Timaru District Plan Review – Transport Baseline Review

Timaru District Council

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Quality Assurance Information

Prepared for:	Timaru District Council
Job Number:	TDC-J019
Prepared by:	Wendy Wee, Senior Transportation Engineer
Reviewed by:	Ann-Marie Head, Associate Transportation Engineer

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		Name
30 August 2019	Draft	Ann-Marie Head
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T +64 9 486 0898 (Akld)
T +64 3 377 4703 (Chch)
E admin@abley.com

Auckland
Level 8, 57 Fort Street
PO Box 911336
Auckland 1142
New Zealand

Christchurch
Level 1, 137 Victoria Street
PO Box 25350
Christchurch 8144
New Zealand

www.abley.com

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1. Introduction

1.1 Background

The Timaru District Plan Review (DPR) is being undertaken in a four-phase process as shown in **Figure 1.1**.

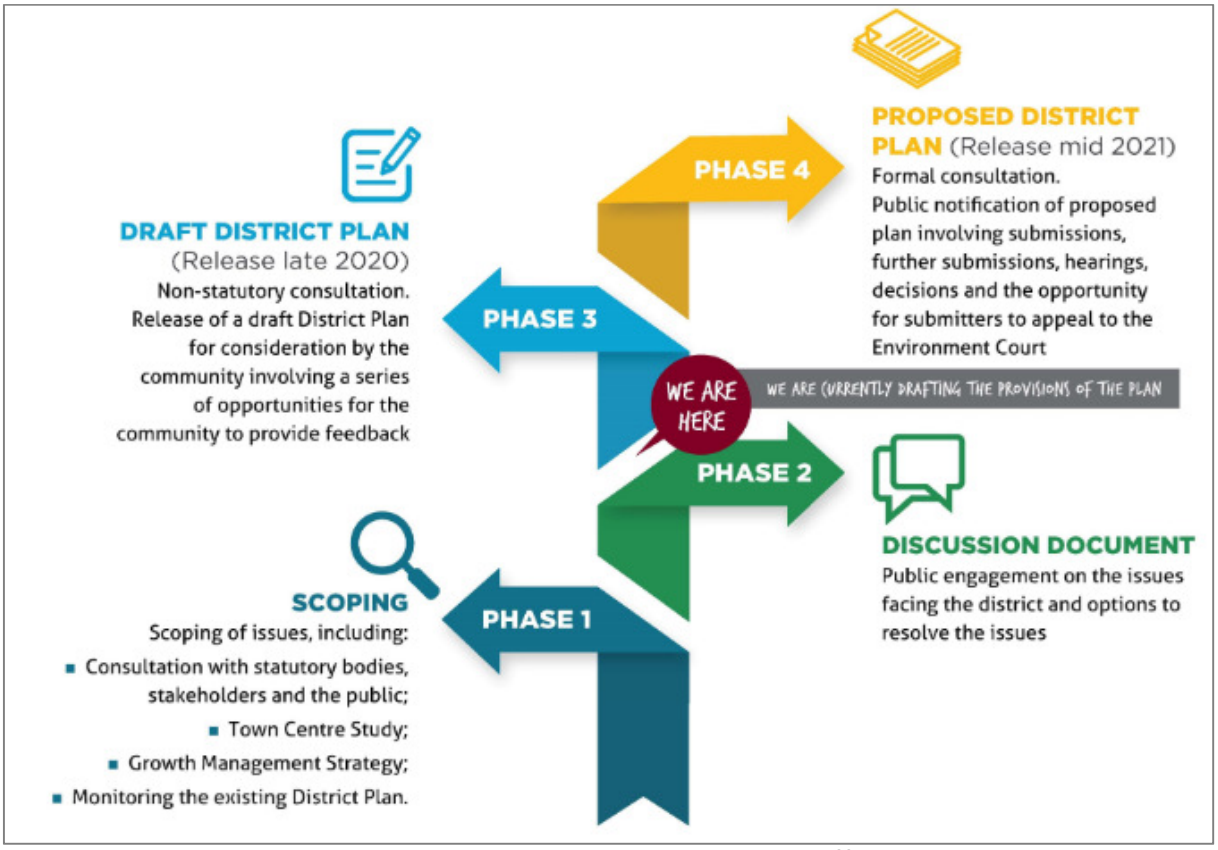


Figure 1.1 Timaru District Plan review process (extracted from Timaru District Council website[1])

Figure 1.1 shows that the Timaru District Council (TDC) is currently in Phase 3 (Draft District Plan) of the DPR process and Phase 2 of the DPR has been accomplished with discussion documents completed on the issues for major topics. Transport was one of the 18 major topics discussed in Phase 2 of the DPR. The proposed District Plan is scheduled for release in mid-2021 (Phase 4).

1.2 Scope of the DPR

The outcome of the DPR is to develop a Proposed District Plan that is intended to be an 'activities based' plan. As part of the review there is a need to determine whether the transport provisions remain appropriate or if amendments are necessary to achieve more effective and efficient transport provisions. This Baseline Transport Report is the first stage of progressing transport related changes to the District Plan.

This review takes into account key strategic documents. These include the Canterbury Regional Policy Statement (RPS) and the Canterbury Regional Land Transport Plan (RLTP). There is also consideration of the One Network Road Classification (ONRC) developed in partnership by the NZ Transport Agency and Local Government NZ.

[1] https://www.timaru.govt.nz/services/planning/district-plan/district-plan-review

Best practice with respect to the management of transport effects has evolved with greater emphasis on the integration of transport and land use planning.

There may also be opportunities to ensure some level of consistency where appropriate with other Councils in New Zealand, particularly if they have recently made transport related changes to their Plans.

There are other District Plan review work streams that have a transport element, such as signage, lighting and glare, noise and vibration. There are also work streams that have a strong effects relationship with land use development, such as residential, business and industrial zones. The transport review does not specifically include these elements however the review teams will need to continue to communicate throughout the review process.

1.3 Methodology

The Abley commission has involved best practice review and research, two half day workshops with key Timaru District Council (TDC) staff and external stakeholders (NZTA and KiwiRail), and a meeting with the Technical Working Group which consists of TDC staff and other external stakeholders (representatives from Environment Canterbury, Ngai Tahu and Te Runanga o Arowhenua). Prior to our commission, TDC staff compiled a list of issues with the current transport provisions and these were made available to Abley to inform the review. From this process the key issues that require addressing were identified and a range of options were then developed and assessed. The key steps in the process are described briefly below.

Workshop 1 – Issues and opportunities

The initial findings of the reviews were presented and discussed, this also allowed any other relevant issues to be raised and discussed. Issues that cannot be, or are not appropriate to be, addressed through the District Plan were identified. See Appendix B for the workshop material.

Statutory review

The statutory review identified the nature of any changes that the Council may wish to consider in the Proposed District Plan in order to fulfil statutory obligations or alignment with these documents. Refer to Section 2 for the findings.

Approaches of Neighbouring Councils

The approaches of neighbouring Councils (Ashburton District, Waimate District, and Mackenzie District), to the management of transport from an RMA perspective were also reviewed. Refer to Section 3 for the findings.

Best practice review

This review considered the best practice approach to the management of transport effects currently being taken within District Plans. This was in regard to types of rules/methods that have more recently been included in District Plans throughout New Zealand. Best practice with consideration of the broader transport and urban design fields is not included in the review. The best practice review set the scene for operative plan review against a range of themes discussed in Section 4.

Workshop 2 – Options

The findings of the reviews/assessments and the options that had been identified for recommended areas of change were presented to the stakeholder group and discussed. The workshop developed short listings of options where possible. See Appendix C for the workshop material.

Option assessment

Options identified for recommended areas of change were considered qualitatively from an advantages (effectiveness and efficiency) and disadvantages (limitations and risks) perspective. This high-level assessment framework aligns broadly with the approach that we understand will be used in the Section 32 analysis. Refer to Sections 6 to 12 for the recommendations.

Technical Working Group meeting

The options identified were presented and discussed at a Technical Working Group (TWG) meeting held on 4 September 2019. Attendees at the TWG meeting agreed on all the options identified except for the option in relation to the Timaru City Centre parking requirements. The recommendation for the Timaru City Centre parking requirements has been updated in Section 10.2 to reflect the conclusion reached at the TWG meeting on this matter.

1.4 Land Transport in Timaru District

The Timaru District has approximately 1,700km of roads, around 955km are sealed road and the remaining 762km are unsealed roads located in the rural areas of the district. There are also state highways passing through the district (SH 1, 8, 78, and 79) that are managed by the NZ Transport Agency (NZTA). KiwiRail manage one railway corridor through the district, the Main South line.

Geographically the large size of the district means that the predominant form of travel is likely to be by private motor vehicle, at least in the short to medium term. Opportunities to enhance public transport, walking and cycling in the District's main towns of Timaru, Geraldine, Temuka and Pleasant Point are continually being pursued to provide a wider range of transport choices for people. Council has developed an Active Transport Strategy that focuses on the District's main towns where there is the most potential for walking and cycling for non-recreational purposes to be carried out. Environment Canterbury (ECan) operate four urban bus services (Timaru Link, Grantlea, Gleniti and Watlington) in Timaru, a dedicated school bus and a service connecting Timaru and Temuka. ECan provide annual funding grants to a number of community trusts so that they can provide transport from areas not serviced with a public bus system. At this time the community trusts provide on demand transport from Geraldine, Waimate and Twizel to Timaru and back.

2. Statutory review

2.1 Overview

This review involved an assessment of the extent to which the District Plan transport provisions achieve, or are consistent with, the requirements of regional and district strategies and plans.

Section 75(3) of the RMA requires a district plan to give effect to:

- any national policy statement;
- any New Zealand coastal policy statement;
- a national planning standard; and
- any regional policy statement.

The key strategies and plans reviewed are shown in **Figure 2.1**. It is acknowledged that other transport strategies and policies also exist however the review was limited to those with significant relevance to the District Plan. It is noted there is no Parking Strategy in Timaru District. The assessment identified the nature of any changes that TDC may wish to consider in the Proposed Plan in order to fulfil statutory obligations or alignment with these documents.

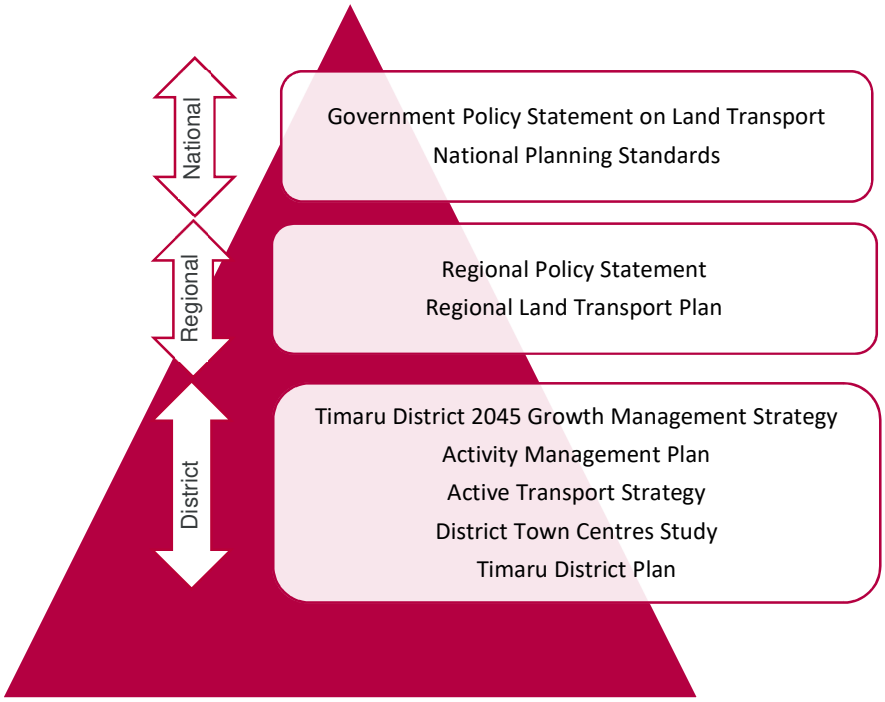


Figure 2.1 Strategic context overview

2.2 Government policies and standards

Government Policy Statement on Land Transport 2018

The Government Policy Statement on Land Transport (GPS) 2018 sets out the government's priorities for expenditure from the National Land Transport Fund over the next 10 years. The strategic direction of the GPS is shown in **Table 2.1**.

Table 2.1 Strategic direction of the GPS 2018

Strategic priorities	Objectives
Safety	A land transport system that is a safe system, free of death and serious injury.
Access	A land transport system that: • provides increased access to economic and social opportunities; • enables transport choice and access; and • is resilient.
Environment	A land transport system that reduces greenhouse gas emissions, as well as adverse effects on the local environment and public health.
Value for money	A land transport system that delivers the right infrastructure and services to the right level at the best cost.

National Planning Standards

The Ministry for the Environment released the first set of National Planning Standards (NPS) on 5 April 2019. The purpose of the NPS is to improve consistency in plan and policy statement structure, format and content. The NPS does not determine local policy matters or the content of the plans but outlines the format of local government plans made under the RMA.

2.3 Regional strategies and plans

Canterbury Regional Policy Statement (2013)

Under the RMA, Regional Policy Statements (RPSs) play a key strategic role in land transport planning. As regional and district plans are required to 'give effect to' RPSs (refer ss67(3) and 75(3) of the RMA), their specific high-level objectives and policies have a strong influence on the policy framework within regional and district plans.

The Canterbury RPS (CRPS) promotes strategic integration between land-use and infrastructure. Chapter 5, Land-use and infrastructure, provides direction on this and seeks that territorial authorities set out objectives, policies and/or methods in district plans which (Chapter 5.3.8):

- avoid land-uses that may result in adverse reverse sensitivity effects on transport infrastructure.
- enable the appropriate upgrading of existing and establishment of new transport infrastructure.
- address the interaction between land use and the transport system, including high traffic generators and the promotion of accessibility and modal choice as appropriate.
- promote transport modes which have low adverse environmental effects.

The Methods of the RPS state that "Local authorities should engage with developers to promote accessibility and modal choice for substantial developments; and engage with the NZ Transport Agency to protect the appropriate functioning of the strategic land and transport network."[2]

Canterbury Regional Land Transport Plan 2015 – 2025 (revised June 2018)

The Canterbury Regional Land Transport Plan (RLTP) 2015 – 2025 sets out the economic, social and spatial context in which the transport system operates in Canterbury. As such it identifies regional transport issues and challenges as well as how these can be addressed, including a matching financial forecast of investment. The RLTP identified six priority investment areas taking into account the regional transport issues and challenges. The investment priority areas and the associated objectives are included in **Table 2.2**.

[2] RPS Chapter 5.3.8, Method 3 and 4

Table 2.2 Priority investment areas and the associated objectives (based on RLTP)

Area	Objectives
Safety	Progressively reduce transport-related fatalities and serious injuries over time.
Accessibility	Improve levels of access in an environmentally sustainable way by increasing the attractiveness of public transport, walking and cycling, so there is greater use of these modes: • for public transport the focus is on timeliness, convenience, affordability, efficiency, connectedness and sustainability; and • for walking and cycling the focus is on safety, amenity, convenience, connectivity and being able to take a direct route. Improve connections between different transport modes.
Condition and suitability of assets	Increased capability for appropriate roads and bridges to carry heavy vehicles. All roads comply with One Network Road Classification performance measures.
Travel time reliability	Improve journey time reliability on key corridors, with a focus on freight, public transport and tourism. Improve access to freight hubs.
Resilience	Resilient routes are in place for strategic routes that are most at risk of disruption. Reduce the number and duration of road closures. Identify routes that are at risk of being impacted by climate change, and how to manage these risks to improve resilience.
Environmental impact	Meeting the objectives outlined above under "accessibility" would also help to address environmental impact. In addition, the following objectives are also important: • Increased uptake of energy efficient and environmentally sustainable vehicles. • Increased transport and land use integration. • Reduced air and water pollution. • Improved storm water management.

2.4 District strategies and plans

Timaru District 2045 Growth Management Strategy

The Timaru District 2045 Growth Management Strategy has the following vision "*A District where land use and growth is sustainably managed to ensure a fantastic lifestyle, thriving economy and strong identity*". This Strategy is a non-statutory document which is used to inform Council's long-term planning especially in guiding the development of the District Plan, Activity Management Plans and Long Term Plan. Growth is largely forecast for Timaru, Temuka, Pleasant Point, and Geraldine. Residential growth in the remainder of existing settlements, such as Winchester, Pareora and Cave can be readily accommodated within existing urban areas. The rates of growth identified for Timaru are not significant, both relative to New Zealand and also in terms of the existing district's population. The Strategy seeks to ensure that those elements that make Timaru great now, being its town centres, infrastructure, residential neighbourhoods, and employment areas are maintained and consolidated.

Providing the framework for Timaru District 2045 are 12 Strategic Directions, including a strategic direction on transport. The strategic direction for transport is "*To promote an effective, efficient and safe transport system that integrates with land use and growth, and promotes community prosperity through improving connectivity and accessibility.*"

All seven actions to achieve the transport strategic direction are proposed to be implemented via the Replacement District Plan. These include:

1) Integrate greenfield growth areas with appropriate access and interconnections to the wider roading network.
2) Provide certainty to organisations responsible for public transport, rail and road networks as to growth locations and demand, to deliver appropriate levels of infrastructure in a proactive manner.

3) Require walking and cycling routes to be identified on Structure and Outline Development Plans associated within new greenfield growth areas.
4) Provide infill and intensification opportunities within close proximity to Timaru CBD to promote access and modal choice.
5) Require provisions within the replacement District Plan and LTP to manage the adverse transport effects of development (i.e. stormwater quality requirements for roading as associated with swales, rain gardens or permeable paving), and recognise and provide for strategic transport infrastructure.
6) Engage and collaborate with strategic infrastructure providers (NZTA, KiwiRail, Port of Timaru, Timaru Airport) to recognise and foster continued infrastructure investment and growth.
7) Establish a forum and associated promotional campaign with the CHDB, NZTA and ECan to coordinate transport funding, planning and marketing for opportunities for public passenger transport, and the promotion of active transport modes.

Transport Activity Management Plan (2012 – 2022)

The Activity Management Plan (AMP) sets out a 10-year programme for the management of roading assets and activities. The plans are developed to ensure that the assets and activities are managed in an affordable, efficient, sustainable, and effective manner to minimise the financial impact on Timaru District's community.

Council is planning to work towards:

- Maintaining existing assets
- Widening seal and upgrading bridges to meet increasing freight demand
- Support growth in the District
- Improve road safety
- Sustainable transport
- Maximise government financial assistance and user charges
- Continue to develop long term strategies and plans to reduce risks
- Continued collaboration with ECan and NZTA
- Manage the road corridor more actively
- Monitoring asset performance

Active Transport Strategy

The first Timaru District Active Transport Strategy was developed and adopted in 2011. The vision for the 2011 Timaru District Active Transport Strategy is "*Timaru District will be known nationally as an active and healthy lifestyle district by making walking and cycling accessible, safe, and enjoyable for all.*"

A review of the 2011 Active Transport Strategy was undertaken in 2018. The desired outcome of the Active Transport Strategy (2018) is "*For active transport in the Timaru District to be accessible, safe, and enjoyable for all.*" The objectives of the strategy are:

- Develop a safe, accessible, sustainable and integrated network for active transport
- Educate and encourage residents and visitors to choose active transport for active and healthy lifestyles.

The targets of the strategy are:

- Target 1: To increase the proportion of active transport trips to/from school in a 3 year period.
- Target 2: To increase the number of people walking and cycling on key routes in the District in a 3 year period.
- Target 3: To reduce the number of pedestrians and cyclists injured or killed in crashes in the Timaru District. This should be measured over a five year period. Note that for the 2012-2016 period there were 3 fatalities, 9 serious injuries and 34 minor injuries to pedestrians, and 1 fatality, 9 serious injuries and 24 minor injuries to cyclists.
- Target 4: To increase the number of people walking and cycling as measured by the road user survey over a 3 year period.

The 2018 Active Transport Strategy document has been finalised but the Strategy has not been adopted by the Council as yet.

District Town Centres Study (2016)

The District Town Centres Study examined the issues and opportunities faced by the District's town centres and the options to address those matters. Timaru City, Pleasant Point, Temuka and Geraldine were included in the Study. A total of 15 opportunities were identified in the Study. These include:

1) Establishing a town centre management group
2) Encouraging the use of vacant buildings
3) Capitalising on the unique quality of our built heritage
4) Capturing the leakage in retail expenditure and consolidating retail activities to a core area
5) Encouraging residential development
6) Enhancing amenity values
7) Improving accessibility
8) Promoting clustering of similar activities
9) Changing car culture with the development of driverless and electric cars
10) PrimePort's Primacy and influence on The Bay Hill Area
11) Review the provisions of the District Plan
12) Review the provisions of Council Bylaws
13) Development of key sites
14) Major people attracting activities
15) Making the most of views

The opportunity associated with the District Plan review relates to reviewing the District Plan rules for commercial areas. The transport related aspect is associated with reviewing the car parking requirements and the cash-in-lieu financial contributions for having no/little on-site car parking in the town centres for specific uses.

Reviewing the Council's Bylaws is identified as another one of the 15 opportunities in the Study, which requires consideration to allow for:

- Reduction in the traffic speeds along Talbot Street (SH79), perhaps to 30km/hr within the Commercial 1 Zone. This needs to be done in conjunction with the NZ Transport Agency.
- Review the provisions for outdoor dining areas to make more amenable in suitable locations.
- Investigate the opportunities to be realised if part of the town centre was pedestrianised.

Timaru District Plan

District Plans establish a policy and regulatory framework for land use and subdivision and managing associated environmental effects. Land use planning decisions can assist (or frustrate) the implementation of strategic transportation measures and outcomes. District Plans are primarily a means of regulating activities to ensure amongst other considerations that land transport systems can safely and effectively accommodate increases and/or changes in use or access from those activities.

In broad terms, land transport[3] provisions in district plans should[4]:

- integrate land use and transport planning
- allow for the development and management of integrated, safe, responsive and sustainable transportation systems

[3] land transport means (under the Land Transport Act 1998) transport on land by any means and the infrastructure facilitating such transport; and includes rail, surface-effect vehicles, and harbour ferries
[4] RMA Quality planning Consultants (2013), Plan Topics – Land Transport

- give effect to the land transport provisions included in the relevant RPS
- not be inconsistent with any relevant regional plan or national planning provisions
- have regard to national and regional transport policies and plans prepared under the Land Transport Management Act
- seek to manage the environmental effects of land transport on land use and the effects of land use on land transport.
- manage the effects of reverse sensitivity on the land transport network.

The Resource Management Act (RMA) has formal requirements that councils must fulfil when they prepare district plans.

It is intended that the Proposed Timaru District Plan will be structured as an activity based plan with a single Transport Chapter. The National Planning Standards will also influence the structure. The transport effects of activities vary with scale and the nature of the activity and how they interact with the land transport network, which is why transport rules are often effects based. Therefore, a combination approach of activity based rules and effects based rules may be necessary for the Transport Chapter.

The Operative Timaru District Plan (District Plan) was approved by the Timaru District Council on 22 February 2005 and was deemed to be operative on 8 March 2005. The operative plan can be found on the Timaru District Council website as PDFs for each chapter. It is not an e-plan. The Operative Timaru District Plan comprises four parts:

- Part A: Introduction'
- Part B: Resource Management Issues, Objectives, Policies, Methods, Environmental Results
- Part C: Planning Maps
- Part D: Zones, General Rules, Definitions and Appendices

Transport or roading issues, objectives and policies are contained in Part B (8) Roading. Operative transport rules can be found in the following sub-chapter in Part D:

- Part D 6.6 Roading Hierarchy
- Part D 6.7 Vehicle Access and Loading
- Part D 6.8 Parking

Subdivision

The subdivision of land in Timaru District currently always requires a resource consent, even if it is only a boundary adjustment and no additional lots are created. New subdivision potentially provides the greatest opportunity to set expectations for council's requirements for streets and roads. Subdivision general rules are contained in Part D 6.3 Subdivision and transport rules in Part D 6.6 to 6.8 are applicable in subdivisions.

