Proposed Plan Change 78 - Intensification (PC78)

PC78 to the Auckland Unitary Plan (Operative in part)

SECTION 32

IMPLEMENTATION OF POLICY 3 OF THE NATIONAL POLICY STATEMENT – URBAN DEVELOPMENT:

EVALUATION REPORT

Table of Contents

Executive Summary

The council is required by the RMA to prepare, notify and progress an Intensification Planning Instrument ('**IPI**') to (amongst other things) give effect to Policy 3 of the National Policy Statement on Urban Development 2020 – updated May 2022 ('**NPS-UD**').

The IPI (proposed Plan Change 78 – Intensification ('**PC78**')) is to be notified on or before 20 August 2022 to satisfy the requirements of section 77G and 77N of the Act, which impose a duty to implement Policy 3 in Auckland's urban environment.

The purpose of this Section 32 ('**s32**') report is to analyse the various options of council to implement Policy 3 of the NPS-UD. Policy 3 requires district plans to enable as much capacity as possible in the City Centre and heights and density in Metropolitan Centres to reflect the demand (but enabling at least six storeys). Policy 3 also requires that buildings of at least six storeys high are enabled in the walkable catchments of the City Centre, Metropolitan Centres and rapid transit stops. Consideration is also to be given to increased density of development in and around other smaller centres.

Interpretation of terms in Policy 3

Some of the implementation of Policy 3 does not require options to be considered as the meaning of the words or phrases are clear. Examining other options in these cases would be overly onerous and would achieve little benefit. This report covers these matters in the Auckland context such as what 'equivalent' zones are, where the edge of the centre zones is measured from, how high six storeys is in metres, what is a rapid transit service, and what are Auckland's existing and planned rapid transit stops.

Policy 3(a) – City Centre zone

Policy 3(a) directs the council to enable as much development capacity as possible in the city centre, to maximise benefits of intensification. This matter is covered in more detail in the s32 reports covering the City Centre zone and its precincts. In summary, the City Centre zone will meet the Policy 3(a) requirements by removing standards which restrict gross floor area ('GFA') and increasing the general building height standard.

Provisions which provide for qualifying matters in the city centre are retained including provisions around heritage, open space, special character, local views, outlook and sunlight admission. To protect the current and future amenity of the city, the maximum building heights in the city centre are not proposed to be removed. Maintaining the amenity of the city centre, including the streets and open spaces, is a part of ensuring that the city centre can maximise the benefits of intensification.

These recommended actions will enable a significant additional development capacity in the city centre, (site-dependent) but generally in the range of 60 to 75 percent.

Policy 3(b) – Metropolitan Centre zones

There are ten metropolitan centres in Auckland – Albany, Botany, Henderson, Manukau, New Lynn, Newmarket, Papakura, Sylvia Park, Takapuna, and Westgate. Policy 3(b) firstly directs the council to enable heights and density of urban form in the metropolitan centres to reflect demand for housing and business use.

Analysis of the capacity and long-term demand in the metropolitan centres demonstrates that the capacity for housing and business in the centres already reflects the demand (i.e. provides sufficient capacity). In fact, there is very considerable capacity with average utilisation rate of just 18% in each centre (out to 2050) of the modelled floorspace capacity.

Therefore capacity constraints are unlikely for any of Auckland's metropolitan centres and no changes to the enabled heights and density of urban form are proposed to meet this part of Policy 3(b).

Policy 3(b) also has a mandatory requirement that building heights of at least six storeys are enabled in metropolitan centres. This report analyses each of Auckland's ten metropolitan centres to see whether six storey buildings are 'enabled' by the current AUP provisions. In summary, while the Metropolitan Centre zone height standard is significantly higher than six storeys, there are some other AUP provisions that prevent buildings of six storeys in some parts of the metropolitan centres.

Qualifying matters (under Policy 4 of the NPS-UD) apply to some of these provisions – meaning they do not need to be amended. However, the Height in Relation to Boundary standard in the Metropolitan Centre zone can limit the overall height of a building, where sites within the Metropolitan Centre zone are adjacent to a residential zone. Therefore, this standard is proposed to be amended to remove the restrictions on six storey buildings near the edge of the zone.

Policy 3(c) – Walkable catchments

In the context of Policy 3(c) of the NPS-UD walkable catchments in Auckland are based on the area the *average* person could walk to access a centre or a rapid transit stop. The two main units to measure a walkable catchment are time and distance (i.e. how long will people walk for in minutes or how far will people walk in metres). Often, time and distance are proxies for one another (e.g. a 5 minute walk = 400m).

This report considers various options of how to determine a walkable catchment. These range from the traditional radial ped-shed to GIS network analysis with distance or time parameters.

The preferred option is to generate walkable catchments using a GIS service area analysis using a distance parameter. The catchment is based on actual walking networks to create an accurate walkable catchment. However, this type of GIS analysis does not take into account

various factors that influence people's propensity to walk and the distance they are prepared to do so.

Therefore, a set of modifying factors (such as topography like steep hills) were developed. The factors impact on people's ability or willingness to walk, and they are relatively easily understood and measured. The modifying factors were applied sparingly and only where there was a clear, likely impact on a walkable route. The modifying factors refined the edges of the raw GIS catchment to reflect issues such as topography.

The option of a GIS network analysis using a distance parameter and then manually applying modifying factors generates robust walkable catchments with moderate implementation costs.

The next issue to determine under Policy 3(c) was the size of the walkable catchments. Determining the appropriate size of a walkable catchment has been the subject of extensive research which is set out in detail in this report and its Appendices. A range of matters were considered such as international and local literature on walkable catchments, Auckland Council's previous walkable catchment approaches, national guidance on walkability, census travel data for Auckland, international comparator city approaches, other tier 1 council approaches, and the Ministry for the Environment's ('**MfE**') guidance on implementing Policy 3 of the NPS-UD.

Four different distance options were assessed ranging from 400m (5 minute walk) to 1,600m (20 minute walk). The application of these distances were applied to each of the three areas - the city centre, the metropolitan centres, and the rapid transit stops.

<u>Rapid transit stops and Metropolitan Centre zones:</u>

An 800m (10 minute walk) walkable catchment distance is the preferred option for these areas as it is a commonly used metric that is backed up with various research and is generally supported by MfE guidance. This catchment provides a suitable amount of land for intensification around Auckland's metropolitan centres and rapid transit stops and therefore would likely get the benefits of a focussed area for intensification being realised.

The propensity to walk (per household) would be high (i.e. the relatively short distance would be more likely to be walked by those living in it). This option encourages intensification in a relatively small area, meaning intensification outcomes are more likely to occur close to the metropolitan centre and rapid transit stops.

The feedback during the consultation in April/May 2022 on the council's preliminary NPS-UD response showed overall support for an 800m walkable catchment for metropolitan centres and rapid transit stops.

City Centre zones:

A 1,200m (15 minute walk) walkable catchment distance is the preferred option for the City Centre zone. While there are not many studies on walking to very large centres, there is evidence to show people will walk further than 800m to a destination with a variety of amenities. The size of Auckland's city centre is much larger than metropolitan centres and the amenities in the city centre are unique. Census data shows a high proportion of people in surrounding suburbs (who work in the city centre) walk to work from those surrounding suburbs, with many of these trips 1,200m or more.

The MfE guidance also recommends that tier 1 city centres should have walkable catchments of more than 800m. The 1,200m walkable catchment around the city centre is consistent with New Zealand's second largest city, Christchurch (1,200m).

The feedback during the consultation in April/May 2022 on the council's preliminary NPS-UD response showed overall support for a 1,200m walkable catchment around the city centre. However, it is noted that this distance was opposed by various residents' groups representing suburbs on the fringe of the city centre who sought that the walkable catchment be smaller.

The walkable catchments are identified in the AUP through a spatially demarcated layer on the planning maps called 'Walkable Catchments'. Within the AUP text, Chapter G will be amended to be called '*Chapter G – Rural Urban Boundary (RUB) and Walkable Catchments'*. Walkable Catchments will be a District Plan method and will be very similar to how the Rural Urban Boundary is presented in the AUP.

The preferred method of enabling six storey development within the walkable catchments is by rezoning residential zones to a modified Terrace Housing and Apartment Buildings zone (THAB) and enable additional height of six storeys in other zones within the walkable catchments. This option achieves the objective of implementing Policy 3(c) of the NPS-UD using an existing zone framework and retaining the integrity of the zoning approach in the AUP. This option also does not risk undermining the centres by enabling a large amount of centre-type activities outside the centre (as the application of the Mixed Use zone could do).

Policy 3(d) – Suburban centres

Policy 3(d) of the NPS-UD directs intensification around neighbourhood, local and town centre zones. The level of intensification is directed to be 'commensurate' with the level of commercial activity and community services in the centre.

The application of Policy 3(d) has been separated into different parts. The first part is to measure 'level' of commercial activity and community services in Neighbourhood, Local and Town Centre zones.

The preferred option for doing this is use the centre zone hierarchy, the size of the zone, and the centre catchment as a proxy for the 'level' of activities and services.

Under Option 5 all the neighbourhood centres are considered to have low levels of activities and services and the local and town centres are classified into 12 categories. Of this 12, only three categories of centre are considered to have medium/high or high levels of services and activities, that may warrant intensification under the NPS-UD:

- Local Centres ('Large' in size with 'High' catchments)
- Town Centres ('Small' in size with 'High' catchments)
- Town Centres ('Large' in size with 'High' catchments)

The outcome of this is that 46 local and town centres across Auckland are classified as having medium/high or high levels of commercial activities and community services. The broad geographical spread of these centres is as follows:

- 12 centres in north and west Auckland
- 23 centres in the central isthmus
- 11 centres in south and east Auckland
- No policy 3(d) intensification is proposed in any rural settlement or on any offshore island (e.g. Hauraki Gulf islands)

It is worth noting that the concentration of these centres on the central isthmus and urban area of Auckland is consistent with the Auckland Plan and the Regional Policy Statement's compact city approach.

Intensification within centres:

This report includes a detailed analysis of the building heights and densities of urban form within neighbourhood, local, and town centre zones. It concludes that the enabled heights and densities within all neighbourhood, local, and town centres (of any size or catchment) are commensurate with the levels of activities and services in those centres. Therefore, no amendments to the AUP provisions are recommended to implement the part of Policy 3(d) relating to heights and densities of urban form within neighbourhood, local and town centres.

Intensification adjacent to centres:

Another part of applying Policy 3(d) is determining where 'adjacent' is in relation to Neighbourhood, Local, and Town Centre zones. It is concluded that the interpretation of the word 'adjacent' in the context of Policy 3(d) and based on case law is that 'adjacent' generally includes properties that adjoin a centre, and those that are 'close' or 'near' to a centre.

Based on the preferred metric for measuring the size of the walkable catchments (outlined earlier), the maximum possible threshold of 'close' or 'near' for Policy 3(d) is considered to be somewhere below 800m (a 10 minute walk) from the centre.

The preferred of applying 'adjacent' in the context of Policy 3(d) is a walking distance of 200m for the local centres and the small town centres with medium/high 'levels' of activities

and services, and 400m for the large town centres with high 'levels' of activities and services.

These options provide logical area around the centre for intensification based on actual walking distances (rather than 'as the crow flies'). They are also relatively small, contained areas adjacent to the centres for intensification. A distance of 400m (5 minute walk) is a widely accepted distance for how far people will walk to local services, and the 200m distance is even easier to walk. These two options are appropriate as they reflect the levels of services and activities in each of these centres.

In the context of Policy 3(d), the medium building heights and densities of urban form enabled on land adjacent to neighbourhood centres is already commensurate with the low level of activities and services in Auckland's neighbourhood centres. Therefore, no changes to the AUP are proposed under Policy 3(d) in relation to land adjacent to neighbourhood centres.

The land adjacent to the 46 local and town centres that have medium/high or high levels of activities and services is covered by a variety of zones (as proposed by PC78). The main zones adjacent to these centres have been assessed as to their enabled heights and densities. It concludes that the enabled heights and densities in the adjacent zones are commensurate with the levels of activities and services in most centres.

However, the heights and densities in the zones adjacent to the following centre types are not commensurate with the levels of activities and services in those centres:

- Large local centres with high population and employment catchments
- Small town centres with high population and employment catchments
- Large town centres with high population and employment catchments

It is the land adjacent to these centres that is required to enable heights and densities of urban form that are commensurate with the medium/high or high level of activities and services in those centres.

The preferred method of enabling greater heights and densities of urban form on land adjacent to Neighbourhood, Local and Town Centre zones is by rezoning residential zones to THAB. This option achieves the objective of implementing Policy 3(d) of the NPS-UD using an existing zone framework and retaining the integrity of the zoning approach in the AUP. This option also does not risk undermining the suburban centres by enabling centre-type activities outside the centre as the Mixed Use zone could do (i.e. potentially diluting the centre uses across a wider area).

1 Introduction

This report is prepared as part of the evaluation required by Section 32 of the Resource Management Act 1991 ('**RMA**' or '**the Act**') for proposed Plan Change 78 - Intensification ('**PC78**') to the Auckland Unitary Plan (Operative in Part) ('**AUP**').

1.1 Section 32 Evaluation

Section 32 of the Act requires that before adopting any objective, policy, rule or other method, the Council shall carry out an evaluation to examine:

- The extent to which each objective is the most appropriate way to achieve the purpose of the Act, and
- Whether, having regard to their efficiency and effectiveness, the policies, rules or other methods are the most appropriate for achieving the objective.

The evaluation must also take into account:

- The benefits and costs of policies, rules, or other methods; and
- 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.

1.2 The evaluation approach

This section outlines how the council's application of Policy 3 of the National Policy Statement – Urban Development ('**NPS-UD**') has been evaluated. The rest of this report will follow the evaluation approach described in the table below. In accordance with section 32(6) of the RMA and for the purposes of this report:

- the 'proposal' means the council's proposed method to implement Policy 3 of the NPS-UD and includes:
  - Policy 3(a):
    - How to realise as much development capacity as possible in the city centre, to maximise benefits of intensification
  - Policy 3(b):
    - How to reflect demand for housing and business use in metropolitan centres
    - How to enable at least six storeys in metropolitan centres
  - Policy 3(c):
    - How to determine a walkable catchment
    - What size is a walkable catchment
    - How to enable at least six storeys in the walkable catchments
  - Policy 3(d):
    - How to measure the level of commercial activity and community services in neighbourhood, local and town centre zones

    - Where ‘adjacent’ is in relation to neighbourhood, local, and town centre zones
    - How to enable heights and densities of urban form that are commensurate with the level of activities and services within and adjacent to each of the centres
- the ‘objectives’ means the objective of the plan change, which in the context of this s32 report is to implement Policy 3 in Auckland as directed by the NPS-UD and the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021 (‘**RMA**’ or ‘**the Act**’); and
- the ‘provisions’ means the proposed map (e.g. rezoning) and text changes to the AUP in PC78.

Sections of this report	Evaluation Approach
Section 2: Issues	This part of the report explains the resource management issues and why there is a need to resolve them.
Section 3: Reasons for the proposed plan change	This section outlines the reasons for PC78 and the scope of PC78, including those issues that do not have the scope or need for an options analysis.
Section 4: Statutory evaluation	This part of the report cross-refers to the PC78 s32 Overall Evaluation Report which evaluates the relevance of PC78 to Part 2 (sections 5-8) and other relevant parts / sections of the RMA.
Section 5: National and local planning context	This part of the report cross-refers to the PC78 s32 Overall Evaluation Report which evaluates the relevance of PC78 against the national and local planning context.
Section 6: The development and evaluation of options	In accordance with section 32(1)(b) and (2) of the RMA, this section examines whether the options appropriately achieve the objectives and the sustainable management purpose of the RMA. The options are assessed in terms of their efficiency and effectiveness, costs, benefits and risks to resolve the RMA issue.
Section 8: Development of the plan change	This part of the report cross-refers to the PC78 s32 Overall Evaluation Report which outlines the methodology and development of PC78. This section also outlines the consultation undertaken in preparing PC78 and includes a summary of the feedback specifically in relation to Policy 3.
Section 9: Conclusion	This part of the report concludes that the implementation of Policy 3 through PC78 is the most efficient, effective and appropriate means of addressing the resource management issues identified.

Figure 1: Overview of s32 report sections

This section 32 evaluation report will continue to be refined in response to any consultation feedback provided to the council, and in response to any new information received.

2 Issues

2.1 Implementation of the National Policy Statement on Urban Development

The purpose of PC78 - Intensification is to follow the central government mandated requirement to notify a plan change to amend the AUP by 20 August 2022 to satisfy the requirements of section 77G and 77N of the Act, which impose a duty to implement Policy 3 in Auckland's urban environment.

PC78 will result in wide scale and significant changes to the zonings across Auckland's urban zoned land, in addition to significant changes to most of the main zone provisions (objectives, policies, rules).

2.2 Government direction on intensification

The NPS-UD came into effect on 20 August 2020 and recent amendments to the NPS-UD through the RMA came into effect on 21 December 2021. Notification of amendments to the national policy statement were published in the New Zealand Gazette in May 2022.

The NPS-UD is about ensuring New Zealand's towns and cities are well-functioning urban environments that meet the changing needs of diverse communities. It seeks to remove overly restrictive barriers to development to allow growth 'up' and 'out' in locations that have good access to existing services, public transport networks and infrastructure.[1]

This s32 report only covers the council's response to the directions in **Policy 3** of the NPS-UD. This report does not cover the application of any qualifying matters under Policy 4 of the NPS-UD. Qualifying matters are covered broadly in the PC78 s32 Overall Evaluation Report, and in more detail in various other s32 reports.

2.3 Policy 3 of the NPS-UD

The NPS-UD (updated May 2022 version) directs the council to enable intensification in specific areas within Auckland (a tier 1 urban environment) as outlined below.

> "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

[1] https://environment.govt.nz/acts-and-regulations/national-policy-statements/national-policy-statement-urban-development/

(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."

2.4 Requirement to implement the NPS-UD

Section 55 of the RMA requires the council to amend its Regional Policy Statement ('**RPS**') and district/regional plans so that they can give effect to any provision in a national policy statement that affects the document.

Policy 3 is a list of directives for tier 1 councils as to how their plans need to enable heights and density of urban form in specific areas. These directions are mandatory and therefore the council cannot broadly consider other options (i.e. options to not enable the required intensification in the AUP). The council must simply implement the higher level directives.

Figure 2 below summarises the different levels of intensification required to be enabled in each sub-part ((a), (b), (c), and (d)) of Policy 3.

Area for intensification	Mandated intensification direction	
	Heights	Density of urban form
In city centre zones	To realise as much development capacity as possible	To realise as much development capacity as possible
In metropolitan centre zones	Reflect demand for housing and business use in those locations, and in all cases building heights of at least six storeys	Reflect demand for housing and business use in those locations
Within walkable catchments	At least six storeys	N/a
Within and adjacent to neighbourhood centre zones, local centre zones, and town centre zones (or equivalent)	Commensurate with the level of commercial activity and community services	Commensurate with the level of commercial activity and community services

Figure 2: Different levels of intensification required under Policy 3

While the overall implementation of Policy 3 is not optional for the council, the wording of Policy 3 does give the council some scope as to *how* the policies are implemented. This

relates to how specific parts of the policy are interpreted and how specific words or phrases are defined/interpreted. The different options as to how to apply Policy 3 to the AUP are outlined further in section 6 of this report.

3 Reasons for the proposed plan change

PC78 is to implement the RMA and give effect to Policies 3 and 4 of the NPS-UD. Auckland Council is required by the NPS-UD to notify a Plan Change to give effect to the NPS-UD by 20 August 2022.

The focus of this s32 report is on the implementation of Policy 3 only. This policy directs Auckland Council to enable greater intensification in specific areas. Policy 3 applies to Auckland's city centre and all ten metropolitan centres and requires intensive development to be enabled. It also directs the council to identify walkable catchments around these centres and all rapid transit stops. In these walkable catchments, building heights of least six storeys must be enabled. Intensification around smaller suburban centres must also be considered. PC78 also includes 'qualifying matters' which can be used to modify the otherwise required building heights or density requirements under Policy 3.

3.1 Policy 3 directions with the scope and need for an options analysis

Some parts of Policy 3 provide scope for the council to consider a range of options in implementing that part of the policy. The parts of Policy 3 that have had an options assessment are listed below and the full options assessment is in section 6 of this s32 document.

- Policy 3(a):
    - How to realise as much development capacity as possible in the city centre, to maximise benefits of intensification
- Policy 3(b):
    - How to reflect demand for housing and business use in metropolitan centres
    - How to enable at least six storeys in metropolitan centres
- Policy 3(c):
    - How to determine a walkable catchment
    - What size is a walkable catchment
    - How to enable at least six storeys in the walkable catchments
- Policy 3(d):
    - How to measure the level of commercial activity and community services in neighbourhood, local and town centre zones
    - Where 'adjacent' is in relation to neighbourhood, local, and town centre zones
    - How to enable heights and densities of urban form that are commensurate with the level of activities and services within and adjacent to each of the centres

3.2 Policy 3 interpretation matters with no scope or need for an options analysis

Some of the implementation of the wording of Policy 3 does not require options to be considered as the meaning of the words or phrases are clear. Examining other options in these cases would be overly onerous and would achieve little benefit.

A detailed analysis of these matters is included in **Appendix 1** and below is a summary of why no further options have been deemed necessary to consider for these matters relating to the implementation of Policy 3.

3.2.1 What is Auckland's 'urban environment'?

Auckland Council has interpreted the 'urban environment' in the context of Auckland to include "All land zoned residential, business and adjoining special purpose zones and open space zones as identified in the AUP, including the Hauraki Gulf Island Section, which includes metropolitan Auckland, all towns, and all rural and coastal towns and villages." Further discussion around this is included in **Appendix 1** and the PC78 s32 Overall Evaluation Report.

3.2.2 What are 'equivalent' zones?

The 'equivalent' National Planning Standard zones in the AUP and the Operative Auckland Council District Plan – Hauraki Gulf Islands section (2018) ('**HGI section**') are listed in Figure 3 below:

National Planning Standards zone	AUP zone	HGI Section zone
City Centre zone	City Centre zone	N/a
Metropolitan centre zone	Metropolitan centre zone	N/a
Town Centre zone	Town Centre zone	N/a
Local Centre zone	Local Centre zone	Commercial 2 (Ostend village) Matiatia (gateway)
Neighbourhood Centre zone	Neighbourhood Centre zone	Commercial 1 (Oneroa village) Commercial 3 (Local shops) Commercial 4 (visitor facilities) Tryphena (local retailing area) Claris (local retailing area) Okiwi (local retailing area) Port Fitzroy (local retailing area)

Figure 3: The 'equivalent' zones to those in the National Planning Standards

Further discussion around this is included in **Appendix 1**.

3.2.3 What does 'in' and 'within' mean?

The use of the word "in" in Policy 3 denotes all land that is *zoned* Business – City Centre or Business – Metropolitan Centre in the AUP.

In relation to Policy 3(c) the use of the word "within" denotes all land that is inside the walkable catchments. In relation to Policy 3(d) it denotes all land that is zoned Business – Neighbourhood Centre zone, Business – Local Centre zone, and Business – Town Centre zone in the AUP.

3.2.4 Where is the edge of the City Centre zone and the Metropolitan Centre zones?

The Ministry for the Environment ('**MfE**') guidance[2] on implementing the NPS-UD states that the 'edge' is 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.

Auckland Council has followed the intention of the guidance but rather than identify a continuous 'edge' the council has plotted 'entrance points' along the edge of the centre zones to enable walkable catchments to be generated in GIS more efficiently, while still following the intention of the guidance. Further discussion around this is included in **Appendix 1**.

3.2.5 What does 'building heights' mean?

Based on reference to the definitions in the National Planning Standards, 'building heights' is the vertical distance (height) of a physical construction (building) that is located on land.

3.2.6 What does 'at least six storeys' mean?

The AUP height standards are not calculated in storey units, but rather are measured in metres. To enable a 'viable' six storey building in a walkable catchment, a height of 21m is required. Further discussion around this is included in **Appendix 1**.

3.2.7 What does 'density of urban form' mean?

The AUP contains various provisions that relate directly to density such as rules around how many dwellings are permitted per site. However, to genuinely enable additional density it is not just the rules specifically related to density of dwellings on a site that need to be considered. The full package of controls that affect total development space need to be considered such as gross floor area ('**GFA**'), yard and podium setbacks, and recession planes. Further discussion around this is included in **Appendix 1**.

[2] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment

3.2.8 What does 'development capacity' mean?

Development capacity is defined in the NPS-UD and is further discussed in the s32 report on capacity and demand.

3.2.9 What is a rapid transit service?

Auckland's existing and planned (RLTP) rapid transit network comprises:

- the three lines[3] (Western, Southern, Eastern) of the heavy rail network between Swanson and Pukekohe, including the Central Rail Link ('CRL').
- the Northern Busway (including the recent extension to Albany).
- the Eastern Busway.

Further discussion around this is included in **Appendix 1**.

3.2.10 What are Auckland's 'existing' rapid transit stops?

Based on the interpretation of Auckland's rapid transit services the 44 existing rapid transit stops in Auckland are:

- Akoranga Bus Station
- Albany Bus Station
- Avondale Train Station
- Baldwin Ave Train Station
- Britomart Train Station
- Constellation Bus Station
- Ellerslie Train Station
- Fruitvale Rd Train Station
- Glen Eden Train Station
- Glen Innes Train Station
- Grafton Train Station
- Greenlane Train Station
- Henderson Train Station
- Homai Train Station
- Kingsland Train Station
- Manukau Train Station
- Manurewa Train Station
- Meadowbank Train Station
- Middlemore Train Station
- Morningside Train Station
- Mt Albert Train Station
- Mt Eden Train Station
- New Lynn Train Station
- Newmarket Train Station
- Orakei Train Station
- Otahuhu Train Station
- Panmure Train Station
- Papakura Train Station
- Papatoetoe Train Station
- Parnell Train Station
- Penrose Train Station
- Puhinui Train Station
- Pukekohe Train Station
- Ranui Train Station
- Remuera Train Station
- Smales Farm Bus Station
- Sturges Rd Train Station
- Sunnynook Bus Station
- Sunnyvale Train Station
- Swanson Train Station
- Sylvia Park Train Station
- Takaanini Train Station
- Te Mahia Train Station
- Williams Ave Bus Station

[3] The Onehunga Branch Line (Onehunga and Te Papapa stations) is not considered a rapid transit service as it is not planned to reach the frequencies required (only two trains per hour are planned).

3.2.11 What are Auckland's 'planned' rapid transit stops?

In the context of Auckland a rapid transit stop is considered to be 'planned' when it meets all the criteria below:

- Funding for the physical infrastructure and the service must be identified in the RLTP; and
- The route is shown as being a rapid transit network in the RLTP; and
- A Notice of Requirement (for a designation) has been publicly notified for the station location.

Based on this, the 'planned rapid transit stops' in Auckland are:

- Te Wai Horotiu[4] (City Rail Link)
- Karanga a Hape[5] (City Rail Link)
- Maketuu[6] (Southern Line)
- Paeraataa (Southern Line)
- Rosedale (Northern Busway)

There are a number of 'future' rapid transit stops[7] in Auckland that have some planning underway, but as yet do not meet the criteria listed above for being deemed a 'planned rapid transit stop'. Therefore, it would be premature to identify walkable catchments around these stops under Policy 3(c).

These stops relate to future rapid transit service projects such as the Eastern Busway[8], Northern Busway extension to Milldale, the Light Rail – City Centre to Mangere[9], and the Light Rail – North West. Some of these projects are more advanced in planning than others.

The stations listed below are 'future' rapid transit stops in Auckland that are the most advanced in their planning:[10]

- Ngaakooroa[11] (Southern Line)
- Pakuranga station (Eastern Busway)
- Edgewater station (Eastern Busway)
- Gossamer station (Eastern Busway)
- Burswood station (Eastern Busway)
- Botany station (Eastern Busway)

PC78 does not seek to identify a walkable catchment for these stations or any other 'future' rapid transit stops under Policy 3(c). However, the implementation of the NPS-UD is not a 'once only' opportunity under PC78. The AUP will still need to "give effect" to the NPS-UD going forward. Therefore, further Plan Changes in the future will be necessary to identify

[4] Formerly referred to as 'Aotea'.
[5] Formerly referred to as 'K Road'.
[6] Formerly referred to as 'Drury Central'.
[7] This is not a term referred to in the NPS-UD
[8] Part of the Auckland Manukau Eastern Transport Initiative project ('AMETI')
[9] Refer to the PC78 s32 Overall Evaluation Report
[10] This is not intended to be an exhaustive list
[11] Formerly referred to as 'Drury West'

walkable catchments for these stations, once they met the criteria of a ‘planned rapid transit stop’. Further discussion around this is included in **Appendix 1**.

4 Statutory Evaluation under the RMA

Please refer to the statutory evaluation in the PC78 s32 Overall Evaluation Report.

5 National and Regional Planning Context

Please refer to the national and regional planning context section in the PC78 s32 Overall Evaluation Report.

6 Development and evaluation of options

6.1 Overview

6.1.1 Scope of options for Policy 3

Some parts of Policy 3 provide scope for the council to consider a range of options in implementing that part of the policy. The parts of Policy 3 that have had an options assessment are listed below.

- Policy 3(a):
    - How to realise as much development capacity as possible in the city centre, to maximise benefits of intensification
- Policy 3(b):
    - How to reflect demand for housing and business use in metropolitan centres
    - How to enable at least six storeys in metropolitan centres
- Policy 3(c):
    - How to determine a walkable catchment
    - What size is a walkable catchment
    - How to enable at least six storeys in the walkable catchments
- Policy 3(d):
    - How to measure the level of commercial activity and community services in neighbourhood, local and town centre zones
    - Where ‘adjacent’ is in relation to neighbourhood, local, and town centre zones
    - How to enable heights and densities of urban form that are commensurate with the level of activities and services within and adjacent to each of the centres

6.1.2 Evaluation Criteria

Figure 4 below outlines the criteria used to assess the options for addressing the resource management issues.

Sections of the RMA		Criteria
Appropriateness	s32(1)(a) and s32(1)(b) of the RMA	Is this option the most appropriate way in which to address the issue at hand? In doing so, is this option the most appropriate way to meet the objective of the AUP and the purpose of the RMA?
Effectiveness	s32(1)(b)(ii) of the RMA	How successfully can this option address the issue? Does this option successfully meet the objectives of the AUP and the purpose of the RMA?
Efficiency	s32(1)(b)(ii) of the RMA	Does this option address the issue at lowest cost and highest net benefit?
Costs	s32(2) of the RMA	What are the social, economic, environmental or cultural costs and/or negative impacts that this option presents?
Benefits	s32(2) of the RMA	What are the social, economic, environmental or cultural benefits and/ or positive impacts that this option presents?
Risks	s32(2)(c) of the RMA	What are the risks of addressing this issue? What are the risks of not addressing this issue?

Figure 4: Criteria to assess options

6.2 How to realise as much development capacity as possible in the city centre, to maximise benefits of intensification

6.2.1 Overview

Policy 3(a) requires that the AUP enable building heights and density of urban form in the City Centre zone to realise as much development capacity as possible, to maximise benefits of intensification. The MfE guidance[12] on how to implement the NPS-UD sets out the following:

- 'As much as possible' means removing unnecessary and unreasonable barriers to accommodate the maximum amount of development capacity that can be realised.
- The level of demand and accessibility should be considered in determining what heights and densities can be enabled.
- 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).
- In practice this may mean:

[12] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 6.2

- no maximum building heights or maximum 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.

6.2.2 Description of options – How to realise as much development capacity as possible in the city centre, to maximise benefits of intensification

A provision-by-provision approach has been used in the City Centre zone options analysis, with some provisions to be removed, while others are retained or amended. For each provision which could limit the intensification required under Policy 3(a), options included:

- Retain as-is;
- Remove in full;
- Amend (where amendments were possible, with multiple amendment options considered for some provisions).

A full description of options is covered in the s32 report on the City Centre zone and the s32 report on the city centre precincts.

6.2.3 Evaluation of options – How to realise as much development capacity as possible in the city centre, to maximise benefits of intensification

The detailed evaluation of the options for realising as much development capacity as possible in the City Centre zone are covered in detail in the s32 report on the City Centre zone and the s32 report on the city centre precincts.

In summary, the outcome of that evaluation is the recommendation that the City Centre zone will meet the Policy 3(a) requirements by being amended as follows:

- Amending zone standards to enable development capacity of greater than six storeys (greater than the Metropolitan Centre zone). This will be done by:
  - Removing standards which restrict GFA. This will enable greater height and development capacity across the city centre, but particularly in the Special Height Area which enables tall towers in the city centre core.
  - Increasing General Building Height standard to enable heights of 72.5m (the Metropolitan Centre zone height limit).
- Having a package of provisions in the city centre which manage urban design outcomes and effects of development in a way that is appropriate for the complex and high-intensity context of the city centre. This will include the amended provisions for height, as well as provisions managing building form and design and will contribute to a well-functioning urban environment.

Additionally, it is recommended to retain provisions which provide for qualifying matters in the city centre. These include provisions around heritage, open space, special character, local views, outlook and sunlight admission.

The maximum building heights in the city centre (a mix of the General Building Height standard and height limits providing for qualifying matters) are not proposed to be removed. Restricting building height is important to protect the current and future amenity of the city. This will ensure a well-functioning urban environment (in line with Objective 1 of the NPS-UD) and that the amenity values of the city centre can provide for the needs of future generations (in line with Objective 4 of the NPS-UD). Maintaining the amenity of the city centre, including the streets and open spaces, is also part of ensuring that the city centre can maximise the benefits of intensification.

These recommended actions will enable a significant additional development capacity in the city centre. Due to the complexity of the city centre, the additional capacity enabled will be site-dependent. Test sites which were modelled as part of the options analysis mostly had a capacity increase in the range of 60 to 75 percent.

6.3 How to reflect demand for housing and business use in metropolitan centres

6.3.1 Overview

6.3.1.1 Potential floorspace in metropolitan centres

Auckland Council is required to prepare a housing and business capacity assessment ('**HBA**'). HBAs provide information on the demand and supply of housing and business land. The MfE guidelines for implementing the NPS-UD state that:

> "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."[13]

An assessment[14] has been undertaken (refer to **Appendix 18**) that estimates the potential buildable capacity for Auckland's ten Metropolitan Centres according to the AUP provisions. This is based on site dimensions and taking into account building height constraints.

An estimate has then been made on the potential split between business floorspace and residential floorspace (apartments) allowing for assumed capacity. This allows for variation among centre types in terms of the business / residential split at each level, with business activity commanding most of the lower floors (Levels one to five), but residential having a somewhat greater share from levels six and higher, to take advantage of views, and

[13] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.3
[14] Refer to "Auckland Centres Growth and Capacity – Situation and Outlook" by Market Economics in **Appendix 18**

recognising the likely low incidence of retail and household service activity above the second level.

The modelled floorspace capacity in each of the metropolitan centres is listed below:

- Albany: 7,924,000m^2
- Botany: 7,898,000m^2
- Henderson: 5,128,000m^2
- Manukau 10,345,000m^2
- New Lynn: 5,607,000m^2
- Newmarket: 2,574,000m^2
- Papakura: 1,658,000m^2
- Sylvia Park: 3,051,000m^2
- Takapuna: 1,662,000m^2
- Westgate: 6,386,000m^2

6.3.1.2 Floorspace demand in metropolitan centres

For the enabled floorspace capacity itself, a key issue is whether the Metropolitan centres are likely to have sufficient capacity to accommodate for business growth as well as residential growth.

To assess this, the current situation in the ten Metropolitan Centres has been examined, along with the growth outlook, taking into account employment, floorspace demand for business activity, and future employment trends. A key indicator is the current level of floorspace (m^2) per person employed (Modified Employment Count ('**MEC**')) in each centre.

6.3.1.3 Future outlook for business floorspace demand in metropolitan centres

The projected future employment levels in the centres have been modelled out to 2050. The modelling is based on the projected total employment future by sector for Auckland over the 2021-2050 period. The projected numbers for each centre have then been estimated based on their projected share of total employment growth from 2021 onwards, according to their current share of total employment, their share of employment growth by sector over the recent medium term (2010-2020), and the projected household growth in each metropolitan centre's main catchment area.

Analysis of recent (medium term) employment growth across centres and business areas over the 2006-21 and 2010-21 periods showed the clear influence of both the established level of employment at the start of any period, and the household growth in centres' service catchments over the period[15]. This is to be expected, given that Auckland is an established and stable economy, with a well-developed network of centres in the spatial hierarchy.

[15] Showing out as high levels of 'explanation' (R^2) in statistical terms.

Auckland's growth is occurring through the combination of outward expansion, and residential intensification, with much of the growth in household demand able to be served by established centres, with consequent increases in their employment levels, and addition of built investment for both business activity and residential capacity. That said, the employment projections are treated as estimates only.

The projected employment for each metropolitan centre has considered the long term, out to 2050. The implied demand for floorspace has been estimated according to employment, the current employment intensity (floorspace m^2 per MEC) with allowance for floorspace productivity to improve over time. This is expected to see the floorspace per person employed decrease.

The projected employment and estimated floorspace demand are set out in Figure 5. This is for the medium growth future. Figure 5 also shows the modelled floorspace capacity for the main centres, and the indicated uptake of the plan-enabled capacity by 2050.

Centre	Employment 2021	Total Improvement Value 2021	Total Capital Value 2021	Total Floorspace 2021	M2 / MEC	Employment 2050-Medium	Estd Floorspace Demand 2050	Modelled Floorspace Capacity	Space Utiltn %
		$M	*$M*	*(000)*			*(000)*	*(000)*	
Albany	7,800	1,100	2,400	286	36	15,800	535	7,924	7%
Botany	8,900	800	2,400	527	59	17,600	967	7,898	12%
Henderson	5,300	700	1,700	371	69	11,000	711	5,128	14%
Manukau	14,700	1,400	3,400	693	47	29,300	1,282	10,345	12%
New Lynn	5,900	800	1,900	456	77	11,700	843	5,607	15%
Newmarket	18,700	2,600	5,400	536	29	39,500	1,053	2,574	41%
Papakura	2,800	300	700	192	68	6,100	380	1,658	23%
Sylvia Park	4,400	1,000	1,500	190	44	8,900	361	3,051	12%
Takapuna	8,300	1,300	3,000	324	39	17,500	638	1,662	38%
Westgate / Massey	3,200	700	1,900	229	72	6,500	436	6,386	7%

Figure 5: CBD and Metropolitan Centres – Key Parameters and Demand Outlook (2050)

The key finding is that all the metropolitan centres would have considerable capacity to accommodate long term employment growth.

The assessment is necessarily based on projections into the long term future, with uncertainty about the economic future, and the future employment patterns for example, the Covid-19 pandemic has seen a considerable shift toward working from home, with consequent reduction in demand for built employment space. Whether or not that shift persists into the long term is unknown. Certainly, the key property and space parameters of the centres reflect mainly the pre-Covid economy.

Nevertheless, the big picture for Auckland shows very considerable capacity to accommodate business growth in the metropolitan centres, with large margins between the indicated plan-enabled capacity and the estimated demand, even in the long term.

That suggests considerable leeway to conclude that capacity constraints are unlikely for any of Auckland's metropolitan centres.

6.3.1.4 Future residential demand in metropolitan centres

The metropolitan centres have considerable potential to accommodate residential growth into the long term. This is expected to be almost entirely in the form of apartment developments, through a combination of mixed-use developments (business activity mainly on lower floors, apartments at higher levels (6 and above), and residential only developments (especially toward the edge of the centres)).

Under the AUP, the metropolitan centres have attracted a substantial share of new apartment development, accounting for around 4,180 new apartments (18% of the Auckland total) since 2016. The CBD has still been the centre of this growth (7,600 apartments, 32% share), supported by developments in the inner suburbs (1,170 apartments, 5%). Among the metropolitan centres, Takapuna, Albany, Henderson and Newmarket have seen the largest shares of growth. One feature is that apartment development is also attracted to locations near the metropolitan centres.

With the greater enablement in walkable catchments, and the increasing propensity of households to opt for apartment living (especially prior to and following raising families) this trend is expected to continue into the longer term.

All of the metropolitan centres have substantial development capacity for apartment and mixed use developments.

6.3.2 Description of options – How to reflect demand for housing and business use in metropolitan centres

As outlined in the section above, the capacity for housing and business in Auckland's metropolitan centres already reflects (i.e. provides sufficient capacity) for the demand. In fact, there is very considerable capacity and therefore capacity constraints are unlikely for any of Auckland's metropolitan centres. Based on this assessment, there are four options to reflect demand for housing and business use in metropolitan centres.

6.3.2.1 Option 1: Do nothing (Status Quo)

This option would not make any specific amendments to the AUP in relation to the Metropolitan Centre zone provisions or any applicable precincts and Height Variation Controls. They would remain unchanged.

6.3.2.2 Option 2: Increase the business and residential capacity in the metropolitan centres

This option would amend the Metropolitan Centre zone provisions, and any applicable precincts and Height Variation Controls, to enable more business and housing capacity. This would be through methods such as increasing maximum heights, removing any applicable GFA controls, and amendments to development standards (i.e. yards, height in relation to boundary).

6.3.2.3 Option 3: Increase the business and residential capacity in specific metropolitan centres

This option would amend the Metropolitan Centre zone provisions, and any applicable precincts and Height Variation Controls, to enable more business and housing capacity in only some specific metropolitan centres. Based on Figure 5 above, the specific centres would be Newmarket and Takapuna – as they are projected to utilise the greatest percentage of their floorspace out to 2050. As per Option 2, amendments to these two Metropolitan Centre zones would be through methods such as increasing maximum heights, removing any applicable GFA controls, and amendments to development standards (i.e. yards, height in relation to boundary).

6.3.2.4 Option 4: Decrease the business and residential capacity in the Metropolitan Centres

This option would amend the Metropolitan Centre zone provisions, and any applicable precincts and Height Variation Controls, to reduce the existing business and housing capacity. These changes would be acknowledging that there is already a large surplus of capacity and therefore attempting to better 'reflect' the actual demand for business and housing in the AUP provisions for metropolitan centres. This would be through methods such as decreasing maximum heights, adding maximum GFA controls, and potential amendments to development standards (i.e. yards, height in relation to boundary).

6.3.3 Evaluation of options – How to reflect demand for housing and business use in metropolitan centres

Figure 6 over the page evaluates the four options for how to enable building heights and density of urban form in metropolitan centres to reflect demand for housing and business use in the metropolitan centres.

Overall, 'Option 1 – Status Quo (do nothing)' is the preferred approach as there is no need to further enable building heights and density of urban form because the current AUP provisions adequately reflect demand for housing and business use in all of Auckland's metropolitan centres.

	Option 1: Status Quo (Do nothing)	Option 2: Increase the business and residential capacity in the metropolitan centres	Option 3: Increase the business and residential capacity in specific metropolitan centres	Option 4: Decrease the business and residential capacity in the metropolitan centres
Appropriateness	Most appropriate at meeting the objective of implementing Policy 3(b) of the NPS-UD.	Not the most appropriate as further increasing capacity is unnecessary to meet the objective of implementing Policy 3(b) of the NPS-UD.	Not the most appropriate as further increasing capacity even for Newmarket and Takapuna is unnecessary to meet the objective of implementing Policy 3(b) of the NPS-UD.	Reducing development capacity would better 'reflect' the demand for housing and business use in metropolitan centres but would create other issues.
Effectiveness	Will achieve the objective of implementing the NPS-UD.	Unlikely to have much effect in light of the large amount of spare development capacity still left in Auckland's Metropolitan Centres.	Unlikely to have much effect in light of the large amount of spare development capacity still left in the Newmarket and Takapuna metropolitan centres (59% and 62% respectively).	Addresses the issue to 'reflect' demand, but potentially creates the need for future plan changes to add capacity.
Efficiency	Requires the least time and achieves the objective.	Requires a moderate amount of time to decide how much additional capacity to add and by what method. Does not achieve the objective as the enabled density would be even higher than the existing capacity oversupply.	Requires a moderate amount of time to decide how much additional capacity to add and by what method. Does not achieve the objective as the enabled density would be even higher than the existing capacity oversupply.	Likely to result in a high level of input from landowners (seeking to retain development rights) and a high corresponding input from council and others, with few benefits.
Costs	Generally cost neutral. Minimal council costs as no plan change provisions associated with this option.	Some council costs as there are new plan change provisions associated with this option.	Some council costs as there are new plan change provisions associated with this option.	Some council costs as there are new plan change provisions associated with this option. Costs to landowners losing some existing development rights.
Benefits	Retains a large surplus of capacity over demand for residential and	Adds further development capacity (albeit excessive) in a location where high growth is encouraged by the NPS-UD.	Adds further development capacity (albeit excessive) in specific locations with the lowest amount of surplus capacity.	Minimal benefits aside from technically achieving the direction of the NPS-UD more closely by better 'reflecting' the demand for housing

	Option 1: Status Quo (Do nothing)	Option 2: Increase the business and residential capacity in the metropolitan centres	Option 3: Increase the business and residential capacity in specific metropolitan centres	Option 4: Decrease the business and residential capacity in the metropolitan centres
	business uses in the metropolitan centres.			and business use in metropolitan centres.
Risks	Very low risk that anticipated residential and business demand will actually exceed the development capacity.	Some risk that the relaxation of development controls enables poor urban design outcomes and undermines a well-functioning urban environment.	Some risk that the further relaxation of development controls enables poor urban design outcomes in Newmarket and Takapuna and undermines a well-functioning urban environment.	High risk of widespread landowner opposition. Risk that by lowering capacity too much the demand will use it up and require a future plan change to enable further capacity.

Figure 6: Options evaluation to enable building heights and density of urban form in metropolitan centres to reflect demand for housing and business use

6.4 How to enable at least six storeys in metropolitan centres?

6.4.1 Overview

In addition to enabling building heights and density of urban form to reflect demand for housing and business use in the metropolitan centres (covered in section 6.3 above), Policy 3(b) of the NPS-UD also requires building heights of "at least 6 storeys" in metropolitan centres. This part of the s32 report looks at the options to enable building heights of at least six storeys in the Metropolitan Centre zones.

The MfE guidance on the implementation of the intensification policies of the NPS-UD states that the requirement to enable 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-serviced by existing or planned public transport. In most cases, metropolitan centre zones will exhibit most, if not all, of these attributes."[16]

The guidance also makes it clear that the "six storeys is a minimum and not a target" and "there may be cases where higher heights and densities than the six-storey minimum as directed might be appropriate".[17]

Each of Auckland's ten metropolitan centres has been analysed to see whether six storey buildings are 'enabled' by the current AUP provisions. This analysis is set out in full in **Appendix 2** and is summarised below.

Metropolitan Centre zone height standard:

The Metropolitan Centre zone height limit of 72.5m (20+ storeys) is significantly higher than the six storeys (21m) required by Policy 3(b).

Other Metropolitan Centre zone development standards:

The Metropolitan Centre zone in the AUP has been reviewed to determine whether there are any other development standards (aside from height addressed above) that would limit the ability to enable a six storey building. The review concluded that for sites within the Metropolitan Centre zone that are adjacent to a residential zone, the Height in Relation to Boundary ('**HIRB**') standard can limit the overall height of the building. In some cases, this can restrict the enabled height in the Metropolitan Centre zone below 6 storeys (21m).

Height Variation Controls:

While there are Height Variation Controls over parts of some metropolitan centres, the height is not limited to less than six storeys in any case.

Precincts:

[16] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 6.3
[17] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 6.3

Two metropolitan centres (Manukau and Takapuna) have precincts that apply to them that restrict building height to less than 21m in some specific locations. In both cases, this height restriction is linked to a qualifying matter.

Other matters limiting 6 storey buildings in metropolitan centres:

A volcanic view shaft overlay also restricts building heights in some parts of the Newmarket Metropolitan zone to less than 21m. However, this again is a qualifying matter that results in the intensification directions being modified by Policy 4 of the NPS-UD.

6.4.2 Description of options – How to enable at least six storeys in metropolitan centres?

6.4.2.1 Option 1: Status Quo (Do nothing)

This option would not make any specific amendments to the AUP in relation to the Metropolitan Centre zone provisions, any applicable precinct provisions, and any relevant Height Variation Controls. The existing AUP provisions would remain unchanged.

6.4.2.2 Option 2: Delete or amend all provisions that do not enable buildings of at least six storeys

This option amends the AUP in to enable six storey buildings in the Metropolitan Centre zones in all cases. Based on the analysis in **Appendix 2**, the amendments to the AUP provisions would be:

- Amend Table I540.6.1.1 in the Takapuna 1 Precinct in relation to Sub-precinct D to increase the maximum height from 12.5m to 21m (and any other consequential changes required to the precinct provisions).
- Delete the Manukau Precinct (I425) from the AUP.
- Amend the HIRB standard in H9 Metropolitan Centres to remove the restrictions on six storey buildings near the edge of the zone.
- Amend the relevant Volcanic View Shaft height limits over the Newmarket Metropolitan Centre so their lowest height is at least 21m.

6.4.2.3 Option 3: Delete or amend provisions that do not enable buildings of at least six storeys, unless a qualifying matter applies

This option amends the AUP in to enable six storey buildings in the Metropolitan Centre zones, unless a qualifying matter applies. Based on the analysis in **Appendix 2**, the amendments to the AUP provisions would be to only change the HIRB

standard in H9 Metropolitan Centres to remove the restrictions on six storey buildings near the edge of the zone.

6.4.3 Evaluation of options - How to enable at least six storeys in metropolitan centres?

Figure 7 below evaluates the three options for how to enable building heights of at least six storeys in metropolitan centres. Overall, 'Option 3 – Delete or amend provisions that do not enable buildings of at least six storeys, unless a qualifying matter applies' is the preferred approach. This option achieves the objective of implementing Policy 3(b) of the NPS-UD while also being cognisant of the wider policies of the NPS-UD (i.e. Policy 4 on qualifying matters).

	Option 1: Status Quo (Do nothing)	Option 2: Delete or amend all provisions that do not enable buildings of at least six storeys	Option 3: Delete or amend provisions that do not enable buildings of at least six storeys, unless a qualifying matter applies
Appropriateness	Inappropriate as it does not fully implement Policy 3(b) of the NPS-UD.	Not the most appropriate option as it does not take spatially located qualifying matters into account.	Most appropriate as it enables six storey development in metropolitan centres while allowing for qualifying matters.
Effectiveness	Ineffective in fully implementing Policy 3(b).	Implements Policy 3(b) but not the wider policies of the NPS-UD (i.e. Policy 4 on qualifying matters).	Effectively implements Policy 3(b) and the wider policies of the NPS-UD (i.e. Policy 4 on qualifying matters).
Efficiency	Efficient process but does not fully implement the NPS-UD.	Efficient option to implement but carries the costs of enabling six storey buildings in potentially unsuitable areas (i.e. areas where qualifying matters apply).	Most efficient option as it addresses the matter of implementing Policy 3(b) of the NPS-UD, without the costs of Option 2.
Costs	Enables further six storey buildings only in parts of the metropolitan centres.	Negative impacts on the environment by enabling six storey buildings in potential unsuitable areas (i.e. areas where qualifying matters apply).	Small cost in amending plan provisions in relation to HIRB.
Benefits	Minimal administration as no plan change required.	Enables six storey buildings as sought by Policy 3(b) of the NPS-UD in all cases.	Enables six storey development in metropolitan centres except for potentially unsuitable areas (i.e. where qualifying matters apply).
Risks	High risk (legal and reputational) for the council – as it does	Some risk as it does not take account of the wider NPS-UD policies	Little/no risk as it follows the specific directions to implement Policy 3(b) as well

	Option 1: Status Quo (Do nothing)	Option 2: Delete or amend all provisions that do not enable buildings of at least six storeys	Option 3: Delete or amend provisions that do not enable buildings of at least six storeys, unless a qualifying matter applies
	not follow directions to fully implement Policy 3(b).	around qualifying matters.	as recognising the wider policies of the NPS-UD in relation to qualifying matters.

Figure 7: Evaluation of options to enable at least six storeys in metropolitan centres

6.5 How do you determine a walkable catchment?

6.5.1 Overview

Determining what is meant by the term 'walkable catchment' is covered in some detail in **Appendix 3**. It concludes that in the context of Policy 3(c) of the NPS-UD, the walkable catchments in Auckland should be based on the area the *average* person could walk to access a centre, or a rapid transit stop.

The MfE guidance on implementing the NPS-UD states that "walkable catchments can be determined either using a simple, radial pedshed analysis or a more detailed GIS (geographic information systems) network analysis."[18] Waka Kotahi's pedestrian planning guide notes that "there are many different methods to measuring walkability using desktop analysis, on-site assessment or through pedestrians' experiences."[19]

A key issue in determining a walkable catchment is settling on the type of units in which it is measured. The two main units to measure a walkable catchment are time and distance (i.e. how long will people walk for in minutes or how far will people walk in metres).

Often, time and distance are proxies for one another (e.g. a 5 minute walk = 400m). The matter of time and distance in relation to walkable catchments will be explored in more detail in the options below.

6.5.2 Description of options – How do you determine a walkable catchment?

6.5.2.1 Option 1: A radial 'ped-shed' analysis

A circle (or radial circles) from the centre point of a centre or station can be used to define a walkable catchment. This technique is known as a radial ped-shed ('pedestrian shed')

[18] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5

[19] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/planning/walkability/measuring-walkability/

analysis and is drawn as a basic circle (with a selected walking distance forming the radius of the circle). An example of a radial 'ped-shed' is shown in Figure 8 below.

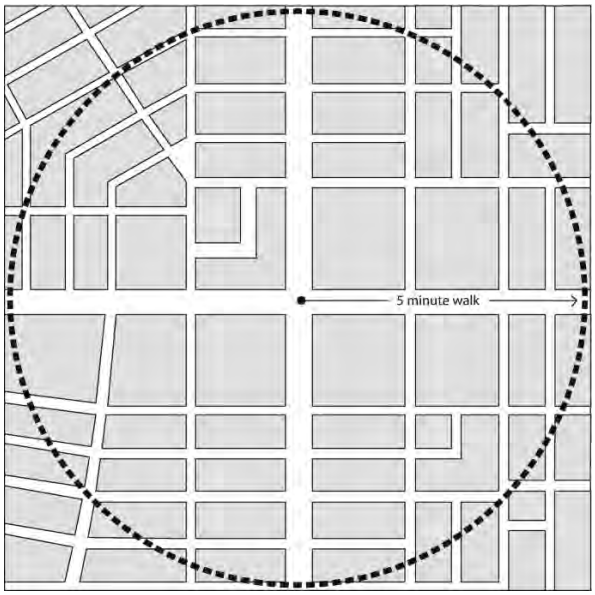


Figure 8: Example of a radial ped-shed using a 400m (5 minute walk) radius[20]

The MfE guidance notes that 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 (i.e. Auckland) to use this method as a proxy for the actual 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).[21]

6.5.2.2 Option 2: Use a GIS network analysis with a distance parameter

Walkable catchments can be determined using a detailed geographic information system ('**GIS**') network analysis. The MfE guidance suggests that councils use GIS with spatial data (including digital road and walking networks) to calculate walkable catchments.[22]

Walking networks

A walking network is a collection of paths and tracks a pedestrian uses when travelling to different locations. The network can be made up of:

[20] Source: Friedman, A. (2021). *Mobility and the City: The Broad View. In: Fundamentals of Sustainable Urban Design.* Springer, Cham. https://doi.org/10.1007/978-3-030-60865-1_15
[21] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.4
[22] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.4

- Footpaths
- Shared paths
- Road crossings and intersections
- Pedestrian bridges and underpasses / tunnels
- Shared spaces
- Laneways
- Unpaved walking tracks
- Stairs and ramps
- Park pathways and trails[23]

Various GIS datasets based on the above networks can be used to create a digital walking network on which a walkable catchment can be mapped. This option was tested using Auckland Council's GIS data on walking networks. It should be noted that GIS data for walking networks may not perfectly represent the extent of pedestrian access in the real world. Furthermore, any significant addition to the walking network may change the actual extent of the walkable catchment.

Auckland Council GIS analysis

Auckland Council's GIS team use the service area analysis tool (using ArcGIS software) to generate walkable catchments. The tool works by determining an area encompassing all accessible walking networks from a specific location based on set parameters.

The road centreline network dataset (updated monthly) was used in this analysis, and it contains all road connections including latest available accessways/walkways. It also defines roads which are impassable by pedestrians (e.g. motorways) so they can be excluded from the walkable catchment analysis.

To begin with, the tool requires a starting point (or multiple points) to measure a defined distance from. The pedestrian entrance points to the rapid transit stations were mapped[24], as were entrance points along the edge of the Metropolitan Centre zone[25] and the City Centre zones.[26] These points were used as the starting point for measuring the distance of the walkable catchment.

In the service area analysis tool, the following parameters[27] were set to calculate the walkable catchments required by Policy 3(c) of the NPS-UD:

- calculate the distance measurement in metres
- 800m from rapid transit network station entrances

[23] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/walking-in-new-zealand/context-and-definitions/
[24] Refer to **Appendix 12** for maps of the entrance points to the rapid transit stops.
[25] Refer to **Appendix 13** for maps of the entrance points to the Metropolitan Centre zones.
[26] Refer to **Appendix 14** for maps of the entrance points to the City Centre zone.
[27] Refer to section 6.6 for how the size of walkable catchments were determined

- 800m from the entrance points along the edges of the Metropolitan Centre zone
- 1,200m distance from the entrance points along the edge of the City Centre zone
- prohibit any “no-pedestrian access” road/route (e.g. motorways)
- no specific time of day was used to run the analysis

The output of the service area analysis is a set of polygons and network lines from each of the chosen starting points which encompass the area which is accessible within the distance set (i.e. 800m or 1,200m).[28]

An example of how the service area analysis creates a walkable catchment is shown in Figure 9 below. The red lines are the walking network. It shows a walkable catchment of 1,200m based on the edge points (red dots) of the City Centre zone. Each entrance point generates a service area (the individually coloured polygons). These are then merged to create one full walkable catchment for the City Centre zone.

[28] The polygons are generated by putting the geometry of the lines traversed by the service area solver into a triangulated irregular network data structure. The network distance along the lines serves as the height of the locations inside the triangulated irregular network. Locations not traversed by the service area are put in with a much larger height value. A polygon generation routine is used with this triangulated irregular network to carve out regions encompassing areas in between the specified break values. The polygon generation algorithm has additional logic to produce the generalised or detailed polygons and to deal with the many special cases that can be encountered.

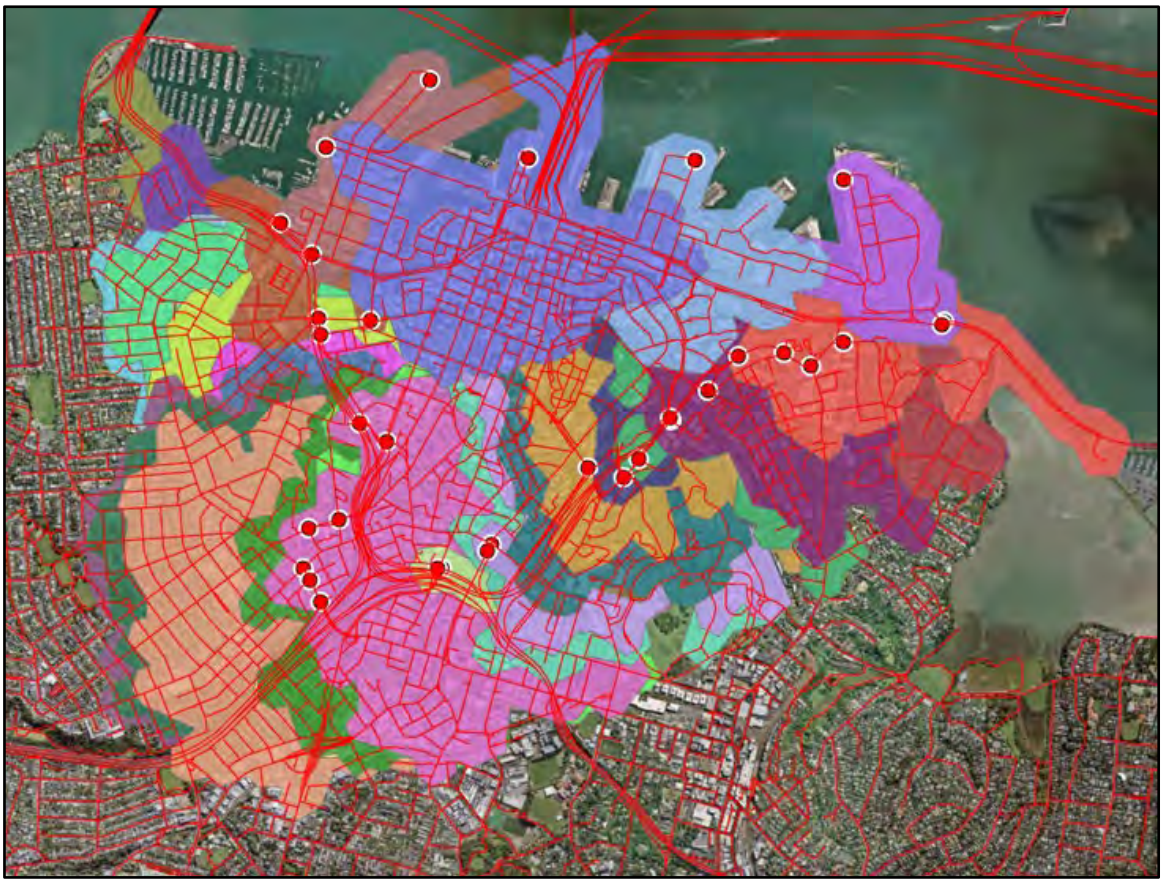


Figure 9: GIS developed service area of 1,200m from the edge of the City Centre zone

Using a GIS service area analysis based on actual walking networks creates a more refined walkable catchment (compared to the radial ped-shed approach). Figure 10 below compares a radial distance buffer (the dark purple circle) with the same distance service area (the lighter-coloured irregular shape within the buffer). It shows how much the radial ‘ped-shed’ approach can over-estimate the land area within a walkable catchment.

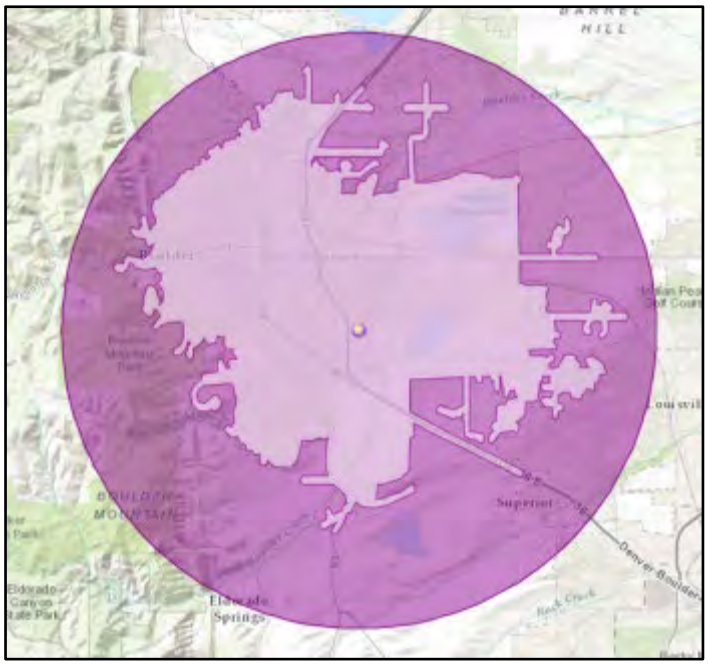


Figure 10: Example of a radial distance buffer (dark purple circle) versus the same distance measured by a service area (irregular shape light purple in the circle).

Using a GIS network analysis enables the selected distance to be the actual distance or path travelled rather than a linear radius that disregards actual environmental characteristics and their implications on walking. Another example is shown in Figure 11 below using Albany as a case study. The first image represents an 800m radius, but it is adjusted in the second image to represent an 800m walk, being the actual paths used – which are not linear, straight lines. This produces a smaller, but more accurate walkable catchment.

