely been selected on the basis of being within a 10 minute or 800m walk of the Johnsonville Triangle with an implied

average walking speed of around 5kph. Given the walking distances to some of the more remote areas of MDRA I expect that no allowance has been made for much slower walking speeds on the steeper streets or an allowance for crossing the roads around the Triangle. At peak times a pedestrian crossing one of the Triangle roads at signals could reasonably be delayed on average some 30 to 45 seconds depending on cycle times. In my estimation the combination of these effects could reasonably reduce the distance walked in 10 minutes by up to 100m.

74. In terms of the introduction of MDRA's encouraging reduced car ownership and minimising the adverse effects of car usage, the key matter in my view is the ability of journey to work trips being made by active modes or public transport. Increased use of these travel modes has the beneficial effect of removing traffic off the road network at the times it is most congested. The central Johnsonville road network is widely recognised as being congested at peak times with the planned improvements allowing the future mall traffic to be accommodated along with some background traffic growth with associated average peak hour delays in 2016 that are only slightly improved on the existing situation.
75. Accordingly I consider that any MDRA should be within a 400m walk of a commuter public transport stop with access to as many of the regional employment centres as possible. In the Johnsonville context this means being within a 400m walk of one of the commuter bus stops. In the current situation this involves reducing the extent of the proposed MDRA's to the coverage shown in Attachment 3. In the event that the commuter bus services only stop on Johnsonville Road the accessibility to public transport for residents to the west of Moorefield Road would be further reduced.

Overspill Parking

76. In my view, the proposed parking provision requirements for the MDRA's do not adequately take into consideration the following factors:
- (i) the narrow cross-sections of many of the streets with kerbside parking either reducing the trafficable width down to less than the 3.5m clear width required for emergency access or parked cars straddling the footpath and reducing the already narrow footpath widths;

- (ii) the amount of kerbside parking already occupied by people working in central Johnsonville;
- (iii) the amount of kerbside parking already occupied by park and ride users;
- (iv) the potential for increasing demands for park and ride and worker parking in line with Council's aspirations for growth in the wider catchment supported by increased public transport usage and growing employment opportunities in central Johnsonville;
- (v) the potential for cumulative adverse effects associated with parking overspill due to the extensive areas over which medium density housing is being encouraged; and
- (vi) the parking demands associated with residents having the use of a company vehicle.

77. Accordingly, my recommendation is that developers should be required to demonstrate that any overspill parking can be reasonably accommodated. The proposed parking provision is not intended to meet all residential and visitor parking demands and as such any development providing only the required number of spaces will generate a demand for kerbside spaces.

Access Width

78. As included in Rule 5.6.1.4.4 the maximum access width in the MDRAs is 3.7m for up to six units and 6.0m for seven or more units. I have the following concerns with regard to access requirements:

- (i) the use of a maximum means that a development with seven or more units could include a complying access which had only a single traffic lane with associated adverse effects as entering vehicles queue on the street to wait for an exiting vehicle to clear the driveway;
- (ii) there is no mention of the maximum number of units that can be served off a single driveway of up to 6m width; and

- (iii) there is no requirement to include a footpath once the development gets to a particular size. For instance the Council's Code of Practice for Land Development requires two 1.5m footpaths on a short residential cul de sac serving up to 20 households.

79. I recommend that developments with seven or more units should be required to provide a two-way driveway and to demonstrate safe pedestrian connection to the frontage footpath. A cap should also usefully be placed on the maximum number of units that can be served from a 6m wide driveway.

80. **Other Areas of Discretion**

81. In my view there are a number of other matters that need to be considered as part of any resource consent application for multi-unit residential development within the MDRA being:

- (i) forecast traffic effects beyond the site and in particular with regard to the performance of the intersections around the Triangle;
- (ii) how rubbish collection will be undertaken, if on-site can a truck enter and exit the site safely, if from the kerbside can this be done without unduly disrupting frontage traffic; and
- (iii) a maximum number of units that can be included before an application is assessed on a full discretion basis.

82. Without this extra level of assessment in place I believe that some significant adverse traffic effects may get overlooked.

LOCAL AREA CONCERNS

83. Having discussed my concerns regarding the overall MDRA concept in the previous paragraphs, I now go on to look at the separate areas of proposed MDRA zoning.