There is currently no standard or code of practice for subdivision design that provides good practice guidance to developers, designers and landowners. The Engineering Approval process is currently the key opportunity to seek good transport outcomes.

Conclusion

The District Plan provisions should also reflect and be consistent with the outcomes sought by the district wide documents discussed above. The following are considered the key issues that require consideration throughout the review:

- There is currently no district wide Parking Strategy, this could be an issue for the District Plan when reviewing the car parking requirements and the cash-in-lieu financial contributions for having no/little on-site car parking in the town centres for specific uses.
- Integration of land use and transport is important, particularly in Timaru City and town centres in the District.
- Ensure that support for walking and cycling, public transport and travel demand management are reflected in the District Plan provisions as far as possible in alignment with the various strategies that seek more sustainable transport networks.

3. Neighbouring District Plans reviews

Timaru is located in the Canterbury region and is bounded by Ashburton to the north, Mackenzie to the west and Waimate to the south.

3.1 Ashburton District Council

The Ashburton District Plan (ADP) became operative on 25 August 2014. The ADP can be found on the Ashburton District Council (ADC) website as PDFs for each chapter. It is not an e-plan.

Roads in the ADP are zoned according to the zoning either side of the road. In cases where the zones differ on either side of the road, the zone boundary runs down the centre of the road. This approach has not caused any major issues to date, however it was noted by the planner interviewed that it can cause issues for mobile shops in residential zones as they trigger a resource consent. The ADC preference is to where possible use bylaws to control activities in public road reserves.

The Transport provisions are district wide and may apply in addition to any relevant Zone provisions. Chapter 10 outlines the Transport issues, objectives, policies and rules. There is no requirement for ITAs in the Plan. The CRPS requirement for ITAs was introduced towards the end of the development of the Ashburton Plan so was not addressed in their plan review. The transport assessment matters, however do cover a number of aspects that would be expected in an ITA.

The road hierarchy includes four main classifications that are then broken into urban and rural as shown in **Figure 3.1**, with each classification expected to fall within a range of daily traffic volume. The highest classified roads (Arterials) provide for predominantly through traffic function and these are consistent with the State Highway network through the District. The lowest classification roads (Local) provide for primary access to adjacent land and properties and through traffic use is discouraged.

Road Hierarchy	Location	Vehicles per day
Arterial	urban	>5000
Arterial	rural	>1000
Principal	urban	1000 to 6000
Principal	rural	500 to 1500
Collector	urban	200 to 2000
Collector	rural	150 to 800
Local	urban	<250
Local	rural	<200

Figure 3.1 Ashburton District Road Hierarchy (extracted from Ashburton District Plan)

The ADP requires that all new roads shall be laid out and vested in the Council, in accordance with Standard NZS4404:2010, other than arterials where minimum road and carriageway widths are specified. In the case of roads created for subdivision this approach relies on an external document that is not freely available, it must be purchased. This could cause issues for small scale, one off developers. The process of design acceptance relies on ADC staff review. Despite the limitation of this approach it is not causing ADC any issues that would prompt them to change the approach in the short to medium term.

Car parking requirements are based on the approach of providing "*sufficient to cater for normal generation demand*". For all zones, except the Business A zone (Central Business Area in Ashburton), the requirement is a minimum number of parking spaces to be provided at all times. However, the Plan does have assessment matters to allow flexibility and efficient use of land as follows:

- Whether there is an adequate alternative supply of alternative off-street parking or loading spaces in the immediate vicinity. (In general, on-street parking is not considered an acceptable alternative.)

- Whether there is another site in the immediate vicinity that has available parking or loading spaces which are not required at the same time as the proposed activity. (In such a situation the Council may require the alternative parking or loading spaces to be secured in some manner.)
- Whether a demonstrably less than normal incidence of parking or loading will be generated by the proposal.
- Whether the Council is anticipating in the short term providing public car-parking that would serve the vicinity of the activity, and whether a cash payment towards

In the Business A Zone of Ashburton only, no on-site car parking is required except for residential activities, and where on-site car parking for the convenience of persons working or living on-site is proposed, it shall be provided to the rear of any building(s) on the site and all required loading spaces shall be provided at the rear of building(s) on the site. This approach is feasible as there is a large public car park on the edge of the CBD area that is managed by Council.

Cycle parking is required for all developments, other than residential and farming, at a rate of 1 cycle space for every 20 car parking spaces provided. All required cycle parking shall be provided in cycle stands and laid out in accordance with Appendix 10-3.

All other requirements such as vehicle crossing standards, and parking dimensions are standard.

3.2 Mackenzie District Council

The Mackenzie District Plan (MDP) was made operative on 24 May 2004. The plan can be found on the Mackenzie District Council website as PDFs for each chapter and is not an e-plan. Since being made operative a number of private and Council led plan changes have been made. MDC is in the process of developing a timeline for their District Plan review.

Roads in MDC are zoned according to the zoning on either side of the road. The Transport provisions are district wide provisions which may apply in addition to any relevant Zone provisions. Section 15 (Transportation) include the district wide transport rules. There is no explicit requirement for ITAs. The road hierarchy include three classifications; arterial, collector and local roads. There is no indication of expected traffic volume for each road type. Instead the definition of each road type is based on the function of the road.

Section 13 (Subdivision) outlines the road design attributes for each road type and zone (either rural and rural residential or other zones). It is noted that footpaths are required on both sides in all zones except in Rural and Rural Residential Zones.

A cash payment may be made in lieu of part or all of the parking requirement in areas where the Council is anticipating creation of public parking that would serve the area of the development.

All other requirements such as vehicle crossing standards and parking dimensions are standard.

3.3 Waimate District Council

The Waimate District Plan (WDP) became operative on 28 February 2014. Similarly, the WDP can be found on the Waimate District Council website as PDFs for each chapter. It is not an e-plan.

Similar to MDC, roads in WDC are zoned according to the zoning on either side of the road. The road hierarchy includes three classifications; arterial, collector and local roads. There is no indication of expected traffic volume or function for each road type. The Waimate District Plan road hierarchy is shown in **Table 3.1**.

Table 3.1 Waimate District Plan Road Hierarchy

Road hierarchy	
Arterial Roads	State Highway 1
	State Highway 82
	McNamaras Road
Collector Roads	Pareora River Road

Road hierarchy	
	Pareora Gorge Road
	Old Ferry Road
	Tawai Ikawai Road (from Old Ferry Road to Ikawai Middle Road)
	Ikawai Middle Road
Local Roads	All other roads

Section 10 (Financial Contributions and Subdivision) of the District Plan states that Council has adopted NZS4404 Land Development and Subdivision Engineering (and any amendments) as its Code of Practice for Subdivision. This Code is referred to in the assessment matters for resource consents, relates to engineering requirements and is not a part of the District Plan. Table 10.2 in the Section 10 of the District Plan states the road standards for each road type and zone (either rural, residential 2 and 3 or other zones)

Similar to MDC, WDC also accept cash payment in lieu of part or all of the parking requirement in areas where the Council is anticipating creation of public parking that would serve the area.

All new roads generally require footpaths on both sides except in rural zones where there is no requirement to provide footpaths.

All other requirements such as vehicle crossing standards, and parking dimensions are standard..

3.4 Conclusion

Timaru's consistency with the neighbouring plans currently varies. Overall, it is considered the least critical in terms of striving for consistency with the three neighbouring plans as two of the plans are now four years old and updating the Mackenzie District Plan is yet to be undertaken. However, it is important to consider the cross boundary/shared boundary roading interface with the neighbouring districts.

4. Best practice review

4.1 NZ District/City Plans examined in the review

In addition to the review of the neighbouring district plans in section 3, the district plans in **Table 4.1** were also reviewed as part of establishing best practice with regard to policies and types of rules/methods that have more recently been included in District Plans throughout New Zealand. These plans were selected for review given they have more recently been revised and are mostly operative. Several district councils that are considered similar to Timaru in terms of scale and issues are currently undertaking district plan reviews, however they were not included in this review as they are in the early review stages. The detailed reviews are outlined in Appendix A.

Table 4.1 NZ District/City Plans Reviewed

Plan	Status	Transport chapter
Christchurch District Plan	Operative	Chapter 7 – Transport Chapter 8 – Subdivision, Development and Earthworks
Auckland Unitary Plan	Operative in part	Chapter E – Auckland wide E27 - Transport
Hamilton City Plan	Operative, 2016	Chapter 18 Transport Corridor Zone Chapter 23 Subdivision
Tauranga City Plan	Operative, 2013	Chapter 4 0 General Rules, Section 4B Transportation Provisions Chapter 12 – Subdivision, Services and Infrastructure
Queenstown Lakes District Plan	The Proposed Plan does not yet include Chapter 29 -Transportation. The Operative rules for transport were updated in 2016 so these have been reviewed as they reflect recent approaches.	Section 14 – Transport Rules Section 15 - Subdivision

5. Timaru District Plan Review Issues

The list of transport related issues identified were grouped into four themes (high-level issues, outcome related issues, process relate issues and input and coordination with other chapters) as shown in the first two columns in **Table 5.1**. Most of these issues were identified by TDC staff before the Issues Workshop and some were added to the list following the Issues Workshop.

The analysis and discussions held at the first workshop identified the approach for addressing each of the issues as shown in the third column in **Table 5.1**. Some issues were not progressed and some issues which require investigation of options for addressing the issue formed the basis of the review.

Table 5.1 Summary of issues discussed in Issues Workshop

Issue		Approach
High level (overarching) issues	Alignment with national and regional policies and plans	Implicit in addressing all of the other issues
	Requiring Integrated Transport Assessments (ITAs)	Investigate options
	Relationship with One Network Road Classification (ONRC)	Investigate options
	Control of activities in the road reserve	Investigate options
	Catering for future needs	Not progressed (Not considered an issue for Timaru District Plan. This will be addressed through the Activity Management Plan).
	Consideration of resilience	Not progressed (Not considered an issue for Timaru District Plan. This will be addressed through the Activity Management Plan).
	Requirement for ODP for greenfield development	Not progressed (Falls under District wide topic)
Outcome related issues (based on experiences)	Inadequate road standards	Investigate options
	Inadequate access standards	Investigate options
	Lack of catering for walking, cycling and public transport	Investigate options for end of trip facilities
	Developments in Rural areas	Overlap with access standards
	Subdivision outcomes	Overlap with road and access standards
	Transport technical standards	Investigate options
	Parking requirements (Timaru City)	Investigate options
Process related issues	Referencing external documents	To be addressed in conjunction with other topics.
Input and coordination with other chapters	Land use intensification effects, reverse sensitivity, etc.	Not progressed (To be addressed in other topics)

The issues and options are discussed together in the following sections of this report, under the following issue topic areas:

- Section 6 - High-level issues and options (requiring Integrated Transport assessments, relationship with One Network Road Classification (ONRC), control of activities in the road reserve)
- Section 7 – Road and subdivision issues and options (footpaths, cycle provisions, cul-de-sacs, amenity/utility strips or berms in roads, walkable blocks)

- Section 8 – Access issues and options (private access or right-of-way (ROW), vehicle crossings)
- Section 9 – Mode choice issues and options (end of trip facilities, public transport)
- Section 10 – Parking management options (car parking, cycle parking, loading)
- Section 11 – Development of transport technical standards (parking technical standards)
- Section 12– Referencing external documents

6. High-level issues and options

6.1 Integrated Transport Assessments (ITAs)

Best practice review

All activities that generate trips have some effect on the transport system. Larger developments, or those in sensitive locations on the transport network are generally more likely to cause significant transport effects. Integrated transport assessments (ITAs) consider the proposed impact of a development on the network and the effectiveness of any mitigation measures that are proposed to address adverse impacts[5][

Specifically, an ITA is a structured method of assessing the transportation effects of a development based on its geographical and policy context and may include measures to mitigate unacceptable adverse effects considering a range of different techniques and transport modes. 'Integrated' means the integration of land use and transport which is a key transport objective of most District Plans. ITAs can be prepared for large scale rezoning proposals or as part of an Assessment of Environmental Effects (AEE) accompanying a resource consent application.

The RMA requires that the degree of detail in an AEE is proportionate to the scale and significance of the effects that the proposed development may have on the environment. This is an important consideration when identifying an appropriate scope of assessment for an ITA.

Although ITAs provide a more structured method of assessing effects and can ensure the scope of assessment is appropriate for the scale of development, there may be differences of opinion regarding the conclusions drawn by the ITA report. ITA guidelines may help this but there are often still further discussions required. This is often because interpretation of the assessment matters may differ. Essentially, an ITA provides a starting point for further discussion regarding the scope of any mitigation measures, funding arrangements and conditions of consent.

The NZTA Research Report 422[6] provides best practice guidelines for preparing an ITA including the scope and content required for a 'simple', 'moderate', 'broad' or 'extensive' ITA. The four different ITA levels provide practitioners with varying levels of geographic and policy assessments. The research provides guidance as to the appropriate depth of analysis as well as wider spatial and policy assessments.

Many district plans in New Zealand include a threshold provision above which an ITA is required. The result is that the wider transport effects of developments that fall below the threshold are generally not assessed except for the rules that apply to the particular proposed development. An NZTA Research Report 610[7] investigated whether the transportation effects of small-scale developments should be assessed through a transport assessment prepared by a transport professional and if so, whether this would be cost effective, pragmatic and provide value for money. The research concluded that any requirements for transport assessments for small-scale developments, i.e. those that fall under existing thresholds for ITAs, need to be carefully considered so as not to contravene objectives to simplify and reduce the prescriptiveness of development controls. It concluded that the requirement for a transport assessment should be based on the potential effects or outcomes in the context of the individual development. The research also addressed the issue of cumulative effects of small-scale developments as this was a recurring theme in discussions with stakeholders. In this respect, the research concluded that cumulative effects of development are most effectively managed at a strategic level in the planning process (i.e. district plan, plan changes, ODPs) and not at the consent application stage.

Christchurch, Hamilton and Tauranga require ITAs as a rule. The scope of the ITA is generally dependent on the size, location, underlying zoning and/or trip generation of the proposed development. Some of these authorities require different ITA scopes depending on key factors relating to the size or location of the proposed development.

Tauranga City's Operative City Plan requires an ITA for development proposals with 25 or more new or additional on-site car parking spaces. There are four levels of transport assessment; named basic, neighbourhood, local area and wide

[5] https://www.nzta.govt.nz/assets/resources/integrated-transport-assessments/docs/integrated-transport-assessments.pdf
[6] Abley, S, P Durdin, M Douglass (2010) Integrated transport assessment guidelines. NZ Transport Agency research report 422. 110pp. http://www.nzta.govt.nz/assets/resources/research/reports/422/docs/422.pdf
[7] Head A, A Dunne, D Smith, I Clark and S Mills (2017) The assessment of the effects of small-scale development proposals on the transport network. NZ Transport Agency research report 610. 79pp.

area which are based on the number of new or additional parking spaces proposed (as a proxy for traffic generation). A development proposal with less than 25 new or additional on-site car parking spaces would not require a transport assessment provided it did not breach any other transport-related rule.

The Hamilton City District Plan which was made operative in September 2017 includes a range of triggers that require an ITA (Rule 25.14.4.3) including:

- Trip generation triggers – based on the trip generation of the activity (vehicles per day), the status of the activity in the zone, and whether the activity is located on the sensitive transport network or not.
- Existing vehicle access triggers – if the use of an existing access on the strategic network or major arterial or takes access across a railway level crossing increases by 100 vehicles per day.
- Specific activity triggers – An ITA is required for new proposals of the following 6 activity types; schools, hospitals, transport depots, drive-through services, emergency vehicle facilities, transport corridor.
- Area specific triggers – new activity within specific areas which exceed specific trip generation rates.

Although the trip generation triggers are listed in vehicles per day, the plan includes a table converting these triggers to floor area or unit equivalent based on different activity types. The triggers above stipulate two levels of ITA, named Simple and Broad. The plan provides a checklist of the requirements for each ITA type and refers to the NZTA Research Report 422 for further guidance.

The Auckland Unitary Plan does not explicitly require ITAs, however it identifies thresholds (Rule E27.6.1) which, if exceeded, require resource consent as a restricted discretionary activity. This includes new development thresholds for common activity types, a 100 vehicles per hour (in any hour) threshold for activities that are controlled or restricted discretionary in their zone, or subdivision of land for more than 100 dwellings. Exemptions apply to specific zones (such as Business – City Centre and Metropolitan Centre) or if development is being undertaken in accordance with a consent or previously approved ITA.

None of the plans used equivalent car movements as a threshold basis of measurement for ITAs.

Operative Plan

There is no requirement for ITAs or a definition of a high traffic generator in the Operative Plan. However, 6.1.2 of the District Plan states that the information supplied with an application or designation should be tailored to the scale and intensity of effects that the proposed activity will generate, and Council can request information in respect of any traffic effects of the proposal. It is understood that TDC currently use discretion to request a Transport Assessment where there is a non-compliance with the transport provisions to understand the traffic movements/effects and how these may be resolved/mitigated (depending on the nature and scale of the activity and the degree of non-compliance). They can also be requested for an ODP or Notice of Requirement (NOR).

Discussion

The direction set by the RPS requires the interaction between land use and the transport system, including high traffic generators to be addressed in district plans. Best practice suggests that requiring ITAs would be an appropriate means for addressing the interaction between land use and the transport system in Timaru District. The scale of activities and the potential requirement for ITAs need to be considered together.

Options

A range of options were discussed at the Options Workshop as shown in **Table 6.1**.

Table 6.1 Options - Requiring ITAs

Option	Advantages	Disadvantages
Option 1 Status Quo	• No requirements on the applicants	• Does not align with the RPS • Does not support seeking better transport outcomes

Option	Advantages	Disadvantages
Option 2 Require ITAs based on scale (thresholds) and activity status	• Larger developments that are likely to have transport effects will require an ITA • Easy to apply	• Activity status adds another layer of consideration for potentially limited benefit. • Some activities below the threshold could still have some effects • Some activities scaled back to fit just under the threshold to avoid ITA.
Option 3 Require ITAs based on scale (thresholds) and zone	• Easy to apply	• Risk that some activities in non-specified zone will generate unintended adverse impacts • Some activities below the threshold could still have some effects • Some activities scaled back to fit just under the threshold to avoid ITA.
Option 4 Require ITAs based on scale of activity (thresholds)	• No risk that an activity generates high traffic volumes will slip through • Easier to apply	• Some activities below the threshold could still have some effects • Some activities scaled back to fit just under the threshold to avoid ITA.

Option 4 is the recommended option and is described in more detail below. It is acknowledged that an ITA could be triggered in a number of ways in Timaru as follows:

- Plan change/ODP process (generally large-scale developments and developments under the HASHA Housing accord)
- Notice of Requirement process (e.g. schools)
- At subdivision consent stage, as this is a 'discretionary' activity in Timaru (there is already an extensive list of transport assessment matters listed)
- At land use resource consent stage, in the case of Option 4, if it exceeds defined trip thresholds

The initial threshold would be whether the activity is considered a High trip generating' (HTG) activity based on total trips generated per day converted to a unit of measurement such as floor area or number of dwellings. Any further thresholds would be effects based. It is therefore important to consider the possible range of transport effects and how these might be captured by the ITA process.

Effects can be:

1) **Network effects** (is the number of vehicles associated with the site going to adversely impact on the surrounding network?, if so what are the potential mitigating measures?)
2) **Infrastructure related** (is there a high volume of heavy vehicles that will have an adverse impact on the roading infrastructure?)
3) **Safety related** (is movement through the site safe? is interaction with the frontage road at the access safe? etc.)
4) **Efficiency related** (how is the site managed in terms of servicing? etc.)
5) **Mode choice related** (is the site allowing opportunity for travel by other than private motor vehicle, is the site designed to allow travel by other modes (cycle parking, public transport etc.))
6) **Impact on neighbours** (e.g. Noise and vibration)

The first two effects (1,2) are directly related to the scale of traffic being generated by the activity. The next three (3,4,5) are related to the design of the site and its interaction with the adjacent roads. The final effect (6) is managed in other chapters within the Plan.

Assessment matters to capture the effects are considered appropriate. The CCC uses this approach and has 6 assessment matters, 2 of which are for non-permitted activities. The matters for non-permitted activities relate to the policy framework and accessibility of the site, as these activities were not anticipated in the zone.

The following four assessment matters are proposed:

- Network effects (network related) – captures 1 above
- Heavy vehicles (infrastructure related) - captures 2 above
- Safety and efficiency (site related) - captures 3 and 4 above
- Design and layout (site related) – captures 5 above

The key to setting the thresholds is whether TDC consider traffic to be a peak hour issue or an 'across the day' issue. The 'network effects' assessment matter could be a peak hour issue, likewise the 'heavy vehicles' assessment matter would be triggered by a certain number of heavy vehicles per day. The proposed process is outlined in **Figure 6.1**.

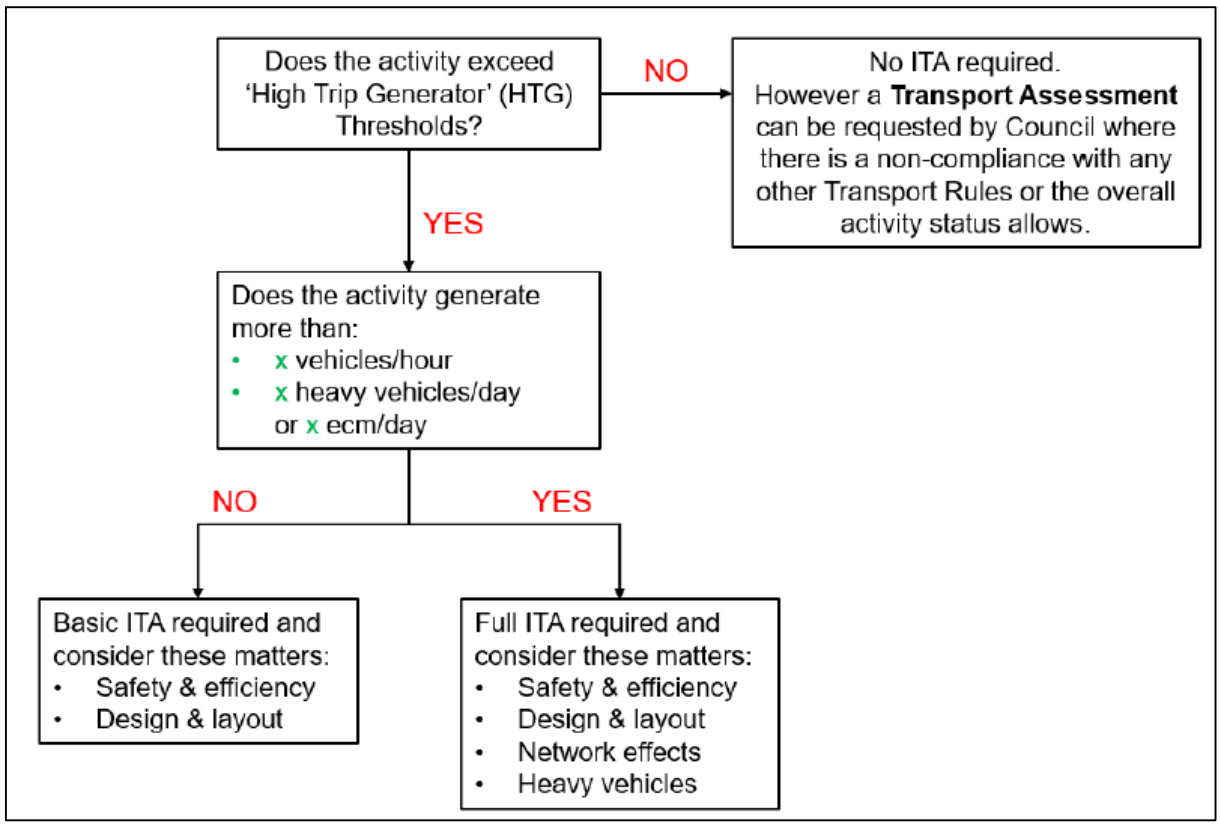


Figure 6.1 Option 4 – Suggested ITA process

The difference between a 'basic' and a 'full' ITA is the assessment matters that are required to be considered. This is considered a clear and simple approach, acknowledging that the issue of non-permitted activities still needs to be considered in the next phase. If the high trip generating rule is not triggered but another Transport rule aside from the HTG rule is not met Council can continue to use its discretion to request a Transport Assessment. Furthermore, in the case of a plan change/ODP, NOR or subdivision resource consent Council will have the discretion to ask for a Transport Assessment.

