Plan Change 14

Section 32:

Accessibility – Qualifying Matters

Christchurch City Council

Technical Report

Date: 19 July 2022
Version:
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Peer reviewed:

DISCLAIMER:

Christchurch City Council has taken every care to ensure the correctness of all the information contained in this report. All information has been obtained by what are considered to be reliable sources, and Christchurch City Council has no reason to doubt its accuracy. It is however, the responsibility of all parties acting on information contained in this report to make their own enquiries to verify correctness.

1. Accessibility

1.1.1. Providing good accessibility is a key driver for the National Policy Statement on Urban Development (NPS UD) and the Resource Management (Enabling Housing Supply and Other Matters) Amendment Act.

1.1.2. The NPS UD notes that well-functioning urban environments provide communities with good access to social, economic and cultural opportunities (Objective 1 and Policy 1). There is a clear link between good accessibility and social, economic and cultural wellbeing, and the health and safety of all people[1].

1.1.3. Policy 1 of the NPS UD requires that planning decisions contribute to well-functioning urban environments and good accessibility (Policy 1c) is a feature of well-functioning urban environments. Policy 3 identifies that increased densities are required around centres where a higher level of accessibility is anticipated.

2. Background

2.1.1 Planning and providing for good accessibility is a driver for many Council programmes. In terms of the District Plan, there are already strong foundations to planning for good accessibility including a clear centres framework (Policy 15.2.2.1) which is supported by the enablement of medium density housing in locations close to centres. Other programmes of work include the Christchurch Transport Plan, Climate Change Strategy and the Otautahi Christchurch Spatial Plan, which all recognise the value of good accessibility and will propose actions to support this objective.

2.1.2 Early work in relation to the NPS UD[2] resulted in the development of a Density Enablers Model. This is a GIS tool that enabled identification of areas that have good access to a range of services and amenities; thereon these areas were to be considered most suitable for intensification given their good accessibility. The model applied a range of enablers and each was given a catchment and a weighting. Once all the catchments and scores were mapped (at individual parcel level), it was evident which land parcels score most highly and are therefore most accessible to a range of services and amenities. The enablers identified comprised commercial centres, core public transport routes (high frequency), major cycleways (MCR's), supermarket (over 1,000sqm), within 1km of the city centre, community hub and facilities, significant open space (over 3,000sqm), employment centre, schools and the standard bus network.

2.1.3 This work emphasised much of the thinking about locations around centres generally offering good accessibility to a range of goods and services. Overall areas around larger centres score more highly as they had better accessibility to a wider range of goods and services e.g. larger shopping centres, more frequent public transport services and more employment opportunities.

2.1.4 A determination of what is 'good accessibility' in terms of the scores outputted by the model obviously requires some subjectivity i.e how high a score should be considered 'good'? Recognising how nuances in this approach can change the number of areas which are considered as having good accessibility, it is possible to band the accessibility scores and identify which locations have the strongest level of accessibility. The map below identifies those areas with the strongest levels of accessibility (shown in