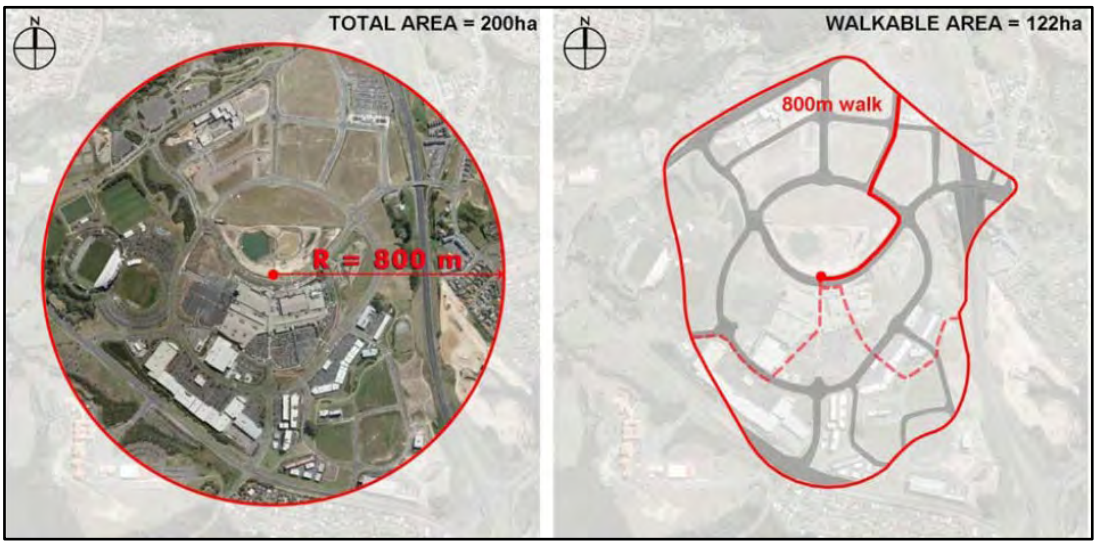


Figure 11: Different methods to determine a walkable catchment for Albany[29]

[29] Source: Munro, I. (2009). *The Problem of Catchment in Centres-based Residential Growth Planning.* Urbanism Plus Ltd.

6.5.2.3 Option 3: Use a GIS network analysis with a distance parameter plus a refinement of edges based on modifying factors

Limitations of network catchments

The Mfe guidance on implementing the NPS-UD notes that basic network catchments in GIS software may not always accurately represent true walkable catchments. This is because digital street and pedestrian networks often do not take into account informal walking routes, such as those found in public parks, or other shortcuts. In addition, the walkable catchment distance can be "affected by factors such as land form (e.g. hills take longer to walk up and can be an obstacle to walking), connectivity or severance (e.g. the lack of ease and safety of crossing roads, highways and intersections), and the quality of footpaths."[30]

Though relatively 'simple', the GIS network analysis does not account for these natural or man-made barriers in the actual urban environment and give some sort of time or distance penalty based on their implications. This means that walking accessibility can be overestimated when using the basic network method.[31]

The MfE guidance also notes that GIS generated catchments will often cut across property boundaries, especially where properties are large. A more formalised walking catchment should be based on property boundaries, as they help later when considering how to zone properties.[32]

Adding modifying factors

Therefore, Option 3 uses the same methodology as outlined in Option 2 above but adds a further step of refining the edges of the walkable catchment based on various modifying factors. Modifying factor guidelines were developed internally and generally incorporate the more important factors noted in various studies and research on walkable catchments.

There are many factors that influence people's propensity to walk and the distance they are prepared to do so. The modifying factors for the council's internal guidelines were selected as they were considered to be the most impactful variables on people's ability or willingness to walk and they are relatively easily understood and measured. Many factors, such as footpath quality, separation from moving traffic, number of vehicle accessways, and the number of other path users are either difficult or impossible to measure at the scale required for implementation of the NPS-UD.

[30] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5
[31] Zhao, F., Chow, L.-F., Li, M.-T., Ubaka, I., & Gan, A. (2003). *Forecasting Transit Walk Accessibility: Regression Model Alternative to Buffer Method.* Transportation Research Record, 1835(1), 34–41. https://doi.org/10.3141/1835-05
[32] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.4

While there are many matters that impact the distance people will walk, trying to account for every minor instance of them is unrealistic. It is firstly, very difficult to estimate the exact extent to which they impact the walkability. Secondly studying, measuring, and applying these to every street within every catchment is simply not feasible in the timeframes required to implement the NPS-UD. Finally, the purpose behind the walkable catchments is to identify areas for long term land use change/intensification so it is not logical to determine these areas based on short-term maintenance conditions at a granular level.

The modifying factors are therefore applied sparingly and only where there is a clear, likely impact on a walkable route. The council's internal modifying factor guidelines were reviewed and updated during the process of identifying walkable catchments. The final guidelines for determining walkable catchments are included in full in **Appendix 4** and are summarised below.

The guidelines are split into two categories – edge and route. The edge guidelines relate to the location and nature of the catchment boundary, and how it should be aligned. The route guidelines relate to the nature and qualities of the route(s) taken to reach the catchment boundary, and how the boundary could be adjusted to take account of these.

A. Edge guidelines

The location of the walkable catchment boundary:

- **Full properties**
  Should not bisect a property unless the property is unusually large and will clearly distort the extent of the catchment in that location.

- **Boundaries**
  Should be a road boundary, rather than a zone or property boundary, to limit transitional effects.

- **Same-zoned blocks**
  Should not bisect a block of 'same-zoned' properties, to limit transitional effects, unless the block is unusually large and will clearly distort the extent of the catchment in that location.

- **Centre zones**
  Should include Business – Town Centre Zone or Business – Local Centre Zone, where it intersects these zones, to an appropriate point beyond the catchment boundary.

B. Route guidelines

The location of the walkable catchment boundary:

- **Severance**

Should take account of any severance features such as motorways, railway line, rivers and tidal inlets and adjust the boundary inward along the edge of the relevant feature.

- **Topography**
  Should reflect the topography of the area and the gradient of the routes within it. Where the topography of the route(s) is flat or gently undulating, do not adjust the boundary. Where there is steep or difficult gradient along a route or a section of it, move the boundary inwards a proportionate distance that reflects the gradient and length of the section.

- **Block sizes**
  Should take account of block sizes and lengths along the route, which indicate the pedestrian permeability of an area and assists with providing variety for the pedestrian. Smaller blocks sizes or lengths along a route can increase walking interest and permeability.

- **Environment and land use mix**
  Should take account of the quality, variety and safety of the street and built environment along a route, and the type and mix of land uses along a route, such that the experience of the pedestrian is enhanced or detracted by these factors. Where this is poor adjust the boundary inwards.

Ground-truthing

The exercise to determine the walkable catchments around Auckland's rapid transit network stations and centres began in late 2021 which coincided with Auckland's COVID-19 'lockdown' restrictions. This meant it was not possible for council staff to undertake site visits to physically walk the routes to test the above guidelines on the ground.

However, council staff could check the GIS generated catchments using other information such as aerial photography, streetview, contours, as well as local knowledge to refine their accuracy with the modifying factors.

6.5.2.4 Option 4: Use a GIS network analysis with a time parameter

Time instead of distance

Waka Kotahi's pedestrian planning guide defines a walkable catchment as "the area covered by a set walking time (e.g. 5 minutes) from a destination".[33] A GIS network analysis can be used to determine a walkable catchment along a walking network based on pedestrian walking speeds. Options 2 and 3 determine a walkable catchment based on a distance (e.g. 800m) whereas this option (Option 4) calculates the catchment based on time (e.g. a 10 minute walk).

[33] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/glossary-2/

This method uses the same walking network (footpaths, tracks etc) as Options 2 and 3 but adds information into the GIS network itself, such as walking speed and slope gradient. Point data such as controlled and uncontrolled crossing points with an average wait time can also be added into the GIS network.

How fast do people generally walk?

A key part of using a time parameter is determining how fast people walk. An 'average walking speed' is applied to the network. Waka Kotahi's pedestrian network guidance notes that people walk at a range of speeds depending on pedestrian characteristics such as age, gender and physical condition.[34]

As outlined in **Appendix 3**, objective 1 of the NPS-UD focuses on "all people" and the MfE guidance on implementing the NPS-UD specifically states that a walkable catchment is "the area that an **average** person could walk from a specific point to get to multiple destinations"[35] [bold added for emphasis]. Therefore, using the average walking speed is appropriate for this exercise.

There are a range of 'average walking speeds' referred to in studies, overseas examples, and guidance. A few of these examples are noted below:

- The vast majority of people walk at speeds between 0.8 metres per second (m/s) and 1.8 m/s (2.9 kilometres per hour (km/h) and 6.5 km/h). A fit, healthy adult will generally travel at a mean speed of 1.5 m/s (15th percentile: 1.3 m/s), and the aged and those with mobility impairments travel more slowly, at around 1.2 m/s (15th percentile: 1.0 m/s).[36]
- Generally, walking speeds are approximately 3 to 4 miles (4.8 to 6.4 kilometres) an hour. This most likely decreases with age, to roughly 2.5 to 3 miles (4 to 4.8 kilometres) an hour.[37]
- Free speed (speed as desired or when unhindered by other pedestrians) is on, average, 1.58m/s.[38]
- The typical walking capacity of a 'normal healthy adult' is 6km/h. A walker would typically be able to maintain a speed of 6km/h for up to 20 minutes, before this rate declines from fatigue or other factors.[39]

[34] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/planning/pedestrian-planning-principles/pedestrian-characteristics/physical-space/
[35] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5
[36] New Zealand Transport Agency (2009). *Pedestrian Planning and Design Guide.*
[37] Patricia. (2010). *Normal walking speed: Average human walking pace.* Yogawiz. http://www.yogawiz.com/blog/walking/normal-walking-speed.html
[38] Daamen, W., & Hoogendoorn, S. P. (2003). *Experimental Research of Pedestrian Walking Behaviour.* Transportation Research Record, 1828(1), 20–30. https://doi.org/10.3141/1828-03
[39] Allan, Andrew. (2001). *Walking as a Local Transport Modal Choice in Adelaide.* EcoPlan International.

- A typical fit and healthy adult walks about five kilometres in an hour. The low range for an older adult is 3.3 kilometres in an hour. Therefore, a simple rule of thumb for un-delayed walking is 12–18 minutes per kilometres.[40]

While the above examples show a range of different walking speeds, most studies were consistent in calculating an 'average' walking speed at around 5km/hr. When determining walking catchments Waka Kotahi's most recent guidance is to use an average walking speed of 4.8km/h to 5.0km/h (i.e. 1.3m/s to 1.4m/s).[41]

GIS network model with time penalties

Option 4 follows the same initial steps as Options 2 and 3 in setting up the walking network and the starting points. However, rather than calculate a distance along the walking network from the starting point, Option 4 models a person walking along the network for a certain length of time.

An average walking speed (e.g. 5km/hr) is used to begin with, but then this speed is reduced in various parts of the network depending on the slope gradient (i.e. walking speeds are slower for walking uphill in steep areas). Walking speeds can reduce by 15% or more once gradient exceeds 10%.[42]

On busy arterial roads the network can only allow crossing of the road where there are traffic signals or a pedestrian crossing. Average wait times at the crossings can be added to the network so that there is a 'penalty' time added for the wait (e.g. 45 seconds). This can make a significant difference to the extent of the walkable catchment.

By including this information in the walking network it allows a GIS exercise to calculate a more accurate walkable catchment, modelled on 'real-world' conditions. However, it is acknowledged that any desktop assessment of walkability will be unable to consider all the actual circumstances that pedestrians encounter.

A desktop analysis cannot easily take into account trip characteristics such as pedestrian density, walking purpose, and route familiarity or environmental characteristics such as weather conditions that can impact walking speed.[43] Such an analysis also does not take account of factors such as debris, ponding, the sense of personal security, temporary

[40] Waka Kotahi NZ Transport Agency (2021). Draft Pedestrian network guidance https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/walking-in-new-zealand/walking-activity-and-trends-in-new-zealand/
[41] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. Further reference to: Akcelik & Associates. (2001). *An investigation of pedestrian movement characteristics at Midblock signalised crossings*
[42] Q Ladetto, et. al., *'Human Walking Analysis Assisted by DGPS'*, research paper, Geodetic Laboratory, Swiss Federal Institute of Technology, Lausanne, Switzerland.

[43] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. Waka Kotahi pedestrian guidance (https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/planning/pedestrian-planning-principles/pedestrian-characteristics/physical-space/)

obstructions, inconsistent signage and irregular surfaces, although all may affect pedestrians.[44]

6.5.2.5 Option 5: Station and centre surveys

Waka Kotahi's pedestrian network guidance suggests that the walkable catchment of a station or centre can be determined by asking those people who regularly walk in the area. On-site assessments of walkability involve asking pedestrians for their perceptions, or the use of assessment criteria to measure or score various aspects. Assessments involving pedestrians can consist of checklists and rating systems against which pedestrians rate their own experience as they travel along a route.

Additionally, customer tests with people who do not normally use a space can inform how to better cater for those who are excluded. Asking pedestrians to take pictures to document their feedback can also help understand their perception. The complexity of the checklist used may vary but should be tailored to match the characteristics of the pedestrians undertaking the assessment.[45] A walkable catchment can then be generated based on the results of the survey data.

However, it is noted that the exercise to determine the walkable catchments around Auckland's rapid transit network stations and centres began in late 2021 which coincided with Auckland's COVID-19 'lockdown' restrictions. This meant it was not possible for council staff to undertake site visits to survey pedestrians around the various stations or centres. There was also not enough other data available that might 'backfill' this information on walking trips to Auckland's rapid transit stops and centres.

6.5.2.6 Option 6: Manually generated catchments via test walks

A relatively 'simple' option to determine a walkable catchment is to physically walk the catchment – starting from the station or centre entrance point and stopping when the time limit (e.g. 10 minutes) is up.

This would work by a person walking in one direction from the entrance points (to the stations or centres) until the time limit is reached. At that point, a marker would be set down as being the outer edge of the catchment (in that direction). This would need to be (at least) repeated for each direction from the station or centre (i.e. north, south, east, west).

To increase the accuracy of this method, additional timed walks to the north-west, north-east, south-west, and south-east could be added to the data. This exercise would benefit

[44] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/planning/walkability/measuring-walkability/

[45] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/planning/walkability/measuring-walkability/

greatly from using a Global Positioning System ('**GPS**') tool that would be able to track the walks on a GIS map.

This option could possibly result in an accurate walkable catchment based on the actual, 'on-the-ground' or 'real-world' conditions. However, there is also the potential that such a process would introduce bias based on the variable inputs such as the person's actual walking speed, the weather, and the time of day. The assessments would be subjective and results could vary according to individuals' abilities and confidence. To minimise this bias, the same route could be assessed using different pedestrians at different times, including during hours of darkness.

6.5.3 Evaluation of options – How do you determine a walkable catchment

Figure 12 over the page evaluates the six options for how to determine a walkable catchment (i.e. the method to use to determine it).

Overall, the preferred option is 'Option 3 – Use a GIS network analysis with a distance parameter plus a refinement of edges based on modifying factors'. This option can generate robust walkable catchments with only moderate implementation costs (i.e. basic GIS catchment and staff time to apply modifying factors). This option results in more accurate walkable catchments than options 1, 2, 5 and 6. Option 4 would result in an accurate walkable catchment with transparent assumptions but has very high implementation costs (GIS).

The feedback during the consultation in April/May 2022 on the council's preliminary response to the implementation of the NPS-UD included a number of comments generally opposing a simple radial 'ped-shed' approach to determining walkable catchments and also requesting that topography and other constraints be taken into account.

This reflected that many respondents misunderstood that the council's methodology for the walkable catchments as it had in fact been based on actual walking networks and included reducing the edge of the catchments based on modifying factors such as topography. The preferred Option 3 here takes into account both of these matters.

	Option 1: A radial 'ped-shed' analysis	Option 2: Use a GIS network analysis with a distance parameter	Option 3: Use a GIS network analysis with a distance parameter plus a refinement of edges based on modifying factors	Option 4: Use a GIS network analysis with a time parameter	Option 5: Station and centre surveys	Option 6: Manually generated catchments via test walks
Appropriateness	Inappropriate as it will implement Policy 3(c) in an inaccurate way by over-estimating the area within a walkable catchment.	Not the most appropriate option as its accuracy could be improved with minor costs (see Option 3).	Most appropriate option as it generates robust walkable catchments with only moderate implementation costs.	An appropriate option as while it has high implementation costs (GIS), it generates robust walkable catchments that can be transparently interrogated.	Inappropriate as it has high costs and results likely skewed by pandemic lock-down.	Not the most appropriate option has high costs and cannot be guaranteed to produce reliable results.
Effectiveness	Least effective as the walkable catchments identified are 'as the crow flies' (rather than 'as people walk') and will therefore not be accurate.	Generates a fairly accurate walkable catchment (more accurate than Option 1) as it is based on mapped walkable routes (footpaths, tracks etc).	Generates an accurate walkable catchment (more accurate than Option 2) as it includes consideration of modifying factors that can influence walkability.	Generates an accurate and consistent walkable catchment that transparently shows the assumptions built into the GIS analysis.	Ineffective due to Covid-19 lock-downs preventing site visits / surveys from being undertaken. Use of public transport and centres affected by Covid-19 and therefore potentially skewing the survey results and generating inaccurate walkable catchments.	Not effective in accurately determining walkable catchments.
Efficiency	Requires little analysis to identify walkable catchments but has associated costs regarding accuracy.	Requires only GIS analysis to generate walkable catchments but has associated costs regarding accuracy. GIS-generated catchments will often cut across property boundaries (specially	Requires GIS analysis and additional staff time to apply modifying factors but generates an accurate walkable catchment.	Requires very high GIS input to generate the walkable catchments but unclear whether the results are more accurate (or just similar) to Option 3.	High costs to implement (staff time to undertake surveys) and likely to generate inaccurate catchments.	High costs to implement (time to walk all the catchments in each direction using a range of staff for quality control testing) and unlikely to result in accurate walkable catchments.

	Option 1: A radial 'ped-shed' analysis	Option 2: Use a GIS network analysis with a distance parameter	Option 3: Use a GIS network analysis with a distance parameter plus a refinement of edges based on modifying factors	Option 4: Use a GIS network analysis with a time parameter	Option 5: Station and centre surveys	Option 6: Manually generated catchments via test walks
		where properties are large) creating issues around future zoning implications of the walkable catchments.				
Costs	Walkable catchments will not be accurate and will include a significant amount of land (for intensification) that is not actually within a walkable distance.	Walkable catchments will not be entirely accurate and will include some land (for intensification) that is not actually within a walkable distance as the analysis only uses a basic network and doesn't take into account potential modifying factors.	Moderate level of staff costs to generate a basic GIS walkable catchment and then refine with modifying factors for each specific catchment.	Requires a very high level of GIS input and analysis to generate the walkable catchments.	High staff costs to implement (surveys) and the walkable catchments generated are unlikely to be accurate.	High staff costs to implement and the walkable catchments generated will still have in-built subjectivity. Very high costs required to attempt to reduce subjectivity by having multiple people walk every route.
Benefits	Takes minimal analysis to generate the walkable catchments.	Generates a fairly accurate walkable catchment based on a transparent methodology using GIS mapped walking routes.	Generates an accurate walkable catchment for each station and centre based on mapped walking routes and specific modifying factors.	Generates an accurate walkable catchment for each station and centre based on average walking speeds with the modifying factors of Option 3 built into the GIS analysis itself – generating a more consistent approach across all the walkable catchments.	Generates a specific walkable catchment for each station and centre based on the actual walking habits of station and centre users.	Gives a type of 'real-world' and 'on-the-ground' basis to the walkable catchments.

	Option 1: A radial 'ped-shed' analysis	Option 2: Use a GIS network analysis with a distance parameter	Option 3: Use a GIS network analysis with a distance parameter plus a refinement of edges based on modifying factors	Option 4: Use a GIS network analysis with a time parameter	Option 5: Station and centre surveys	Option 6: Manually generated catchments via test walks
Risks	Walkable catchments generated under this option will not be accurate. MfE guidance specifically recommends tier 1 councils against using this method.	Does not consider some of the 'real-world' factors that can limit walkability (e.g. slope, major roads) meaning walkable catchments generated under this option will not be accurate.	The application of the modifying factors can be subjective, resulting in inconsistencies between the walkable catchments.	The changing of any of the assumptions in the GIS will result in changes across the entire set of walkable catchments.	Only takes into account the distances walked by those using public transport stations or the centre. Does not consider other factors that may influence the data such as surrounding land use. Does not consider potential users of public transport and centres not surveyed. Due to the timing of the exercise, the data would be skewed by reduced public transport and centres use during Covid-19.	Likely that the walkable catchments generated will not be accurate as they will be subjective (based on a specific person, time, weather conditions etc).

Figure 12: Evaluation of options to determine a walkable catchment

6.6 What size is a walkable catchment?

6.6.1 Overview

The previous section 6.5 considers whether to determine a walkable catchment based on a distance (e.g. 400m) or a time (e.g. 5 minutes). Distance and time measures are often used as proxies for one another. For example, a 400m walk (using an average walking speed of 5km/hr (or 1.4m/s)) would take around 5 minutes[46]. Equally, walking for 5 minutes at an average walking speed would take you a distance of around 400m.

The preferred option in the previous section 6.5 was to determine a walkable catchment based on distance (as a proxy for time). Therefore, the options analysed in this section are different distances (with time proxies) that determine the size of the walkable catchment.

Determining the appropriate size of a walkable catchment has been the subject of extensive research which is set out in detail in **Appendix 5**. In analysing what the appropriate options are for the distance for a walkable catchment, the matters under the headings below have been considered. Each of these matters is covered in more detail in **Appendix 5**.

In addition, a discussion on the potential implications of larger walkable catchments is included in **Appendix 19**. It indicates that focusing intensification more closely around centres will result in greater levels of walking trips – in the range of 17-40%. It also argues that increasing the radius of a notional 'walkable catchment' is likely to be counter-productive in terms of the amount of walking undertaken by the community if that means the same overall housing intensification is simply distributed more widely across that catchment.

6.6.1.1 Literature review (international and local)

An extensive range of research on walkable catchments has been reviewed for this s32 report. However, it is important to acknowledge that this has not been an exhaustive review of all literature on walkable catchments. A short summary of the studies, articles, and books that have been reviewed is included in **Appendix 20**.

There is a general agreement across the various studies that the proportion of people who walk to a destination decreases the further away from the destination they are. This is referred to as a 'distance-decay' effect and there is a strong distance-decay relationship for walking trips to all destinations. There are also some broad similarities in studies looking at the rate of this effect for different destination (i.e. bus stops, train stations, shops, etc).

Generally, a 400m – 800m catchment is considered walkable. However, various studies show that people are prepared to walk further to key destinations such as frequent public transport stops and centres with a variety of amenities. Further detail summarising the literature on walkable catchments is in **Appendix 5**.

[46] Walking 400m at a pace of 5km/hr would take 4 minutes and 48 seconds (approximately 5 minutes).

6.6.1.2 New Zealand walkability guidance

A number of central government guides have been produced that cover the sizes of walkable catchments. In general, the guidance ranges from suggesting walkable catchments of 400m (5 minute walk) to around 1,200m (15 minute walk). Further detail summarising the walkability guidance in New Zealand is in **Appendix 5**.

6.6.1.3 Auckland Council's previous walkable catchment approaches

Auckland Council has not defined the term 'walkable catchment' in any planning or strategic document such as the AUP. Neither has Auckland Transport in its transport planning documents. Until the advent of the NPD-UD in 2020, walkable catchments were not used as regulatory methods but understood and applied as 'ped-sheds'. The NPS-UD Policy 3(c) requirement for district plans to enable six-story building heights in walkable catchments means the use of walkable catchments as a district plan method (as discussed in **Appendix 6**) is new.

The council and its CCOs have used a range of different distances for a walkable catchment (or related concepts) since 2012, and for different purposes. The distances have ranged from 250m to 1,600m. Further detail summarising Auckland Council's previous walkable catchment approaches is in **Appendix 5**.

6.6.1.4 Comparator city approaches

The guidance offered by other international local governments (city and state) in relation to the distance of walkable catchments has been reviewed. The recommended sizes of walkable catchments in comparator cities (using cities that are similar to Auckland in terms of their history and development) range from 400m–800m or 5–10 minutes' walk from public transport, with the longer distance generally being seen as more appropriate for major transit stops. Further detail summarising comparator city approaches to walkable catchments is in **Appendix 5**.

6.6.1.5 Approaches of other tier 1 councils to Policy 3(c) walkable catchments

Tier 1 urban environments are directed by the NPS-UD to implement walkable catchments around the city centre, metropolitan centres, and rapid transit stations. While the individual context of each tier 1 local authority is different, it would seem logical that each council would have similar, but not necessarily the same, walkable catchment responses. Figure 13 below lists the various walkable catchments for each tier 1 urban area.

Walkable Catchment	Tier 1 urban area				
	Auckland	Christchurch	Wellington	Hamilton	Tauranga
City centre	1,200m	1,200m	800m	800m	1,500m
Metropolitan centres	800m	N/A (would be 800m)	Approx. 800m (10 mins)	N/A	N/A
Rapid transit stops	800m	N/A (would be 800m)	Approx. 800m (10mins)	N/A	N/A

Figure 13: The walkable catchment metrics used by tier 1 local authorities for implementing Policy 3(c) of the NPS-UD

Figure 13 demonstrates that there is a consistency between the walkable catchment metrics each council has used. While each council did its own internal work to come up with their walkable catchment metrics, the consistency can likely be explained through each council's references to well established industry guidelines and academic studies on walkable catchments. Further detail summarising the various tier 1 urban area approaches to walkable catchments is in **Appendix 5**.

6.6.1.6 Census travel data for Auckland

The Auckland city centre has a large surrounding area in which a high proportion of people walk to their city centre work destination. Based on the 'walk to work' percentages of residents that live in areas surrounding the city centre (and who work in the city centre) there are 13 suburbs around the city centre that have 'walk to work' percentages over 10%, with five areas over 30%.

The areas with the higher percentages of people who walk to work in the city centre are around 1km (as the crow flies) from the edge of the City Centre zone. Therefore, in reality some of the distances walked are likely to be closer to 2km once the actual walking route is considered. In addition, many work destinations will be beyond the edge of the City Centre zone and therefore the walking distance will be even greater.

Conversely, the census data shows that most of Auckland's ten metropolitan centres do not have a high proportion of people in the area surrounding each centre that walk to their work destination in the metropolitan centre.

While Takapuna, New Lynn and (in particular) Newmarket show relatively high proportions of people walking, the other seven metropolitan centres show that only a small proportion of people in surrounding areas walk to their work destination in those centres. Further detail summarising the census travel data for Auckland's city centre and metropolitan centres is in **Appendix 5**.

6.6.1.7 The nature of the city centre

When determining a walkable catchment for the city centre it is useful to understand how Auckland's city centre is different to the ten metropolitan centres and the rapid transit stops. On average, the metropolitan centres are around just one fifth of the size of the city centre. The city centre also contains far more attractors than any of the metropolitan centres or rapid transit stops in relation to employment, entertainment, retail, civic amenities, education, tourism, and transport connections. In summary, there is a strong case to treat the city centre walkable catchment differently to those around metropolitan centres and rapid transit stops. Further detail summarising the nature of Auckland's city centre is in **Appendix 5**.

6.6.1.8 Walkable catchments in greenfield areas

Some walkable catchments are adjacent to greenfield land that is either zoned Future Urban zone or have a 'live' urban zoning but are still greenfield (as no development has occurred yet on the land). No walkable catchment areas are shown on this land.

The rationale behind the walkable catchments in greenfield areas is because in practice you cannot currently walk anywhere on this land. The land is undeveloped and used for rural activities (pasture etc). The land is all privately owned, and the public have no legal rights to access it. There are no public roads, footpaths or tracks on which a walkable catchment might be measured. It is noted that the walkable catchments generated for other areas in Auckland also assume that the public cannot access privately owned land.

It is accepted that in the future rapid transit stops adjacent to greenfield land will need to have their walkable catchments applied and development of six storey buildings enabled within them. This could occur through a plan change (or plan review) when there is more certainty about how the surrounding greenfield areas will develop and the layout of the road/pedestrian network connecting to the rapid transit stops. The AUP will need to be updated as new rapid transit stops are planned and/or if any additional land is zoned for a metropolitan centre. Further detail summarising the approach to walkable catchments in greenfield areas is in **Appendix 5**.

6.6.1.9 What 'at least' a walkable catchment means

Where Policy 3 refers to "at least" a walkable catchment this means that the minimum area for enabling buildings of six storeys must be within a walkable catchment. However, Policy 3(c) makes it possible for the area enabling six storeys to go beyond the walkable catchments.

This approach has not been applied in Auckland due to the significant amount of development capacity that is enabled through the directions of the NPS-UD and the application of the Medium Density Residential Standards. This is explained further in the s32 report on development capacity and demand.

It should also be noted that there are already some existing areas outside the walkable catchments where buildings of at least 6 storeys are enabled (e.g. Town Centre zones, specific precincts) and PC78 does not affect those more enabling building heights.

6.6.1.10 Ministry for the Environment's NPS-UD guidance

In 2020 MfE produced a guidance document for councils called *"Understanding and implementing intensification provisions for the National Policy Statement on Urban Development"*. The guidance was developed to help local authorities understand and interpret the provisions for intensification in the NPS-UD (specifically including Policy 3).

The guidance states that "a distance of 800 metres from each main entrance to a transit stop is considered a minimum walkable catchment in all urban areas" as it is consistent with long-standing academic and international best practice. However, it acknowledges that each local authority can determine the distance of walkable catchments appropriate for local circumstances and that the final distance can be influenced by a range of factors.

The guidance notes that an 800m catchment may be a good starting point, but it also may be appropriate for larger tier 1 urban environments to consider greater distances in some situations. Not all destinations (centres, stations) are equal and where there are larger centres with more services and amenities or more connected stations, the walkable catchment can be expected to be larger. This is because people are prepared to walk further to use well connected stations and centres with a larger range of activities.

The guidance recognises the walkable catchment distance can be amended to account for local factors such as street layout, severance, topography, connectivity, urban amenity, street lighting, passive security, mobility needs, and delays at traffic light-controlled intersections. Further detail summarising the MfE guidance around walkable catchments is in **Appendix 5**.

6.6.2 Description of options – What size is a walkable catchment?

These options only consider different distance metrics and do not refer to methods for measuring or calculating a walkable catchment, as that is covered in the previous section 6.5 above. It must also be highlighted that while these options below have specific metrics, the methodology outlined in the section above still requires modifying factors to be considered (e.g. topography) so the distance metric can be altered when considering specific walkable catchments.

The metrics outlined in the options below all have 'round numbers' (e.g. 400m, 800m or 5 minutes, 10 minutes). Obviously, a 400m distance is not a 'hard boundary' for a walkable catchment. It is clearly not logical that someone 397m from a centre or station will happily walk there, while the neighbour who is 403m away would never do so.

As explained in **Appendix 5**, the distance-decay effect has a long tail where a small percentage of people will continue to walk to the centre or station even if it is well beyond the walkable catchment metric (based on the 'average' person). While a District Plan 'walkable catchment' will necessarily require a specific boundary for legal reasons, the actual relationship between distance and willingness to walk is a continuous curve without sharp breaks.

Therefore, the use of 'round numbers' for each option is a deliberate decision. The basis of the options has been derived using intervals of 5 minute walks (400m). A 5 minute walk is a widely agreed unit of walkability (as discussed in more detail in **Appendix 5** of this report). It is clear there will be much debate through the plan change process around which distance option is the most appropriate for the walkable catchments. That is to be anticipated and welcomed to ensure a robust process. However, there does not seem to be the evidence base to argue over very specific metrics for walkable catchments (for example a 570m distance or a six and a half minute walk).

Finally, it is worth noting that the area covered by a walkable catchment increases at greater rate than an increase in the walkable catchment distance. For example, a basic circular 400m catchment covers some 50ha of land, whereas an 800m catchment covers 201ha and a 1,600m catchment covers 804ha. A doubling of the walkable catchment distance roughly equates to a quadrupling of the area of land covered by that walkable catchment.

6.6.2.1 Option 1: 400m (5 minute walk)

This option calculates a walkable catchment based on a 400m distance, which is the equivalent of a 5 minute walk. It is noted that this catchment can be further refined through the use of modifying factors as described in section 6.5.2.3 of this report and **Appendix 4**.

6.6.2.2 Option 2: 800m (10 minute walk)

This option calculates a walkable catchment based on an 800m distance, which is the equivalent of a 10 minute walk. It is noted that this catchment can be further refined through the use of modifying factors as described in section 6.5.2.3 of this report and **Appendix 4**.

6.6.2.3 Option 3: 1,200m (15 minute walk)

This option calculates a walkable catchment based on a 1,200m distance, which is the equivalent of a 15 minute walk. It is noted that this catchment can be further refined through the use of modifying factors as described in section 6.5.2.3 of this report and **Appendix 4**.

6.6.2.4 Option 4: 1,600m (20 minute walk)

This option calculates a walkable catchment based on a 1,600m distance, which is the equivalent of a 20 minute walk. It is noted that this catchment can be further refined through the use of modifying factors as described in section 6.5.2.3 of this report and **Appendix 4**.

6.6.3 Evaluation of options – What size is a walkable catchment?

The four walkable catchment distance options are assessed in tables further below. They are assessed separately for rapid transit stops (in Figure 14), metropolitan centres (in Figure 15), and the city centre (in Figure 16).

Rapid transit stops:

Overall, for rapid transit stops the preferred approach is 'Option 2 – 800m (10 minute walk)'. This is because it is a commonly used metric that is backed up with various research and is generally supported by MfE guidance.

It provides a suitable amount of land for intensification around Auckland's rapid transit stops and therefore would likely get the benefits of a focussed area for intensification being realised. The propensity to walk (per household) would be high (i.e. the relatively short distance would be more likely to be walked by those living in it). This option encourages intensification in a relatively small area, meaning intensification outcomes are more likely to occur close to rapid transit stops.

The feedback during the consultation in April/May 2022 on the council's preliminary NPS-UD response showed the proposal of at least an 800m walkable catchment around rapid transit stops was supported by 56% of responses. This support was more pronounced in the Kantar Public survey at 73%. Some key stakeholders such as Property Council, Waka Kotahi, and the Coalition for More Homes also generally supported the 800m (although the Coalition for More Homes sought that all the rapid transit stops on the isthmus have larger walkable catchments of 1,600m). Kainga Ora sought that all rapid transit stops in Auckland should have a walkable catchment of 1,200m. More information on the feedback on walkable catchments around rapid transit stops is in section 7.1 of this s32 report.

Metropolitan Centre zones

Overall, for metropolitan centre zones the preferred approach is 'Option 2 – 800m (10 minute walk)'. This is because it is a commonly used metric that is backed up with various research and is generally supported by MfE guidance.

This option provides a suitable amount of land for intensification around Auckland's large centres and therefore would likely get the benefits of a focussed area for intensification being realised. The propensity to walk (per household) would be high (i.e. the relatively short distance would be more likely to be walked by those living in it). This option encourages

intensification in a relatively small area, meaning intensification outcomes are more likely to occur close to metropolitan centres.

The feedback during the consultation in April/May 2022 on the council's preliminary NPS-UD response showed the proposal of at least an 800m walkable catchment around metropolitan centres was supported by 61% of responses. This support was more pronounced in the Kantar Public survey at 74%. Some key stakeholders such as Property Council, Waka Kotahi, and the Coalition for More Homes also generally supported the 800m (although the Coalition for More Homes sought that both the metropolitan centre on the isthmus (Newmarket and Sylvia Park) have larger walkable catchments of 1,600m). Kainga Ora sought that all metropolitan centres in Auckland should have a walkable catchment of 1,200m. More information on the feedback on walkable catchments around metropolitan centres is in section 7.1 of this s32 report.

City Centre zones

Overall, for the City Centre zone the preferred approach is 'Option 3 – 1,200m (15 minute walk)'. While there are not many studies on walking to very large centres, there is evidence to show people will walk further than 800m to a destination with a variety of amenities. The size of the city centre is much larger than metropolitan centres and the amenities in the city centre are unique in that they include:

- Three rapid transit stops in city centre and a hub for public transport including buses and ferries;
- Largest concentration of employment in Auckland – 125,000 jobs;
- Entertainment – 500 dining venues, theatres, spark arena;
- Retail - $1.9B spent in city centre each year;
- Civic amenities – Town Hall, Art Gallery, 33ha open space;
- Education – the greatest concentration of students in New Zealand (37,000) and two universities;
- Tourism – Cruise ship terminal, concentration of accommodation (hotels) and tourist venues – sky tower, maritime museum, convention centre, waterfront area;

Census data shows a high proportion of people in surrounding suburbs (who work in the city centre) walk to work from those surrounding suburbs (e.g. Freemans Bay – 58%, Grafton – 41%, Parnell West – 37%, Eden Terrace – 36%, Ponsonby East – 30%, Grey Lynn East – 29%, Saint Marys Bay – 24%, Grey Lynn Central – 23%).

The MfE guidance also recommends that tier 1 city centres should have walkable catchments of more than 800m. The 1,200m walkable catchment around the city centre is consistent with Christchurch (1,200m) and less than Tauranga (1,500m).

The feedback during the consultation in April/May 2022 on the council's preliminary NPS-UD response showed the proposal of at least a 1,200m walkable catchment around the city centre was supported by 59% of responses. This support was more pronounced in the Kantar Public survey at 66%.

Various residents' groups representing suburbs on the fringe of the city centre all sought that the walkable catchment be closer than 1,200m, with 800m being a commonly suggested alternative. Other key stakeholders either supported the 1,200m distance for the city centre walkable catchment or sought that it be increased (to 1,600m or 2,400m). More information on the feedback on the walkable catchment around the city centre is in section 7.1 of this s32 report.

Rapid transit stops

	Option 1: 400m (5 min)	Option 2: 800m (10 min)	Option 3: 1,200m (15 min)	Option 4: 1,600m (20 min)
Appropriateness	Could be appropriate as it is a commonly used metric for how far people will generally walk to a destination that is backed up with various research – but evidence also shows people will often walk further to a rapid transit stop due to the reliability and frequency of the service.	Appropriate as it is a commonly used metric that is backed up with various research - a 'walkable catchment' is generally around an 800m or 10min walk to access a rapid transit service. Generally supported by MfE guidance.	Unlikely to be appropriate due to the very large areas of land included within the walkable catchments across Auckland and the implications of this on diluting intensification and walkability effect. Not as much evidence to support this distance for rapid transit stops.	Unlikely to be appropriate as the metric is significantly above recognised across various research and used in comparable cities. The dilution of the walkability effect would be most notable under this option.
Effectiveness	Results in a relatively small area of land within the walkable catchment and therefore limits the ability for intensification around Auckland's rapid transit stops.	Results in larger area of land (than Option 1) within the walkable catchment and therefore provides more ability for intensification around Auckland's rapid transit stops.	Results in a much larger area of land (than Option 2) within the walkable catchment – especially multiplying this across 49 rapid transit stops and across Auckland. Dilution of the walkability effect as distances increase and catchment size increases.	Results in a huge additional area being added to the walkable catchment but without corresponding benefits of focussed intensification or increased propensity to walk (per household).
Efficiency	While this option has potential benefits of a tightly focussed area for intensification being realised (in terms of walking outcomes and redevelopment) it also comes with the opportunity costs of only identifying a small area for intensification around Auckland's rapid transit stops.	Would likely get benefits of a focussed area for intensification being realised (in terms of walking outcomes and redevelopment) without the costs.	While this option would provide the potential for a large amount of intensification around Auckland's rapid transit stops, it is could also undermine the intensification goal by distributing uptake over a much larger area.	While this option would provide for the potential for a very large amount of intensification around Auckland's rapid transit stops, the area is so big that it could also undermine the intensification goal by distributing uptake over a very large area.
Costs	Results in a relatively small area of land within the walkable catchment and therefore limited ability for	Potential dilution of the walkability effect as the distance increase and catchment size increases.	The propensity to walk (per household) would be lower than Option 2. Potential to dilute the walkability effect as distances	The wider walkable catchment enables a large amount of additional capacity with little effect on the scale of demand. Therefore, the large

	Option 1: 400m (5 min)	Option 2: 800m (10 min)	Option 3: 1,200m (15 min)	Option 4: 1,600m (20 min)
	intensification around Auckland's rapid transit stops. Has flow-on impacts to supress the metrics of how far away 'adjacent' can be considered under Policy 3(d).		increase and catchment size increases.	excess of capacity above and the long term demand/growth results in a wider geographic spread of development. Distributing the anticipated demand across a larger area will reduce the average density across the catchment and likely see less intensification close to Auckland's major centres. The benefits of intensification around these locations will be diluted and this potentially undermines the intention of Policy 3(c) to focus growth around major centres. Likely to have fewer (per household) walking trips than smaller catchment options.
Benefits	The propensity to walk (per household) would be highest (i.e. the short distance would be more likely to be walked by those living in it). Encourages intensification in a small area, meaning intensification outcomes more likely to occur close to rapid transit stops.	The propensity to walk (per household) would be high (i.e. the relatively short distance would be more likely to be walked by those living in it). Encourages intensification in a relatively small area, meaning intensification outcomes more likely to occur close to rapid transit stops.	Provides a large amount of capacity around Auckland's rapid transit stops where the NPS-UD and the AUP direct intensification to be focussed.	Provides a very large amount of capacity around Auckland's rapid transit stops where the NPS-UD and the AUP direct intensification to be focussed.
Risks	Inconsistent with the metrics used for rapid transit by other NZ tier 1 urban areas. Conflicts with MfE guidance as a 400m catchment is under the suggested 'starting point' of 800m.	Does not follow the MfE guidance which suggests 800m around centres and stations as a good 'starting point' but also 'expects' the walkable catchment of Auckland's rapid transit stops to be *larger* than those of metropolitan centres.	Risk in zoning large walkable catchment area that well exceeds the capacity required, and the intention of Policy 3(c) is undermined as the same overall housing intensification is simply distributed more widely across that larger catchment.	Risk that by zoning very large walkable catchments, excessive capacity is enabled, and the intention of Policy 3(c) is undermined as the same overall housing intensification is simply distributed more widely across that larger catchment. Well above MfE guidance metrics.

Figure 14: Evaluation of options for walkable catchments around rapid transit stops

Metropolitan Centre zones

	Option 1: 400m (5 min)	Option 2: 800m (10 min)	Option 3: 1,200m (15 min)	Option 4: 1,600m (20 min)
Appropriateness	Could be appropriate as it is a commonly used metric for how far people will generally walk to a destination that is backed up with various research – but evidence also shows people will often walk further to a large centre due to quantity and range of novel facilities.	Appropriate as it is a commonly used metric that is backed up with various research - a 'walkable catchment' is generally around an 800m or 10min walk (or longer) to access major centres. Generally supported by MfE guidance.	Unlikely to be appropriate due to the very large areas of land included within the walkable catchments across Auckland and the implications of this on diluting intensification and walkability effect. Not as much evidence to support this distance for metropolitan centres.	Unlikely to be appropriate as the metric is significantly above recognised across various research and used in comparable cities. The dilution of the walkability effect would be most notable under this option.
Effectiveness	Results in a relatively small area of land within the walkable catchment and therefore limits the ability for intensification around Auckland's major centres.	Results in a much larger area of land (four times that of Option 1) within the walkable catchment and therefore provides more ability for intensification around Auckland's larger centres.	Results in a much larger area of land (than Option 2) within the walkable catchment – especially multiplying this across 10 major centres across Auckland. Dilution of the walkability effect as distances increase and catchment size increases.	Results in a huge additional area being added to the walkable catchment but without corresponding benefits of focussed intensification or increased propensity to walk (per household).
Efficiency	While this option has potential benefits of a tightly focussed area for intensification being realised (in terms of walking outcomes and redevelopment) it also comes with the opportunity costs of only identifying a small area for intensification around Auckland's major centres.	Would likely get benefits of a focussed area for intensification being realised (in terms of walking outcomes and redevelopment) without the costs.	While this option would provide the potential for a large amount of intensification around Auckland's major centres it could also undermine the intensification goal by distributing uptake over a much larger area.	While this option would provide for the potential for a very large amount of intensification around Auckland's rapid transit stops, the area is so big that it could also undermine the intensification goal by distributing uptake over a very large area.
Costs	Results in a relatively small area of land within the walkable catchment and therefore limited ability for	Potential dilution of the walkability effect as the distance increase and catchment size increases.	The propensity to walk (per household) would be lower than Option 2. Potential to dilute the walkability effect as distances	The wider walkable catchment enables a large amount of additional capacity with little effect on the scale of demand. Therefore, the large

	Option 1: 400m (5 min)	Option 2: 800m (10 min)	Option 3: 1,200m (15 min)	Option 4: 1,600m (20 min)
	intensification around Auckland's major centres. Has flow-on impacts to supress the metrics of how far away 'adjacent' can be considered under Policy 3(d).		increase and catchment size increases.	excess of capacity above and the long term demand/growth results in a wider geographic spread of development. Distributing the anticipated demand across a larger area will reduce the average density across the catchment and likely see less intensification close to Auckland's major centres. The benefits of intensification around these locations will be diluted and this potentially undermines the intention of Policy 3(c) to focus growth around major centres. Likely to have fewer (per household) walking trips than smaller catchment options.
Benefits	The propensity to walk (per household) would be highest (i.e. the short distance would be more likely to be walked by those living in it). Encourages intensification in a small area, meaning intensification outcomes more likely to occur close to major centres.	The propensity to walk (per household) would be high (i.e. the relatively short distance would be more likely to be walked by those living in it). Encourages intensification in a relatively small area, meaning intensification outcomes more likely to occur close to major centres.	Provides a large amount of capacity around Auckland's major centres where the NPS-UD and the AUP direct intensification to be focussed.	Provides a very large amount of capacity around Auckland's major centres where the NPS-UD and the AUP direct intensification to be focussed.
Risks	Inconsistent with the metrics used for rapid transit by other NZ tier 1 urban areas. Conflicts with MfE guidance as a 400m catchment is under the suggested 'starting point' of 800m.	Does not follow the MfE guidance which suggests 800m around centres and stations as a good 'starting point' but also 'expects' the walkable catchment of Auckland's rapid transit stops to be *larger* than those of metropolitan centres.	Risk in zoning large walkable catchment area that well exceeds the capacity required, and the intention of Policy 3(c) is undermined as the same overall housing intensification is simply distributed more widely across that larger catchment.	Risk that by zoning very large walkable catchments, excessive capacity is enabled, and the intention of Policy 3(c) is undermined as the same overall housing intensification is simply distributed more widely across that larger catchment. Well above MfE guidance metrics.

Figure 15: Evaluation of options for walkable catchments around metropolitan centres

City Centre zone

	Option 1: 400m (5 min)	Option 2: 800m (10 min)	Option 3: 1,200m (15 min)	Option 4: 1,600m (20 min)
Appropriateness	Not appropriate as this metric is too small based on the city centre's place at the top of the centres' hierarchy (the city centre would have to have the largest metric across all walkable catchments). 400m is under the suggested distance in the MfE guidance.	Could be appropriate for the city centre as it is a commonly used metric that is backed up with various research - a 'walkable catchment' is generally around an 800m or 10min walk to access services and amenities.	Appropriate as the city centre has the largest concentration of employment, entertainment, retail, civic amenities, education, and tourism services and activities in Auckland plus three rapid transit stations and there is evidence to show that people will (and do) walk this far to access the city centre. City centre is much larger than any metropolitan centre and this 1,200m metric sets the city centre apart from other metropolitan centres by moving up one increment (5 mins or 400m), reinforcing a clear hierarchy. Consistent with MfE guidance that suggests 800m around centres and stations as a good 'starting point' but also 'expects' the walkable catchment of Auckland's city centre to be larger than those of metropolitan centres.	Unlikely to be appropriate as the metric is significantly above that generally recognised across various research and used in comparable cities.
Effectiveness	Results in a relatively small area of land within the walkable catchment and therefore limited ability for intensification around Auckland's most prominent centre.	Results in much larger area of land (than Option 1) within the walkable catchment and therefore provides more ability for intensification around Auckland's most prominent centre.	Results in large area of land within the walkable catchment and therefore provides more ability for intensification around Auckland's most prominent centre but at some risk of diluting the walkability effect as distances increase and catchment size increases.	Results in a large additional area being added to the walkable catchment but without corresponding benefits of focussed intensification or increased propensity to walk (per household).

	Option 1: 400m (5 min)	Option 2: 800m (10 min)	Option 3: 1,200m (15 min)	Option 4: 1,600m (20 min)
Efficiency	While this option has potential benefits of a tightly focussed area for intensification being realised (in terms of walking outcomes and redevelopment) it also comes with the opportunity costs of only identifying a small area for intensification around Auckland's largest centre and supressing other walkable catchment metrics for the. the lower order centres.	Would get benefits of a relatively focussed area for intensification being realised (in terms of walking outcomes and redevelopment) but would also supresses other walkable catchment metrics for the lower order centres.	Evidence shows people walk further than 800m to work in the city centre (people are prepared to walk further to use centres with a larger range of activities) and other research shows that more dense, mixed use areas have a higher proportion of walking trips and people in these areas will walk further.	While this option would provide for the potential for a large amount of intensification around the city centre, it could also undermine the intensification goal by distributing uptake over a much larger area.
Costs	Results in a relatively small area of land within the walkable catchment and therefore limited ability for intensification around Auckland's most prominent centre. Has flow-on impacts to supress the metrics of other walkable catchments as 400m for the city centre would have to be the largest metric across all walkable catchments based on the city centre's place at the top of the centres' hierarchy.	Has flow-on impacts to supress the metrics of other walkable catchments as 800m for the city centre would have to be the largest metric across all walkable catchments based on the city centre's place at the top of the centres' hierarchy.	The propensity to walk (per household) would be lower than Option 2. Potential to dilute the walkability effect as distances increase and catchment size increases.	The wider walkable catchment enables a large amount of additional capacity with little effect on the scale of demand. The large excess of capacity above long term demand/growth results in a wider geographic spread of development. Distributing the anticipated demand across a larger area will reduce the average density across the catchment and likely see less intensification close to the city centre. The benefits of intensification around the city centre will be diluted and this potentially undermines the intention of Policy 3(c) to focus growth around the city centre. Likely to have fewer (per household) walking trips than smaller catchment options.
Benefits	The propensity to walk (per household) would be highest (i.e. the short distance would be more	The propensity to walk (per household) would be high (i.e. the relatively short distance would be	The city centre is much larger than any metropolitan centre and this 1,200, metric sets the city centre apart from other metropolitan	There is data to show that some people will and do walk this distance to the Auckland city centre.

	Option 1: 400m (5 min)	Option 2: 800m (10 min)	Option 3: 1,200m (15 min)	Option 4: 1,600m (20 min)
	likely to be walked by those living in it). Encourages intensification in a small area, meaning intensification outcomes more likely to occur close to the city centre.	more likely to be walked by those living in it). Encourages intensification in a relatively small area, meaning intensification outcomes more likely to occur close to the city centre.	centres by moving up one increment (5 mins or 400m), reinforcing a clear walkable catchments hierarchy. Provides a large amount of capacity around the city centre, potentially reinforcing its role.	Provides a very large amount of capacity around the city centre, potentially reinforcing its role.
Risks	A weak evidence base as this metric is smaller than local and international research on walkable catchments in relation to larger centres (and rapid transit stops – of which the city centre has three). Inconsistent with the larger metrics used for city centres by other NZ tier 1 urban areas (that have smaller city centres). Conflicts with MfE guidance as a 400m catchment for the city centre is well under the suggested 'starting point' of 800m and the further suggestion that the city centre walkable catchment should go beyond 800m.	Does not follow evidence that shows people walk further than 800m to work in the city centre (people are prepared to walk further to use centres with a larger range of activities). Does not follow the MfE guidance which suggests 800m around centres and stations as a good 'starting point' but also 'expects' the walkable catchment of Auckland's city centre to be larger than those of metropolitan centres. Inconsistent with the larger metrics used for city centres by Christchurch and Tauranga (other NZ tier 1 urban areas) that have smaller city centres.	Risks diluting the propensity to walk (per household) as distances increase and catchment size increases. Provides for intensification over a wider area, potentially distributing the density rather than concentrating it on the city centre.	Risk in identifying a very large walkable catchment that excessive capacity is enabled, and the intention of Policy 3(c) is undermined.

Figure 16: Evaluation of options for walkable catchments around the city centre

6.7 How to enable at least six storeys within walkable catchments?

6.7.1 Overview

6.7.1.1 Demarcation of walkable catchments in the AUP

The walkable catchments (as discussed in sections 6.5. and 6.6 above) will be identified in the AUP for the City Centre zone, the ten Metropolitan Centre zones, and Auckland's 49 existing and planned rapid transit stops. The method of identifying the walkable catchments in the AUP will be through a spatially demarcated layer on the planning maps called 'Walkable Catchments'. Within the AUP text, Chapter G will be amended to be called '*Chapter G – Rural Urban Boundary (RUB) and Walkable Catchments'*. Walkable Catchments will be a District Plan method and will be very similar to how the Rural Urban Boundary is presented in the AUP. The new text proposed in Chapter G in relation to Walkable Catchments is shown in **Appendix 6** along with a brief evaluation of it.

6.7.1.2 'At least' six storeys

Where Policy 3 refers to "at least" six storeys this means that a minimum of six storeys must be enabled, but six storeys is not necessarily the maximum height – it could be higher (but not lower) than six storeys.

The MfE guidance states that 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." The guidance notes that "this will depend on local circumstances and evidence."[47]

As explained in the s32 on development capacity and demand, there is a large surplus of development capacity in Auckland. Therefore, simply based on capacity there is no need to identify areas of more than six storeys. However, that is not to say that additional height in some areas may be appropriate for other reasons.

Due to the time constraints on the council in preparing PC78 (along with other related plan changes) no new areas within walkable catchments have been identified for additional height beyond six storeys. Existing Height Variation Controls that enable buildings beyond six storeys (i.e. 21m) remain unchanged. Further work is required to determine where heights of more than six storeys might be appropriate.

[47] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 6.4

6.7.1.3 Plan methods available to enable greater heights and density of urban form

The AUP has a range of existing methods that could be used to enable greater heights and density of urban form within the walkable catchments. These are listed below and covered in more detail in **Appendix 7**.

- Rezoning:
    - Terrace Housing and Apartment Buildings zone (modified provisions)
    - Mixed Housing Urban zone (with modified provisions)
    - Mixed Use zone (modified provisions)
- Zone standards:
    - Amend zone standards
- Precincts:
    - New precincts
    - Amend existing precincts
- Controls:
    - Height Variation Control ('**HVC**')
- Overlays:
    - New overlays

These methods will be considered and referred to when describing and evaluating options to enable greater heights and densities or urban form.

6.7.2 Description of options – How to enable at least six storeys within walkable catchments?

6.7.2.1 Option 1: Status quo (do nothing)

This option would not make any specific amendments to the AUP in relation to the provisions in the walkable catchments. The MDRS would still be applied to relevant residential zones within the walkable catchment, but there would be no other changes.

6.7.2.2 Option 2: Rezone residential zones to a modified THAB zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)

This option would rezone all the residential zones inside the walkable catchments to a modified THAB zone that enables building heights of at least six storeys. Other zones within walkable catchments would have their height standard amended to enable buildings of at least six storeys. Existing HVCs under 21m (six storeys) would be removed unless a qualifying matter applied. Existing HVCs over 21m would be retained.

6.7.2.3 Option 3: Rezone residential zones to a modified Mixed Use zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)

This option would rezone all the residential zones inside the walkable catchments to a modified Mixed Use zone that enables building heights of at least six storeys (21m). Other zones within walkable catchments would have their height standard amended to enable buildings of at least six storeys. Existing HVCs under 21m would be removed unless a qualifying matter applied. Existing HVCs over 21m would be retained.

6.7.2.4 Option 4: Retain zonings but add a Height Variation Control/Precinct/or Overlay to the walkable catchments enabling building heights of at least six storeys

This option would leave the zonings as they are within the walkable catchments (noting that all relevant residential zones would have the MDRS apply). An AUP tool of a Height Variation Control, Precinct, or Overlay would be added to the walkable catchments to enable building heights of six storeys.

6.7.3 Evaluation of options – How to enable at least six storeys within walkable catchments?

Figure 17 below evaluates the four options for how to enable at least six storeys within a walkable catchment. Overall, 'Option 2: Rezone residential zones to a modified THAB zone (and enable additional height of six storeys in other zones)' is the preferred approach. This option achieves the objective of implementing Policy 3(c) of the NPS-UD using an existing zone framework and retaining the integrity of the zoning approach in the AUP. This option also does not risk undermining the centres by enabling a large amount of centre-type activities outside the centre.

	Option 1: Status Quo (Do nothing)	Option 2: Rezone residential zones to a modified THAB zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)	Option 3: Rezone residential zones to a modified Mixed Use zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)	Option 4: Retain zonings but add a Height Variation Control/Precinct/or Overlay to the walkable catchments enabling building heights of at least six storeys
Appropriateness	Inappropriate as it does not implement Policy 3(c) of the NPS-UD.	Most appropriate as it uses an existing zone already set up for high density residential outcomes. Does not risk undermining centres.	Not appropriate as it introduces a large new supply of potential commercial land that risks the dilution of the centres and potentially undermines the centres based approach in the Auckland Plan and the Regional Policy Statement section of the AUP. Potentially could be done where centre or area plans have already proven merit and there is evidence to show the centre will not be negatively impacted. However, in nearly all cases, this planning work has not been completed.	Not appropriate as it distorts the zone based approach in the AUP by introducing large differentials in the outcomes from the underlying zones to what the precincts/HVCs and overlays would enable. Seemingly simple, but would create complexity by overlapping existing precincts/HVCs and overlays.
Effectiveness	Ineffective in implementing Policy 3(c).	Implements Policy 3(c) effectively.	Implements Policy 3(c) but goes further than the Policy 3(c) directions and enables a large mix of uses within the walkable catchment.	Implements Policy 3(c) but new precinct/HVC or overlay would in many cases need to change development standards well beyond many of those within the current underlying zones.
Efficiency	Efficient process but does not implement the NPS-UD.	Minimal costs while implementing the NPS-UD.	Requires a high level analysis to ensure that the Mixed Use zoning won't undermine the role of the centres themselves by dispersing the centre-type activities	Keeps current zonings but uses a complicated plan method to enable 6 storey heights.
Costs	Does not enable 6 storey buildings in walkable catchments – where density is directed by the NPS-UD.	Requires minimal changes to THAB zone provisions. Could result in large areas of dense population with little provision	Will require each walkable catchment to be analysed in detail to see if the Mixed Use zoning is appropriate. Lower residential amenity and fewer zone protections for residents than the THAB zone (Option 2). Area or centre planning would needed before such a significant change in zoning.	New precinct or overlay would require further work (spatial sets of objectives and policies). Will lead to the new precinct/HVC or overlay overlapping with existing precincts/HVCs and overlays, with associated integration issues. Plan integrity issues with precincts/HVCs and overlays having large differentials in outcomes

	Option 1: Status Quo (Do nothing)	Option 2: Rezone residential zones to a modified THAB zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)	Option 3: Rezone residential zones to a modified Mixed Use zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)	Option 4: Retain zonings but add a Height Variation Control/Precinct/or Overlay to the walkable catchments enabling building heights of at least six storeys
		for complementary retail or food and beverage.		from the underlying zones, rendering much of the underlying zoning and related Auckland-wide provisions redundant.
Benefits	Could retain the some of the existing suburban character of areas (noting that MDRS will apply in any case). Avoids an 'edge problem' of six storey development being adjacent to lower density residential development.	Uses an existing zone already set up for high density residential outcomes. Increases residential capacity around centres and stations.	Allows for outward growth of centres and potentially a clearer business-residential land use transition. Could create more vitality in and around centres. Increases likelihood of walking to other activities.	No need to change zoning so retains some of the integrity of the AUP spatial zone allocation. Avoids structural implications across the AUP. Precinct or overlay could include matters beyond height.
Risks	High risk (legal and reputational) for the council – as it does not follow directions to implement Policy 3(c).	Risks creating a stale environment of intensive residential development with few other uses. Risk that it results in less walking as	Lack of evidence to justify this large additional supply of business land. Further information would be required to confirm that the centre zones themselves would not be negatively impacted by large-scale rezoning of residential land to Mixed Use. An excessive oversupply of land for centre-type activities risks the dilution of the centres and potentially undermines	Risks plan integrity issues as while the zones would remain, the zone outcomes within the walkable catchments will be significantly changed by the new precinct/HVC or overlay. Reputational risk to council as this approach could be seen to be obscuring the true implications of what is enabled in the walkable catchments.

	Option 1: Status Quo (Do nothing)	Option 2: Rezone residential zones to a modified THAB zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)	Option 3: Rezone residential zones to a modified Mixed Use zone (and enable additional height of six storeys in other zones and amend existing HVCs as required)	Option 4: Retain zonings but add a Height Variation Control/Precinct/or Overlay to the walkable catchments enabling building heights of at least six storeys
		there are no amenities very close by.	the centres based approach in the Auckland Plan and the Regional Policy Statement section of the AUP. Lack of area / centre planning to guide decision making for business zonings in the walkable catchment areas.	Inconsistent with the zoning approach taken in implementing Policy 3(d).

Figure 17: Evaluation of options to enable at least six storeys within walkable catchments

6.8 How to measure the level of commercial activity and community services in Neighbourhood, Local and Town Centre zones?

6.8.1 Overview

Policy 3(d) of the NPS-UD directs intensification around neighbourhood, local and town centre zones. The level of intensification is directed to be 'commensurate' with the level of commercial activity and community services in the centre. Policy 3(d) states:

> "In relation to tier 1 urban environments, regional policy statements and district plans enable:…(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."

The background to Policy 3(d) and an analysis of the following terms is included in **Appendix 8**:

- Commercial activities
- Community services
    - Community facilities
    - Educational facilities
    - Commercial activities that serve the needs of the community

Essentially, the analysis in **Appendix 8** finds that commercial activities are activities that trade in goods, equipment or services and include things like offices, retail and commercial services.

Community services include community facilities which are things such as halls, libraries, marae, community centres, churches and arts and cultural centres. Community services also includes educational facilities which are things such as childcare centres, schools, and tertiary education.

Community services also includes "commercial activities that serve the needs of the community". The analysis in **Appendix 8** concludes that 'commercial activities that serve the needs of the community' has the same meaning as 'commercial activities' (as covered above). Essentially all commercial activities (by their very nature of requiring customers to make a profit) exist to meet the needs (or potentially 'wants') of the community.

Therefore, the reference in sub-part (c) of the definition of 'community services' to 'commercial activities that serve the needs of the community' is somewhat circular. It just means the same as the term 'commercial activity' that is already covered by the wording of Policy 3(d) ("…the level of commercial activity and community services").

In order to apply policy 3(d), a method is needed to measure the 'level' of commercial activity and community services in each centre. There are over 500 Neighbourhood, Local and Town Centre zones across Auckland. The next section outlines potential options for how to calculate the level of activities and services of each centre.

6.8.2 Description of options - How to measure the level of commercial activity and community services in Neighbourhood, Local and Town Centre zones?

6.8.2.1 Option 1: Based on centre zone hierarchy

Neighbourhood, local and town centres are types of business zones in the AUP. Each type of centre is outlined in Figure 18 below in ascending order of the hierarchy.

Zone	Zone description	Number of centres in Auckland	Average size of centres	Centre examples
Neighbourhood Centre	The Neighbourhood Centre Zone applies to single corner stores or small shopping strips located in residential neighbourhoods. They provide residents and passers-by with frequent retail and commercial service needs. Typically, the Neighbourhood Centre zone applies to small groups of 'corner shops' (i.e. dairy, takeaways, bakery) as well as one-off dairies and service stations.	400+	0.3ha	 Mokoia Dairy Birkenhead (pictured), Verran's Corner Birkdale, Johns Lane Pakuranga, Red Beach.
Local Centre	The Local Centre Zone applies to a large number of small centres throughout Auckland. The centres are generally located in areas serviced by good public transport. The zone primarily provides for the local convenience needs of surrounding residential areas, including local retail, commercial services, offices, food and beverage, and appropriately scaled supermarkets.	74	3ha	 Waiuku (pictured), Gulf Harbour, Beach Haven, Dawsons Road, Massey Road.
Town Centre	The Town Centre Zone applies to suburban centres throughout Auckland. The centres are typically located on main arterial roads, which provide good public transport access. The zone services a wider area than local centres and provides for a wide range of activities including commercial, leisure, residential, tourism, cultural, community and civic services. Most centres are identified for growth and intensification.	44	10ha	 Mangere (pictured), Helensville, Whangaparaoa, Point Chevalier, Ponsonby, Stoddard Road, Manurewa, Pukekohe.