Recommendation

ITA provisions require further investigation in the next phase of the review in relation to setting the appropriate thresholds for ITAs for various activity types.

6.2 Road hierarchy alignment with ONRC

The national One Network Road Classification (ONRC) involves categorising roads based on the functions they perform as part of an integrated national network. The classification aims to help local government and the NZTA to plan, invest in, maintain and operate the road network in a more strategic, consistent and affordable way throughout the country. Customer levels of service are assigned to each of the classifications to reflect the experience a road user should have, consistent over time, on a particular category of road. In many cases this will be the same as the experience currently offered on these roads. However, in some cases there may be a gap between what is experienced and what should be experienced or is 'fit for purpose' (either more or less). When working out the customer levels of service associated with each category of road, a range of variables need to be considered including road function, traffic movement, the expectations of users, user mode share, safety and speed as well as funding opportunities available for investment in the network.

The ONRC is currently being enhanced under the One Network Framework project to better include people that are walking, riding a bike or taking public transport[8]. The One Network Framework project is to evolve the current ONRC to[9]:

1) Provide a consistent travel experience along elements of the transport system with similar classifications at the best achievable value for money.
2) Consistently describe the elements of the entire land transport system so strategic, land-use and planning, improvement, operation and management activities use a common language.
3) Describe service levels and outcomes for land transport modes that are appropriate for urban and rural contexts and functions consistent with the wider network and adjacent land use.
4) Provide a clear line of sight between transport interventions and the customer service levels and community outcomes to be useful for strategic, operational and tactical activities.
5) Provide a structured service level and performance framework so transport investment decision-making considers all modes equally.

The One Network Framework is due for release in 2020. However, it is uncertain how this would affect the current ONRC.

Best practice review

A District Plan road hierarchy helps to manage the effects of land use on roads and the effects of roads on land use under the RMA. It aids Councils in managing its network, establishing relevant standards, monitoring activities and setting maintenance and enhancement priorities.

It is understood that NZTA did not intend for the ONRC to be carried through into district plans. None of the Plans reviewed have adopted the ONRC hierarchy in their District Plan. 'Arterial' is the only ONRC term that is common with some plans (Ashburton, Dunedin and Queenstown Lakes) using the same term in their road hierarchy. As ONRC is required to be regularly reviewed by Councils and changes made to classifications to reflect changes in road use, this could potentially trigger a plan change requirement if these classifications were also directly used in a District Plan.

Operative plan

The hierarchy comprises primary roads (principal and arterial roads), which carry traffic around the District and secondary roads (collector roads and local roads) which distribute traffic. **Table 6.2** shows the ONRC and operative Timaru District Plan road hierarchies.

[8] https://www.nzta.govt.nz/roads-and-rail/road-efficiency-group/projects/onrc
[9] https://www.nzta.govt.nz/roads-and-rail/road-efficiency-group/projects/one-network-framework/

Table 6.2 ONRC and District Plan road hierarchies

ONRC hierarchy	Timaru District Plan hierarchy	
National	National Routes	Primary roads
Regional	Regional Arterials	
Arterial	District Arterials	
Primary Collector	Principal Roads	
Secondary Collector	Collector Roads	Secondary roads
Access	Local Roads Service Lanes	
Low volume		

Table 6.2 shows that the number and naming of road classifications under the current Timaru District road hierarchy generally aligns with the ONRC.

Discussion

It is unknown at this stage how the ONRC will change under the One Network Framework project. Discussion with TDC staff and NZTA staff at the second workshop concluded to retain the existing road hierarchy and identify roads that need to be reclassified to better represent their function. .

Recommendation

Further discussions and analysis, as part of the next phase of the review, are required to identify roads that need to be reclassified to meet the intent of the classification.

6.3 Control of activities in the road reserve

All roads in Timaru District are subject to the adjacent underlying land zoning and there is a risk that roadworks may require resource consents.

Best practice review

Most of the larger centre District Plans reviewed now manage their roads as a transport zone where zone specific development rules apply. This method has the benefit of clearly identifying for plan users what is road and rules can be clearly applied. Ashburton, Waimakariri and Queenstown Lakes include roads in the definition of a utility where the rules associated with utilities apply to any activities within roads/ road reserves.

Christchurch have overcome the issue of vested roads having to undergo a plan change to become Transport Zone by 'deeming' a road 'Transport Zone' once vested. The scenario of roads being 'dedicated' as opposed to 'vested' has not arisen in Christchurch.

Operative plan

All roads in Timaru District are subject to the adjacent underlying land zoning. Where a road adjoins two different zones, the road takes on the zoning of one of the adjacent zones as shown in **Figure 6.2**.

Figure 6.2 Zones (extracted from Timaru District Plan)

When a road is created through the subdivision process there are controls over the design of roads such as road widths, number of traffic lanes, cycle provision and number of footpaths. It is noted that 'road and bridge construction and maintenance within road reserves' is currently listed as a permitted activity in each zone of the operative District Plan

Discussion

TDC staff indicated in the Issues Workshop that there do not appear to be any issues with the current arrangement.. It is unclear whether transport provisions can be included in each zone under the National Planning Standards (NPS) template. However, a review of the way that activities in roads are controlled would be beneficial.

Options

Two options were discussed at the Options Workshop as shown in **Table 6.3**.

Table 6.3 Options - control of activities in the road reserve

Option	Advantages	Disadvantages
Option 1 Status Quo – Roads are subject to underlying zone	• Does not appear to be causing any issues	• Low risk that work in road reserve may require consent.
Option 2 Road/transport zone (deemed upon vesting or dedicating)	• Roads can be managed under a rule framework appropriate for its purpose • Clarity over what is road versus other zone	• Requires road boundaries to be defined legally so may need to carry out surveys

It is considered that Option 2 would provide clarity over what is allowable etc. in the zone containing the road and is consistent with other Councils. However, the disadvantage of Option 2 requiring road boundaries to be defined legally is likely to require surveys and result in additional cost and time. Discussion at the workshop concluded that the disadvantage outweighs the benefits considering the status quo does not appear to be causing any issues.

Recommendation

No change is recommended to the Operative Plan (Transport Chapter). However, it is recommended that the District Plan (Zone Chapter) includes what activities (e.g. roadworks) are permitted on roads and wording amendments to ensure definitions are robust to avoid unnecessary resource consents for maintenance and upgrading works.

7. Road and subdivision issues and options

7.1 Footpaths

Footpaths are an important component of the multi-modal network providing access for pedestrians and in shared path situations for cyclists. Footpaths in general are critical to encourage walkable, active neighbourhoods that promote social interaction and the general wellbeing of residents.

Best practice review

In general, district plans require footpaths on both sides of urban roads with a classification higher than 'local' road. The issue of providing footpaths on one side or both sides of a local residential street has been a focus for many plans. The Waimakariri District Plan only requires footpaths on one side of local residential streets but as stated earlier, this Plan is due to be reviewed in the near future. Both the Christchurch and Hamilton District Plans require footpaths on both sides of the street. The Christchurch District Plan does allow for footpaths on one side as an exception under restricted circumstances. The key debate has focused on the financial cost of both the upfront development and the asset management cost to council of two sided footpaths versus achieving neighbourhoods that promote active modes such as walking and cycling that are accessible for all residents.

The benefits of providing footpaths on both sides of a street are clear. Two sided footpaths encourage the wellbeing of residents through 'barrier free design[10]' outcomes. The key concern with one sided footpaths is that they can create both physical and social barriers for residents that are less mobile and struggle to cross a road independently such as the elderly, children, people pushing prams or people with disabilities. The key concern of providing two sided footpaths is the financial cost of constructing and maintaining the footpath asset.

Operative Plan

The Operative Timaru District Plan (Table 6.6.2(5)) includes recommended combined footpath and berm widths. However, the split between a footpath and a berm is not specified and it could be interpreted as either footpath or berm width. The term 'recommended' implies that the widths specified can be different to that on the plan. Overall, the footpath requirements in the operative plan are considered ambiguous.

Discussion

It is considered best practice to require the provision of footpaths on both sides of all local streets (except in rural residential subdivisions) with exemptions for certain circumstances where a footpath on only one side would not be detrimental to the walking network or the width of road compromises the ability to meet desired amenity outcomes. It is important that new development supports multimodal networks and allows for appropriate vehicle movement as well as active modes such as walking and cycling and there are linkages across developments. The issue of developments being joined by footpaths is more difficult to solve through rules, this is a network issue that needs to be addressed during the development of ODPs.

The best practice review found that an approach where one-sided footpaths are permitted but only under special circumstances is appropriate.

Options

Two options were discussed at the Options Workshop as shown in **Table 7.1**. Option 2 was amended during the workshop to allow one sided footpath on low volume streets rather than on narrow streets.

Table 7.1 Options - footpaths requirements

Option	Advantages	Disadvantages
Option 1		• Ambiguous in terms of footpaths

[10] Barrier free design, also known as universal design is the concept of designing built environments that can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability.

Option	Advantages	Disadvantages
Status Quo – berm and footpath width combined		• Risk of poor outcomes
Option 2 Stipulate footpath width separately from berm width. Require two sided footpaths on all urban and rural residential streets but allowing one sided footpath for low volume streets.	• Supports barrier free design and accessibility.	• Requires increased upfront investment from developers. • Increases on going asset management costs. • Could compromise the ability to also include amenity strips and utility strips.

Option 2 is the preferred option.

Recommendation

Given the interdependence with the street design issue and the permitted road width, it is recommended that further discussions and analysis be held as part of the next phase of the review to discuss both these matters, with representation from the various units of council who have a stake in the outcomes.

7.2 Cycle provision

The provision of cycle facilities within the road corridor are encouraged as they promote active lifestyles and multi-modal networks. The 'level of facility' varies from those that are 'dedicated' such as cycleways to those that are 'shared' such as the provision for cycling within the general traffic lanes. The issue is focused on which level of facility is appropriate for which type of street environment.

Best practice review

Most plans associate cycle provision with the road classification. In general the level of cycle provisions are reduced as streets reduce in traffic volumes. Hence in the majority of plans arterials are required to provide a greater level of facility such as off-road paths, and local streets lower levels such as shared with general movement lanes.

The Hamilton City District Plan is a good example where arterial roads are required to have either a cycle path or shared cycle and footpath, collector roads require marked on road cycle lanes and local roads allow shared use within general traffic movement lanes. In addition, the Hamilton Plan provides provision for bespoke design of cycle facilities within business centres to allow for response to local context.

An issue with following the road hierarchy classification is that the opportunity to utilise non-road facilities is of less focus in the plans. An opportunity to provide dedicated facilities alongside roads and through reserve land may be a more efficient route from origin to destination within the cycle network and may lead to a more efficient outcome.

Operative Plan

The Operative Timaru District Plan (Table 6.6.2(5)) requires provision of two 1.5m wide cycle lanes on urban Collector Roads in residential zones. There is a note that "Cycle Lanes need not be marked but the space must be provided." This indicates that the cycle lane width is incorporated into traffic lane width if cycle lanes are not marked. There are no specific requirements for dedicated cycle facilities within the road corridor for other lower level street types and Collector Roads in rural areas or other zones.

Discussion

It is considered best practice to ensure that cycle provision within all streets and the level of facilities aligns with the road hierarchy classification, but also make allowance for specific cycle network plans and non-road opportunities. Overall, the operative plan is consistent with best practice. However, the 1.5m cycle lane width does not reflect the current best practice width of 1.8m.

Options

Three options were discussed at the Options Workshop as shown in **Table 7.2**.

Table 7.2 Options - cycle provision within road corridor

Option	Advantages	Disadvantages
Option 1 Status Quo – 2x1.5m required for urban Collector roads in residential zones.	• Allows design specific solution to accommodate, provided designer following best practice	• Less opportunity to achieve better outcomes
Option 2 Update status quo to best practice widths – 1.8m	• Opportunity to achieve better outcomes	
Option 3 Provide either on road or off-road cycle provisions on more street types.	• Opportunity to achieve better outcomes	• Requires good direction on what facilities are appropriate for various context

Option 2 is the preferred option. Discussion concluded that the status quo of requiring cycle lanes on urban Collector roads in residential zones is appropriate as it provides flexibility to provide off-road or alternative cycling connections rather than an on-road facility if appropriate for other higher road classifications. However, the participants agreed that the cycle lane width of 1.5m should be updated to best practice widths of 1.8m.

Recommendation

Update status quo to best practice cycle lane widths of 1.8m. It is recommended that cycle lanes are required to be marked to provide dedicated space for cyclists.

7.3 Cul-de-sacs

The key issue with the design of cul-de-sacs is that they can restrict through movement and are often barriers to a connected street network.

Best practice review

Cul-de-sacs can be considered as an outcome of a car focused network that does not provide good pedestrian connectivity.

They can also contribute to poor Crime Prevention Through Environmental Design (CPTED) outcomes. MfE's national guidelines[11] for CPTED identifies 7 qualities for safer places, these deal with various personal safety and security issues which are widely accepted as issues facing cul-de-sacs. The key CPTED issues relating to cul-de-sacs are entrapment (escaping from dead end streets), maintain sight lines (you can't see around corners), choice (multiple exit points), and connections (to enable through movement and passive surveillance). However, it is reasonable to argue that short cul-de-sacs that have line of sight from the connecting road and which have pedestrian through connections from the cul-de-sac head to adjacent streets can result in acceptable outcomes.

It is acknowledged that cul-de-sacs can be a tool in achieving practical roading access into small development pockets and hilly areas and are a better outcome than multiple rights of way. Also, they can encourage social interaction as they do not have through traffic and if designed with this in mind can allow other activities to occur in the street space.

Many of the plans allow the development of cul-de-sacs, but are subject to restrictions in maximum length and require through block pedestrian links to encourage permeability.

[11] http://www.mfe.govt.nz/publications/towns-and-cities/national-guidelines-crime-prevention-through-environmental-design-new

Operative Plan

Cul-de-sacs are permitted on local urban roads in residential zones and are restricted to a maximum length of 300m. There is no minimum turning head diameter requirements on cul-de-sacs, no restriction on the number of right-of-ways and cul-de-sacs off a cul-de-sac, and no limit on the number of household units on a cul-de-sac. There have been instances of complying cul-de-sacs that do not result in good outcomes such as under designed turning head diameter at the end of cul-de-sacs that required fixing post construction and do not achieve good CPTED outcomes.

Discussion

It is considered that best practice would advise against providing cul-de-sacs in new subdivisions as they can lead to socially isolated and unsafe street environments however this is considered impractical as cul-de-sacs can be useful. However, in some cases they are a tool in achieving practical roading access into small development pockets and are a better outcome than multiple rights of way. In some instances, short cul-de-sacs can be appropriate, for example where there is direct line of sight from the end of the cul-de-sac to the adjoining street and they have walking and cycling connectivity.

Options

Three options were discussed at the Options Workshop as shown in **Table 7.3**.

Table 7.3 Options - cul-de-sacs

Option	Advantages	Disadvantages
Option 1 Status Quo – up to 300m and more than 20 household units.		• Risk of poor outcomes • Does not require line of sight from junction (i.e. does not meet CPTED requirements)
Option 2 Introduce requirements: • Reduce maximum length to 150m • Minimum turning head diameter requirements • Require pedestrian link at end • No cul-de-sac on the end of a cul-de-sac	• Reduce risk of poor outcomes • Allows short cul-de-sacs that can meet CPTED	• Reduces flexibility and may not be favoured by developers.
Option 3 Do not allow cul-de-sacs	• Eliminates risk of poor outcomes	• Could reduce options for irregular sized blocks of land.

Option 3 of prohibiting cul-de-sacs was not considered feasible as cul-de-sacs are often essential in brownfield developments due to the shape of the site and inability to connect to other roads and therefore was discounted.

Option 2 is the recommended option. Participants commented that requiring line of sight to adjoining streets is more difficult to achieve and prescribe and is not viewed as critical if a pedestrian link is provided at the end of a cul-de-sac. A discussion on requiring a minimum turning head diameter at the end of a cul-de-sac concluded that this is needed as there have been issues with under designed cul-de-sac turning head diameters which required fixing post construction. Option 2 was amended to remove the requiring line of sight requirement and include minimum turning head requirements.

Recommendation

Introduce new design requirements for cul-de-sacs. These include:

- Reduce maximum length to 150m
- Minimum turning head diameter requirements

- Require pedestrian link at end
- No cul-de-sac on the end of a cul-de-sac

7.4 Amenity/utility strips or berms in roads

The provision of amenity strips or berms allowing the planting of trees, shrubs and ground covers (including grass verges) is important to achieve good sustainability, biodiversity and amenity of all streets.

Best practice review

The Christchurch and Hamilton District Plans require amenity strips on all urban roads. The Hamilton District Plan also provides provision for site specific design in commercial zones such that local conditions can be taken into account when providing amenity strips. The key debate in the development of proposed plans is the positive amenity and environmental outcomes versus the financial cost to both the upfront development and the asset management and maintenance cost to council for maintaining these areas and providing trees within neighbourhood streets. Most Councils have a policy that property owners maintain the berms along frontages but street trees and landscape beds are the responsibility of Council to maintain. The type of planting can help mitigate this cost.

The Hamilton District Plan includes berm requirements for each road classification and further specifies the minimum service corridor width within the berm width. The QLDC Land Development and Subdivision Code of Practice states that the combined berm and footpath width shall be adequate to enable landscaping and current and expected services to be installed. Other District Plans do not have specific utility strip requirements.

Section 3.1 of the National Code of Practice for Utility Operators' Access to Transport Corridor (July 2019)[12] states that "*where practicable, Utility Structures must be positioned in the Road Corridor with at least 300mm separation, and ideally 1m separation, from the kerb and channel, leaving this area free for its land drainage function.*"

Operative Plan

The Operative Plan specifies recommended berm width combined with footpath width and there are no further details on the proportion split between a berm and a footpath. The combined berm and footpath widths are considered the existing amenity and utility provision. However, the required berm width is ambiguous as it is combined with footpath width.

Discussion

Some views were discussed about whether requiring amenity strips in the District Plan is necessary as developers tend to include landscaping to make their subdivision attractive. TDC staff indicated at the Options Workshop that the preference is to provide indented parking with tree pits in between residential areas.

The provision of utility strips provides dedicated space for utilities infrastructure within the road corridor and encourages co-siting of utility facilities wherever operationally feasible. It will not always be operationally feasible or environmentally desirable to have structures co-located in single locations and each proposal will need to be considered on its merits. Discussion at the workshop includes specifying the minimum separation distance between the utility strip and the carriageway in accordance with the National Code of Practice for Utility Operators' Access to Transport Corridor.

Options

A range of options were discussed at the Options Workshop as shown in **Table 7.4**.

Table 7.4 Options - amenity and utility strips in streets

Option	Advantages	Disadvantages
Option 1 Status Quo – no specific requirement for amenity/utility	• Does not incur asset management costs .	• Does not encourage street amenity • Limited/no space for utility

[12] http://nzuag.org.nz/wp-content/uploads/2019/07/National-Code-approved-version-150719.pdf

Option	Advantages	Disadvantages
strip		
Option 2 Require amenity/utility strip for all new roads	• Encourages street planting and amenity on all streets • Ensures space for utility	• Will create cost of maintenance
Option 3 Require amenity/utility strip and requirements for the spacing of street plantings	• Ensures street trees are planted • Ensures space for utility	• Will create cost of maintenance

Option 2 is the recommended option.

Recommendation

Further discussion and analysis are required to agree on the minimum required amenity and utility strip widths for urban roads and rural residential roads, and to determine the assessment matters.

7.5 Walkable blocks

Appropriately sized development blocks are important to ensure permeability is achieved and pedestrian connectivity and walkable neighbourhoods are realised. Permeability can be achieved by limiting block size and or providing pedestrian accessways through mid-block connections. Ultimately new subdivision developments should not include large block forms that restrict movement. It is acknowledged that smaller blocks create more road intersections, and this has the potential to increase traffic related crashes, however balance is required between these aspects to achieve the greatest overall benefit.

Best practice review

Figure 7.1 shows examples of large blocks that restrict permeability. Example a) illustrates a large 980m block that provides very poor permeability and pedestrian connectivity. Example b) shows a large 750m block and pedestrian connectivity is relatively more effective than example 'a' further improvement could have been introduced such as mid-block pedestrian accessways to improve connectivity and reduce large block lengths.

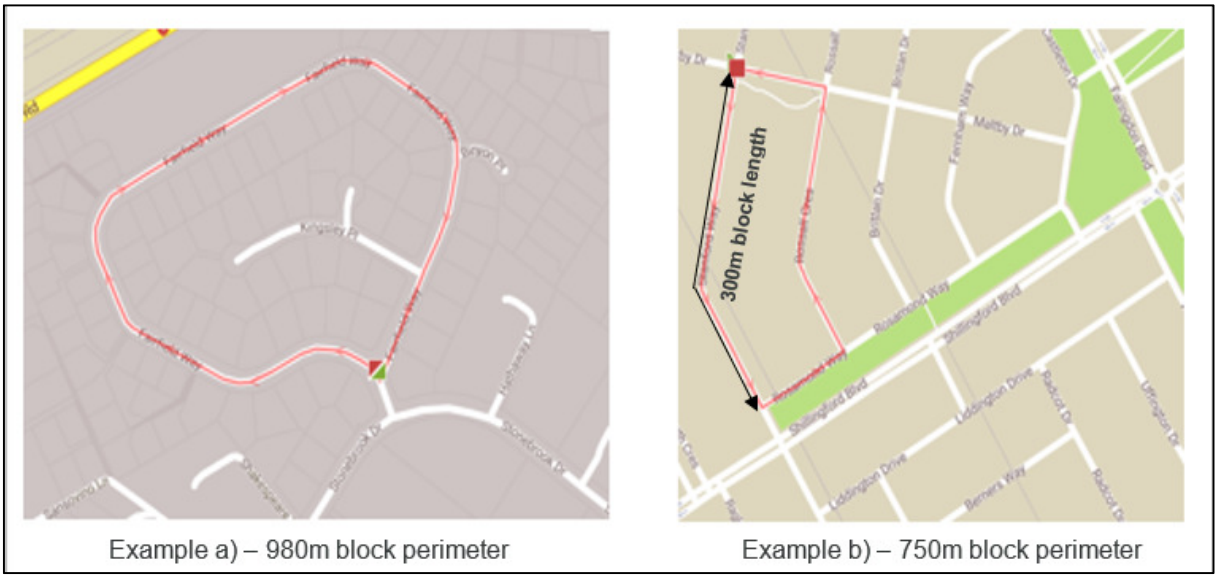


Figure 7.1 Block examples

Other second generation plans such as the Christchurch District Plan include subdivision block size limitations based on a 800m maximum perimeter length. This approach does provide some restriction and is effective to minimise the largest blocks (as illustrated in the Rolleston example). However, this rule will still allow potential block lengths of up to 300m in length which arguably does not achieve good block permeability and pedestrian/cycle connectivity.

Operative Plan

There are currently no rules in the Operative Plan regarding block size or length.

Discussion

It is considered that best practice subdivision design includes a restriction on the maximum perimeter distance as well as providing measures, such as block size, to further introduce permeability for the longest blocks to maintain good pedestrian and cycle connectivity.