East of the Motorway

84. I have the following transportation related concerns with regard to the inclusion of this area as an MDRA:

- (i) the long length and poor quality of the pedestrian link between Sheridan Place and Disraeli Street. A full list of my concerns with regard to this link are included in Attachment 2;
- (ii) the steep grades and single narrow footpath provision along much of the length of Sheridan Terrace;
- (iii) the narrow trafficable width of much of Sheridan Terrace with parked vehicles reducing the trafficable width to less than the 3.5m required for emergency access; and
- (iv) reliance on vehicle access to and from central Johnsonville and the wider road network via Burgess Road which gets reduced to a trafficable width of less than 3.5m over long sections with vehicles parked along both sides.

85. In my opinion the whole of this area fails to meet the accessibility criteria for MDRAs and as such should be removed from the proposed plan change.

Middleton Road

86. I have separately and recently looked in detail into the introduction of medium density housing in this area in response to residents' concerns regarding the proposed 21 unit development at 8-10 Middleton Road. I have included a copy of my assessment in Attachment 4 with my findings summarised as follows:

- (i) pedestrian access to the shopping centre and train station involves a walking distance of up to 500m and requires crossing three very busy roads in challenging environments close to busy roundabouts;
- (ii) Middleton Road carries some 7,325vpd within a 10m wide carriageway and as such is operating beyond its desirable capacity from within a considerably reduced road width;
- (iii) the development would result in overspill parking that would adversely affect the function and safety of Middleton Road with increased parking manoeuvres, an increased likelihood that vehicles will u-turn within the road, an increased likelihood that drivers will park on the western side of Middleton

Road where there is no footpath and crossing the road can be challenging given the traffic volumes and speeds along with the available sight lines and lack of median or pedestrian refuge;

- (iv) a lack of provision for on-site rubbish collection. Kerbside collection in this location for a large number of units will result in delays for through traffic with either the truck blocking the southbound traffic lane or blocking the entry to the development preventing vehicles from entering with an associated need to queue along the frontage;
- (v) a lack of provision for pedestrians within the site given the scale of the proposal; and
- (vi) the proposal is contrary to District Plan objectives and policies with regard to controlling adverse effects of residential activities.

87. Given the challenging pedestrian environment in the vicinity of the two nearby roundabouts both now and even more so in the future with the additional traffic associated with the planned mall redevelopment along with the potential adverse effects resulting from overspill parking onto Middleton Road which is classified as a Principal Road, I consider that this area fails to meet the accessibility criteria for MDRA and the potential impacts on the function, safety and capacity of Middleton Road have not been fully considered. As such I recommend that from a transportation perspective this area be excluded from the MDRA.

West of Moorefield Road

88. The proposed plan change includes two MDRAs to the west of Moorefield Road. My concerns with MDRA in these locations are:
- (i) as shown in Attachment 3 parts of these areas are not within a 400m walk of public transport commuter services;
 - (ii) a number of the streets have steep grades namely, Earp Street to the north of Woodland Road, Woodland Road and Frankmoore Avenue to the west of Phillip Street;

- (iii) the three streets mentioned in (ii) only have single footpaths and in the case of Frankmoore Avenue the footpath is reduced to a width of 0.8m in places;
- (iv) Heath Street has a single footpath and is excessively wide at its intersection with Broderick Road resulting in a 25m crossing distance for pedestrians;
- (v) the trafficable width on Woodland Road gets reduced to less than 3.5m when vehicles are parked along the kerbside;
- (vi) the areas that are within a convenient walk of the commuter public transport services are also the areas under greatest pressure for non-residential kerbside parking. At present day time visitors to residential properties in these areas would at times not be able to find a kerbside park within the street of the property they are visiting. The reduction in kerbside parking along Moorefield Road as a result of the road improvements associated with the mall expansion may further increase parking pressures in this area;
- (vii) the lack of amenity for pedestrians crossing Broderick Street mid-block. The section of Broderick Road to the west of Moorefield Road and away from the intersection has parking restrictions along much of its length with little side friction to impede traffic flow. There are no medians or pedestrian refuges to provide protection for pedestrians crossing the road. This is particularly a concern in the vicinity of Bannister Avenue and Heath Street where pedestrian desire lines exist to and from the Dairy, St Brigid's School and Alex Moore Park; and
- (viii) as included earlier in my evidence the existing performance of the Broderick Road intersection with Moorefield Road is modelled as having a level of service of E and D in the weekday evening and Saturday midday traffic peaks respectively with associated average delays of 66 s/veh and 45 s/veh. With the improvements associated with the mall redevelopment the intersection is forecast to perform with a level of service of D in both peaks with average delays of 51 s/veh and 42 s/veh during the weekday evening and Saturday peaks respectively. Accordingly additional traffic activity especially during the