Figure 18: Zoning hierarchy of centres in the AUP

Option 1 uses the centre zoning hierarchy as a basic proxy for the 'level' of commercial activity and community services in each centre. The rationale for this is that the centre zone hierarchy clearly shows that each type of centre is likely to have a different 'level' of commercial activity and community services. Under this option the 'levels' could be classified as low for neighbourhood centres, medium for local centres, and high for town centres. These basic levels could be used as the indicators as to whether centres should have intensification within them.

6.8.2.2 Option 2: Based on the actual floorspace existing in the centre

Another option to determine the different levels of commercial activities and community services in each neighbourhood, local and town centre across Auckland is to measure the existing floorspace (GFA) of the activities that are present in each centre. That is, the GFA of commercial activities such as retail, restaurants, and offices and the area of community services (libraries, education facilities etc).

This option uses the total GFA of each centre as a proxy for their 'level' of commercial activity and community services. The rationale for this is that the higher the GFA, the higher the 'levels' of commercial activity and community services. Under this option the 'levels' could be set at certain GFA thresholds, or the centre GFAs could be compared to each other to be classified 'small' or 'large' centres.

A high degree of analysis is required to determine the GFA of each centre. It is noted that this method also only captures a 'snapshot' in time of the 'levels' of commercial activities and community services in each centre. Centres are dynamic and some activities have a relatively high churn rate. For example, an existing commercial building in a centre could be tenanted by a restaurant one year, but the next year it could be converted into an office, or a shop, or could be vacant. Measuring the commercial activities of a centre at a set point in time does not capture this.

6.8.2.3 Option 3: Based on size of the centre zone

There is a large variation in sizes of the Neighbourhood, Local and Town Centre zones across Auckland. The zoning footprint of Neighbourhood Centre zones range in size from 0.02ha to 8.2ha. Local Centre zones range from 0.25ha to 18ha and the Town Centre zones range from 2.1ha to 25ha.

Option 3 uses the total zoned footprint area of each centre as a proxy for the 'level' of commercial activity and community services in each centre. The rationale for this is that the larger the zoned footprint area, the higher the 'levels' of commercial activity and community services. Under this option the 'levels' could be set at certain size thresholds or the centre zone footprints could be compared to each other to be classified 'small' or 'large' centres.

While Option 2 captures the levels of activities and services in the centre zone at a set point in time, Option 3 accounts for potential change to the areas of commercial activities and community services over time.

The potential activities in each centre can be determined by looking at what the current AUP zoning enables. The Neighbourhood, Local and Town Centre zones enable a wide range of activities to occur as permitted activities (no resource consent required) such as retail, restaurants, offices, supermarkets, and healthcare facilities. Local and Town centre zones also enable community facilities, education facilities, recreation facilities, light manufacturing, warehousing, and marae complexes as permitted activities.

The Town Centre zone has the potential for larger types of commercial activities with more variety than the Local Centre zone due to the zone's slightly more enabling provisions. Correspondingly, the Local Centre zone also has the potential for a wider range and larger types of commercial activities than the Neighbourhood Centre zone.

Under Option 3 the *potential* 'level' of commercial activities and community services of each centre is measured using the zone footprint area of each centre. It is noted that a GFA measurement (Option 2) could more accurately differentiate the centres that may have higher *existing* building coverage and/or multi-level buildings.

However, the Neighbourhood, Local, and Town Centre zones are enabling of quality new buildings to be established. All new buildings in these zones require a resource consent, but this is just to assess their design and appearance. All the centre zones enable a generous amount of height[48] and unlimited building coverage. It is noted that the Town Centre zone generally enables more floorspace than the Local Centre zone due to the more generous development standards (e.g. height) and the permitted status of larger retail, office and supermarket activities. Correspondingly, the Local Centre zone also generally enables more floorspace than the Neighbourhood Centre zone.

Essentially, a well-designed building with a large amount of floorspace could conceivably be consented and built in any of the centre zones at any point in time and this could markedly change the total floorspace of that centre. This is why Option 3 measures the *potential* size of each centre based on the zone footprint measurement of each centre (rather than the size of the centre at a static point in time).

6.8.2.4 Option 4: Based on the centre zone hierarchy and the size of the zone

Option 4 is essentially a blend of Option 1 and Option 3 (as each is described above). Option 4 uses the combination of the zone hierarchy and the zone footprint area of each centre as a proxy for the 'level' of commercial activity and community services in each centre.

The rationale for Option 4 is that centres that are both higher in the centre zone hierarchy, and have larger zoned footprint areas, will likely have higher 'levels' of commercial activity and community services (including their potential over the long term). Under this option the 'levels' could be set based on the zone hierarchy and the relative size of the centre. A generic example is outlined in Figure 19 below.

Name of centre	Centre zone hierarchy 'level'	Centre area	Centre 'level' (size)
Centre 1	Local Centre	3.7ha	Large
Centre 2	Local Centre	1.2ha	Small

[48] 13m total building height in Neighbourhood Centre zone, 18m total building height in Local Centre zone, and each Town Centre zone has specific Height Variation Controls applying to it (ranging from 8.5m to 32.5m, with an average of around 19m-23m)

Name of centre	Centre zone hierarchy 'level'	Centre area	Centre 'level' (size)
Centre 3	Neighbourhood Centre	0.2ha	Small
Centre 4	Town Centre	8.6ha	Small
Centre 5	Neighbourhood Centre	1.6ha	Large
Centre 6	Local Centre	1.3ha	Small
Centre 7	Town Centre	11.6ha	Large
Etc	…	…	…

Figure 19: Example of classifying centres based on zone hierarchy and zone area

6.8.2.5 Option 5: Based on the centre zone hierarchy, the size of the zone, and the centre catchment

When considering intensification within and adjacent neighbourhood, local and town centres it is also important to consider the centre's catchment. The catchment can be used as another proxy for the levels of activities and services in the centre. Option 5 is the same as Option 4 but adds the centre catchment as a further matter to consider in determining the 'levels' of activities and services in the centre.

The rationale for adding in a catchment variable is that the larger the centre's catchment, the higher the level of commercial activities and community services are likely to be in that centre.

The centre catchment can be calculated in various ways. For this option the centre catchment is based on how many people live within a 45-minute public transport or walking trip from each centre and how many jobs there are within that same distance.[49] This options weights the population catchment and the employment catchment equally (50/50) in determining a final catchment 'score'. These scores can be compared to determine which centres have a 'low' or 'high' combination of catchment population and employment.

Under this option, to determine the 'levels' of commercial activity and community services the centres would be classified based on the three variables below:

- position in the centre zone hierarchy;
- size of the centre's zoned footprint area; and
- size of the centre's population and employment catchment.

A generic example is outlined in Figure 19 below.

[49] This was calculated using the 2031 public transport network (General Transit Feed Specification or 'GTFS' data) based on mean access between the times 7am to 7pm. The current Auckland walking network was taken from open street maps. Statistical Area 2 ('SA2') level estimated resident population data at the 2018 census. If a centre was located across two SA2s, then the average was taken of the two to create its accessibility scoring

Name of centre	Zone hierarchy 'level'	Zone area	Centre 'level' (size)	Catchment size – population and jobs (percentile)	Catchment 'level'
Centre 1	Local Centre	3.7ha	Large	65th	High
Centre 2	Local Centre	0.9ha	Small	23rd	Low
Centre 3	Neighbourhood Centre	0.1ha	Small	44th	Low
Centre 4	Town Centre	8.6ha	Small	74th	High
Centre 5	Neighbourhood Centre	0.6ha	Large	12th	Low
Centre 6	Local Centre	1.3ha	Small	34th	Low
Centre 7	Town Centre	11.6ha	Large	86th	High
Etc	…	…	…	…	…

Figure 20: Example of classifying centres based on zone hierarchy, zone area, and catchment

Using this methodology, 12 potential categories of centre can be filtered by using the three variables of its zone, size, and catchment.

- Neighbourhood Centres ('Small' in size with 'Low' catchments)
- Neighbourhood Centres ('Small' in size with 'High' catchments)
- Neighbourhood Centres ('Large' in size with 'Low' catchments)
- Neighbourhood Centres ('Large' in size with 'High' catchments)
- Local Centres ('Small' in size with 'Low' catchments)
- Local Centres ('Small' in size with 'High' catchments)
- Local Centres ('Large' in size with 'Low' catchments)
- Local Centres ('Large' in size with 'High' catchments)
- Town Centres ('Small' in size with 'Low' catchments)
- Town Centres ('Small' in size with 'High' catchments)
- Town Centres ('Large' in size with 'Low' catchments)
- Town Centres ('Large' in size with 'High' catchments)

This option firstly considers that all neighbourhood centres (regardless of size and catchment) are not considered to have a high level of commercial activity and community

services to warrant any further intensification within or adjacent to them.[50] This is because of their status at the bottom of the centres hierarchy and the fact that neighbourhood centres are predominately very small and can in many cases be a single shop.

Secondly, local centres will generally have low levels of activities and services. This is because of their status near the bottom of the centres hierarchy and the fact that local centres are also generally small, and are in most cases just a handful of shops. Large local centres that also have 'high' catchments are considered to have a medium/high level of commercial activity and community services that may warrant further intensification within or adjacent to them.

Finally, small town centres that have 'high' catchments are considered to have medium/high levels of commercial activity and community services, that may warrant further intensification within or adjacent to town centres. Large town centres that have 'high' catchments are considered to have high levels of commercial activity and community services This is because of their status in the middle of overall centres hierarchy[51] and the fact that town centres are typically located on main arterial roads, provide good public transport access, and provide a wide range of activities including commercial, leisure, residential, tourist, cultural, community and civic services.

In summary, under this option the following centre 'types' are considered to have medium/high or high levels of services and activities, that may warrant intensification under the NPS-UD:

- Local Centres ('Large' in size with 'High' catchments)
- Town Centres ('Small' in size with 'High' catchments)
- Town Centres ('Large' in size with 'High' catchments)

A list of all the local and town centre zones in Auckland and their size and catchment information is included in **Appendix 9** of this report.

6.8.2.6 Option 6: Based on certain 'indicator' facilities being present in a centre

Certain types of commercial activities and community services can be given an 'indicator' function, meaning the presence of all (or a combination of) these activities can be used as a proxy for determining the 'levels' of activities and services.

These 'indicator' activities could be large activities that are popular, large, and relatively stable (i.e. unlikely to shift away or close down in the medium-term future). Examples of such activities and services could include:

[50] Noting that the MDRS applies across all relevant residential zones that are adjacent to neighbourhood centres. The building heights and densities of urban form of the MDRS is considered to be more than commensurate with the level of commercial activity and community services in neighbourhood centres Auckland.
[51] Town centres are at the top of the centres hierarchy of those centres specifically referred to in Policy 3(d) of the NPS-UD, but below metropolitan centres and the city centre (so town centres are sit in the middle of the five centre zones).

- Supermarkets
- Leisure Centres
- Schools
- Tertiary education facilities
- Large parks
- Community Centres/Halls
- Medical facilities
- Libraries
- Department stores

6.8.3 Evaluation of options – How to measure the level of commercial activity and community services in Neighbourhood, Local and Town Centre zones?

21 below evaluates the six options for how to measure the level of commercial activity and community services in Neighbourhood, Local and Town Centre zones. Overall, the preferred approach to measure the 'levels' of activities and services is 'Option 5: Based on the centre zone hierarchy, the size of the zone, and the centre catchment'.

Option 5 classifies the centres based on the three variables below:

- position in the centre zone hierarchy;
- size of the centre's zoned footprint area; and
- size of the centre's population and employment catchment.

These three variables in combination create a proxy for determine the 'levels' of commercial activities and community services in each centre. Unlike Option 2, the preferred option is not limited to measuring the levels of activities and services at a 'snapshot' in time. When planning for the long-term intensification in and adjacent to these centres, it is better to determine the *potential* of what could occur in each centre, rather than simply what is occurring today.

Under Option 5 all the neighbourhood centres are considered to have low levels of activities and services and the local and town centres are classified into 12 groups. Of this 12, only three categories of centre are considered to have medium/high or high levels of services and activities, that may warrant intensification under the NPS-UD:

- Local Centres ('Large' in size with 'High' catchments)
- Town Centres ('Small' in size with 'High' catchments)
- Town Centres ('Large' in size with 'High' catchments)

The outcome of Option 5 is that 46 local and town centres across Auckland are classified as having medium/high or high levels of commercial activities and community services. The broad geographical spread of these centres is as follows:

- 12 centres in north and west Auckland
- 23 centres in the central isthmus

- 11 centres in south and east Auckland
- No policy 3(d) intensification is proposed in any rural settlement or on any offshore island (e.g. Hauraki Gulf islands)

It is worth noting that the concentration of these centres on the central isthmus and urban area of Auckland is consistent with the Auckland Plan and the Regional Policy Statement's compact city approach.

Based on Option 5, the local and town centres that require a commensurate response in terms of heights and densities of urban form are listed below.

Large local centres with a high population and employment catchment:

- Albany Village
- Dawsons Road
- Greville
- Lynfield
- Meadowlands
- Balmoral
- Eden Valley
- Grey Lynn
- Mangere East
- Ranui
- Botany Junction
- Greenlane West
- Kepa Road / Eastridge
- Meadowbank

Small town centres with a high population and employment catchment:

- Devonport
- Greenlane
- Newton - Upper Symonds St
- Parnell
- Sunnynook
- Ellerslie
- Milford
- Northcote
- Pt Chevalier
- Three Kings
- Glenfield
- Mt Albert
- Otara
- Remuera

Large town centres with a high population and employment catchment:

- Avondale
- Glen Eden
- Hunters Corner
- Onehunga
- Panmure
- Royal Oak
- Birkenhead
- Glen Innes
- Mangere
- Otahuhu
- Papatoetoe
- St Lukes
- Browns Bay
- Highland Park
- Manurewa
- Pakuranga
- Ponsonby
- Stoddard Rd

Tables classifying all the local and town centres by size and accessibility are included in **Appendix 9**.

Feedback on the centres identified for intensification was received during the consultation in April/May 2022 on the council's preliminary NPS-UD response. Some key stakeholders such as the Property Council, Kainga Ora, Waka Kotahi, and the Coalition for More Homes sought that more town centres should be identified for intensification on land adjacent to them.

Some sought that intensification should occur around all town centres in Auckland, while others sought that it apply specifically to all town centres on the isthmus. Feedback on the local centres from the Coalition for More Homes sought that all local centres on the isthmus should be identified for intensification on their adjacent land.

More information on the feedback on which centres are identified for intensification (on their adjacent land) is in section 7.1 of this s32 report.

	Option 1: Based on centre zone hierarchy	Option 2: Based on the actual floorspace existing in the centre	Option 3: Based on size of the zone	Option 4: Based centre zone hierarchy and size of zone	Option 5: Based centre zone hierarchy, size of zone, and the centre catchment	Option 6: Based on certain 'indicator' facilities being present in a centre
Appropriateness	Not appropriate as the zone hierarchy is too coarse a filter for an exercise that has significant zoning implications.	Not the most appropriate option as it is a static measure that could date relatively quickly. Not suitable for long term zoning decisions.	Not appropriate as zone size is too coarse a filter for an exercise that has significant zoning implications.	Not appropriate as even the combination of the zone hierarchy and centre size is too coarse a filter for an exercise that has significant zoning implications	Most appropriate as the combination of the three variables gives a more robust result.	Not the most appropriate as this option places a high level of importance on a few facilities and does not consider regional geography of centre locations.
Effectiveness	Does not effectively address the issue as the methodology is too simplistic.	Effective at showing what is actually occurring in a centre, but only measures a 'snapshot' in time of levels of activities and services	Does not effectively address the issue as the methodology is too simplistic.	Does not effectively address the issue as the methodology is too simplistic.	The geographic split of centres for intensification is concentrated on the isthmus and are all within the urban area - consistent with the compact city approach of the AUP.	Effective at finding the centres that have key facilities, but lacks a spatial component to consider the different geographic locations of centres (and their suitability for intensification).
Efficiency	Low costs to implement but does not produce a robust list of centres for intensification.	High costs to implement and measures only a 'snapshot in time', so could be out of date relatively quickly.	Low costs to implement but does not produce a robust list of centres for intensification.	Low costs to implement but does not produce a robust list of centres for intensification.	Relatively quick and low cost to implement and results in a fairly robust list of centres for intensification.	Relatively high costs to implement and uncertain as to the accuracy of the indicators (in terms of warranting intensification).
Costs	Results in some small centres or remote centres being deemed suitable for intensification (within and adjacent to the centre).	Large amount of data and research required to compile, and data can be out of date quickly with new developments or the closing of shops, restaurants etc.	Minimal GIS inputs for measuring centre sizes. Results in some remote centres being deemed suitable for intensification (within	Minimal GIS inputs for measuring centre sizes. Results in some remote centres being deemed suitable for intensification (within	More GIS analysis for determining catchments. Has a 'cut-off' point so some centres that are quite suitable for intensification will not be included.	Time spent gathering data and ground-truthing. Results in some small centres or remote centres being deemed suitable for intensification (within

			and adjacent to the centre).	and adjacent to the centre).		and adjacent to the centre).
Benefits	Simple exercise as the AUP already classifies the centres.	Provides a measurement of what is actually going on in a centre, rather than potential development (that may never be realised). Takes account of centres with existing large multi-storey buildings.	Simple and easy to understand option. Measures the zone rather than GFA and therefore takes into account potential future development.	Simple and easy to understand option. Measures the zone rather than GFA and therefore takes into account potential future development.	Relatively simple and easy to understand option. Measures the zone rather than GFA and therefore takes into account potential future development. Takes into account the regional geography of centre locations.	Takes into account the main 'anchor tenants' of a centre. Discerns between similar sized or zoned centres where one has (for example) a supermarket and the other does not.
Risks	Risks small centres or centres in unsuitable locations being deemed suitable for intensification.	Only measures a 'snapshot' in time of levels of activities and services. The timing of the exercise during Covid-19 'lockdown' could skew the results with a high proportion of vacant premises.	Risks centres in unsuitable locations being deemed suitable for intensification.	Risks centres in unsuitable locations being deemed suitable for intensification.	Risks being over-reliant on potential future development that may not occur. Measures theoretical development, rather than actual development.	Risks that one of the indicator facilities might shift or close (no absolute guarantees). Risks centres in unsuitable locations being deemed suitable for intensification.

Figure 21: Evaluation of options to measure the level of commercial activity and community services in Neighbourhood, Local and Town Centre zones

6.9 Where ‘adjacent’ is in relation to Neighbourhood, Local, and Town Centre zones?

6.9.1 Overview

6.9.1.1 What does ‘adjacent’ mean?

Policy 3(d) requires the council to enable heights and densities on land within and ‘adjacent’ to neighbourhood, local, and town centres. The term ‘adjacent’ is not defined in the RMA or in *Chapter J – Definitions* of the AUP.

The Hauraki Gulf Islands (‘**HGI**’) District Plan, which is the district plan in force for the HGI does have a definition for ‘adjacent’ which states “Adjacent means being near or close but not necessarily contiguous”.[52] While this is useful to add into the discussion of interpreting how ‘adjacent’ should be applied, it is noted that the HGI District Plan does not apply to the majority of Auckland. In addition, the HGI section specifically does not apply to any of the 46 centres identified in the previous section 6.8 as having medium/high or high levels of commercial activities and community services (i.e. centres that may require commensurate heights and densities of urban form within or adjacent to the centre).

Some background discussion on how to interpret the word ‘adjacent’ in the context of Policy 3(d) and based on case law is included in **Appendix 10**. It concludes that ‘adjacent’ generally includes properties that adjoin a centre, and those that are ‘close’ or ‘near’ to a centre.

Based on the preferred metric for measuring the size of the walkable catchments (outlined in section 6.6 of this report), the maximum possible threshold of ‘close’ or ‘near’ for Policy 3(d) is considered to be somewhere below 800m (10 minute walk) from the centre.

6.9.2 Description of options – Where is “adjacent” in relation to Neighbourhood, Local, and Town Centre zones?

6.9.2.1 Option 1: Immediately adjoining properties

This option includes only the properties that immediately ‘adjoin’ (i.e. share a common boundary) with the centre zone. Adjoining properties include all sites that share a boundary with the subject site, including sites adjoining at the top, bottom, or side boundaries of the subject site, as well as those that diagonally adjoin the site. Sites only separated from the subject site by roads (or small stream), including diagonally, can be considered to be adjoining. Figure 22 below gives an example of which sites can be considered to be adjoining the site outlined in black.

[52] https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/hgi-district-plan/Documents/hauraki-gulf-islands-district-plan-text-part-14.pdf

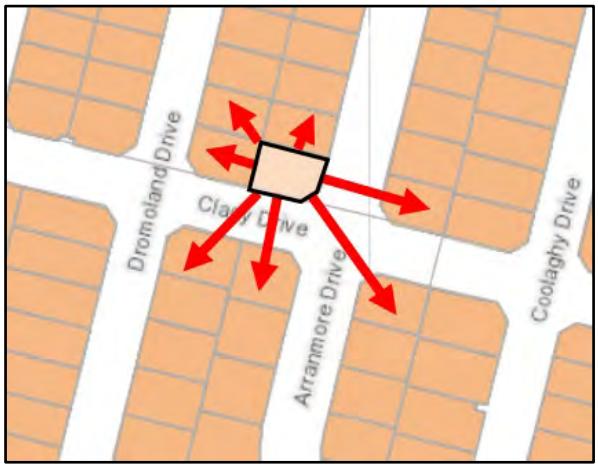


Figure 22: Example of 'adjoining' sites

Figure 23 below gives an example of applying the 'adjoining sites' methodology around the edge of the Milford Town Centre zone.

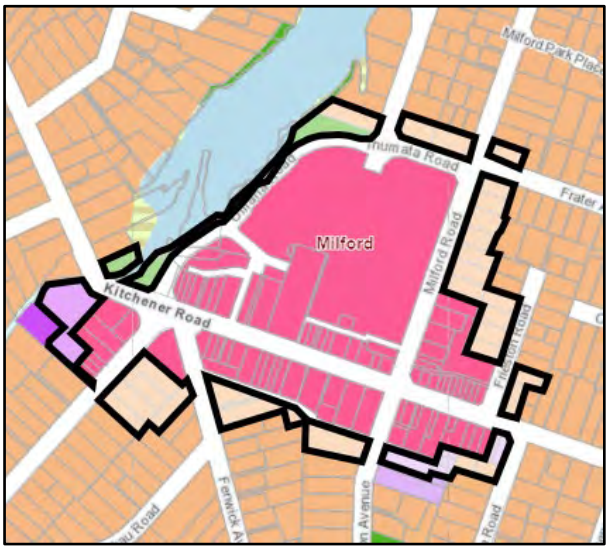


Figure 23: Example of 'adjoining' sites (outlined in black) around the edge of the Milford Town Centre zone (dark pink)

6.9.2.2 Option 2: Immediately adjoining blocks

This option includes all land that is part of an immediately adjoining block. This option uses road boundaries as the edge to the 'adjacent' area. Figure 24 below gives an example of applying the 'immediately adjoining blocks' methodology to the Milford Town Centre zone, with some distances to illustrate the scale.

Figure 24: Example of immediately adjoining blocks (outlined in black) around the edge of the Milford Town Centre zone (dark pink)

6.9.2.3 Option 3: A walking distance of 200m

This option uses a 200m walking distance (based on GIS walking networks) and takes into consideration any significant modifying factors.[53] Figure 25 below shows an example of applying a 200m walking distance from the edge of the Milford Town Centre zone. This analysis uses the walking network to travel 200m from the edge of the zone and then draws a line around all the furthest points of extent to create a polygon.[54] The polygon is only the first step as it is further refined through applying any significant modifying factors (e.g. topography).

[53] Modifying factors are discussed in more detail in section 6.5.2.3 of this report and in **Appendix 4**.
[54] This explains the area of water included in the example below. There is obviously no walking network into the water, but it is included in the polygon as a result of joining two areas of furthest extent on either side of the water.

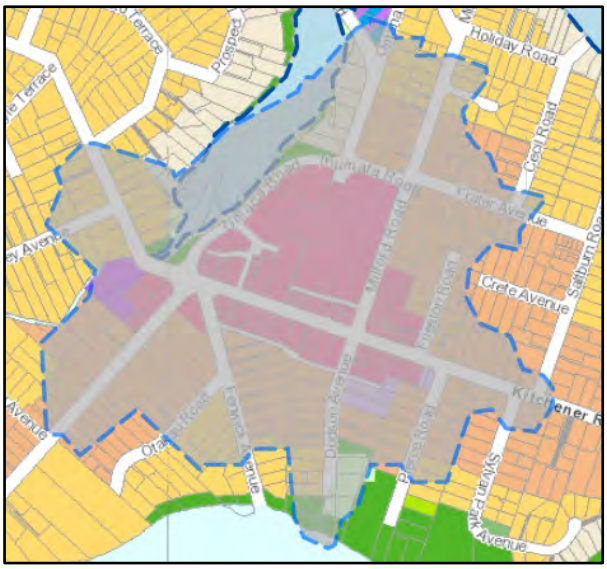


Figure 25: Example of 200m walking distance (blue GIS polygon) around the edge of the Milford Town Centre zone (dark pink)

6.9.2.4 Option 4: A walking distance of 400m

This option uses a 400m walking distance (based on GIS walking networks) and takes into consideration any significant modifying factors. below shows an example of a 400m walking distance from the edge of the Milford Town Centre zone.

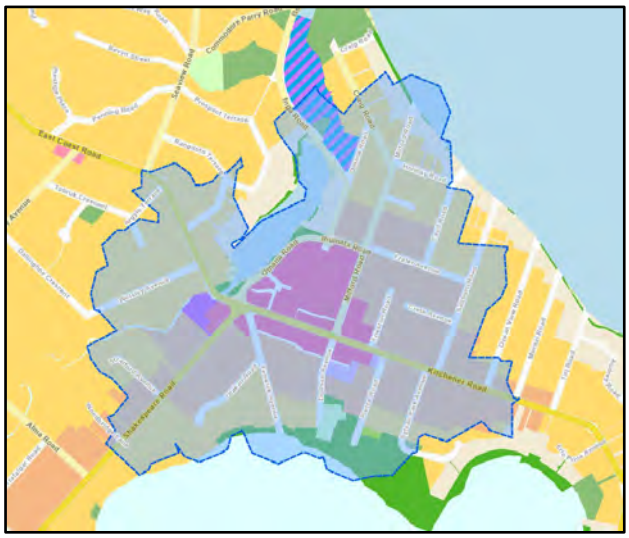


Figure 26: Example of 400m walking distance (purple GIS polygon) around the edge of the Milford Town Centre zone (dark pink)

6.9.2.5 Option 5: A walking distance of 600m

This option uses a 600m walking distance (based on GIS walking networks) and takes into consideration any significant modifying factors. Figure 27 below shows an example of applying a 600m walking distance from the edge of the Milford Town Centre zone.

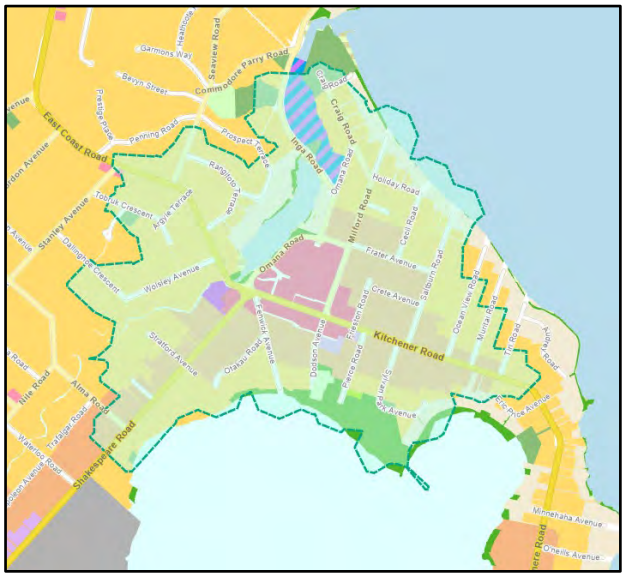


Figure 27: Example of 600m walking distance (green GIS polygon) around the edge of the Milford Town Centre zone (dark pink)

6.9.3 Evaluation of options – Where is "adjacent" in relation to Neighbourhood, Local, and Town Centre zones?

Figure 28 below evaluates the five options for determining where 'adjacent' land is in relation to Neighbourhood, Local and Town Centre zones. Overall, the preferred approach is a combination of 'Option 3: A walking distance of 200m' and 'Option 4: A walking distance of 400m'. That is, of the 46 centres identified in section 6.8, the local centres and the small town centres will use a walking distance of 200m, while the large town centres will use a walking distance of 400m.

These options provide logical area around the centre for intensification based on actual walking distances (rather than 'as the crow flies'). They are also relatively small, contained areas adjacent to the centres for intensification. A distance of 400m (5 minute walk) is a widely accepted distance for how far people will walk to local services, and the 200m distance is even easier to walk. These two options are appropriate as they reflect the levels of services and activities in each of these centres.

The feedback during the consultation in April/May 2022 on the council's preliminary NPS-UD response showed 55% support the proposal to apply THAB at least 400m around specific town centres. This support was slightly higher in the Kantar Public survey at 61%. Some key stakeholders such as the Property Council, Kainga Ora, Waka Kotahi, and the Coalition for

More Homes sought that the area of THAB be larger, with 800m a commonly suggested distance.

The feedback response showed 59% supported the proposal to apply THAB at least 200m around specific local and town centres. This support was markedly higher in the Kantar Public survey at 76%. Some key stakeholders such as the Property Council, Kainga Ora, Waka Kotahi, and the Coalition for More Homes sought that the area of THAB around the local and town centres be larger, with 400m a commonly suggested distance.

More information on the feedback on the proposed application of the THAB zone on land adjacent to specific local and town centres is in section 7.1 of this s32 report.

	Option 1: Immediately adjoining properties	Option 2: Immediately adjoining blocks	Option 3: A walking distance of 200m	Option 4: A walking distance of 400m	Option 5: A walking distance of 600m
Appropriateness	Not appropriate as provides a minimal area for potential intensification and covers a smaller area that case law interpretations of 'adjacent' would indicate.	Not appropriate as the irregular block sizes across Auckland could in many cases dictate a skewed zoning pattern 'adjacent' to the centres that does not achieve the intentions of the NPS-UD.	Appropriate for the lower category centres (large local centres and small town centres) as the short distance reflects the levels of services and activities in those centres.	Appropriate for the higher category centres (large town centres) as the greater distance reflects the higher levels of services and activities in those centres.	Not appropriate as this distance is likely beyond 'adjacent' and is in fact close to the walkable catchment distance for rapid transit stops and metropolitan centres.
Effectiveness	Ineffective at providing the most suitable area for intensification around a centre.	Ineffective at providing the most suitable area for intensification around a centre.	Effective at providing a small, contained area adjacent to the centre for intensification.	Effective at providing a relatively small, contained area adjacent to the centre for intensification.	Effective at providing a relatively large area around the centre for intensification, but more likely to result in intensification being diluted over a wide area.
Efficiency	Simple to implement but comes with high costs of a small and potentially unsuitable area for intensification.	Simple to implement but comes with high costs of a small and potentially unsuitable area for intensification.	Relatively simple to implement and creates a logical area around the centre for intensification.	Relatively simple to implement and creates a logical area around the centre for intensification.	Relatively simple to implement but creates a large area around the centre for intensification.
Costs	Offers only a small area for intensification. In some cases adjoining properties are not as accessible to the centre as other properties.	Due to the irregular block sizes in Auckland (based on topography etc), the block sizes are highly variable could result in a very broad interpretation of 'adjacent'. Intensification may be spread over a wide area, diluting the benefits. In other cases a small block size can result in less intensification being enabled than intended.	Relatively low GIS analysis to determine the area but some staff costs to check any significant modifying factors.	Relatively low GIS analysis to determine the area but some staff costs to check any significant modifying factors.	Relatively low GIS analysis to determine the area but some staff costs to check any significant modifying factors. Intensification may be spread over a wide area, diluting the benefits. 600m (7.5 minute walk) is getting beyond the generally accepted distance that people will walk to local services.
Benefits	Intensification would generally be very focussed around the edge of the	Simple method that has clean boundaries and easy to understand.	Identifies properties that are actually close to the centre	Identifies properties that are actually relatively close to the centre via a walking	Identifies properties that are actually within walking distance of the centre via a

	centre – rather than dispersed throughout a wider area.		via a walking network (rather than 'as the crow flies'). 200m (2.5 minute walk) is a very short walk to local services.	network (rather than 'as the crow flies'). 400m (5 minute walk) is a widely accepted distance for walking to local services.	walking network (rather than 'as the crow flies'). Results in a large area for intensification around a suitable centre.
Risks	Risks that in some cases adjoining properties do not actually have good access to the centre due to topography, street network etc.	Risk that the 'adjacent' area is determined by irregular block sizes, creating a skewed zoning pattern that does not meet the intention of the NPS-UD.	Could be mistakenly conflated with a 'walkable catchment' by the public.	Could be mistakenly conflated with a 'walkable catchment' by the public.	Could be mistakenly conflated with a 'walkable catchment' by the public, especially as the distance is close to the existing 800m walkable catchments for rapid transit stops and metropolitan centres. Intensification may be spread over a wide area, diluting the benefits.

Figure 28: Evaluation of options

6.10 How do you enable heights and densities of urban form that are commensurate with the level of activities and services within and adjacent to each of the centres?

6.10.1 Overview

Policy 3 has been applied in a sequenced manner from sub-parts (a) through to (d). In particular, the walkable catchments under Policy 3(c) were applied prior to the application of Policy 3(d). Therefore, when applying Policy 3(d), in some cases land adjacent to the 46 qualifying local and town centres was already located within a walkable catchment defined under Policy 3(c) (and therefore rezoned to THAB under Policy 3(c)). In these cases, the earlier work of Policy 3(c) requiring at least six storeys to be enabled took precedence. No changes to zonings inside a walkable catchment were made under Policy 3(d).

A non-statutory information layer of a brown outline is applied on the planning maps to show where Policy 3(d) applies to land adjacent to a neighbourhood, local, or town centre.

A discussion looking at some of the key issues with implementing Policy 3(d) is included in **Appendix 11**.

In applying Policy 3(d) an assessment was first undertaken to measure the "level of commercial activity and community services" in each centre. This assessment is outlined in section 6.8 of this s32 report and in **Appendix 9**. This assessment resulted in 46 of Auckland's town and local centres being classified as having either medium/high or high levels of activities and services.

Policy 3(d) then requires the AUP to enable within and adjacent to these centres, building heights and densities of urban form commensurate with their medium/high or high levels of activities and services. Therefore, these centres with *medium/high* or *high* levels of activities and services must enable commensurately *medium/high* or *high* building heights and densities of urban form (or enable at least that[55]).

6.10.1.1 Determining 'commensurate' building heights and densities of urban form on land **within** centres

A detailed analysis of the building heights and densities of urban form with neighbourhood, local, and town centre zones is covered in **Appendix 11**. Figure 29 below broadly summarises the levels of activities and services in the centres and the enabled heights and densities of urban form within each centre zone. The final column then compares the two results and whether the enabled heights and densities are at least commensurate with the levels of services and activities.

[55] It is considered that the intention of Policy 3(d) is to require greater heights and densities on adjacent land where the centres have medium/high or high levels of activities and services. It is not considered that the intention of the NPS-UD is to also require the heights and densities on adjacent land to be reduced if the centre itself has low levels of activities and services. In these cases no changes would be made under Policy 3(d).

It concludes that the enabled heights and densities within all neighbourhood, local, and town centres (of any size or catchment) are commensurate with the levels of activities and services in those centres. Therefore, no amendments to the AUP provisions are recommended to implement the part of Policy 3(d) relating to heights and densities of urban form within neighbourhood, local and town centres.

Centre type	Centre size	Centre catchment	Level of activities and services	Enabled heights and density within centre	Are heights and densities at least commensurate with levels of activities and services?
Neighbourhood Centre	All	All	Low	Medium	Yes
Local Centres	Small	All	Low	Medium/High	Yes
Local Centres	Large	Low	Low	Medium	Yes
Local Centres	Large	High	Medium/High	Medium/High	Yes
Town Centres	All	Low	Medium	High	Yes
Town Centres	Small	High	Medium/High	High	Yes
Town Centres	Large	High	High	High	Yes

Figure 29: Measuring whether heights and densities within centres are commensurate with level of activities and services

6.10.1.2 Determining 'commensurate' building heights and densities of urban form on land **adjacent** to centres

The enabled building heights and densities of urban form on residential land adjacent to neighbourhood centres are considered to be medium as they will (at minimum) include the MDRS. In the context of Policy 3(d), the medium building heights and densities of urban form enabled on land adjacent to neighbourhood centres is already commensurate with the low level of activities and services in Auckland's neighbourhood centres. Therefore, no changes to the AUP are proposed under Policy 3(d) in relation to land adjacent to neighbourhood centres.

The land adjacent to the 46 local and town centres that have medium/high or high levels of activities and services is covered by a variety of zones (as proposed by PC78). The main zones adjacent to these centres are outlined in **Appendix 11** along with an assessment of the enabled heights and densities in each zone.

Figure 30 below broadly summarises densities of urban form on the land adjacent to the various centre categories. The final column then compares the enabled heights and densities with the levels of services and activities to determine if they are (at least) commensurate.

Centre type	Centre size	Centre catchment	Level of activities and services	Enabled heights and density adjacent to centre[56]	Are heights and densities (at least) commensurate with levels of activities and services?
Neighbourhood Centres	All	All	Low	Medium	Yes
Local Centres	Small	All	Low	Medium	Yes
Local Centres	Large	Low	Low	Medium	Yes
Local Centres	Large	High	Medium/High	Medium	No
Town Centres	All	Low	Medium	Medium	Yes
Town Centres	Small	High	Medium/High	Medium	No
Town Centres	Large	High	High	Medium	No

Figure 30: Measuring whether heights and densities adjacent to centres are commensurate with level of activities and services in these centres

Further detail around this assessment is in **Appendix 11**, but in summary the above table concludes that the enabled heights and densities in the adjacent zones are commensurate with the levels of activities and services in most centres. However, the heights and densities in the zones adjacent to the following centre types are not commensurate with the levels of activities and services in those centres:

- Large local centres with high population and employment catchments
- Small town centres with high population and employment catchments
- Large town centres with high population and employment catchments

It is the land adjacent to these centres that is required to enable heights and densities of urban form that are commensurate with the medium/high or high level of activities and services in those centres.

6.10.1.3 Plan methods available to enable greater heights and density of urban form

The AUP has a range of existing methods that could be used to enable greater heights and density of urban form within the walkable catchments. These are listed below and covered in more detail in **Appendix 7**.

- Rezoning:
    - Terrace Housing and Apartment Buildings zone (modified provisions)
    - Mixed Housing Urban zone (with modified provisions)

[56] Determined from the mix of adjacent zones.

    - Mixed Use zone (modified provisions)
- Zone standards:
    - Amend zone standards
- Precincts:
    - New precincts
    - Amend existing precincts
- Controls:
    - Height Variation Control ('**HVC**')
- Overlays:
    - New overlays

These methods will be considered and referred to when describing and evaluating options to enable greater heights and densities or urban form.

6.10.2 Description of options – How to enable heights and densities of urban form that are commensurate with the level of activities and services within and adjacent to each of the centres?

6.10.2.1 Option 1: Status quo (do nothing)

This option would not make any specific amendments to the AUP in relation to the provisions in zones adjacent to the 46 local and town centres. The MDRS would still be applied to relevant residential zones adjacent to the centres but there would be no other changes.

6.10.2.2 Option 2: Rezone adjacent land to THAB

Where intensification is recommended adjacent to a local centre or town centre under policy 3(d), the THAB zone can be applied to result in building heights and densities of urban form commensurate with the levels of activities and services within the centres. This option would rezone residential zones on land adjacent to specific centres to a modified THAB zone (but enabling the standard building height of 16m).

6.10.2.3 Option 3: Rezone adjacent land to Mixed Use zone

Where intensification is recommended adjacent to a local centre or town centre under policy 3(d), the Mixed Use zone can be applied to result in building heights and densities of urban form commensurate with the levels of activities and services within the centres This option would rezone all the residential zones adjacent to the centre to the Mixed Use zone

6.10.2.4 Option 4: Retain zonings but add a Height Variation Control/Precinct/or Overlay to the adjacent land

This option would leave the zonings as they are on land adjacent to the 46 local and town centres (noting that all relevant residential zones would have the MDRS apply). An AUP tool of a Height Variation Control, Precinct, or Overlay would be added to the adjacent land to enable more commensurate heights and density of urban form.

6.10.3 Evaluation of options – How to enable heights and densities of urban form that are commensurate with the level of activities and services within and adjacent to each of the centres?

Figure 28 below evaluates the four options for determining how to enable greater heights and densities of urban form on land adjacent to Neighbourhood, Local and Town Centre zones. Overall, the preferred approach is 'Option 3 – Rezone adjacent land THAB'. This option achieves the objective of implementing Policy 3(d) of the NPS-UD using an existing zone framework and retaining the integrity of the zoning approach in the AUP. This option also does not risk undermining the suburban centres by enabling centre-type activities outside the centre (i.e. potential diluting the centre uses across a wider area).

	Option 1: Status Quo (Do nothing)	Option 2: Option 2: Rezone adjacent land to THAB	Option 3: Rezone adjacent land to Mixed Use zone	Option 4: Retain zonings but add a Height Variation Control/Precinct/or Overlay to the adjacent land
Appropriateness	Inappropriate as it does not implement Policy 3(d) of the NPS-UD.	Most appropriate as it uses an existing zone already set up for high density residential outcomes. Does not risk undermining the suburban centres.	Not appropriate as it introduces a new supply of potential commercial land that risks the dilution of the suburban centres and potentially undermines the centres based approach in the Auckland Plan and the Regional Policy Statement section of the AUP. Potentially could be done where centre or area plans have already proven merit and there is evidence to show the centre will not be negatively impacted. However, in nearly all cases, this planning work has not been completed.	Not appropriate as it distorts the zone based approach in the AUP by introducing large differentials in the outcomes from the underlying zones to what the precincts/HVCs and overlays would enable. Seemingly simple, but would create complexity by overlapping existing precincts/HVCs and overlays.
Effectiveness	Ineffective in implementing Policy 3(d).	Implements Policy 3(d) effectively.	Implements Policy 3(d) but goes further than the Policy 3(d) height and density directions and enables a large mix of uses around the suburban centres.	Implements Policy 3(d) but new precinct/HVC or overlay would in many cases need to change development standards well beyond many of those within the current underlying zones.
Efficiency	Efficient process but does not implement the NPS-UD.	Minimal costs while implementing the NPS-UD.	Requires a high level analysis to ensure that the Mixed Use zoning won't undermine the role of the centres themselves by dispersing the centre-type activities	Keeps current zonings but uses a complicated plan method to enable greater heights and densities of urban form.
Costs	Does not commensurate heights and densities of urban form on land adjacent to specific local and town centres with medium/high or high levels of activities and services – where density is directed by the NPS-UD.	Could result in areas of dense population with little provision for complementary retail or food and beverage (although the centres themselves are very close).	Will require each local and town centre to be analysed in detail to see if the Mixed Use zoning is appropriate. Lower residential amenity and fewer zone protections for residents than the THAB zone (Option 2). Area or centre planning would needed before such a significant change in zoning.	New precinct or overlay would require further work (spatial sets of objectives and policies). Will lead to the new precinct/HVC or overlay overlapping with existing precincts/HVCs and overlays, with associated integration issues. Plan integrity issues with precincts/HVCs and overlays having large differentials in outcomes from the underlying zones, rendering much of the underlying zoning

				and related Auckland-wide provisions redundant.
Benefits	Could retain the some of the existing suburban character of areas (noting that MDRS will apply in any case).	Uses an existing zone already set up for high density residential outcomes. Increases residential capacity around selected suburban centres.	Allows for outward growth of centres and potentially a clearer business-residential land use transition. Could create more vitality in and around centres.	No need to change zoning so retains some of the integrity of the AUP spatial zone allocation. Avoids structural implications across the AUP. Precinct or overlay could include matters beyond height.
Risks	High risk (legal and reputational) for the council – as it does not follow directions to implement Policy 3(d).	Risks creating a stale environment of intensive residential development with few other uses.	Lack of evidence to justify this additional supply of business land. Further information would be required to confirm that the centre zones themselves would not be negatively impacted by rezoning of adjacent residential land to Mixed Use. An oversupply of land for centre-type activities risks the dilution of the suburban centres and potentially undermines the centres based approach in the Auckland Plan and the Regional Policy Statement section of the AUP. Lack of area / centre planning to guide decision making for business zonings adjacent to suburban centres	Risks plan integrity issues as while the zones would remain, the zone outcomes on land adjacent to some suburban centres will be significantly changed by the new precinct/HVC or overlay. Reputational risk to council as this approach could be seen to be obscuring the true implications of what is enabled on the land adjacent to suburban centres. Inconsistent with the zoning approach taken in implementing Policy 3(c).

Figure 31: Evaluation of options to enable greater heights and densities of urban form in specific local and town centre

7 Development of Plan Change

An overview of the development of the Plan Change including the methodology and information used is covered in the PC78 s32 Overall Evaluation Report.

7.1 Consultation

A full outline of the consultation undertaken on the preparation on PC78 is covered in the s32 report on engagement. This section refers only to the specific consultation and feedback on matters to do with the implementation of Policy 3.

7.1.1 Overview of public engagement on Policy 3

In April/May 2022 the Auckland Council consulted on a preliminary response to the implementation of the NPS-UD. The council's preliminary response to walkable catchments under Policy 3(c) was to propose walkable catchment distances as follows (subject to modifying factors such as landscape (e.g. steep hills), and physical barriers (e.g. streams)):

- a 15-minute walk (around 1,200 metres) from the edge of the city centre
- a 10-minute walk (around 800 metres) from the edge of metropolitan centres and around rapid transit stops

The council's preliminary response under Policy 3(d) in relation to neighbourhood, local and town centre zones was to determine the level of activities and services in each centre based on three criteria: zoning, size, and catchment (jobs and population). The subsequent intensification around these centres was proposed as follows:

- No further intensification[57] around neighbourhood centres
- 200m of THAB around larger local centres and smaller town centres (with large population catchments)
- 400m of THAB around larger town centres (with large population catchments)

During the consultation period, feedback was sought on the proposed changes to the AUP that the council have scope to make limited decisions on – such as the size of the walkable catchments and the areas around local and town centres for intensification. The council did not seek feedback on the mandatory changes the Government has directed council to make, such as having walkable catchments or six storey building heights.

Overall, 7,860 pieces of feedback were received during the April/May consultation. These came via online feedback forms, at virtual Have Your Say events and through email.

In addition, Auckland Council commissioned Kantar Public to carry out a representative survey of Aucklanders to measure levels of support for key aspects of Auckland Council's

[57] Noting that the baseline of intensification around neighbourhood centres is the MDRS.

preliminary response. An online survey of 2,041 Aucklanders aged 18 years and over was carried out in April/May 2022.

7.1.2 Feedback on 1,200m walkable catchment around the city centre

Figure 32 below summarises feedback form responses to the specific question "What do you think of our proposed walkable catchment of 1,200 metres from the edge of the city centre?"

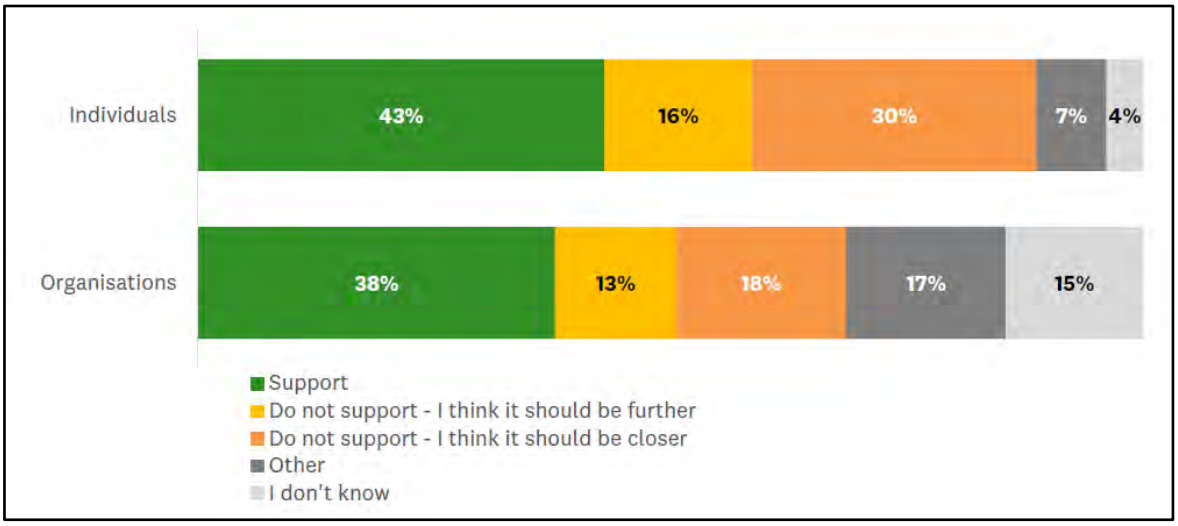


Figure 32: Summary of feedback on proposed 1,200m walkable catchment around the city centre

In terms of individuals' feedback, the highest response was in support of the 1,200m walkable catchment (43%). A distance of at least 1,200m was supported by 59% of responses.[58] Around a third of responses wanted the walkable catchment around the city centre to be closer than 1,200m.

The Kantar Public survey showed slightly higher levels of support (50%) for the proposed 1,200m walkable catchment from the city centre. In that survey 16% of respondents did not support the 1,200m distance because they felt it should be larger and 21% did not support it because they felt it should be smaller.

Other feedback (not via the feedback forms) was received from various stakeholders. The residents' groups from the suburbs around the city centre all sought that the walkable catchment around the city centre be closer than 1,200m:

- The Parnell Community Committee sought an 800m walkable catchment.
- The Freemans Bay Residents Association sought an 800m walkable catchment.
- The St Marys Bay Association sought to exclude St Marys Bay from the walkable catchment.
- The Grey Lynn Residents Association sought that the walkable catchment be "closer" than 1,200m.

[58] Combining the 'Support' and 'Do not support – think it should be further' responses.

There was concern from these groups about the walkable catchment being measured from the edge of the City Centre zone, rather than a point somewhere in the middle of the city centre (i.e. Queen Street). There was also particular concern around properties within the walkable catchment and the implications this would have on their status as a Residential Special Character Area.

Overall, some feedback on defining walkable catchments was influenced by the extent to which other outcomes were affected by the size of the catchment (such as extent of special character areas, support for future rapid transit and reducing pressure for intensification outside of walkable catchments, in suburban areas). That is, much feedback on walkable catchments was prompted by other concerns than the direct issue of how far people are (on average) prepared to walk.

Other key stakeholders either supported the 1,200m distance for the city centre walkable catchment or sought that it be increased:

- The Property Council supported the 1,200m walkable catchment.
- Kainga Ora sought that the city centre walkable catchment be 2,000m.
- Waka Kotahi sought that the city centre walkable catchment be 1,500m – 1,800m.
- The Coalition for More Homes sought that the city centre walkable catchment be 2,400m.

7.1.3 Feedback on 800m walkable catchments around metropolitan centres

Figure 33 below summarises feedback form responses to the specific question "What do you think of our proposed walkable catchment of 800 metres from the edge of the metropolitan centres?"

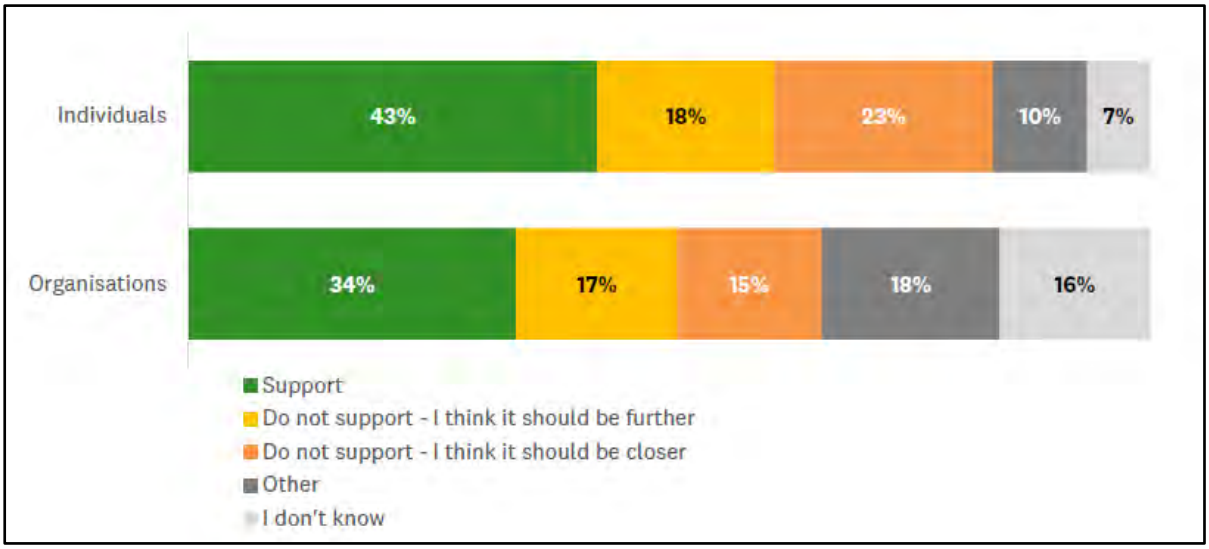


Figure 33: Summary of feedback on proposed 800m walkable catchments around metropolitan centres

In terms of individuals' feedback, the highest response was in support of the 800m walkable catchment (43%). A distance of at least 800m was supported by 61% of responses.[59] Around a quarter of responses wanted the walkable catchment around the metropolitan centres to be closer than 800m.

The Kantar Public survey showed slightly higher levels of support (49%) for the proposed 800m walkable catchment from the metropolitan centres. In that survey 25% of respondents did not support the 800m distance because they felt it should be larger and 14% did not support it because they felt it should be smaller.

Other feedback (not via the feedback forms) was received from various stakeholders. The Property Council, Waka Kotahi, and the Coalition for More Homes supported the 800m walkable catchments around the metropolitan centres. However, the Coalition for More Homes sought that the metropolitan centres on the isthmus (Newmarket and Sylvia Park) have larger walkable catchments of 1,600m. Kainga Ora sought that all metropolitan centres should have walkable catchments of 1,200m.

7.1.4 Feedback on 800m rapid transit stop walkable catchments

Figure 34 below summarises feedback form responses to the specific question "What do you think of our proposed walkable catchment of 800 metres around rapid transit stops?"

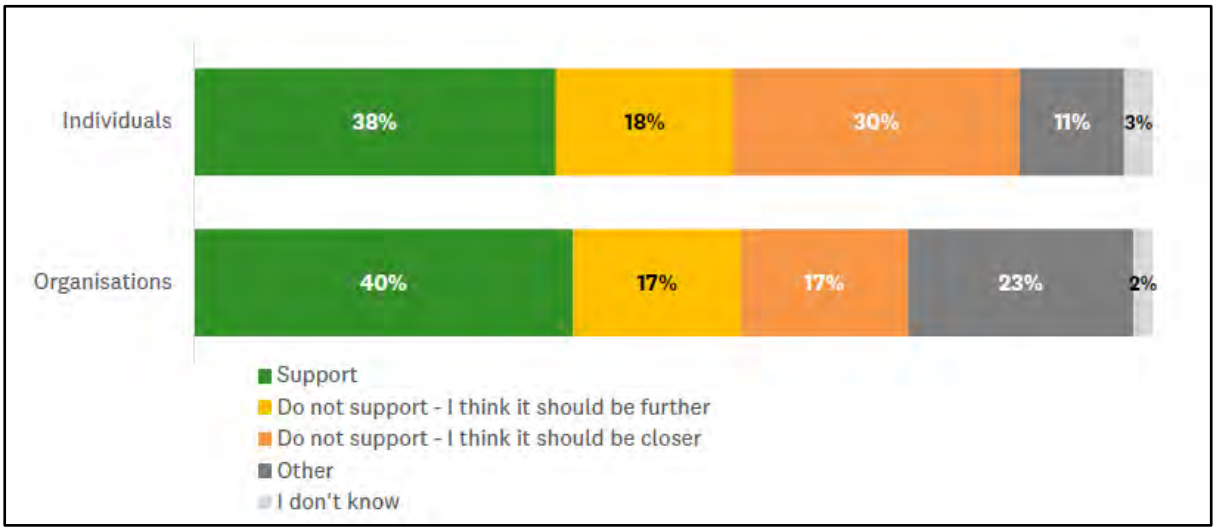


Figure 34: Summary of feedback on proposed 800m walkable catchments around rapid transit stops

In terms of individuals' feedback, the highest response was in support of the 800m walkable catchment (38%), but this was slightly lower than the support for the previous walkable catchments for the city centre and metropolitan centres. A distance of at least 800m around rapid transit stops was supported by 56% of responses.[60] Around a third of responses wanted the walkable catchments to be closer than 800m.

[59] Combining the 'Support' and 'Do not support – think it should be further' responses.
[60] Combining the 'Support' and 'Do not support – think it should be further' responses.

The Kantar Public survey showed a higher level of support (52%) for the proposed 800m walkable catchment from the rapid transit stops. In that survey 21% of respondents did not support an 800m distance because they felt it should be larger and 14% did not support it because they felt it should be smaller.

Other feedback (not via the feedback forms) was received from various stakeholders. The Property Council, Waka Kotahi, and the Coalition for More Homes supported the 800m walkable catchments around the rapid transit stops. However, the Coalition for More Homes sought that all the rapid transit stops on the isthmus have larger walkable catchments of 1,600m. Kainga Ora sought that all rapid transit stops in Auckland should have walkable catchments of 1,200m.

7.1.5 Feedback on the application of the THAB zone around 400m from specific town centres

Figure 35 below summarises feedback form responses to the specific question "What do you think of our proposal to apply the Terrace Housing and Apartment Buildings zone to residential areas up to around 400m from large town centres with high accessibility?" [61]

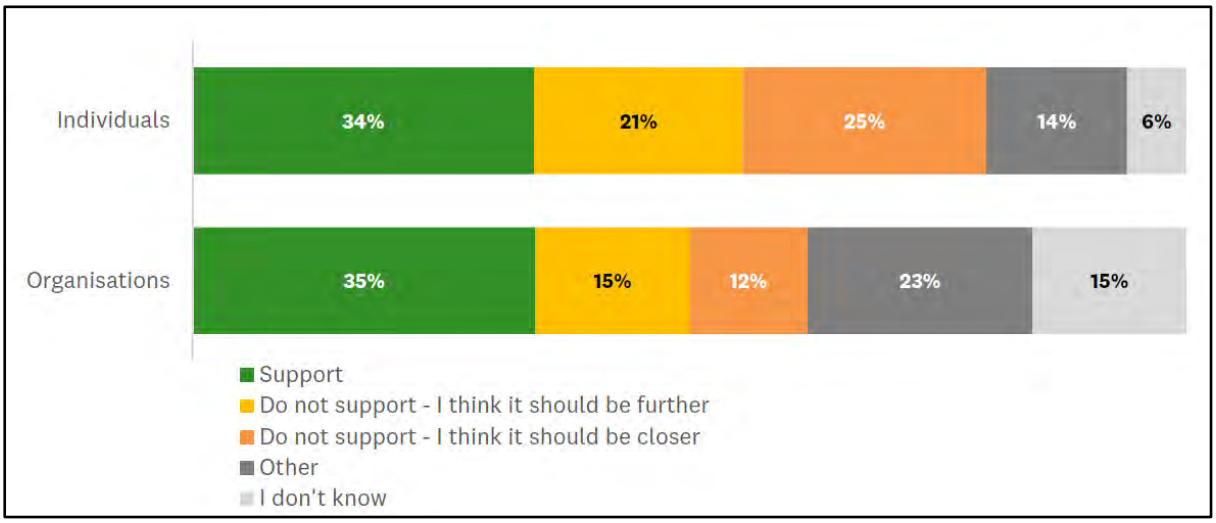


Figure 35: Summary of feedback on proposed application of THAB around 400m from large town centres with high accessibility (catchments)

In terms of individuals' feedback, the highest response was in support of the application of the THAB zone around 400m from specific town centres (34%). A distance of at least 400m was supported by 55% of responses.[62] A quarter of responses wanted the THAB applied to a smaller area, closer than 400m from the town centres.

The Kantar Public survey showed a higher level of support (49%) for the application of the THAB zone around 400m from specific town centres. In that survey 26% of respondents did

[61] 'High accessibility' relates to the size of the population and employment catchment of the centre via a 45 minute public transport trip.
[62] Combining the 'Support' and 'Do not support – think it should be further' responses.

not support the proposed rezoning because they felt the area of rezoning should be larger and 12% did not support it because they felt it should be smaller.

Other feedback (not via the feedback forms) was received from various stakeholders. A number of the stakeholders sought that the area where the THAB was proposed to apply around town centres be increased:

- The Property Council supported the 400m THAB area but sought that it apply to more town centres.
- Kainga Ora sought that the THAB area be increased to 800m and that this area apply to all town centres.
- Waka Kotahi sought that the THAB area be increased around town centres (unspecified distance/area).
- The Coalition for More Homes sought that the THAB area be increased to 800m for all town centres on the isthmus.

7.1.6 Feedback on the application of the THAB zone around 200m from specific town centres

Figure 36 below summarises feedback form responses to the specific question "What do you think of our proposal to apply the Terrace Housing and Apartment Buildings zone to residential areas up to around 200m from small town centres or large local centres with high accessibility?" [63]

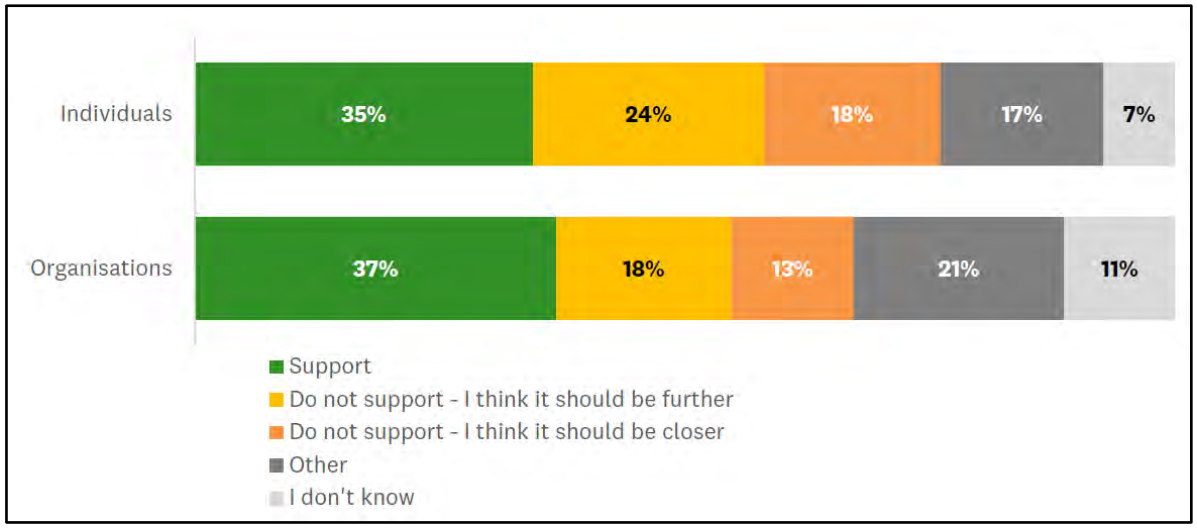


Figure 36: Summary of feedback on proposed application of THAB around 200m from small town centres or large local centres with high accessibility (catchment)

In terms of individuals' feedback, the highest response was in support of the application of the THAB zone around 200m from specific town and local centres (35%). A distance of at

[63] 'High accessibility' relates to the size of the population and employment catchment of the centre via a 45 minute public transport trip.

least 200m was supported by 59% of responses.[64] About a quarter of responses wanted the THAB applied to a larger area, further than 200m from the town and local centres.