Appropriately sized development blocks are important to ensure permeability is achieved and pedestrian connectivity and walkable neighbourhoods are realised. Permeability can be achieved by limiting block size and/or providing pedestrian accessways through mid-block connections. Ultimately new subdivision developments should not include large block forms that restrict movement. From a public transport planning perspective, people should be able to be within 400-500m walking distance of a bus stop. A commonly used maximum block perimeter in the design process is 800m.

Longer lengths to blocks result in a loss in permeability and lack of choice especially when considering higher density neighbourhoods with greater demand on the pedestrian network. To encourage walkable neighbourhoods block lengths that are between 100 and 200m tend to be more successful, and it is as much about perception.

Options

A range of options were discussed at the Options Workshop as shown in **Table 7.5**.

Table 7.5 Options - walkable blocks

Option	Advantages	Disadvantages
Option 1 Status Quo – no requirements		• Risk that development could have low permeability • Set up large grain bock structure that does not encourage walking and cycling.
Option 2 Introduce maximum block size (maximum 800m perimeter)	• Provides some control on pedestrian permeability • Easy to measure	• May result in blocks that are 300m+ in length.
Option 3 Introduce alternative method such as maximum block length rule 150-200m for example	• Greater permeability achieved.	• More intersections or conflict points created. • More road infrastructure • Maybe too prescriptive for sites with topography issues.

Recommendation

Option 2 is the recommended option as it is easy to measure and is less prescriptive. This requires further consideration as it may impact on the Residential topic rules.

8. Access issues and options

8.1 Private access or Right-of-Ways (ROWs)

The key issue with ROWs is the complexity that arises with multiple addresses located off a ROW. This includes issue with property owners cannot agree to maintain the ROW.

Best practice review

The rural and urban addressing standards (AS/NZS 4819:2011) provides requirements and guidance for addressing authorities to use for assigning addresses, naming roads and localities, recording and mapping the related information, and related signage. One of the main addressing requirements in the AS/NZS 4819:2011 is using suffixes and sub-address numbering in addresses. The AS/NZS 4819:2011 states that "*When there are no street numbers available to allocate to a new building, then letters should be used as suffixes to street numbers (A - E only)".* This suggests a maximum of 5 addresses off a ROW.

Some of the District Plans reviewed have limit on the number of properties located off a ROW. This varies between 6 and 10 properties. The Christchurch District Plan which does not have a limit on the number of properties on a ROW requires the ROW to be designed to accommodate two-way traffic flow. Passing opportunities are required for long and narrow ROWs in most of the District Plans reviewed.

Operative Plan

There is no limit on the maximum length of a ROW. However, there is a limit of a maximum of 6 household units off a ROW in urban residential zones and a maximum of 7 household units in rural zones. The width of the ROW in urban residential zone servicing up to two household units is required to be 3.5m which includes a 2.7m traffic lane and a combined 0.8m berm and footpath width. The width of a ROW servicing between 3 and 6 household units in an urban residential zone is required to be 6m wide for the first 9m length and 5m wide thereafter. The traffic lane width within the 5m wide section is required to be 4m wide with the remaining 1m for footpath and/or berm.

The total ROW width in a rural area is required to be 8m wide which includes a 3m wide traffic lane and two 2.5m combined footpath and berm width on both sides of the ROW.

Discussion

Discussion at the workshop included the difficulty of locating a property off a long ROW with multiple properties. This issue is further exacerbated when emergency services are unable to locate the correct property on a ROW.

Discussion on passing bay requirements at the Options Workshop concluded that this is not necessary. This is because introducing a new requirement on the maximum length and maintaining the existing requirement of a wider (two-way) width at the start of the ROW will eliminate the need for passing bay requirements.

The requirements for ROWs are currently shown in the same table as the requirements for secondary roads (vested as road) in the Operative Plan. It is considered best practice to separate the requirements for ROWs from the requirements for secondary roads to minimise confusion and misinterpretation.

Options

Two options were discussed at the Options Workshop as shown in **Table 8.6**. Option 3 was added at the workshop to reflect that retaining the status quo may still be appropriate but with the addition of the maximum length requirement included.

Table 8.6 Options - ROWs

Option	Advantages	Disadvantages
Option 1 Status Quo requirements:		• Leads to poor maintenance

Option	Advantages	Disadvantages
• Maximum number of allotments • Requires wider width at the start of the ROW to allow for two-way traffic flow where 3 or more allotments are on a ROW.		
Option 2 Introduce new requirements: • Maximum length • Passing bay requirements	• Improved outcomes.	• May get push back from some developers
Option 3 Retain status quo but include maximum length requirement	• Improved outcomes.	• May get push back from some developers

Option 3 is the preferred option. Discussion included to retain the current formation requirement (wider at the front to allow for comfortable two-way traffic flow) and maximum number of allotments off a ROW. Participants discussed that introducing a new requirement on the maximum length requirement on ROWs will be beneficial to avoid long ROWs. Passing bay requirement was discussed and participants concluded that retaining the existing formation requirement (wider at the front) and introducing the maximum length requirement will eliminate the need for passing bay requirements. This will require the linkage to or transfer of some material from the Subdivision Chapter and consistency between the District Plan and the Code of Practice (currently being prepared) to ensure the desired outcomes are clear and can be assessed from a statutory perspective.

The assessment matters will be important and should include both amenity and operational aspects, such as outlining the proposed waste collection provisions, and meeting anticipated on-street parking demand. The matters need to be developed with consideration of the Code of Practice objectives and Subdivision Chapter so there is consistency.

Recommendation

It is recommended that further discussion and analysis is required to agree on the maximum length requirement on a right-of-way, and to determine the assessment matters.

8.2 Vehicle crossings

Vehicle crossing requirements are important to provide vehicle access which ensures safety and efficiency of the transport network.

Best practice review

The Plans reviewed generally include requirements on vehicle crossing width (minimum or maximum or both), maximum number of crossings, minimum distance to nearest intersection. Maximum number of vehicle crossings is dependent on the road frontage length and the road function or classification.

The NZ Transport Agency's Planning Policy Manual (Appendix 5B) requires gates to be recessed back from the highway a sufficient distance to allow any vehicle using the driveway to stop clear of the traffic lanes while the gate is being opened or closed.

Operative Plan

Vehicle crossing requirements are separated into two sections in the Operative District Plan; namely one section for all zones (except for Rural and Recreation 1 and 3 zones) and the other section for Rural and Recreation 1 and 3 Zones. Within all zones (except for Rural and Recreation 1 and 3 zones), there is a maximum vehicle crossing width requirement of 6m for Residential and Rural Residential (Brookfield Road) Zones. Commercial and Industrial zones are subject to a

less specific requirement of "*provide for two-way traffic onto and off the site except where a site is served by a service lane".*

Vehicle crossings in Rural and Recreation 1 and 3 Zones are required to be provided in accordance with seven diagrams (Diagram 1 -7) in the District Plan. The vehicle crossing requirements in the seven diagrams are somewhat ambiguous and require interpretation.

A summary of the existing vehicle crossing requirements is shown in **Table 8.1**.

Table 8.1 Summary of current vehicle crossing requirements

Zone	Max. width	Max. number of crossings	Min. spacing	Distance from intersection
Residential + Rural Residential (Brookfield Road)	Yes (6m)	-	Yes (>7m)	Yes (>10m)
Commercial & Industrial	"*provide for two-way traffic onto and off the site except where a site is served by a service lane"*		Yes (>7m)	Yes (>10m)
Rural & Recreation 1 and 3	Yes (by vehicle type)	-	Min. distance to existing access	Min. distance to access on a secondary road to an intersection

Discussion

Discussions at the Options workshop concluded that although no maximum number of crossings are specified in the current District Plan, there has not been an issue with visual dominance of vehicle crossings. However, participants agreed that introducing a maximum number of vehicle crossings requirement will help avoid the issue of visual dominance of vehicle crossings in future developments.

Options – All Zones except for Rural and Recreation 1 and 3 Zones

Two options were discussed at the Options Workshop as shown in **Table 8.2**.

Table 8.2 Options - Vehicle crossing requirements (All Zones except Rural and Recreation 1 and 3 Zones)

Option	Advantages	Disadvantages
Option 1 Status Quo	• May appeal to some developers	• Leads to poor outcomes with poor street amenity
Option 2 Introduce new requirements: • Max. width • Max. number of crossings	• Reduce visual dominance of vehicle crossings •	• May not be supported by some developers.

Option 2 is the preferred option with new requirements on maximum number of crossings and maximum vehicle crossing width (for Commercial and Industrial Zones) included to align with current best practice.

Options –Rural and Recreation 1 and 3 Zones

Two options were discussed at the Options Workshop as shown in **Table 8.3**. Option 2 was modified at the Options Workshop to include the minimum gate setback from road requirement.

Table 8.3 Options - Vehicle crossing requirements (Rural and Recreation 1 and 3 Zones

Option	Advantages	Disadvantages
Option 1 Status Quo	• May appeal to some developers	• Leads to poor outcomes with poor street amenity
Option 2 Introduce new requirements: • Max. width • Max. number of crossings • Min. spacing • Min. gate setback from road	• Reduce visual dominance of vehicle crossings •	• May not be supported by some developers.

Option 2 is the preferred option which requires introducing requirements to align with current best practice. These include requirements on maximum width, maximum number of crossings, minimum spacing and distance from intersections included. These vehicle crossing requirements are similar to the other zones with the additional requirement on minimum gate setbacks from the frontage road.

Recommendation

The proposed vehicle crossing requirements are outlined in **Table 8.4**. This is considered a clear way of specifying vehicle crossing requirements.

Table 8.4 Suggested vehicle crossing requirements

Zone	Max. width	Max. number of crossings	Min. spacing	Distance from intersection	Min. gate setback
Residential + Rural Residential	6m	X	>7m	>10m	N/A
Commercial & Industrial	X m	X	>7m	>10m	N/A
Rural & Recreation 1 and 3	X m	X	> X m	> X m	Gate to be recessed back from road to allow any vehicle to stop clear of the road traffic while the gate is being opened or closed.

Note: "X" to be confirmed in the next phase of the review.

Further discussions and analysis are required to complete **Table 8.4** with specific vehicle crossing requirements, and to determine the associated assessment matters when an application does not comply with the vehicle crossing requirements.

9. Mode choice issues and options

9.1 End of trip facilities

Providing end of trip facilities (e.g. showers) is a way to encourage active transport. Cycle parking is also an important end of trip facility to encourage cycling and this is further discussed in Section 10.3.

Best practice review

Requirements for end of trip facilities such as showers, lockers and changing rooms have been introduced in Christchurch, Hamilton and Auckland for certain activities (above a certain scale) as listed below:

- Christchurch – showers and lockers for commercial activities, tertiary education and research activities and hospitals based on based on number of cycle spaces provided
- Hamilton – showers and changing rooms for all Central City Zone and Business Zones 1 to 7, based on number of cycle spaces provided
- Auckland - showers and changing area with space for storage of clothing for offices, education facilities, hospitals based on floor area range

Operative Plan

There is no requirement in the Operative Plan for end of trip facilities such as showers, changing rooms or lockers.

Discussion

The requirement for end of trip facilities such as showers, changing rooms or lockers are requirements in larger metropolitan areas. The number of end of trip facilities required under the Christchurch District Plan depends on the number of staff cycle parks required. The Christchurch District Plan requires one shower per every 10 staff cycle parks when 11 to 100 staff cycle parks are required. Adopting the recommended staff cycle parking rate of 1 space per 100m^2 GFA for an office activity (as detailed in **Table 10.4**), an office needs to be 1100m^2 GFA to require 11 staff cycle parks. Discussions at the workshop concluded that an office development of 1100m^2 GFA or more is very unlikely within the Timaru District. Therefore, a rule requiring end of trip facilities is likely to be ineffective. However, showers for some developments will be a requirement of the Building Code.

Options

A range of options for end of trip facilities were discussed at the Options Workshop as shown in **Table 9.1**.

Table 9.1 Options - end of trip facilities

Option	Advantages	Disadvantages
Option 1 Status Quo – no requirements for end of trip facilities	• Allows market to decide based on the demand they consider necessary • Reduces regulation costs to developers	• Barrier to cycling • Showers could be difficult to retrofit if they are not provided at the time of construction.
Option 2 Include requirements for showers for certain zone/activity based	• More likely to meet the expectations of current and potential cycle commuters.	• Additional cost to developers • Difficult to quantify staff numbers at application stage
Option 3 Include requirements for showers and lockers for certain zone/activity based	• More likely to meet the expectations of current and potential cycle commuters.	• Additional cost to developers • Difficult to quantify staff numbers at application stage.

Given the scale of developments in Timaru and the nature of the transport system it is not considered appropriate to require end of trip facilities. However, some developments are required to provide showers under the Building Code.

Recommendation

No change is recommended to the Operative Plan.

9.2 Public transport

Providing the necessary infrastructure and suitable road network configuration is important to support public transport. Public transport in Timaru may take a less formal route/bus stop approach in future (i.e. on-demand services are likely to work better in Timaru).

Best practice review

District Plans can promote public transport through the objectives and policies. For example, Christchurch District Plan Policy 7.2.1.6 is reproduced below:

7.2.1.6 Policy - Promote public transport and active transport

a. Promote public and active transport by:

- *ensuring new, and upgrades to existing, road corridors provide sufficient space and facilities to promote safe walking, cycling and public transport, in accordance with the road classification where they contribute to the delivery of an integrated transport system;*
- *ensuring activities provide an adequate amount of safe, secure, and convenient cycle parking and, outside the Central City, associated end of trip facilities;*
- *encouraging the use of travel demand management options that help facilitate the use of public transport, cycling, walking and options to minimise the need to travel; and*
- *requiring new District Centres to provide opportunities for a public transport interchange.*
- *encouraging the formation of new Central City lanes and upgrading of existing lanes in the Central City, where appropriate, to provide for walking and cycling linkages and public spaces.*
- *developing a core pedestrian area within the Central City which is compact, convenient and safe, with a wider comprehensive network of pedestrians and cycle linkages that are appropriately sized, direct, legible, prioritized, safe, have high amenity, ensure access for the mobility impaired and are free from encroachment.*

It is important that local authorities provide the necessary infrastructure and suitable road network configuration to support the bus services run by the regional councils. This requires both authorities working closely together at the planning phase. District Plans therefore generally do not include specific requirements around provision for public transport as it is operated by another party. However, Councils do encourage consideration of future proofing for public transport routes through their ODP processes. This provides the opportunity for consideration of route changes to service substantial new developments and then a conversation regarding the classification and design of new roads and bus related infrastructure can commence. If a service to that area could be feasible in the future, the classification and design of new roads becomes important at the planning phase. Infrastructure for bus stops is more problematic to future proof.

Some councils enable public transport related development such as interchanges and park & ride in their plans. CCC for example do this explicitly for their Transport Zone.

Operative Plan

There is no requirement in the operative plan regarding public transport provision.

Discussion

District Councils provide the necessary infrastructure to support the bus services run by the Regional Councils. Issues can arise when installing bus stop infrastructure such as seats or shelters in existing developments from a space and adjacent property owner objection perspective. The latter is a Local Government Act issue. In terms of District Plans it is

important to recognise public transport at a policy level to support any discussion over the roads that are identified as future public transport routes.

Environment Canterbury is in the process of investigating whether an on-demand, ride-sharing public transport system could work as a viable alternative to the current service. The latest update on May 2019[13] states that:

"*Timaru's public transport could progressively migrate to an on-demand service later in 2019, eventually replacing the existing service, with the exclusion of school services and the Temuka service. If the on-demand service does not go ahead, current funding sustainability challenges are likely to lead to an overhaul of the Timaru bus service, potentially resulting in reductions to frequency and coverage*".

Recommendations

No new rules are recommended. However, it is recommended that the objectives and policies developed for the new Plan incorporate the public transport related directions such as encouraging land use that supports public transport outcomes.

[13] http://www.metroinfo.co.nz/timaru/promos/Pages/An-On-Demand-Public-Transport-service-for-Timaru.aspx

10. Parking management options

10.1 Introduction

2018 review

The review of parking management options was undertaken by Abley separately in 2018. The review included the whole Timaru District except for Timaru City in the absence of a parking strategy for the City. The District Plan Review: Parking Research report (Abley, 2018) details the methodology and findings of the review. The scope of the 2018 review was to develop activity-based standards for car parking and cycle parking. The scope of that report was restricted to the rates for the quantum of parking to be provided. It was anticipated that a review of other requirements such as dimensions for car parks, manoeuvring, cycle stand attributes and locations will be undertaken in the next phase.

A review of car parking management approaches in a selected range of 2nd generation District Plans was included. The review identified a long list of potential approaches. An assessment was carried out to identify the advantages and disadvantages of each approach, and to eliminate any impractical approaches. A preferred approach was identified, the review identified the range of activity types and rates used in other District Plans, and in supporting research documents. An assessment was carried out to identify the appropriate activities and parking rates applicable for the Timaru District.

There is a consistent theme through the strategic documents that seeks an efficient and integrated transport system that provides a range of transport options for all people. This provides guidance for how the parking system should be managed. To align with the national and regional strategic objectives, parking management in the Timaru District should seek a better balance between the provision of car parking, which invariably encourages travel by car when it is cheap and in large supply; and encouraging the use of other modes of travel.

To understand parking management approaches used in other areas of New Zealand, Abley conducted a review of other District Plans. The District Plans were selected based on several considerations including whether they were 2nd Generation Plans and the population and attributes of the council area the plan services, and included; Christchurch, Waimakariri, Selwyn, Dunedin and Hamilton. Hamilton was included based on its approach to less able and alternative modes. The review of District Plans was limited to the approach to parking and loading. The review included identifying the parking and loading approaches used in the District Plan.

Key findings from the Abley (2018) report have been extracted and included in the following sections for completeness.

2019 review

As noted earlier, the review undertaken in 2018 excluded parking requirements within the Timaru City (defined as Commercial 1A and Commercial 1B areas within Timaru City). The review in 2019 included parking requirements in the Timaru City as one of the topics to progress onto identifying options (as shown in **Table 5.1**). Discussion on this topic is included in Section 10.2.

10.2 Car parking requirements

Best practice review

There are several approaches employed in District Plans to manage on-site parking for developments. These approaches include:

- Minimum parking requirements
  - By activity type
  - Contextual
  - Parking reduction factors
  - Shared parking
  - Payment in lieu of parking
- No parking requirement (zero parking)
- Maximum parking requirements

- No parking permitted

Traditionally District Plans have required parking on a 'minimum' basis for the type of activity to ensure sufficient parking is provided on site to meet estimated day to day parking demand. Requirements to meet peak demand such as the Christmas period for retail has not been included in Plans as this would result in excess parking provision for the rest of the year. This approach has meant that parking can be supplied at greater than the minimum specified if the developer wishes.

Maximum parking requirements on the other hand allow the developer to make a market-based decision on how much, if any, parking is to be provided up to a maximum amount. Therefore, maximum parking ratios can encourage development by reducing development costs. Maximum parking requirements can be a particularly useful tool for managing private vehicle travel in large city centres well served by active and public transport, and public car parking.

Auckland and Christchurch have maximum parking rates for some central city areas. Auckland has both a minimum and maximum rate for offices in Area 2. Hamilton applies minimum rates except in Business 1 to 7 zones where more than 10 car parking spaces are provided, parking space numbers must not exceed 125% of the minimum. Queenstown Lakes have both a minimum and maximum for the Frankton Flats Special Zone (B) and exceeding the maximum triggers a series of assessment matters. Tauranga and Dunedin require minimum parking rates.

In locations where walking, cycling and public transport are not regarded as realistic alternatives, and there is no off street public car parking, maximum ratios can be counter-productive if they reduce public parking availability and cause parking spill-over problems without having a significant impact on mode choice or without generating the anticipated economic benefits. Most plans reviewed still require minimums however there is generally scope to reduce supply where appropriate either through the assessment matters or reduction factors. For example, Christchurch and Tauranga have introduced 'parking reduction factors', these permit reductions in the minimum parking requirements if certain criteria are met. The criteria are generally related to the following:

- Accessible to a frequent public transport service and / or a cycle route
- Within a short walk of a commercial centre
- Is a mixed use development (where parking can be shared between the uses and / or customers make multi-purpose trips)
- Implementing a travel plan to encourage and support other modes.

A summary of the different approaches used in the reviewed District Plans is shown in **Table 10.5**. For comparison, the table also includes the existing Timaru Operative District Plan.

Table 10.1 Summary of District Plan car parking requirements (extracted from Table 5.1 District Plan Review: Parking Research (Abley ,2018)

	Timaru	Christchurch	Waimakariri	Selwyn	Dunedin	Hamilton
Parking minimums	All zones	Outside Central City			Required parking spaces may be used for car/cycle or motorcycle parking	Outside Central Commercial Activity Area
Contextual minimum parking			All zones	All zones		
Parking reduction factors		Outside Central City				
Shared parking		Through matters of discretion if parking minimum not met			Permitted if hours of operation do not overlap.	Through matters of discretion if parking minimum not met

	Timaru	Christchurch	Waimakariri	Selwyn	Dunedin	Hamilton
Payment in lieu of parking	Where parking spaces cannot be located on a site because of a rule in the District Plan or other practical difficulty		For sites with frontage to a Principal Shopping Street			
No parking requirement						In Central Commercial Activity Area
Parking maximums		Within Central City				
No parking permitted						

Operative Plan

The parking requirements in the operative District Plan no longer reflect best practice as they result in inefficient land use and often result in an oversupply of parking.

Discussion

After reviewing the possible car parking management approaches, and those used in other District Plans, a preferred approach was identified for different areas. As the zones for the replacement district plan have not yet been determined, the recommended approaches have been based on the existing zones.

Table 10.2 Recommended car parking management approach[14]

Area	Recommended Car Parking Approach
Timaru City Centre (Com 1A + Com 1B)	To be confirmed following development of a parking strategy for the town centre
Recreation Zones 1-3 Industrial Zones H and L Commercial Zones 1-3	Parking minimums, parking reduction factors, shared parking
Rural Residential Residential Zones 1-6 Rural Zones 1-5	Parking minimums

The parking minimum approach is best suited to where there are limited transport options. The primary mode of transport throughout the Timaru District is by private motor vehicle. Therefore, parking demands can be expected to be generated by new developments. The parking minimum approach ensures that those demands are managed on-site by the developer, and do not result in increased on-street parking pressure which becomes an issue for the council to manage. However, the recommended parking reduction factor and shared parking recognises that in some situations parking demand is lower, and aims to ensure that on-site parking does not over dominate the environment where there is no demand.

Activity based minimum car parking standards are proposed for all zones except for the Timaru City Centre. The operative District Plan has a very limited list of activities to which minimum standards are applied to. A narrow range of

[14] Table 6.1, District Plan Review: Parking Research (Abley ,2018)

activities generally leads to a conservative rate applied as a minimum which can result in unnecessary resource consent applications being generated. Thus, the first step in determining the parking standards was a review of the activity types used by other district plans. A list of the recommended activity types derived from the review of other District Plans is shown in **Table 10.3**.