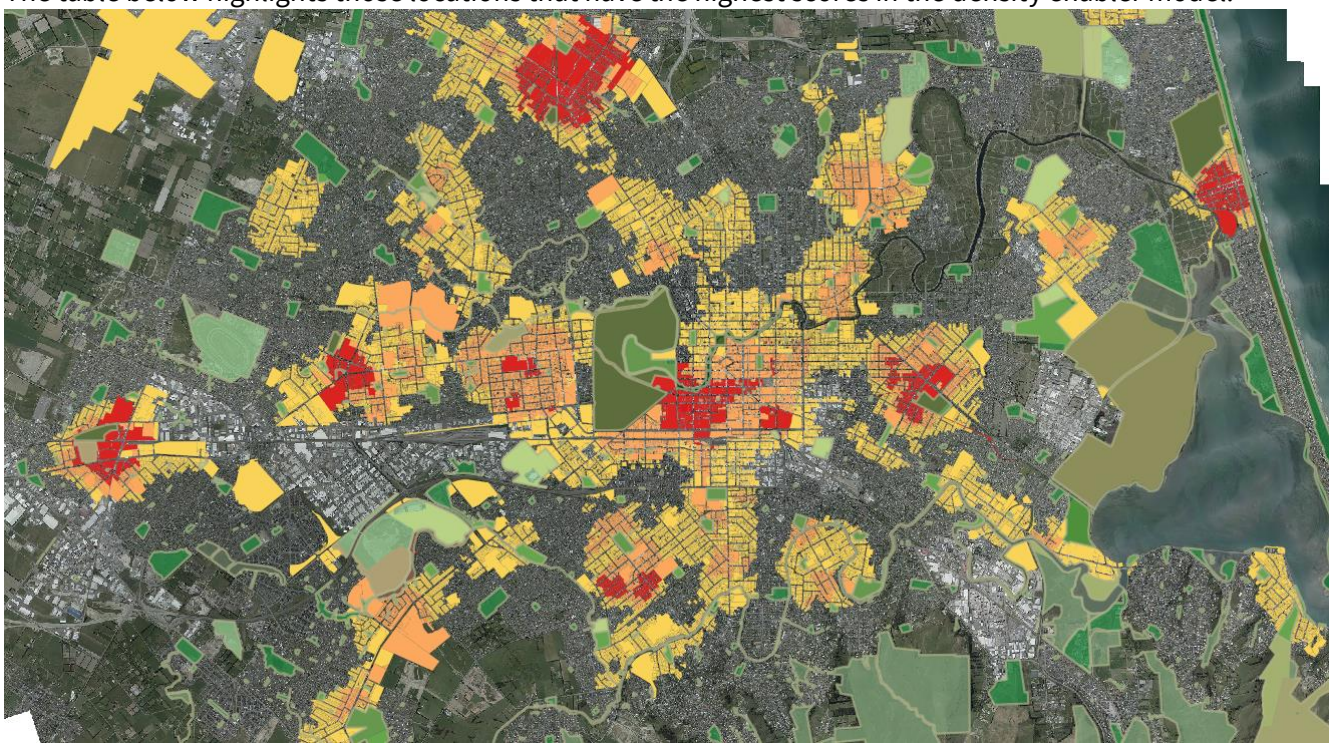
[1] Understanding and implementing intensification provisions for the NPS UD

[2] At this point, Policy 3d identified that building heights and density of urban form should be 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.

red). Accessibility scoring on this map reduces from red through to orange, then yellow and areas with relatively low accessibility have no shading.

Density Enablers Scores

The table below highlights those locations that have the highest scores in the density enabler model:



Locations with Good Accessibility Score of 20-24	**Comments**
Papanui	Considerable area, far wider than the existing RMD, particularly to the west of the centre.
Riccarton	Large area of orange zoning but relatively small red area. RMD only to the south of the centre currently. Accessibility is however equally good to both the north and south of the centre.
Hornby	The extent of area which is highly accessible is similar to that of the existing RMD and RSDT areas.
Linwood	Areas with highest accessibility are located to the west and north of the centre, similar to existing RMD area.
Central City	Areas with the highest accessibility are around the south of the central city area.
Barrington	Highest accessibility to the south of the centre, some in RSDT and some in lower density zoned areas.
Bush Inn	Significant area around centre, much larger than current RMD zone
New Brighton	Significant area around centre, much larger than current RMD zone

2.1.5 Whilst there was a change in emphasis of Policy 3d in October 2021, the Density Enabler modelling work does provide further support for the notion that larger centres should provide for greater building heights and density of urban form in relation to their stronger accessibility to goods and services.

3. Options – Accessibility

3.1.1 Whilst the NPS UD promotes the concept of good accessibility, the final version of the NPS UD limited discretion in terms of how we factor in our understanding of good accessibility in the city. The wording of Policy 3 is directive in terms of those areas where it requires the greatest height of development and density of urban form and therefore Council's approach adhered to this direction.

3.1.2 Both the city centre and metropolitan centres are highlighted as locations where development potential should be maximised (unlimited in the central city and at least 6 storeys in metropolitan centres) and Policy 3c also specified that walkable catchments should be applied to rapid transit stops, the central city and walkable catchments. Policy 3d is specific in terms of where further intensification should be considered but allows the individual Council to determine the scale and extent of this enablement provided it can be described as commensurate with the level of commercial activity and community services at each centre.

3.1.3 Given that Christchurch has neither metropolitan centres or rapid transit stops, decisions that drew on an understanding of good accessibility were therefore limited to the following matters:

- What should be the extent of the walkable catchment in the central city?
- What is an appropriate extent of additional enablement around commercial centres?

4. Walkable Catchments

4.1.1 The concept of applying walkable catchments has gained prominence in planning work over recent years. A walkable catchment describes an area within a specified walking distance of a destination along routes where footpaths are provided. Catchments can be measured in terms of distance from a particular place or zone (e.g. 800m) or time (e.g. a 10-minute walk). In broad terms, an 800m walkable catchment equates to a 10-minute walk catchment and 400m is approximately a 5-minute walk. The concept of walkable catchments aligns closely to the idea of developing strong walkable neighbourhoods – areas where travel by foot and bike is made easy, direct and safe and there is good accessibility to a centre's commercial and community activity.