The Kantar Public survey showed a higher level of support (46%) for the application of the THAB zone around 200m from specific town and local centres. In that survey 30% of respondents did not support the proposed rezoning because they felt it should be larger and 10% did not support it because they felt it should be smaller.

Other feedback (not via the feedback forms) was received from various stakeholders. The Property Council supported the 200m THAB area for local centres but sought 400m for town centres. Other stakeholders sought that the area where the THAB was proposed to apply around these specific town and local centres be increased as follows:

- Kainga Ora sought that the THAB area be increased to 400m around the specific town and local centres.
- Waka Kotahi sought that the THAB area be increased around the specific town and local centres but did not specify the distance or area.
- The Coalition for More Homes sought that the THAB area be increased to 400m around the specific town and local centres and that all local centres on the isthmus have 400m of THAB applied.

7.1.7 Feedback from those with accessibility limitations

Feedback was received from a number of groups representing people with accessibility limitations. Blind Citizens New Zealand provided feedback on behalf of its blind, deafblind and vision impaired members of the Auckland Branch. No direct feedback was provided on the walkable catchment distances, but it was noted that some people have to walk extra distances to use safe road crossings to get to and from the nodes. They also sought significant and urgent improvements to Auckland's footpaths and road crossings.

The Disabled Persons Assembly of New Zealand provided feedback that focused on accessible lifts in medium density dwellings. No specific feedback was given on walkable catchments.

Auckland Council's Disability Advisory Panel gave feedback that the proposed walkable catchment distances were too large to cater for disabled people. They sought that the catchments should equate to between a 5 and 8 minute walk from a nodal point.

People with accessibility limitations was also a component of the feedback from iwi groups, with concerns around the walkable catchment distances in regard to their less able whanau members.

[64] Combining the 'Support' and 'Do not support – think it should be further' responses.

7.1.8 Feedback on other Policy 3 matters

Specific feedback from some stakeholders raised the following matters that relate to the implementation of Policy 3:

- The interpretation of rapid transit services is too narrow and should include other services within Auckland that provide a frequent service utilising bus priority or bus lanes. All train stations should be included within definition of a rapid transit service (including the Penrose to Onehunga branch of the rail network)
- The planned stations along the Pakuranga to Botany section of the Eastern Busway should have walkable catchments apply to them, as there is enough information now around the locations of the stations to enable walkable catchments to be identified.
- General support for the proposal to not intensify any further around the neighbourhood centres (noting that the MDRS will already apply to relevant residential zones around these centres).
- The THAB areas proposed to be rezoned around specific town and local centres under Policy 3(d) should be enabled to at least six storeys instead of the standard five storeys.
- Local Centre zones proposed to be surrounded by THAB should have their heights increased to six storeys.
- Town Centre zones should have their heights standards enable at least six storeys and, where appropriate, they could provide for up to 15 stories.
- Consideration should be given to the expansion of centre zones and/or the application of the Mixed Use zone inside the walkable catchments.

7.1.9 Amendments to walkable catchments based on public feedback

Feedback on some specific walkable catchments and their boundaries was received from individuals, community groups, interest groups, and local boards. Council staff were able to review this feedback and, in some cases, amendments were made to the walkable catchment boundaries in response to this feedback. Notably, the walkable catchment boundaries of the City Centre zone around St Marys Bay and Parnell were adjusted in light of specific feedback related to modifying factors such as topography.

Furthermore, prior to notification the walkable catchments were cross-checked against each other to attempt to make them consistent across the region. A number of further minor changes to the walkable catchments were made at this point such as including various zones inside the catchments that had previously been excluded (such as open space zones, special purpose zones etc).

8 Conclusion

Section 32 requires an assessment of whether the proposed provisions are the more effective and efficient means of implementing the relevant objectives, having considered options and their costs and benefits.

In the context of section 77G and 77N of the RMA (duty to give effect to policy 3) the key evaluations in this report relate to enabling more residential and business capacity in the city centre, metropolitan centres, the walkable catchments, and within and adjacent to suburban centres.

As outlined in the PC78 s32 Overall Evaluation Report, there is already a large amount of capacity enabled in the AUP and through the mandated application of the MDRS across suburban Auckland. While Policy 3 of the NPS-UD attempts to reinforce a compact city approach with density linked to centres and high-quality public transport, the broad application of the MDRS conflicts with this.

The effect of different Policy 3 implementation options (e.g. walkable catchment distances) is not crucial in terms of overall capacity across Auckland. However, for specific geographic areas with high demand (such as around the city centre) the options of how to apply Policy 3 are significant for those areas.

Overall, the implementation of Policy 3 in the IPI as proposed by the Council represents an effective and efficient response to the requirements of the NPS-UD.

9 Glossary / List of acronyms

Acronym or term	Meaning
AMETI	Auckland Manukau Eastern Transport Initiative
ARTP	Auckland Rapid Transit Plan
AT	Auckland Transport
AUP	Auckland Unitary Plan (Operative in Part)
CCO	Council-controlled organisation
FTN	Frequent Transport Network
GFA	Gross floor area
GIS	Geographic Information System
GPS	Global Positioning System
HBA	Housing and Business Assessment
HIRB	Height in relation to boundary
HVC	Height Variation Control
HGI Section	Operative Auckland Council District Plan – Hauraki Gulf Islands section (2018)
IPI	Intensification Planning Instrument
m	Metres
MEC	Modified Employment Count
MDRS	Medium Density Residential Standards
MfE	Ministry for the Environment
MHU	Residential – Mixed Housing Urban zone
NPS-UD	National Policy Statement on Urban Development
Waka Kotahi	Waka Kotahi NZ Transport Agency
RLTP	Regional Land Transport Plan
RMA	Resource Management Act 1991
RTN	Rapid Transit Network
S32/s32	Section 32 of Resource Management Act 1991
SA2	Statistical Area 2
THAB	Residential – Terrace Housing and Apartment Buildings zone
Transit	Public Transport
QTN	Quality Transit Network

10 References / Bibliography

- Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment.

- Urban street and road design guide, Auckland Transport, 2019 https://at.govt.nz/media/1980686/urban-street-and-road-design-guide.pdf

- Roads and streets framework, Auckland Transport, 2018 https://at.govt.nz/media/1976084/roads-and-streets-framework-webcompressed.pdf

- Waka Kotahi (2021) Draft Pedestrian Network Guidance. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/planning/walkability/measuring-walkability/

- Millward, H., Spinney, J., & Scott, D. (2013). Active-transport walking behaviour: destinations, durations, distances. *Journal of Transport Geography, 28,* 101-110. https://doi.org/10.1016/j.jtrangeo.2012.11.012.

- Alshalalfah, B. & Shalaby, Amer. (2007). Case Study: Relationship of Walk Access Distance to Transit with Service, Travel, and Personal Characteristics. *Journal of Urban Planning and Development. 133(2).* 10.1061/(ASCE)0733-9488(2007)133:2(114).

- Burke, M., & Brown, A. (2007). Distances People Walk for Transport. Road & Transport Research, 16(3), 16–29. https://search.informit.org/doi/10.3316/informit.880016006301032

- Daniels, R., & Mulley, C. (2013). Explaining walking distance to public transport: The dominance of public transport supply. *Journal of Transport and Land Use*, *6*(2), 5–20. http://www.jstor.org/stable/26202654

- Zhao, F., Chow, L.-F., Li, M.-T., Ubaka, I., & Gan, A. (2003). Forecasting Transit Walk Accessibility: Regression Model Alternative to Buffer Method. Transportation Research Record, 1835(1), 34–41. https://doi.org/10.3141/1835-05

- Badland, H. M., Garrett, N., & Schofield, G. M. (2010). How Does Car Parking Availability and Public Transport Accessibility Influence Work-Related Travel Behaviours? *Sustainability*, *2*(2), 576–590. https://doi.org/10.3390/su2020576

- Agrawal, W. A., Schlossberg, M., & Irvin, K. (2008). How Far, by Which Route and Why? A Spatial Analysis of Pedestrian Preference, Journal of Urban Design, 13:1, 81-98. 10.1080/13574800701804074

- El-Geneidy, A., Grimsrud, M., Rania, W., Tétreault, P., & Surprenant-Legault, J. (2014). New evidence on walking distances to transit stops: Identifying redundancies and gaps using variable service areas. *Transportation (41),* 193-210. 10.1007/s11116-013-9508-z.

- Wedderburn, M. (2013). Improving the cost-benefit analysis of integrated PT, walking and cycling. New Zealand Transport Agency. https://www.nzta.govt.nz/assets/resources/research/reports/537/docs/537.pdf

- O'Sullivan, S., & Morrall, J. (1996). *Walking Distances to and from Light-Rail Transit Stations*. Transportation Research Record, 1538(1). 19–26. https://doi.org/10.1177/0361198196153800103

- Cervero, R., Round, A., Goldman, T., & Wu, K. (1995). *Rail Access Modes and Catchment Areas for the BART System.* UC Berkley Institute of Urban and Regional Development. https://escholarship.org/uc/item/0m92j0kr

- Walton, D., & Sunseri, S. (2007). Impediments to Walking as a Mode Choice. Land Transport New Zealand. https://www.nzta.govt.nz/assets/resources/research/reports/329/docs/329.pdf

- Ewing, R., & Cervero, R. (2010). Travel and the Built Environment. *Journal of the American Planning Association, 76:3,* 265-294. 10.1080/01944361003766766

- Stevens, M. R. (2017). Does Compact Development Make People Drive Less? *Journal of the American Planning Association, 83:1,* 7-18. 10.1080/01944363.2016.1240044

- Ewing, R., & Cervero, R. (2017). "Does Compact Development Make People Drive Less?" The Answer Is Yes. *Journal of the American Planning Association, 83:1,* 19-25. 10.1080/01944363.2016.1245112

- Cervero, R., & Guerra, E. (2011). Urban Densities and Transit: A Multi-dimensional Perspective. *UC Berkeley: Center for Future Urban Transport: A Volvo Center of Excellence*. https://escholarship.org/uc/item/3mb598qr

- Ewing, R., Tian, G., Goates, J., Zhang, M., Greenwald, M. J., Joyce, A., Kircher, J., & Greene, W. (2015). Varying influences of the built environment on household travel in 15 diverse regions of the United States. Urban Studies, 52(13), 2330–2348. https://doi.org/10.1177/0042098014560991

- Aston, L., Currie, G., Delbosc, A., & Kamruzzaman, M. D., & Teller, D. (2020). Exploring built environment impacts on transit use – an updated meta-analysis. *Transport Reviews. 41:1.* 73-96. 10.1080/01441647.2020.1806941.

- National Academies of Sciences, Engineering, and Medicine. (2013). Transit Capacity and Quality of Service Manual, Third Edition. Washington, DC: The National Academies Press. https://doi.org/10.17226/24766.

- Frank, L. D., Sallis, J. F., Conway, T. L., Chapman, J. E., Saelens, B. E. & Bachman, W. (2006). Many Pathways from Land Use to Health: Associations between Neighborhood Walkability and Active Transportation, Body Mass Index, and Air Quality, Journal of the American Planning Association, 72:1. 75-87. 10.1080/01944360608976725

- Adkins, A., Makarewicz, C., Scanze, M., Ingram, M., & Luhr, G. (2017). Contextualizing Walkability: Do Relationships Between Built Environments and Walking Vary by Socioeconomic Context? *Journal of the American Planning Association, 83:3*, 296-314. 10.1080/01944363.2017.1322527

- Loutzenheiser, D. R. (1997). Pedestrian Access to Transit: Model of Walk Trips and Their Design and Urban Form Determinants Around Bay Area Rapid Transit Stations. *Transportation Research Record, 1604(1),* 40–49. https://doi.org/10.3141/1604-06

- Wilson, L (2013). Walkable catchments analysis at Auckland train and Northern Busway stations – 2013. Technical Report: TR2013/014. Auckland Council. https://knowledgeauckland.org.nz/media/1541/tr2013-014-walkable-catchments-analysis-at-auckland-train-and-northern-busway-stations-2013.pdf

- Rahman, N. A., Shamsuddin, S., & Ghani, I. (2015). What Makes People Use the Street?: Towards a Liveable Urban Environment in Kuala Lumpur City Centre. *Procedia - Social and Behavioural Sciences, 170,* 624-632. https://doi.org/10.1016/j.sbspro.2015.01.064.

- Larsen, J., El-Geneidy, A., & Yasmin, F. (2010). Beyond the Quarter Mile: Re-examining Travel Distances by Active Transportation. *Canadian Journal of Urban Research*, *19*(1), 70–88. http://www.jstor.org/stable/26193275

- Allan, Andrew. (2001). Walking as a Local Transport Modal Choice in Adelaide. EcoPlan International.

- Ker, I.T., & Ginn, S.G. (2003). Myths and Realities in Walkable Catchments: The Case of Walking and Transit. *Road & Transport Research, 12*, 69-80.

- Pafka, E. & Dovey, K. (2017). Permeability and interface catchment: measuring and mapping walkable access. *Journal of Urbanism: International Research on Placemaking and Urban Sustainability, 10:2,* 150-162. 10.1080/17549175.2016.1220413

- McCormack, G.R., Friedenreich, C.M., Sandalack, B.A., Giles-Corti, B., Doyle-Baker, P.K., & Shiell, A. (2012). The relationship between cluster-analysis derived walkability and local recreational and transportation walking among Canadian adults. *Health & place, 18 5*, 1079-87 .

- Gunn, Lucy & King, Tania & Mavoa, Suzanne & Lamb, Karen & Giles-Corti, Billie & Kavanagh, Anne. (2016). Identifying destination distances that support walking trips in local neighborhoods. *Journal of Transport & Health, 5,* 133- 141. 10.1016/j.jth.2016.08.009.

- Daamen, W., & Hoogendoorn, S. P. (2003). Experimental Research of Pedestrian Walking Behaviour. Transportation Research Record, 1828(1), 20–30. https://doi.org/10.3141/1828-03

- Barton, H., Grant, M. & Guise, R. (2003). Shaping neighbourhoods: A guide for health, sustainability and vitality. New York: Spon Press.

- Olson, J. (2010). *The neighbourhood unit: How does Perry's concept apply to modern day planning.* EVstudio Colorado & Texas Architects & Engineers. https://evstudio.com/the-neighborhood-unit-how-does-perrys-concept-apply-to-modern-day-planning/

- Patricia. (2010). Normal walking speed: Average human walking pace. Yogawiz. http://www.yogawiz.com/blog/walking/normal-walking-speed.html

- Iacono, M., Krizek, K., & El-Geneidy, A. M. (2008). *Access to Destinations: How Close is Close Enough? Estimating Accurate Distance Decay Functions for Multiple Modes and Different Purposes.* Minnesota Department of Transportation. https://hdl.handle.net/11299/151329.

- McCormack, G. R., Giles-Corti, B., & Bulsara, M. (2008). The relationship between destination proximity, destination mix and physical activity behaviours. *Preventive medicine*, *46*(1), 33–40. https://doi.org/10.1016/j.ypmed.2007.01.013

- Sugiyama, T., Neuhaus, M., Cole, R., Giles-Corti, B., & Owen, N. (2012). Destination and route attributes associated with adults' walking: a review. *Medicine & Science in Sports & Exercise. 44:7.* 1275-1286. 10.1249/MSS.0b013e318247d286.

- Hinckson, E., Cerin, E., Mavoa, S. et al. (2017). Associations of the perceived and objective neighborhood environment with physical activity and sedentary time in New Zealand adolescents. *International Journal of Behavioral Nutrition and Physical Activity, 14,* 145. https://doi.org/10.1186/s12966-017-0597-5

- Saelens, B. E., & Handy, S. L. (2008). Built environment correlates of walking: a review. *Medicine and science in sports and exercise*, *40*(7 Suppl), S550–S566. https://doi.org/10.1249/MSS.0b013e31817c67a4

- Lee, C., & Moudon, A. V. (2006). Correlates of Walking for Transportation or Recreation Purposes. *Journal of physical activity & health*, *3*(s1), S77–S98. https://doi.org/10.1123/jpah.3.s1.s77

- Frank, L. D., Schmid, T. L., Sallis, J. F., Chapman, J., & Saelens, B. E. (2005). Linking objectively measured physical activity with objectively measured urban form: findings from SMARTRAQ. *American journal of preventive medicine*, *28*(2 Suppl 2), 117–125. https://doi.org/10.1016/j.amepre.2004.11.001

- Witten, K., Blakely, T., Bagheri, N., Badland, H., Ivory, V., Pearce, J., Mavoa, S., Hinckson, E., & Schofield, G. (2012). Neighborhood built environment and transport and leisure physical activity: findings using objective exposure and outcome measures in New Zealand. *Environmental health perspectives*, *120*(7), 971–977. https://doi.org/10.1289/ehp.1104584

- Krizek, K., & Johnson, P. J. (2006). Proximity to Trails and Retail: *Effects on Urban Cycling and Walking. Journal of the American Planning Association. 72:1.* 33-42. 10.1080/01944360608976722.

- Smith, M., Hosking, J., Woodward, A., Witten, K., MacMillan, A., Field, A., Baas, P., & Mackie, H. (2017). Systematic literature review of built environment effects on physical activity and active transport - an update and new findings on health equity. *The international journal of behavioural nutrition and physical activity*, *14*(1), 158. https://doi.org/10.1186/s12966-017-0613-9

- Yang, Y., & Diez Roux, A. (2012). Walking Distance by Trip Purpose and Population Subgroups. *American journal of preventive medicine. 43.* 11-9. 10.1016/j.amepre.2012.03.015.

- Gehl, J. (2010). Cities for People. Washington DC: Island Press. https://umranica.wikido.xyz/repo/7/75/Cities_For_People_-_Jan_Gehl.pdf

- Wang, Y., Chau, C.K., Ng, W.Y., & Leung, T.M. (2016). A review on the effects of physical built environment attributes on enhancing walking and cycling activity levels within residential neighborhoods. *Cities. 50.* 1-15. 10.1016/j.cities.2015.08.004.

- Witten, K., Pearce, J., & Day, P. (2011). Neighbourhood Destination Accessibility Index: A GIS Tool for Measuring Infrastructure Support for Neighbourhood Physical Activity. Environment and Planning A: Economy and Space, 43(1), 205–223. https://doi.org/10.1068/a43219

- Munro, I. (2009). The Problem of Catchment in Centres-based Residential Growth Planning. Urbanism Plus Ltd.

- Clifton, K.J., Muhs, C., Morrissey, S., Morrissey, T., Currans, K. & Ritter, C. (2012). Consumer Behaviour and Travel Mode Choices. Oregon Transportation Research and Education Consortium. NACTO. https://nacto.org/references/clifton-kelly-kristina-m/

- Ministry for the Environment. (2002). People + Places + Spaces – A design guide for urban New Zealand. https://www.boprc.govt.nz/media/90678/peopleplacesspacesurbandesignguideentirereport.pdf

- Ministry for the Environment. (2006). Urban Design Toolkit. https://environment.govt.nz/assets/Publications/Files/urban-design-toolkit-third-edition.pdf

- Crowan, R. (2008). PAN 83: Master Planning. Scottish Government. https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2008/09/pan-83-planning-advice-note-master-planning/documents/0068213-pdf/0068213-pdf/govscot%3Adocument/0068213.pdf

- Llewelyn-Davies. (2000). The Urban Design Compendium. English Partnerships – The National Regeneration Agency and The Housing Cooperation. https://webapps.stoke.gov.uk/uploadedfiles/Urban%20Design%20Compendium%201.pdf

- Ladetto, Q., Gabaglio, V., Merminod, B., Terrier, P., & Schutz, Y. (2000). Human Walking Analysis Assisted by DGPS. Global Navigation Satellite System, GNSS, Edinburgh, Scotland. https://d1wqtxts1xzle7.cloudfront.net/33433962/gnss2000_ql-with-cover-page-v2.pdf?Expires=1658658226&Signature=hMhFVyRVpDPMHfQava7LFvxOo64GcTUPO49vcPx8JbcrgmhCTSELpSsYnB1TyKY7ylAc3gbpAiitfURjPS72KYSewhLWMUrJQAxJUJP1Jv1CmvV91qHWdqU9IObbqHkm-6LEMw2xmZJR~pnw7cEqFwiJZ-k10IvlMzhV-DNoSUXN0yy-Xjx0dqvU3-f5YzkfcCflupjyJ2s-2yqJQXDM~x4YsmGAY6zBDYWBCa4D~DI0RjkB1THxP3dStvyyEJXjWk8TfIIUrCupsr-t0lnYRWHu9p5KBsl8Fb2GQEwdPxUhv5lpXUr3V9z91KTFlkwlOBjON2JqAMv7cILvHKtHFg__&Key-Pair-Id=APKAJLOHF5GGSLRBV4ZA

- Badland, H., Whitzman, C., Lowe, M., Davern, M., Aye, L., Butterworth, I., Hes, D., & Giles-Corti, B. (2014). Urban liveability: emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health. *Social science & medicine (1982)*, *111*, 64–73. https://doi.org/10.1016/j.socscimed.2014.04.003

- Forsyth, E. (2016). Walking to scale: an index to assess walkability at the residential scale. University of Auckland. http://hdl.handle.net/2292/31204

11 List of Appendices

Appendix Number	Appendix Title
1	Matters without further scope or necessity for an options analysis
2	Assessment of whether six storey buildings are enabled in the Metropolitan Centre zone
3	Context for walkable catchments
4	Modifying factors for walkable catchments - guidelines
5	Context for determining the size of walkable catchments
6	New Chapter G2 – Walkable Catchments
7	Plan methods to enable greater heights and density of urban form
8	Policy 3(d): A background and interpretation of key terms
9	Determining the levels of activities and services in centres
10	Interpretation of ‘adjacent’
11	Determining heights and densities ‘commensurate’ with levels of activities and services
12	Rapid transit stops: Station entrance maps
13	Metropolitan Centre zone edge: Zone ‘entrance points’ maps
14	City Centre zone edge: Zone ‘entrance points’ map
15	200m walking distance from 28 local and town centre zones: Zone ‘entrance points’ maps
16	400m walking distance from 18 local and town centre zones: Zone ‘entrance points’ maps
17	Equivalent zones: Auckland Council District Plan – Hauraki Gulf Islands section
18	Metropolitan Centres: Growth and capacity overview
19	Potential implications of larger walkable catchment extents
20	Summary of literature on walkable catchments

Appendix 1

Matters without further scope or necessity for an options analysis

1 Matters without further scope or necessity for an options analysis

Some of the implementation of the wording of Policy 3 does not require options to be considered as the meaning of the words or phrase are clear. Examining other options in these cases would be overly onerous and would achieve little benefit. No further options have been deemed necessary to consider for the below matters relating to the implementation of Policy 3.

1.1 What is Auckland's 'urban environment'?

Policy 3 of the NPS-UD states that it is "in relation to…urban environments". Section 77F of the RMA and the NPS-UD defines the "urban environment" as:

> "any area of land (regardless of size, and irrespective of local authority or statistical boundaries) that: is, or is intended to be, predominantly urban in character; and is, or is intended to be, part of a housing and labour market of at least 10,000 people."

As outlined in the PC78 s32 Overall Evaluation Report, Auckland Council has interpreted this to mean in the context of Auckland to include:

> All land zoned residential, business and adjoining special purpose zones and open space zones as identified in the AUP, including the Hauraki Gulf Island Section, which includes metropolitan Auckland, all towns, and all rural and coastal towns and villages.

For clarity then, the urban environment in Auckland:

- includes all urban areas in the region regardless of size that are of an urban character
- includes all urban areas that are part of the wider Auckland housing and labour market
- includes areas which are zoned for urban purposes, but which are not yet urbanised (i.e. areas "intended" to be urban in character)
- utilises zonings already in the AUP
- does not include the Future Urban Zone.

One key implication of this is that Policy 3(d) applies to neighbourhood, local, and town centre zones in Auckland's rural towns and settlements.

1.2 What are 'equivalent' zones?

Policy 3 of the NPS-UD refers to the following specific zones in which intensification is directed in and around:

- City Centre zone
- Metropolitan Centre zone
- Town Centre zone
- Local Centre zone
- Neighbourhood Centre zone

Section 1.4(4) of Part 1 of the NPS-UD states:

"A reference in this National Policy Statement to a zone is: a reference to that zone as described in Standard 8 (Zone Framework Standard) of the National Planning Standard; or 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."

Auckland Council has not yet implemented the Zone Framework from the National Planning Standard. The MfE guidelines[1] on implementing the NPS-UD state that where a local authority has not adopted the standards, then the nearest equivalent zone must be used. 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.

Many of the zones in the National Planning Standard have the same or similar zone names and descriptions as those in the AUP. Based on this, the equivalent AUP zones are outlined below.

1.2.1 City Centre zone

Table 13 of the National Planning Standards includes the "City centre zone". This is described as "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 equivalent zone in the AUP is the "Business – City Centre Zone" (Chapter H8 of the AUP). The zone description states "The city centre is the top of the centres hierarchy and plays a pivotal role in Auckland's present and future success. The Business – City Centre Zone seeks to ensure the city centre is an international centre for business and learning, innovation, entertainment, culture and urban living…"

The Business – City Centre Zone is shown in "violet red" on the AUP maps as shown in Figure 1 below:

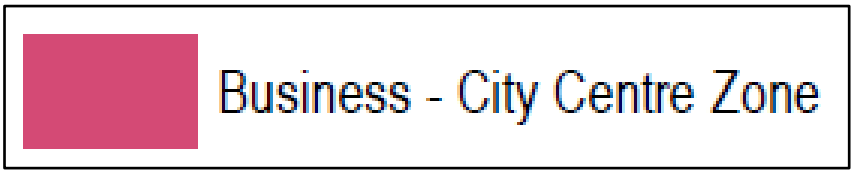


Figure 1: Auckland Unitary Plan zone colour of the Business - City Centre zone

1.2.2 Metropolitan Centre zone

Table 13 of the National Planning Standards includes the "Metropolitan centre zone". This is described as "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."

The equivalent zone in the AUP is the "Business – Metropolitan Centre Zone" (Chapter H9 of the AUP). The zone description states "The Business – Metropolitan Centre Zone applies to centres located in different sub-regional catchments of Auckland. These centres are second

[1] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment.

only to the city centre in overall scale and intensity and act as focal points for community interaction and commercial growth and development and contain hubs serving high frequency transport.

The zone provides for a wide range of activities including commercial, leisure, high-density residential, tourist, cultural, community and civic services. Zone provisions, in conjunction with rules in the other business zones, reinforce metropolitan centres as locations for all scales of commercial activity…"

The Business – Metropolitan Centre Zone is shown in "violet red and hot pink hatching" on the AUP maps as shown in Figure 2 below:

Figure 2: Auckland Unitary Plan zone colour of the Business - Metropolitan Centre zone

1.2.3 Town Centre zone

Table 13 of the National Planning Standards include the "Town centre zone". This is described as "Areas used predominantly for:

- in smaller urban areas, a range of commercial, community, recreational and residential activities.
- in larger urban areas, a range of commercial, community, recreational and residential activities that service the needs of the immediate and neighbouring suburbs."

The equivalent zone in the AUP is the "Business – Town Centre Zone" (Chapter H10 of the AUP). The zone description states "The Business – Town Centre Zone applies to suburban centres throughout Auckland, the satellite centres of Warkworth and Pukekohe, and the rural towns of Helensville and Wellsford. The centres are typically located on main arterial roads, which provide good public transport access.

The zone provides for a wide range of activities including commercial, leisure, residential, tourist, cultural, community and civic services, providing a focus for commercial activities and growth…"

The Business – Town Centre Zone is shown in "hot pink" on the AUP maps as shown in Figure 3 below:

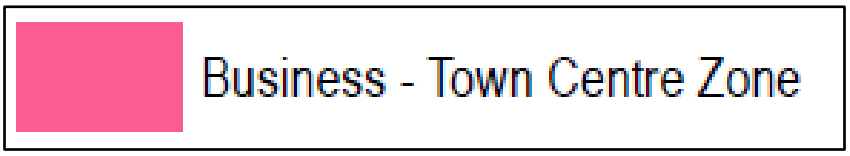


Figure 3: Auckland Unitary Plan zone colour of the Business - Town Centre zone

1.2.4 Local Centre zone

Table 13 of the National Planning Standards include the "Local centre zone". This is described as "Areas used predominantly for a range of commercial and community activities that service the needs of the residential catchment."

The equivalent zone in the AUP is the “Business – Local Centre Zone” (Chapter H11 of the AUP). The zone description states “…Areas used predominantly for a range of commercial and community activities that service the needs of the residential catchment…”

The Business – Local Centre Zone is shown in “neon pink” on the AUP maps as shown in Figure 4 below:

Figure 4: Auckland Unitary Plan zone colour of the Business - Local Centre zone

The AUP zones do not cover the Hauraki Gulf islands. The zonings for the islands are set out in the Operative Auckland Council District Plan – Hauraki Gulf Islands section (2018) (‘**HGI section**’). A comparison of the HGI section zones to the AUP zones and the National Planning Standards zones is included in **Appendix 17**.

The following zones in the HGI section are considered to be the equivalent of the “Local centre zone” in the National Planning Standards:

- Commercial 2 (Ostend village)

  This HGI section zone is the administrative centre of Waiheke, with most site sizes being greater than 1,000m^2 with a mix of commercial, residential and community facilities. The main supermarket and council offices are located at Ostend. The objectives and policies enable and consolidate commercial and community facilities.

- Matiatia (gateway)

  This HGI section land unit provides currently for a ferry terminal and surrounding transport facilities while the objectives and policies allow for a mix of activities including retail, offices and restaurants and cafes. Height of up to 8m in the mixed use portion of the area. As the wharf in the area only covers a small area while the rest of the area is intended for a mix of uses, this most closely aligns with the “Local centre zone” in the National Planning Standards.

1.2.5 Neighbourhood Centre zone

Table 13 of the National Planning Standards includes the “Neighbourhood centre zone”. This is described as “Areas used predominantly for small-scale commercial and community activities that service the needs of the immediate residential neighbourhood.”

The equivalent zone in the AUP is the “Business – Neighbourhood Centre Zone” (Chapter H12 of the AUP). The zone description states “The Business – Neighbourhood Centre Zone applies to single corner stores or small shopping strips located in residential neighbourhoods. They provide residents and passers-by with frequent retail and commercial service needs…”

The Business – Neighbourhood Centre Zone is shown in “pale violet red” on the AUP maps as shown in Figure 5 below:

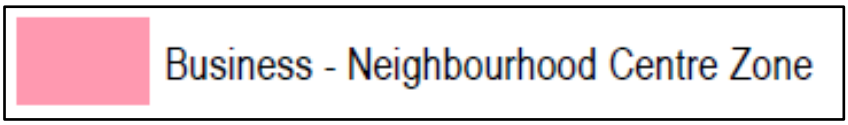


Figure 5: Auckland Unitary Plan zone colour of the Business - Neighbourhood Centre zone

The AUP zones do not cover the Hauraki Gulf islands. The zonings for the islands are set out in the Operative Auckland Council District Plan – Hauraki Gulf Islands section (2018) ('**HGI section**'). The following zones in the HGI section are considered to be the equivalent of the "Neighbourhood centre zone" in the National Planning Standards:

- Commercial 1 (Oneroa village)

  This HGI section zone is described as providing generally small scale retail and other commercial activities for relatively high volumes of traffic. Oneroa has a stronger tourism function with cafes, shops, museum, art gallery etc. The island's only library is also located at Oneroa. The objectives and policies enable a vibrant, varied and safe retail environment and allow appropriate commercial growth.

- Commercial 3 (Local shops)

  This HGI section zone is defined as having "a smaller scale than retail activities within the main commercial centres of Oneroa and Ostend". The objectives and policies provide for small scale retail, and certain non-retail activities, in close proximity to residential areas".

- Commercial 4 (visitor facilities)

  This HGI section zone is described as providing for visitor facilities and camping facilities (and restaurants as a Discretionary activity), while not providing for dwellings.

- Tryphena (local retailing area)

  The objectives and policies of this HGI section area is to concentrate good quality visitor and local retail development and activities within the local retailing area.

- Claris (local retailing area)

  The objective of this HGI section retail area is "to facilitate the establishment of local retail, service and visitor activities of high amenity in the local retailing area, without compromising the function of Claris airport".

- Okiwi (local retailing area)

  The objective of this HGI section retail area is "to provide an area for commercial activities which are compatible with the character and scale of Okiwi, to service the north part of Great Barrier".

- Port Fitzroy (local retailing area)

  This HGI section area provides retail activities which are compatible with the Port Fitzroy area.

1.3 What does ‘in’ and ‘within’ mean?

Policy 3(a) and (b) use the term “in” whereas Policy 3(c) and (d) use the term “within”.

(a) *in* city centre zones…
(b) *in* metropolitan centre zones…
(c) …*within* at least a walkable catchment of…
(d) *Within*…neighbourhood centre zones, local centre zones, and town centre zones (or equivalent)…

The use of the word “in” in Policy 3 denotes all land that is *zoned* Business – City Centre or Business – Metropolitan Centre in the AUP.

In relation to Policy 3(c) the use of the word “within” denotes all land that is inside the walkable catchments. In relation to Policy 3(d) it denotes all land that is zoned Business – Neighbourhood Centre zone, Business – Local Centre zone, and Business – Town Centre zone in the AUP.

1.4 Where is the edge of the City Centre zone and the Metropolitan Centre zones?

Policy 3(c)(ii) and (iii) refer to the edges of City Centre and Metropolitan Centre zones – being the points at which to measure a walkable catchment from. The MfE guidance on implementing the NPS-UD states that the ‘edge’ 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[2]. The guidance provides the diagram below in Figure 6 as an example of where the edge of a Metropolitan Centre zone would be.

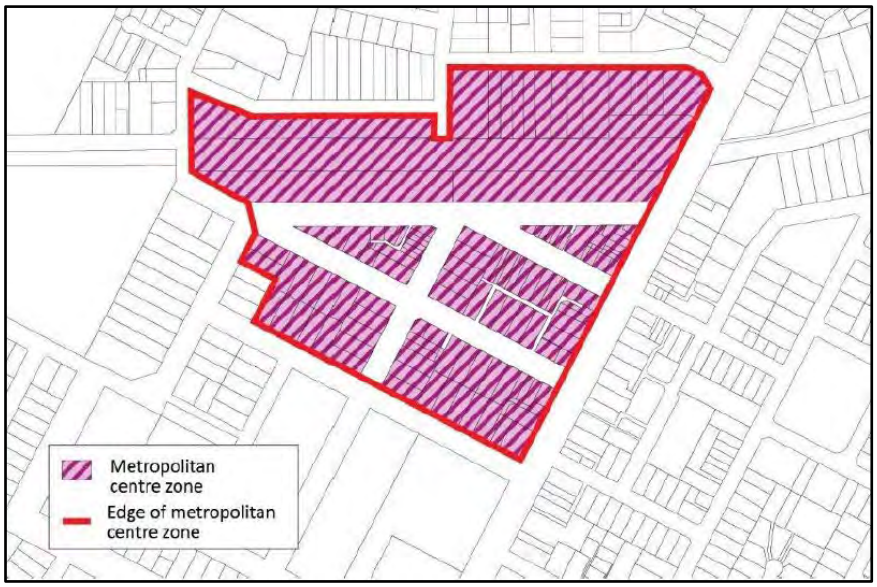


Figure 6: Diagram showing the "edge" of a Metropolitan Centre zone

[2] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment Section 5.5.1

Auckland Council has followed the intention of the guidance but rather than identify a continuous ‘edge’ the council has plotted ‘entrance points’ along the edge of the centre zones (Metropolitan and City Centre zones). This was done to enable walkable catchments to be generated in GIS more efficiently, while still following the intention of the guidance.

The entrance points at the edge of the Metropolitan Centres and the City Centre were identified and mapped by the Auckland Council’s GIS team with the following approach:

- The edge of the Metropolitan Centre and the City Centre zones were determined from the AUP layer.
- The walking dataset was added to the map which shows each location where there is a walkway (i.e. road, footpath, recreational track) at the edge of the zone boundary.
- ‘Entrance points’ were plotted along the walking dataset closest to the edge of the centre zone.
- Aerial basemaps and Google Street View were used to assist in identifying these entrance points.

The walkable catchment measurements started from each of these entrance points. Entrances points are only required at the outer extremes as these will generate the furthest catchment from the edge. Figure 7 below shows an example of where the entrance points were plotted on the walking dataset along the edge of a Metropolitan centre zone.

Figure 7: Example of entrance points plotted on the walking dataset along the edge of a centre

When plotting the entrance points it was important to note that the walkable catchments are generated along the walking network. Therefore, there is no use in plotting entrance points where the road network does not exist (e.g. an undeveloped piece of land with no road network) as the GIS calculation will not generate any catchment from that point.

A Network Analysis is then performed using GIS. Based on the 800m walking distance set for a Metropolitan Centre (as an example), the following parameters Service Area Analysis were used to run the analysis to generate the Walkable catchment of 800 metres from the edge of the zone (using the 'entrance points'). The process is shown in Figure 8 below.

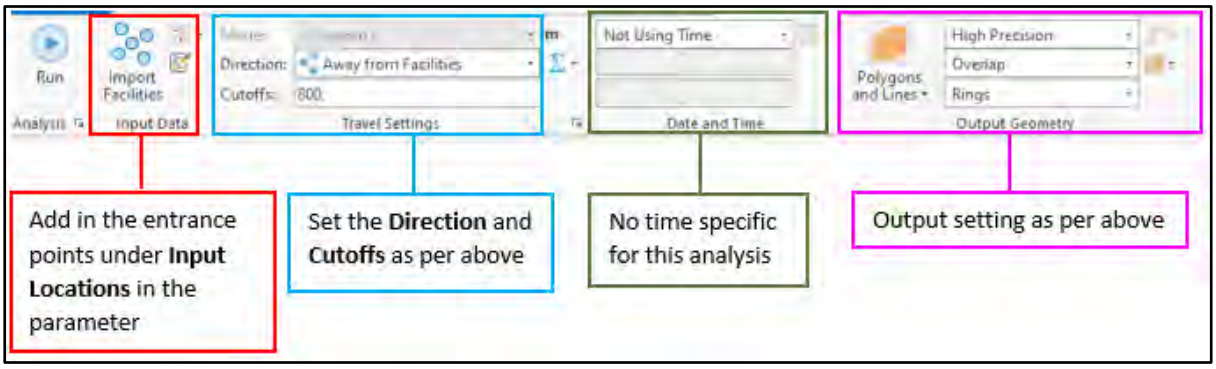


Figure 8: GIS process to generate walkable catchments based on 'entrance points'

Maps showing the 'entrance points' for the Metropolitan Centre zones are in **Appendix 13** and those for the City Centre zone are in **Appendix 14**.

1.5 What does 'building heights' mean?

The National Planning Standards define a building as:

> *"a temporary or permanent movable or immovable physical construction that is:*
>
> *(a) partially or fully roofed; and*
>
> *(b) fixed or located on or in land;*
>
> *but excludes any motorised vehicle or other mode of transport that could be moved under its own power."*

The National Planning Standards define height as:

> *"the vertical distance between a specified reference point and the highest part of any feature, structure or building above that point."*

Where Policy 3 refers to building heights, it is the ordinary meaning of this phrase in light of the above definitions. That is, the vertical distance (height) of a physical construction (building) that is located on land.

1.5.1 What does 'at least 6 storeys' mean?

Policy 3(b) and (c) refer to enabling building heights of "at least 6 storeys". The AUP height standards are not calculated in storey units, but rather are measured in metres.

To enable a 6 storey building in a walkable catchment, a height of 21m is required. The 21m total building height standard is based on enabling a 'viable' 6 storey apartment building. This is considered to enable a more viable and better quality 6 storey apartment building

than the existing Terrace Housing and Apartment Buildings zone ('**THAB**') 6 storey Height Variation Control of 19.5m.

The 21m height is made up of:

4m:	4m ground floor height
15.5m:	3.1m floor to floor heights (x 5)
1.5m:	Design flexibility to reflect site conditions/architectural requirements

Total: 21m

This height standard broadly aligns with the AUP's Height Variation Control standard which identifies 21m as the total building height for a 6 storey building in the Business – Mixed Use zone, Business – Town Centre zone, Business – Local Centre zone, and Business – Neighbourhood Centre zone.

Where Policy 3 refers to "at least" 6 storeys this means that a minimum of 6 storeys must be enabled, but 6 storeys is not necessarily the maximum height – it could be higher (but not lower) than 6 storeys.

It is also pertinent to note that the AUP must only *enable* buildings of at least 6 storeys and does not *require* new developments to be at least 6 storeys. The MfE guidance on implementing the intensification provisions of the NPS-UD state:

> "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."[3]

1.6 What does 'density of urban form' mean?

Policy 3 of the NPS-UD refers to regional policy statements and district plans enabling a "density of urban form". The AUP contains various provisions that relate directly to density such as rules around how many dwellings are permitted per site[4].

However, to genuinely enable additional density it is not just the rules specifically related to density of dwellings on a site that need to be considered. The full package of controls that affect total development space need to be considered such as gross floor area, yard and podium setbacks, and recession planes.

Therefore, the council has examined the potential limitations on density on typical urban sites and propose to amend various objectives, policies, and rules throughout the AUP to enable higher densities of urban form. This work is covered in detail in the s32 reports on the various zones.

[3] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 6.3

[4] For example Table H3.4.1 (A6) "More than one dwelling per site…" is a non-complying activity.

1.7 What does 'development capacity' mean?

The NPS-UD contains a definition of 'development capacity' as follows:

> "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."

The NPS-UD goes on to state that 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 Future Development Strategy or, if the local authority is not required to have an Future Development Strategy, any other relevant plan or strategy.[5]

Further detailed information on how development capacity is measured in Auckland is provided in the s32 on capacity and demand.

1.8 What is a 'rapid transit service'?

The NPS-UD defines a rapid transit service as "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."

Terms used within this definition (such as frequent, quick, reliable, and largely) are not further defined, leaving scope for councils to apply their own interpretation. The MfE guidance on implementing the NPS-UD does not provide any further assistance on what these terms mean, but the guidance does specifically state that examples of existing rapid transit stops include train stations on the commuter rail services in Auckland and bus stations on Auckland's Northern Busway.[6]

1.8.1 The Auckland Rapid Transit Plan (under development)

In 2020 Auckland Transport in partnership with Auckland Council and Waka Kotahi initiated work on the Auckland Rapid Transit Plan ('**ARTP**'). The plan is intended to provide clarity on long-term planning at a network level critical, which cannot be achieved through project-level business cases alone.

Most relevant to the immediate implementation of the NPS-UD has been the first stage of the ARTP process to prepare a 'baseline' document to ensure an agreed starting point for future network planning. This document defines rapid transit in Auckland's context.

---

[5] NPS-UD Clause 3.4(1)

[6] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.1

The definition of rapid transit builds on what is outlined in the Government Policy Statement 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 definition of rapid transit for the ARTP is:

> "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."

While similar to the NPS-UD definition of a 'rapid transit service', there are some differences in the approach.

1.8.2 Interpreting the key terms in the NPS-UD definition of 'rapid transit service'

The key terms in the NPS-UD definition of a 'rapid transit service' are shown in bold below and then explained further, with reference to the further work in the ARTP on what it means in the Auckland context.

> "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."

Note that the words 'existing' and 'planned' are covered in separate sections in the s32 report

> <u>'Frequent':</u>
>
> 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. These high frequencies enable rapid transit to quickly shift large numbers of people and allow for efficient connections between different public transport services. For the purposes of the NPS-UD it is considered that scheduled frequencies of no more than 15 minutes are necessary to meet this 'turn-up-and-go' need.
>
> <u>'Quick':</u>
>
> Rapid transit services must 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. However, 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, rapid transit is generally faster than other public transport services, through provision of a dedicated corridor and wider spacing between stops.
>
> <u>'Reliable':</u>
>
> Rapid transit services must operate with very high levels of reliability and be unaffected by other parts of the transport network. They will 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’:

Rapid transit services must have high capacity (i.e. be able to move a large number of people at once). This is linked to the size of the vehicle (i.e. double decker buses, multiple-car trains) in combination with high frequency services. This means that rapid transit services can move significant numbers of people per hour in a relatively small amount of space.

‘Permanent route’:

A key difference between general public transport services and rapid transit services is that the routes of the former can often change, as a bus route can be changed relatively easily. This contrasts with rapid transit services which are fixed on permanent routes and therefore form the backbone of a public transport system. The fixed route gives greater certainty to residents, businesses and land developers that the service will remain in the future.

The definition specifically limits rapid transit services to services that operate on permanent road or rail routes. Therefore, this excludes ferries from being considered a rapid transit service.

Largely separated from other traffic:

To ensure other qualifications of a rapid transit service are met (e.g. quick and reliable), rapid transit services need to be separated from other traffic. When public transport shares routes with other traffic there is the risk (if not likelihood) that congestion will hinder the service’s speed and reliability. In simple terms, the rail corridor and the dedicated busways are the public transport routes in Auckland that are separated from other traffic.

However, the NPS-UD definition only states that rapid transit services must be ‘largely’ separated from other traffic. This potentially opens up the definition to include other public transport services, such as those that run along painted bus lanes.

There seems to be no explicit explanation of the term “largely” in the development of the NPS-UD. However, it would appear its use is based on two matters:

- A *national* policy statement

  The NPS-UD is a national statement that applies not only to Auckland but in other centres in New Zealand (e.g. Christchurch) where there is no rapid transit of Auckland’s standard. The definition in the NPD-UD is written so that it can be applicable in those other centres

- The Northern Busway

  The use of the term ‘largely’ also ensures that the Northern Busway comes within the definition of a rapid transit service. The Northern Busway is not separated from other traffic along its whole route. It operates along a separated two-way road for buses between the Albany Station and the Auckland Harbour Bridge.

Between the Harbour Bridge and the terminus in the Auckland city centre, the route is a mix of regular traffic lanes and painted bus lanes.

Auckland's rapid transit services

In conclusion, Auckland's existing and planned (RLTP) rapid transit network comprises:

- the three lines[7] (Western, Southern, Eastern) of the heavy rail network between Swanson and Pukekohe, including the Central Rail Link ('CRL').
- the Northern Busway (including the recent extension to Albany).
- the Eastern Busway.

It is noted that most of Auckland's rapid transit services do not yet exist. The Akoranga to Albany section of the Busway and the Britomart to Newmarket section of the rail network are the only sections that currently meet the definition. However, most of the rest of the network is planned in the RLTP to meet the definition as the rail network frequencies increase post CRL and the electrification of the line from Papakura to Pukekohe allows improved frequencies.

Based on the interpretation of 'rapid transit service' outlined above, the sections below explain what the existing and planned rapid transit *stops* are in Auckland.

1.9 What are Auckland's '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, whether existing or planned". The MfE guidance on implementing the NPS-UD states that examples of existing rapid transit stops include train stations on the commuter rail services in Auckland and bus stations on Auckland's Northern Busway.[8]

Based on the interpretation of Auckland's rapid transit services (addressed in the above section), the 44 existing rapid transit stops in Auckland are listed in Figure 9 below.

No.	Station name	Route[9]	No.	Station name	Route
1	Akoranga Bus Station	Nth BW	**23**	New Lynn Train Station	Western
2	Albany Bus Station	Nth BW	**24**	Newmarket Train Station	Southern / Western
3	Avondale Train Station	Western	**25**	Orakei Train Station	Eastern
4	Baldwin Ave Train Station	Western	**26**	Otahuhu Train Station	Southern
5	Britomart Train Station[10]	All	**27**	Panmure Train Station	Eastern
6	Constellation Bus Station	Nth BW	**28**	Papakura Train Station	Southern
7	Ellerslie Train Station	Southern	**29**	Papatoetoe Train Station	Southern
8	Fruitvale Rd Train Station	Western	**30**	Parnell Train Station	Southern / Western

[7] The Onehunga Branch Line (Onehunga and Te Papapa stations) is not considered a rapid transit service as it is not planned to reach the frequencies required (only two trains per hour are planned).
[8] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.1
[9] 'Nth BW' – Northern Busway, 'East BW' = Eastern Busway, 'Southern' = Southern Train Line, 'Eastern' = Eastern Train Line, 'Western' = Western Train Line.
[10] Proposed be renamed 'Waitematā'.

No.	Station name	Route[9]	No.	Station name	Route
9	Glen Eden Train Station	Western	**31**	Penrose Train Station	Southern
10	Glen Innes Train Station	Eastern	**32**	Puhinui Train Station	Southern
11	Grafton Train Station	Western	**33**	Pukekohe Train Station	Southern
12	Greenlane Train Station	Southern	**34**	Ranui Train Station	Western
13	Henderson Train Station	Western	**35**	Remuera Train Station	Southern
14	Homai Train Station	Southern	**36**	Smales Farm Bus Station	Nth BW
15	Kingsland Train Station	Western	**37**	Sturges Rd Train Station	Western
16	Manukau Train Station	Southern	**38**	Sunnynook Bus Station	Nth BW
17	Manurewa Train Station	Southern	**39**	Sunnyvale Train Station	Western
18	Meadowbank Train Station	Eastern	**40**	Swanson Train Station	Western
19	Middlemore Train Station	Southern	**41**	Sylvia Park Train Station	Eastern
20	Morningside Train Station	Western	**42**	Takaanini Train Station	Southern
21	Mt Albert Train Station	Western	**43**	Te Mahia Train Station	Southern
22	Mt Eden Train Station[11]	Western	**44**	Williams Ave Bus Station	East BW

Figure 9: List of Auckland's existing rapid transit stops

The above list of stations ('stops') are existing in terms of the station infrastructure itself. However, note that in many cases the actual rapid transit service is not yet in operation (as the current frequencies do not meet the definition of a rapid transit service). So these stations are *existing* 'rapid transit stops' for a *planned* 'rapid transit service'.

Note that for the purposes of determining walkable catchments for existing rapid transit stops, the MfE guidance suggests using 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.[12] Maps showing the 'entrance points' for Auckland's existing rapid transit stops are included in **Appendix 12**.

1.10 What are Auckland's 'planned' rapid transit stops?

The NPS-UD defines "planned rapid transit stops" as "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".

1.10.1 Funding

The Regional Land Transport Plan (2021 – 2031) ('**RLTP**') is the 10-year plan for Auckland's transport network. It details the areas that Auckland Transport, Waka Kotahi NZ Transport Agency and KiwiRail will focus on to respond to the region's transport challenges. It also outlines the proposed 10-year investment programme for specific transportation projects.

However, the RLTP is primarily a funding document, and therefore it does not show the detail of planned rapid transit routes or stops. The MfE guidance on implementing the NPS-UD acknowledges that:

"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

[11] Proposed to be renamed 'Maungawhau' and station currently closed until late 2024.
[12] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.1

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."

1.10.2 Certainty of location

As a planned rapid transit stop identified in an RLTP provides no specific information on the station's location, it is impossible to locate the exact pedestrian entrances and exits to the stations for the purposes of determining a walkable catchment. Therefore, being in an RLTP alone is not enough for a station to be considered 'planned' and have a walkable catchment applied.

Rapid transit projects usually go through a number of different stages in their development. They could be identified in a regional planning document, before being evaluated in an indicative (or other high-level) business case, then a detailed business case, before being identified in public planning documents as a designation before construction finally commences. Public consultation and engagement could happen a number of times through this process, though most importantly it is required as part of the statutory RMA planning process of a Notice of Requirement (for a designation).

An incorrect walkable catchment could be identified if it is based on an indicative rapid transit station location, as the station location may shift (potentially hundreds of metres away) once the more detailed work is done. This is especially relevant given the MfE's guidance on using station entrances and exits[13] to calculate walkable catchments from – indicating a level of accuracy for walkable catchments that cannot be concluded from indicative station locations.

Therefore, an appropriate point in the process of developing a rapid transit stop must be found where a stop location is known with sufficient certainty. It is considered that this point is the public notification of a notice of requirement to designate the station location. At this point in the process the stop/station has:

- considerable certainty of location and design. In reaching this point alternatives would have been evaluated and detailed design undertaken.
- Indicates some level of financial commitment.
- Allows for the best coordination of planning processes
- Provides for clear public engagement[14] and joint messaging between Auckland Transport, Waka Kotahi, Kiwirail, and Auckland Council.

There does remain some chance of a stop location and design changing at this point because evaluation of any designation proposal is required, but significant relocation of proposal would be uncommon. Co-ordinating the notification, consultation and hearing process of the designation and plan change processes allows changes to be made[15] through the hearing process.

---

[13] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.1

[14] The alternative of consulting on zoning changes before the station location itself would be very confusing for the public and could lead to accusations of predetermining station locations prior to the public opportunity for input.

[15] Assuming there is scope within submissions.

1.10.3 Criteria to determine a 'planned' rapid transit stop

In the context of Auckland a rapid transit stop is considered to be 'planned' when it meets all the criteria below:

- Funding for the physical infrastructure and the service must be identified in the RLTP; and
- The route is shown as being a rapid transit network in the RLTP; and
- A Notice of Requirement (for a designation) has been publicly notified for the station location.

Based on this, the 'planned rapid transit stops' in Auckland are:

- Te Wai Horotiu[16] (City Rail Link)
- Karanga a Hape[17] (City Rail Link)
- Maketuu[18] (Southern Line)
- Paeraataa (Southern Line)
- Rosedale (Northern Busway)

Note that for the purposes of determining walkable catchments for planned rapid transit stops, the MfE guidance suggests using the pedestrian entrances and exits to the stops or stations.[19] Maps showing the 'entrance points' for Auckland's planned rapid transit stops are included in **Appendix 12**.

1.10.4 'Future' rapid transit stops

Figure 10 below shows the existing, planned (in the RLTP), and future rapid transit network for Auckland.

There are a number of 'future' rapid transit stops[20] in Auckland that have some planning underway, but as yet do not meet the criteria for being deemed a 'planned rapid transit stop'. Therefore, it would be premature to identify walkable catchments around these stops under Policy 3(c).

These stops relate to future rapid transit service projects such as the Eastern Busway[21], Northern Busway extension to Milldale, the Light Rail – City Centre to Mangere[22], and the Light Rail – North West. Some of these projects are more advanced in planning than others.

The stations listed below are 'future' rapid transit stops in Auckland that are the most advanced in their planning:[23]

[16] Formerly referred to as 'Aotea'.
[17] Formerly referred to as 'K Road'.
[18] Formerly referred to as 'Drury Central'.
[19] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5.1
[20] This is not a term referred to in the NPS-UD
[21] Part of the Auckland Manukau Eastern Transport Initiative project ('**AMETI**')
[22] Refer to the Overview s32 report for PC78 for further information on the Light Rail corridor and PC78
[23] This is not intended to be an exhaustive list

Figure 10: Auckland's existing, 10-year, and future rapid transit network[24]

- Ngaakooroa[25] (Southern Line)
- Pakuranga station (Eastern Busway)
- Edgewater station (Eastern Busway)
- Gossamer station (Eastern Busway)
- Burswood station (Eastern Busway)
- Botany station (Eastern Busway)

PC78 does not seek to identify a walkable catchment for these stations or any other 'future' rapid transit stops under Policy 3(c). However, the implementation of the NPS-UD is not a 'once only' opportunity under PC78. The AUP will still need to "give effect" to the NPS-UD going forward. Therefore, further Plan Changes in the future will be necessary to identify walkable catchments for these stations, once they met the criteria of a 'planned rapid transit stop'.

[24] Source: Auckland Transport (2021). *Auckland Regional Land Transport Plan 2021-2031.* Page 55.
[25] Formerly referred to as 'Drury West'

Appendix 2

Assessment of whether six storey buildings are enabled in the Metropolitan Centre zone

Assessment of whether six storey buildings are enabled in the Metropolitan Centre zone

The AUP measures building heights in metres rather than storeys. A height limit of 21m has been identified as enabling a six storey building. This of course is also subject to other development standards which may control and constrain the mass, form and height of a building.

Height standards

The building heights in Auckland's ten Metropolitan Centre zones are controlled through the Business – Metropolitan Centre zone development standards and in some cases, there are also precincts and Height Variation Controls.

Figure 1 below summarises the direct controls on building heights in Auckland's Metropolitan Centres.

Metropolitan Centre	Metro Centre zone	Height Variation Control		Precinct		Lowest building height control for each Metro Centre
	Maximum height standard (H9.6.1)	Maximum Height	Extent	Precinct name	Maximum Height controls	
Albany	72.5m	N/a	N/a	Albany Centre	N/a	72.5m
Takapuna	72.5m	N/a	N/a	Takapuna 1	Table I540.6.1.1 Building height: 24.5m, 36.5m, Unlimited, 12.5m	12.5m
Westgate	72.5m	N/a	N/a	Westgate (Sub-precincts A and E)	I615.6.6. Building height: 32.5m	32.5m
Henderson	72.5m	N/a	N/a	N/a	N/a	72.5m
New Lynn	72.5m	N/a	N/a	New Lynn	I607.6.2. Sub-precinct A - Building Height and I607.6.7. Sub-precinct D Building Height: 41m	41m
Newmarket	72.5m	28m, 31m, 32m, 55m	Around Carlton Gore Road and Kingdon Street	N/a	N/a	28m
Sylvia Park	72.5m	22.5m, 27m	Mt Wellington Highway frontage – near Longford Street	Sylvia Park	Table I336.4.1: 27m, 50m, 72.5m	22.5m

Metropolitan Centre	Metro Centre zone	Height Variation Control		Precinct		Lowest building height control for each Metro Centre
	Maximum height standard (H9.6.1)	Maximum Height	Extent	Precinct name	Maximum Height controls	
Botany	72.5m	N/a	N/a	N/a	N/a	72.5m
Manukau	72.5m	N/a	N/a	Manukau	I425.6.1. Sunlight admission	72.5m (subject to sunlight control)
Papakura	72.5m	27m, 40.5m	Entire zone	Papakura	N/a	27m

Figure 1: Enabled building heights in Auckland's Metropolitan Centres

In summary, the data in Figure 1 demonstrates that:

- As identified in H9.6.1(1) buildings must not exceed 72.5m, unless otherwise specified by a Height Variation Control (HVC). This height control is significantly above the 21m height control identified as enabling a building of at least 6 storeys.

- None of the ten Metropolitan Centres include a HVC of less than 21m.

- Only two Metropolitan Centres include precincts that restrict height to less than 21m in some specific locations within the precinct:

    - The Takapuna Metropolitan Centre has an area (Takapuna 1 precinct: sub-precinct D) with a height control of less than 21m. This lower height limit of 12.5m is associated with a qualifying matter. Therefore, under Policy 4 of the NPS-UD building heights can be modified to accommodate that qualifying matter. Further detail around this can be found in the s32 report on the Takapuna 1 Precinct.

    - The Manukau Metropolitan Centre has a rule in the Manukau Precinct (I425.6.1) that limits height around Manukau Square. This rule would likely place limits on the maximum building height of 72.5m on those sites subject to the standard. However, the exact limits on building heights from this rule would need to be determined using building shadow projection software to model the effects on the Manukau Square during the specified months, days and times. In any case, this potential height restriction is associated with a qualifying matter. Therefore, under Policy 4 of the NPS-UD building heights can be

modified to accommodate that qualifying matter. Further detail around this can be found in the s32 report on the Manukau Precinct.

Therefore, amendments to the AUP height standards are not required to enable 6 storey developments in the Metropolitan Centres.

Other development controls limiting 6 storey buildings in Metropolitan Centres

The Business – Metropolitan Centre zone in the AUP has been reviewed to determine whether there are any other restrictions[1] that would limit the ability to enable a 6 storey building (as required by Policy 3(b) of the NPS-UD). The review concluded that for sites within the Metropolitan Centre zone, where adjacent to residential zone, the operative Height in Relation to Boundary ('HIRB') standard can limit the overall height of the building. In some cases, this can restrict the enabled height in the Metropolitan Centre zone below 6 storeys (21m).

H9.6.2(1) and H9.6.2(2) are the key provisions setting out the respective recession plane from a vertical height above ground level that buildings should not project through. The HIRB provisions identify that this recession plane extends for only 30m from a residential zone into sites within the Metropolitan Centre zone.

It is noted that the equivalent Metropolitan Centre HIRB standard is proposed to be amended in other business zones H10 – H13 so that:

- It is consistent with the proposed amendment to HIRB in adjoining residential zones to enable a building of at least 6 storeys (THAB walkable catchments) or for other zones the level of intensity proposed in giving effect to Policy 3 NPS-UD.
- It ensures an effective transition in scale between buildings in the residential zones and buildings in business zones which typically have a higher height control.
- It enables greater intensification on sites adjoining Special Purpose zone (as these are not considered to be qualifying matters as defined by the RMA or proposed to be qualifying matters by Council).

The overall effect of the existing HIRB standard on the height of buildings achieved in the Metropolitan Centre zone generally differs in comparison to other centres within zones H10-H13 for the following reasons:

- The recession plane in the HIRB provision for Metropolitan Centres extends for only 30m into sites within the zone. This is significant as many Metropolitan Centre zone boundaries adjoin roads. This results in that edge of the zone either having no HIRB requirement (where roads are arterial and have an approximate width of 30m or greater) or the HIRB having a more limited effect where the zone adjoins local roads (which still can have a dimension of 15-25m).

[1] In addition to the height restrictions outlined in the section above.

- Metropolitan centres are typically larger in size than Town, Local and Neighbourhood Centres and feature a larger core area. Therefore, the proportion of the overall sites within a Metropolitan Centre which adjoin other zones, where the HIRB standard is applicable, is typically less than these other centres which are usually either more linear and/or smaller with a greater proportion of sites on frontages.

However, while the proportion of sites in the Metropolitan Centre zone affected may be reduced due to their large size, where the HIRB standards do apply the impact on development potential of sites can be considered greater. This is because the HIRB standard will place a restriction on a site with a 72m height control rather than the lower height controls that exist in zones H10-H13.

The section at the end of this Appendix looks at each Metropolitan Centre zone and the key adjacent land uses (i.e. roads or zones) and controls in regard to height and HIRB. Overall, it shows that the impact of the HIRB control in the Metropolitan Centre zone is often diminished, given in most cases the zone boundary adjoins roads.

However, while diminished, the HIRB standard in the Metropolitan Centre zone does impact on the ability to establish 6 storey dwellings (near the edge of the zone). Therefore an amendment to the HIRB standard in the Metropolitan Centre zone is proposed to remove the restrictions on 6 storey buildings near the edge of the zone. Further details on this proposed amendment can be found in the s32 report relating to the Metropolitan Centre zone.

Other matters limiting 6 storey buildings in Metropolitan Centres

The Mt Eden Volcanic View Shaft overlay (E08, E09, E11, E12 and E13) limits the maximum building height in the Newmarket Metropolitan Centre. In a few locations towards the edges of the centre the overlay results in heights lower than 6 storeys (21m) as indicated by the yellow stars on Figure 2 below.