Table 10.3 Activity types[15]

List of activities	Definition
Day Care Centres, Kohanga Reo	As per definitions in the Operative Plan Day Care Centres: "*Land or buildings used for the care during the day of children or for adults with disabilities, other than those residing on the site*" Kohanga Reo: *"A preschool facility"*
Primary School	**TDC to develop definition** The Operative Plan currently captures all education types in "Educational Establishments". The parking generation varies for different education facilities and thus it is recommended that this activity is split into primary, secondary and tertiary education.
Secondary School	**TDC to develop definition** As per above.
Tertiary education, research, training	**TDC to develop definition** As per above.
Places of assembly	**TDC to amend definition** The Operative Plan definition includes education and excludes theatres or cinemas. Suggested that TDC revise the definition to includes cinemas, theatres, concert venues, conference and private function facilities, arts and cultural centres, places of worship, community centres, halls and libraries. Education to be covered in separate activity type
Sports fields	**TDC to develop definition**
Sports courts	**TDC to develop definition**
Gymnasiums	**TDC to develop definition** Suggestion for a new definition: "*means a building or room/s used for organised or instructed indoor exercise, including aerobics or weight/circuit training, and ancillary facilities such as health care services, spa/sauna, a small apparel sales area and cafeteria for patrons. Specialised facilities, such as squash courts, are considered ancillary to the gymnasium for the purposes of calculating parking requirements.*"
Hotels / Motels	**TDC to resolve definition.** The Operative Plan includes Travellers Accommodation. For the purposes of parking rates its recommended that this is split into Hotels/Motels and Backpackers / Hostels.
Boarding / Lodging House / Hostel	**TDC to update definition.** It is recommended that TDC update the "Boarding or Lodging House or Hostel" definition to include travellers accommodation as well as private boarding / lodging houses e.g. student hostels servicing education activities. It is also recommended that camping grounds / caravan parks are not included in this definition.
Hospital	**TDC to update definition**

[15] Table 7.1, District Plan Review: Parking Research (Abley ,2018)

List of activities	Definition
	Suggestion "*Any private or public hospital for the reception and treatment of persons requiring medical treatment" (NB. This is consistent with the Operative Plan definition)*
Health care services	**TDC to create definition** Suggestion "*Means the use of land and/or buildings for providing physical or mental health or welfare services, including: medical practitioners; dentists and dental technicians; opticians; physiotherapists; medical social workers and counsellors; midwives; paramedical practitioners; alternative therapists; providers of health and well-being services; diagnostic laboratories; and accessory offices. It excludes: Hospitals"*
Industrial activities	**TDC to resolve definition** Operative Plan definition for Industry states "*The use of any premises or land used or proposed to be used for the production, processing, assembly, servicing, testing, repair and/or storage and warehousing of any materials, goods or products and also includes transportation facilities, and sales facilities that are a part of the industry*" For parking rates, it is necessary to differentiate between manufacturing and warehousing / storage / distribution as well as research and training.
Warehousing and storage	**As per above, TDC to resolve definition.** Suggestion: "*means the storage and sorting of materials, goods or products pending distribution.*"
Residential Activity	**TDC to consider creating a new definition** The Operative Plan includes "Household Unit" in the schedule of definitions. The associated definition is "*See definition in section 2 of the Building Act 1991 which currently reads: 'any building or group of buildings, or part of any building or group of buildings, used or intended to be used solely or principally for residential purposes and occupied or intended to be occupied exclusively as the home or residence of not more than one household; but does not include a hostel or boarding house or other specialised accommodation'".* For the purposes of parking it is recommended that a "Residential Activity" is listed. The suggested definition for Residential Activity is *"Means the use of land and buildings by people for the primary purpose of living accommodation"*
Home occupation	**TDC to consider updating definition** Suggested definition: "*Means an occupation, craft, service or profession that is secondary to the use of the site for a residential activity"*
Retirement Village	**TDC to create definition** Suggestion: "*means premises (including any land and associated buildings) within a complex of premises for occupation as residences predominantly by persons who are retired and any spouses or partners of such persons."*
Care facility (includes care homes within a retirement village)	**TDC to resolve definition.** Currently included as "Community Care Facility (restrained)" however it is suggested that TDC consider replacing this with a "care facility" activity. Suggestion: "*means a facility providing rest home care within the meaning of the Health and Disability Services (Safety) Act 2001, or a home for the residential care of people with special needs, and/or any land or buildings used for the care during the day of elderly persons or people with special needs."*
Office	**TDC to resolve definition.** The definition for Office in the Operative Plan is: *"Any of the following:* *(i) Administrative offices where the administration of an organisation, whether trading or non-trading, is conducted.*

List of activities	Definition
	(ii) Commercial offices such as banks, insurance agents, typing services, duplicating services and estate agents, being places where trade (other than that involving the immediate exchange of money for goods or the display or production of goods) is transacted. *(iii) Professional offices such as the offices of accountants, solicitors, architects, surveyors, engineers, where a professional service is available and carried out."* For the purposes of parking, it is recommended that the definition be split to "Offices" and "Commercial Services" where offices include administrative offices and professional offices and Commercial Services include those activities currently described in Commercial Offices.
Commercial Services	**TDC to resolve definition.** As per above. It is recommended that TDC create a new definition. It is recommended that Commercial Services include Commercial Offices and Personal Services as currently defined in the Operative Plan.
Food and beverage	**TDC to create definition.** The Operative Plan currently includes Restaurants. It is recommended that a new definition "Food and Beverage" be created which will incorporate other activities in addition to restaurants. A new activity, "Food and Beverage" could have the following definition: "*means the use of land and/or buildings primarily for the sale of food and/or beverages prepared for immediate consumption on or off the site to the general public. It includes restaurants, taverns, cafés, fast food outlets, takeaway bars and any ancillary services. It excludes supermarkets.*"
Supermarket	**TDC to create definition.**
General retail	**TDC to resolve definition** The Operative Plan has a definition for "Retailing or Shop" which is "*The direct sale or hire to the public from a site and/or the display or offering for sale or hire to the public on site of goods, merchandise or equipment and any ancillary work rooms, but shall exclude premises licensed under the Sale of Liquor Act 1989, restaurants, roadside stalls, service stations or vehicle or boat sales."* However, for parking rates, it is necessary to distinguish between general retail and slow trade / large format retail. Suggestion: "*means the use of land and/or buildings for displaying or offering goods for sale or hire to the public. It excludes individual tenancies with a GFA over 450m^2 (see large format retail), trade / yard--based suppliers and service stations.*"
Large format retail	**TDC to create a definition** Suggestion: "*means any individual retail tenancy with a GFA greater than 450m^2. It excludes trade / yard--based suppliers and service stations"*
Service station	**TDC to resolve definition** The current definition for Service Station includes mechanical repair and servicing of motor vehicles. For the purposes of parking rates it is recommended that these definitions are split.
Trade and yard based retail (including garden centres)	**TDC to create definitions.** It is recommended that TDC create a definition for Trade / Yard based retail which includes car and boat yards, hardware stores, trade suppliers, hire services and garden centres.
Motor garage	**TDC to resolve definition** As per service station.

Recommended car parking requirements (except Timaru City Centre)

Striking the right balance in the minimum parking rate applied is important as a rate which is too onerous will likely result in an excessive number of consent applications. However, a rate which is too low may result in developments under-supplying car parking. An under-supply of car parking generally results in overspill to the adjacent road network.

To inform the identification of rates for the Timaru District Plan, a review of the different minimum car and cycle parking rates applied for each activity type was conducted (Appendix C and D in the Abley (2018) report respectively). This review included the rates used in other District Plans and the 85th percentile parking demand for the activity as reported in the *NZ Transport Agency Research Report 453: Trips and Parking related to land use* (RR453). Where the rates varied significantly, scenario testing was undertaken to identify an appropriate car parking requirement for each activity type.

Table 10.4 contains the list of recommended car parking rates including an explanation as to how the rate was selected. Note that while some district plans separate the car parking requirements into staff and a visitor component, this approach is not recommended for Timaru. Other district plans separate the requirement so that they may apply a rule that requires staff spaces to be marked for the exclusive use of staff. However, marking staff spaces does not align with Crime Prevention Through Environmental Design (CPTED) principles as it identifies vehicles that are likely to be unattended for long periods of time (7-8 hours). Marking staff spaces can sometimes result in these vehicles being burgled or damaged.

Table 10.4 Car Parking Rates Selection[16]

List of activities	Car parking requirement	Explanation
Day Care Centres, Kohanga Reo	0.3 per child / person being cared for	Following scenario testing, 0.3 per person enrolled has been adopted.
Primary School	0.04 per student and 0.5 per FTE	The rates for Christchurch and Waimakariri have been adopted as these were agreed with the Ministry of Education (MoE) during development of these plans.
Secondary School	0.02 per student and 0.5 per FTE	As per primary school.
Tertiary education, research, training	0.3 per student	The value from NZTA's RR453 has been adopted
Places of assembly	0.25 per person the facility is designed to accommodate	Rates have been determined based on scenario testing
Sports fields	0.3 per 100m^2 playing area	Rates determined based on scenario testing
Sports courts	6 per court	Following a review of other District Plans and scenario testing, this rate has been selected.
Gymnasium	6 per 100m^2 GFA	From RR453
Hotels/Motels	1.1 per unit	Based on a common rate in other plans and professional judgement
Boarding / Lodging House / Hostel	0.25 per bed	Based on a common rate in other plans and professional judgement
Hospital	1.5 per bed	Based on RR453
Health care services	3 per practitioner	Common rate in other plans
Industrial activities	2 per 100m^2 GFA	Common rate in other plans
Warehousing and storage	0.8 per 100m^2 GFA	Based on scenario testing, RR453 and professional judgement

[16] Table 7.2, District Plan Review: Parking Research (Abley ,2018)

List of activities	Car parking requirement	Explanation
Residential units	1 per unit for dwellings up to 75m^2 GFA. 2 per unit for dwellings greater than 75m^2 GFA.	Based on a common rate in other plans and professional judgement
Home business	1 per staff member not living on site (in addition to residential component)	Common rate in other plans
Retirement Village	1 per unit	Common rate in other plans. Aligns with rate for smaller residential units
Care facility	0.3 per bed	Common rate in district plans which aligns with RR453
Office	2.5 per 100m^2 GFA	Rate determined based on scenario testing
Commercial Services	3.2 per 100m^2 GFA	Informed by other district plan rates and the rate in NZTA RR453
Food and beverage retail, restaurants, bars, taverns	10 per 100m^2 GFA	Rate determined based on a review of other plans, scenario testing and professional judgement
Supermarket	4.5 per 100m^2 GFA	Informed by our experience working with supermarkets
General retail	4 per 100m^2 for the first 10,000m^2 GFA 3 per 100m^2 GFA thereafter	Informed by NZTA RR453 and professional judgement
Large format retail	3.5 per 100m^2 GFA	Informed by rates in other plans and professional judgement
Trade and yard based retail (including garden centres)	2 per 100m^2 GFA and 1 per 100^2 of outdoor display area	Informed by rates in other plans, NZTA RR453 and professional judgement
Service station	1 per filling point and 0.5 per staff employed on the site	Informed by rates in other plans and our experience with service stations.
Motor garage	4 per work bay	Professional judgement

Options – Parking requirements (Timaru City Centre)

A range of options for the overall approach to the Timaru City Centre (Commercial 1A and 1B areas) parking were discussed at the Options Workshop as shown in **Table 10.5**. Option 5 was added at the workshop to reflect that retaining minimums may still be appropriate but with the preference towards cash in lieu such that Council has control on parking provision within the Timaru City Centre.

Table 10.5 Options - Timaru City Centre (Commercial 1A and 1B) parking requirements

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo – minimums and cash in lieu	• Allows developers to supply more if they want to	• Potential to facilitate an over supply of parking
Option 2 Parking minimums with reduction factors and shared parking	• Better facilitates good use of land if set at right level	• Need good public transport and cycling options to support the reduction

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 3 Cash in lieu	• Council has control on parking provisions within the Timaru City	• Limited Council land to provide parking may result in undersupply of parking
Option 4 No parking permitted	• Potential to encourage development	• Potentially requires TDC to lead consolidated/shared parking arrangements which could involve levied rates.
Option 5 Retain status quo with amendments to encourage cash in lieu.	• Greater potential for quality city centre • Council has control on off-site parking provisions	• Limited Council land to provide parking may result in undersupply of parking.

In the absence of a parking strategy for the Timaru City, discussions at the Options Workshop around the likely growth within the City and the associated parking management options indicated that Council prefer control on parking provisions within the Timaru City Centre. However, it is acknowledged that on-site parking may be more appropriate for certain activities (e.g. residential activity). Therefore, Option 5 in **Table 10.5** was selected as the preferred option for the parking requirements in Timaru City Centre (Commercial 1A and 1B areas). However, discussion at the Technical Working Group meeting noted that the Timaru City Hub strategy is currently being developed and the parking requirements in the Timaru City Centre should align with the Timaru City Hub strategy.

Recommendation

Parking requirements for the Timaru City Centre to be confirmed following the completion of the Timaru City Hub strategy.

10.3 Cycle parking requirements

Best practice review

A summary of cycle parking requirements in the reviewed District Plans is shown **Table 10.6**.

Table 10.6 Summary of District Plan cycle parking requirements (extracted from Table 5.1 District Plan Review: Parking Research (Abley ,2018)

	Timaru	Christchurch	Waimakariri	Selwyn	Dunedin	Hamilton
Cycle parking minimums		All zones	All zones	All zones, based on parking supply up to maximum		Only in central city
Minimum end of trip facilities		All zones				Only in central city
No Requirement	No requirement for cycle parking				Required parking spaces may be used for car/cycle or motorcycle parking	

To inform the identification of rates for the Timaru District Plan, a review of the different cycle parking rates used in other District Plans was conducted (refer to Appendix C in the District Plan Review: Parking Research report (Abley, 2018) for

further details). Where the rates varied significantly, scenario testing was undertaken to identify an appropriate cycle parking requirement for each activity type.

Discussion

It is recommended that minimum cycle parking requirements are applied by activity type for all zones. Minimum requirements for cycle parking will ensure that future developments are catering for active modes in addition to motor vehicles.

Recommended cycle parking requirements

Table 10.7 contains the list of recommended cycle parking rates including an explanation as to how the rate was selected. The visitor and staff components have been separated as it is recommended that design and location criteria be applied depending on who will use the cycle parking and their length of stay. For example, visitor parking should be located in close proximity to a main entrance and staff parking should be located in a covered and secure area. Note that the cycle parking requirements are based on the number of bicycles that can be parked. Some stands such as that shown in **Figure 10.1** provides spaces for two bicycles, one on either side of the stand. Thus, if these stands are utilised then the number of stands required will be half the number of spaces required.

Figure 10.1 Cycle stand with two cycle parks

Table 10.7 Recommended cycle parking rates[17]

List of activities	Cycle parking requirement		
	Short term (visitor)	Long term (student/staff/resident)	Explanation
Day Care Centres, Kohanga Reo	1 space per 10 children	1 space per 3 FTE employees	Informed by Christchurch rates and scenario testing
Primary School	1 space per 30 students	1 space per 7 students	Informed by Christchurch rates and our experience with schools

[17] Table 7.3, District Plan Review: Parking Research (Abley, 2018)

List of activities	Cycle parking requirement		
	Short term (visitor)	Long term (student/staff/resident)	Explanation
Secondary School	1 space per 100 students	1 space per 5 students	Informed by Christchurch rates and our experience with schools
Tertiary education, research, training	1 space/ 100 FTE students	1 staff space per 4 FTE staff and 1 student space per 4 FTE students	Christchurch rates have been adopted
Places of assembly	1 space per person the facility is designed to accommodate	10% of visitor requirements	Professional judgement
Sports fields	1 space per 15 participants the facility is designed to accommodate	Nil	Review of rates in other plans and professional judgement.
Sports courts	1 space per 15 participants the facility is designed to accommodate	Nil	Review of rates in other plans and professional judgement.
Gymnasium	1 space per 100m^2 GFA	1 space per 300 m^2 GFA	Rate selected using professional judgement and scenario testing.
Hotels/Motels	1 space per 20 beds	1 space per 50 beds (2 spaces minimum)	Informed by the Christchurch rates and using professional judgement.
Boarding / Lodging House / Hostel	1 space per 20 beds	1 space per 50 beds (2 spaces minimum)	Informed by the Christchurch rates and using professional judgement.
Hospital	1 space per 1000 m^2 GFA	1 space per 300m^2 GFA	Christchurch rates have been adopted
Health care services	1 space per 200 m^2 GFA	1 space per 300 m^2 GFA	Rate selected following scenario testing.
Industrial activities	Nil	1 space per 1,000m^2 GFA (2 spaces minimum)	Informed by rates in other plans and professional judgement.
Warehousing and storage	Nil	1 space per 1,500m^2 GFA (2 spaces minimum)	Informed by rates in other plans, scenario testing and professional judgement.
Residential units	Nil	1 residents' space per dwelling without a garage	Informed by rates in other plans and professional judgement.
Home business	Nil	Nil	Common rate in other plans
Retirement Village	1 space per 10 units, for developments with 10 or more units	Nil	Christchurch rates have been adopted
Care facility	1 space per 50 clients	1 space per 30 clients	Christchurch rates have been adopted
Office	1 space per 500 m^2 GFA (2 spaces minimum)	1 space per 100 m^2 GFA	Informed by rates in other plans and scenario testing

List of activities	Cycle parking requirement		
	Short term (visitor)	Long term (student/staff/resident)	Explanation
Commercial Services	1 space per 500 m^2 GFA (2 spaces minimum)	1 space per 200 m^2 GFA	Christchurch rates have been adopted
Food and beverage retail, restaurants, bars, taverns	1 space per 100 m^2 GFA (2 spaces minimum)	1 space per 100 m^2 GFA	Informed by rates in other plans, scenario testing and professional judgement.
Supermarket	1 space per 300m^2 GFA (2 spaces minimum)	1 space per 500m^2 GFA	Informed by scenario testing and our experience with supermarkets.
General retail	1 space per 150 m^2 GFA (2 spaces minimum)	1 space per 500 m^2 GFA	Informed by scenario testing and professional judgement.
Large format retail	1 space per 600 m^2 GFA (2 spaces minimum)	1 space per 750m^2 GFA	Informed by scenario testing and professional judgement.
Trade and yard based retail (including garden centres)	1 space per 1000 m^2 GFA (2 spaces minimum)	1 space per 750 m^2 GFA	Christchurch rates and scenario testing have informed the rates selection
Service station	2 spaces	Nil	Professional judgement
Motor garage	Nil	Nil	Professional judgement

Note that in town centre locations where there is no building setback from the road boundary it is not appropriate to require visitor parking as there would be no suitable location for this parking. In this case it is recommended that visitor cycle parking is not required, however Council will need to consider providing an appropriate number of visitor cycle parking spaces in public space instead.

10.4 Loading requirements

Best practice review

A summary of loading requirements in the reviewed District Plans is shown in **Table 10.8**.

Table 10.8 Summary of District Plan loading requirements (extracted from Table 5.1 District Plan Review: Parking Research (Abley ,2018)

	Timaru	Christchurch	Waimakariri	Selwyn	Dunedin	Hamilton
Loading minimums		All zones	All zones			All zones
Other				Rule that all loading must be accommodated on site.	Contextual minimum loading in all zones	

Discussion

It is recommended that minimum loading space requirements are applied by activity type for all zones. Minimum requirements for loading spaces will help prevent loading from occurring on-street.

Recommended loading requirements

To inform the identification of rates for the Timaru District Plan, a review of the different loading space requirements in other District Plans was conducted (refer to Appendix D in the District Plan Review: Parking Research report (Abley, 2018) for further details).

Table 10.9 contains the list of recommended loading space requirements including an explanation as to how the rate was selected. Note that district plans often have different approaches regarding the dimensions of the spaces required. Some plans simply require spaces, with the applicant determining the size of the spaces, and others are more specific regarding size requirements. To ensure the loading spaces provided are fit for purpose, it is recommended that the District Plan include specific requirements for the different types of loading vehicle e.g. 99th percentile car bay. The loading spaces required are also a minimum, thus applicants may provide additional spaces as required to meet operational needs.

Table 10.9 Recommended Loading Rates[18]

List of activities	Minimum loading space requirement	Explanation
Day Care Centres, Kohanga Reo	Centres with less than 20 children enrolled Nil Centres with more than 20 children enrolled 1 99th percentile car bay	Informed by the Christchurch District Plan rate.
Primary School	Schools with less than 100 students 1 99th percentile car bay Schools with 100 or more students 1 99th percentile car bay 1 heavy vehicle bay to accommodate an 8m truck	Informed by the Christchurch District Plan rate.
Secondary School	Schools with less than 100 students 1 99th percentile car bay Schools with 100 or more students 1 99th percentile car bay 1 heavy vehicle bay (to accommodate an 8m truck or the DHB dental van - whichever is greater)	Informed by the Christchurch District Plan rate.
Tertiary education, research, training	Schools with less than 100 students 1 99th percentile car bay Schools with 100 or more students 1 99th percentile car bay and 1 heavy vehicle bay (to accommodate at least an 8m truck)	Professional judgement
Places of assembly	1 heavy vehicle bay (to accommodate at least an 8m truck)	Common rate in other district plans. Professional judgement used for the size of the heavy vehicle bay.
Sports fields	Nil	No requirement is common in other district plans.
Sports courts	Nil	No requirement is common in other district plans.
Gymnasiums	1 99th percentile car bay	Professional judgement

[18] Table 7.4, District Plan Review: Parking Research (Abley, 2018)

List of activities	Minimum loading space requirement	Explanation
Hotels / Motels	1 heavy vehicle bay per 100 bedrooms/units (to accommodate at least an 11.5m truck) 1 99th percentile car bay per 50 bedrooms	Professional judgement based on our experience with hotels
Boarding / Lodging House / Hostel	1 heavy vehicle bay per 100 bedrooms/units (to accommodate at least an 11.5m truck) 1 99th percentile car bay per 50 bedrooms	Professional judgement based on our experience with hotels
Hospital	1 heavy vehicle bay	Professional judgement. Note: ambulance bays are not included in the rate as this will depend on whether emergency facilities are provided. These should be provided if operationally required.
Medical and Health Service Activity	1 99th percentile car bay (or ambulance bay as appropriate)	Professional judgement.
Industrial activities	GFA less than 1000m^2 1 99th percentile car GFA 1000m^2 or greater 1 heavy vehicle bay per 2000m^2 GFA (to accommodate at least an 11.5m truck)	Professional judgement.
Warehousing and storage	1 heavy vehicle bay per 2000m^2 GFA (to accommodate at least an 11.5m truck)	
Residential Activity	Nil	No requirement is common in other district plans.
Home occupation	Nil	No requirement is common in other district plans.
Retirement Village Premises	Nil	No requirement is common in other district plans.
Care facility (includes care homes within a retirement village)	Care facility with less than 20 residents Nil Care facility with more than 20 persons 1 heavy vehicle bays (to accommodate at least an 8m truck)	Professional judgement and our experience working with rest homes.
Office	Offices with a GFA less than 1000m^2 Nil Offices with a GFA of 1000m^2 or greater 1 99th percentile car bay	Professional judgement
Commercial Services	GFA less than 200m^2 Nil GFA of 200m^2 or greater 1 99th percentile car bay	Professional judgement
Food and beverage	GFA less than 250m^2 Nil GFA 250m^2 or greater 1 heavy vehicle bay (to accommodate at least an 8m truck)	Professional judgement

List of activities	Minimum loading space requirement	Explanation
Supermarket	For GFA less than 1000m^2 1 heavy vehicle bay (to accommodate at least an 8m truck) For GFA greater than 1000m^2 1 heavy vehicle bay (to accommodate at least a 11.5m truck)	Professional judgement
General retail	GFA less than 250m^2 Nil GFA 250-1500m^2 1 99th percentile car bay GFA 1500m^2 or greater 1 99th percentile car bay per 5000m^2 GFA (minimum 1) 1 heavy vehicle bay (to accommodate at least an 8m truck) per 5000m^2 GFA (minimum 1 bay)	Professional judgement
Large format retail	GFA less than 1000m^2 1 heavy vehicle bay (to accommodate at least an 8m truck) GFA 1000m^2 or greater 1 heavy vehicle bay (to accommodate at least a 11.5m truck)	
Service station	1 unmarked heavy vehicle bay for fuel deliveries	Professional judgement based on our experience working with service stations.
Trade and yard based retail (including garden centres)	GFA less than 2000m^2 1 heavy vehicle bay (to accommodate at least an 8m truck) GFA 2000m^2 or greater 1 heavy vehicle bay (to accommodate at least a 11.5m truck)	
Motor garage	Nil	Professional judgement

11. Development of technical standards

It is recommended that the appropriate transport technical standards are provided in the District Plan and references to external transport technical standards are included where appropriate.