the Saturday peak could result in congestion at similar or worse levels than at present.

89. My recommendation is that the extent of the proposed MDRAs is reduced to reflect the areas that are within a 400m walk of the existing public transport hub accepting that there is a risk that the commuter bus stops will be relocated to Johnsonville Road. With regard to the District Plan provisions I suggest that multi-unit developments in these areas are required to demonstrate that overspill parking and additional pedestrian and traffic activity can be satisfactorily accommodated within the local road network from a capacity and safety perspective.

South of Broderick

90. The proposed plan change includes two MDRAs to the south of Broderick Road. My concerns with MDRA in these locations are:
- (i) as shown in Attachment 3 parts of these areas are not within a 400m walk of public transport commuter services;
 - (ii) as described in Attachments 1 and 2 a number of the streets have steep grades namely, Hindmarsh Street, Corlett Street and Fraser Avenue;
 - (iii) Moorefield Road (south of Broderick Road), Takitimu Way, Fraser Avenue and Pollen Street only have single footpaths and Tarawera Road (north of Pollen Street) has no footpath;
 - (iv) the lower level footpath along the southern section of Bould Street is poorly maintained, with uneven surfaces and overgrown berms, and has a poor level of natural surveillance as it is hidden from the road and typically the frontage properties are set back from the path;
 - (v) the higher level footpath along the southern section of Hindmarsh Street is narrow (less than 1m wide) and very steep in places along with having the same maintenance and natural surveillance issues that exist along the Bould Street footpath;

- (vi) there is no footpath along the eastern side of Fraser Avenue. There is a pedestrian desire line down Fraser Avenue and across Johnsonville Road to the commuter bus stop. In my opinion any intensified residential development along the eastern side of Fraser Avenue should require a footpath connection down to Johnsonville Road;
- (vii) Moorefield Road to the south of Broderick Road is a Principal Road carrying large traffic flows within a narrow carriageway. Overspill residential parking onto Moorefield Road should be avoided especially on the narrower section between Broderick Road and Stephen Street as it will impede the traffic carrying function of this important traffic route;
- (viii) kerbside parking either now or in the future with increased demands has the potential to reduce the trafficable width to less than 3.5m on Stephen Street, Takatimu Way, Bould Street, Hindmarsh Street (north of Corlett Street) and Pollen Street;
- (ix) the lack of kerb along the western edge of the southern section of Bould Street results in a lack of definition of the parking lane leading to variations in the trafficable width. Parked vehicles along the eastern side were observed straddling the footpath further reducing the already narrow footpath width;
- (x) despite the proximity to public transport and the shopping centre, pedestrian activity in this area is quiet and vehicle trip generations rates are similar or only slightly reduced from typical suburban rates;
- (xi) existing lack of pedestrian amenity for pedestrians crossing Broderick Road in the vicinity of Bould Street. This situation will be worsened as a result of the road upgrades associated with the mall expansion. In this location there will be five traffic lanes and a turning bay to cross;
- (xii) the intensification of residential development on Bould Street and Hindmarsh Street will unavoidably lead to increased traffic volumes through the two most sensitive intersections in the local road network being the Broderick Road signalised intersections with each of Moorefield Road and Johnsonville Road;

- (xiii) the areas that are within a convenient walk of the commuter public transport services are also the areas under greatest pressure for non-residential kerbside parking with limited daytime capacity available for either overflow residential or visitor parking; and
- (xiv) the proposed MDRA to the south of Broderick Road between Moorefield Road and the railway line has in my view inadequate walking connectivity to commuter public transport services apart from the area opposite Alex Moore Park. This northern pocket only has road frontage to Moorefield Road and the intensification of residential development in this area will likely lead to overspill parking onto a narrow section of Moorefield Road.