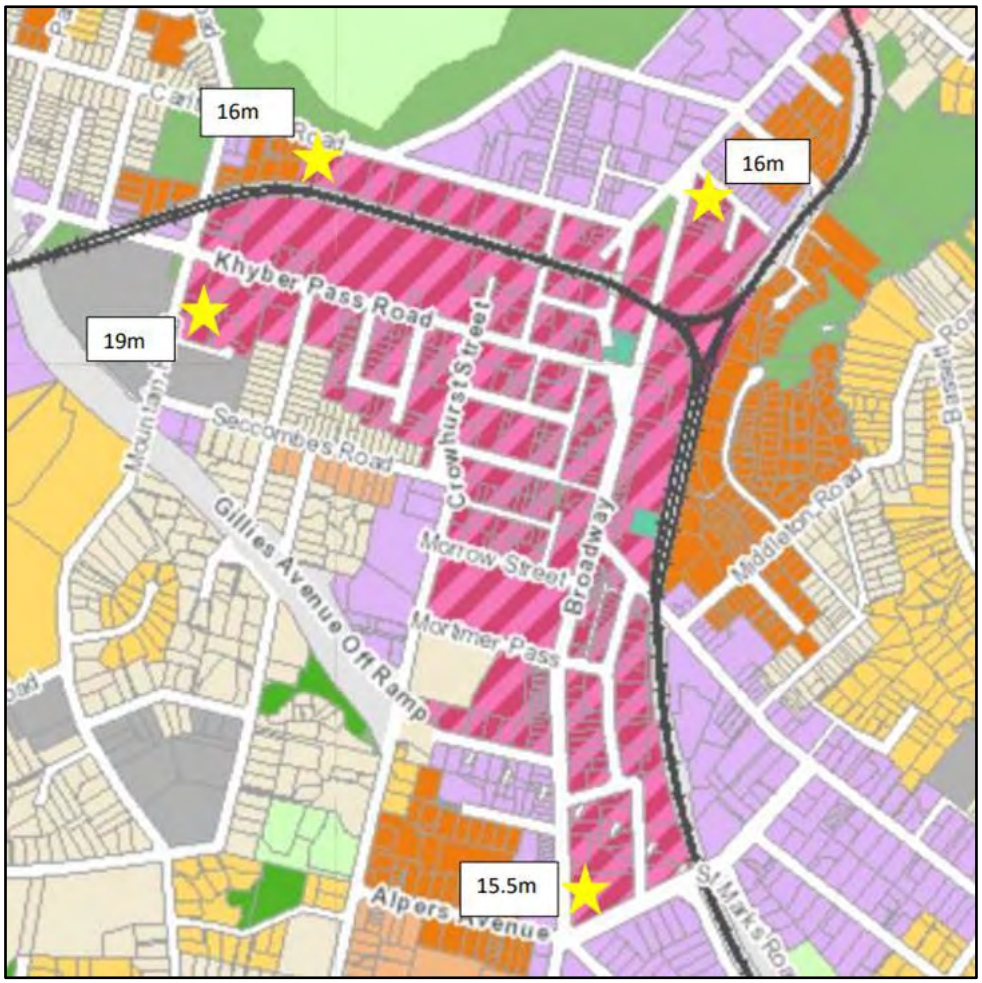
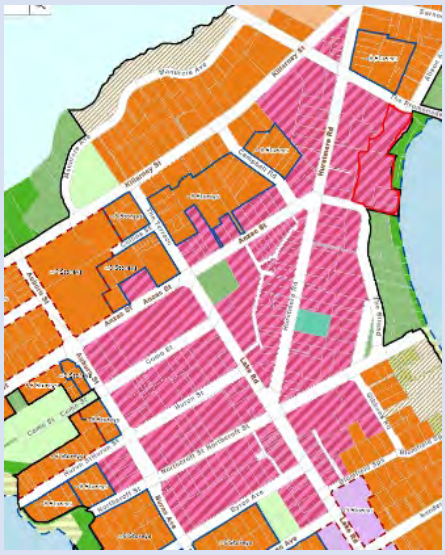


Figure 2: Areas of the Newmarket Metropolitan Centre where buildings are restricted to under 6 storeys

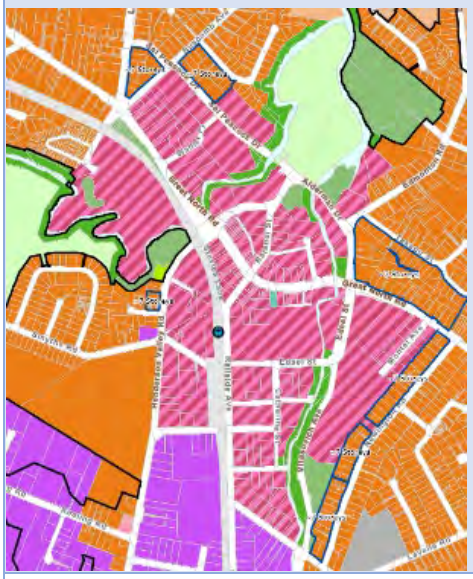
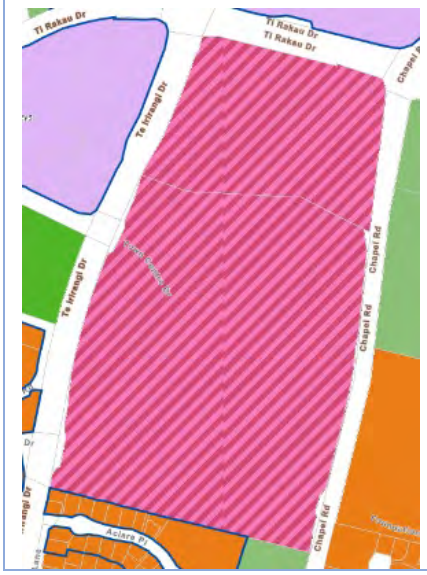
This Volcanic View Shaft overlay is a qualifying matter and therefore, under Policy 4 of the NPS-UD building heights can be modified to accommodate that qualifying matter. Further detail around this can be found in the s32 report relating to the Volcanic View Shaft overlay.

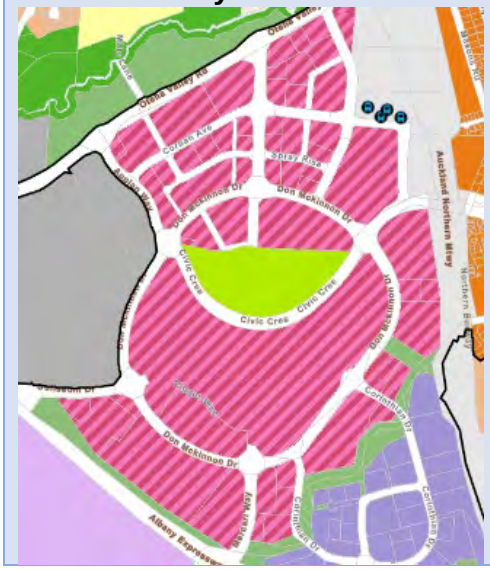
Assessing Auckland's metropolitan centres for enablement of six storey buildings

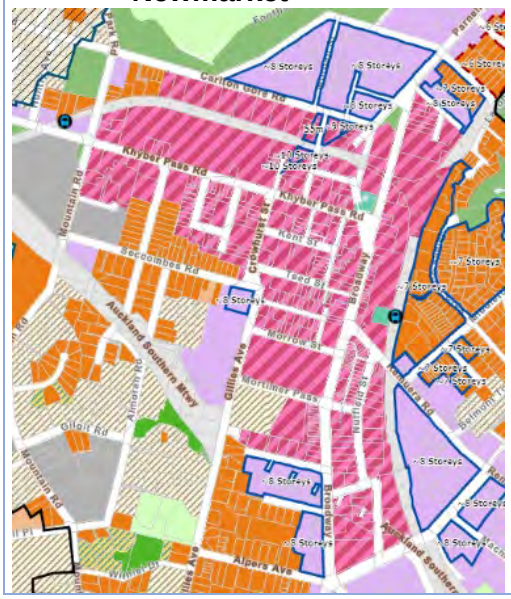
The AUP measures building heights in metres rather than storeys. A height limit of 21m in the AUP is the equivalent of enabling a six storey building. The table below assesses the metropolitan centres in terms of Height and Height in relation to boundary development controls.

Metropolitan Centre and Map (Preliminary Response Viewer for NPS-UD and MDRS April 2022)	Height and HIRB Summary
Takapuna 	- No HVC in place within the centre. - Entire metropolitan centre within the designated precinct which has its own height controls. Sub-Precinct D (outlined in red) at 12.5m is the only control below 21m. - Centre primarily adjacent to THAB within walkable catchments (WC) land which is subject to 21m height control or a higher HVC. Other adjacent zones include open space, business and MHU. - Impact of HIRB diminished given most boundaries are facing onto roads with dimension of approx. 20-25 metres. There are sites on northern, southern and western boundaries (adjoining THAB WC) and eastern adjoining open space (however this is already restricted by sub-precinct D control) where HIRB will apply in full. - Precinct has a frontage and building setback standard which will affect building form/height where applicable.

Metropolitan Centre and Map (Preliminary Response Viewer for NPS-UD and MDRS April 2022)	Height and HIRB Summary
Sylvia Park 	- HVC included for minority of sites at NW corner of the zone at 8 storeys. - HVC in place for some adjoining land, all above 6 storeys. - Adjoining zones all business zones with exception of THAB (WC) on northern boundary. - HIRB does not apply to much of site boundaries given the road width at the south and lower sections of eastern and western boundaries. Diminished in its impact on the remaining eastern and western boundaries given road/rail width (20m-25m). Full effect on the northern boundary adjacent to THAB WC.
Manukau 	- No HVC in place, part of centre within precinct but no height control specified. - HVC in place for adjoining land at SE corner at 8 storeys. - Adjoining zones all business zones with exception of open space and THAB to south (distance greater than 30m). - Impact of HIRB on sites largely limited to minority of the southern section where adjoins Business – mixed use zone and areas that adjoin open space. This is given road widths that abound the centre.
Papakura 	- Varying HVC in place for all of the centre, all above 21m/6 storeys. - Centre adjacent to THAB WC, business, special purpose or open space zones/areas. - Impact of HIRB diminished given most boundaries are onto roads/rail lines with dimension of over 30m or approx. 20-25 metres. There are sites on northern boundaries (adjoining Business - Mixed Use) and open space where HIRB standard would has a full and significant impact on height achievable.

Metropolitan Centre and Map (Preliminary Response Viewer for NPS-UD and MDRS April 2022)	Height and HIRB Summary
Henderson 	- No HVC in place. All adjacent HVC are greater than 21m/6 storeys. - Centre adjacent to THAB WC, business or open space zones/areas. - Whilst roads and rail lines remove or reduce the impact of HIRB on a large number of the boundary sites large number of sites do directly adjoin THAB WC and open space where existing HIRB controls apply in full.
Botany 	- No HVC in place. All adjacent HVC are greater than 21m/6 storeys. - Centre adjacent to THAB WC, business, or open space zones/areas. - Width of roads on northern, eastern and western boundary means effect of HIRB largely limited to southern boundary adjoining THAB WC and open space.

Metropolitan Centre and Map (Preliminary Response Viewer for NPS-UD and MDRS April 2022)	Height and HIRB Summary
Westgate 	- No HVC in place. - All of centre within designated precincts, precinct height control 32.5m/8 storeys. - Centre adjacent to THAB WC, business, major road infrastructure or open space zones/areas. - For majority of eastern boundary of the centre HIRB not applicable given width of adjoining roads. In other areas the impact is diminished given the separation and width of roads to adjoining zones. HIRB applies in full to areas on the southern and upper western boundary where adjoining open space and THAB WC respectively.
New Lynn 	- No HVC in place. All adjacent HVC are greater than 21m/6 storeys. - Centre adjacent to THAB WC, business, major road infrastructure or open space zones/areas. - Impact of HIRB most significant on a large section of the southern and northern section of the zone where adjoining THAB WC and open space. Elsewhere width of roads or adjoining zones not triggering a requirement mean no or diminished effect on potential height achievable of the HIRB standard.
Albany 	- No HVC in place. All adjacent HVC are greater than 21m/6 storeys. - Centre adjacent to major road infrastructure, recreational facilities or open space zones/areas THAB WC to east (distance greater than 30m across Northern Motorway) - Impact of HIRB most significant sections of the southern boundary of the zone where adjoining open space. Elsewhere width of roads result in no or certainly diminished effect from the HIRB standard.

Metropolitan Centre and Map (Preliminary Response Viewer for NPS-UD and MDRS April 2022)	Height and HIRB Summary
Newmarket 	- HVC included for a minority of selected sites in the centre, all above 21m / 6 storeys. - HVC in place for adjoining land, all above 6 storeys. - Adjacent to other business zones, THAB (WC), special purpose, low density residential and open space zones/areas. - Full impact of HIRB on sites limited to minority of sites that directly adjoin THAB WC, LDR or open space. Large amounts of boundary sites adjoin roads but these are typically approx. 20m width meaning that HIRB impact on these sites will be diminished, but still significant.

Appendix 3

Context for walkable catchments

1 What is a walkable catchment?

The term “walkable catchment” is only used once in the NPS-UD and it is not defined. There is also no definition within the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act 2021, nor the RMA itself. There is also no definition of walkable catchment in the AUP. Looking to wider academic research there is still no single, universal definition for a walkable catchment.

The following sections examine what is meant by a ‘walkable catchment’ in the context of Policy 3(c) of the NPS-UD.

1.1 ‘Walkable’

The word ‘walkable’ is an adjective meaning a route (or area of a route) that is “suitable or safe for walking” or that a destination is “close enough to be reached by walking”.[1] Distilling it to its core, a basic definition of walkable could be simply that areas or routes are ‘able to be walked’.

The ability to walk somewhere is to be based on the physical characteristics of an area. Waka Kotahi’s pedestrian planning guide defines ‘walkability’ as “the extent to which the built environment is walking friendly”[2]. Auckland Transport’s Urban Street and Road design guide goes further and states that walkability is the “extent to which the built environment allows people to walk to get to everyday destinations for work, shopping, education, and recreation. Walkability can be affected by street connectivity, mix of land uses, destinations and pedestrian infrastructure.”

The physical characteristics of a walkable route or area are outlined below[3] (which are broad and often overlap):

- Publicly accessible
  The land on which the walking facility (e.g. footpath) is on must be publicly owned or at least have legal access that enables the public to walk on it. This would generally cover nearly all of Auckland’s roads, footpaths, parks, walking tracks, plazas/squares etc. The assumption is that private land cannot be accessed by the general public.

- Safe
  Public walking facilities should be safe as practicable to use at all times of day (e.g. lighting, CPTED[4]) and for people to feel safe to spend time in. A perception of safety is greater when there are “eyes on the street” or the natural surveillance that occurs in neighbourhoods where people are frequently coming and going at all hours of the day.

[1] Oxford University Press, The Oxford English Dictionary, 2022.
[2] Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/glossary-2/
[3] Based on Waka Kotahi (2021) *Draft Pedestrian Network Guidance*. https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/planning/walkability/pedestrian-network-characteristics/
[4] Crime Prevention Through Environmental Design

- Inclusive
  All walking environments should adhere to the principles of inclusive design by ensuring that they are accessible to, and usable by, as many people as reasonably possible. Safe, obvious, and step-free routes are a priority on the most important pedestrian routes to ensure universal access is addressed.

- Comfortable
  Walking areas should allow unhindered movement for pedestrians by providing sufficient space, even surfaces and gentle gradients. Where topography is steep or there are steps it can be anticipated that walking speeds will slow or even put people off attempting to walk the route at all.

- Direct
  Facilities should be positioned to provide convenient links between major walking trip attractors, without impediments from obstacles or other road users. There should be measures taken to resolve severance issues (significant barriers that hinder of prevent walking access such as busy arterial roads, motorways, railway lines, rivers, or streams). Such measures could include dedicated pedestrian crossings or bridges.

- Legible
  Features should be consistent and easy to understand for all pedestrians to know intuitively how to navigate a space (way-finding).

- Connected
  There should be a connected network of walking facilities (e.g. footpaths, recreation tracks, pedestrian rights of way, overbridges/underpasses) that have a high density of route options to connect pedestrians to the places they wish to reach.

- Attractive
  Walking environments should be inviting for pedestrians to pass through and/or spend time in. This can mean low levels of traffic, noise and pollution. There should be places to shelter, play, or rest (e.g. covered walkways shaded from hot sun and protected from rain (e.g. verandahs), benches, pedestrian-oriented street lights, and public toilets). The environment should be clean and visually appealing (e.g. street trees, open space, attractive buildings, small block sizes) and the type and mix of land uses along a route should enhance the pedestrian experience.

In addition to the physical environment, how walkable an area is will also be influenced by how favourably walking compares to other transport modes in terms of time, financial costs, and availability including:

- Availability and cost of petrol and car parking.
- Any alternative efficient transport options available (e.g. public transport).

- Shortcuts, such as pedestrian paths, bridges and entranceways, which reduce the distances that pedestrians must travel to reach destinations and give pedestrians an advantage over other transport modes.

Furthermore, how walkable an area is can be influenced by other factors such as the:

- Age/mobility of the walker.
- Income level of the walker.
- Reason for walking (e.g. is the destination a workplace, to have a meal, or for purely recreational purposes e.g. walking the dog).
- Climate, season, and weather.

Finally, it is worth clarifying that while cycling and other forms of micro-mobility are often considered as part of the package of 'active transport', the NPS-UD specifically refers to 'walkable catchments'. Therefore, the catchments must be measured based on their ability to be walked rather than cycled, scootered, skateboarded etc.

1.2 'Catchment'

In plain English a catchment is generally defined as a geographic area or extent served by some sort of facility (e.g. a school or hospital)[5]. One of the most common types of catchments referred to in geography is a water catchment; an area that captures rainfall which then drains into a watercourse. Such a catchment extends to the greatest distance that the rainfall will travel from to enter the watercourse.

In the context of Policy 3(c) of the NPS-UD a catchment is served by either a centre or a rapid transit station and the extent of the catchment is determined by whether it is 'walkable'.

1.3 A 'walkable catchment'

In determining a walkable catchment for Policy 3(c) of the NPS-UD there are two main possible approaches:

- A catchment which extends as far as all existing or possible customers /passengers will walk:

  This approach aligns with the common use of the concept of catchments in geography. For instance, as a water catchment covers the entire area from which water flows into a river or lake, likewise when considering transport, the catchment of a centre or station could be considered to be the entire extent of the area from which customers or passengers are willing to walk.

- A catchment focused on the area that a certain proportion of the existing or possible customers/passengers will walk:

  This approach differs from the first in that it recognises that there will always be outliers who are not representative of the general population and seeks to focus on a

[5] https://dictionary.cambridge.org/dictionary/english/catchment-area

more significant proportion of the population (e.g. an ‘average’ person or ‘most people’).

Applying the first approach to ‘catchments’ (like that used for water catchments) would result in walkable catchments extending the greatest distance that anyone would walk to access a centre or station. This approach can make sense in some circumstances, where there is a need to understand the full extent that all people will walk.

However, in the context of the NPS-UD it is not a sensible planning approach, as it could result in an intensification approach around centres and stations for thousands of people based on the habits of the outliers. The purpose of identifying walkable catchments in the NPS-UD is to delineate the extent of where to enable greater building heights and density of urban form. This is not to say that some people cannot or will not walk further than the ‘average’ walkable catchment area to access a centre or rapid transit stop.

The second approach outlined above is the common method for measuring walkable catchments and it aligns better with NPS-UD Objective 1:

> “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.”

Given the focus of this objective on ***“all people”*** it is considered appropriate to adopt a position that considers walkable catchments from the perspective of the average person rather than from the perspective of only the most fit, mobile, and able people.

In addition, the MfE guidance on implementing the NPS-UD specifically states that a walkable catchment is “the area that an ***average*** person could walk from a specific point to get to multiple destinations”[6] [bold-italics added for emphasis].

Therefore, under Policy 3(c) of the NPS-UD it is proposed to base the walkable catchments in Auckland on the area the average person could walk to access a centre, or a rapid transit stop.

[6] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5

Appendix 4

Modifying factors for walkable catchments - guidelines

Auckland Council Plans and Places Department

NPS-UD Walkable Catchment Assessment Guidelines

(Final version June 2022 - following amendments made during the process of determining and testing walkable catchments)

Overview

This section provides guidelines for refining the 1,200m and 800m walkable catchment boundaries, by including or removing parcels or areas to be within or outside the initial GIS boundary proposals (based on the application of Option 3 – explained in the main section of this s32 report).

The guidelines are to be first considered individually to the location of catchment boundaries and then a position arrived at that considers and weighs up the impact of the guidelines collectively. Guidelines are not weighted or prioritised – it is the task of the assessor to apply judgement to consideration of each guideline and then making a balanced overall judgement as to changes required to the initial boundary proposed, along each walking route.

Additionally, there are no metrics provided for each guideline that enable assessors to apply an objective measurement or scale by which catchments boundaries should be adjusted according to the guideline. With the number of guidelines and the differences between them in terms of being objectively simple (e.g. using roads as boundaries) to complex (the effect of land use mix on walkability), applying and weighing up distances by which to adjust boundaries due to a number of guidelines is in itself a subjective assessment.

It is up to the judgement of the assessor, both in considering the guidelines individually and then collectively, to arrive at an overall position on whether a catchment boundary is retained, moved inward or pushed outward.

The walkable catchments are to be reviewed as a set by a single team to provide consistency and perform a quality assurance function including consideration of public feedback received during the preliminary consultation phase.

Approach to the task

Even though the task is the consideration of retaining or moving the proposed catchment boundary as a result of applying the guidelines, the assessor needs to consider the nature and qualities of the whole walking route from the edge of the centre or the rapid transit network station entrance, not just the last 100-200 metres where any change in boundary location might be recommended.

The guidelines are split into two categories – edge and route. The edge guidelines relate to the location and nature of the catchment boundary, and how it should be

aligned. The route guidelines relate to the nature and qualities of the route(s) taken to reach the catchment boundary, and how the boundary could be adjusted to take account of these.

In testing the approach it was found to be helpful to start with a review of the overall proposed catchment to understand where the boundary has been initially drawn and what some overall responses might be, as a guide to the subsequent more detailed work. The use of the GIS contour function will be useful to gauge topography along the routes out to the catchment boundaries, as is the use of the 'Google Streetview' function for qualitative assessment involved in the route guidelines.

Once this overview assessment has been done, and identification of where possible boundary changes are likely needed, the work can commence on adjustments using the GIS viewer for this purpose. In the detailed assessment and adjustment, the edge guidelines could be considered first followed by the route guidelines. If the route guidelines require a change in the boundary location arrived at through the edge guidelines, further adjustment should follow the edge guidelines to find an appropriate final position.

Guidelines

A. Edge guidelines

The location of the walkable catchment boundary:

- **Full properties**
  Should not bisect a property unless the property is unusually large and will clearly distort the extent of the catchment in that location within the catchment. Full parcels are to be inside or outside the boundary. If there are unusually large properties, then find a suitable and logical delineation of the property through consideration of the other guidelines.

- **Boundaries**
  Should be a road boundary, rather than a zone or property boundary, to limit transitional effects. This is particularly relevant where the initial walkable catchment includes a small portion of a large block of same zoned land, where there is no discernible delineation of that zone block. And to include the whole block would extend the walkable catchment more than a reasonable distance (refer below). The road then becomes the logical boundary at around 1,200m metres or 800m.

- **Same-zoned blocks**
  Should not bisect a block of 'same-zoned' properties, to limit transitional effects, unless the block is unusually large and will clearly distort the extent of the catchment in that location. Include all properties in the block within the boundary or exclude all properties in the block, unless the block is unusually large and therefore can be divided by a suitable and logical boundary through consideration of the other guidelines.

- **Centre zones**

Should include Business – Town Centre Zone or Business – Local Centre Zone, where it intersects these zones, to an appropriate point beyond the catchment boundary. Adjust the boundary to a suitable and logical point in that Business – Town Centre Zone or Business – Local Centre Zone through consideration of the other guidelines.

B. Route guidelines

The location of the walkable catchment boundary:

- **Severance**

Should take account of any severance features such as major pieces of infrastructure (such as motorway, railway line, other major infrastructure route) or natural landscape features (such as the coast, a cliff, stream, river and tidal inlet), or other barriers to pedestrian movement, along the route that might interrupt or constrain convenient movement. If such barriers are present, adjust the boundary inward along the edge of the relevant feature.

- **Topography**

Should reflect the topography of the area and the gradient of the routes within it. Where the topography of the route(s) is flat or gently undulating, do not adjust the boundary. Where there is moderate or variable gradient along a route or a section of it, move the boundary inward a proportionate distance that reflects the gradient and length of the section. Where there is steep or difficult gradient along a route or a section of it, move the boundary inwards a distance that reflects the gradient and length of the section. Consider steps as being a steep gradient.

- **Block sizes**

Should take account of block sizes and lengths along the route, which indicate the pedestrian permeability of an area and assists with providing variety for the pedestrian. Smaller blocks sizes or lengths along a route can increase walking interest and permeability. Routes with a majority of blocks up to 200 metres long are very walkable - do not adjust boundary. Routes with a majority of blocks 200-400 metres long are less permeable or interesting - adjust boundary inward to reflect the number of such blocks. Routes with blocks 400-500 metres long are less walkable again - adjust boundary inward to reflect the number of such blocks. Blocks over 500 metres act as barriers, adjust boundary inward further.

- **Environment and land use mix**

Should take account of the quality, variety and safety of the street and built environment along a route, and the type and mix of land uses along a route, such that the experience of the pedestrian is enhanced or detracted by these factors.

Where there is a good or ‘standard’ street and/or built environment along a route, a mix of land uses, and no undesirable land uses from a pedestrian perspective, do not adjust the boundary. Where there is a poor or substandard street and/or built environment, a modest or no mix of land uses and undesirable land uses, adjust the boundary inwards.

Note:

- Does not include consideration of traffic volumes – dealt with through block sizes and environment/land use mix and fact that heavy traffic volumes do not necessarily impact on walkability alongside these routes if crossings are signalised or marked.

- Does not include street and intersection crossings assessment as the existence of signalised or marked crossings is an ongoing pedestrian and safety factor that should match the need for these depending on the status and level of traffic on a route.

Appendix 5

Context for determining the size of walkable catchments

1 Literature review (international and local)

There has been a large amount of research into walkable catchments both internationally and in New Zealand. It can be difficult to synthesise all the studies into a succinct set of principles as each study has its own distinct circumstances which are not always able to be replicated elsewhere. In addition, sometimes there can be contrary conclusions between different studies.

This section 32 analysis has reviewed an extensive range of research on walkable catchments. However, it is important to acknowledge that this has not been an exhaustive review of all literature on walkable catchments. A short summary of the studies, articles, and books that have been reviewed is included in **Appendix 20**.

1.1 Walking trips to rapid transit - international research

There have been many studies undertaken internationally looking at the pedestrian catchments for public transport. These studies show that individuals are willing to walk to and from public transport, but for limited distances.

The various studies reviewed mostly conclude that the average distances walked to or from public transport stops range from around 400m to around 800m. However, some studies note that the distance should be "at least" 800m[1] while others note that the 85th percentile walking distance for public transport can be around 1,300m.[2]

When looking at studies in this area it is important to separate two different aspects of them: the distance **a** person will walk to access public transport services and the distance **most** people will walk to access them. Of more relevance to the implementation of Policy 3 of the NPS-UD is the distance most people will walk.[3]

There is a general agreement across the various studies that the proportion of people who walk to or from public transport decreases the further away from the station or stop they are. This is referred to as a 'distance-decay' effect and there is a strong distance-decay relationship for walking trips to all destinations.[4] Distance decay is used in geography to mathematically describe how a given phenomenon varies as a function of distance. In this case, the longer the distance to the destination, the less likely people are to travel to it by walking.

While there is no universal agreement on the rate of decrease, most studies demonstrate a pattern of distance-decay that starts with a relatively high proportion of patrons from close to the station, a steep drop-off as the distance increases and then a long tail, similar to that shown below in Figure 1.

---

[1] Agrawal, W. A., Schlossberg, M., & Irvin, K. (2008). *How Far, by Which Route and Why? A Spatial Analysis of Pedestrian Preference*, Journal of Urban Design, 13:1, 81-98. 10.1080/13574800701804074

[2] Burke, M., & Brown, A. (2007). *Distances People Walk for Transport.* Road & Transport Research, 16(3), 16–29. https://search.informit.org/doi/10.3316/informit.880016006301032 and El-Geneidy, A., Grimsrud, M., Rania, W., Tétreault, P., & Surprenant-Legault, J. (2014). *New evidence on walking distances to transit stops: Identifying redundancies and gaps using variable service areas*. Transportation (41), 193-210. 10.1007/s11116-013-9508-z.

[3] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5

[4] Millward, H., Spinney, J., & Scott, D. (2013). *Active-transport walking behaviour: destinations, durations, distances.* Journal of Transport Geography, 28, 101-110. https://doi.org/10.1016/j.jtrangeo.2012.11.012.

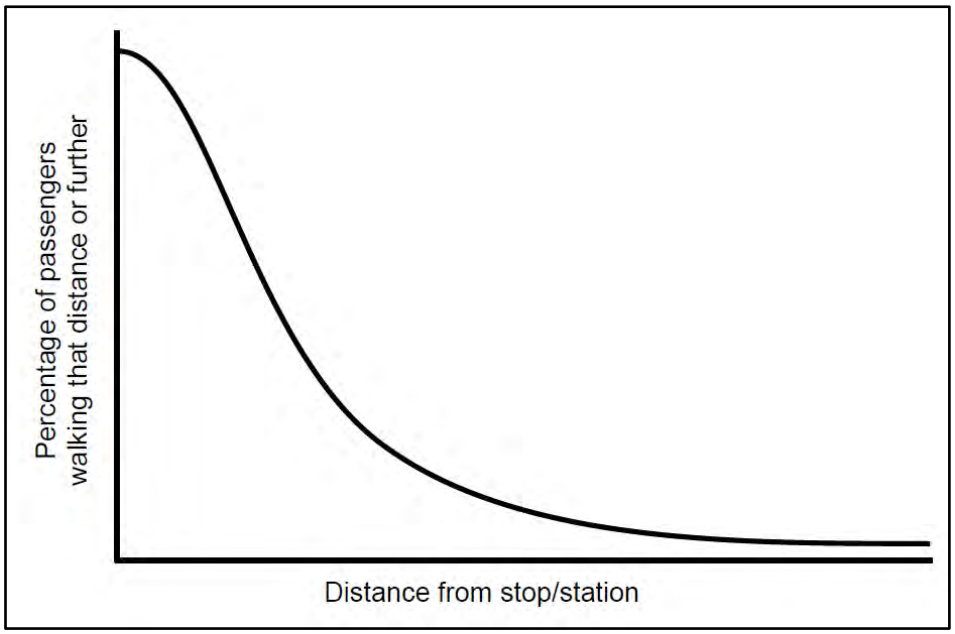


Figure 1: Graph illustrating the distance-decay relationship[5]

1.1.1 Key trends

One meta-analysis of other studies found that a 10% decrease in a household's distance to transit corresponded with a 3% increase in transit use. One specific study in California found that those living within 800m of a transit station were four times more likely to use transit than others living between 800m and 4,800m away.[6]

A study in Canada interviewed 1,800 light rail users and found a marked difference is the distances walked to suburban stations (649m) to central city stations (326m). The shorter walk in the central city is likely to reflect shorter distances between pedestrians' points of origin and the stations. This is likely due to the array of transport options in the city centre, compared to the relatively scarce options in the suburbs (requiring a further walk on average to get to a light rail hub).[7]

A number of studies found that people are prepared to walk further to access train services compared to bus services[8] and/or those public transport services with a shorter wait time.[9]

---

[5] Cribbens, Alastair. Wrenn, Steve. Winter, Liam. *Joint statement of evidence on behalf of Auckland Council (Auckland Transport) for Topic 080 Rezoning and Precincts (General) and Topic 081 Rezoning and Precincts (Geographical Areas) before the Auckland Unitary Plan Independent Hearings Panel.* 3 December 2015.

[6] Ewing, R., & Cervero, R. (2010). *Travel and the Built Environment.* Journal of the American Planning Association, 76:3, 265-294. 10.1080/01944361003766766

[7] O'Sullivan, S., & Morrall, J. (1996). *Walking Distances to and from Light-Rail Transit Stations.* Transportation Research Record, 1538(1). 19–26. https://doi.org/10.1177/0361198196153800103

[8] Alshalalfah, B. & Shalaby, Amer. (2007). *Case Study: Relationship of Walk Access Distance to Transit with Service, Travel, and Personal Characteristics.* Journal of Urban Planning and Development. 133(2). 10.1061/(ASCE)0733-9488(2007)133:2(114) and Daniels, R., & Mulley, C. (2013). *Explaining walking distance to public transport: The dominance of public transport supply.* Journal of Transport and Land Use, 6(2), 5–20. http://www.jstor.org/stable/26202654

[9] El-Geneidy, A., Grimsrud, M., Rania, W., Tétreault, P., & Surprenant-Legault, J. (2014). *New evidence on walking distances to transit stops: Identifying redundancies and gaps using variable service areas.* Transportation (41), 193-210. 10.1007/s11116-013-9508-z.

It was also found that higher proportions of walking trips for public transport are made in more dense, mixed use areas and that people in these areas were prepared to accept further walking distances to and from public transport (than people in other areas).[10]

One study found that people walked faster for 'active-transport' walking trips as opposed to walking for leisure or recreation. Active-transport walks were also moderately faster than recreational walking, and typically shorter in time and duration.[11]

1.2 Walking trips to rapid transit - New Zealand research

There have been a number of New Zealand studies which have looked at walking trips to public transport. Some of these are specific to the Auckland context. Key findings are summarised below.

One of the most often cited studies in relation to walkable catchments and the NPS-UD was conducted in 2013 by Auckland Council.[12] It looked at how far people would walk to 12 railway stations and five busway stations. The study aimed to test the findings from a 2010 survey that found that the median walking distance to Papatoetoe train station was 1,200m – further than the 800m radius typically assumed for walkable catchments. A further survey in 2012 produced similar findings for New Lynn, Glenn Innes, and Mt Albert train stations.

The 2013 study extended the research to a further 12 train stations[13] and five Northern Busway stations.[14] Again, the aim was to investigate whether an 800m radius accurately represented the walking distance of passengers to the respective stations. The results of the surveys were as follows:

For the 12 train stations:

- At four stations: over 50% of respondents walked further than 800m
- At six stations: over 15% of respondents walked further than 1,500m
- Walking was the most common form of arrival at nine out of 12 stations. Ellerslie had the highest (73%); followed by Newmarket (69%). Manurewa had the lowest (42%)
- There was significant variation in median walking distances to each station:
    - Papakura had the highest (971m); followed by Panmure (917m).
    - Newmarket had the lowest (446m); followed by Ellerslie (569m).

For the 5 bus stations:

- At four of five stations, 50% of respondents walked further than 800m (the exception was Akoranga).
- There was even greater variation in median walking distances to each station:
    - Albany had the highest median walking distance (2,727m).

[10] Cervero, R., Round, A., Goldman, T., & Wu, K. (1995). *Rail Access Modes and Catchment Areas for the BART System.* UC Berkley Institute of Urban and Regional Development. https://escholarship.org/uc/item/0m92j0kr
[11] Millward, H., Spinney, J., & Scott, D. (2013). *Active-transport walking behaviour: destinations, durations, distances.* Journal of Transport Geography, 28, 101-110. https://doi.org/10.1016/j.jtrangeo.2012.11.012.
[12] Wilson, L (2013). *Walkable catchments analysis at Auckland train and Northern Busway stations – 2013*. Auckland Council technical report, TR2013/014
[13] Manurewa, Otahuhu. Panmure, Papakura, Newmarket, Henderson, Onehunga, Pukekohe, Glen Eden, Meadowbank, Sturges Road, Ellerslie
[14] Albany, Constellation, Sunnynook, Smales Farm, Akoranga

- Smales Farm had the lowest (588m); followed by Akoranga (590m).

Overall, the study found that:

- Some people were prepared to walk considerable distances to the stations (over 4km in some cases).
- The median distance walked to these stations differed considerably between stations (446m – 2,727m).
- Most of the stations recorded a median walking distance in the range of 550m-950m.

The study concluded that the 800m catchment radius is representative of some stations, but for others, it is lower than the actual walking distance people are willing to walk.

While this study is useful in understanding the distance some passengers will walk to rapid transit, caution must be used to avoid reading too much into the results. The survey does not take into account the surrounding level of development, population density, land uses, or distance from the city centre. For example, Newmarket is a densely populated area with high employment and many transport options so you would expect the average walking distance to the train station to be relatively low (446m). On the other hand, the Albany busway station (in 2013) was an isolated piece of infrastructure with a large amount of vacant land around it and a motorway separating it from residential areas to the east. Anyone walking to that station would necessarily have to walk long distances on average (2,727m).

In addition, while a survey such as this can tell you how far a person walked to access public transport, it does not tell you how many people did not access public transport because the walk was too far.

Another study by researchers at AUT[15], which looked at bus stops rather than RTN stations, investigated the relationships between car parking, public transport, travel behaviours, and health outcomes for adults traveling to a worksite. This study found that respondents with a bus stop within 200m of their residence, or who perceived public transport as being accessible, were more likely to commute to work by public transport. Those who lived further away or did not perceive it accessible demonstrated no change in behaviour.

In 2018 Auckland Council's Chief Economist Unit released an insights paper looking at rapid transit access and its impact on property values[16]. This study found that on the isthmus there was a house price premium out to 500m from train stations. The highest impact on property values was about 260m from the stations. This property value premium was about 19% over a home more than 500m away from a station. There was no property value premium found outside of the isthmus, and within the isthmus the premium was more evident on the eastern than western side of the isthmus.

Waka Kotahi released a research paper[17] in 2007 which looked into the factors which determine people's decision to walk or drive to public transport. This study, looking at park and ride sites in Auckland and Wellington, surveyed people who travelled under 1km to the

[15] Badland H, Garrett N & Scofield G (2010) *How Does Car Parking Availability and Public Transport Accessibility Influence Work-Related Travel Behaviours?* Sustainability 2010, 2, 576-590
[16] Martin, S., & Norman, D., *How rapid transit access adds to property values*, Auckland Council CEU Insights paper (2018)
[17] Walton, D., & Sunseri, S. (2007). *Impediments to Walking as a Mode Choice.* Land Transport New Zealand. https://www.nzta.govt.nz/assets/resources/research/reports/329/docs/329.pdf

station by foot or car with a focus on factors influencing the decision to walk or drive. Participants in this study perceived 820m to be a reasonable walking distance to access a public transport station.

Another Waka Kotahi study drew on the Ministry of Transport's New Zealand Household Travel Survey. The median distance of walks to bus services was 200m; and 75% of these trips under 500m.[18] This is lower than the typical 400-800m distances reported internationally.

However, figures for walking to rail services were notably higher and were aligned closer to international examples. The median distance walked for access to rail stations was over 1km (mean distance: 1.13km).[19] This indicated that individuals were willing to walk longer distances to faster or more frequent public transport modes (such as rail or ferry services) – to which further walking distances by individuals were observed.[20] This is consistent with international research.

In Auckland, the preference for rail and for frequent services are considered to play out fairly evenly across the rapid transit network. The bus services on Auckland's bus rapid transit are substantially more frequent than rail services and as such are considered to have the same level of attractiveness. Similar to rail services, the bus rapid transit service is provided on a dedicated route, largely separated from general traffic. These factors mean it is appropriate to apply the same distances (and the same edge and route guidelines in **Appendix 4**) to walkable catchments for rail RTN stations and bus RTN stations.

1.3 Walking trips to city and metropolitan centres - international research

Studies looking at walkable catchments of major centres are not as common as those around public transport. While there are numerous studies of the impact on walking/exercise levels from local shops (and the distance this impact extends), proximity to major centres themselves are less studied.

The early origins of mapping 'walkable catchments' in urban areas with a 400m radius goes back to Clarence Perry's concept of the 'neighbourhood unit' in the 1920s (see Figure 2). Walkability was a crucial attribute of his concept, and it used a 5 minute walk as the suitable walking distance for self-contained neighbourhoods. The design was based on the 'human factor' – all distances calculated (e.g. to schools, parks etc) were intended for the human foot rather than motorised transport.

[18] Wedderburn, M. (2013). *Improving the cost-benefit analysis of integrated PT, walking and cycling.* New Zealand (p.35) Transport Agency. https://www.nzta.govt.nz/assets/resources/research/reports/537/docs/537.pdf
[19] Ibid
[20] Ibid

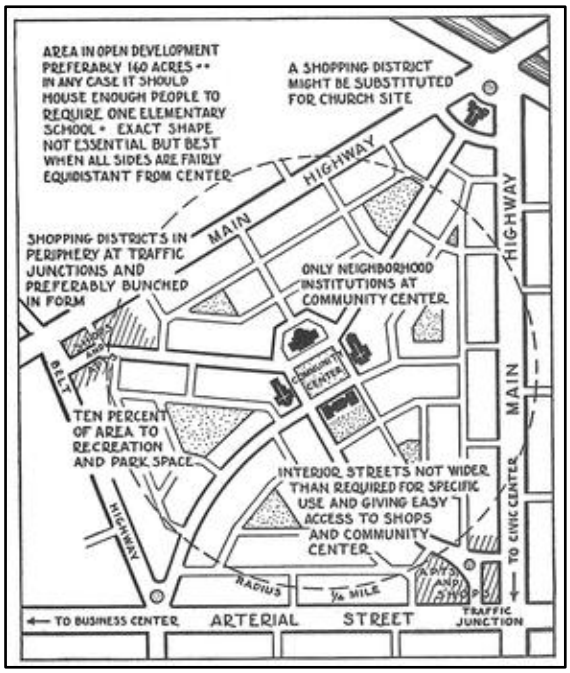


Figure 2: The 'neighbourhood unit' concept[21]

A 5 minute walk has continued to be a popular metric for urban planning, although over the years various studies have challenged this figure, especially in relation to significant destinations.

In his book ‘Cities for People’, Danish architect and urban designer Jan Gehl states that in general terms, a 500m walk is widely accepted as an appropriate walking distance. However, he also notes that it is very dependent on variables such as factors that either enhance or impede walkability.[22] A Canadian study in 2010 found that the overall median walking distance for any purpose (work, shopping, school, leisure) was 650m, exceeding the often used 400m catchment distance.[23]

In the U.S., in recent decades, 400 meters (5-minute walk) has sometimes been assumed to be the distance that "the average American will walk rather than drive” and has been used as the value of acceptable walking distance. An American study investigated the levels of walking (distances and durations) utilising data from the 2009 National Household Travel Survey. It found that 16% of respondents had at least one walking trip per day and their trips had a median of 800m (10 minutes) and a mean of 1,100m (14-15 minutes). Around 65% of walking trips were over 400m.[24]

These results suggest that the conventional wisdom of using 400m as a walking distance understates the distance that some people commonly walk. It is noted that large variations

[21] Source: A diagram of Clarence Perry's neighbourhood unit, illustrating the spatiality of the core principles of the concept, from the New York Regional Survey, Vol 7. 1929
[22] Gehl, J. (2010). *Cities for People.* Washington DC: Island Press. https://umranica.wikido.xyz/repo/7/75/Cities_For_People_-_Jan_Gehl.pdf
[23] Larsen, J., El-Geneidy, A., & Yasmin, F. (2010). *Beyond the Quarter Mile: Re-examining Travel Distances by Active Transportation.* Canadian Journal of Urban Research, 19(1), 70–88. http://www.jstor.org/stable/26193275
[24] Yang, Y., & Diez Roux, A. (2012). *Walking Distance by Trip Purpose and Population Subgroups.* American Journal of Preventive Medicine. 43. 11-9. 10.1016/j.amepre.2012.03.015.

were found among various purposes for both distance and duration. The distances and durations of walking for recreation were substantially longer than those for other purposes.[25]

An Australian study from 2014 showed that 20-minutes was the maximum time people were willing to walk to meet their daily needs locally.[26] A separate study also proposed that a 20-min walk (i.e. 2km) is reasonable distance in Australian urban environments.

Another study calculated the average walking journey was 1 kilometre and not many people walked more than 2 kilometres. The accepted threshold for walking to local facilities was 400m while 800m was a suggested threshold for walking to a town centre.[27]

However, there are some conflicting studies that suggest distances nearer than 400m are required to incentivise walking. An American study looked at whether the presence of neighbourhood retail within walking distance would increase the likelihood of walking. It found that only those living within 200m of retail shops had a significant increased likelihood of walking.[28]

In terms of walking trips to large centres (such as metropolitan centres or city centres) a study from Australia found that shorter walking trips of around 400m were strongly associated with destinations such as post boxes, bus stops, transit stations, shopping malls, convenience stores, news agencies. Longer walking trips of around 1,500m were more associated with destinations such as schools, transit stations, and shopping malls.

The authors noted that for *less common destinations* a 1,500m buffer is more appropriate – due to the relative rarity of the destination, and the limited number of people who could access it within 400m. The authors cite rapid transit as an example[29] but potentially a similar argument could be made for metropolitan centres/city centres as they have a higher proportion of novel amenities.

One study used a meta-regression analysis to demonstrate that compact development makes people drive less. The most influential variable on driving was the distance to downtown. With every 1% decrease in distance from household to downtown, driving decreased by 0.63%.[30]

A study from Malaysia found that the majority of respondents would walk around 1km in distance to the city centre. The main factor which attracted street usage by pedestrians was the proximity of the destination (commute distance).[31]

---

[25] Yang, Y., & Diez Roux, A. (2012). *Walking Distance by Trip Purpose and Population Subgroups.* American Journal of Preventive Medicine. 43. 11-9. 10.1016/j.amepre.2012.03.015.

[26] Badland H, Whitzman C, Lowe M, Davern M, Aye L, Butterworth I, Hes, D and Giles-Corti B 2014, *Urban liveability: Emerging lessons from Australia for exploring the potential for indicators to measure the social determinants of health*, Social Science and Medicine, 111: 64–73.

[27] Barton, H., Grant, M. & Guise, R. (2003). *Shaping neighbourhoods: A guide for health, sustainability and vitality.* New York: Spon Press.

[28] Iacono, M., Krizek, K., & El-Geneidy, A. M. (2008). *Access to Destinations: How Close is Close Enough? Estimating Accurate Distance Decay Functions for Multiple Modes and Different Purposes.* Minnesota Department of Transportation. https://hdl.handle.net/11299/151329.

[29] McCormack, G. R., Giles-Corti, B., & Bulsara, M. (2008). *The relationship between destination proximity, destination mix and physical activity behaviours*. Preventive medicine, 46(1), 33–40. https://doi.org/10.1016/j.ypmed.2007.01.013

[30] Stevens, M. R. (2017). *Does Compact Development Make People Drive Less?* Journal of the American Planning Association, 83:1, 7-18. 10.1080/01944363.2016.1240044

[31] Rahman, N. A., Shamsuddin, S., & Ghani, I. (2015). *What Makes People Use the Street?: Towards a Liveable Urban Environment in Kuala Lumpur City Centre.* Procedia - Social and Behavioural Sciences, 170, 624-632. https://doi.org/10.1016/j.sbspro.2015.01.064.

Another study indicated the maximum walking distances and times to a range of community facilities and services. It ranged from 400m (5 minutes) to access a local shop or a bus stop, to 2,000m (25 minutes) to access a district centre[32] (i.e. a large centre akin to a metropolitan centre in the Auckland context).

1.4 Walking to city and metropolitan centres – New Zealand research

As outlined above, studies looking at walkable catchments of major centres are not as common as those around public transport, and this is even more so when only looking at New Zealand research. The section below has some overlap with this section as it covers New Zealand guidelines on walkability.

Ian Munro's 2009 critique of theoretical walking catchments around centres acknowledges that in New Zealand the 800m circle has become accepted as representing a convenient 10-minute walk for most people in a community.

This is based on a normative, average journey using a walking speed averaging 1.3m/s across the journey and including minor delays. People walking slower at 1m/s average will cover around 600m; those walking faster at 1.5m/s average may cover around 900m. The actual distance covered will also be impacted by the climate and topography.

Munro also highlights the implications of extending walkable catchments in terms of the amount of land which is then covered (if using a basic circle catchment as per Option 1 discussed in the main body of this report). Even if using a refined catchment based on an actual walking network (as per Option 2 discussed in the main body of this report), the implications of extending the catchment are still relevant:

> "The 800m radius circle encompasses approximately 200ha of land. But it is worth contemplating the nature of circles. A doubling of radius will generally quadruple the area within it; a 400m radius circle encompasses 50ha, and a 200m radius circle 12.5ha. The implication for growth planning is clear – the greatest amount of area (and hence land possible for intensification) will always exist at the periphery."[33]

2 New Zealand walkability guidance

2.1 People + Places + Spaces – A design guide for urban New Zealand (2002)

The Ministry for the Environment produced this guide to introduce urban design and guidance for achieving better urban design in New Zealand's towns and cities. The guide recommends that urban nodes should be defined as walkable catchments. It then goes on to state that a walkable catchment should be 400m (5 minutes) from neighbourhood centres

[32] Barton, H., Grant, M. & Guise, R. (2003). *Shaping neighbourhoods: A guide for health, sustainability and vitality.* New York: Spon Press. Azmi, D. I., Karim, H. A., & Ahmad, P. (2012). *A Comparative Study of Walking Behaviour to Community Facilities in Low-Cost and Medium Cost Housing*. Procedia - Social and Behavioural Sciences, 35, 619-628.

[33] Munro, I. (2009). *The Problem of Catchment in Centres-based Residential Growth Planning.* Urbanism Plus Ltd.

and bus stops, and 800m (10 minutes) from rail stations and town centres – as outlined in Figure 3 below.

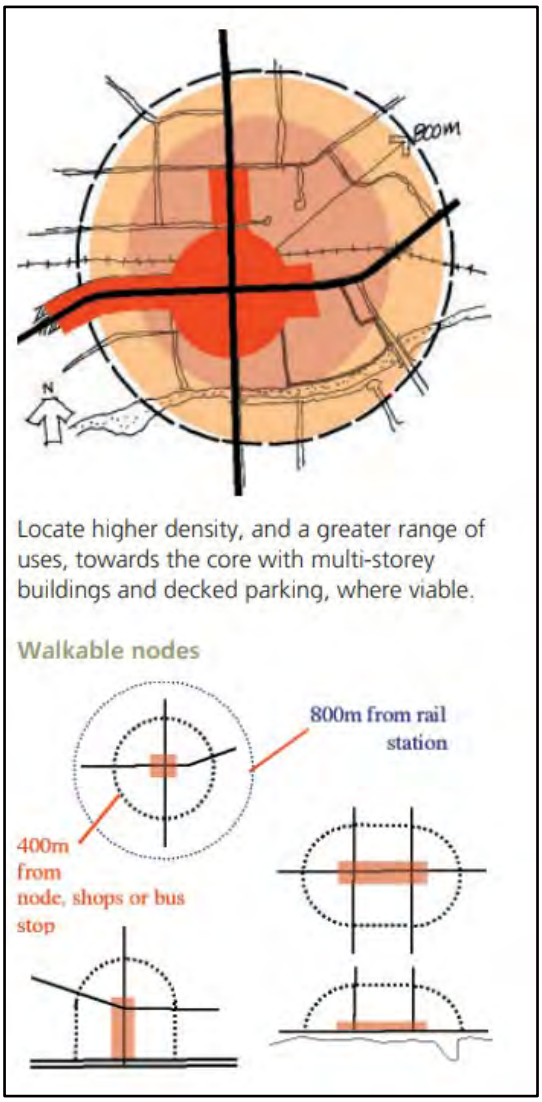


Figure 3: Walkable catchment diagrams[34]

2.2 Urban Design Toolkit (2006)

The Ministry for the Environment produced a third edition of this toolkit in 2006. The Urban Design Toolkit is a compendium of tools that can be used to facilitate high-quality urban design.

It covers research and analysis tools which include a 'ped-shed' analysis. This is described as a mapping technique that calculates the population catchment within a five or 10 minute walk from an activity, transport stop or node. An example of a ped-shed map is shown in Figure 4 below.

[34] Source: Ministry for the Environment. (2002). *People + Places + Spaces – A design guide for urban New Zealand.* (pg. 41) https://www.boprc.govt.nz/media/90678/peopleplacesspacesurbandesignguideentirereport.pdf

Figure 4: Example of a ped-shed analysis map

To determine a ped-shed, a fixed-diameter circle is overlaid on a map with the centre placed on the destination point. Circle radii are usually based on an average person walking 400m in five minutes. A second radius of 800m indicates a 10 minute walk. The population density within this radius can then be calculated to determine the number of people within easy walking distance of the destination. A ped-shed analysis can be refined further by mapping linkages and obstacles that may decrease or increase travel distance or time to give a more accurate population figure.

2.3 Pedestrian Planning and Design Guide (2009)

In 2009 Waka Kotahi (NZ Transport Agency) produced this guide[35] to promote a consistent 'world's best practice' approach to planning, designing, operating and maintaining walking infrastructure and networks. The guide notes that as New Zealand research into walking trips increases, the guide will be updated and augmented.

The guide states that there are no national thresholds for walkability indicators in New Zealand, but Land Transport NZ is currently developing walkability assessment systems in New Zealand.

In determining the walkability of an area, existing pedestrian activity is a useful starting point. However, it is also important to be able to estimate how many people would walk if the environment were modified, such as through land use changes or removing physical and/or institutional barriers to pedestrian movements. This is known as 'latent demand'.

The guide notes that the vast majority of people walk at speeds between 0.8 metres per second (m/s) and 1.8 m/s.

2.4 Draft Pedestrian Network Guidance (2021)

Waka Kotahi recently prepared a draft Pedestrian network guidance document that provides design advice and standards for walking in New Zealand. It provides a 'one-stop-shop' of

[35] New Zealand Transport Agency (2009). *Pedestrian Planning and Design Guide.*

best practice guidance, specifically suited to New Zealand's regulatory and operating environment.

The draft guidance is an update of the Pedestrian Planning and Design Guide (2009) and based on research and industry surveys in 2018 that helped inform what new guidance was needed and what guidance needed updating.

The *New Zealand Household Travel Survey* shows that of the estimated 6000 million plus trips made by New Zealand households annually, nearly one in five (17 percent) was made by walking.[36] Around ninety percent of walking trips are less than 2km long.[37] For trips of 2km or less, the walk mode share is 30%. Only 4% of trips longer than 2km are made on foot. This is illustrated on the graph in Figure 5 below.

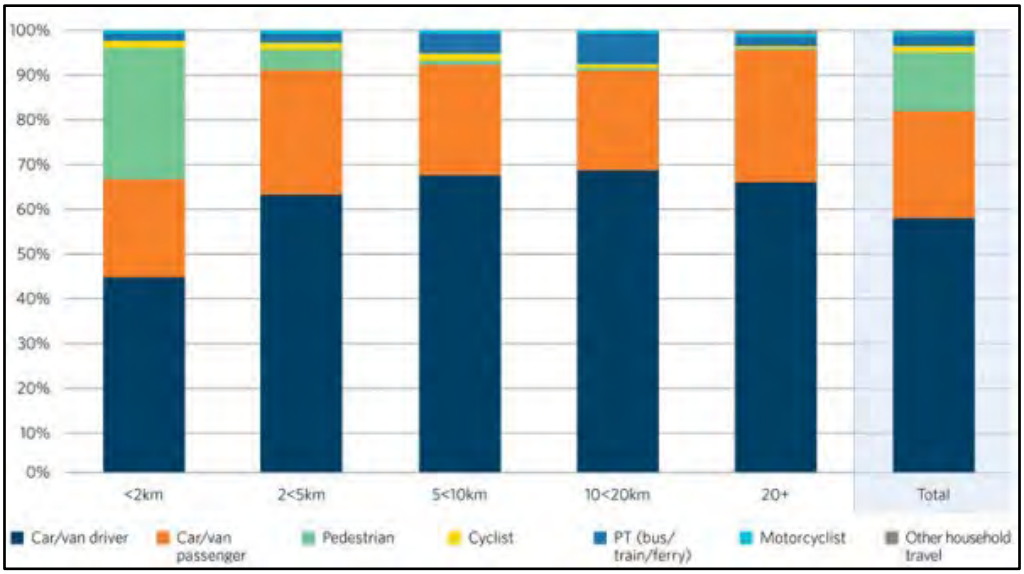


Figure 5: Mode distribution of trip legs by distance of trip leg, main urban areas[38]

The guidance notes that people tend not to walk for trips that take more than 30 minutes, and they walk more when trip durations are short. For 'walk only' trips, the New Zealand Household Travel Survey data shows that half are more than 10 minutes, 18 percent are more than 20 minutes and nine percent are more than 30 minutes.

2.5 Draft Aotearoa Urban Street Planning Guide (2021)

Waka Kotahi have created this draft guide to provide a national framework and high-level principles for multi-modal street design in an urban context. The guidance refers to walkable catchments and states that international practice applies 800m (10 minutes) walking

[36] Ministry of Transport. (2015). *Walking: New Zealand Household Travel Survey 2011–2014*
[37] Ministry of Transport. (2018). *New Zealand Household Travel Survey 2015–2018*
[38] Source: Waka Kotahi NZ Transport Agency (2021). *Draft Pedestrian network guidance* https://www.nzta.govt.nz/walking-cycling-and-public-transport/walking/walking-standards-and-guidelines/pedestrian-network-guidance/walking-in-new-zealand/walking-activity-and-trends-in-new-zealand/

catchment at either end of a rail journey. It also states that research[39] in Auckland suggests passengers in New Zealand may walk further - up to 1,200m on a quality route.

The guidance steers away from using basic 800m circles and states that actual catchments are determined by:

- street/path network connectivity and layout including intersections
- space allocation and priority given to walking along and across the street
- quality of the pedestrian and cycling environment (influenced strongly by built form and land use activity factors adjacent the street as well as transport factors)
- the quality of infrastructure
- priority given to modes
- influencing factors including topography

The guidance notes that while walkable catchments of greater than 800 metres will be suitable in some situations (e.g. 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). There is an expectation that walkable catchment of a city centre will be larger than those of metropolitan centres, 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.

The guidance states that the city centres of Auckland and Wellington form highly walkable catchments some 2-3km across of continuously connected, dense city blocks with high concentrations of walkable destinations supported by high capacity and frequent public transport stops and stations.

2.6 Government Policy Statement on Housing and Urban Development (2021)

The Government's current policy statement on Housing and Urban Development is intended to be the start of a multi-decade system strategy for housing and urban development. The policy statement includes some preliminary baseline indicators on the health of the housing and urban development system. One indicator of 'Thriving and resilient communities' shown below alludes to 15 minutes travel time (including by walking) being a target figure for access to various services:

> "Proportion of people with access to essential services, (including health care, supermarkets, and schools) by walking, cycling, public transport and car within 15 minutes."[40]

[39] This research is not cited in the MfE guidance document. Therefore, it is not clear what it is referring to but it is assumed to be: Wilson, L (2013). *Walkable catchments analysis at Auckland train and Northern Busway stations – 2013*. Auckland Council technical report, TR2013/014

[40] New Zealand Government (2021). *Government Policy Statement on Housing and Urban Development.*

3 Auckland Council's previous walkable catchment approaches

Auckland Council has not defined the term 'walkable catchment' in any planning or strategic document such as the AUP. Neither has Auckland Transport in its transport planning documents. Until the advent of the NPD-UD in 2020, walkable catchments were not used as regulatory methods but understood and applied as ped-sheds. The NPS-UD Policy 3(c) requirement for district plans to enable six-story building heights in walkable catchments means the use of walkable catchments as a district plan method (as discussed in **Appendix 6**) is new.

In establishing distance options for walkable catchments in the context of the NPS-UD, current or recent positions adopted by the council (or its Council Controlled Organisations ('**CCOs**')) were identified. It is not proposed to specifically use any of these positions in the new context of the NPS-UD, but they are helpful to understand for context.

The council and its CCOs have used a range of different distances for a walkable catchment (or related concepts) since 2012, and for different purposes. The distances have ranged from 250m out to 1,600m. A summary of some of the relevant instances where a figure or approach has been identified is outlined in the table in Figure 6 below.

Process or document	Date	Walkable Catchment distance	Comments
Auckland Plan	2012	800m (Local and Town Centres) 1,000m (Metropolitan Centres) 2,000m (City Centre)	• A 10 minute walkable catchment is the area in which people can be expected to easily walk to activities in a centre • Walking distance is outlined for different centres based on their size and function
Proposed Auckland Unitary Plan	2013	500m	• Applied from Metro, Town and Local Centres, Rapid and Frequent Transit and Arterial roads for the purpose of applying higher intensity residential zones • This distance was related to the term 'moderate walking distance' in the RPS (though the above locations differ from the locations listed in the RPS)
Independent Hearings Panel recommendations	2016	400-800m	• Unclear where this applies, though presumably the same as the above
Council submission on draft National Policy Statement – Urban Development	2019	1,500m	• 1,500m pedestrian catchment of rapid transit network stops
Auckland Plan Development Strategy 2050 monitoring	2021	1,500m	• Measures number of dwellings consented inside 1,500m catchments of train stations and Northern Busway stations.
Auckland Design Manual	2022	800m	• Neighbourhood design, movement networks: able bodied adults can walk at an average speed of 1.5metre per second or up to 800m in 10mins.

Process or document	Date	Walkable Catchment distance	Comments
Auckland monthly Housing Update	2022	1,500m	• Measures percentage of dwellings inside the 1,500m walking catchments of the rapid transit network
Urban street and road design guide (Auckland Transport)	2022	600m (5-10 mins walk) - 1,600m (20 mins walk)	• Transit oriented development typically focused within 600m of a rail or busway station. • 20mins is an acceptable walk to rapid transit stations

Figure 6: Summary of previous Auckland Council (and CCO) approaches to 'walkable catchments'

These positions have been reached based on varying levels of evidence, with some having little documented explanation whereas other documents or processes were tested through evidence and/or consultation and formal reporting. A further explanation of each document or project is below.

3.1 Auckland Plan (2012)

The Auckland Plan sets out the hierarchy of urban centres. It states the city centre lies within a 2km walkable catchment (approximately).[41] It also equates a distance for other centres in which people can be expected to easily walk is 10 minutes. However, the plan notes that this is an approximate walking distance and detailed planning will refine the actual distance for each centre. Although Figure 7 appears to be a radial ped-shed (as per Option 1), the Auckland Plan takes an approach consistent with Option 2 (based on actual walking networks).

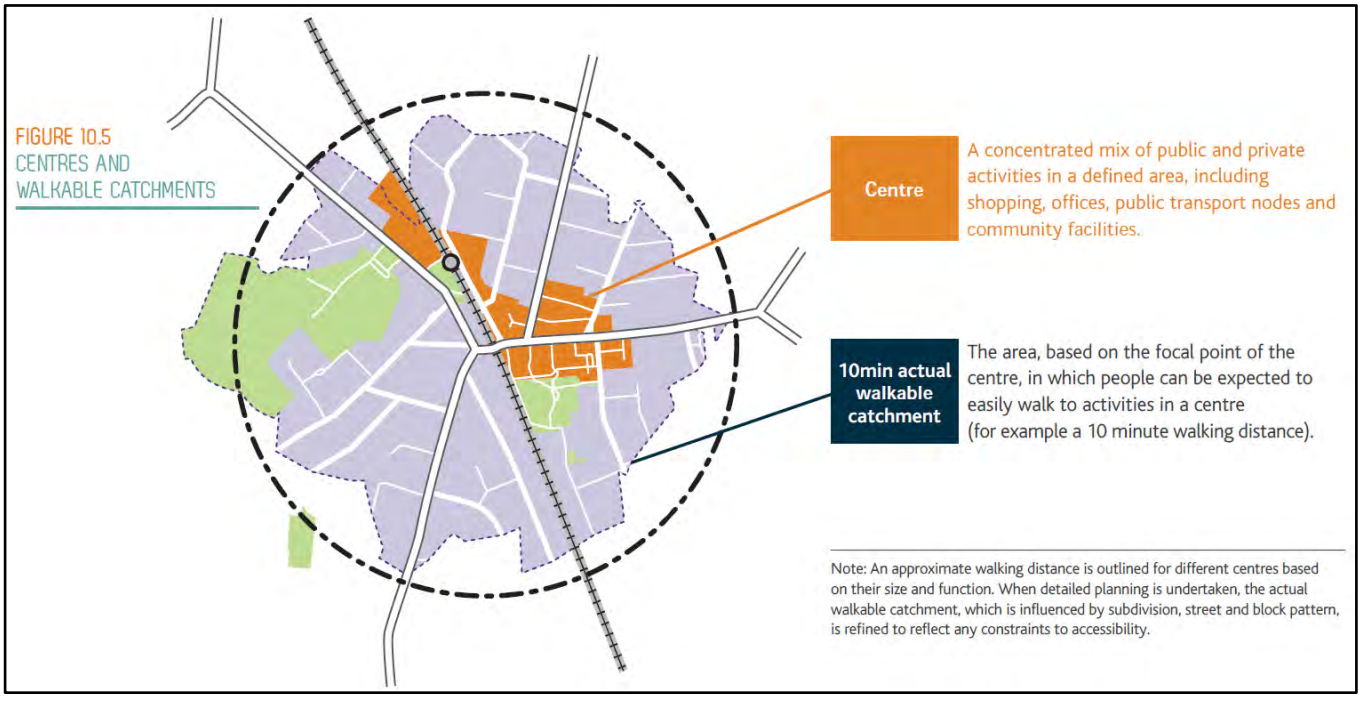


Figure 7: Centres and walkable catchments diagram from the Auckland Plan 2012

[41] Auckland Council (2012). *Auckland Plan.* (p.253)

A centres and corridors technical report[42] that informed the drafting of the Auckland Plan (and formed part of the s32 on the Proposed Auckland Unitary Plan[43]) goes into further detail on walkable catchments.