4.1.2 Theoretically, Christchurch is highly walkable. Most of the city is flat and there is a relatively good network of footpaths. Whilst there are some barriers to connections (e.g. busy roads with limited crossings, railway lines etc.) in general, there are few limitations to walkability. Nationally the city has a good reputation for cycling too and over recent years; investment into the Major Cycleway Routes (MCR's) has further supported the idea of creating safe connections across the city and within neighbourhoods.

4.1.3 The extent of walkable catchments has been much discussed within NZ and overseas. 400m and 800m catchments (equating to approximately a 5 or 10 minutes catchment) are commonly used within planning work and internationally the concept of a 15-minute (Paris) or 20 minute (Melbourne) neighbourhood has been applied. Using a neighbourhood approach represents the time taken to walk

from home to a destination and back again[3]. As such, the 20-minute neighbourhood equates to an 800m catchment[4].

4.1.4 More recent work by Iain White[5] indicates that 20 minutes is the maximum time that people would prefer in terms of accessing amenities (regardless of the destination or mode of transport). 20 minutes walking equates to 1.5km walking, 5km cycling or 8km by micro-scooter.

4.1.5 This work therefore illustrates consistencies in terms of applying a 400m and 800m catchments with the larger catchment synonymous with a centre providing greater range of goods and services (the idea being that people will travel further for a greater offer). More recent work indicates that potentially people will walk further than that – whether this is because of a cultural acceptance to walking more or because walking itself has become a more attractive option (for either push or pull reasons e.g. because of safety/connection improvements or the prohibitive cost/time of other travel options etc.).

5. Thresholds for walkable catchments in Christchurch

5.1.1 In Christchurch, the central city is the location with the greatest offer of goods and services (commercial, community and cultural). The most significant walkable catchment was therefore applied here. A 1.2km catchment was selected, equating to a roughly 15 minute walkable distance from the edge of the central city zone.

5.1.2 Appreciating the context of walkable catchment sizes informed the thinking in terms of intensification options around centres. Building on the work in terms of aligning the current District Plan commercial centres framework to the National Planning Standards framework, catchments were applied to different centres with the purpose of implementing Policy 3d.

5.1.3 Centres with the greatest range of commercial activity and community standards are town centres (Christchurch does not have Metropolitan centres) and within this category, there are three centres with a significantly larger offer (Papanui, Hornby and Riccarton).

5.1.4 400m was selected as an appropriate walkable catchment for town centres in general as it reflects the fact that some additional intensification opportunity is appropriate but the scale of these centres is not significant to warrant a higher threshold (800m would be suitable for a Metropolitan Centre). The larger walkable catchment threshold for Papanui, Riccarton and Hornby (600m) reflects the greater scale and range of activities and services available at these centres.

5.1.5 The Large Local Centres provided a similar scale of commercial activity and community facilities as the town centres (bar the 'big 3' – Papanui, Hornby and Riccarton) and therefore a 400m catchment was also applied here. In recognition of their important role in providing a reasonable level of commercial activity and community services to their surrounding residential area, the Medium Local Centres were

[3] Plan Melbourne, Victoria State Government
[4] Plan Melbourne, Victoria State Government
[5] University of Waikato, Environmental Planning Programme, 20 minute city research

given a 200m catchment. In contrast, it was not considered that the scale of activity at the Small Local Centres or Neighbourhood Centres was commensurate with any more development than that enabled under the new Medium Density Residential Standards and therefore no catchments were applied to these centres.

5.1.6 The areas of additional intensification were mapped using GIS and applied using the Walking Network. This means that the distances were mapped along footpaths, taking into account the ability to use alleyways. Once the catchment was mapped, planners reviewed the extent of these thresholds and realigned the 'boundary' so it was appropriate in relation to built form, road networks and natural features such as rivers etc. In some places, this means that the proposed extent of the intensification catchment is slightly larger or smaller than the exact catchment extent e.g. could be slightly less or more than 1.2km from the Central City zone where other matters mean a revised extent is more appropriate.