91. My recommendation is that the extent of the proposed MDRA is reduced to reflect the areas that are within a 400m walk of the existing public transport hub, again accepting that there is a risk that the commuter bus stops will be relocated to Johnsonville Road. I suggest that the area of proposed MDRA to the west of the railway line be removed from the proposed plan change due to its poor walking connection to commuter public transport services and likely adverse effects of overspill parking onto the section of Moorefield Road opposite Alex Moore Park.
92. With regard to the District Plan provisions I recommend that multi-unit developments in the reduced MDRA are required to demonstrate that overspill parking and additional pedestrian and traffic activity can be satisfactorily accommodated within the local road network from a capacity and safety perspective.

COMMENT ON COUNCIL EVIDENCE

Robert Stephen Spence

93. I note that at paragraph 12 Mr Spence comments that:

'For the most part the existing properties have off street parking available...'

94. My observation of the residential area accessed via Bould Street and Corlett Street was that a number of the properties on the western sides of the southern sections

of Bould Street and Hindmarsh St do not have vehicle access as a result of the sloping topography. These properties rely on kerbside parking for all residential and visitor parking.

95. I agree with Mr Spence's comment later in paragraph 12 that:

'This means that in many of the streets lying within the proposed MDRAs, there is quite heavy on street parking currently and in some streets little if any spare kerb space available in the evenings when residents are most likely to be at home, or during weekdays when commuters park in the streets closest to the Shopping Centre and walk to their place of work locally in Johnsonville, or catch the bus or train to work outside Johnsonville.'

96. I also agree with Mr Spence's comment at paragraph 14 that with regard to the roads around the Triangle:

'These roads running along the perimeter of the shopping centre serve a key role in carrying vehicular traffic, but at the same time present something of a barrier for those on foot.'

97. At paragraph 34 of his evidence, Mr Spence assumes that the proposed dwellings will typically be one or two bedroom properties and as such can be expected based on the 2006 census data to have roughly one motor vehicle for each dwelling. My understanding is that a mix of housing types and sizes will be encouraged and accordingly I consider the car ownership rate of 1.4 vehicles per household as deduced from the 2006 census data for all housing types in Johnsonville to be more appropriate.

98. Later on in paragraph 34 Mr Spence suggests that:

'...where on street parking demand becomes excessive then this may require interventions by Council in the form of e.g. creation of residents parking areas, or applying traffic management measures to ensure stationary vehicles do not unduly obstruct the passage of traffic.'

99. In the absence of a local parking management plan and given that there are already parking pressures within parts of the network that have not been addressed, I have little confidence in this as a suggested mechanism for addressing parking problems.

100. At paragraph 36, Mr Spence estimates that trip rates will be in the order of 5 trips per day per household per day. As described earlier in my evidence, existing trip generations within the southern proposed MDRA are some 6.8 to 8.4 vehicle movements per household per day. Accordingly I consider that Mr Spence has considerably underestimated the trip generation rate.

101. At paragraph 37, Mr Spence comments that the additional traffic will result in:

'...little noticeable impact in terms of congestion or delay.'

102. Given that the overall potential level of additional traffic associated with the proposed MDRA during the weekday PM peak and Saturday peak is in excess of the additional hourly flows associated with the mall redevelopment and that despite the improvements the two Broderick Road signalised intersections are forecast to remain congested with levels of service of D and E, I consider that the additional traffic activity could significantly undermine the benefits that could be achieved by the planned improvements.

103. At paragraph 45, Mr Spence suggests that:

'The need for alterations to the roads and intersections will be able to be monitored and any necessary improvements planned and implemented as residential development takes place.'

104. Given that the proposed District Plan provisions for multi-unit developments do not include any requirement to consider off-site traffic effects any mitigation of adverse effects would need to be addressed by Council outside the resource consent process. In my view given the existing and anticipated ongoing levels of traffic activity in central Johnsonville any resource consent application for a multi-unit development should be required to give consideration to likely traffic effects beyond the site.

John Leslie McSweeney

105. At paragraph 49 Mr McSweeney refers to an advantage of the MDRA option being:

'Allowing efficient use of existing infrastructure...'