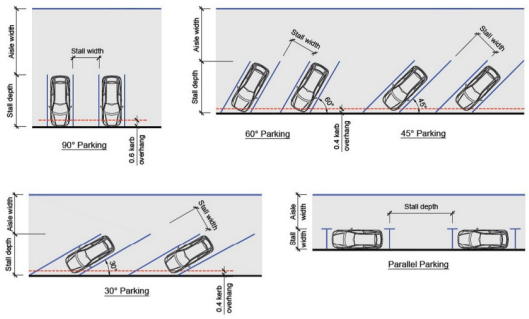
11.1 Parking technical standards

Car parking

This chapter reviews technical standards for car and cycle parking and loading and recommends those that should be included in the District Plan. These technical standards include requirements regarding the dimensions, location, availability, and accessibility of the spaces to ensure they are able to be used safely and efficiently and without impeding other users. Note that some of the standards for car and cycle parking and loading are very similar and could be consolidated when the standards are drafted.

To inform the identification of technical standards for parking, a review of the requirements in the operative Timaru District Plan, Christchurch District Plan and ASNZS 2890.1:2004 was conducted (refer to Appendix E in the District Plan Review: Parking Research report (Abley, 2018)). **Table 11.1** contains the list of recommended requirements including an explanation as to why the requirements are needed.

Table 11.1 Recommended Parking Technical Standards

<table>
<tr><th>Recommended standard</th><th>Explanation</th></tr>
<tr><td>Car parking dimensions are to be measured in accordance with the diagram below (retrieved from Christchurch District Plan).
 

<table>
<tr><th colspan="5">90 Degree Parking Angle</th></tr>
<tr><th>Type of use</th><th>Stall Width (m)</th><th>Stall Depth (m)</th><th>Aisle Width (m)</th><th>Kerb Overhang (m)</th></tr>
<tr><td>Long term</td><td>2.4</td><td rowspan="3">5.0</td><td>6.7</td><td rowspan="3">0.6</td></tr>
<tr><td>Medium term</td><td>2.5</td><td>6.4</td></tr>
<tr><td>Short term</td><td>2.6</td><td>6.3</td></tr>
<tr><td>Mobility</td><td>3.6*</td><td>5.0</td><td>6.7</td><td>0.6</td></tr>
</table></td><td>Car parking dimensions have been informed by ASNZ2890.1:2004 and the reviewed District Plans.

Specifying dimensions is important to ensure vehicles are able to manoeuvre into and out of the parking spaces and that the spaces are fit for purpose.</td></tr>
</table>

Recommended standard	Explanation
60 Degree Parking Angle **Type of use** / **Stall Width (m)** / **Stall Depth (m)** / **Aisle Width (m)** / **Kerb Overhang (m)** Long term: 2.4 / 5.0 / 4.9 / 0.6 Medium term: 2.5 / 4.6 Short term: 2.6 / 4.3	
45 Degree Parking Angle **Type of use** / **Stall Width (m)** / **Stall Depth (m)** / **Aisle Width (m)** / **Kerb Overhang (m)** Long term: 2.4 / 5.0 / 3.9 / 0.4 Medium term: 2.5 / 3.7 Short term: 2.6 / 3.5	
30 Degree Parking Angle **Type of use** / **Stall Width (m)** / **Stall Depth (m)** / **Aisle Width (m)** / **Kerb Overhang (m)** Long term: 2.1 / 4.0 / 3.1 / 0.4 Medium term: 2.3 / 3.0 Short term: 2.5 / 2.9	
Parallel Parking **Type of use** / **Stall Width (m)** / **Aisle Width (m)** / **Stall Depth (m)** Long term: 2.1 / 3.0 / 6.3 Medium term: 3.3 / 6.1 Short term: 3.6 / 5.9 Mobility: 3.5* / 3.3 / 7.4 Long term parking: generally all day parking. Medium term parking: generally two to four hour parking. Short term parking: generally two hour parking or less. *1.1m of which may be a shared area	
Stall widths shall be increased by 300mm where they abut permanent obstructions and if obstructions are present on both sides of the parking space, the width shall be increased by 600mm. **It is recommended that TDC include an advise note that ASNZS2890.1 can be referred to for design guidance in buildings.**	This allows for “shy space” for manoeuvring adjacent to an obstruction and ensures parking spaces are accessible. The requirement is informed by other plans and ASNZ290.1:2004.

Recommended standard	Explanation
Parking spaces shall be located so as to ensure that no vehicle is required to carry out any reverse manoeuvring when moving from any vehicle access to any parking space, except for parallel parking spaces. Parking spaces shall be located so that vehicles are not required to undertake more than one reverse manoeuvre when manoeuvring out of any parking space.	This ensures the parking spaces are easily accessible (and will therefore be used). The requirements have been adopted from the Christchurch District Plan.
Manoeuvring within car parking areas shall be designed to accommodate an 85th percentile car except for critical areas where tracking shall accommodate a 99th percentile car. Critical areas include all aisles, in or between major structures or locations where there is a change in grade.	This rule has been informed by the rule in Christchurch District Plan. It exists to ensure vehicles are able to circulate around the parking area without requiring multiple manoeuvres. It also minimises the chance of vehicles being damaged when manoeuvring or parked in a car park..
Maximum gradient within car parking spaces, Measured parallel to angle of parking – 1 in 20 (5%) Measured in any other direction – 1 in 16 (6.25%)	In accordance with AS/NZS 2890.1:2004
Any space required for parking shall be available during the hours of operation and shall not be diminished by the subsequent erection of any structure, storage of goods, or any other use.	This requirement ensures parking spaces are always available for the intended use.
The whole of the parking area, access drives, manoeuvring areas and aisles shall, before the commencement of the activity to which those parking and loading spaces relate, and thereafter for as long as that activity is continued, be formed, provided with a sealed surface, drained, marked out or delineated, and maintained	As per the operative District Plan.

Cycle Parking

To inform the identification of technical standards for cycle parking, a review of the requirements in three District Plans was conducted (refer to Appendix F in the Abley (2018) report). NZTA have also recently published cycle parking standards[19]. **Table 11.2** contains the list of recommended requirements including an explanation as to why these are required.

Table 11.2 Recommended Cycle Parking Technical Standards

	Recommended standard	Explanation
Type	All stands shall be securely anchored to an immovable object	This is a common requirement in other plans. It is important to include this requirement to minimise the theft of bicycles secured to stands.
	Stands shall support the bicycle frame and front wheel	This is a common requirement in other plans. It is important to include this requirement as stands which do not support the frame and front wheel can cause damage to the bicycles attached to them e.g. wheels may buckle
	Stands shall allow the bicycle frame to be secured	This is a common requirement in other plans. It is important to include this requirement to minimise the theft of bicycles.

[19] NZTA (2019) Cycle parking planning and design: cycling network guidance technical note. https://www.nzta.govt.nz/assets/resources/cycle-parking-planning-and-design/cycle-parking-planning-and-design.pdf

	Recommended standard	Explanation
	Long term parking shall be located in a covered and secure area.	This requirement is common in other district plans and aligns with best practice for encouraging staff and residents to cycle.
Location	Cycle parking shall be constructed to allow at least 1.1m of clear space between parking stands or other obstruction	This requirement ensures that the cycle stands are functional for people using them. Professional judgment has been applied for this requirement.
	Short term cycle parking shall be clearly signposted or visible to cyclists entering the site	This requirement aligns with best practice as short term cycle parking is unlikely to be used unless it is highly conspicuous when approaching the destination. This is a common requirement in other plans.
	Cycle parking shall be located so as not to create a hazard for pedestrians, including people whose mobility or vision is restricted. If in a publicly accessible space, cycle parking shall be detectable by visually impaired pedestrians through use of a kick stand or other method.	This requirement is applied in other plans and ensures that pedestrian routes are not compromised by the location of cycle parking. This requirement also allows visually impaired pedestrians who use a cane to identify and avoid the parking stands.
	Cycle parking facilities must be located so that the bicycle is at no risk of damage from vehicle movements.	This requirement prevents cycle parking being positioned in a location that puts bicycles at risk of being damaged. It is commonly applied in other plans.
	Short term cycle parking shall be located as close as possible to and no more than 15m from at least one main pedestrian public entrance to the building/activity. Where there is more than one public entrance to the building, it is recommended that visitor parking is apportioned between entrances in accordance with their potential usage.	This requirement aligns with best practice as the utilisation of short term cycle parking is dependent on its proximity to the entrance of the destination building.
	Long term cycle parking facilities shall be located so they are easily accessible for staff / residents / students of the activity	The utilisation of cycle parking is dependent on how convenient the locations of the stand are to the user. This ensures that stand locations are suitable and routes to the stands are not obstructed. This requirement is noted in some plans.
Availability	All cycle parking spaces which are used during the hours of darkness shall be illuminated in accordance with the relevant lighting rule	This requirement aligns with CPTED principles.
	Cycle parking facilities must be available during the hours of operation and must not be diminished by the subsequent erection of any structure, storage of goods, landscape planting or any other use.	This requirement ensures cycle parking is available for use after construction and aligns with the requirement for car parking and loading.
End of trip facilities	For End of trip facilities 1-10 staff cycle parks required: none >11 staff cycle parks required: 1 shower for every 10 staff cycle parks	A requirement to provide end of trip facilities aligns with best practice and is common in other plans.

Loading

To inform the identification of technical standards for loading, a review of the requirements in the operative Timaru District Plan, Christchurch District Plan and ASNZS 2890.2:2004 was conducted (refer to Appendix G). **Table 11.3** contains the list of recommended requirements including an explanation as to why these are required.

Table 11.3 Recommended Loading Technical Standards

<table>
<tr><th>Recommended standard</th><th>Explanation</th></tr>
<tr><td>The size of the loading bay to be provided shall align with the requirements stated in the loading rates section except where the largest vehicle expected on site is larger and thus the required bay(s) shall be provided in accordance with this vehicle.
<table>
<tr><th>Vehicle Class</th><th>Bay Width (m)</th><th>Bay Length (m)</th><th>Vertical Clearance (m)</th></tr>
<tr><td>99 percentile car</td><td>3.2</td><td>5.2</td><td>2.5</td></tr>
<tr><td>Medium Rigid Vehicle (8m truck)</td><td>3.5</td><td>8.8</td><td>4.5</td></tr>
<tr><td>Large Rigid Vehicle (11.5m truck)</td><td>3.5</td><td>12.5</td><td></td></tr>
<tr><td>Articulated Vehicle</td><td>3.5</td><td>19.0</td><td></td></tr>
</table>
Design vehicle Dimensions are as follows
<table>
<tr><th>Vehicle Class</th><th>Overall Length</th><th>Design Width</th><th>Wheel Base</th><th>Design Turning Radius</th></tr>
<tr><td>99th percentile car</td><td>5.2</td><td>1.9</td><td>3.1</td><td>7.1</td></tr>
<tr><td>Medium Rigid Vehicle</td><td>8.0</td><td>2.5</td><td>5.0</td><td>10.0</td></tr>
<tr><td>Large Rigid Vehicle</td><td>11.5</td><td>2.5</td><td>7.1*</td><td>12.5</td></tr>
<tr><td>Articulated Vehicle</td><td>19.45</td><td>2.5</td><td>16.3**</td><td></td></tr>
</table>
*centre of axle groups
**first axle to last axle

It is recommended that TDC also include swept path diagrams of each of the design vehicles in the technical standards.</td><td>To align with the loading rates, the specification for loading size is based on vehicle type rather than activity.

Design vehicle attributes have been provided to inform the vehicle manoeuvre requirements.

The requirements align with ASNZ2890.2:2004 except for this requirement for 99th percentile vehicle bay which has been developed using professional judgement.</td></tr>
<tr><td>Loading space shall be located on the same site as the activity to which it relates, be available at all times and shall have adequate usable access to that activity or building.</td><td>This provision is retained from the operative District Plan.</td></tr>
<tr><td>The design vehicles shall be able to manoeuvre into the loading bay with only one reverse movement</td><td>This requirement aligns with ASNZ290.2:2004</td></tr>
<tr><td>The loading bay must not be located in an area required by other vehicles for manoeuvring.</td><td>This requirement ensures vehicles are not trapped while servicing occurs. This requirement is informed by ASNZ290.2:2004 and modified using professional judgement.</td></tr>
</table>

Recommended standard	Explanation
Any space required for loading shall be available during the hours of operation and shall not be diminished by the subsequent erection of any structure, storage of goods, or any other use.	This requirement ensures loading areas are always available for the intended use.
The maximum gradient of any part of a service bay shall be no greater than 1:25 (4%) measured in any direction including directions oblique to bay centreline.	This requirement aligns with ASNZ290.2:2004
The whole of the loading space or spaces, access drives, manoeuvring areas and aisles shall, before the commencement of the activity to which those parking and loading spaces relate, and thereafter for as long as that activity is continued, be formed, provided with a sealed surface, drained, marked out or delineated, and maintained	As per the operative plan.

11.2 Vehicle tracking curves

The current District Plan requires 90th or 99th percentile tracking curves rather than 85th percentile tracking curves. Discussions with TDC staff at the workshops concluded to retain status quo. However, the tracking curves should be revised to ensure consistency with current 90th and 99th percentile vehicles.

11.3 External transport technical standards

Some external transport technical standards which could be referenced in the District Plan were identified in the Option Workshop. These include:

- The Land Transport NZ “New Zealand on-road tracking curves for heavy motor vehicles”
- KiwiRail “Design Guidance for Pedestrian and Cycle Rail Crossings”
- NZ Transport Agency “Traffic control devices manual Part 9: Level crossings´

Another transport technical standard raised was the NZ Transport Agency’s “Planning policy manual - for integrated planning & development of state highways” which is currently being revised by NZTA.

12. Referencing external documents

12.1 Discussion

While references to external documents can be a useful way to keep the size of a district plan shorter, they can be problematic. A plan does not automatically capture subsequent amendments to an incorporated document. Clause 31 of Schedule 1 (Part 3) of the RMA requires that if an externally referenced document is amended or updated and it is to supersede the incorporated document, it will not form part of the plan until it has been incorporated into the plan by a variation or via a plan change.

The Hearings Panel for the Proposed Auckland Unitary Plan took the view that references to external documents should be limited as far as practicable - the reason for this is that the Panel felt it was a principle of good plan making to have the district plan as self-contained as possible. However there are some cases where it makes sense to reference an external document due to the highly technical nature of the specifications e.g. Rule E13.1.1 has this note "*For further design guidance for parking areas in buildings refer to the New Zealand Building Code D1: Access Routes or Australian Standard Off-street Parking, Part 1: Car Parking Facilities, ASNZ 2890.1-2004 and subsequent amendments.*"

One of the issues raised at the Issues Workshop was the references to outdated external documents leading to sub-optimal outcomes or confusion.

12.2 Recommended approach

It is considered that the following principles could apply to the decision on where a requirement should be located:

- If a requirement is related to the development of a site it is important it should be in the District Plan.
- If a requirement related to the development and provision of infrastructure that will be vested in Council is fundamentally important, and cannot be captured by another approval process (or would be too late to be considered at engineering approval process), it should be in the District Plan.
- If a requirement related to the development and provision of infrastructure that will be vested in Council can be captured by another approval process at an appropriate stage, it should not be in the District Plan.
- If the requirement is safety critical (e.g. sight lines at rail level crossings) it should be in the District Plan.

TDC is in the process of drafting an Engineering Code of Practice (ECoP). The ECoP is not a statutory document and it is therefore recommended that reference to the ECoP is made in the District Plan.

13. Summary of issues

The review identified issues related to the following themes:

- High-level (requiring Integrated Transport assessments, relationship with One Network Road Classification (ONRC), control of activities in the road reserve)
- Road and subdivision (footpaths, cycle provisions, cul-de-sacs, amenity/utility strips or berms in roads, walkable blocks)
- Access (private access or right-of-way (ROW), vehicle crossings)
- Mode choice (end of trip facilities, public transport)
- Parking management (car parking, cycle parking, loading)
- Development of transport technical standards (parking technical standards)
- Referencing external documents

These issues have been discussed with the TDC, NZTA and KiwiRail stakeholders at two workshops and with the TWG for the District Plan review. **Table 13.1** outlines the issues identified in the reviews. The table identifies which issues do not require any change to address, those that have the potential to be addressed through the District Plan review and the associated recommended option. It also identifies which recommended option can be progressed with very little further work and those that require further analysis.

Table 13.1 Summary of recommendations

Issue		Change recommended	To be addressed in DP review	Recommended option	Can proceed without further analysis	Requires further work to develop technical aspects
High level (overarching) issues	Requiring Integrated Transport Assessments (ITAs)	Yes	Yes	Require ITAs based on either scale of activity (thresholds) only or a combination of scale and certain activities	No	Yes
	Relationship with One Network Road Classification (ONRC)	Maybe	Discussion with TDC staff and NZ Transport Agency staff at the second workshop concluded to retain the existing road hierarchy and identify roads that need to be reclassified to better represent their function. Further discussions and analysis, as part of the next phase of the review, are required to identify if any roads are required to be reclassified to meet the intent of the classification.			
	Control of activities in the road reserve	Maybe	Discussion with TDC at the Issues Workshop concluded that there do not appear to be any issues with the current arrangement. However, several examples were raised at the Options Workshop that indicated a review of the way that activities in roads are controlled would be beneficial. No change is recommended to the Operative Plan (Transport Chapter). However, it is recommended that the District Plan (Zone Chapter) includes what activities (e.g. roadworks) are permitted in roads to avoid resource consents.			
Road and subdivision	Footpaths	Yes	Yes	Stipulate footpath width separately from berm width. Require two sided footpaths on all urban and rural residential streets but allowing one sided footpath for low volume streets	No	Yes
	Cycle provisions	Yes	Yes	Retain status quo but update cycle lane width from 1.5m to 1.8m to reflect current best practice widths. Cycle lanes are required to be marked to provide dedicated space for cyclists.	Yes	No
	Cul-de-sacs	Yes	Yes	Reduce maximum length to 150m, include minimum turning head diameter requirements, require pedestrian link at the end of a cul-de-sac and do not allow a cul-de-sac at the end of a cul-de-sac.	Yes	No
	Amenity/utility strips or berms in roads	Yes	Yes	Require amenity/utility strips for all new roads.	No	Yes
	Walkable blocks	Yes	Yes	Rule requiring 800m walkable block	Yes	No
Access	Private access or right-of-way (ROW)	Yes	Yes	Retain status quo but include maximum ROW length requirement	No	Yes
	Vehicle crossings	Yes	Yes	Introduce requirements to align with current best practice. These include requirements on maximum width, maximum number of crossings, minimum spacing and distance from intersection included. Minimum gate setback requirement to be applicable to Rural and Recreation 1 and 3 Zones.	No	Yes
Mode choice	End of trip facilities	No	Given the scale of developments in Timaru and the nature of the transport system it is not considered appropriate to require end of trip facilities. However, some developments are required to provide showers under the Building Code.			
	Public Transport	No	No new rules are recommended. However, it is recommended that the objectives and policies developed for the new Plan incorporate the public transport related directions such as encouraging land use that supports public transport outcomes.			
Parking management	Activity definitions	Yes	Yes	Further investigate the initial analysis recommendations	No	Yes
	Car parking	Yes	Yes	<u>Timaru District (except Timaru City Centre (Com 1A and 1B))</u> • Update minimum parking requirements <u>Timaru City Centre (Com 1A and 1B)</u> • To be confirmed following the completion of the Timaru City Hub strategy	<u>Timaru District (except Timaru City Centre (Com 1A and 1B))</u> • Yes <u>Timaru City Centre (Com 1A and 1B)</u> • No	<u>Timaru District (except Timaru City Centre (Com 1A and 1B))</u> • No <u>Timaru City Centre (Com 1A and 1B)</u> • Yes
	Cycle parking	Yes	Yes	Rule requiring minimum cycle parking	Yes	No
	Loading	Yes	Yes	Rule requiring minimum loading space	Yes	No
Transport technical standards	Parking	Yes	Yes	Minimum parking dimensions and other changes	Yes	No
	Vehicle tracking curves	Yes	Yes	Update status quo to reflect current best practice	No	Yes
	External technical standards	Yes	Yes	Reference external transport technical standards where applicable such as KiwiRail's railway crossings requirements.	No	Yes
Referencing external documents		Yes	Yes	Agree an approach on where material is located so that the important requirements become statutory.	No	Yes

Appendix A
Review of New Zealand Second Generation District Plan - Transport aspects

Transport aspect	Operative Timaru DP	Christchurch DP Operative	Auckland Unitary Plan Operative in part	Hamilton City DP Operative	Tauranga City DP Operative	Queenstown Lakes DP Operative
Management of the road reserve from a District Plan perspective.	Roads are subject to the underlying land zoning and where a road is located between two zones, the road is subject to one of the adjacent zones.	Road reserve is zoned a 'Transport Zone'	Strategic Transport Corridor Zone' for SHs and rail corridors. Roads and Road network activities are treated as infrastructure (network utilities).	Road reserve is zoned as 'Transport Corridor' Most formed public roads are included within the Transport Corridor Zone. As new public roads are formed, the rules of this zone will apply.	'Road Zone' includes all public roads and, regardless of the underlying zoning on the Plan Maps (Part B) including a State Highway and any service lane.	Roads are zoned as Legal Road (including State Highways) or Unformed Road.
ONRC classification versus District Plan classification	The District Plan roading hierarchy uses common terms as the ONRC. The types of roading hierarchy are: • National Route • Regional Arterial • District Arterial • Principal Road • Secondary Road (including Collector Road, Local Road, Service Lane)	The District Plan hierarchy includes no common terms as the ONRC The district plan road hierarchy is based on the classification in the Christchurch Transport Strategic Plan. The hierarchy given to each road is a function of the land use it serves as well as the role that road plays in moving people and goods around the transport network.	Roads are classified into two broad categories (Arterial and Non-arterial) which are further sub divided into four categories each. **Arterial Roads:** • Motorways • Strategic Routes • Primary Arterials • Secondary Arterials **Non-Arterials** • Collector Roads • Local Streets • Lanes and Service Lanes • Shared Space/ Shared Zones	The District Plan hierarchy includes one classification that uses the same term as the ONRC, that being 'Arterial'. The hierarchy is Major Arterial, Minor Arterial, Collector, Local and Central City	The District Plan hierarchy includes no common terms as the ONRC The district plan hierarchy includes 5 categories. • Expressway Motorway • Primary Arterial • Secondary Arterial • Collector • Local Roads • Service Lanes	The DP categorises roads into three categories, Arterial Roads, Collector Roads and Local Roads and Service Lanes. One classification uses the same term as the ONRC, that being 'Arterial'.
Requirement for Integrated Transport Assessments (ITAs) Thresholds/types of ITAs	No rules or requirements.	There are two types of ITAs (Basic and Full). The requirement and the type of an ITA depends on a threshold, permission for activity within the zone and the classification of the access road to the development.	The requirement for an ITA is dependent on a threshold for five main activities and for all other activity that generates more than 100 vehicles in the peak hour	A Simple or Broad ITA is required dependent on the expected trip generation (vehicles per day), activity permission within the zone and whether the activity is located on the Sensitive Transport Network or not. There are also ITA requirements for specific activities (e.g. schools, hospitals, transport depots etc), area specific triggers, and if new vehicle access is required to a specific part of the transport corridor,	The requirement for an ITA is based on the size of the car park with a threshold of 25 parking spaces. The four types of ITA's are; • Basic • Neighbourhood • Local Area • Wide Area	No requirement in Operative Plan. However in Frankton Flats zone there is a requirement that any non-residential activity which has 25 or more car parks for visitors and/or staff shall be a Controlled Activity with the matters over which Council reserves control: (i) The number, location and design of facilities to promote walking and cycling by customers and workers; (ii) Methods to manage use of car parking; and (iii) Monitoring of outcomes. And must produce a Travel Demand Management Plan
End of trip facilities	No rules or requirements.	Table 7.5.2.2 End-of-trip facilities are required for Commercial activities, Tertiary education and research activities and Hospitals, where there are 11 or more staff cycle parks required.	Table E27.6.2.6 End-of-trip facilities must be provided for new offices, education facilities and hospitals over 500m^2. Changing area and showers are reliant on the size of the development.	Not covered in the plan.	Not covered in the plan.	Frankton Flats zone only At a minimum, for developments accommodating up to 40 staff, one unisex shower should be provided where the shower and associated changing facilities are provided independently of gender separated toilets; or a minimum of two showers (one separate shower per gender) with associated gender separated changing facilities.