The report states that a walkable catchment is the area based on the focal point of a centre in which people can be expected to easily walk to activities in a centre. These can vary for different centres because of contextual issues. However, for the purposes of providing consistent information at a strategic level for modelling and comparison between centres, the report recommends the following walkable catchments metrics.

- Town centres – based on a 10 minute (800m) radius.
- Metropolitan centres – based on a 12-15 minute (1,000m) radius. This larger size is based on a metropolitan centre's greater ability to attract people through a wider range of services, and greater transport accessibility. Research indicates that people will walk greater distances than this to access Rapid Transit Network services. However for the purposes of the report a conservative walking catchment was chosen.
- Local centres – based on a 10 minute (800m) radius. The use of this catchment reflects that many of these centres, while smaller than town centres, have access to Rapid Transit Network and Quality Transit Network services.

The report also notes that at the stage where Local Area Planning and Precinct Planning is undertaken, contextual elements (e.g. subdivision, block and roading patterns, topography) should be taken into account to derive a spatially distinct catchment for each centre.

This approach is similar to the preferred option (Option 3 in the main body of this s32 report), although a key difference is the single point of origin relative to a centre, rather than the use of a centre edge as is required to implement NPS-UD Policy 3(c).

3.2 Proposed Auckland Unitary Plan (2013)

The phrase 'moderate walking distance' was proposed as part of the Regional Policy Statement section of the Proposed Auckland Unitary Plan (policy 2.4.2 (2) and (3)). During the hearings on the plan, Auckland Council's evidence did not support defining the phrase in the plan as "this needs to be considered on a case by case basis with consideration of the walking environment, accessibility and topography".[44]

Further evidence from council outlined some zoning principles that indicated that the Terrace Housing and Apartment Building ('THAB') zone should be applied within 250m of centres, the rapid and frequent service network and large community facilities or open space facilities, and that the Mixed Housing Urban zone should be applied within 250m of the THAB zone. These principles are illustrated in the diagrams in Figure 8 and Figure 9 below

[42] Mackay, Dawne (2012). *Technical report: Centres and Corridors.* Auckland Council.
[43] Refer to https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/unitary-plan/history-unitary-plan/documentssection32reportproposedaup/appendix-3-4-5.pdf
[44] Trenouth, Chloe (2016). *Independent hearings panel statement of rebuttal evidence on behalf of Auckland Council on Topic 013* Paragraph 6.21

and were guidance to establishing a “moderate walkable distance” for the purpose of responding to rezoning submissions on the plan.[45]

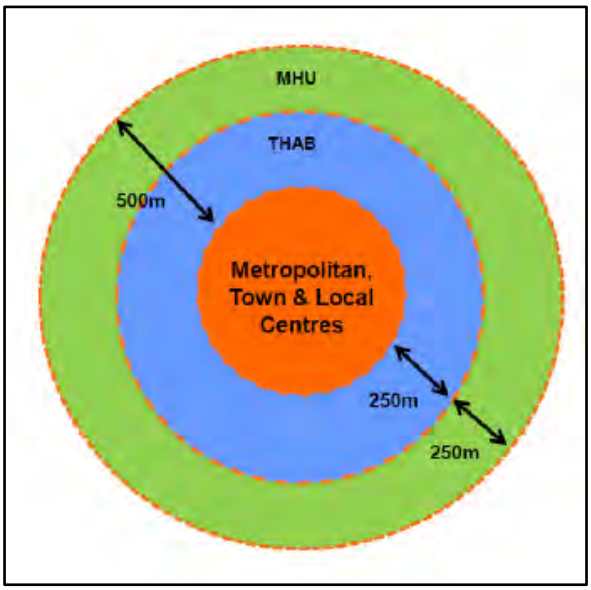


Figure 8: Diagram of Auckland Council’s zoning principles for Metropolitan, Town and Local Centres based on a moderate walking distance[46]

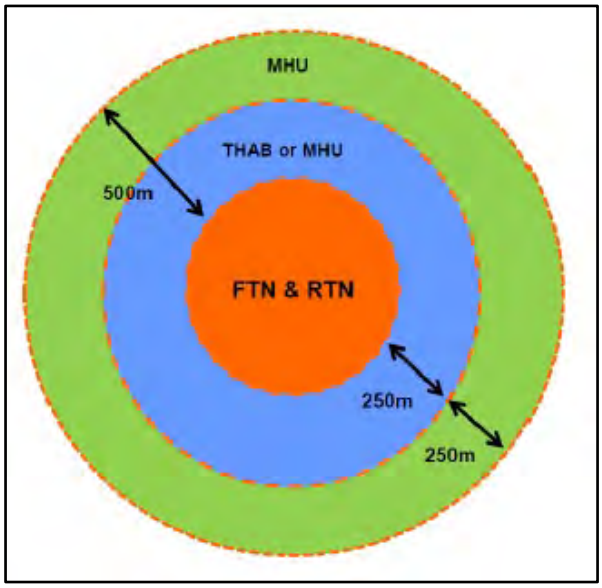


Figure 9: Diagram of Auckland Council’s zoning principles for Frequent and Rapid Transit based on a moderate walking distance[47]

[45] Duguid, John (2016). *Independent hearings panel statement of primary evidence on behalf of Auckland Council (zoning) 3 December 2015 on Topic 080 Rezoning and Precincts (General) and Topic 081 Rezoning and Precincts (Geographical Areas)*
[46] Duguid, John (2016). *Independent hearings panel statement of rebuttal evidence on behalf of Auckland Council (zoning) 27 January 2016 on Topic 080 Rezoning and Precincts (General) and Topic 081 Rezoning and Precincts (Geographical Areas)*
[47] Duguid, John (2016). *Independent hearings panel statement of rebuttal evidence on behalf of Auckland Council (zoning) 27 January 2016 on Topic 080 Rezoning and Precincts (General) and Topic 081 Rezoning and Precincts (Geographical Areas)*

Overall, consideration of the application of the more intensive zones was recommended to start at a distance of up to 500m from the edge of centres and rapid public transport. Evidence from Auckland Transport stated that this distance broadly aligned with international practice, where the commonly cited standard is 400m for an average level of public transport and 800-1000m for services of a higher quality, especially those that run on their own right of way. These distances all derive from the distance an average person can walk within five minutes (400-500m) and 10 minutes (800-1,000m).[48]

The evidence went on to acknowledge that there is uncertainty around any specific threshold figure but that the closer a person lives to public transport, the more likely they are to walk to and use that service. Therefore, to increase public transport intensification should be focused as close as possible to the transport network. Conversely, allowing intensification further away from public transport will likely see a smaller percentage of these residents use public transport and a corresponding increase in private vehicle use.[49]

As a starting point Auckland Transport's evidence found that a distance of around 400-500m from rapid transit stations (subject to factors such as topography) was appropriate and is in line with what nearly all early studies show as being aligned with a higher level of public transport usage. The evidence found more uncertainty around walkable catchments for centres but landed on a distance equal to five minutes' walk (around 400-500m). This sits in the middle range of the figures in the studies reviewed in the evidence and represents the distance many people will walk for their day-to-day needs.[50]

3.3 Independent Hearings Plan – recommendations to the Auckland Council on the Proposed Auckland Unitary Plan

In recommending the approach to residential zoning in the Unitary Plan maps, the Independent Hearings Panel referred to the concept of walkable catchments and the metric that they preferred:

> "In terms of applying higher density zones, the Panel has preferred a wider walkability metric than the 200-400m [sic] proposed by Council. While accepting that a 400-800m metric as proposed by the Housing New Zealand Corporation is not appropriate in all circumstances, or likely realisable within the current medium-term, ten-year planning horizon, the Panel considers that approach to be more appropriate strategically when taking the longer-term 2041 planning horizon into account."[51]

---

[48] Cribbens, Alastair. Wrenn, Steve. Winter, Liam. *Joint statement of evidence on behalf of Auckland Council (Auckland Transport) for Topic 080 Rezoning and Precincts (General) and Topic 081 Rezoning and Precincts (Geographical Areas) before the Auckland Unitary Plan Independent Hearings Panel.* 3 December 2015.
[49] Ibid
[50] Cribbens, Alastair. Wrenn, Steve. Winter, Liam. *Joint statement of evidence on behalf of Auckland Council (Auckland Transport) for Topic 080 Rezoning and Precincts (General) and Topic 081 Rezoning and Precincts (Geographical Areas) before the Auckland Unitary Plan Independent Hearings Panel.* 3 December 2015.
[51] Independent Hearings Panel (2016). *Report to Auckland Council - Changes to the Rural Urban Boundary, rezoning and precincts – Hearing topics 016, 017 Rural Urban Boundary, 080 Rezoning and precincts (General) and 081 Rezoning and precincts (Geographic areas).* Section 3.3.4 https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/unitary-plan/history-unitary-plan/ihp-designations-reports-recommendations/Documents/ihp016017080081changestorubrezoningprecincts.pdf

The Housing New Zealand Corporation zoning principles are illustrated in the diagram in Figure 10 below.

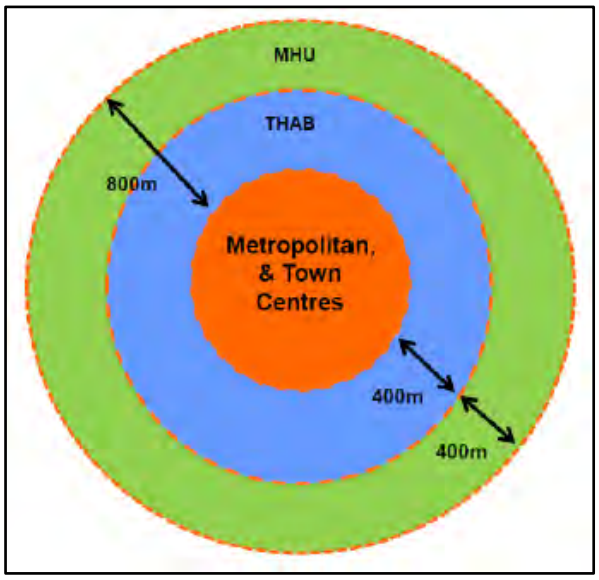


Figure 10: Diagram of Housing New Zealand Corporation's zoning principles for Frequent and Rapid Transit based on a moderate walking distance[52]

The Independent Hearings Panel's explanation for these distances is very brief and as such it is unclear where exactly these distances were intended to apply (i.e. whether the panel had adopted the council's zoning approach but with different distances, or they had adopted an altogether different approach). Given the lack of explanation it is assumed that the 400-800m was meant to apply in the same locations as council's 'moderate walking distances' (Metropolitan Centres, Town Centres, Local Centres, Rapid Transit, Frequent Transit, Arterials).

The residential zone mapping recommended by the Independent Hearings Panel (based on the 400-800m walkable catchments) was accepted by Auckland Council.

3.4 Auckland Council submission on the Proposed National Policy Statement on Urban Development

In 2019 Auckland Council lodged a submission in response to the Government's discussion document *"Planning for successful cities"* and the proposed NPS-UD. The council supported the overall intention of the proposed NPS-UD, but not all the content.

The submission sought to make the point that the Auckland Unitary Plan was already effectively enabling intensification within key areas of Auckland. It stated that both employment space and housing was being delivered across Auckland at increasing pace, and in accessible locations that provide for housing choice.

[52] Duguid, John (2016). *Independent hearings panel statement of rebuttal evidence on behalf of Auckland Council (zoning) 27 January 2016 on Topic 080 Rezoning and Precincts (General) and Topic 081 Rezoning and Precincts (Geographical Areas)*

The submission stated that after the Auckland Unitary Plan became operational, there was a large increase in consents granted for housing and additional business floor space and that most of Auckland's housing growth had occurred within existing urban areas.

The submission also highlighted a pattern of larger developments near public transport. It stated that while only 2.6% of the Auckland region's land area falls within a 1,500m walk of a rapid transit station (a train station or northern busway stop), this small area was where 41% of all multi-unit developments were consented in 2017/2018.

This share of multi-unit consents is 16 times higher than the rapid transit stop catchment's share of Auckland's land. If only considering the 2016-defined urban area, overall 40% of all dwellings consented in the urban area were within the rapid transit stop catchments (even though those catchments only account for 25% of Auckland's urban area).[53]

3.5 Auckland Plan Development Strategy 2050 monitoring (2021)

The Auckland Plan Development Strategy sets out how Auckland will grow and change over the next 30 years. In 2021 the council produced the third monitoring report on the strategy, covering the period 1 July 2020 to 30 June 2021.

The monitoring report states that 4,793 dwellings were consented within 1,500m catchments of train stations and the Northern Busway stations. This is 25% of the total dwellings consented. Train stations refer to stations on the Southern Train Line, Eastern Train Line, Western Train Line, and Onehunga Train Line.[54]

The report also states that in 2020/2021, 85 per cent of residential dwellings consented within 1,500m catchments of train stations and Northern Busway stations were intensive housing (apartments and townhouses etc).[55]

3.6 Auckland Design Manual (2022)

The Auckland Design Manual was created to support developers through the design concept and development phase. It is a practical guide that sits alongside the Auckland Unitary Plan. The Unitary Plan is the 'rule book' and the Auckland Design Manual is the 'how to' guide.

The 'Subdivision and Neighbourhood Design' section of the manual refers to 'walkable neighbourhoods'. The manual states that a 'rule of thumb' is that subdivision design should maximise the area and the mix of activities that can be accessed from each lot within a 10-minute walk. The manual notes that able-bodied adults can walk at an average speed of 1.5 metres per second, or up to 800m in 10 minutes, accounting for occasional delays.[56]

---

[53] Auckland Council (2019). *Auckland Council submission to the Proposed National Policy Statement on Urban Development - 10 October 2019.*
[54] Auckland Council (2021). *Auckland Plan 2050 Development Strategy Monitoring Report 2021* (p.7)
[55] Auckland Council (2021). *Auckland Plan 2050 Development Strategy Monitoring Report 2021* (p.9)
[56] Auckland Council (2022). *Auckland Design Manual* https://www.aucklanddesignmanual.co.nz/sites-and-buildings/subdivision/guidance/movement-networks/walkable-neighbourhoods

3.7 Auckland Monthly Housing Updates (2022)

Auckland Council produce a monthly summary of data for housing in Auckland including the number of dwellings consented, the types of dwellings, the locations of the new dwellings.[57]

In the June 2022 update (which uses data from April) it notes that:

> "In April 2022, 329 dwellings (19 per cent of total dwellings consented) were consented inside the rapid transit network's 1,500m walking catchments. In the last 12 months, 5,250 dwellings were consented inside the 1,500 rapid transit network walking catchments."

The map showing the spatial distribution of dwellings consents shows three categories of "Pedestrian catchment of rapid transit network stops":

- 0 – 500m
- 500 – 1,000m
- 1,000 – 1,500m

The datasheet behind the Auckland monthly housing update[58] contains dwelling figures for each of these catchments. However, the only catchment referred to in the update report is the total 1,500m catchment. This catchment distance was decided on in 2017 and was loosely based on a study by Auckland Council in 2013 on how far people walk to train stations and busway stations.[59]

While there is now some further guidance around walking distances by Auckland Transport and MfE, to retain consistency and the ability to look at data trends, the monthly housing update still collects data based on a 500m, 1,000m, and 1,500m distances.

3.8 Auckland Transport - Urban Street and Road Design Guide (2019)

The Urban Street and Road Design Guide forms part of Auckland Transport's Transport Design Manual. The Transport Design Manual is a set of guides, codes and specifications created for the Auckland region based on international best practice.[60]

The Urban Street and Road Design Guide refers to 'pedestrian catchments'. These represent the range that people can walk over a given time period. Common barriers to range include busy streets with difficult pedestrian crossings and paths in areas that feel unsafe. Maximising pedestrian accessibility is a key strategy to supporting local businesses, public transport services and other destinations.

The guide includes a section on local destinations and how these enable to people to access community services, retail offerings and even jobs without the need for a long-distance trip. The guide includes the diagram in Figure 11 below showing 'acceptable' travel times of a 20 minute walk to destinations such as rapid transit, town centres, intermediate schools, and

---

[57] Auckland Council Spatial Analysis and Modelling Team, Research and Evaluation Unit (2022). *Auckland Monthly Housing Update.* June 2022 https://knowledgeauckland.org.nz/publications/auckland-monthly-housing-update-june-2022/

[58] Auckland Council Research and Evaluation Unit, RIMU (2022). *Auckland monthly housing update Datasheet.* https://knowledgeauckland.org.nz/media/2384/auckland-monthly-housing-update-datasheet-06june-2022.xlsx

[59] Wilson, L (2013). *Walkable catchments analysis at Auckland train and Northern Busway stations – 2013.* Technical Report: TR2013/014. Auckland Council. https://knowledgeauckland.org.nz/media/1541/tr2013-014-walkable-catchments-analysis-at-auckland-train-and-northern-busway-stations-2013.pdf

[60] Auckland Transport (2022) *Urban Street and Road Design Guide* – Version 1.1

high schools. It shows a 10 minute walk as being acceptable for trips to neighbourhood centre shops and frequent bus services.[61]

Figure 11: Acceptable walking times to different destinations[62]

4 Comparator city approaches

It can be useful to look to other international cities and how they have used walkable catchments to inform zoning and/or urban form planning. Figure 12 below shows some examples of the guidance offered by other international local governments (city and state) in relation to the distance of walkable catchments. This is by no means an exhaustive list. The examples are mostly from areas that are similar to Auckland in terms of their history and development.[63]

The table shows that walkable catchments most frequently feature in Urban Design or Transit Oriented Development guidelines. The recommended distances range from 400m–800m or 5–10 minutes' walk from public transport, with the longer distance generally being seen as more appropriate for major transit stops.

[61] In this case "town centre" could be reasonably interpreted to apply to Metropolitan and Town Centre zones and "neighbourhood centre shops" to Local and Neighbourhood Centre zones.
[62] Source: Auckland Transport (2022) *Urban Street and Road Design Guide* – Version 1.1
[63] Cities in Australia, Canada and the USA are generally more comparable to Auckland than European, Asian or African cities due to their similar age, culture, colonial migration history, and significant low-density development with associated auto-dependency.

The guidelines also often point to height and density being focussed immediately around stations and decreasing within the catchment so that the built form on the edge of the catchment is similar to the lower density land uses outside the catchment. This is different to the approach required by the NPS-UD which directs that 6 storeys must be enabled within the catchment without any 'stepping down' of heights and densities (i.e. to attempt to blend with the surrounding more urban form outside the catchment or to concentrate the greatest land use intensity closest to rapid transit stops/centres where greater population density can be proximate to rapid and reliable public transport/greatest range of commercial activities, community services and amenities).

Location	Guidance document	Distance	Additional detail
Victoria, Australia	Plan Melbourne 2017 -2050: 20-minute neighbourhoods[64]	**800m (10 mins)**	• A 20-minute journey represents an 800m walk from home to a destination and back again. Or a 10 minute walk to your destination and 10 minutes back home.
Queensland Australia	Transit oriented development: guide for development in a railway environment[65]	**800m**	• Core (200m), Primary Walking Catchment (400m) and Secondary Walking Catchment (800m)
Western Australia, Australia	Liveable neighbourhoods [66]	**400 - 800m**	• Focus on extra density within 800m of Rapid transit networks and larger centres • Stepping down to a transition area toward (but within) the edge of this area
Sydney, Australia	Integrated Public Transport Service Planning Guidelines[67]	**400m – 1,000m**	• 800m – 1,000m for mass transit stations and intermediate transit stations. • 400m for local transit stations
Edmonton, Canada	Transit Oriented Development Guidelines[68]	**400 - 800m**	• Main height and density within 200m

[64] The State of Victoria: Department of Environment, Land, Water and Planning. (2017). *Plan Melbourne 2017 – 2050: 20-minute neighbourhoods* https://www.planning.vic.gov.au/policy-and-strategy/planning-for-melbourne/plan-melbourne/20-minute-neighbourhoods

[65] The State of Queensland: Department of Infrastructure and Planning. (2010). *Transit oriented development: guide for development in a railway environment.* https://cabinet.qld.gov.au/documents/2009/dec/tod%20publications/Attachments/tod-guide[1].pdf

[66] Government of Western Australia: Department of Planning. (2015). *Liveable neighbourhoods: 2015 Draft.* https://www.wa.gov.au/system/files/2021-05/FUT-LiveableNeighbourhoods_2015.pdf

[67] NSW Ministry of Transport (2013) *Integrated Public Transport Service Planning Guidelines.* Sydney, Australia.

[68] City of Edmonton Sustainable Development and Transportation Services Departments. (2012). *Transit Oriented Development Guidelines.* Edmonton City Council. https://www.edmonton.ca/sites/default/files/public-files/documents/PDF/TOD_Guidelines_-_February_2012.pdf

Location	Guidance document	Distance	Additional detail
			• Measure from station platform
Calgary, Canada	Transit Oriented Development Policy Guidelines[69]	**600m approx (5-10 mins)**	• "The distance that a pedestrian is likely to travel to take transit"
Vancouver, Canada	Transit-Oriented Communities Design Guidelines[70]	**800m**	• Within that area height and density should scale down
San Francisco, USA	Transit-Oriented Development Guidelines. Bay Area Rapid Transit[71]	**400-800m[72] (5-10 mins)**	• "Overall, the proportion of transit riders walking to transit is greatest within 1/4 mile or less of a station, typically declining by one-half between 1/4 and 1/2 mile, and becoming insignificant beyond 1/2 mile"
Dallas, USA	Transit Oriented Development Guidelines[73]	**400m (1/4 mile)**	• Standard buffer zone applied to rapid transit stations

Figure 12: Comparator city approaches to walkable catchments

5 Approaches of other tier 1 councils to implementing Policy 3(c) – walkable catchments

The NPS-UD classifies local authorities into three tiers. These were informed by population size and growth rates. This approach allows the most directive policies to be targeted towards the tier 1 areas which are the largest and fastest growing urban centres, where the greatest benefits of intensification can be realised[74]. New Zealand's tier 1 local authorities

[69] The City of Calgary: Land Use Planning & Policy. (2005). *Transit Oriented Development Policy Guidelines.* https://www.calgary.ca/content/dam/www/pda/pd/documents/transit-oriented-development/tod-policy-guidelines.pdf
[70] Translink. (2012). *Transit-Oriented Communities Design Guidelines.* https://www.translink.ca/-/media/translink/documents/plans-and-projects/managing-the-transit-network/transit_oriented_communities_design_guidelines.pdf
[71] Arrington, G., & Thorne-Lyman, A. (2017). *Transit-Oriented Development Guidelines. Bay Area Rapid Transit.* https://www.bart.gov/sites/default/files/docs/BART_TODGuidelinesFinal2017_compressed_0.pdf
[72] ¼ mile = 402m, ½ mile = 805m
[73] Dallas Area Rapid Transit. (2020). *Transit Oriented Development Guidelines.* https://www.dart.org/economicdevelopment/DARTTODGuidelines2020.pdf
[74] Ministry for the Environment. 2020. *Introductory guide to the National Policy Statement on Urban Development 2020.* Wellington: Ministry for the Environment.

are listed in column 2 of table 1 of the NPS-UD Appendix. The list of tier 1 urban environments and local authorities are shown in Figure 13 below.

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

Figure 13: Tier 1 urban environments and local authorities

Tier 1 urban environments are directed by the NPS-UD to implement Policy 3(c). That is, the walkable catchments around the city centre, metropolitan centres and rapid transit stations. While the individual context of each tier 1 local authority is different, it would seem logical that each council would have similar, but not necessarily the same, walkable catchment responses.

While a generally consistent approach has been taken to walkable catchment distances across the five tier 1 urban areas, each tier 1 area is distinctive. This has resulted in different Policy 3(c) intensification enablement responses overall.

The scale and complexity of the tier 1 urban areas are quite different. Auckland has a large city centre and ten metropolitan centres of varying sizes, plus a rapid transit network (rail and busway). Multiple and overlapping walkable catchments are therefore required in Auckland. Three of the other four urban areas do not have any metropolitan centres or any rapid transit services. Further differences are logical when accounting for topography (e.g. Christchurch is built on a plain whereas Auckland's landform is much more varied with maunga, valleys and ridges). Therefore, absolute national consistency across the tier 1 urban areas is neither necessary or achievable.

While Auckland Council is not required to follow the distances for walkable catchments used by other tier 1 local authorities, a comparison exercise is nevertheless useful to determine whether Auckland is significantly different to other tier 1 local authorities and if so, what the reasons for this might be.

Figure 14 below summarises the different walking catchment metrics used by the tier 1 councils in New Zealand. It illustrates that there is a consistency between the walkable catchment metrics each council has used. While each council did its own internal work to come up with their walkable catchment metrics, the consistency can likely be explained through each council's references to well established industry guidelines and academic studies on walkable catchments.

Walkable Catchment	Tier 1 urban area				
	Auckland	Christchurch	Wellington[75]	Hamilton	Tauranga
City centre	1,200m	1,200m	800m	800m	1,500m
Metropolitan centres	800m	N/A (would be 800m)	Approx. 800m (10 mins)	N/A	N/A
Rapid transit stops	800m	N/A (would be 800m)	Approx. 800m (10mins)	N/A	N/A

Figure 14: The walkable catchment metrics used by tier 1 local authorities for implementing Policy 3(c) of the NPS-UD

The three largest tier 1 councils (Auckland, Christchurch and Wellington) are closely aligned with their walkable catchments for the city centre. Both Auckland and Christchurch have a city centre walkable catchment of 1,200 metres (or a 15 minute walk). While Wellington's recently adopted spatial plan[76] included a walkable catchment of 15 minutes from the edge of the city centre, the council reduced this to 800m when the District Plan Review was notified in July 2022. The distances in Hamilton and Tauranga are different (800 and 1,500 metres) and this is due to the smaller size of these cities and the different and reduced hierarchy of centres these cities have.

The walkable catchments for metropolitan centres and rapid transit stops were consistent between Auckland and Wellington. These two councils are the only tier 1 councils with identified metropolitan centres and rapid transit stops. Christchurch determined an 800m walkable catchment would be suitable for these locations, but it currently does not have any identified metropolitan centres or rapid transit stops to which this catchment could be applied. Hamilton and Tauranga do not have any identified metropolitan centres or rapid transit stops.

6 Census travel data for Auckland

The 2018 census provides data on trips to work and trips to education. Through this data the rates of walking from surrounding areas into to the city and metropolitan centres can be quantified. The percentage of people who walk to work overall is relatively low. The percentage of workers arriving by walking to the city centre is 4.1%. The percentages in the metropolitan centres is lower, ranging from 3.3% (Newmarket) down to 0.4% (Manukau).

6.1 City Centre

Figure 15 below shows the 'walk to work' percentages of residents that live in areas surrounding the Auckland city centre and who work in the city centre. It shows that relative to the metropolitan centres, the city centre has a large surrounding area in which a high

[75] Rather than a distance calculation, Wellington City Council established a walking time (15 or 10 minutes) and then a GIS analysis used a person's average walking speed to determine the extent of the catchment (i.e. how far could they walk in 15 or 10 minutes). Various impediments to walking (i.e. slopes, road crossings) were mapped and they each reduced the average walking speed for that section, and therefore impacted the extent of the catchment.

[76] Wellington City Council (2021). *Our City Tomorrow: Spatial Plan for Wellington City: An Integrated Land-use and Transport Strategy*

proportion of people walk to their city centre work destination. There are 13 areas around the city centre that have percentages over 10%, with five areas over 30%.

As depicted on the map, the areas with the higher percentages of people who walk to work in the city centre are around 1km (as the crow flies) from the edge of the City Centre zone (where the 1km buffer is measured from). Therefore, in reality some of the distances walked are likely to be closer to 2km once the actual walking route is considered.[77] In addition, many work destinations will be beyond the edge of the City Centre zone and therefore the distance will be greater.

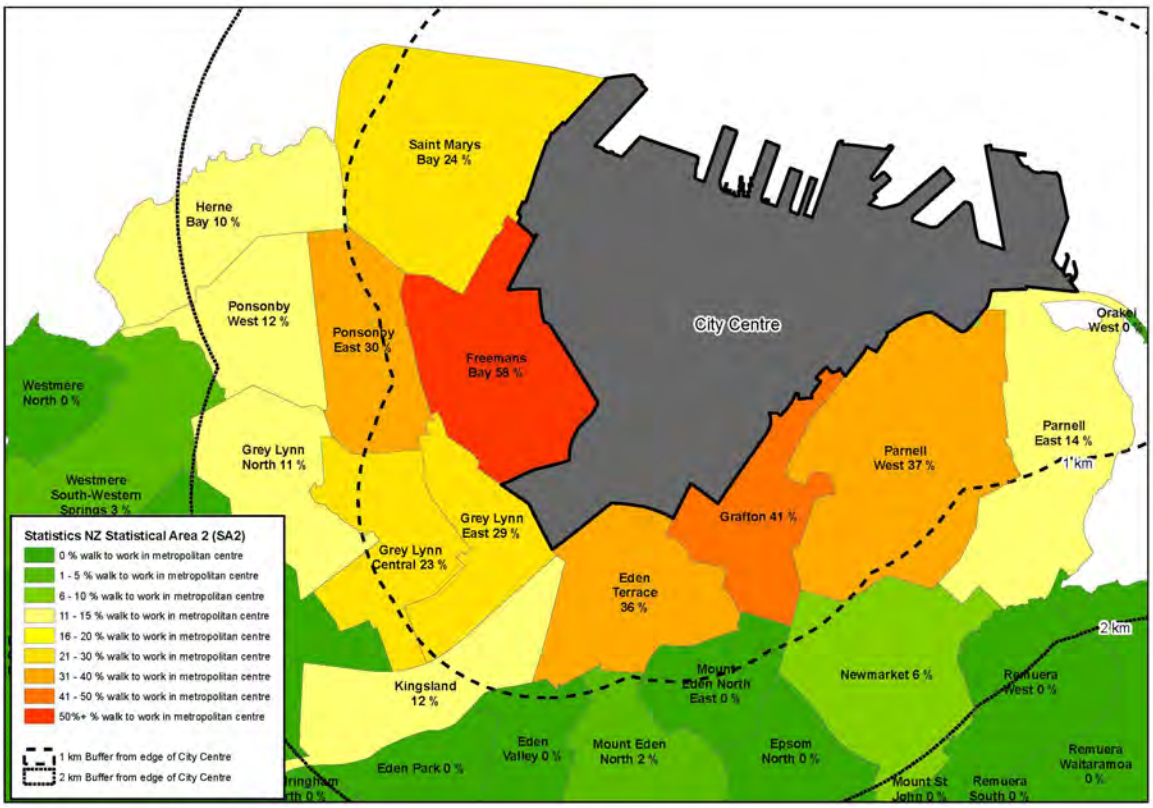


Figure 15: Percentage of residents that walk to their work destination in the city centre

6.2 The metropolitan centres

The census data shows that most of Auckland's ten metropolitan centres do not have a high proportion of people in the area surrounding each centre that walk to their work destination in the metropolitan centre. Takapuna, New Lynn and (in particular) Newmarket show relatively high proportions of people walking to their work destination in those metropolitan centres from surrounding areas. However, the other seven metropolitan centres show that only a small proportion of people in surrounding areas walk to their work destination in those centres. The maps for each of the metropolitan centres are shown in Figures 16-25 below[78].

[77] The size and shapes of the statistical areas used make definitive distances difficult to determine.

[78] Note that while the Statistics New Zealand SA2 areas are a close match to the City Centre zone, none of the SA2 areas match the Metropolitan Centre zones. Therefore, data for those residents living outside the Metropolitan Centre zone but within the same SA2 as the Metropolitan Centre zone is not captured on these maps. Also note that two Metropolitan Centre zones (Henderson and New Lynn) have parts that are in other SA2 areas (outside the grey area on the maps). More detailed SA1 census information on travel to work was unavailable for this exercise.

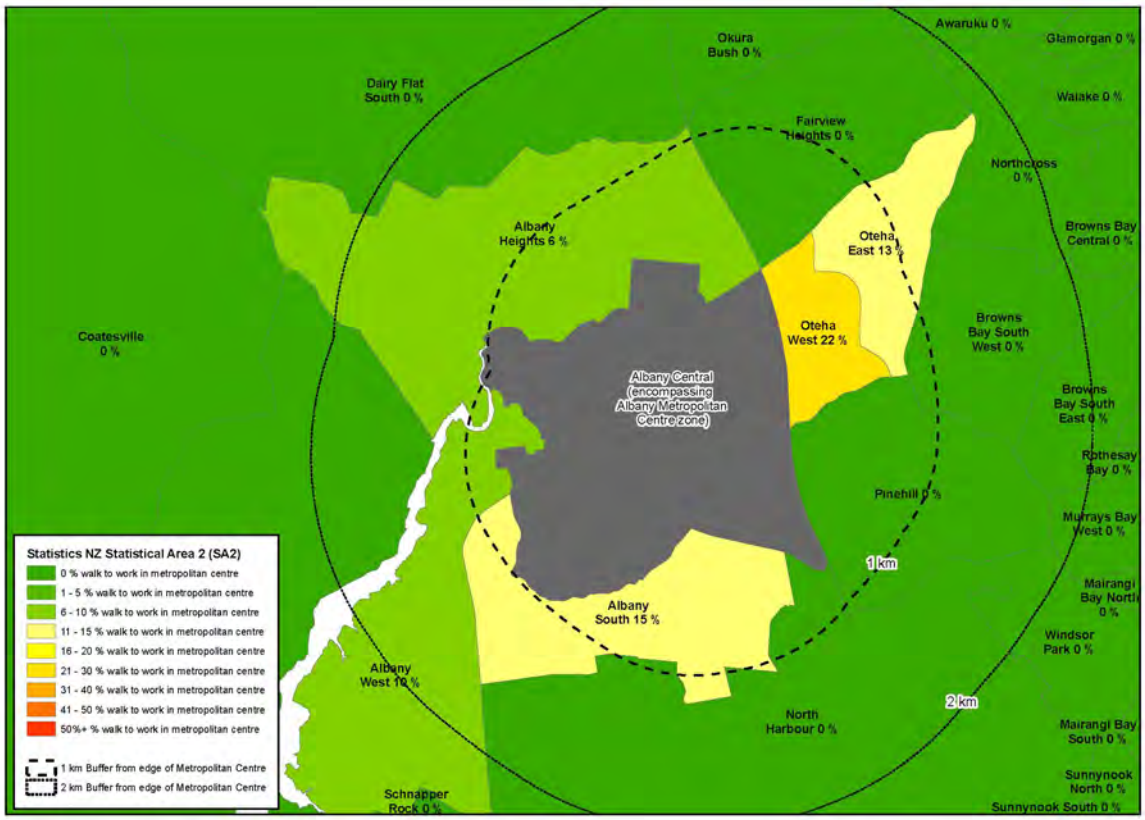


Figure 16: Percentage of residents that walk to their work destination in the Albany metropolitan centre

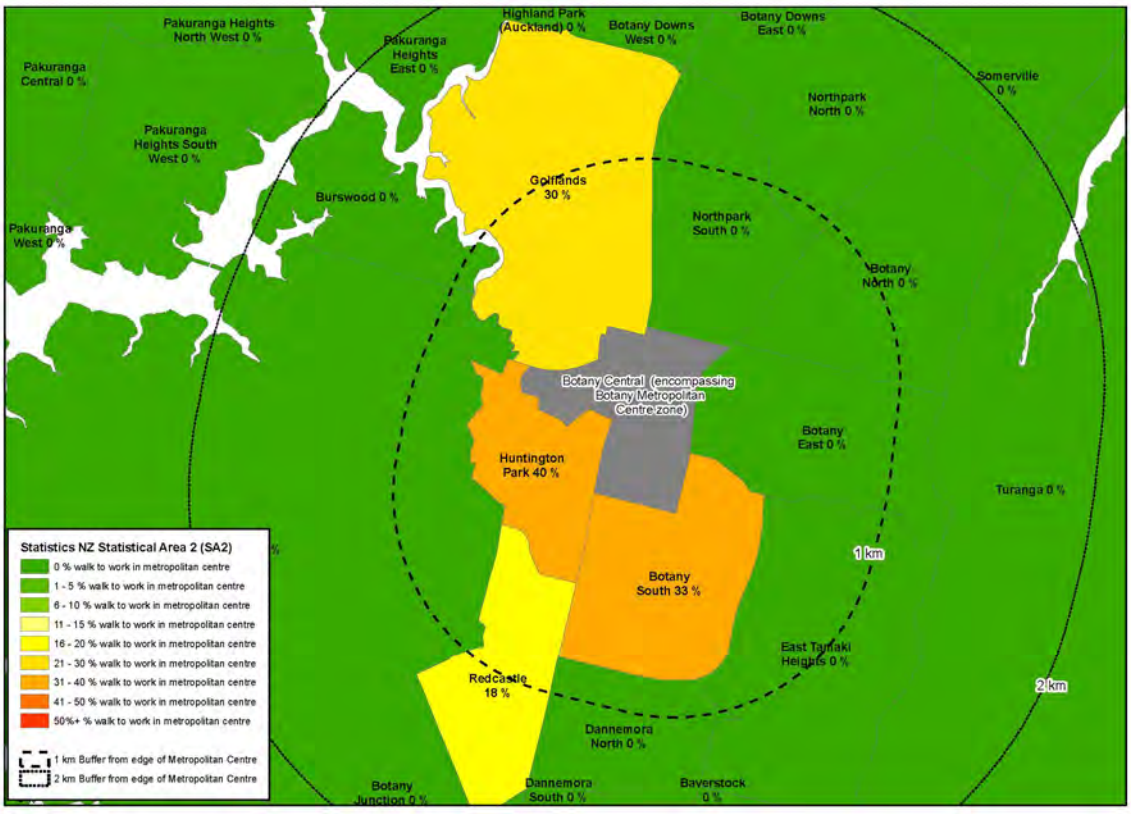


Figure 17: Percentage of residents that walk to their work destination in the Botany metropolitan centre

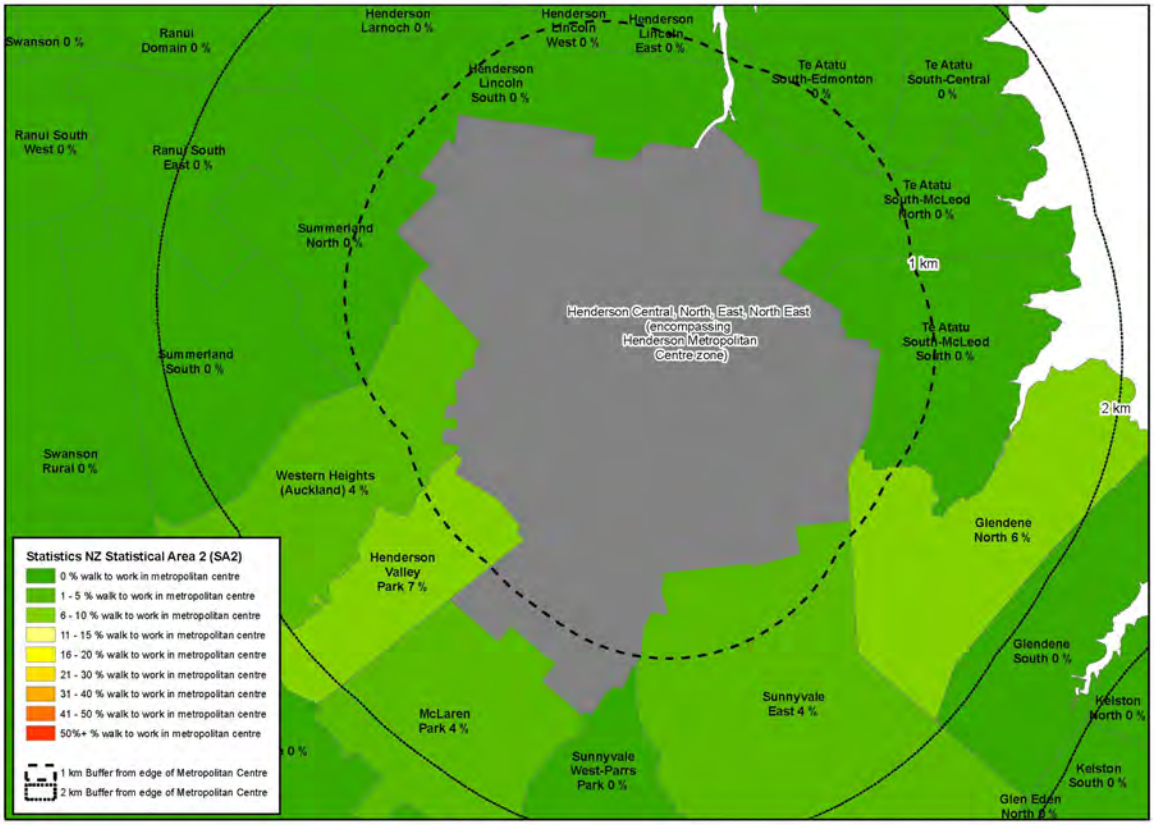


Figure 18: Percentage of residents that walk to their work destination in the Henderson metropolitan centre

Figure 19: Percentage of residents that walk to their work destination in the Manukau metropolitan centre

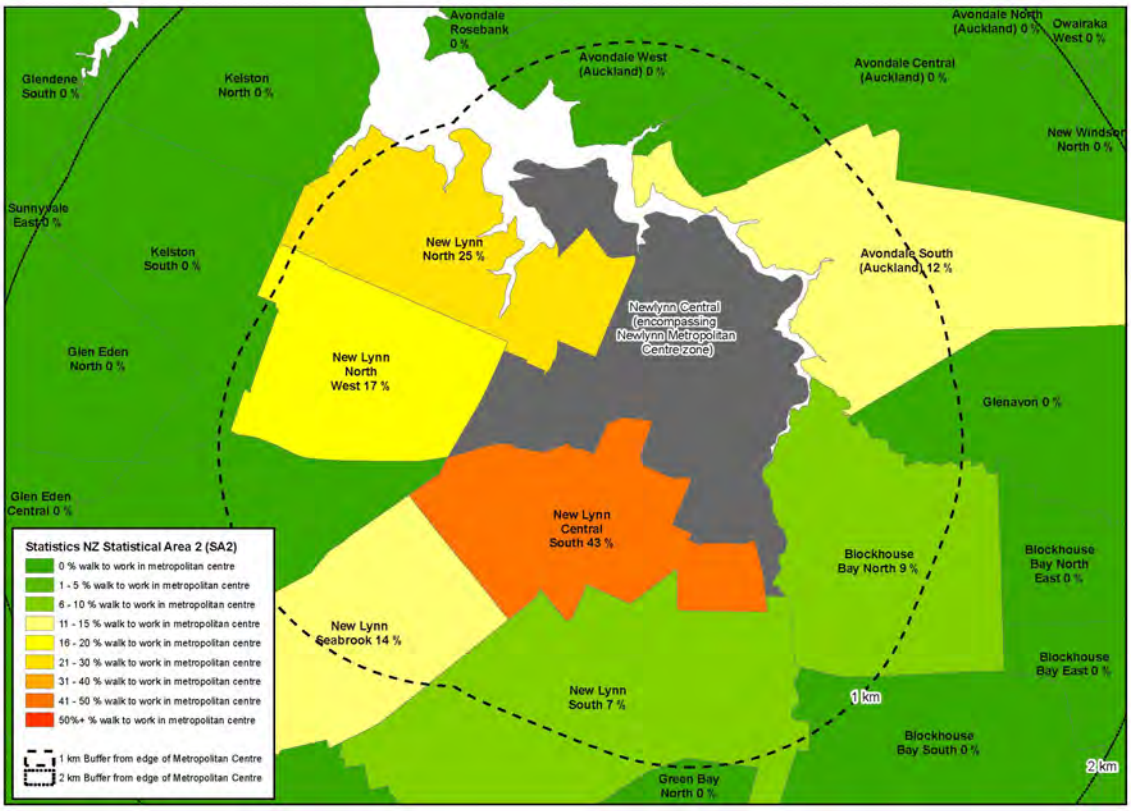


Figure 20: Percentage of residents that walk to their work destination in the New Lynn metropolitan centre

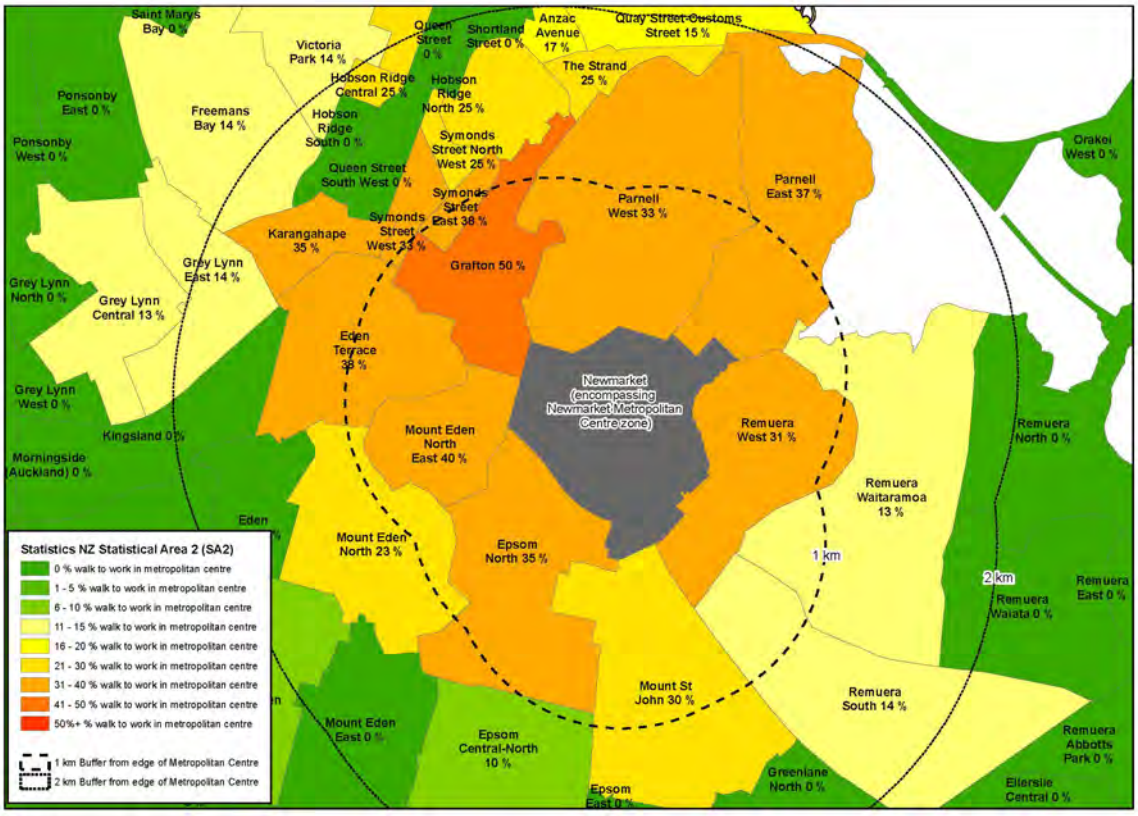


Figure 21: Percentage of residents that walk to their work destination in the Newmarket metropolitan centre

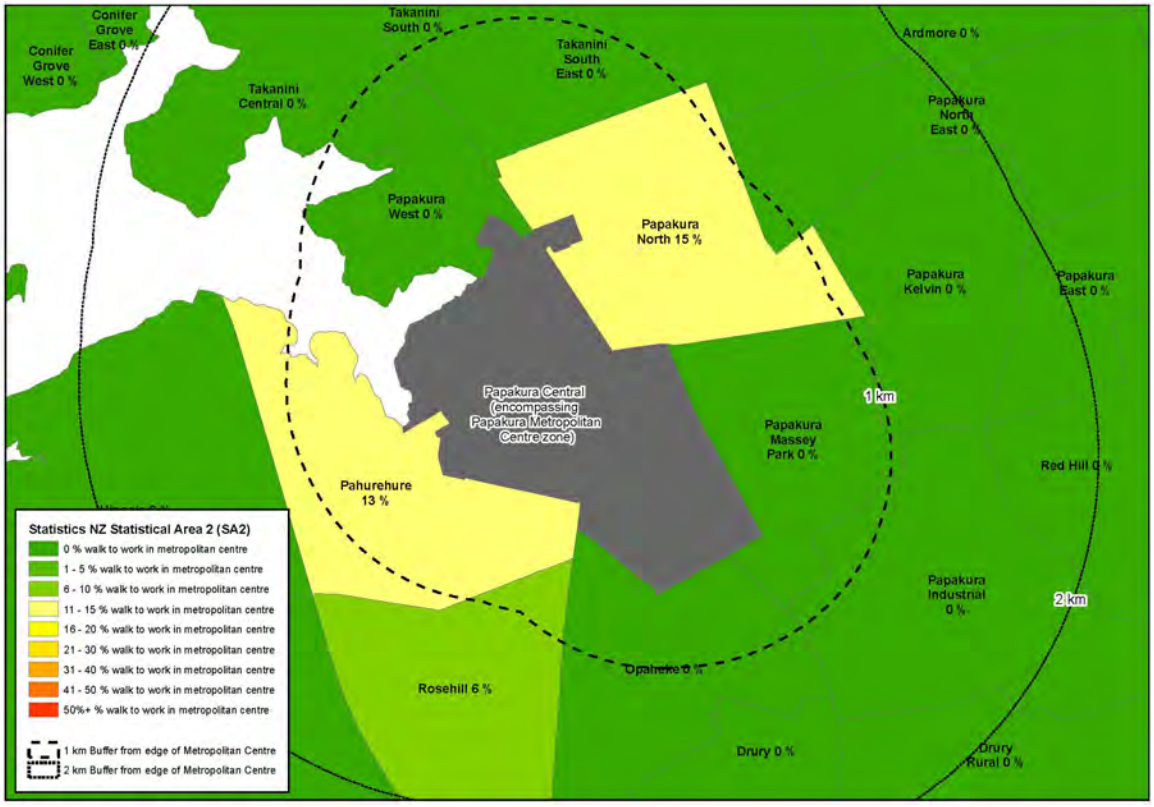


Figure 22: Percentage of residents that walk to their work destination in the Papakura metropolitan centre

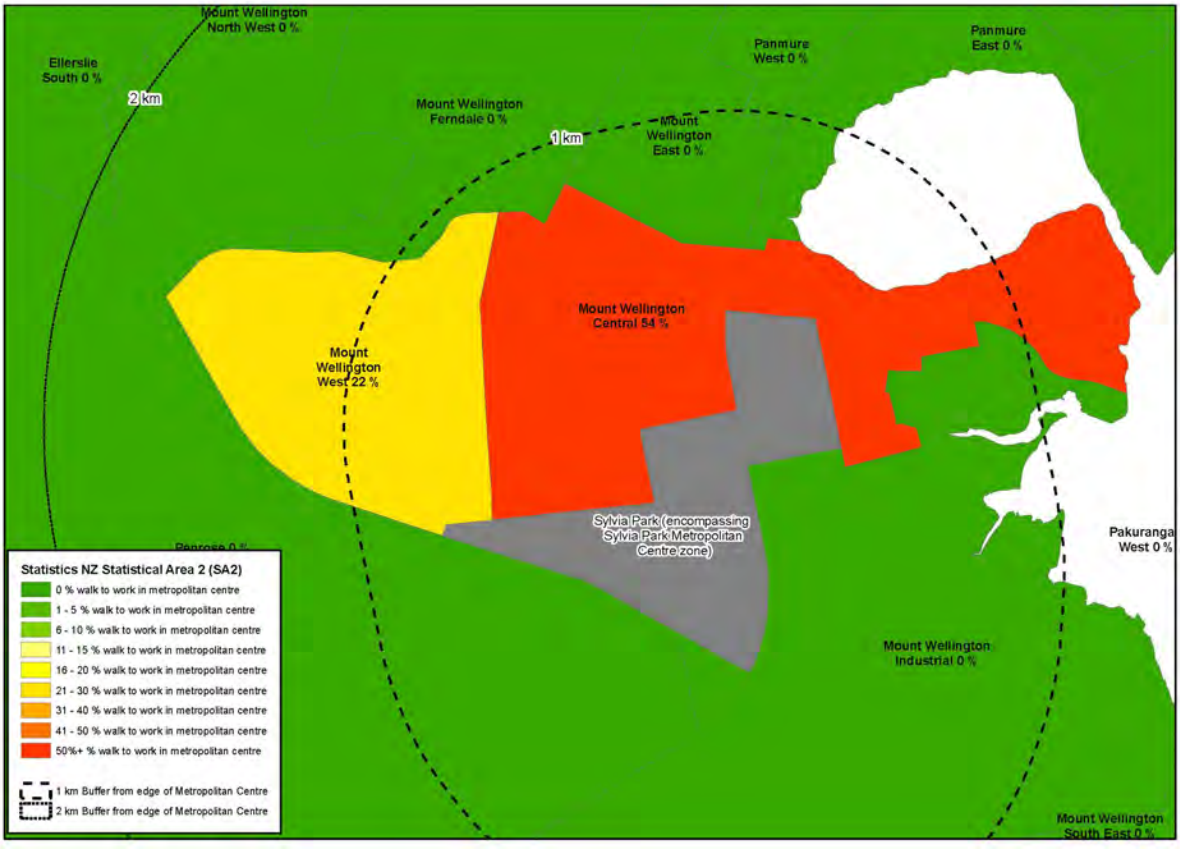


Figure 23: Percentage of residents that walk to their work destination in the Sylvia Park metropolitan centre

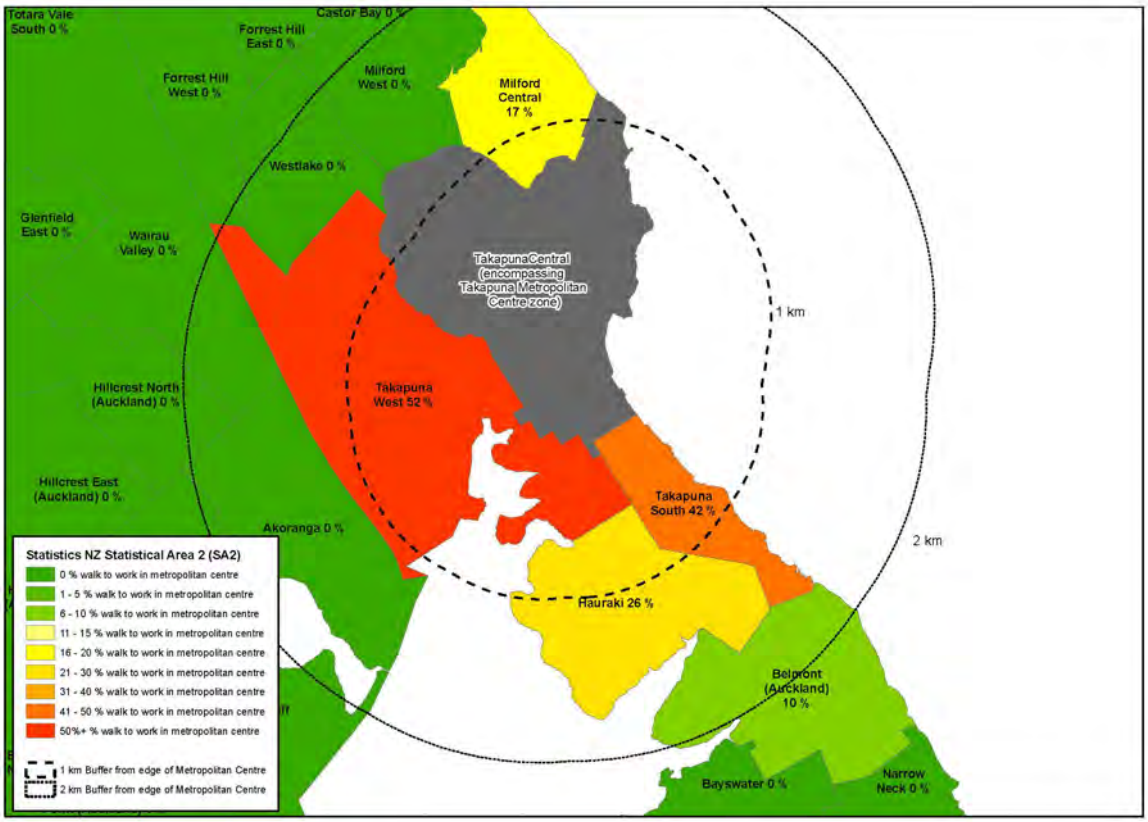


Figure 24: Percentage of residents that walk to their work destination in the Takapuna metropolitan centre

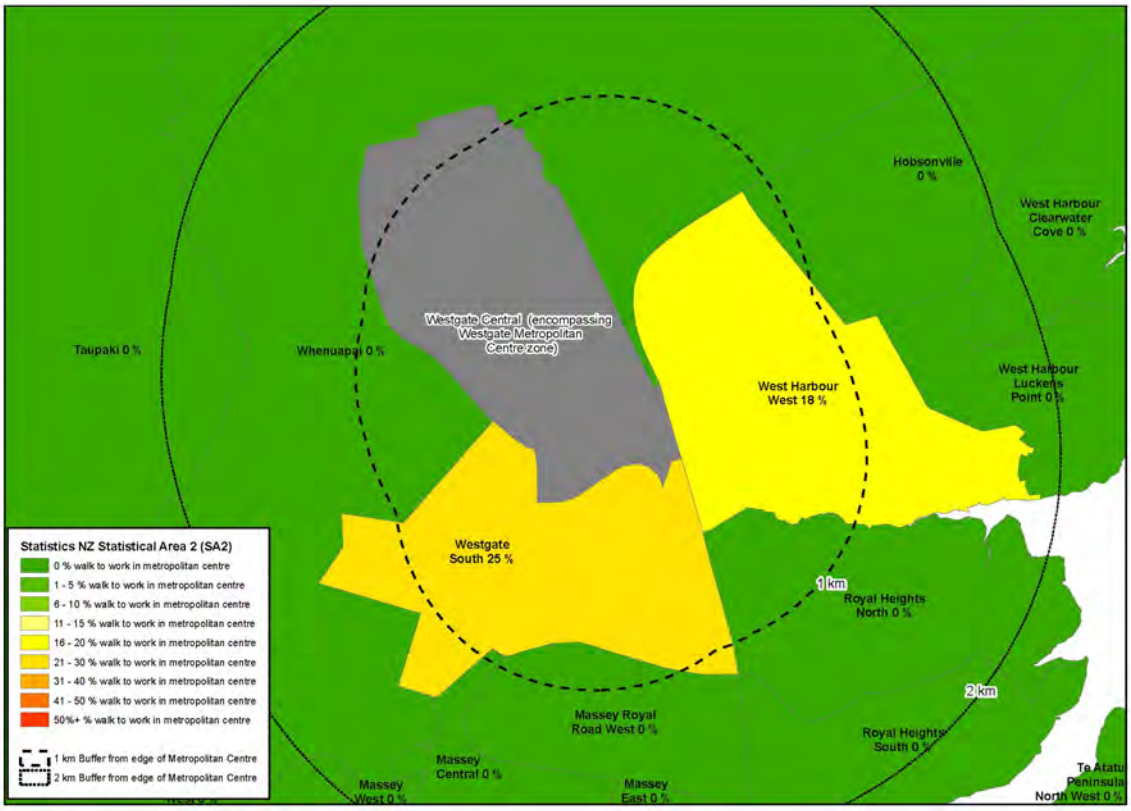


Figure 25: Percentage of residents that walk to their work destination in the Westgate metropolitan centre

7 The nature of the city centre

The city centre is the top of the centres hierarchy and plays a pivotal role in Auckland's present and future success. The city centre is an international centre for business and learning, innovation, entertainment, culture and urban living.[79]

When determining a walkable catchment for the city centre it is useful to understand how Auckland's city centre is different to the ten metropolitan centres and the rapid transit stops.

Firstly, the City Centre zone covers a very large area – 258ha. It is acknowledged that this includes around 60ha of Ports of Auckland land that operates quite distinctly from the rest of the zone. However, even accounting for that the City Centre zone still covers some 200ha.

Figure 26 below compares the size of the City Centre zone with Auckland's ten Metropolitan Centres zones. It illustrates that even the largest Metropolitan Centre zone (Albany at 69ha) is only just over a third of the size of the City Centre zone. On average, Auckland's Metropolitan Centre zones are around one fifth of the size of the City Centre zone.

Centre	Size (ha) [80]	Percentage relative to the City Centre Zone
City Centre zone	≈200	100%
Albany	69	35%
Botany	23	12%
Henderson	51	26%
Manukau	62	31%
New Lynn	44	22%
Newmarket	35	18%
Papakura	24	12%
Sylvia Park	21	11%
Takapuna	21	11%
Westgate	29	15%
Average Metropolitan Centre zone	**38**	**19%**

Figure 26: Zone areas of the city centre and the metropolitan centres

In addition to its much larger size, the city centre also has Auckland's (and New Zealand's) greatest concentration of mid to high rise buildings and far more attractors than any of the ten metropolitan centres or the rapid transit stops:

Employment: The City Centre zone has the largest concentration of employment in Auckland. It contains around 125,000 jobs which is 15% of the total jobs in Auckland. Auckland city centre is home to most major company national headquarters (e.g. Fonterra, Spark, Banks, Air NZ, TVNZ). The next largest employment zone in Auckland is the 'city fringe' with a further 75,000 jobs (9%). Not one of Auckland's metropolitan centres

[79] H8.1 Business – City Centre Zone description
[80] City Centre zone size excluding the Ports of Auckland land.

	have anything close to those numbers. Manukau (including the Wiri industrial area[81]) has around 36,000 jobs (4%).[82]
Entertainment:	The City Centre zone contains a huge number and variety of hospitality venues – over 500 dining venues and over 100 bars and nightlife venues[83]. The city centre is home to theatres (Aotea, Civic, Basement, ASB Waterfront, Sky City, Town Hall) and the Spark Arena (a 12,000 seat arena for sports and entertainment).
Retail:	Around $1.9 billion is spent on retail each year in the city centre[84]. Retail in the City Centre zone includes flagship brands, New Zealand designers, international fashion labels, department stores and specialist retail. There are different shopping districts in the city centre such as Britomart, High Street, and Queen Street.
Civic amenities:	The city centre is home to many civic amenities including the Auckland Town Hall, Central City Library, Art Gallery as well as more public open space (33ha) than the total size of some metropolitan centres. The city centre also hosts major events in sport, music and culture.
Education:	Two of New Zealand's eight universities are located in Auckland's city centre with around 37,000 students in higher education (the greatest concentration in New Zealand).[85]
Tourism:	The city centre is a starting point for international tourism with the cruise ship terminal at Princes Wharf. There is a concentration of accommodation (hotels etc) and tourism venues such as the Sky Tower, Maritime Museum, Convention centre (under construction), and the waterfront area.
Connections:	When the City Rail Link is completed the City Centre zone will contain three rapid transit stops (Waitematā,[86] Te Wai Horotiu,[87] and Karanga a Hape). No metropolitan centre has more than one rapid transit stop. The city centre is also a hub for public transport including buses, ferries and trains.

Finally, the Auckland city centre also has one of New Zealand's highest population densities at approximately 9,000 people per km². The densest sub-area (Hobson Ridge Central) is around 65,000 per km².[88]

In summary, there is a strong case to treat the city centre walkable catchment differently to those around metropolitan centres and rapid transit stops.

---

[81] The job numbers within the Manukau Metropolitan Centre zone will be much lower than 36,000 as many of these jobs will be in the Wiri industrial area (outside the Metropolitan Centre zone).
[82] Jobs numbers based on Statistics New Zealand Business Demographics – Employee counts 2020 (downloaded from Statistics NZ on 5 March 2021).
[83] Based on the database of https://heartofthecity.co.nz/dining
[84] Auckland Council. *Auckland City Centre: Summary Sheets*
[85] Auckland Council. *Auckland City Centre: Summary Sheets*
[86] Currently known as 'Britomart'.
[87] Formerly referred to as 'Aotea'.
[88] Statistics New Zealand 2021 Population Estimates by SA2.

8 Walkable catchments in greenfield areas

The location of two of Auckland's planned rapid transit stops are in or near undeveloped greenfield areas. The planned train stations are Maketuu[89] and Paeraataa on the southern rail line and their location in greenfield areas has implications for determining their walkable catchments.

Parts of the greenfield land around these planned stations have a 'live' urban zoning but are still greenfield as no development has occurred yet on the land.[90] Other parts of the greenfield land have the Future Urban zone applying to them. As outlined in section **Appendix 1**, the Future Urban zone is outside the "urban environment" to which NPS-UD Policy 3(c) applies.