106. He continues at paragraph 50 with the comment that:

'...increased traffic will be an effect and from existing residents perspective may increase their concerns about congestion and road safety, but road capacity is understood to be able to cope with additional units in most streets.'

107. As explained more fully earlier in my evidence, and based on the traffic modelling work undertaken for the planned mall redevelopment along with existing local residential trip generation rates, I do not consider that there will be enough spare capacity within the local road network to accommodate the level of additional traffic that would be generated by up to some 1,112 new dwellings.

108. I agree with Mr McSweeney's comment at paragraph 50 that:

'Increased densities of residential development is likely to generate increased demand for on-street public parking. While the District Plan requires one carpark to be provided per unit, actual car ownership patterns may exceed this requiring additional vehicles to seek alternative parking.'

109. At paragraph 61 Mr McSweeney refers to the setting of the MDRA boundaries based on a number of factors including having good access to public transport.

110. As included earlier, Council's own guidance in the Code of Practice for Land Development is that land development should maximise the number of sites within a 400m walking distance of a designated public transport stop. In order to minimise the adverse effects on peak traffic congestion and in the Johnsonville context, it is in my view necessary to provide convenient access to public transport services which connect with the main regional employment centres. Accordingly ready access is needed to both the train line which in practice only serves Wellington and more importantly the bus services which serve Wellington, Porirua and the Hutt Valley.

111. With uncertainty regarding the future location of the through route bus stop in central Johnsonville it is difficult to measure the accessibility to it from the various residential areas. The map included in Attachment 3 shows the extent of the residential areas within a 400m walk of the existing commuter bus stops. If the through route stop is relocated from adjacent to the train station onto Johnsonville Road accessibility into the residential area to the west of Moorefield Road will be

reduced. Accordingly and in my view, parts of the proposed MDRAs do not have good access to public transport and future changes in the local public transport arrangements could further reduce the quality of local residential access to public transport.

112. Further on in paragraph 100, Mr McSweeney comments that:

'Improvements and works may also be required as part of the resource consent process. This could include site access and intersection improvements, new footpaths, and other measures to improve on-street carparking and safety.'

113. In my assessment there is not a mechanism within the proposed plan change that triggers the need for a developer to address off-site adverse traffic effects. With regard to traffic matters discretion is restricted to the provision of parking in terms of the number of spaces and parking layout along with the access width. The implication is that the existing local road and pedestrian network can readily accommodate any additional traffic activity and parking demands and that the existing footpaths and connections are of an appropriate standard.

114. At paragraph 103, Mr McSweeney comments that the proposed MDRA will:

'reduce the need for vehicle use in and around the town centre over time. Any new development must provide one parking space per residential unit and a minimum of 1 additional car space for every four household units for any proposal that results in 7 units or more. This is consistent with the approach taken in all residential areas in the city.'

115. Given the estimated trip generation rates of some 6.8 to 8.4 vpd per household for existing areas within the southern MDRA along with the census statistics regarding car ownership and journey to work travel mode choice, I do not follow the rationale that infill housing in this area will have a different traffic behaviour from the existing households. Furthermore the proposed parking provision requirement may be appropriate in residential areas with generous road cross-sections and kerbside parking demands limited to residential and visitor overspill but in the central Johnsonville context many of the streets within the proposed MDRAs are narrow and accommodate commuter and park and ride parking as well as residential and visitor overspill parking.

116. In paragraph 104, Mr McSweeney indicates that the additional parking demands can be managed through Councils role as a roading authority and manager of on-street parking. In the absence of a parking management plan for central Johnsonville and out into the proposed MDRA, and given the existing parking pressures in parts of the network along with uncertainty regarding exactly how the mall redevelopment will impact on kerbside parking, I am not confident that the necessary triggers are in place to ensure that satisfactory levels of parking amenity are assured for all users.
117. And finally with regard to Mr McSweeney's evidence, at paragraph 135 he comments that:

'When it is not possible to avoid, remedy or mitigate the adverse environmental effects, the resource consent application could be refused.'

118. From a traffic perspective and as included earlier in my evidence, with development proposals likely to be assessed on a discretionary restricted basis with no trigger to consider traffic effects beyond the site, I do not see how an otherwise complying application could be refused consent on the basis of adverse traffic effects on the local transport network.