Transport aspect	Operative Timaru DP	Christchurch DP Operative	Auckland Unitary Plan Operative in part	Hamilton City DP Operative	Tauranga City DP Operative	Queenstown Lakes DP Operative
Footpaths: One sided vs two sided, asset management vs supporting barrier free design and multimodal networks	General Rule; 6.6.2 (5) Table of private access and secondary roads widths. Recommended berm and footpath width combined for Local and Collector Roads in urban and rural areas.	Road Standards 8.10.3 All roads in business and residential are required to have footpath on both sides, however it is option on local residential where an alternative Min 14m restricted to 20 units and 100m in length is allowed one sided footpath.	(ATCOP) 7.4.10 Footpaths should be provided on all roads 12.2 Footpaths should be provided on at least one side of the road over the full length of urban roads in accordance with NZTA guidance: Arterial and collector requires two sides Local preferred 2 sides minimum one side.	Transport Corridors Criteria - Table 15-6a: Both sides for all zones with some minor variations in width etc except for shared space where no footpaths are required.	Subdivision, Services and Infrastructure (Chapter 12) Footpaths shall be provided for roads in all zones except where the road is a service lane; or in the Rural Residential Zone and Rural Zones where footpaths are not required.	QLDC Land Development and Subdivision Code of Practice Code of Practice Section 3.3.11 Footpaths, accessways, cycle paths, and berms Pedestrians, cyclists, and berms shall be provided for in accordance with table 3.2. The type of pedestrian facility recommended in table 3.2 is dependent on the place context and design environment. The pedestrian facility types are as follows: • Shared (on shoulder and berm) • Shared (in movement lane) • Separate footpath one side • Separate from the carriageway, 1.5m each side • 1.5m one side or 1.5m each side • 1.5m each side • 2.0m each side • 2.5m each side • 3.0m each side • 3.5m each side 4.0m each side
Cycle provision: Cycle provision on street or off street are important for the multi-modal network and to encourage active lifestyles. Should all streets have cycle facilities or selected main routes.	General Rule; 6.6.2 (5) Table of private access and secondary roads widths. Collector (urban) requires two 1.5m wide cycle lanes. No requirement for other road classifications.	Road Standards 8.10.3 All arterials and collectors require either on or off street. Local Roads provision of is 'allowed for' in the road design, assumed optional.	ATCOP (Section 4) Cycle facilities are generally segregated on urban Arterials (Motorways, Strategic, Primary and Secondary). Modest segregate in urban area and at the fringe on Collector Roads, low segregation in urban Local Roads and shared in movement lane on service lanes. No segregation in rural areas except on Motorways and Strategic roads.	Transport Corridors Criteria - Table 15-6a: Arterial – shared off road or cycle path both sides, Central City and Future Urban land use subject to specific design Collector – marked on road, Business Centres and Industrial on road in shared movement lane, Future Urban shared off-road cycle path both sides Local – on road in shared movement land	Performance Standard, Transport Network (appendix 12A) Arterial and Collector Roads will be able to accommodate cycle ways, and bus stops.	QLDC Land Development and Subdivision Code of Practice Code of Practice Section 3.3.1.4 - Where not shown in the table cyclists shall be provided with separate movement lanes if identified in a local or regional cycle network. Section 3.3.11.2 Cycle paths - • Separate cycle paths shall be provided where good design requires separation from the carriageway or a different route to be selected. • Cycle facilities shall be designed to the standards as set out in the Austroads guides and the NZTA Cycle network and route planning guide. Section 3.3.11 Footpaths, accessways, cycle paths, and berms Pedestrians, cyclists, and berms shall be provided for in accordance with table 3.2. The type of cycle facility recommended in table 3.2 is dependent on the place context and design environment. The pedestrian facility types are as follows:

Transport aspect	Operative Timaru DP	Christchurch DP Operative	Auckland Unitary Plan Operative in part	Hamilton City DP Operative	Tauranga City DP Operative	Queenstown Lakes DP Operative
						• Shared (in movement lane) • On sealed shoulder where it is a local authority defined cycle route Separate provision where local authority defined cycle route
Cul-de-sacs: Long and truncated cul-de-sacs are poor outcomes that don't meet CPTED requirements	Maximum 300m in length. No limit on the number of units located on a cul-de-sac.	Subdivision Activity Standards;8.6.11 (f) maximum cul de sac length shall be 100m or 150m with pedestrian access at end.	(ATCOP) 7.5.5 Cul-de-sacs should be avoided when designing for the road network. In situations where cul-de-sacs are to be included, pedestrian and cyclist access ways shall be considered and included where possible to improve the permeability of the transport network. All cul-de-sac heads require a detailed design showing levels and dimensions and must include pedestrian and cyclist access ways.	Subdivision Design Standards (23.7) • Maximum cul-de-sac length (including private way) is 150m • Maximum of one private way accessing on to a cul-de-sac, no private way is permitted in Large Lot Residential Zone • No cul-de-sac is permitted on to another cul-de-sac. Subdivision Design Guide (1.4.1.4) Cul-de-sac should include, where appropriate, pedestrian and cycle links.	Not covered in the plan.	QLDC Land Development and Subdivision Code of Practice Code of Practice Road (3.3.8) 'No-exit' roads should not be provided where through roads and connected networks can be designed. Where no-exit roads are provided, they should ensure connectivity for pedestrians and cyclists.
Private access or Right of Ways (ROWs):	Table 6.6.2 (5) • Maximum of 6 units/lots on a private access in urban areas and maximum of 7 units/ lots in rural areas. • Minimum formed width 3.5m for up to 2 units served in an urban area. Minimum formed width 6.0m for the first 9.0m then 5.0 thereafter for 3 to 6 units served in an urban area. Minimum formed width 8.0m in rural area.	Table 7.5.7.1 • Minimum and maximum formed widths vary depending on number of parking spaces or residential units served. • No limit on number of residential units or parking spaces served. • Passing opportunities required for access width less than 5.5m and more than 50m long.	AUPOP (Table E38.8.1.2) • A single jointly owned access lot or right-of-way easement must not serve more than ten proposed rear sites. • Maximum length of 50m for up to 5 sites served, up to 100m for up to 10 lots served. • Accessways serving six or more rear sites must provide separate pedestrian access (can be located within formed driveway) • Minimum formed width varies depending on the number of sites served. AUPOP (Table E27.6.4.3.1) • Passing bay requirements for access width less than 5.5m and more than 100m (rural zone) and 50m (all other zones) AUPOP (Table E27.6.4.3.2) Minimum formed access width varies depending on the number of parking spaces served and zoning	Subdivision Design Standards (23.7) • Maximum private way length of 50m in General Residential Zone, 100m in other zones with and without passing requirements. • Minimum private way width varies between 3.5m and 6.5m depending on number of allotments and residential zone types. Minimum private way width varies between 8m and 10m in Business and Industrial zones. Maximum number of allotments served by a single private way is 6 in residential zones.	Residential zone (Chapter 14) • The maximum number of units served varies depending on zoning. Minimum legal and formed widths vary depending on the number of units served and the zoning.	QLDC Land Development and Subdivision Code of Practice • Maximum number of units off a private road is 6 • 2.5m lane width (excluding 0.5m sealed shoulder) in rural area, 2.75-3.0m in suburban and urban areas. • Allow for passing up to every 50m. All roads that provide access to 12 or more dwelling units shall vest in the Queenstown Lakes District Council as Legal Public Road.
Amenity/utility strip	No specific requirements for amenity/utility strip requirement. Assumed included in ''recommended berm and footpath width combined'.	Road Standards 8.10.3 Amenity strip required on all urban roads and on rural	Not covered in the plan.	Criteria for the Form of Transport Corridors (15-6)	Street trees shall be provided within local and collector roads at the following rates:	Section 3.3.11.4 Berms Grassed or planted berms between the road legal boundary and

Transport aspect	Operative Timaru DP	Christchurch DP Operative	Auckland Unitary Plan Operative in part	Hamilton City DP Operative	Tauranga City DP Operative	Queenstown Lakes DP Operative
		roads where these adjoin a residential zone.		Service corridor on both sides for all zones with some minor variations in width except for residential private way where service corridor is required only on one side.	i) For Residential Zones – 1 tree per lot with road frontage; and 12 Subdivision, Services and Infrastructure 12 March 2016 Appendices Page 2 of 14 For Commercial Zones and Industrial Zones –At least 3 trees per 100 metres of road.	carriageway shall be provided in accordance with the landscape character intent for each street type within the development. For streets with high pedestrian activity, a full footpath (with no berms) may be more appropriate. Residential streets with a lower pedestrian activity may have a ribbon footpath (planted berms between footpath and carriageway, and between footpath and road boundary). In all cases the combined berm and footpath width shall be as required by the TA to be adequate to enable landscaping and all current and expected services to be installed. Where a berm crossfall greater than 1 in 12.5 is proposed, the designer shall produce a cross section along suitable individual property access locations to show that the sag or summit curves at crossings can be satisfactorily negotiated by a 90th percentile car. Berms shall be of adequate width to: a) Achieve safe clearances between the carriageway edge and any obstacle; b) Allow running of utility services and placing of lighting poles within the berm unless approved otherwise by the utility provider or the TA; c) Provide adequate space between the road reserve boundary and the carriageway edge to enable residents to safely enter the road traffic; d) Allow room for efficient road edge and edge drain maintenance; and Allow adequate space for the effective operation and maintenance of any form of stormwater management device.
Walkable blocks: Long continuous blocks restrict pedestrian access and permeability through the neighbourhood.	No specific requirement on pedestrian permeability.	Subdivision Activity Standards;8.6.11 (i) Walkable block - maximumperimeter length of 800m.	Not covered in the plan.	Subdivision Design Standards (23.7) Maximum pedestrian accessway length through a block is 80m. Minimum pedestrian accessway width through a block: • 40m or less in length:6m wide • 41m-60m in length: 9m wide • 61m-80m in length: 12m wide	Not covered in the plan.	QLDC Code of Practice (page 57-58): The design process should ensure the following maximum walking distances from a lot to a connector/collector or arterial road: (a) Rural: No maximum distance. The design should maximise future connectivity to a suburban network;

<table>
<tr><th>Transport aspect</th><th>Operative Timaru DP</th><th>Christchurch DP
Operative</th><th>Auckland Unitary Plan
Operative in part</th><th>Hamilton City DP
Operative</th><th>Tauranga City DP
Operative</th><th>Queenstown Lakes DP
Operative</th></tr>
<tr><td></td><td></td><td></td><td></td><td></td><td></td><td>(b) Suburban: 400 m. A shorter distance shall be considered near centres and major
public transport routes;
(c) Urban: 300 m;
(d) Centre: 200 m</td></tr>
<tr><td>Vehicle crossings:</td><td>
<table>
<tr><th>Zone</th><th>Max. width</th><th>Max. number of crossings</th><th>Min. spacing</th><th>Distance from intersection</th></tr>
<tr><td>Residential + Rural Residential (Brookfield Road)</td><td>Yes (6m)</td><td>-</td><td>Yes (>7m)</td><td>Yes (>10m)</td></tr>
<tr><td>Commercial & Industrial</td><td colspan="2">”provide for two-way traffic onto and off the site except where a site is served by a service lane”</td><td>Yes (>7m)</td><td>Yes (>10m)</td></tr>
<tr><td>Rural & Recreation 1 and 3</td><td>Yes (by vehicle type)</td><td>-</td><td>Min. distance to existing access</td><td>Min. distance to access on a secondary road to an intersection</td></tr>
</table>
No specific vehicle crossing width requirement (Commercial and Industrial Zone)
No minimum spacing requirement between vehicle crossings serving the same site (Rural Zones and Recreation 1 and 3 Zone.)
No maximum number of crossings requirement</td><td>Access design 7.4.3.7 (a)
Minimum distance between vehicle crossings depends of the frontage road classification and speed limit.
Maximum number of vehicle crossings is a function of frontage length and road classification.
Minimum distance of vehicle crossings from intersections depends on intersecting road type and speed limit.</td><td>AUPOP (Table E27.6.4.2.1)
Maximum number of vehicle crossings is a function of road frontage of the site.
Minimum separation distance from crossings serving adjacent sites
Minimum of 6m separation between crossings serving the same site where more than one crossing is permitted.
AUPOP (Table E27.6.4.3.2)
Minimum and maximum vehicle crossing widths at site boundary vary depending on the number of parking spaces served and zoning</td><td>Vehicle crossings and internal vehicle access (24.14.4.1)
Minimum distance between vehicle crossings varies between 7.5m and 100m depending on posted speed limit.
Minimum distance to an intersection and minimum sight distance from vehicle crossings varies depending on posted speed limit and road hierarchy
Maximum of one vehicle crossing within Residential and Special Character Zone, Maximum of one per frontage equal or less than 20m (or to a strategic network/ arterial transport corridor) and 2 per frontage more than 20m wide in other zones.
Vehicle crossing widths of 3m to 5.5m in residential and Special Character Zone. 5m to 7.5m in all other zones.
Minimum internal vehicle access widths varies between 3m and 8m depending on number of units or car parking spaces on-site.</td><td>Transportation provisions (4B.2.7)
Vehicle crossings serving a business activity shall be between 4m and 9m wide at the site boundary or designed to accommodate articulated trucks and trailers or buses if these vehicles are likely to be used. Minimum 2.7m wide at site boundary for all other activities.
Minimum distance from intersection depends on speed limit, road classification and zoning.</td><td>Transport Rules 14.2.4.2 Access
Minimum and maximum length of vehicle crossing depending on land use (residential or other).
Maximum gradient for vehicle access: 1 in 6 for private use and 1 in 5 for residential zones where a private way serves no more than 2 residential units.
Minimum sight distances from vehicle accesses provided for activity type speed limit (Table 3 – Minimum sight distances from access)
Maximum number of vehicles crossings depending on type of road frontage and frontage length (Table 4 – Maximum number of vehicle crossings)
Distances of vehicle crossings from intersections for roads with a speed limit of less than 100km/hr and equal or greater than 100km/hr. The distance also depends on the intersecting road and the frontage road.
Specific vehicle access rules for service stations are provided.
Minimum distance between any two vehicle crossings onto any State Highway situated in zones (Rural General, Rural Lifestyle, Rural Residential, Gibbston Character, Ski-Area Sub-zone and Resort), shall be 200 metres.</td></tr>
</table>

Appendix B
Issues and opportunities workshop material

Timaru District Plan Review

Issues and Opportunities Workshop

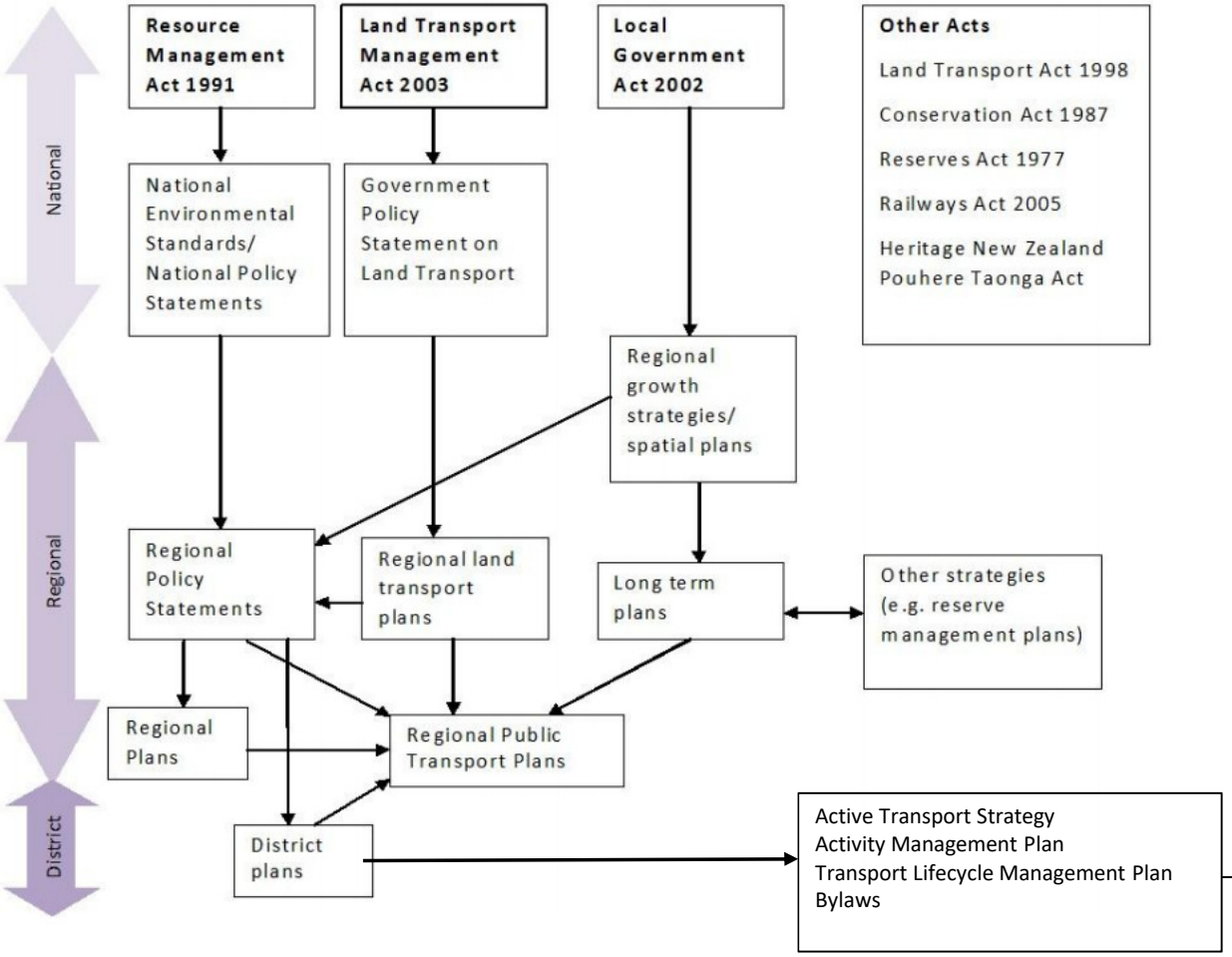
Insightful solutions.
Empowering advice.

Agenda

- 10:00am Welcome and introduction
- 10.30am Confirmation and clarification of issues and opportunities
- 12:00pm Lunch break
- 12:30pm Continue with issues and opportunities
- 1:45pm Wrap up, next steps

Welcome and Introduction

District Plans – role in wider framework



District Plans – purpose and intent

In broad terms, land transport provisions in district plans should:

- integrate land use and transport planning:
- allow for the development and management of integrated, safe, responsive and sustainable transportation systems
- give effect to the land transport provisions included in the relevant RPS
- be consistent with any relevant regional plan provisions
- have regard to national and regional transport policies and plans prepared under the Land Transport Management Act
- seek to address the environmental effects of land transport on land use and the effects of land use on land transport.
- manage the effects of reverse sensitivity on the land transport network.

District Plans – purpose and intent

Integrate land use and transport planning...

- This is key issue to ensure quality urban design outcomes are achieved in the plan.
- This issue affects all levels of the plan from the strategic, objectives and policies through to the rules and provisions.
- There are two sides to the issue, first the effects of land use on the transport network, second the effects of the transport network on the adjacent land use.

District Plans – structure

Issues (optional)

- a means to enable clear linkages to matters contained in other strategic or higher-level documents that do not sit within the regional or district plan
- the context to the plan provisions that followed
- a logical starting point or heading around which related objectives and policies could be grouped.

Objectives (must have)

Policies to implement the objectives (must have)

Rules to implement the policies (must have) **-** the most sticking!

District Plan Review
PROCESS

PROPOSED DISTRICT PLAN (Release mid 2021)
Formal consultation.
Public notification of proposed plan involving submissions, further submissions, hearings, decisions and the opportunity for submitters to appeal to the Environment Court

PHASE 4

DRAFT DISTRICT PLAN
(Release late 2020)
Non-statutory consultation.
Release of a draft District Plan for consideration by the community involving a series of opportunities for the community to provide feedback

PHASE 3

WE ARE HERE

WE ARE CURRENTLY DRAFTING THE PROVISIONS OF THE PLAN

PHASE 2

DISCUSSION DOCUMENT
Public engagement on the issues facing the district and options to resolve the issues

SCOPING
Scoping of issues, including:
- Consultation with statutory bodies, stakeholders and the public;
- Town Centre Study;
- Growth Management Strategy;
- Monitoring the existing District Plan.

PHASE 1

Timaru District Plan Review (Phase 2)

Shortfalls of current District Plan:

- Does not recognise and provide for other (non-motorised vehicles) forms of transport effectively.
- Roading related issues, objectives and policies are incorporated into zone provisions.
- Inclusion of transport related policy throughout the District Plan is inefficient.
- The transport issues, objectives and policies of the current District Plan have a 'narrow' focus on roading.
- The number of roading provisions and text could be reduced.
- Road classifications could be moved to an Appendix in the District Plan and do not need to be included as part of the transport objectives and policies chapter.
- Positive economic and social benefits of transport and transport infrastructure should be recognised and provided for.
- The car parking requirements of the District Plan should be reviewed to ensure they are consistent with best practice.

Timaru District Plan Review (Phase 2)

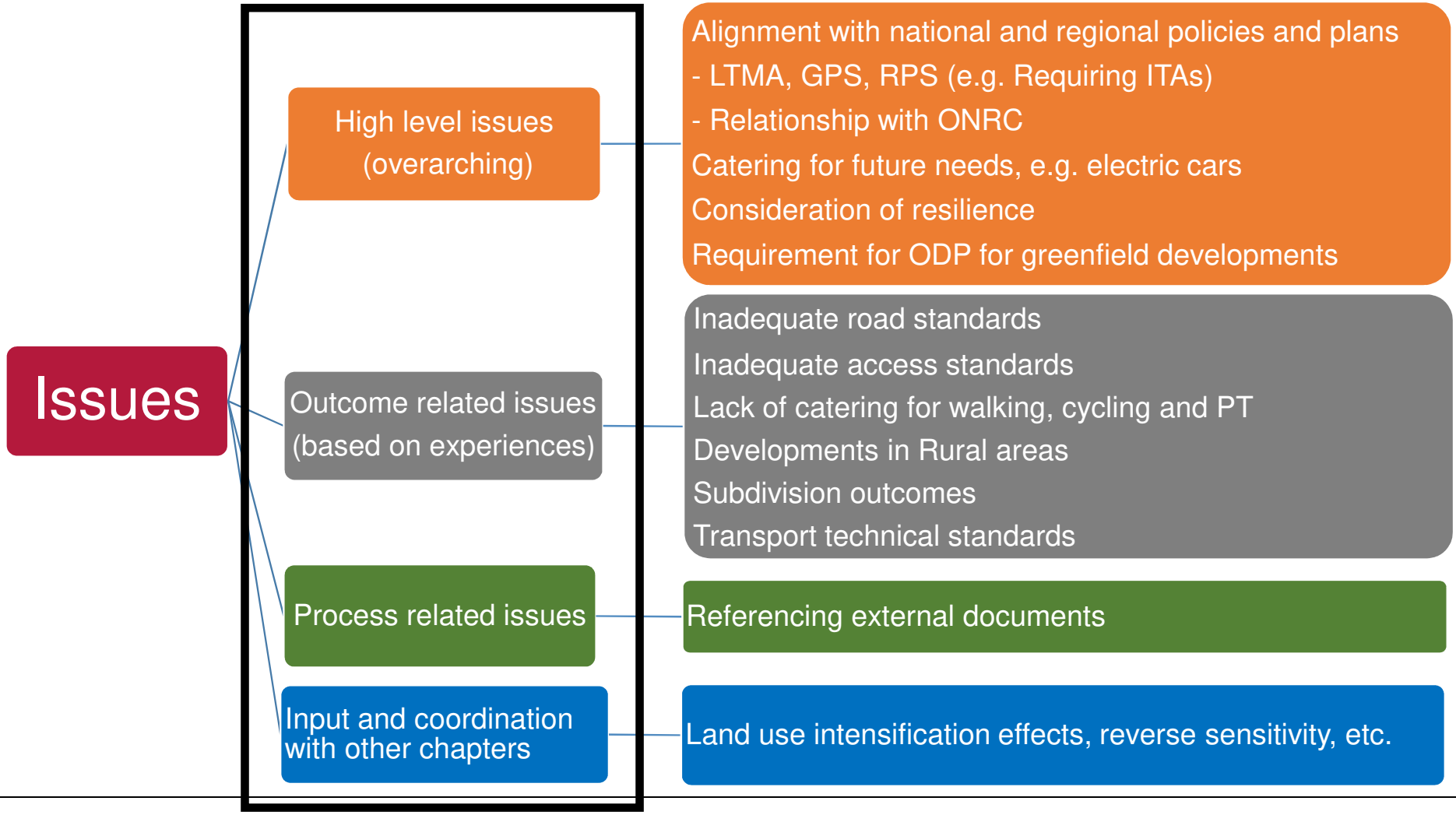
Key transport issues:

1. Parking provisions
2. Modal shift
3. Land use intensification effects

Additional issues:

- Railway level crossings (setbacks and sightlines)
- Road corridors for other forms of infrastructure
- Noise standards for reverse sensitivity

Issues and opportunities


Issues
High level issues (overarching)
Outcome related issues (based on experiences)
Process related issues
Input and coordination with other chapters
Alignment with national and regional policies and plans
- LTMA, GPS, RPS (e.g. Requiring ITAs)
- Relationship with ONRC
Catering for future needs, e.g. electric cars
Consideration of resilience
Requirement for ODP for greenfield developments
Inadequate road standards
Inadequate access standards
Lack of catering for walking, cycling and PT
Developments in Rural areas
Subdivision outcomes
Transport technical standards
Referencing external documents
Land use intensification effects, reverse sensitivity, etc.