The Maketuu station's walkable catchment contains some existing and developed 'live' zoned areas but excludes the Future Urban zone. The Paeraataa station is surrounded by undeveloped land on all sides and therefore has a walkable catchment of zero (the walkable catchment boundary follows the designation boundary for the station platform and pedestrian entrances).

The rationale behind these unusual walkable catchments in greenfield areas is because in practice you cannot currently walk anywhere from these stations. The surrounding land is undeveloped and used for rural activities (pasture etc). The surrounding land is all privately owned, and the public have no legal rights to access it. There are no public roads, footpaths or tracks on which a walkable catchment might be measured. It is noted that the walkable catchments generated for other areas in Auckland also assume that the public cannot access privately owned land.

It is accepted that in the future these stations will need to have their walkable catchments applied and development of 6 storey buildings enabled within them. This could occur through a plan change (or plan review) when there is more certainty about how the surrounding areas will develop and the layout of the road/pedestrian network connecting to the stations. The AUP will need to be updated if other new rapid transit stops are planned and/or if any additional land is zoned for a metropolitan centre.

9 What 'at least' a walkable catchment means

Policy 3(c) of the NPS-UD directs the AUP to enable "building heights of at least 6 storeys within **at least** a walkable catchment" [bold added for emphasis] of major centres and rapid transit stops.

Where Policy 3 refers to "at least" a walkable catchment this means that the minimum area for enabling buildings of six storeys must be within a walkable catchment. However, Policy 3(c) makes it possible for the area enabling six storeys to go beyond the walkable catchments.

This approach has not been applied in Auckland due to the significant amount of development capacity that is enabled through the directions of the NPS-UD and the

[89] Formerly referred to as 'Drury Central'
[90] This 'live' zoned but as yet undeveloped land is intended to be part of the urban environment.

application of the Medium Density Residential Standards. This is explained further in the s32 report on development capacity and demand.

It should also be noted that there are already some existing areas outside the walkable catchments where buildings of at least 6 storeys are enabled (e.g. Town Centre zones, specific precincts) and PC78 does not affect those more enabling building heights.

10 Ministry for the Environment guidance for implementing the NPS-UD

In 2020 MfE produced a guidance document for councils called *"Understanding and implementing intensification provisions for the National Policy Statement on Urban Development"*. The guidance was developed to help local authorities understand and interpret the provisions for intensification in the NPS-UD.

The guidance provides methods, tools, and examples to help implement the provisions (specifically including Policy 3). The guidance can be used to understand the individual components of the intensification provisions (such as "walkability") to determine the intensification outcomes on the ground.

It is noted that the document is not intended to be a step-by-step guide to preparing plan changes to give effect to the NPS-UD intensification provisions and it has no legal status as a regulatory or policy instrument. Plan changes and outcomes depend on the local context and the guide states that local authorities will need to give effect to the intensification provisions in their local context.

10.1 An 800m (10-minute walk) catchment

The MfE guidance confirms that a walkable catchment of 800 metres is typically associated with a ten-minute average walk[91]. The guidance explains this below:

> "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."[92]

The guidance states "a distance of 800 metres from each main entrance to a transit stop is considered a minimum walkable catchment in all urban areas" as it is consistent with long-standing academic and international best practice[93]. The guidance states that "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".[94]

The guidance does however note that each local authority can determine the distance of walkable catchments appropriate for local circumstances and that the final distance can be influenced by a range of factors.

---

[91] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 5.5
[92] Ibid Section 5.5.2
[93] Ibid Section 5.5.3
[94] Ibid Section 5.5.2

10.2 Different locations can have different sized catchments

The guidance notes that an 800-metre catchment may be a good starting point, but it also may be appropriate for larger tier 1 urban environments to consider greater distances in some situations. Not all destinations (centres, stations) are equal and where there are larger centres with more services and amenities or more connected stations, the walkable catchment can be expected to be larger. This is because people are prepared to walk further to use well connected stations and centres with a larger range of activities.[95]

Additionally, where a centre also has a rapid transit stop located within or close by, it should have a larger walkable catchment than a centre without a rapid transit stop.

10.3 Modifying factors

The guidance suggests that the 800m threshold is *extended* in tier 1 local authorities to account for local factors such as street layout, severance, topography, connectivity, urban amenity, street lighting, passive security, mobility needs, and delays at traffic light-controlled intersections.[96]

However, this list of factors is mostly linked to matters that hinder or slow walking access. Therefore, while the guidance suggests extending the catchment after reviewing these factors, it is often more likely that the threshold would be *reduced* after taking these factors into account. For example, walking up a hill would generally reduce someone's walking speed which would have flow-on effects to how long it would take to cover a certain distance.

[95] Ibid Section 5.5.2
[96] Ibid Section 5.5.3

Appendix 6

New Chapter G2 – Walkable Catchments

New text to be inserted in Chapter G of the AUP:

“G2. Walkable Catchments

Policy 3(c) of the National Policy Statement on Urban Development 2020, updated May 2022, requires regional policy statements and district plans in tier 1 urban environments to enable building heights of at least six storeys within at least a walkable catchment of the following:

(i) existing and planned rapid transit stops

(ii) the edge of city centre zones, and

(iii) the edge of metropolitan centre zones.

Auckland is a tier 1 urban environment.

A walkable catchment of around 1,200m is applied from the edge of the Business – City Centre Zone. A walkable catchment of around 800m is applied from both the edge of the Business – Metropolitan Centre Zones and from the pedestrian access points to existing or planned rapid transit stops.

Edge and route modifying factors such as property boundaries, road boundaries, severance, topography, block sizes, the walking environment and the mix of land use activities can affect these general walkable catchment distances.

The depiction of walkable catchments in the planning maps is a district plan method pursuant to section 75(2) of the Resource Management Act 1991 for implementing the policies of the district and giving effect to the National Policy Statement on Urban Development 2020, updated May 2022.

The planning maps show the location and extent of walkable catchment boundaries, many of which overlap with each other.

The location or extent of a walkable catchment can only be amended by way of a plan change pursuant to Schedule 1 of the Resource Management Act 1991.

Any amendment to the location or extent of a walkable catchment must give effect Policy 3(c) of the National Policy Statement on Urban Development 2020, updated May 2022.”

Evaluation: New Chapter G2 Walkable Catchments

The purpose of PC78 is to implement sections 77G and 77N of the RMA and give effect to policies 3 and 4 of NPD-UD within the Auckland Unitary Plan, Operative in Part 2016.

The plan change purpose is the (s32) objective and the NPS-UD has been prepared to achieve the purpose of the RMA, focussing on urban development, well-functioning urban environments and in this context, enabling intensification in tier 1 urban environments.

Implementation of NPS-UD Policy 3(c) within the district plan section of the AUP will, in turn, achieve the purpose of the RMA.

As explained throughout this s32 evaluation report, enabling intensification within walkable catchments is a mandatory requirement of NPS-UD Policy 3(c) as the council is a tier 1 local authority required to enable building heights of at least 6 storeys within at least a walkable catchment of the following within Auckland's urban environment:

i. existing and planned rapid transit stops
ii. the edge of city centre zones, and
iii. the edge of metropolitan centre zones.

PC78's walkable catchment provisions include:

a) Identification of walkable catchments within PC78 map viewer, and in some cases application of the height variation control in the same viewer (the s32 evaluation is the subject of this report)
b) Amended district plan provisions: zone chapters include proposed changes to height standards for those zones present inside walkable catchments (the s32 evaluations are the subject of separate reports).
c) Proposed Chapter G2 Walkable Catchments (see previous page of **Appendix 6**).

Chapter G2 records that 'walkable catchments' are a district plan method pursuant to section 75(2) of the RMA and are places within which the council is enabling building heights of at least 6 storeys. Chapter G further records the general size of catchments and that edge and route modifying factors can affect walkable catchment distances. Consideration of walkable catchments' attributes, and their relevance to NPS-UD, is provided in **Appendix 3**. Evaluation of council's approach to edge and route modifying factors to walkable catchments' boundaries is provided within **Appendix 4**. The evaluation of walkable catchment provisions' appropriateness for achieving the purpose of PC78 can also be found in those appendices, and the main body of this report especially:

- Section 6.5 How do you determine a walkable catchment?
- Section 6.6 What size is a walkable catchment?

and their options' analysis.

Proposed Chapter G2 Walkable Catchments is a record of the result of that evaluation, and a summation of the council's approach to satisfying its duty to give effect to Policy 3(c) of NPS-UD and sections 77G and 77N of the RMA.

Appendix 7

Plan methods to enable greater heights and density of urban form

1 Plan methods available to enable greater heights and density of urban form

1.1 Background

The AUP has a range of existing methods that could be used to enable greater heights and density of urban form within the walkable catchments. This existing palette of AUP methods can be applied to the specific areas identified for intensification under Policy 3:

a) City Centre zone;
b) Metropolitan Centre zone;
c) Walkable catchments around the City Centre zone, Metropolitan Centre zones, and rapid transit stops; and
d) Within and adjacent to those Neighbourhood, Local and Town Centre zones with commensurate activities and services.

A range of different methods to enable greater heights and density of urban form may be required and the method will often depend on which area it relates to of the above list.

This section outlines a range of methods/options that could be used to enable greater heights and density of urban form. In addition to the existing methods in the AUP, consideration has been given to the methods available in the National Planning Standards to ensure that any changes to the AUP do not depart from these standards.

The MfE guidance on implementing the intensification provisions of the NPS-UD states that:

> "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…. 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 National Planning 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 National Planning Standards for further information on specific controls."[1]

In regard to zoning, the implementation of the NPS-UD into the AUP has resulted in some changes to the suite of available zones and their provisions. Firstly, the provisions of most zones have been amended from the operative AUP versions, to modified versions. These modified versions include things such as:

- Incorporating the Medium Density Residential Standards into all "relevant residential zones" through amendments to the zone objectives, policies and rules.
- Amending the zone or precinct height standard (and other standards) to enable building heights of at least six storeys in walkable catchments (modified versions of the zones that fall within a walkable catchment – e.g. Terrace Housing and Apartment Buildings zone, Mixed Use zone, Metropolitan Centre zone, Industrial zones).

Further information on the proposed amendments to the AUP zones can be found in the s32 reports of these various chapters.

Secondly, the overall zone palette is also now different to what is in the current AUP (stemming from the NPS-UD and RMA Enabling Act changes).

- The Single House zone and Mixed Housing Suburban zone are no longer applied to land within Auckland's metropolitan area. However, the Single House zone and Mixed Housing Suburban zone are still part of the AUP and they apply in serviced rural towns and settlements (e.g. Wellsford, Snells Beach, Waiuku, Omaha etc).

- A new zone 'Residential – Low Density Residential' is now proposed in the AUP. It modifies and replaces the Single House zone within the urban environment and is applied to identified locations. Its purpose is to implement certain qualifying matters and reinforce the council's intended outcomes in these areas. The zone accommodates qualifying matters by seeking a low intensity built character of one or two storey buildings and one dwelling per site. Note that most qualifying matters are implemented by existing Overlays in the AUP. The 'Residential – Low Density Residential' zone applies where relevant qualifying matters require a lower level of development than that enabled by the MDRS.

- The Mixed Housing Urban zone (modified version) has been the predominant method used to apply the MDRS to relevant residential zones across Auckland. Essentially, this zone applies to all residential land in the Auckland metropolitan area and some specific rural towns, except for where a qualifying matter is identified.

[1] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment. Section 6.5.5

1.2 Overview of methods

The following list covers the methods to enable greater heights and density of urban form in the specific areas directed by Policy 3. They are described more fully in the sections below.

- Rezoning:
    - Terrace Housing and Apartment Buildings zone (modified provisions)
    - Mixed Housing Urban zone (with modified provisions)
    - Mixed Use zone (modified provisions)
- Zone standards:
    - Amend zone standards
- Precincts:
    - New precincts
    - Amend existing precincts
- Controls:
    - Height Variation Control
- Overlays:
    - New overlays

These methods will be considered and referred to when describing and evaluating options to enable greater heights and densities or urban form in each of the Policy 3 areas for intensification.

1.3 Rezoning

1.3.1 Terrace Housing and Apartment Buildings zone (with modified provisions)

The description[2] of the Residential – Terrace Housing and Apartment Buildings zone ('THAB') in the AUP states that it is a high-intensity zone providing for:

> "…urban residential living in the form of terrace housing and apartments. The zone is predominantly located around metropolitan, town and local centres and the public transport network to support the highest levels of intensification. The purpose of the zone is to make efficient use of land and infrastructure, increase the capacity of housing and ensure that residents have convenient access to services, employment, education facilities, retail and entertainment opportunities, public open space and public transport. This will promote walkable neighbourhoods and increase the vitality of centres.
>
> The zone provides for the greatest density, height and scale of development of all the residential zones. Buildings are enabled up to five, six or seven storeys in identified Height Variation Control areas, depending on the scale of the adjoining centre, to achieve a transition in height from the centre to lower scale residential zones. This form of development will, over time, result in a change from a suburban to urban built character with a high degree of visual change."

Applying the THAB zone to residential areas that currently are zoned for less intensity[3] is one method to enable greater building heights and density of urban form.

---

[2] H6.1 Zone Description

[3] The following residential zones in the AUP provide for less intensity than the THAB zone: Rural and Coastal Settlement, Large Lot, Single House, Mixed Housing Suburban, Mixed Housing Urban.

However, it is noted that the standard maximum height control in the THAB zone is 16m. This height does not enable 6 storey dwellings (as required under Policy 3(c)). Therefore, for the walkable catchments, this method involves the application of an amended THAB zone. The amendments would need to go further than the height standard and also amend any provisions in the zone that would preclude a six storey building from being enabled on a typical site. An assessment of the THAB zone and its ability to enable 6 storey buildings has been undertaken and further details on this assessment and the changes to the THAB zone can be found in the s32 on the THAB zone.

1.3.2 Mixed Housing Urban (with modified provisions)

The description[4] of the Residential – Mixed Housing Urban zone ('MHU') in the AUP states that it is a reasonably high-intensity zone enabling:

> "…a greater intensity of development than previously provided for. Over time, the appearance of neighbourhoods within this zone will change, with development typically up to three storeys in a variety of sizes and forms, including detached dwellings, terrace housing and low-rise apartments. This supports increasing the capacity and choice of housing within neighbourhoods as well as promoting walkable neighbourhoods, fostering a sense of community and increasing the vitality of centres…"

Applying the MHU zone to residential areas that currently are zoned for less intensity[5] is one method to enable greater building heights and density of urban form.

However, as stated in the zone description the MHU zone enables development of up to three storeys. This height does not enable 6 storey dwellings (as required under Policy 3(c)). While the MHU is being modified through PC78, the height standards will not enable 6 storey buildings. Therefore, using the MHU zone to enable 6 storeys in the walkable catchments would require the addition of a Height Variation Control to increase the maximum height to at least 21m.

1.3.3 Mixed Use zone (with modified provisions)

The description[6] of the Business – Mixed Use zone states that it:

> "...is typically located around centres and along corridors served by public transport. It acts as a transition area, in terms of scale and activity, between residential areas and the Business – City Centre Zone, Business – Metropolitan Centre Zone and Business – Town Centre Zone. It also applies to areas where there is a need for a compatible mix of residential and employment activities.
>
> The zone provides for residential activity as well as predominantly smaller scale commercial activity that does not cumulatively affect the function, role and amenity of centres. The zone does not specifically require a mix of uses on individual sites or within areas.

[4] H5.1 Zone Description
[5] The following residential zones in the AUP provide for less intensity than the MHU zone: Rural and Coastal Settlement, Large Lot, Single House, Mixed Housing Suburban.
[6] H13.1 Zone Description

> There is a range of possible building heights depending on the context. Provisions typically enable heights up to four storeys. Greater height may be enabled in areas close to the city centre, metropolitan centres and larger town centres."

Applying the Mixed Use zone to residential areas that currently are zoned for less intensity[7] is one method to enable greater building heights and density of urban form. However, as well as increased heights and density of urban form, the Mixed Use zone also enables a much broader range of activities to occur beyond residential uses. The other enabled activities include activities such as Drive-thru restaurants, Entertainment facilities, Food and beverage, Offices, Retail, small Supermarkets, Healthcare facilities, Light manufacturing and servicing, Repair and maintenance services, Warehousing and storage, and Tertiary education facilities.

In terms of a planning outcome, a diversity of land use activities around centres and rapid transit stops could lead to positive outcomes. Diversity has been coined as one of the "5Ds" of the built environment as is considered important in achieving successful cities and enhancing public transport use.[8] Without this local diversity people may have to make longer journeys to different activities and are therefore less likely to walk and more likely to do so by car.

However, the application of the Mixed Use zone across large areas could also undermine the role of the centres themselves by dispersing the centre-type activities (retail, office, food and beverage) and leading to 'hollowed-out' centres with a lack of vitality. This is especially relevant as the current state of Auckland's centres has been affected by the Covid-19 pandemic. Many retail and hospitality venues have closed, online shopping has become more popular[9], and many office workers are choosing to work from home. Most of Auckland's centres currently have a significant number of vacant premises. It is not clear whether this is a short term impact or whether shopping and working habits have undergone significant and lasting structural changes due to the pandemic.

This highlights the risk in enabling additional centre-type activities across a large amount of land surrounding centres. Further information would be required to confirm that the centre zones themselves would not be negatively impacted by large-scale rezoning of residential land to Mixed Use. An excessive oversupply of land for centre-type activities risks the dilution of the centres and potentially undermines the centres based approach in the Auckland Plan and the Regional Policy Statement section of the AUP.

In addition, the Mixed Use zone has fewer residential-specific development standards. This can result in lower amenity outcomes for residential uses in the Mixed Use zone compared to the THAB zone. The Mixed Use zone has only two development standards specifically for residential amenity – outlook space and dwelling size. Unlike the THAB zone, there is no requirement in the Mixed Use zone for outdoor living spaces such as balconies, the outlook standard is limited in terms of achieving quality outcomes, and there are minimal landscaping requirements. The assessment criteria for residential development in the *H13 – Business Mixed Use Zone* chapter are also far more limited than those in the THAB zone.

---

[7] The following residential zones in the AUP provide for less intensity than the THAB zone: Rural and Coastal Settlement, Large Lot, Single House, Mixed Housing Suburban, Mixed Housing Urban.

[8] Reid Ewing & Robert Cervero (2010) *Travel and the Built Environment*, Journal of the American Planning Association, 76:3, 265-294, DOI: 10.1080/01944361003766766 (The 5D's are Density, Diversity, Design, Destination Access and Distance to Transit).

[9] For example, the Countdown supermarket in Grey Lynn closed in March 2020 to become a 'dark store' (a shuttered store converted into an online warehouse) https://www.nzherald.co.nz/nz/covid-19-coronavirus-countdown-grey-lynn-supermarket-turned-into-online-store/A6XIOUWLUMN6X2DTE6XPOUENSY/

It is also noted that the standard maximum height standard[10] in the Mixed Use zone is 18m. This height does not enable 6 storey dwellings (as required under Policy 3(c)). Therefore, in the walkable catchments this option involves the application of an amended Mixed Use zone. The amendments would need to go further than the height standard and also amend any provisions in the zone that would preclude a six storey building from being enabled on a typical site. An assessment of the Mixed Use zone and its ability to enable 6 storey buildings has been undertaken and further details on this assessment and the changes to the Mixed Use zone can be found in the s32 on the Mixed Use zone.

1.4 Zone standards

1.4.1 Amend existing zone standards

The AUP explains standards as follows:

> "Activities provided for as permitted, controlled or restricted discretionary activities are normally subject to standards. Standards set limits on the extent to which an activity is permitted or may be assessed as a controlled or restricted discretionary activity. Exceedance of a standard normally results in the activity being considered as a more restrictive class of activity.
>
> Standards are located following the activity tables in the overlay, zone, Auckland-wide and precinct provisions."[11]

One method to enable greater building heights and density of urban form is to amend the standards of each zone so that they enable more intensity. Common standards in various zones that could impact on heights and density of urban form include:

- Building height
- Height in relation to boundary
- Yards
- Building setback at upper floors
- Maximum tower dimension and tower separation
- Wind
- Maximum impervious area
- Building coverage
- Landscaped areas
- Outlook space
- Daylight
- Outdoor living space
- Front, side and rear fences and walls
- Minimum dwelling size

Amendments to zone standards that enable greater heights and density of urban form could also require consequential amendments to the zone objectives, policies, and other rules.

---

[10] 16m occupiable building height plus 2m for roof form = 18m total building height.
[11] A1.6.6 Standards of the AUP

The intensification directions under Policy 3 will apply to a range of existing AUP zones which all have specific zone standards. The zones affected by the Policy 3 directives are:[12]

- Policy 3(a):
    - Business – City Centre zone

- Policy 3(b):
    - Business – Metropolitan Centre zone

- Policy 3(c):
    - Residential – Single House zone
    - Residential – Mixed Housing Suburban zone
    - Residential – Mixed Housing Urban zone
    - Residential – Terrace Housing and Apartment Buildings zone
    - Business – Mixed Use zone
    - Business – Town Centre zone
    - Business – Local Centre zone
    - Business – Neighbourhood Centre zone
    - Business – Light Industry
    - Business – Heavy Industry
    - Business – General Business
    - Business – Office Park
    - Open Space zones
    - Special Purpose zones

- Policy 3(d):
    - Business – Town Centre zone
    - Business – Local Centre zone
    - Business – Neighbourhood Centre zone
    - Residential – Single House zone
    - Residential – Mixed Housing Suburban zone
    - Residential – Mixed Housing Urban zone

For land within the walkable catchments, any amendments to the zone standards could be applied specifically to only where that part of the zone is within a walkable catchment. As outlined in **Appendix 6**, the walkable catchments are a spatially demarcated layer on the planning maps and are referred to Chapter G so it is clear which land is inside and outside the walkable catchments.

1.5 Precincts

1.5.1 Amend existing precinct provisions

The intensification directions under Policy 3 will apply to areas that are covered by existing AUP precincts. A precinct sits on top of the underlying zoning and can "enable local

[12] The intensification directions under Policy 3 impact on nearly all the urban zones in the AUP including the residential, business, open space, and special purpose zones.

differences to be recognised by providing detailed place based provisions which can vary the outcomes sought by the zone or Auckland-wide provisions and can be more restrictive or more enabling."[13]

One method to enable greater building heights and density of urban form is to amend the precinct provisions so that they enable more intensity. This could include amending the precinct objectives, policies, and rules (including standards).

1.5.2 New precincts

Another method to enable greater building heights and density of urban form for the areas directed by Policy 3 is to retain the underlying zonings but apply a new precinct with provisions that enable more intensity. This would involve creating a new precinct (or precincts) with specific objectives, policies, and rules.

For example, under Policy 3(c) a new 'walkable catchments' precinct could be applied to the land within the walkable catchments. The precinct provisions could enable greater heights and density of urban form than the underlying zonings would have otherwise enabled.

1.6 Controls

1.6.1 Height Variation Control

The Height Variation Control is a zone rule which has a spatial component and is identified on the planning maps. It varies the usual maximum height standard in a zone to enable greater or lesser height.

One method to enable greater building heights and density of urban form is to apply a new Height Variation Control to areas that the Policy 3 directions apply (or amend existing Height Variation Controls where they already apply).

1.7 Overlays

1.7.1 New Overlay

Overlays in the AUP manage the protection, maintenance or enhancement of particular values associated with an area.

> "Overlays can apply across zones and precincts and overlay boundaries do not follow zone or precinct boundaries. Overlays can also manage specific planning issues.
>
> Overlays generally apply more restrictive rules than the Auckland-wide, zone or precinct provisions that apply to a site, but in some cases they can be more enabling. Overlay rules apply to all activities on the part of the site to which the overlay applies unless the overlay rule expressly states otherwise. Overlay provisions are located in Chapter D of the Plan and overlays are identified on the planning maps."[14]

One method to enable greater building heights and density of urban form is apply a new 'NPS-UD overlay' to areas that the Policy 3 directions apply.

---

[13] A1.6.5 of the AUP
[14] A1.6.2 of the AUP

Appendix 8

Policy 3(d): A background and interpretation of key terms

1 Policy 3(d): A background and interpretation of key terms

1.1 Amendments to Policy 3(d)

In late December 2021, the government made changes to Policy 3(d) of the NPS-UD. Policy 3(d) formerly said:

> "(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."

The government amended Policy 3 through the Enabling Housing Supply and Other Matters Amendment Act (2021). Now, Policy 3 of the NPS-UD (updated May 2022) states:

> "(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."

The result of the change to policy 3(d) is that intensification is now to be applied to different areas of Auckland. The previous policy 3(d) focussed intensification in areas with high levels of accessibility and high demand. The preliminary work undertaken on accessibility and demand indicated that most intensification under the old Policy 3(d) would have been concentrated on the Auckland Isthmus area, along with some areas of the lower North Shore. However, the new direction of policy 3(d) results in the areas of intensification being more dispersed throughout all of urban Auckland, focusing on the areas adjacent to Auckland's lower order centres (neighbourhood, local, and town centres).

The previous policy 3(d) was often referred to as being the intensification direction for 'all other locations'. The new policy 3(d) no longer covers 'all other locations' but rather more discrete areas, being the land 'within and adjacent to' the neighbourhood, local, and town centres across Auckland. The 'all other locations' intensification direction has essentially been replaced by the new Medium Density Residential Standards ('MDRS') that were also introduced by the Enabling Act. Note that the application of the MDRS across Auckland is covered in a separate s32 report. This s32 report only covers the application of Policy 3.

Policy 3(d) directs intensification around neighbourhood, local and town centre zones. The level of intensification is directed to be 'commensurate' with the level of commercial activity and community services in the centre. Before Policy 3(d) can be implemented, a clear understanding of all the terms in it is required.

1.2 What are commercial activities?

The term 'commercial activity' is not separately defined in the NPS-UD. However, 'commercial activities' are defined in the AUP as "the range of commercial activities including offices, retail and commercial services providers." The commerce nesting table in J1.3.1 of the AUP shows that commercial activities includes all the following activities:

- Offices
- Retail
    - Food and beverage

        - Bars and taverns
        - Restaurants and cafes
        - Drive-through restaurant
    - Dairies
    - Show home
    - Large format retail
        - Supermarket
        - Department store
    - Trade supplier
    - Service station
    - Markets
    - Marine retail
    - Motor vehicle sales
    - Garden centres
- Commercial services
    - Veterinary clinic
    - Funeral director premise
    - Commercial sexual services
- Entertainment facilities

The National Planning Standards (2019) also has a definition of 'commercial activity'. It means "any activity trading in goods, equipment or services. It includes any ancillary activity to the commercial activity (for example administrative or head offices)."

1.3 What are community services?

The term 'community services' is defined in the NPS-UD as below.

> "community services means the following:
>
> a) community facilities
> b) educational facilities
> c) those commercial activities that serve the needs of the community"

There are no further definitions for (a) to (c) in the NPS-UD.

1.3.1 Community facilities

Sub-part (a) of the definition of 'community services' refers to 'community facilities'. The AUP defines 'community facilities' as:

> "Facilities for the wellbeing of the community, generally on a not for profit basis.
>
> Includes:
>
> - arts and cultural centres (including art galleries and museums);
> - places of worship;
> - community centres;
> - halls;
> - libraries;

- marae;
- Citizens Advice Bureau;
- community correction facilities; and
- justice facilities.

Excludes:

- entertainment facilities;
- care centres; and
- healthcare facilities.

This definition is nested within the Community nesting table."

The National Planning Standards (2019) also has a definition of 'community services'. It "means land and buildings used by members of the community for recreational, sporting, cultural, safety, health, welfare, or worship purposes. It includes provision for any ancillary activity that assists with the operation of the community facility."

1.3.2 Educational facilities

Sub-part (b) of the definition of 'community services' refers to 'educational facilities'. The AUP defines an 'education facility' as:

"Facility used for education to secondary level.

Includes:

- schools and outdoor education facilities; and
- accommodation, administrative, cultural, religious, health, retail and communal facilities accessory to the above.

Excludes:

- care centres; and
- tertiary education facilities.

This definition is nested within the Community nesting table."

The National Planning Standards (2019) also has a definition of 'educational facility'. It "means land or buildings used for teaching or training by child care services, schools, or tertiary education services, including any ancillary activities."

1.3.3 Commercial activities that serve the needs of the community

Sub-part (c) of the definition of 'community services' refers to 'commercial activities that serve the needs of the community'. There is no definition in the AUP for this phrase, nor in the National Planning Standards (2019).

Based on its ordinary meaning, this phrase is broad and likely encompasses a very wide range of commercial activities. Essentially, 'Commercial activities that serve the needs of the community' is a category or sub-set of 'commercial activities'. As outlined above, commercial activities are activities that trade in goods, equipment or services and include things like offices, retail and commercial services.

To understand what is meant under sub-part (c) of the definition of 'community services', commercial activities can be classified into two types:

- Commercial activities that serve the needs of the community
- Commercial activities that **do not** serve the needs of the community

The difference between the two types being whether they serve the needs of the community or not. To determine whether the needs of the community are met, the community itself needs to be defined.

The word 'community' has the ordinary meaning of "a unified body of individuals"[1] and could refer to people with common interests or characteristics. In this case, it is considered that the word 'community' means people with the common characteristics of living or working in a particular area (i.e. the community that lives and works in and around a particular neighbourhood, local, or town centre in Auckland).

The ordinary meaning of the phrase 'serve the needs' is "to provide things that someone or something needs".[2] Commercial activities by their very nature are linked to providing the needs (or wants[3]) of a community. This is because it is the objective of a commercial activity to make a profit and to make a profit it needs customers (i.e. the community) to need (or want) the product or service. If the community does not need or want the product or service, the commercial activity will not make a profit and will ultimately fail (i.e. close, shut-down, cease to operate). Therefore, all commercial activities exist to meet the needs (or wants) of the community.

Based on this, it is considered that 'commercial activities that serve the needs of the community' has the same meaning as 'commercial activities' (as covered in an above section of this report).

Therefore, the reference in sub-part (c) of the definition of 'community services' to 'commercial activities that serve the needs of the community' is somewhat circular. It essentially just means the same as the term 'commercial activity' that is already covered by the wording of Policy 3(d) ("…the level of commercial activity and community services").

[1] https://www.merriam-webster.com/dictionary/community
[2] https://www.merriam-webster.com/dictionary/serve%20the%20needs
[3] A person's basic 'needs' are generally considered to be food, water and shelter. However, the line between needs vs wants is blurred. While eating is a need, is eating meat or dairy products a need or a want? One person's needs can be another person's wants and vice versa. This report does not seek to solve this age-old issue, but rather this report assumes that the term 'needs' in this context can also include 'wants'.

Appendix 9

Determining the levels of activities and services in centres

Levels of activities and services in neighbourhood, local and town centre zones in Auckland

Neighbourhood centres are typically very small sets of shops or even standalone dairies and service stations. All neighbourhood centres are deemed to have very low levels of commercial activities and community services.

As explained in the main body of this s32 report, a proxy for the levels of commercial activities and community services in each local and town centre has been calculated using the centre hierarchy, size (zone footprint), and the catchment of the centre (population and jobs within a 45 minute public transport trip).

The zoning hierarchy is split into two categories:

- Local Centre zone
- Town Centre zone

The size (zone footprint) is split into two categories:

- Small
- Large

The catchment is calculated based on a 50/50 combination of population and employment catchments and is then split into two categories:

- Low (under 50th percentile)
- High (above 50th percentile)

The raw results of applying this methodology to all the local and town centres in Auckland is shown in Table 1 below.

Table 2 at the end of this Appendix groups the centres according to the categories that are deemed to have high level of activities and services.

Table 1: All local and town centres showing zoning hierarchy, size and catchment

Centre name	AUP Zoning	Area (ha)	Area (Small/Large)	Catchment (percentile)	Catchment (Low/High)
Addison	Local Centre Zone	3.6	Large	35	Low
Albany Village	Local Centre Zone	8.4	Large	53	High
Avondale	Town Centre Zone	11.8	Large	89	High
Balmoral	Local Centre Zone	4.7	Large	95	High
Beach Haven	Local Centre Zone	1.0	Small	58	High
Beachlands	Local Centre Zone	4.1	Large	7	Low
Belmont	Local Centre Zone	1.3	Small	53	High
Birkenhead	Town Centre Zone	11.5	Large	73	High
Blockhouse Bay	Local Centre Zone	2.9	Small	70	High

Centre name	AUP Zoning	Area (ha)	Area (Small/Large)	Catchment (percentile)	Catchment (Low/High)
Botany Junction	Local Centre Zone	3.6	Large	64	High
Browns Bay	Town Centre Zone	10.7	Large	58	High
Chatswood	Local Centre Zone	2.9	Small	69	High
Clendon	Local Centre Zone	6.0	Large	45	Low
Dawsons Road	Local Centre Zone	3.0	Large	63	High
Devonport	Town Centre Zone	4.4	Small	68	High
Drury	Local Centre Zone	2.1	Small	15	Low
Drury - Bremner Road	Local Centre Zone	0.8	Small	10	Low
Eden Valley	Local Centre Zone	6.8	Large	97	High
Ellerslie	Town Centre Zone	2.3	Small	92	High
Favona	Local Centre Zone	2.3	Small	59	High
Glen Eden	Town Centre Zone	9.7	Large	66	High
Glen Innes	Town Centre Zone	11.3	Large	73	High
Glendene	Local Centre Zone	1.9	Small	55	High
Glenfield	Town Centre Zone	6.8	Small	76	High
Grafton	Local Centre Zone	0.8	Small	97	High
Green Bay	Local Centre Zone	0.8	Small	58	High
Green Lane	Town Centre Zone	6.1	Small	91	High
Greenlane West	Local Centre Zone	3.3	Large	89	High
Greenwoods Corner	Local Centre Zone	1.5	Small	88	High
Greville	Local Centre Zone	4.7	Large	64	High
Grey Lynn	Local Centre Zone	3.1	Large	92	High
Gulf Harbour	Local Centre Zone	2.5	Small	11	Low
Half Moon Bay	Local Centre Zone	1.4	Small	22	Low
Hauraki Corner	Local Centre Zone	0.9	Small	50	High
Helensville	Town Centre Zone	8.5	Small	7	Low
HGI - **O**neroa village	Local Centre Zone	5.0	Large	3	Low
HGI - **O**stend village	Local Centre Zone	9.0	Large	4	Low
HGI - Matiatia (gateway)	Local Centre Zone	9.2	Large	2	Low
Highland Park	Town Centre Zone	10.1	Large	52	High
Hingaia	Local Centre Zone	1.7	Small	15	Low

Centre name	AUP Zoning	Area (ha)	Area (Small/Large)	Catchment (percentile)	Catchment (Low/High)
Hobsonville	Local Centre Zone	6.1	Large	24	Low
Homai	Local Centre Zone	0.5	Small	74	High
Howick	Town Centre Zone	7.3	Small	50	Low
Hunters Corner	Town Centre Zone	17.2	Large	76	High
Jervois Road	Local Centre Zone	2.5	Small	86	High
Karaka	Local Centre Zone	2.7	Small	2	Low
Kaukapakapa	Local Centre Zone	1.9	Small	4	Low
Kelston	Local Centre Zone	2.3	Small	68	High
Kepa Road / Eastridge	Local Centre Zone	3.3	Large	50	High
Kingseat	Local Centre Zone	7.7	Large	3	Low
Kingsland	Local Centre Zone	1.6	Small	98	High
Kumeu - Huapai	Town Centre Zone	11.6	Large	12	Low
Leigh	Local Centre Zone	1.3	Small	3	Low
Long Bay	Local Centre Zone	2.2	Small	26	Low
Lynfield	Local Centre Zone	3.6	Large	56	High
Mairangi Bay	Local Centre Zone	2.2	Small	70	High
Mangere	Town Centre Zone	25.1	Large	73	High
Mangere Bridge	Local Centre Zone	1.0	Small	61	High
Mangere East	Local Centre Zone	3.7	Large	89	High
Manurewa	Town Centre Zone	12.7	Large	77	High
Market Road	Local Centre Zone	1.1	Small	91	High
Massey West	Local Centre Zone	8.5	Large	39	Low
Matakana	Local Centre Zone	5.0	Large	4	Low
Meadowbank	Local Centre Zone	3.9	Large	79	High
Meadowlands	Local Centre Zone	6.0	Large	50	High
Milford	Town Centre Zone	6.6	Small	77	High
Mission Bay	Local Centre Zone	1.1	Small	55	High
Morningside	Local Centre Zone	1.4	Small	94	High
Mt Albert	Town Centre Zone	3.2	Small	89	High
Mt Eden	Local Centre Zone	2.0	Small	95	High
Mt Roskill	Local Centre Zone	2.2	Small	94	High

Centre name	AUP Zoning	Area (ha)	Area (Small/Large)	Catchment (percentile)	Catchment (Low/High)
Mt Wellington	Local Centre Zone	2.9	Small	81	High
Newton - Upper Symonds St	Town Centre Zone	5.0	Small	99	High
Northcote	Town Centre Zone	3.3	Small	74	High
Northcross	Local Centre Zone	1.2	Small	57	High
Onehunga	Town Centre Zone	17.2	Large	82	High
Orewa	Town Centre Zone	9.8	Large	26	Low
Ormiston	Town Centre Zone	18.9	Large	47	Low
Otahuhu	Town Centre Zone	14.1	Large	85	High
Otara	Town Centre Zone	5.5	Small	73	High
Paerata	Local Centre Zone	18.0	Large	10	Low
Pakuranga	Town Centre Zone	11.2	Large	78	High
Panama Road	Local Centre Zone	1.2	Small	59	High
Panmure	Town Centre Zone	14.3	Large	91	High
Papatoetoe	Town Centre Zone	10.8	Large	80	High
Parnell	Town Centre Zone	7.1	Small	92	High
Ponsonby	Town Centre Zone	14.1	Large	95	High
Pt Chevalier	Town Centre Zone	4.9	Small	87	High
Pukekohe	Town Centre Zone	14.7	Large	21	Low
Ranui	Local Centre Zone	3.3	Large	56	High
Redhills	Local Centre Zone	8.1	Large	15	Low
Remuera	Town Centre Zone	3.5	Small	90	High
Riverhead	Local Centre Zone	0.9	Small	8	Low
Royal Oak	Town Centre Zone	10.4	Large	87	High
Sandringham	Local Centre Zone	1.7	Small	93	High
Silverdale	Town Centre Zone	23.9	Large	36	Low
Snells Beach	Local Centre Zone	7.5	Large	6	Low
St Heliers	Local Centre Zone	1.7	Small	53	High
St Lukes	Town Centre Zone	11.4	Large	95	High
Stoddard Rd	Town Centre Zone	13.9	Large	83	High
Sturges	Local Centre Zone	0.5	Small	41	Low
Sunnynook	Town Centre Zone	2.1	Small	90	High

Centre name	AUP Zoning	Area (ha)	Area (Small/Large)	Catchment (percentile)	Catchment (Low/High)
Sunnyvale	Local Centre Zone	0.3	Small	57	High
Swanson	Local Centre Zone	1.4	Small	32	Low
Takanini	Business - Town Centre Zone	14.8	Large	41	Low
Te Atatu North	Town Centre Zone	4.5	Small	28	Low
Te Atatu South	Local Centre Zone	4.8	Large	48	Low
Te Hana	Local Centre Zone	2.4	Small	0	Low
Te Napi Drive	Local Centre Zone	1.9	Small	46	Low
Three Kings	Town Centre Zone	4.4	Small	87	High
Titirangi	Local Centre Zone	4.8	Large	35	Low
Torbay	Local Centre Zone	0.9	Small	36	Low
Waimauku	Local Centre Zone	2.1	Small	4	Low
Wainui	Local Centre Zone	7.5	Large	7	Low
Waiuku	Local Centre Zone	11.7	Large	11	Low
Warkworth	Town Centre Zone	11.7	Large	8	Low
Warkworth	Local Centre Zone	2.6	Small	8	Low
Wellsford	Town Centre Zone	8.8	Small	3	Low
West Lynn	Local Centre Zone	1.8	Small	84	High
Whangaparaoa	Town Centre Zone	5.8	Small	20	Low
Whenuapai	Local Centre Zone	3.3	Large	16	Low
Windsor Park	Local Centre Zone	1.7	Small	71	High

Table 2: Centres deemed to have high levels of commercial activities and community services

Local Centres: **Large size AND High accessibility**

Local Centre name	Size (ha)	Size (Small/Large)	Accessibility score (percentile)	Accessibility (High/Low)
Albany Village	8.4	Large	53	High
Balmoral	4.7	Large	95	High
Botany Junction	3.6	Large	64	High
Dawsons Road	3.0	Large	63	High
Eden Valley	6.8	Large	97	High
Greenlane West	3.3	Large	89	High
Greville	4.7	Large	64	High
Grey Lynn	3.1	Large	92	High
Kepa Road / Eastridge	3.3	Large	50	High
Lynfield	3.6	Large	56	High
Mangere East	3.7	Large	89	High
Meadowbank	3.9	Large	79	High
Meadowlands	6.0	Large	50	High
Ranui	3.3	Large	56	High

Town Centres: **Small size AND High accessibility**

Town Centre name	Size (ha)	Size (Small/Large)	Accessibility score (percentile)	Accessibility (High/Low)
Devonport	4.4	Small	68	High
Ellerslie	2.3	Small	92	High
Glenfield	6.8	Small	76	High
Green Lane	6.1	Small	91	High
Milford	6.6	Small	77	High
Mt Albert	3.2	Small	89	High
Newton - Upper Symonds St	5.0	Small	99	High
Northcote	3.3	Small	74	High
Otara	5.5	Small	73	High
Parnell	7.1	Small	92	High
Pt Chevalier	4.9	Small	87	High
Remuera	3.5	Small	90	High
Sunnynook	2.1	Small	90	High
Three Kings	4.4	Small	87	High

Town Centres: **Large size AND high accessibility**

Town Centre name	Size (ha)	Size (Small/Large)	Accessibility score (percentile)	Accessibility (High/Low)
Avondale	11.8	Large	89	High
Birkenhead	11.5	Large	73	High
Browns Bay	10.7	Large	58	High
Glen Eden	9.7	Large	66	High
Glen Innes	11.3	Large	73	High
Highland Park	10.1	Large	52	High
Hunters Corner	17.2	Large	76	High
Mangere	25.1	Large	73	High
Manurewa	12.7	Large	77	High
Onehunga	17.2	Large	82	High
Otahuhu	14.1	Large	85	High
Pakuranga	11.2	Large	78	High
Panmure	14.3	Large	91	High
Papatoetoe	10.8	Large	80	High
Ponsonby	14.1	Large	95	High
Royal Oak	10.4	Large	87	High
St Lukes	11.4	Large	95	High
Stoddard Rd	13.9	Large	83	High

Appendix 10

Interpretation of ‘adjacent’

1 What does ‘adjacent’ mean?

Policy 3(d) requires the council to enable heights and densities on land within and ‘adjacent’ to neighbourhood, local, and town centres. The term ‘adjacent’ is not defined in the RMA or in *Chapter J – Definitions* of the AUP.

The Hauraki Gulf Islands (‘**HGI**’) District Plan, which is still the district plan in force for the HGI does have a definition for ‘adjacent’ which states “Adjacent means being near or close but not necessarily contiguous”.[1] While this is useful to add into the discussion of interpreting how ‘adjacent’ should be applied, it is noted that the HGI District Plan does not apply to the majority of Auckland.

1.1 Feedback on draft Bill

The term ‘adjacent’ was added to Policy 3(d) of the NPS-UD by the Housing Supply Amendment Act (2021). The Supplementary Order papers[2] and Environment Committee reports show that various councils had raised issue with the ambiguity of the term ‘adjacent’ in the draft Bill, noting that it doesn’t provide guidance on what ‘adjacent’ means. [3]

The Environment Committee report did not specifically respond to this matter but did state that:

> “Officials recommend retaining policy 3(d) as drafted in the Bill with small revisions to address technical errors and the application of the qualifying matters. We consider there is sufficient scope in the Bill to make the MDRS more permissive for any other reason, so councils could make the MDRS more permissive to enable greater intensification, including around public transport and other commercial centres.”

1.2 Case law on ‘adjacent’

The term ‘adjacent’ has been considered in a number of court cases and case summaries of the relevant decisions are included in section 2 of this Appendix. Overall, the case law has consistently considered that the term ‘adjacent’:

- is not confined to places that are adjoining, or land that is adjoining; and
- includes land/places that are near/nearby/close (or close by or in close proximity).

The term adjacent has been interpreted by the Courts as meaning “lying near or close; adjoining; continuous; bordering; not necessarily touching”. It may not be limited to adjoining land and may include nearby properties.[4]

---

[1] https://www.aucklandcouncil.govt.nz/plans-projects-policies-reports-bylaws/our-plans-strategies/hgi-district-plan/Documents/hauraki-gulf-islands-district-plan-text-part-14.pdf

[2] Including 83—1/Supplementary Order Paper No 106)

[3] https://www.parliament.nz/resource/mi-NZ/53SCEN_ADV_116288_EN9352/94bf0dbf9e2d16f16000308f6e54d250937b7540

[4] *Ports of Auckland Ltd v Auckland City Council* [1999] 1 NZLR 601
https://qualityplanning.org.nz/sites/default/files/2018-11/To%20Notifiy%20or%20Not%202018.pdf

1.3 Interpretation of ‘adjacent’ in Policy 3(d)

The term ‘adjacent’ has a common meaning which is “close to, but not necessarily adjoining another site”.[5] In light of the case law, the definition of ‘adjacent’ in the HGI District Plan (which appears to be consistent with the case law), and the common meaning of the term ‘adjacent’, it is considered that for the purposes of implementing policy 3(d) in the Auckland context land ‘adjacent’ to neighbourhood, local, or town centres will generally consist of:

- Properties/sites that are directly adjoining the centre; and
- Properties/sites that are not adjoining the centre, but are ‘close to’ or ‘near’ the centre.

While it appears to be clear that you can include all properties/sites that are adjoining the relevant centre, it is not as clear how you determine the properties/sites that are ‘close to’ or ‘near’ the centre. Therefore, based on the above, a number of different options are outlined below as to what land could be considered to be ‘close to’ or ‘near’ neighbourhood, local and town centres in Auckland.

1.3.1 Upper limits of ‘close’ or ‘near’

As outlined above, for the purposes of implementing policy 3(d) in the Auckland context, land ‘adjacent’ to neighbourhood, local, or town centres will generally consist of:

- Properties/sites that are directly adjoining the centre; and
- Properties/sites that are not adjoining the centre, but are ‘close to’ or ‘near’ the centre.

To quantify what ‘close to’ or ‘near’ to the centre means, reference is had to the centres hierarchy in the AUP and the intensification already directed around the larger centres under policy 3(c) of the NPS-UD. The centres hierarchy in the AUP is as follows (largest first):

- City Centre
- Metropolitan Centre
- Town Centre
- Local Centre
- Neighbourhood Centre

As covered in earlier sections of this report, a walkable catchment around the City Centre is approximately 1,200m, while the walkable catchments around the Metropolitan Centres are approximately 800m.

The Metropolitan Centre zone’s walkable catchment of around 800m (10 minute walk) is logically a maximum threshold of what near or close could mean for the three lower order centres under Policy 3(d). The definition of ‘close’ or ‘near’ must be somewhere below 800m. It would not be a coherent strategy to enable ‘adjacent’ land around the lower order centres to be the same as the walkable catchment around metropolitan centres.

1.3.2 Should ‘close’ or ‘near’ be based on an actual walking distance?

The purpose behind Policy 3(d) of the NPS-UD seeking greater building heights and densities of urban form around neighbourhood, local and town centres seems to be to create

[5] https://qualityplanning.org.nz/sites/default/files/2018-11/To%20Notifiy%20or%20Not%202018.pdf

an area immediately surrounding the centres with a high density population. It also seems logical to assume that such a community would be anticipated to walk to that centre for their needs.

Therefore, in determining what ‘close’ or ‘near’ mean in the context of Policy 3(d), it would be more sensible to apply a walking distance than a straight measurement. As explained in section 6.5 of this report, using the ‘as the crow flies’ method of estimating how far people can walk is prone to large inaccuracies. Measuring a walking distance based on actual walking networks will result in far more accurate results.

In some cases, even adjoining sites to a centre might not actually be within a set walking distance of the edge of the centre zone when using actual walking networks (not as the crow flies). Figure 1 below shows an example in Browns Bay where the circuitous walking network and steep topography mean that some sites adjoining the Town Centre zone are not within a 400m walking distance. These sites were therefore not shown outlined in brown and rezoned to THAB on the preliminary response maps.

Figure 1: Application of Policy 3(d) in Browns Bay based on a 400m walking distance (showing the preliminary response maps from April/May)

While it is important to stress that the ‘adjacent’ areas to neighbourhood, local and town centres are **not** ‘walkable catchments’, a similar methodology to that used for Policy 3(c) has been used to assist in determining what areas are ‘close’ or ‘near’ to the centres for Policy 3(d).

As explained in section 1.3.1 above, in the context of the NPS-UD ‘close’ or ‘near’ must be under 800m from the centres (as this is the distance used for the much larger metropolitan centres and the rapid transit stops). As noted in the literature review on walkable catchments in **Appendix 5** and **Appendix 20**, there is evidence to show that people are prepared to walk further to access frequent and reliable public transport and/or centres with a large variety of activities and services, than they would walk for daily convenience needs (such as those in the lower order centres).

Therefore, using the same methodology as the preferred option in section 6.5 in the main body of this report, walking distances (or walkable catchments) can be generated for distances of 600m, 400m, and 200m from the edge of the Neighbourhood, Local and Town

Centre zones[6]. The modifying factors outlined in section 6.5 in the main body of this report and **Appendix 4** are also applied where relevant.

2 Case law summary on the meaning of 'adjacent'

Ports of Auckland Limited v Auckland City Council [1999] 1 NZLR 60

- The Council granted resource consents to developers to construct residential apartments on Quay Street on a non-notified basis.
- The Port claimed that the applications for consent should have been notified on the basis of concerns relating to reverse sensitivity- the Port was concerned that noise from its operations would adversely affect the amenity values of residents occupying the proposed apartments and that they would have standing to sue in future.
- Issue: whether the Port is an "adjacent owner or occupier of land" for the purposes of s 93
- Held: Adjacent land is not confined to land which is adjoining but includes places which are nearby
- The Court concluded that the Port was in close proximity to the proposed apartments that its operations could have an impact on the amenity value of future residents. On that basis the port should have been notified of the applications for consent as an "adjacent occupier".

Wellington v Lower Hutt [1904] AC 773

- LH constructed a bridge over the Hutt River and gave notice to the Wellington City Council to recover the costs for construction, relying on a provision in the Municipal Corporations Act 1900 which states that where the council of any borough decides to construct a bridge which will be of advantage to the inhabitants of the adjacent borough, it is reasonable for the council of the adjacent borough to contribute to the costs
- Wellington City Council disagreed that Wellington was adjacent to Lower Hutt.
- The Court held that Wellington City is adjacent to Lower Hutt. The word adjacent is not confined to places adjoining and it includes places close to or near.

Murray v Whakatane District Council (1997) 3 ELRNZ 308

- Whakatane District Council granted consents to two developers to complete areas of existing residential development on the Ohope Spit.
- The plaintiffs were owners of land with houses built as a result of the earlier subdivisions. They were not notified of the application because the Council resolved to proceed with the application on a non-notified basis.
- The Plaintiffs argued that they are adjacent owners of land and therefore should have been notified of the application.
- The Court adopted the definition of adjacent as set out in *Wellington v Lower Hutt* – that it is not confined to land which is adjoining. It includes places which are nearby.
- The Court was satisfied that that the plaintiffs, by reason of the proximity of their properties to the subdivisions, were persons affected by the application. Despite

[6] The preferred option under Policy 3(d) uses walking distances of 200m and 400m from the edge of the relevant Local and Town Centre zones. Maps showing the edges (or 'entrance points') of the specific Local Centre and Town Centre zones can be found in **Appendix 15** and **Appendix 16**.

suggestions that some of the plaintiff's properties were not immediately adjoining the subdivision sites (particularly in the case of the Waimana development which is separated from the homes of the closest plaintiffs by the width of a nearby reserve), the Court considered that they were sufficiently close that the subdivision will have direct effects on them. The evidence relating to views, privacy and values demonstrated that proximity.

Appendix 11

Determining heights and densities ‘commensurate’ with levels of activities and services

Heights and densities commensurate with activities and services

How ‘adjacent’ land under Policy 3(d) is shown on the planning maps

The adjacent land where Policy 3(d) has been applied is indicated on the planning maps through a brown outline. This brown outline is a non-statutory information layer. An example of this is shown in Figure 1 below for the adjacent land to the Milford Town Centre zone. The brown outline includes only residentially zoned land[1]. The example below shows that the Mixed Use zone adjacent to the south of the Milford town centre is not included within the brown lines.

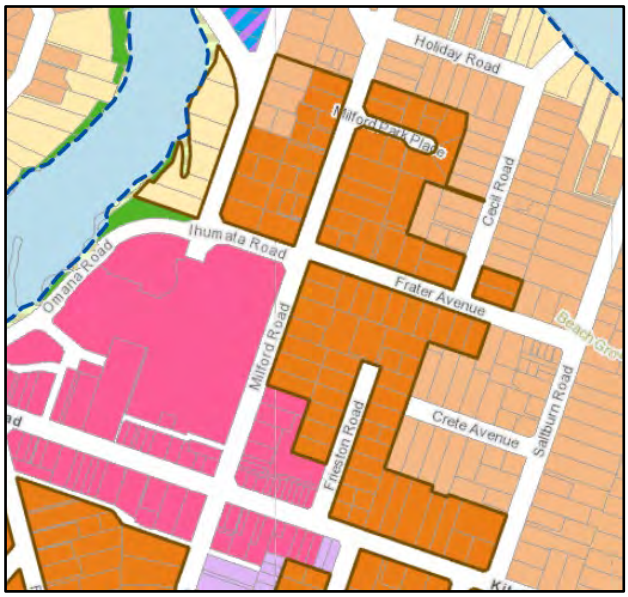


Figure 1: Example of the information layer on the planning maps identifying the residentially zoned land (outlined in brown) adjacent to the Milford Town Centre zone

It is important to note that this brown outline denotes the ‘adjacent’ land to the centre and is **not** to be conflated with a ‘walkable catchment’ (which is covered under Policy 3(c)).

The order of applying Policy 3

Auckland Council has applied Policy 3 in a sequenced manner from sub-part (a) through to (d). In particular, the walkable catchments under Policy 3(c) were applied prior to the application of Policy 3(d).

Therefore, when applying Policy 3(d), in some cases areas of adjacent land to the qualifying local and town centres[2] were already located within a walkable catchment defined under Policy 3(c) (and therefore rezoned to THAB under Policy 3(c)). In these cases, the earlier work of Policy 3(c) requiring at least six storeys to be enabled took precedence. Therefore, no changes to zonings inside a walkable catchment were made under Policy 3(d).

---

[1] Single House zone, Mixed Housing Suburban zone, and Mixed Housing Urban zone. It does not cover existing areas of THAB (i.e. where the AUP already zones land adjacent to the centre as THAB).

[2] Those 46 local and town centres determined as having a medium/high or high level of commercial activities and community services.

An example of this is shown below in Figure 2 where a walkable catchment under Policy 3(c) has firstly been applied to the Glen Innes train station (as depicted by the black line). Then, Policy 3(d) has been applied to land 'adjacent' to the Glen Innes Town Centre zone. In this case most of the adjacent land is already included with the walkable catchment (or is already zoned THAB). Therefore, only a small area of 'adjacent' land to the north is outlined in brown to apply Policy 3(d) to this centre.

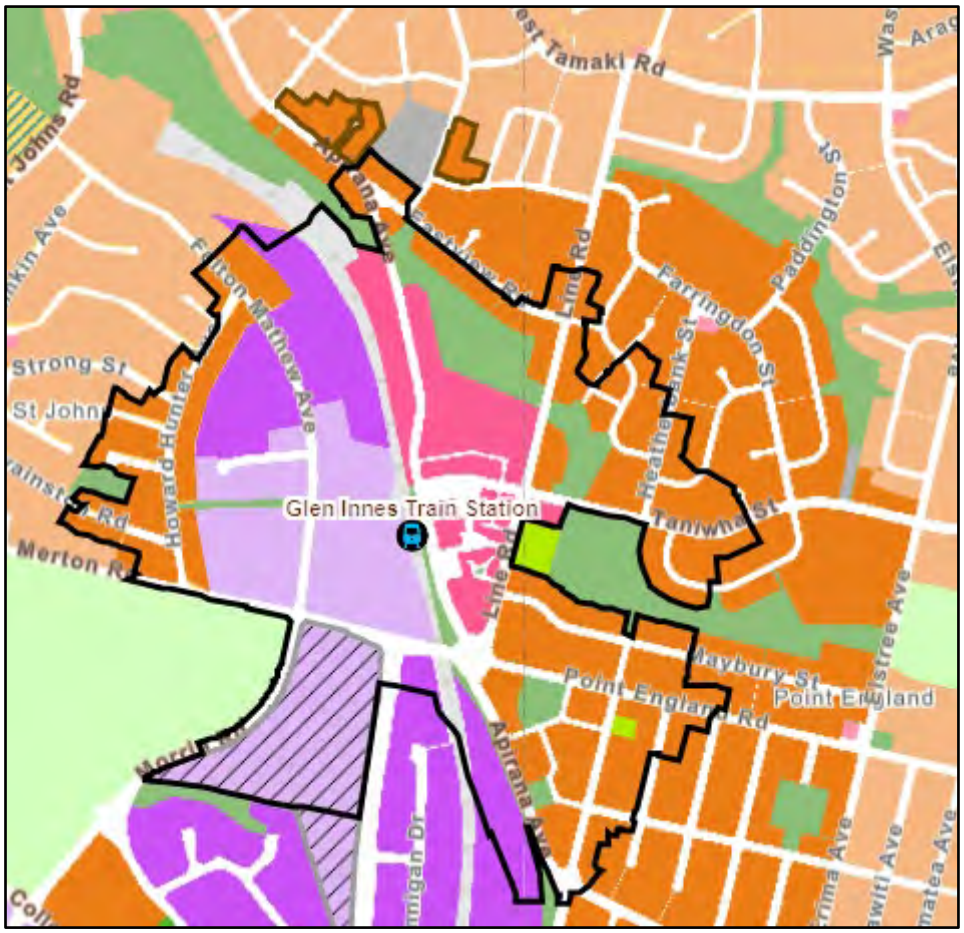


Figure 2: Example of Policy 3(d) areas (brown outline) being applied after the Policy 3(c) walkable catchment (black line) (map from preliminary response viewer April 2022)

How do you measure 'commensurate'?

In applying Policy 3(d) an assessment has first been undertaken to measure the "level of commercial activity and community services" in each centre. This assessment is outlined in section 6.8 of the main body of this s32 report and in Appendix 9. The assessment results in 46 of Auckland's town and local centres being classified as having *medium/high* or *high* levels of activities and services.

Policy 3(d) then requires the AUP to enable within and adjacent to these centres, building heights and densities of urban form commensurate with their medium/high or high levels of activities and services. The ordinary meaning of the word 'commensurate' is "corresponding in size or degree; in proportion".[3] Therefore, these centres with medium/high or high levels

[3] Oxford English Dictionary

of activities and services must enable commensurately *high* building heights and densities of urban form (or enable at least that[4]).

There is no objective measure to calculate what the specific commensurate heights and density are for medium/high and high levels of activities and services. Therefore, it is acknowledged that any method developed will have some level of subjectivity to it. As the MfE guidance[5] was produced prior to the amendment to Policy 3(d), there is no guidance from MfE on how to reconcile levels of activities and services with building heights and densities of urban form.

Determining 'commensurate' building heights and densities of urban form on land within centres

What are the building heights and densities of urban form enabled within neighbourhood, local, and town centres?

The currently enabled building heights and density of urban form within the neighbourhood, local and town centres are detailed in the various zone chapters: *H12 – Business Neighbourhood Centre zone*, *H11 – Business Local Centre zone*, and *H10 – Business Town Centre zone.* A summary of the some of the key height and density provisions for each of these centre zones is provided in Figure 3 below.

Height and density controls	Neighbourhood Centre zone	Local Centre zone	Town Centre zone
Maximum total building height	13m	18m	Applied in all cases through a Height Variation Control which averages between 19m and 23m (maximum 32.5m, minimum 8.5m)
Height in relation to boundary	No HIRB applies on internal zone boundaries	No HIRB applies on internal zone boundaries	No HIRB applies on internal zone boundaries
Rear and side yard	3m	3m	3m
Maximum impervious area	No maximum	No maximum	No maximum
Maximum building coverage	No maximum	No maximum	No maximum
Density controls	No controls on density of activities (aside from minimum dwelling size)	No controls on density of activities (aside from minimum dwelling size)	No controls on density of activities (aside from minimum dwelling size)
Building setback at upper floors	N/a	N/a	6m (at 18m height opposite residential and 27m for all other zones)

[4] It is considered that the intention of Policy 3(d) is to require greater heights and densities on adjacent land where the centres have medium/high or high levels of activities and services. It is not considered that the intention of the NPS-UD is to also require the heights and densities on adjacent land to be reduced if the centre itself has low levels of activities and services. In these cases no changes would be made under Policy 3(d).
[5] Ministry for the Environment. 2020. *Understanding and implementing intensification provisions for the National Policy Statement on Urban Development.* Wellington: Ministry for the Environment.

Height and density controls	Neighbourhood Centre zone	Local Centre zone	Town Centre zone
Maximum tower dimension and tower separation	N/a	N/a	Maximum plan dimension 55m (for that part of building over 27m)
Wind	Buildings over 25m must not cause adverse wind effects	Buildings over 25m must not cause adverse wind effects	Buildings over 25m must not cause adverse wind effects
Outlook space for habitable rooms	3m x 3m (or 6m x 4m for principal living room)	3m x 3m (or 6m x 4m for principal living room)	3m x 3m (or 6m x 4m for principal living room)
Minimum dwelling size	45m^2 or 30m^2 for studio dwellings	45m^2 or 30m^2 for studio dwellings	45m^2 or 30m^2 for studio dwellings
GFA threshold[6] on Offices	500m^2	500m^2	No thresholds
GFA threshold on Retail	450m^2	450m^2	No thresholds
GFA threshold on Supermarkets	450m^2	2,000m^2	No thresholds
Summary of heights and densities	**Medium**	**Medium/High**	**High**

Figure 3: AUP provisions controlling heights and density of urban from in Neighbourhood, Local, and Town Centre zones.

Neighbourhood Centre zones

Neighbourhood centres are typically very small sets of shops or even standalone dairies and service stations. All neighbourhood centres are deemed to have very low levels of commercial activities and community services.[7] In the context of Policy 3(d), the medium building heights and densities of urban form enabled on land within neighbourhood centres (e.g. three storeys height and no building coverage) is already more than commensurate with the low level of activities and services in Auckland's neighbourhood centres.

It is noted that feedback on the council's preliminary response to the NPS-UD directions in April/May 2022 did not raise any significant opposition to the proposal not to intensify any further within neighbourhood centres.

Local Centre zones

The Local Centre zone applies to a large number of small centres throughout Auckland. The zone primarily provides for the local convenience needs of surrounding residential areas.[8] However, there is a wide range of local centre sizes – from 0.25ha to 18ha. The local centres (irrespective of size) with lower population and employment catchments are

[6] Threshold for when the activity shifts in activity status (e.g. from permitted to restricted discretionary).
[7] Refer to section 6.8 in the main body of this s32 report and Appendix 9.
[8] H11.1 of the AUP.

considered to have relatively low levels of commercial activities and community services. The large local centres that also have catchments with high population and employment are considered to have medium/high levels of commercial activities and community services.[9]

In the context of Policy 3(d), the medium building heights and densities of urban form enabled on land within local centres (e.g. four storeys and no building coverage) is already commensurate (or more than commensurate) with both the relatively low level of activities and services in the smaller local centres and the medium/high levels in the larger local centres.