Lucie Desrosiers

119. In her overall conclusion at paragraph 78, Ms Desrosiers comments that:

'All the areas contained in the proposed MDRA are within a short walking distance of the centre, train station and bus services and therefore, I consider that the Johnsonville MDRA has the necessary accessibility to support medium density housing.'

120. For the reasons set out earlier in my evidence I consider that much of the proposed MDRA does not have a satisfactory level of accessibility to public transport to support widespread medium density housing.
121. With regard to the proposed Middleton Road MDRA while the walking distance to the town centre and public transport hub is less than 500m the need to negotiate the already busy northern roundabouts which are forecast to carry significant additional traffic volumes presents in my view an impediment to achieving satisfactory levels of pedestrian accessibility.

122. The MDRA to the east of the motorway is more than a 400m walk from the public transport interchange and the existing commuter bus stop on Johnsonville Road and relies on a pedestrian path that is sloping over much of its length, has very steep grades in places with a number of flights of steps, has little if any passive surveillance and involves the use of a subway that is narrow and poorly lit.
123. With regard to the MDRA in the vicinity of Stephen Street, while the southernmost part of this area is within 400m of Raroa Station, access to the public transport interchange and wider serving commuter bus routes is more than a 400m walk for properties within the area south of Alex Moore Park.

SUMMARY AND CONCLUSIONS

124. In my opinion with the Plan Change as it stands there is real potential for significant additional traffic and parking activity which will adversely affect the performance and safety of the central Johnsonville road network. Even without the introduction of the MDRA's the road network is forecast to remain congested at peak times.
125. If the introduction of MDRA's is not to adversely impact on the carrying capacity of the existing and future road infrastructure, their delivery in my view needs to achieve a reduction in car based journey to work trips being the trip type that dominate during the most congested times on the local road network. Accordingly my recommendation is that the extent of the MDRA's is reduced to being within a 400m walk of commuter public transport services. This presents something of a challenge given the uncertainty regarding the future location of the commuter bus stop. In any event, the proposed MDRA's to the east of the motorway lie outside this walking range and should in my view be removed altogether from the proposed areas of MDRA.
126. The residential areas closest to the public transport hub and best suited to MDRA in terms of accessibility are also the areas which get used the most for commuter and park and ride parking. Accordingly and given the level of traffic activity within the local road network I consider that any resource consent application for multi-unit residential development should be required to consider the effect of the proposal with regard to off-site traffic and parking impacts and for larger proposals demonstrate connectivity between on-site and public pedestrian paths.

127. As set out in my evidence, parts of the existing network present challenges with regard to walkability which will be further exacerbated by the mall redevelopment and associated road upgrades. In particular the residential area along Middleton Road will become further isolated from the town centre and as such I do not consider the introduction of MDRA to be appropriate in this location on the grounds of pedestrian accessibility and safety.
128. As a result of my review of potential traffic and transportation effects associated with the proposed MDRAs in Johnsonville, I have come to the conclusion that there is potential for residential development that is facilitated by Plan Change 72 to be of a nature that is contrary to the proposed District Plan objective and policies regarding safe and convenient access in residential areas. My view is based on the following:
- (i) the overall scale of potential residential development will result in traffic flows and parking demands that cannot be readily accommodated within the existing or planned local road network without adverse effects;
 - (ii) the lack of any requirement to demonstrate how loading activities will occur. Of particular concern is rubbish collection for larger multi-unit developments. Such activities occurring from the street could impede through traffic flow.
 - (iii) the lack of control over site access design including no minimum access width requirement for larger developments, no requirement to consider provision of a pedestrian path to the frontage footpath and no cap on the maximum number of dwellings that can be accessed of a single 6m wide driveway; and
 - (iv) inclusion of areas of MDRA with sole frontage onto Middleton Road and Moorefield Road which are both Principal Roads. Both these roads along the sections proposed for MDRA are carrying significant traffic volumes within constrained carriageway widths. Any overspill parking that would result from the development of multi-unit developments within these areas of MDRA will further constrain the ability of these roads to fulfil their dominant traffic carrying function.