6. Summary of Approach to Intensification Enabled Around Centres

6.1.1 Overall, the increasing threshold of intensification enablement aligns to the new commercial framework proposed. The City Centre has a significant walkable catchment (1.2km) which reflects its' role within the commercial hierarchy and the wide range of community facilities and cultural opportunities within the centre. Town centres are the next 'tier' within the framework and additional intensification has been enabled around these centres (400m) to recognise the important role of these centres as hubs for commercial and community service provision. In recognition of the varying scale of Christchurch's town centres, increased intensification (an additional 200m) has been applied to the 3 larger centres. Additional intensification enablement (over and above MRDS) around Local Centres varies from 400m around a centre (Large Local Centres) to none around Small Local Centres. The surrounds of Neighbourhood Centres also have no additional intensification enablement.

6.1.2 This approach is considered to reflect a commensurate approach to the range of commercial activity and community facilities within centres in the commercial framework.

Appendix 1: Summary of Proposed Enablers, Catchments and Scores

Primary Enabler	Distance (walking)	Draft Weighting	Rationale	Comments
Centres	Larger centre 800m	4	Larger centres with a broader range of facilities attracts a wider catchment.	Apply this to City Centre, Hornby, Riccarton & Papanui
	District Centre 800m	3		District Centres – Belfast, Eastgate, North Halswell & Shirley Palms. Plus large neighbourhood centres - Bush Inn, Merivale, Barrington, Bishopdale, Prestons, Ferrymead and Sydenham (between Moorhouse and Brougham).
	Neighbourhood centre 400m	2		Remaining neighbourhood centres
Core PT route (high frequency corridor)	400m Measure from the core route rather than individual stops.	3 depending on frequency	Provide layered weighting to bus services depending on their frequency. (Orbiter, purple – every 10 mins) (Blue, orange, yellow – between 10 and 15 mins within Chch)	Bus scores vary between 1 and 3. (Standard bus stop 1, core route 3) Use PT Futures Preferred Programme Network Plan – location of core routes (page 12 of Boffa Miskell, Nov 2020). Align to ECAN Metro maps. See notes below for more discussion of routes v stops
Major cycleway (MCR's)	400m As per core bus routes, measure from the route.	2.5	MCR's are significant assets in terms of the opportunity to undertake safe, active travel	Assessment determined that they should score as highly as core PT but with some recognition that not everyone in the community can cycle.
Supermarket Over 1,000sqm	400m	3	Core factor in ability of centre to provide key services.	Policy 14.13.1.4 in the DP (intensification opportunities via the EDM mechanism) identifies a supermarket of 1000sqm as a threshold (except in the Banks Peninsula). Obtained a list of supermarket sizes from Progressives and Foodstuffs. *Potential to add to this list to include proposed supermarkets.*
Proximity to city centre	1km from edge of CCB zone	3	Ease of access to the central area	1km is a relatively conservative option given the ease of travel from the city centre. Scope to increase this distance and to extend the basis from which it is sought to better reflect the City's inner suburbs. At this point using the CCB zone to identify the city centre aligns with the District Plan policy approach.
Secondary Enabler				
Community hub and facilities	400m Measure from the extent of the building footprint and extend the catchment using the walking network.	2 3 for genuine hub e.g. Halswell	Larger scale public facilities that act as a drawcard for the surrounding population.	Include CCC libraries, service centres & rec centres. See mapping in Draft Community Facilities Network Plan. Have included proposed facilities where funding is approved e.g. Linwood pool and Hornby pool and library.
Significant open space Over 3,000sqm	400m Measure from entrances to the parks and extend the catchment using the walking network.	2	Some open space is more important for intensification than others e.g. larger parks or those with more facilities over pocket parks. There will be limitations on the ability to purchase further land for parks in intensification areas.	Chch Open Space Strategy notes that min areas of 2.500 to 3,000sqm are needed to accommodate a playground, trees and some unplanted space for ball play etc. In Wellington 3,000sqm was used as a threshold. Open space should exclude areas which are an agglomeration of multiple distinct small spaces.
Employment centre	400m Measure from edge of zone.	2	Good accessibility between homes and jobs is vital.	Used the following zones: industrial, commercial core and some SPZ hospital and education (Uni). Exclude schools. Also used CCB and CCMU (except for East Frame), SPZ Airport, Commercial Office and Commercial Retail Parks. *Option to increase weighting in relation to employment density.*
Tertiary Enabler				
High schools	800m Measure from main access points using walking network.	2	Key drawcard, particularly some schools.	MoE data Apply 50% reduction in score if school is special character given reduction in 'availability' to general population.
Primary/intermediate school	400m Measure from main access points using waking network.	1		State schools only – MoE data Apply 50% reduction in score if school is special character given reduction in 'availability' to general population.
Bus network	200m from all standard routes	1		As per ECAN route maps – maps available See previous comments about using stops v routes.