Town Centre zones

The Town Centre zone applies to 44 centres throughout Auckland. The zone services a wider area than local centres and provides for a large range of activities including commercial, leisure, residential, tourism, cultural, community and civic services.[10]

However, there is a significant range of town centre sizes – from 2.1ha to 25ha. The town centres (irrespective of size) with lower population and employment catchments are considered to have relatively low levels of commercial activities and community services. Both the small town centres that have catchments with high population and employment are considered to have medium/high levels of commercial activities and community services. The large town centres that have catchments with high population and employment are considered to have high levels of commercial activities and community services.[11]

In the context of Policy 3(d), the relatively high building heights (e.g. up to nine storeys) and densities of urban form (e.g. no building coverage, no GFA limits) enabled on land within town centres is already commensurate (or more than commensurate) with all categories of town centre.

Summary

Figure 3 below broadly summarises the levels of activities and services in neighbourhood, local and town centres and the enabled heights and densities of urban form within each centre. The final column then compares the two results and whether the enabled heights and densities are at least commensurate with the levels of services and activities.

It concludes that the enabled heights and densities within all neighbourhood, local, and town centres (of any size or catchment) are commensurate with the levels of activities and services in those centres. Therefore, no amendments to the AUP provisions are recommended to implement the part of Policy 3(d) relating to heights and densities of urban form within neighbourhood, local and town centres.

[9] Refer to section 6.8 in the main body of this s32 report and Appendix 9.
[10] AUP H10.1
[11] Refer to section 6.8 in the main body of this s32 report and Appendix 9.

Centre type	Centre size	Centre catchment	Level of activities and services	Enabled heights and density within centre	Are heights and densities at least commensurate with levels of activities and services?
Neighbourhood Centre	All	All	Low	Medium	Yes
Local Centres	All	Low	Medium	Medium/High	Yes
Local Centres	Large	High	High	Medium/High	Yes
Town Centres	All	Low	Medium	High	Yes
Town Centres	Small	High	High	High	Yes
Town Centres	Large	High	High	High	Yes

Figure 4: Measuring whether heights and densities within centres are commensurate with level of activities and services

Determining 'commensurate' building heights and densities of urban form on land adjacent to centres

What are the building heights and densities of urban form enabled on land adjacent to neighbourhood, local, and town centres?

Neighbourhood centres

The enabled building heights and densities of urban form on residential land adjacent to neighbourhood centres are considered to be medium as they will (at minimum) include the MDRS. In the context of Policy 3(d), the medium building heights and densities of urban form enabled on land adjacent to neighbourhood centres is already commensurate with the low level of activities and services in Auckland's neighbourhood centres.

Therefore, no changes to the AUP are proposed under Policy 3(d) in relation to land adjacent to neighbourhood centres.

It is noted that feedback on the council's preliminary response to the NPS-UD directions in April/May 2022 did not raise any significant opposition to the proposal not to intensify any further (than MDRS) on land adjacent to neighbourhood centres.

Local and town centres

The land adjacent to the local and town centres that have medium/high or high levels of activities and services[12] is covered by a variety of zones (as proposed by PC78). The main zones[13] adjacent to these centres are summarised in Figure 4, Figure 5, and Figure 6 below.

Large local centres with high population and employment catchments	Adjacent zones
Albany Village	Mixed Housing Urban, Large Lot, Light Industry, Open Space, Special Purpose
Balmoral	Mixed Housing Urban, Low Density Residential, THAB, Mixed Use, Special Purpose, Open Space
Botany Junction	Mixed Housing Urban, THAB, Mixed Use, Open Space
Dawsons Road	Mixed Housing Urban, Open Space
Eden Valley	Mixed Housing Urban, Low Density Residential, THAB, Mixed Use, Open Space
Greenlane West	THAB, Mixed Use, Low Density Residential, Open Space, Special Purpose
Greville	Mixed Housing Urban, Open Space
Grey Lynn	Mixed Housing Urban, Low Density Residential, THAB, Mixed Use, Open Space, Special Purpose
Kepa Road / Eastridge	Mixed Housing Urban, THAB, Open Space, Mixed Use, Neighbourhood Centre
Lynfield	Mixed Housing Urban, THAB, Open Space, Mixed Use
Mangere East	Mixed Housing Urban, THAB, Open Space, Mixed Use, Neighbourhood Centre
Meadowbank	Mixed Housing Urban, THAB, Open Space
Meadowlands	Mixed Housing Urban, Open Space
Ranui	Mixed Housing Urban, Open Space, Large Lot

Figure 5: Adjacent zones next to large local centres with high population and employment catchments

Small town centres with high population and employment catchments	Adjacent zones
Devonport	Low Density Residential, Open Space

[12] Refer to section 6.8 in the main body of this s32 report and Appendix 9.
[13] In determining which zones are adjacent to these centres, the application of the Medium Density Residential Standards ('MDRS') to relevant residential zones has been considered. The application of the MDRS has essentially resulted in areas of Single House and Mixed Housing Suburban zones being rezoned to Mixed Housing Urban through PC78 (except for most rural settlements). Therefore, reference is made in the tables only to the Mixed Housing Urban zone (not the Single House zone or the Mixed Housing Suburban zone). The new Low Density Residential zone has been considered where it is proposed by PC78.

Small town centres with high population and employment catchments	Adjacent zones
Ellerslie	Mixed Housing Urban, Low Density Residential, Open Space, Mixed Use, THAB
Glenfield	Mixed Housing Urban, THAB, Open Space
Greenlane	Mixed Housing Urban, Mixed Use, Open Space
Milford	Mixed Housing Urban, Low Density Residential, Light Industry, Mixed Use, Open Space
Mt Albert	Mixed Housing Urban, THAB, Low Density Residential, Mixed Use, Open Space
Newton - Upper Symonds St	Mixed Use, Open Space
Northcote	Mixed Housing Urban, THAB, Open Space
Otara	Mixed Housing Urban, THAB, Open Space, Light Industry, Special Purpose, Neighbourhood Centre
Parnell	Mixed Housing Urban, THAB, Low Density Residential, Mixed Use, Open Space
Pt Chevalier	Mixed Housing Urban, THAB, Special Purpose, Open Space, Mixed Use
Remuera	Mixed Housing Urban, THAB, Low Density Residential, Special Purpose, Open Space
Sunnynook	Mixed Housing Urban, THAB, Open Space
Three Kings	Mixed Housing Urban, THAB, Low Density Residential, Mixed Use, Open Space

Figure 6: Adjacent zones next to small town centres with high population and employment catchments

Large town centres with high population and employment catchments	Adjacent zones
Avondale	Mixed Housing Urban, THAB, Mixed Use, Special Purpose, Open Space
Birkenhead	Mixed Housing Urban, THAB, Low Density Residential, Mixed Use, Open Space, Light Industry, Neighbourhood Centre
Browns Bay	Mixed Housing Urban, THAB, Low Density Residential, Mixed Use, Open Space,
Glen Eden	THAB, Special Purpose, Light Industry, Open Space
Glen Innes	Mixed Housing Urban, THAB, Mixed Use, Open Space, Light Industry, Special Purpose
Highland Park	Mixed Housing Urban, THAB, Mixed Use, Open Space
Hunters Corner	Mixed Housing Urban, THAB, Low Density Residential, Open Space, Special Purpose
Mangere	Mixed Housing Urban, THAB, Low Density Residential, Open Space
Manurewa	Mixed Housing Urban, THAB, Low Density Residential, Open Space, Special Purpose, Mixed Use, Light Industry

Large town centres with high population and employment catchments	Adjacent zones
Onehunga	Mixed Housing Urban, THAB, Low Density Residential, Open Space, Special Purpose, Mixed Use, Light Industry, Heavy Industry
Otahuhu	Mixed Housing Urban, THAB, Low Density Residential, Open Space, Special Purpose, Mixed Use, Light Industry
Pakuranga	Mixed Housing Urban, THAB, Mixed Use, Open Space, Special Purpose
Panmure	Mixed Housing Urban, THAB, Mixed Use, General Business, Open Space, Special Purpose
Papatoetoe	Mixed Housing Urban, THAB, Low Density Residential, Open Space, Neighbourhood Centre,
Ponsonby	Mixed Housing Urban, THAB, Low Density Residential, Open Space, Mixed Use, Light Industry
Royal Oak	Mixed Housing Urban, THAB, Mixed Use, Open Space, General Business, Light Industry, Neighbourhood Centre
St Lukes	Mixed Housing Urban, THAB, Low Density Residential, Mixed Use, Open Space, Light Industry,
Stoddard Rd	Mixed Housing Urban, THAB, Open Space, Mixed Use, General Business, Special Purpose

Figure 7: Adjacent zones next to large town centres with high population and employment catchments

The enabled building heights and density of urban form in the zones adjacent to these specific local and town centres that have medium/high or high levels of activities and services are outlined in Figure 8 below.

Height and density controls	Large Lot zone	Low Density Residential	Mixed Housing Urban	THAB	Mixed Use	General Business	Light Industry	Heavy Industry	Special Purpose - School	Special Purpose - Tertiary	Neighbour-hood Centre	Open Space (based on informal rec zone)
Max. Height	9m	9m	12m	16m	18m	16.5m	20m	20m	16m	24m	13m	8m
Max. Height in relation to boundary	No HIRB standard applies	60°recession plane, measured from 4m above ground level	60°recession plane, measured from 4m above ground level	60°recession plane, measured from 8m above ground level	No HIRB standard within internal zone boundaries	No HIRB standard within internal zone boundaries	No HIRB standard within internal zone boundaries	No HIRB standard within internal zone boundaries	N/A	No HIRB standard within internal zone boundaries	No HIRB standard within internal zone boundaries	Where adjoining another zone, the HIRB standard of that zone applies
Min. Front yards	10m	3m	1.5m	1.5m	No yard	No yard	2m	2m	3m	3m	No yard	5m or the average setback of buildings
Min. Side/Rear Yard	6m	1m	1m	1m	3m	No yard between internal zone boundaries	5m	No yard between internal zone boundaries	3m	3m	3m	6m
Max. impervious area	Lesser of 35% or 1,400m^2	60%	60%	70%	No more than 10% of riparian yard	No more than 10% of riparian yard	No more than 10% of riparian yard	No more than 10% of riparian yard	70%	N/A	No maximum	Lesser of 10% or 5000m^2
Max. Building coverage	Lesser of 20% or 400m^2	35%	50%	50% (of net site area)	No maximum	N/A	N/A	N/A	50%	50%	N/A	10%
Max. Dwellings per site	1	1	3	3	No limit	Dwellings are a non-complying activity	Dwellings are a non-complying activity	Dwellings are a prohibited activity	1 Dwelling per 2000m^2	No limit if associated with tertiary education activity	No maximum	Dwellings are not provided for

Height and density controls	Large Lot zone	Low Density Residential	Mixed Housing Urban	THAB	Mixed Use	General Business	Light Industry	Heavy Industry	Special Purpose - School	Special Purpose - Tertiary	Neighbour -hood Centre	Open Space (based on informal rec zone)
Min. dwelling size	N/A	N/A	45m^2 or 30m^2 for studio dwellings	45m^2 or 30m^2 for studio dwellings	45m^2 or 30m^2 for studio dwellings	N/A	N/A	N/A	N/A	N/A	45m2 or 30m2 for studio dwellings	N/A
Min. Outlook space for habitable rooms	N/A	4mx4m for principal living room, 1mx1m for all other habitable rooms	4mx4m for principal living room, 1mx1m for all other habitable rooms	3m x 3m (or 6m x 4m for principal living room)	3m x 3m (or 6m x 4m for principal living room)	N/A	N/A	N/A	N/A	N/A	3m x 3m (or 6m x 4m for principal living room)	N/A
Min. Outdoor living space	N/A	20m^2	Dwelling at ground level – 20m^2 Dwelling above ground level – 8m^2	20m^2 (or between 5m^2 and 8m^2 for balconies)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Max. Wind	N/A	N/A	N/A	Buildings over 25m must not cause adverse wind effects	Buildings over 25m must not cause adverse wind effects	Buildings over 25m must not cause adverse wind effects	N/A	N/A	N/A	N/A	Buildings over 25m must not cause adverse wind effects	N/A
Min. Building setback at	N/A	N/A	N/A	N/A	6m (at 18m height opposite residential	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Height and density controls	Large Lot zone	Low Density Residential	Mixed Housing Urban	THAB	Mixed Use	General Business	Light Industry	Heavy Industry	Special Purpose - School	Special Purpose - Tertiary	Neighbour-hood Centre	Open Space (based on informal rec zone)
upper floors					and 27m for all other zones)							
Max. tower dimension and tower separation	N/A	N/A	N/A	N/A	Maximum plan dimension 55m (for that part of building over 27m)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Density controls	1 dwelling per site as a permitted activity	1 dwelling per site as a permitted activity	3 dwellings per site as a permitted activity	3 dwellings per site as a permitted activity	No controls on density of activities (aside from minimum dwelling size)	No controls on density of activities	No controls on density of activities	No controls on density of activities	No controls on density of activities – except for 1 dwelling per 2000m^2	No controls on density of activities	No controls on density of activities	No controls on density of activities
Summary of height and density controls												

Figure 8: AUP provisions controlling heights and density of urban from in zones adjacent to the specific 46 local and town centre zones

Based on the above, Figure 7 shows the zones[14] with enabled heights and densities that are commensurate with the medium/high and high levels of activities and services in the various local and town centres.

Adjacent zone	Enabled heights and density	Is it (at least) commensurate with the level of activities and services[15]
Large Lot zone	Low	Yes*
Low Density Residential zone	Low	Yes*
Mixed Housing Urban zone	Medium	No
Terrace Housing and Apartment Buildings zone	High	Yes
Mixed Use zone	High	Yes
General Business zone	High	Yes**
Light Industry zone	High	Yes**
Heavy Industry zone	High	Yes**
Open Space zones	Low	Yes**
Special Purpose zones	Medium	Yes**
Neighbourhood Centre zone	Medium	No***

Figure 9: Are the heights and densities enabled in adjacent zones commensurate with medium/high and high levels of services and activities

***Where the Large Lot zone and the Low Density Residential zone are used on land adjacent to local and town centres it is because a qualifying matter is present. Therefore, no change to the heights or densities of these zones is required as Policy 4 of the NPS-UD allows qualifying matters to modify the heights or densities otherwise directed.

****These zones are considered commensurate as the heights and density in these zones have a negligeable relationship to the activities and services in an adjacent centre. Medium/high and high levels of activities and services in a centre should have a commensurate response on adjacent residentially zoned land (as the more people living nearby could use the centre) and land zoned for commercial activities (as these can complement the activities of the centre). However, there is not a clear linkage between the heights and density of (for example) a manufacturing factory/park playground/private school and the activities and services of the centre.

*****The Neighbourhood Centre zone has a maximum height of 13m. This is lower than the height enabled in the THAB zone (16m) which (as outlined later) is the preferred option for enabling commensurate heights and densities on land adjacent to specific local and town centres.

[14] Adjacent to the specific local and town centres that have medium/high or high levels of activities and services.
[15] In those 46 local and town centres that have medium/high or high levels of activities and services.

Summary

Figure 8 below broadly summarises densities of urban form adjacent to the various centre categories[16] (based on their levels of activities and services). The final column then compares the enabled heights and densities with the levels of services and activities to determine if they are (at least) commensurate.

Centre type	Centre size	Centre catchment	Level of activities and services	Enabled heights and density adjacent to centre[17]	Are heights and densities (at least) commensurate with levels of activities and services?
Neighbourhood Centres	All	All	Low	Medium	Yes
Local Centres	Small	All	Low	Medium	Yes
Local Centres	Large	Low	Low	Medium	Yes
Local Centres	Large	High	Medium/High	Medium	No
Town Centres	All	Low	Medium	Medium / High	Yes
Town Centres	Small	High	Medium/High	Medium / High	No
Town Centres	Large	High	High	Medium / High	No

Figure 10: Measuring whether heights and densities adjacent to centres are commensurate with level of activities and services in these centres

The above table concludes that the enabled heights and densities in the adjacent zones are commensurate with the levels of activities and services in most centres. However, the heights and densities in the zones adjacent to the following centre types are not commensurate with the levels of activities and services in those centres:

- Large local centres with high population and employment catchments
- Small town centres with high population and employment catchments
- Large town centres with high population and employment catchments

The list of the 46 centres in these three categories is below:

Large local centres with a high population and employment catchment:

- Albany Village
- Balmoral
- Botany Junction
- Dawsons Road
- Eden Valley
- Greenlane West

[16] Categories based on the levels of activities and services in each centre.
[17] Determined from the mix of adjacent zones.

- Greville
- Lynfield
- Meadowlands
- Grey Lynn
- Mangere East
- Ranui
- Kepa Road / Eastridge
- Meadowbank

Small town centres with a high population and employment catchment:

- Devonport
- Greenlane
- Newton - Upper Symonds St
- Parnell
- Sunnynook
- Ellerslie
- Milford
- Northcote
- Pt Chevalier
- Three Kings
- Glenfield
- Mt Albert
- Otara
- Remuera

Large town centres with a high population and employment catchment:

- Avondale
- Glen Eden
- Hunters Corner
- Onehunga
- Panmure
- Royal Oak
- Birkenhead
- Glen Innes
- Mangere
- Otahuhu
- Papatoetoe
- St Lukes
- Browns Bay
- Highland Park
- Manurewa
- Pakuranga
- Ponsonby
- Stoddard Rd

Tables classifying all the local and town centres by size and accessibility are included in Appendix 9.

As outlined earlier in Figure 9, the adjacent zones that have heights and densities of urban form that are not commensurate with the medium/high or high level of activities and services in the specific local and town centres are:

- Mixed Housing Urban zone (incorporating MDRS)
- Neighbourhood Centre zone

Therefore, to implement this part of Policy 3(d) amendments to the AUP zoning and/or provisions are required. A full options analysis is included in the main body of this s32 report, but in summary the recommended option is (for land adjacent to the 46 centres listed above) to:

- Rezone adjacent land zoned Mixed Housing Urban[18] to THAB; and
- Add a Height Variation Control over adjacent land zoned Neighbourhood Centre to increase the enabled height to 16m (to match the new THAB in this area). The specific Neighbourhood Centre zones to which this applies are listed below (note the

[18] Noting that through the application of MDRS all Single House and Mixed Housing Suburban zones around the 46 centres have been replaced with Mixed Housing Urban (incorporating MDRS).

addresses are approximate and relate to all adjoining Neighbourhood Centre zoned sites to that address):

- 12 Growers Lane (near Mangere East Local Centre)
- 153 East Tamaki Road (near Otara Town Centre)
- 224 Kepa Road (near Kepa Road / Eastridge Local Centre)
- 343 Onehunga Mall, 370 Onehunga Mall, 162 Trafalgar St (near Onehunga Town Centre)
- 98 Trafalgar St, 655 Manukau Rd (near Royal Oak Town Centre)
- 125 Mokoia Rd (near Birkenhead Town Centre)

Appendix 12

Rapid transit stops:
Station entrance maps

Walkable catchment

Akoranga Bus Station

Auckland Council

Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Albany Bus Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

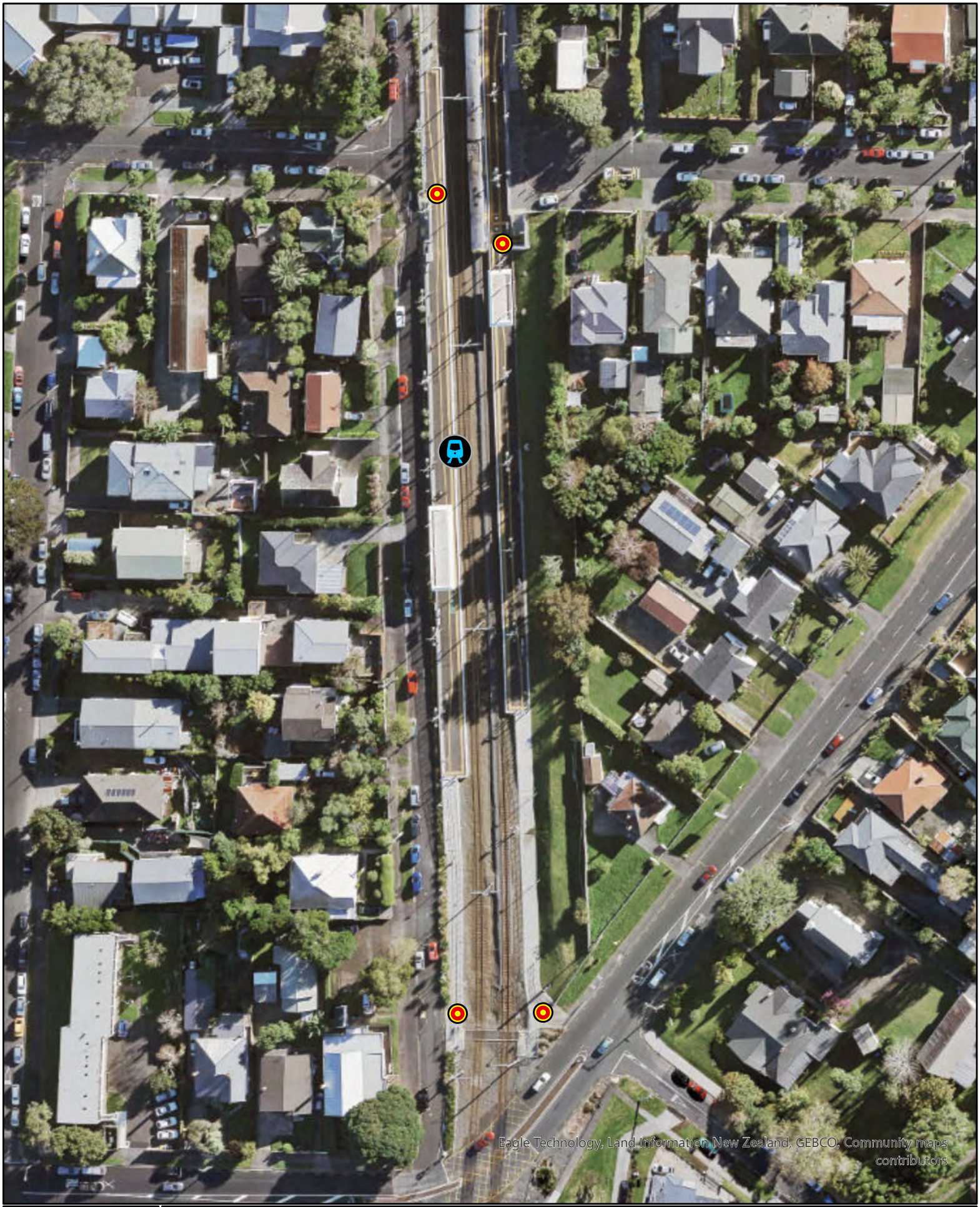
Walkable catchment

Aotea Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



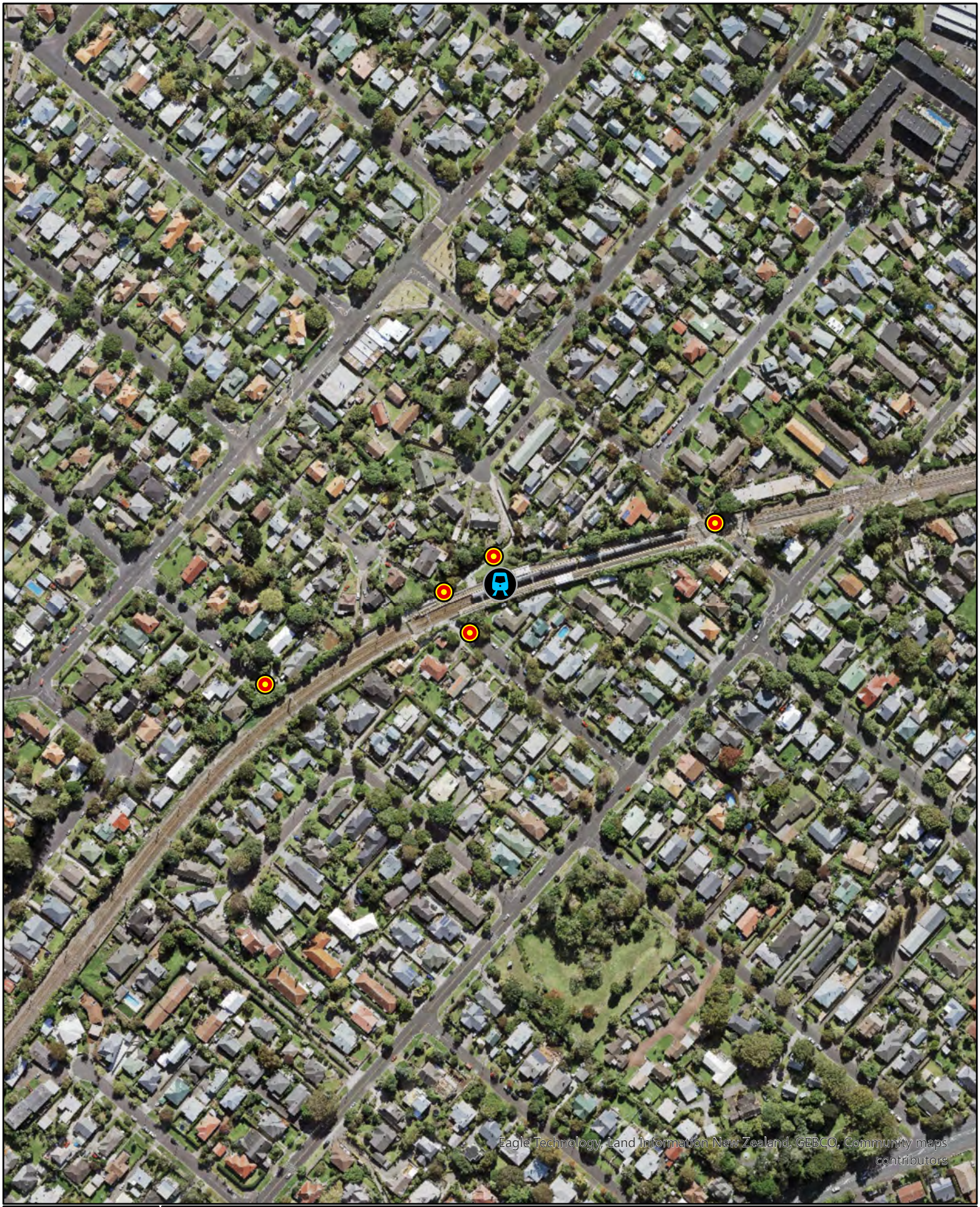
Walkable catchment

Avondale Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

Baldwin Ave Train

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Britomart Train Station

Auckland Council

Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

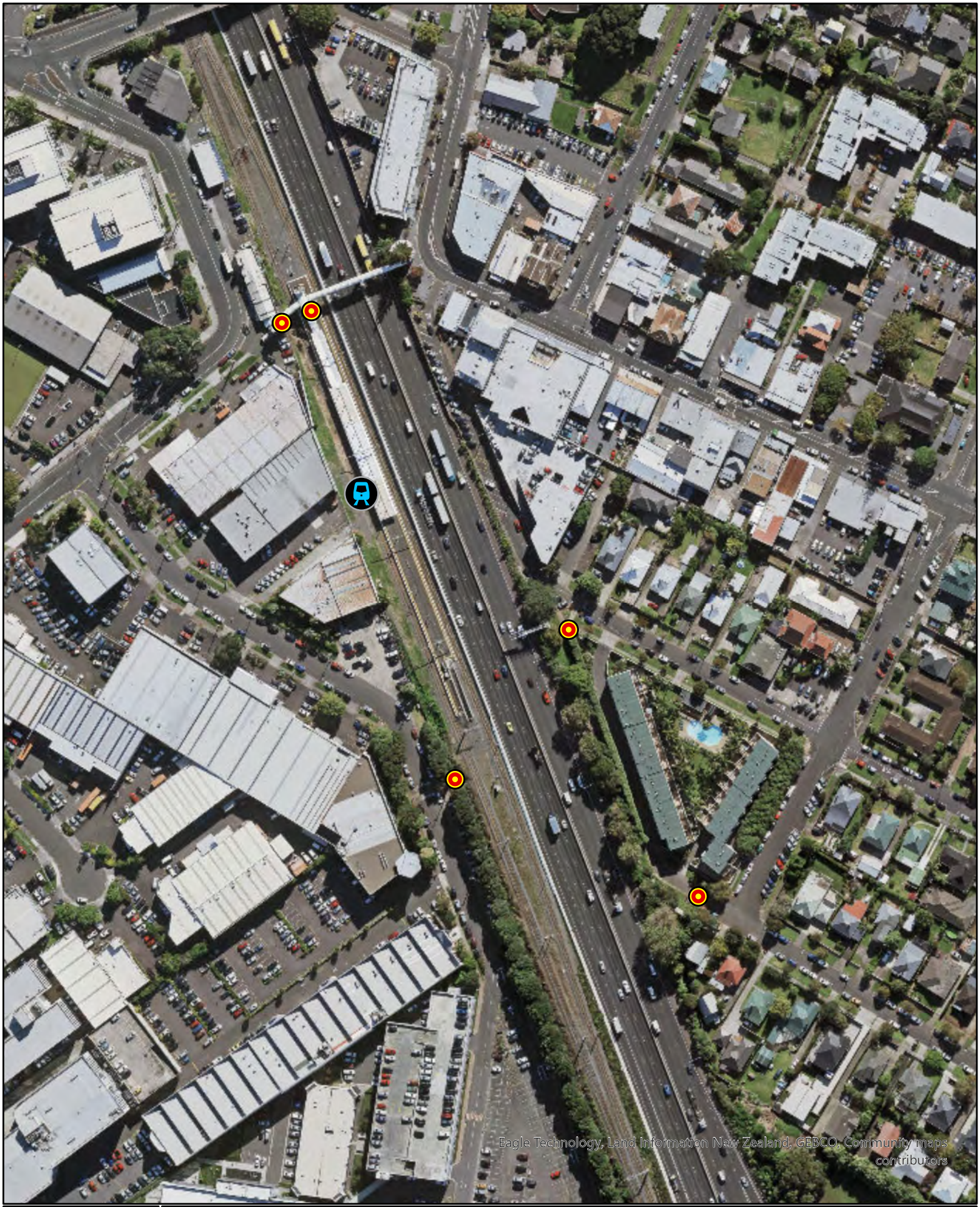
Walkable catchment

Constellation Bus

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

Ellerslie Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Fruitvale Rd Train

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Glen Eden Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Glen Innes Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Grafton Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

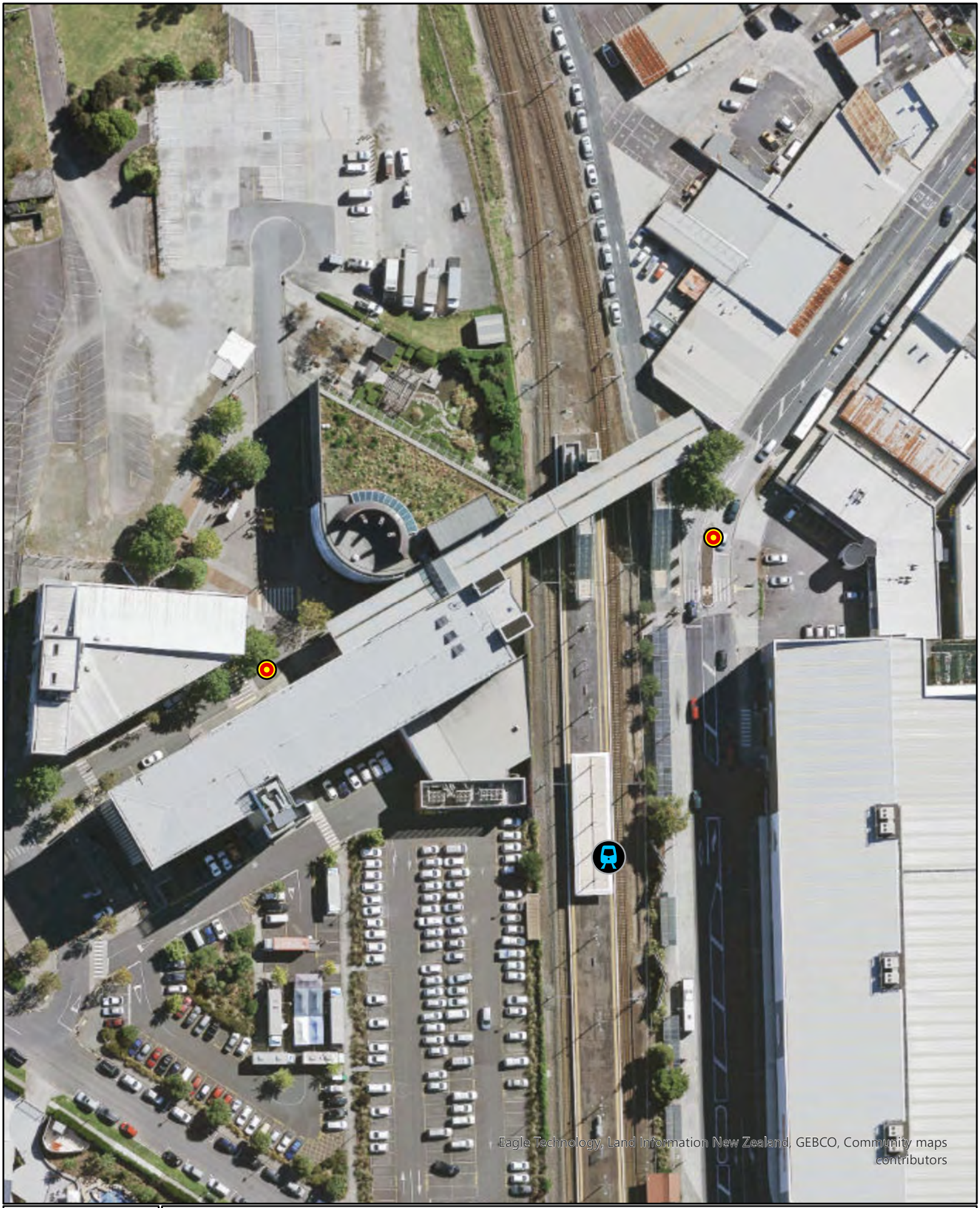
Walkable catchment

Greenlane Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

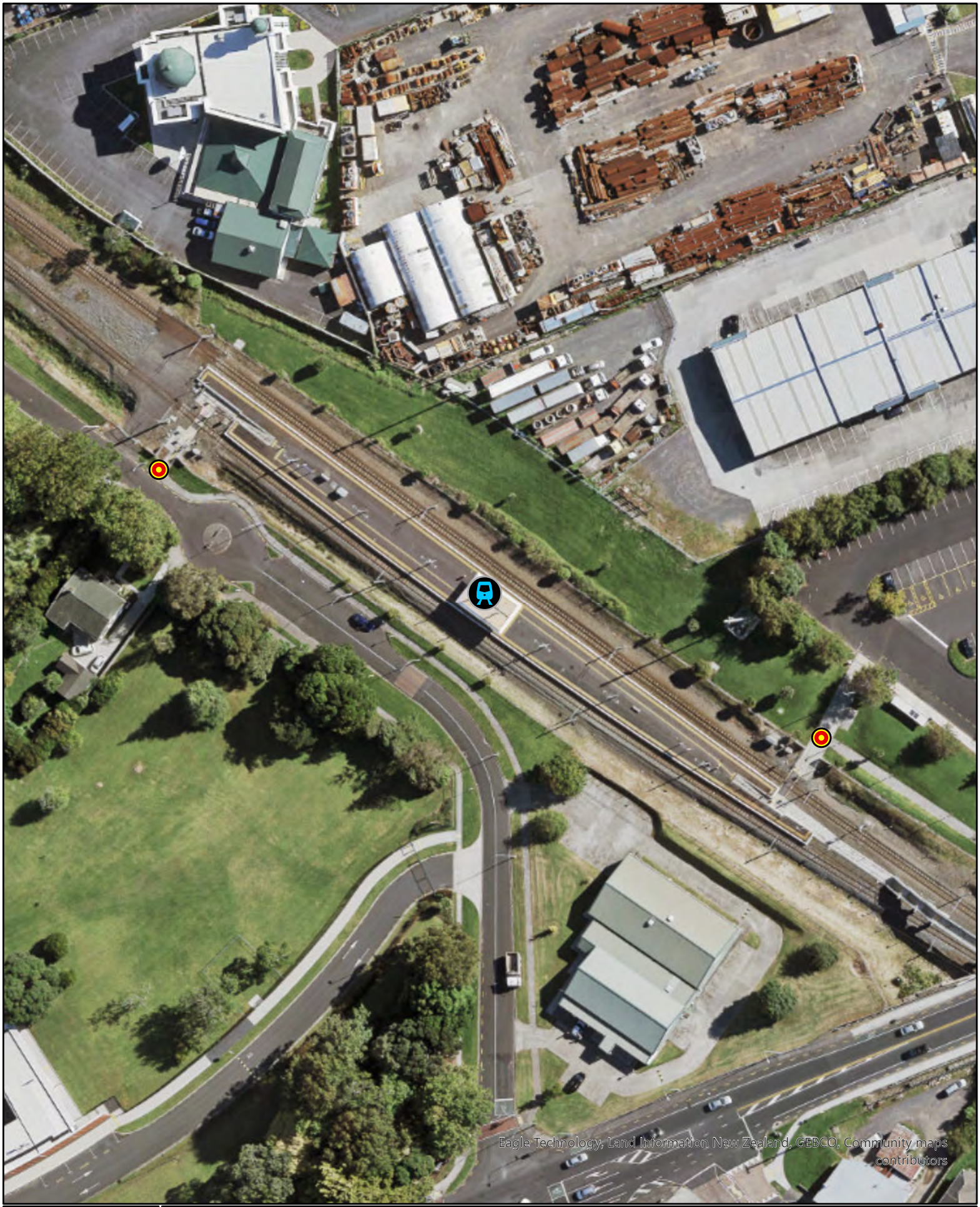
Henderson Train Station

Auckland Council

Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

Homai Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

K Road Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

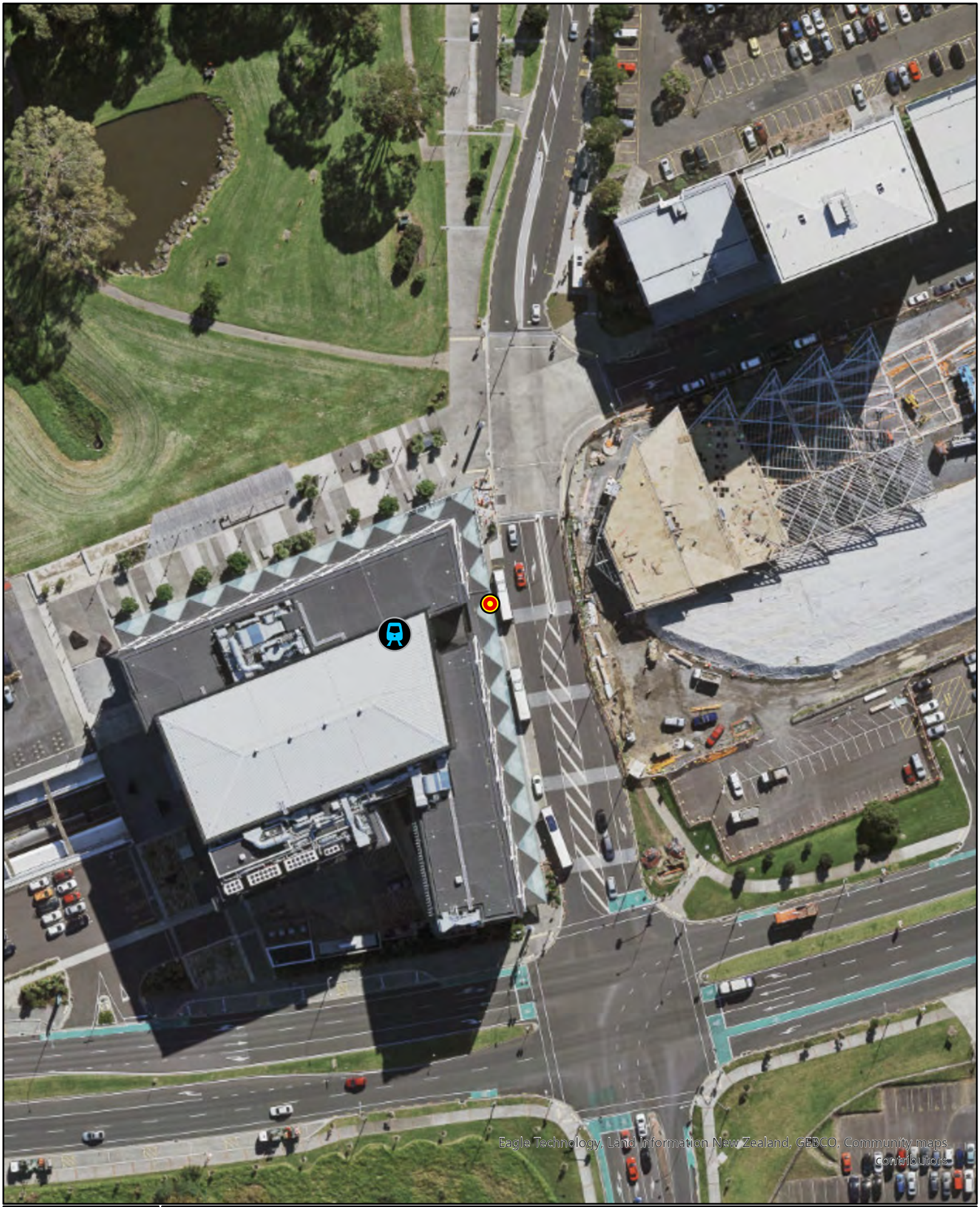
Walkable catchment

Kingsland Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



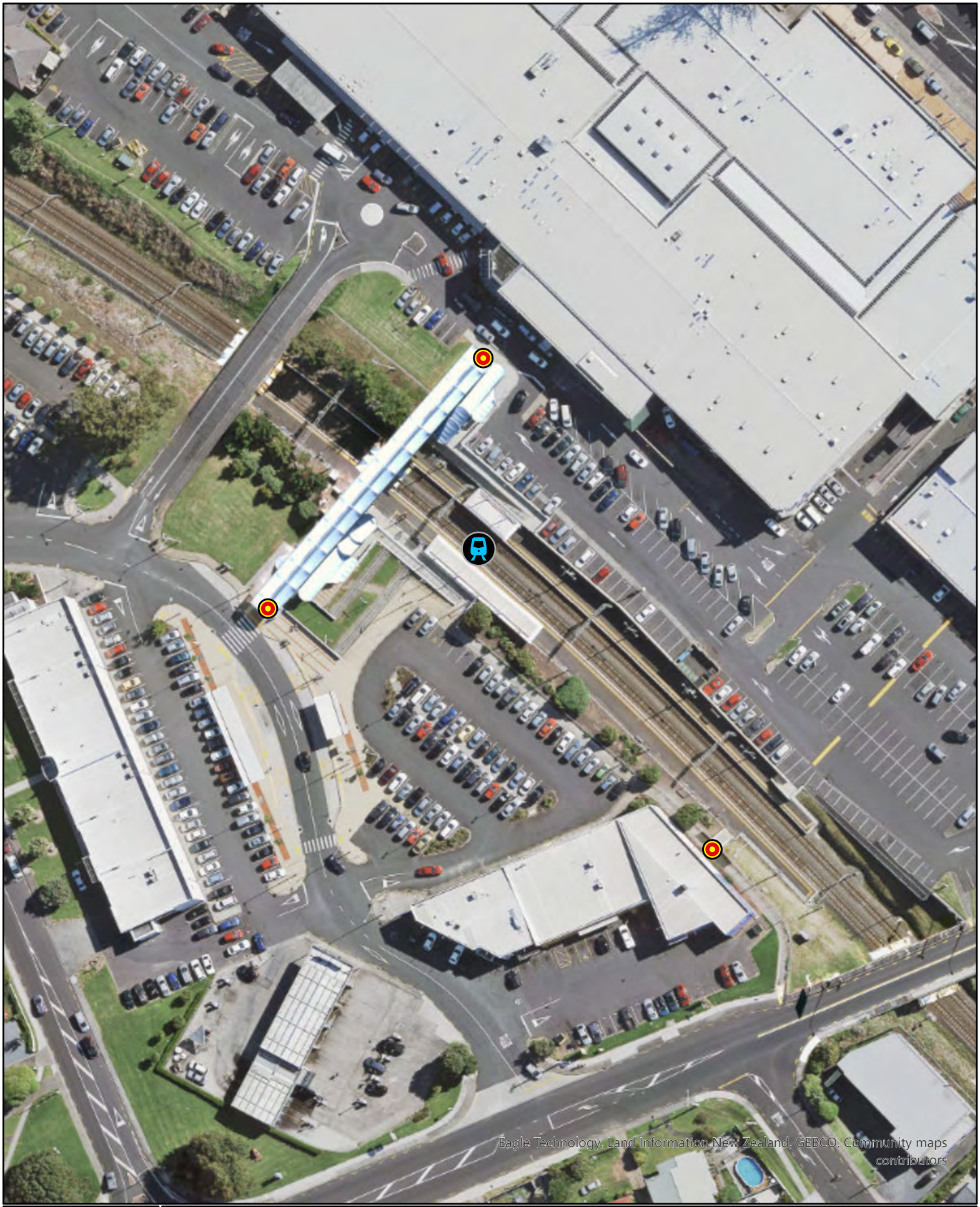
Walkable catchment

Manukau Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

Manurewa Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Meadowbank Train

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

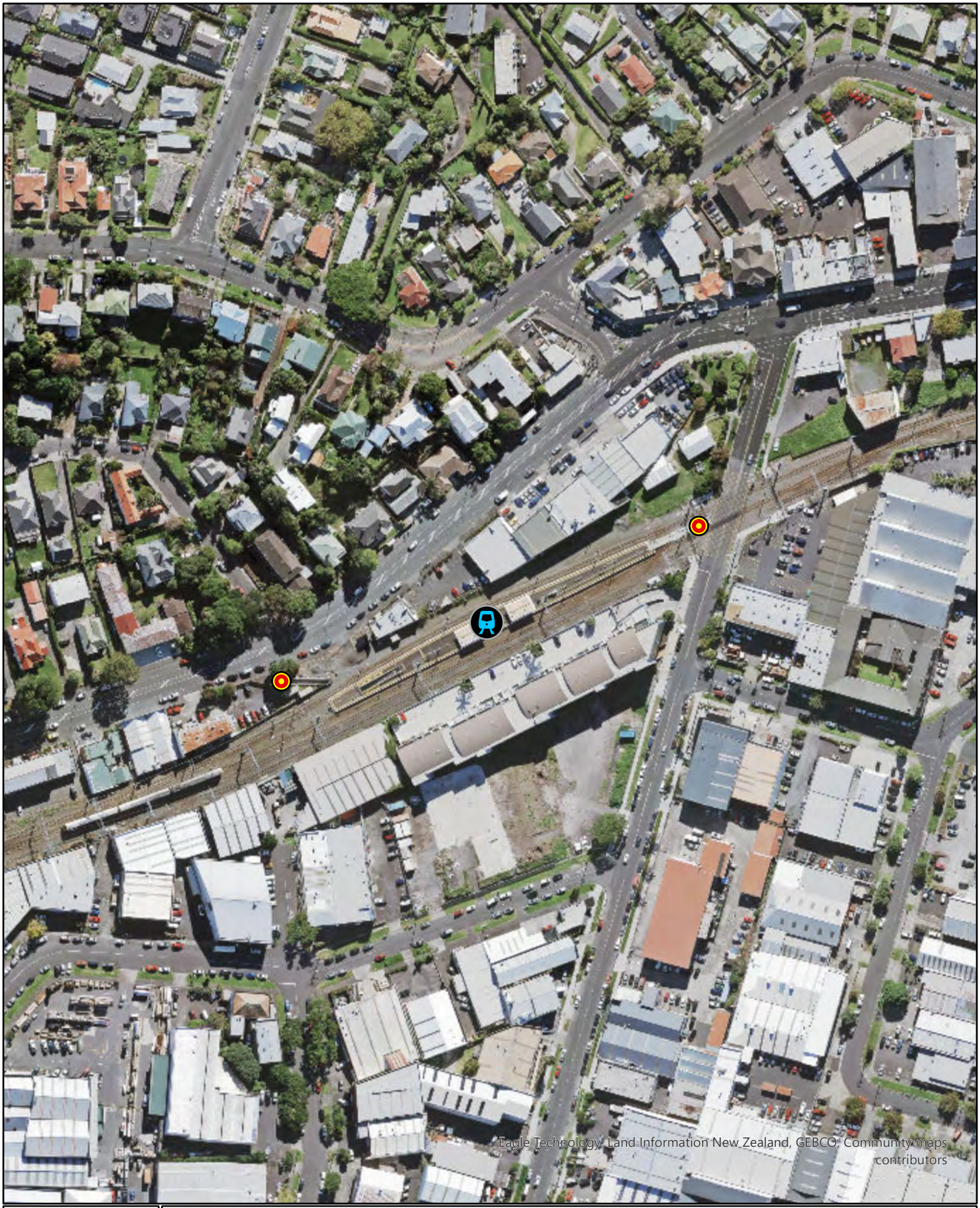
Walkable catchment

Middlemore Train

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

Morningside Train

Auckland Council
Plans and Places

- entrance points to the RTN station
- Rapid Transport Network (RTN) station

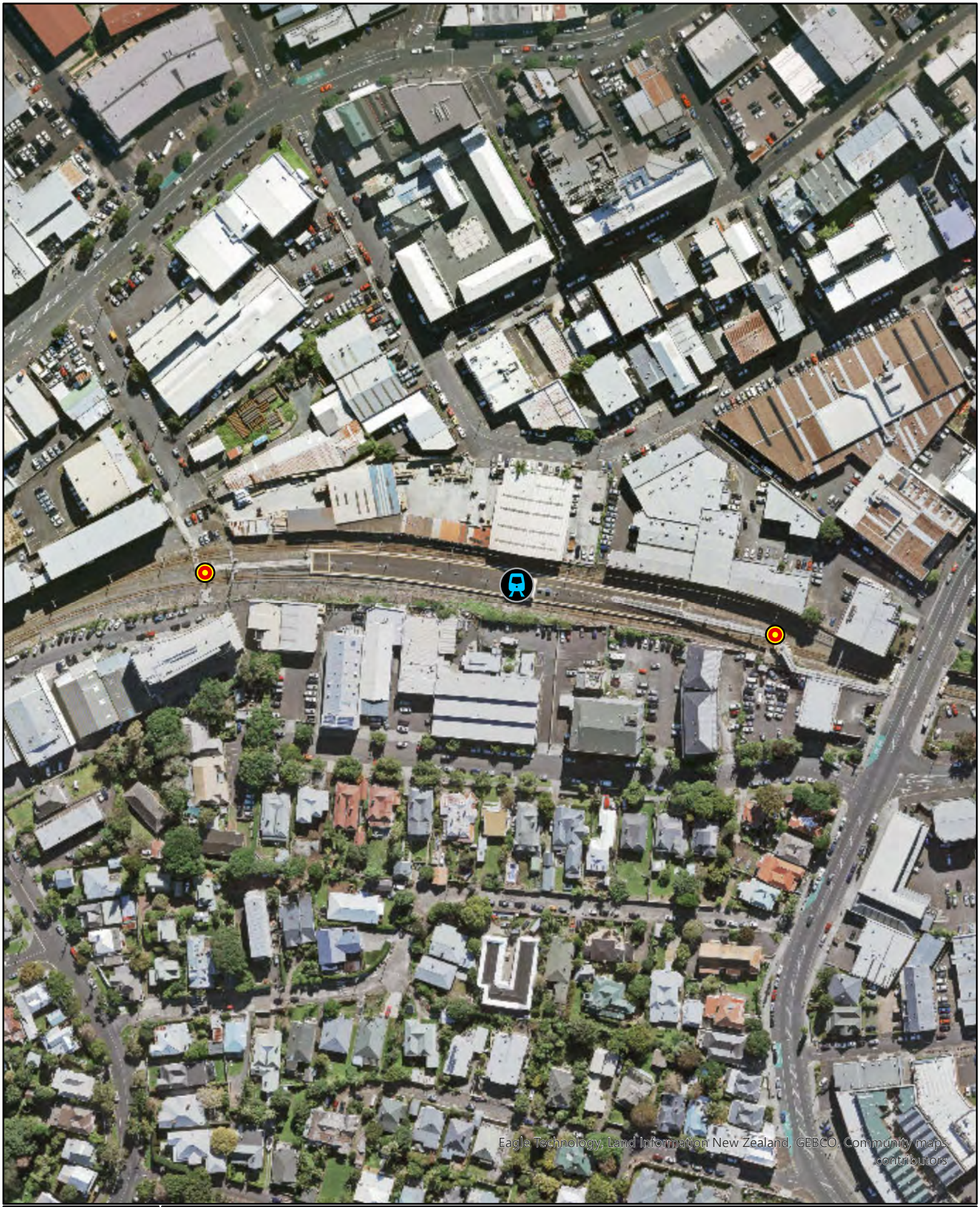
Walkable catchment

Mt Albert Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



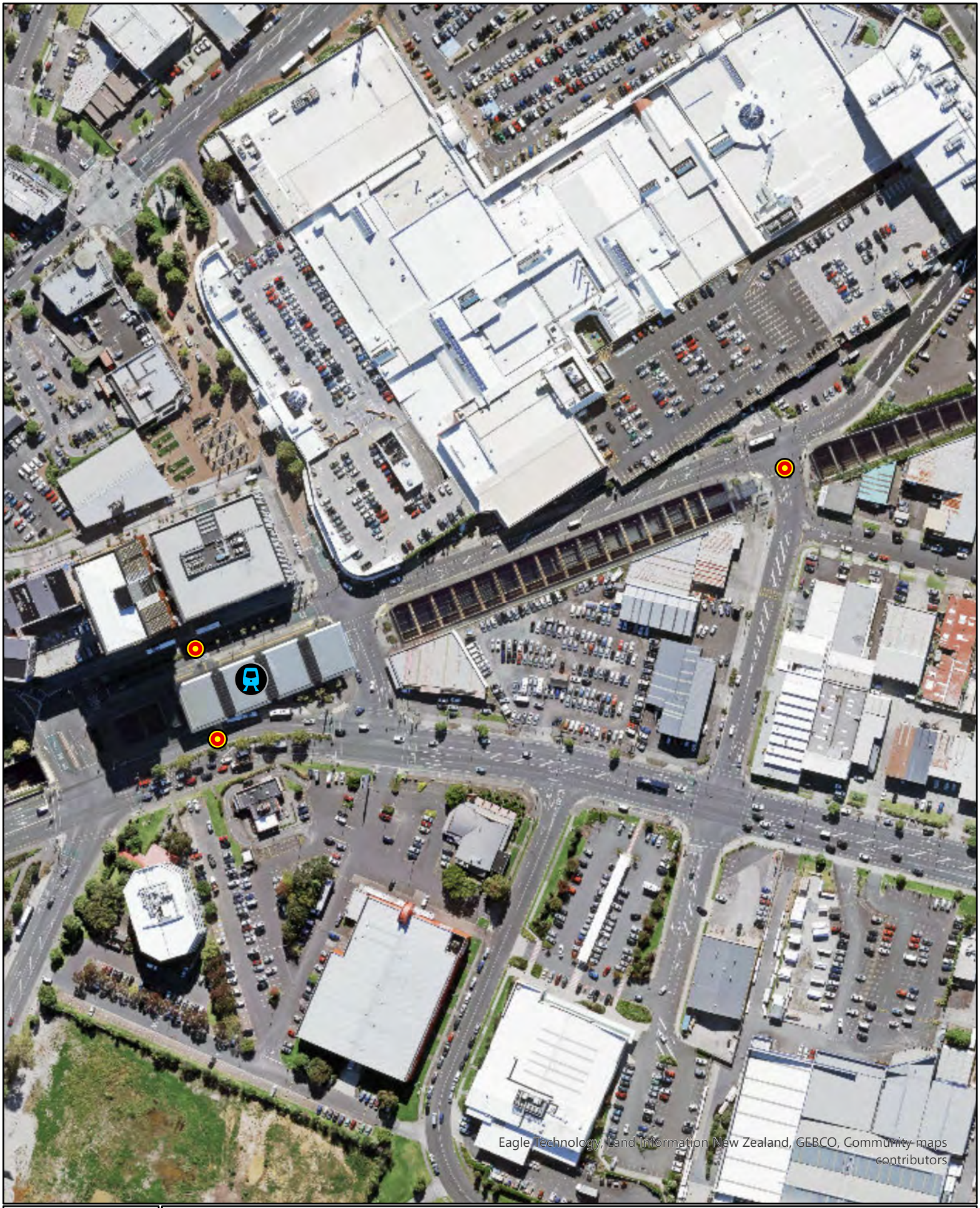
Walkable catchment

Mt Eden Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

New Lynn Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Newmarket Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Orakei Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

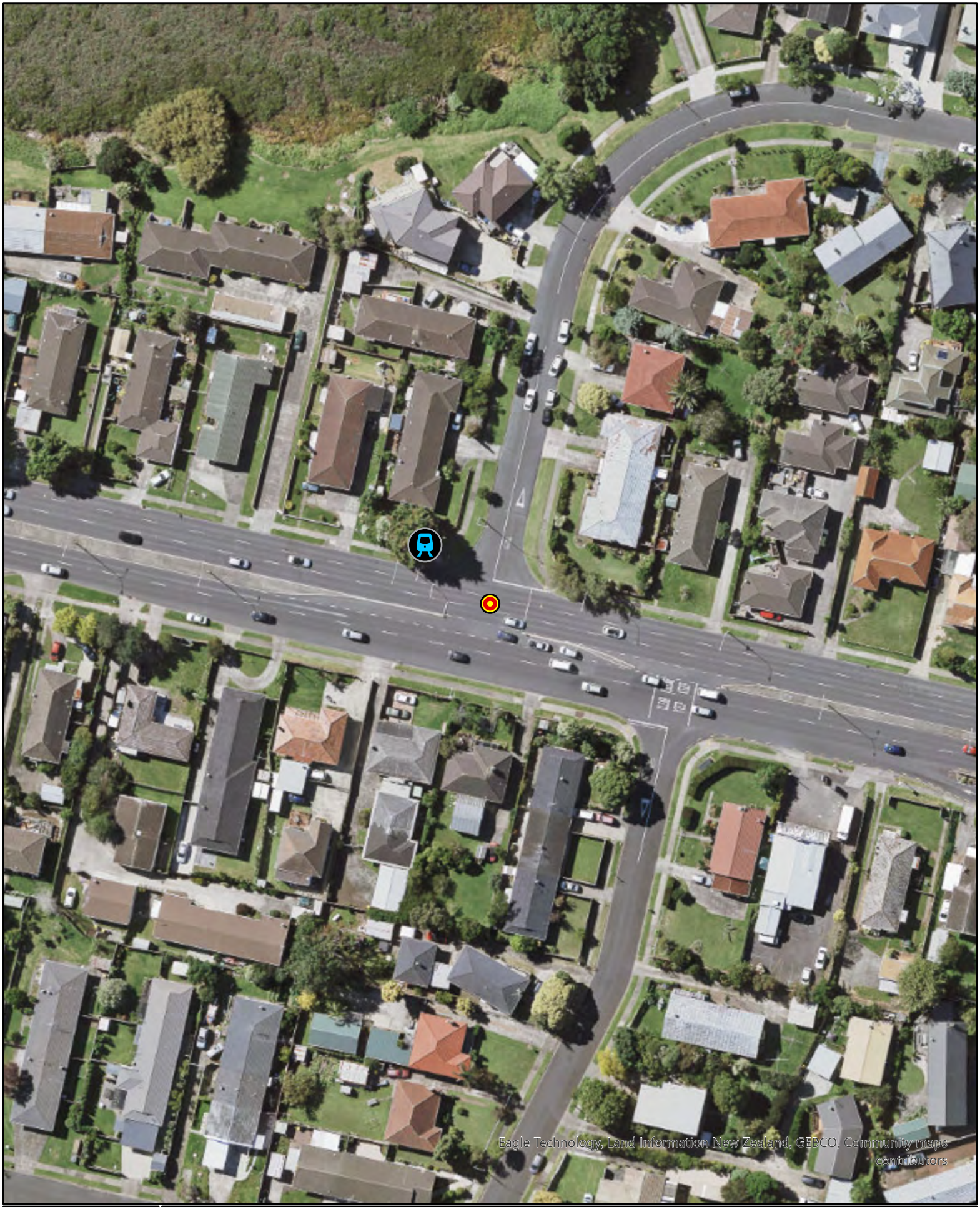
Walkable catchment

Otahuhu Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



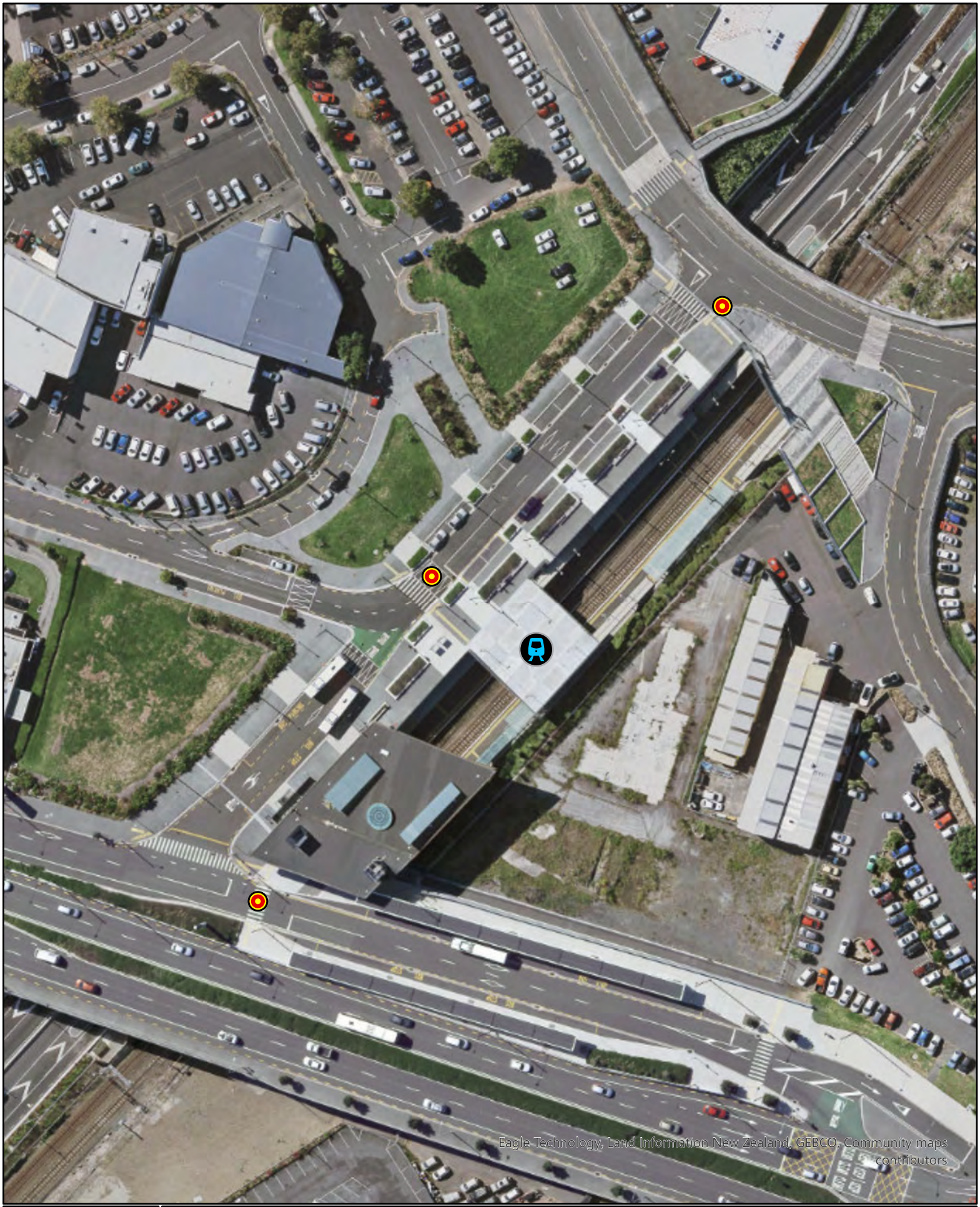
Walkable catchment

Pakuranga Bus Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station



Walkable catchment

Panmure Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Papakura Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Papatoetoe Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Parnell Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Penrose Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Puhinui Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Pukekohe Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Ranui Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station

Walkable catchment

Remuera Train Station

Auckland Council
Plans and Places

entrance points to the RTN station

Rapid Transport Network (RTN) station