129. As such and in my view the extent of the MDRAs should be reduced and further control added to avoid adverse effects on the local street network.

Harriet Fraser
24 April 2013

ATTACHMENT 1 – Street Inventory

ATTACHMENT 2 – Footpath Inventory




ATTACHMENT 3 – 400m Walking Range to Commuter Public Transport Services

ATTACHMENT 4 – 8-10 Middleton Road Transportation Review

Attachment 2 – Footpath Inventory

Street Name and Images	Comments
<p>1. Sheridan Terrace</p> 	<p>Single narrow footpath down to 1.2m wide in places. Undulating along full length with footpath gradients of up to 14%. Parked vehicles observed to partially obstruct footpaths.</p>
<p>2. Pedestrian Link from Sheridan Terrace to Disraeli Street</p> 	<p>370m long path between the end of Disraeli Street near the underpass and Sheridan Terrace. All uphill apart from section through the underpass. Includes gradients of up to 30% near Sheridan Terrace and several flights of steps. Path near Sheridan Terrace is only 2.7m wide and provides vehicle access to a number of properties. The underpass is poorly lit and unattractive with places on each side for an aggressor to hide. No passive surveillance along main section of path. Footpaths on Disraeli Street obstructed by parked cars. The commercial activities along Disraeli Street would provide some passive surveillance during business hours but street would be very quiet at other times. Link would only be an option for a small proportion of pedestrians given level of fitness required and risk to personal safety.</p>




Attachment 2 – Footpath Inventory

Street Name and Images	Comments
<p>3. Middleton Road</p> 	<p>Only one footpath which is 1.4m wide.</p>
<p>4. Earp Street (North of Woodland)</p> 	<p>Only one footpath which has a gradient of up to 13%.</p>
<p>5. Woodland Road</p> 	<p>Only one footpath with a grade of around 10%.</p>

Attachment 2 – Footpath Inventory

Street Name and Images	Comments
<p>6. Frankmoore Avenue (West of Phillip St)</p> 	<p>Only one footpath with a width of 0.8m in places and a grade of up to 17%.</p>
<p>7. Heath Street</p> 	<p>Single footpath. Excessively wide carriageway at intersection with Broderick Road, pedestrians required to walk 25m across the intersection.</p>
<p>8. Moorefield Road (South of Broderick Road)</p> 	<p>Only one footpath along sections of the road.</p>

Street Name and Images	Comments
<p>9. Takatimu Way</p> 	<p>Only one footpath with a width of 1-1.4m.</p>
<p>10. Bould Street (South of Hindmarsh)</p> 	<p>Kerbside path partially obstructed by parked vehicles. Lower level path has uneven surface, is poorly maintained and has poor passive surveillance being hidden from the road. Pedestrian link from close the cul-de-sac head towards Raroa train station is long and narrow with high hedges and fences along the sides restricting opportunities for any passive surveillance.</p>
<p>11. Hindmarsh Street (North of Corlett Street)</p> 	<p>Very steep section of footpath along the northern side of Hindmarsh Street.</p>

Street Name and Images	Comments
<p>12. Hindmarsh Street (South of Corlett Street)</p>  	<p>Use of the high level footpath along the western side of the street involves walking up or down a steep driveway along which vehicles need to reverse.</p> <p>High level footpath varies in width between around 0.9 and 1.2m and is poorly maintained with limited opportunities for passive surveillance.</p> <p>Pedestrian link from the cul-de-sac head to Fraser Avenue is narrow and bounded by high fences with restricted forward visibility along the path.</p> <p>Footpath grades of up to 14% along the eastern side.</p>
<p>13. Corlett Street</p> 	<p>Footpath grades of up to 14%.</p>

Attachment 2 – Footpath Inventory

Street Name and Images	Comments
<p>14. Fraser Avenue</p> 	<p>No footpath along eastern side of Fraser Avenue near Johnsonville Road. Pedestrian desire line observed along eastern side and then across Johnsonville Road to access commuter bus service. Steep footpath over a long distance with up to 17% grade in places.</p>
<p>15. Pollen Street</p> 	<p>Single 1.2m wide footpath.</p>
<p>16. Tarawera Road (North of Pollen Street)</p> 	<p>No footpaths.</p>