High level issues (overarching)

Alignment with national and regional policies and plans

Issues:

- Objectives not directly related to LTMA, GPS on transport
- Consistency with other TDC roading strategies, plans and policies

Relationship with ONRC

Issue: The current road hierarchy is out of date and needs reviewing.

ONRC introduced in 2013 with the following purposes:

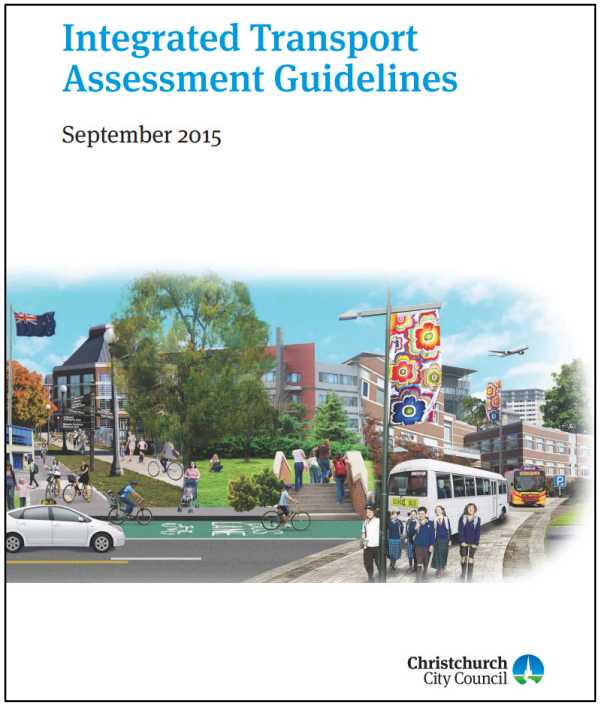
- To enable operational and culture change in road activity management
- To facilitate a customer-focused, business case approach to budget bids for the National Land Transport Programme (NLTP)
- To allow local authorities and NZ Transport Agency to compare the state of roads across the country, direct investment where it is needed most.

How does the One Network Road Classification relate to the District Plan road hierarchy, does it need to?

Requiring ITAs

Issue: No requirement for them, would they help to achieve better outcomes?

- RPS requires ITAs for substantial developments and;
- RPS requires that TAs "include trigger thresholds in district plans for development where an integrated transport assessment is required"
- Key questions for TDC are:
  - Should ITAs be required?
  - If so we will look at the activities and thresholds?
  - 1 or 2 levels/scale of ITA?
  - Reference national docs or provide guidelines?



Requiring ITAs

CCC Replacement District Plan (excluding Central City)

Table 7.4.4.19.1 - Thresholds for full Integrated Transport Assessments

	Activity	Thresholds
a.	Education Activities (Schools).	More than 450 students
b.	Education Activities (Pre-School).	More than 150 children
c.	Education Activities (Tertiary Education and Research Activities).	More than 750 FTE students
d.	Health Care Facilities.	More than 1,000m² GFA
e.	Industrial Activities (excluding Warehousing and Distribution Activities). High Technology Industrial Activities. Heavy Industrial Activities.	More than 10,000m² GFA
f.	Industrial Activities (Warehousing and Distribution Activities).	More than 20,000m² GFA
g.	Offices.	More than 4000m² GFA
h.	Residential Activities.	More than 120 Residential Units
i.	Retail Activities (excluding factory shops, retail park zones, trade suppliers and food and beverage outlets).	More than 1000m² GLFA and/or in a Local Centre or Neighbourhood Centre identified in Chapter 15, where the total area of development* over any three year period exceeds 1000m² GLFA. Advice note: 1. * Development referes to either consented or constructed developments.
j.	Retail Activities (factory shops and retail park zones, but excluding trade suppliers and food and beverage outlets).	More than 2000m² GLFA
k.	All other activities (not covered by the thresholds above).	More than 120 vehicle trips per peak hour or 1000 vehicle trips per day (whichever is met first). 'Peak hour' are those hours between 15:00 and 19:00 hours on a weekday.

Auckland Unitary Plan (not all zones)

Table E27.6.1.1 New development thresholds

Activity			New development
(T1)	Residential	Dwellings	100 dwellings
(T2)		Integrated residential development	500 units
(T3)		Visitor accommodation	100 units
(T4)	Education facilities	Primary	167 students
(T5)		Secondary	333 students
(T6)		Tertiary	500 students
(T7)	Office		5,000 m^2 GFA
(T8)	Retail	Drive through	333 m^2 GFA
(T9)	Industrial activities	Warehousing and storage	20,000 m^2 GFA
(T10)		Other industrial activities	10,000 m^2 GFA

Catering for future needs

Issue/question: Does the District Plan need to consider/cater for the future transport environment? If so in what way?

Consideration of resilience

Issue: Nothing in Timaru District Plan regarding the transport network and natural hazards with regard to the resilience of the network.

Key questions for TDC:

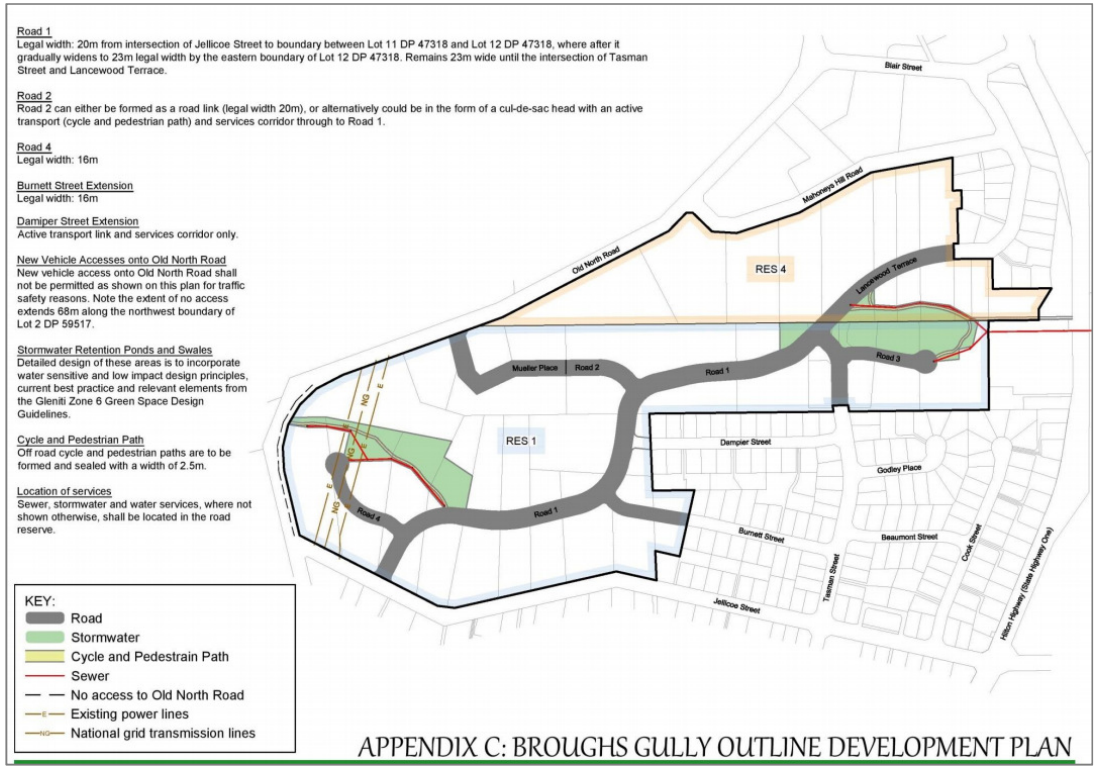
- Is this really needed? What is the risk of not considering it?
- Is it better handled through AMPs and COP?

ODP for greenfield development

Issue: No requirement for outline development plans for greenfield developments

Key questions for TDC:

- Is this really needed?
- What is the risk of not having it?



Outcome related issues (based on experiences)

Road standards

Issue: Current District Plan street design requirements do not meet needs and are ambiguous.

- Road reserve widths inadequate to accommodate utility services in berm areas
- Road widths not suitable for speed environment or road function

Access standards (accessways and private roads)

Issue: Inadequate access standards (crossing width and number of crossings).
Is this related to a particular land use (e.g. industrial activity)?

- Number of houses/lots located off a ROW and the associated assessment matters.

Modal shift

Issue: Does the District Plan need to recognise and provide for a wider range of transport modes other than motorised vehicles?

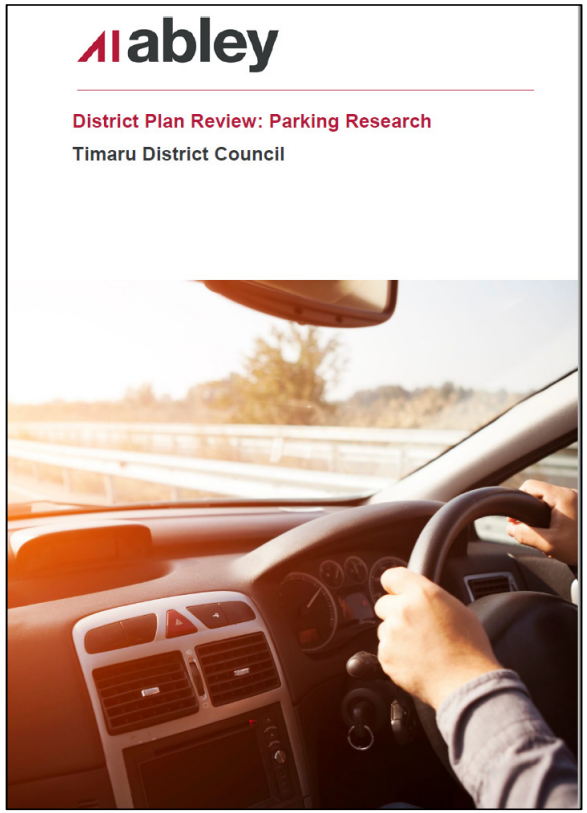
YES! But how in a DP?

- Cycle parking requirements and trip end facilities

Parking provisions

Issue: Need to update current parking requirements (including mobility and cycle parking and loading requirements)

Relevant aspects		Status
1	Guidance on cash in lieu	No longer permitted under Act
2	Guidance on parking reduction	Abley report
3	Guidance on existing use rights apply	Legislation
4	Guidance on stacked parking	Need to address
5	Guidance on off-site parking	Need to address
6	Ability to conform with other parking standards	Need to remove
7	Revise work place travel plan provisions	Need to address



Parking provisions (Timaru City)

Issue: Does the District Plan need to have different parking requirements for the Timaru City?

Rural areas

Issue: Impact of land use change in Rural areas not recognised in current DP.
Particular activity types?

- Requirements on formation of ROWs in rural areas.

Subdivision – achieving good outcomes

Are good integrated design outcomes being achieved for new subdivisions?
What subdivision activity types are anticipated and where (Rural or Urban)?

Issue		
1	ODP process vs infill development?	infill covered by general rules
		ODPs have bespoke rules
2	Density and access related issues?	Block size – walkable blocks and cul-de-sac
		Road standards – parking, amenity, footpaths
3	Operational issues such as waste collection?	Road standards – road widths

Transport technical standards

- Vehicle tracking curves – use NZTA standards
- Railway level crossings – use KiwiRail standards
- Car and cycle parking dimensions – done (Ableys report)
- Others – as needed (access standards, subdivision standards, etc.)

Process related issues

Referencing external documents

Issue: References out dated (e.g. refers to National Roads Board documents and old NZ Standards)

- Can only reference a specific version of an external document

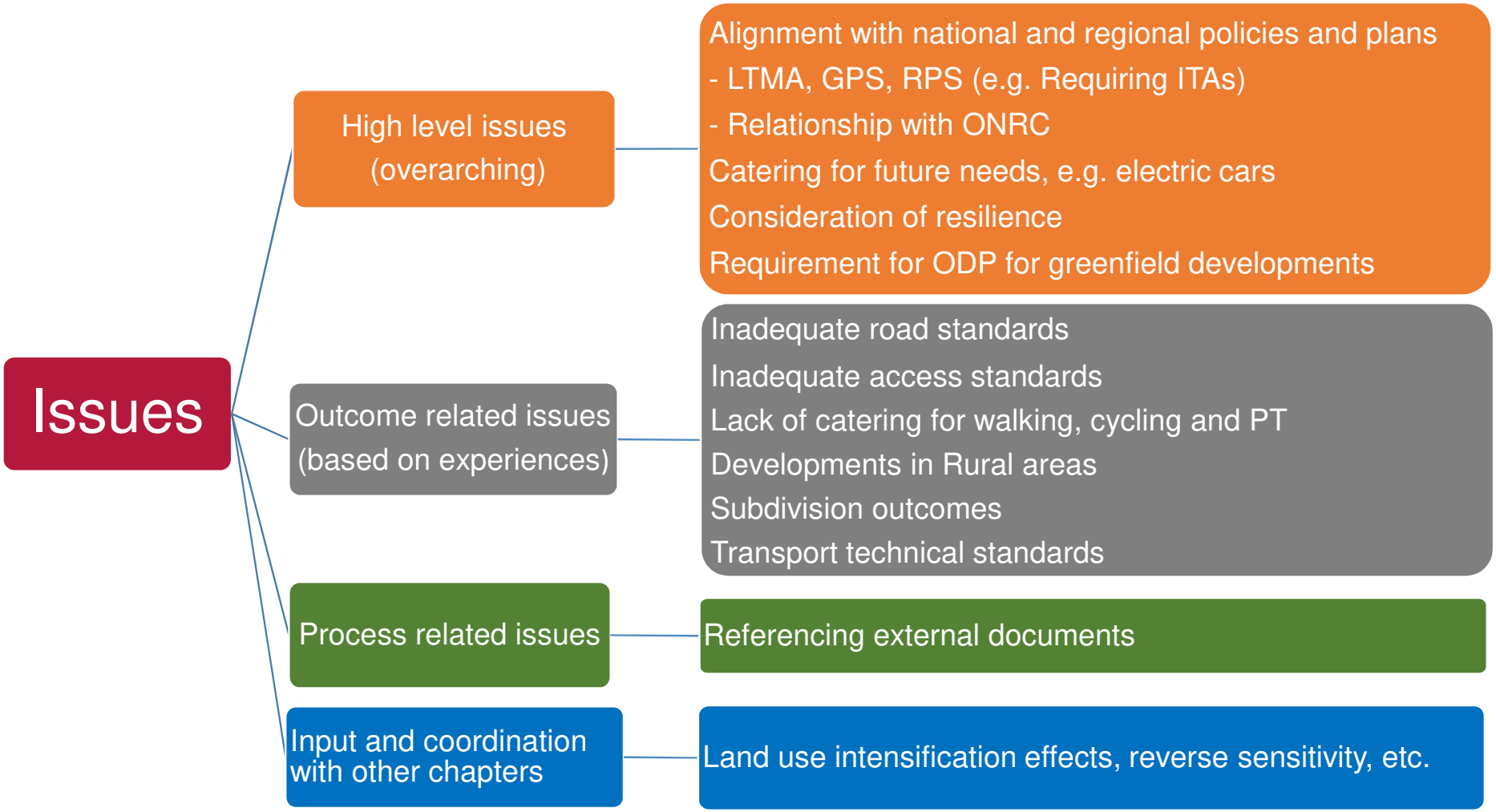
Input and coordination with other chapters

Mabley

Input and coordination with other chapter

Issues:

1. Land use effects on transport network (including land use intensification and reverse sensitivity)
2. Poor environmental provision (treatment of road runoffs) – COP?
3. Should there be a requirement for street trees as they contribute to street amenity?
4. Whether road boundary setback rule for buildings/garages should be applied in Residential 1?
5. Should there be a rule regarding shading of roads?
6. Clarify when financial contributions should apply? – No longer permitted by 2022
7. Others???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Transport technical standards
Process related issues
Referencing external documents
Input and coordination with other chapters
Land use intensification effects, reverse sensitivity, etc.

Wrap up and next steps

Next steps

- Confirm the issues and area for changes from today
- Develop options to address each issue
- Present options at workshop, mid/end June
- Prepare draft report (including preferred options)
- Seek feedback on draft report, early August

Appendix C
Options workshop material

Timaru District Plan Review

Options Workshop

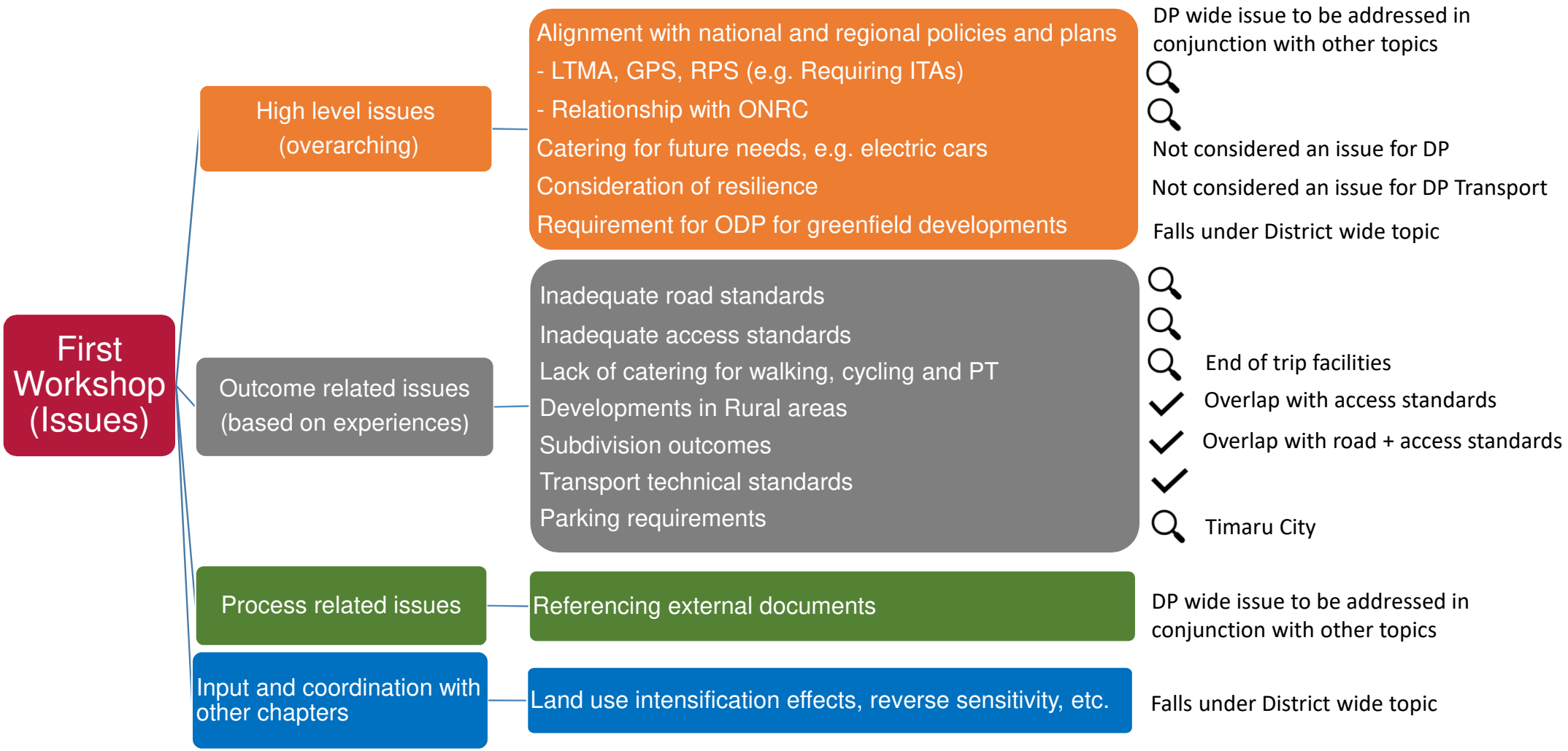
Insightful solutions.
Empowering advice.

Agenda

- 10:30am Welcome and introduction
- 10.45am Set the scene
- 11:00am Options assessment
- 12:30pm Lunch break
- 1:00pm Continue with options assessment
- 2:15pm Wrap up, next steps

Aim of today

- Build on discussion from first (issues) workshop
- Discuss options for addressing the issues
- Confirm and/or identify advantages and disadvantages of each option


First Workshop (Issues)
High level issues (overarching)
Alignment with national and regional policies and plans
- LTMA, GPS, RPS (e.g. Requiring ITAs)
- Relationship with ONRC
Catering for future needs, e.g. electric cars
Consideration of resilience
Requirement for ODP for greenfield developments
DP wide issue to be addressed in conjunction with other topics
Not considered an issue for DP
Not considered an issue for DP Transport
Falls under District wide topic
Outcome related issues (based on experiences)
Inadequate road standards
Inadequate access standards
Lack of catering for walking, cycling and PT
Developments in Rural areas
Subdivision outcomes
Transport technical standards
Parking requirements
End of trip facilities
Overlap with access standards
Overlap with road + access standards
Timaru City
Process related issues
Referencing external documents
DP wide issue to be addressed in conjunction with other topics
Input and coordination with other chapters
Land use intensification effects, reverse sensitivity, etc.
Falls under District wide topic

Requiring ITAs

Canterbury Regional Policy Statement Chapter 5.3.8, Method 2 c.:

"*Territorial authorities will set out objectives, policies and/or methods in district plans which address the* ***interaction between land use and the transport system, including high traffic generators*** *and the promotion of accessibility and modal choice as appropriate*"

Requiring ITAs

Christchurch District Plan (excluding Central City)

Table 7.4.4.19.1 - Thresholds for full Integrated Transport Assessments

	Activity	Thresholds
a.	Education Activities (Schools).	More than 450 students
b.	Education Activities (Pre-School).	More than 150 children
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Auckland Unitary Plan (not all zones)

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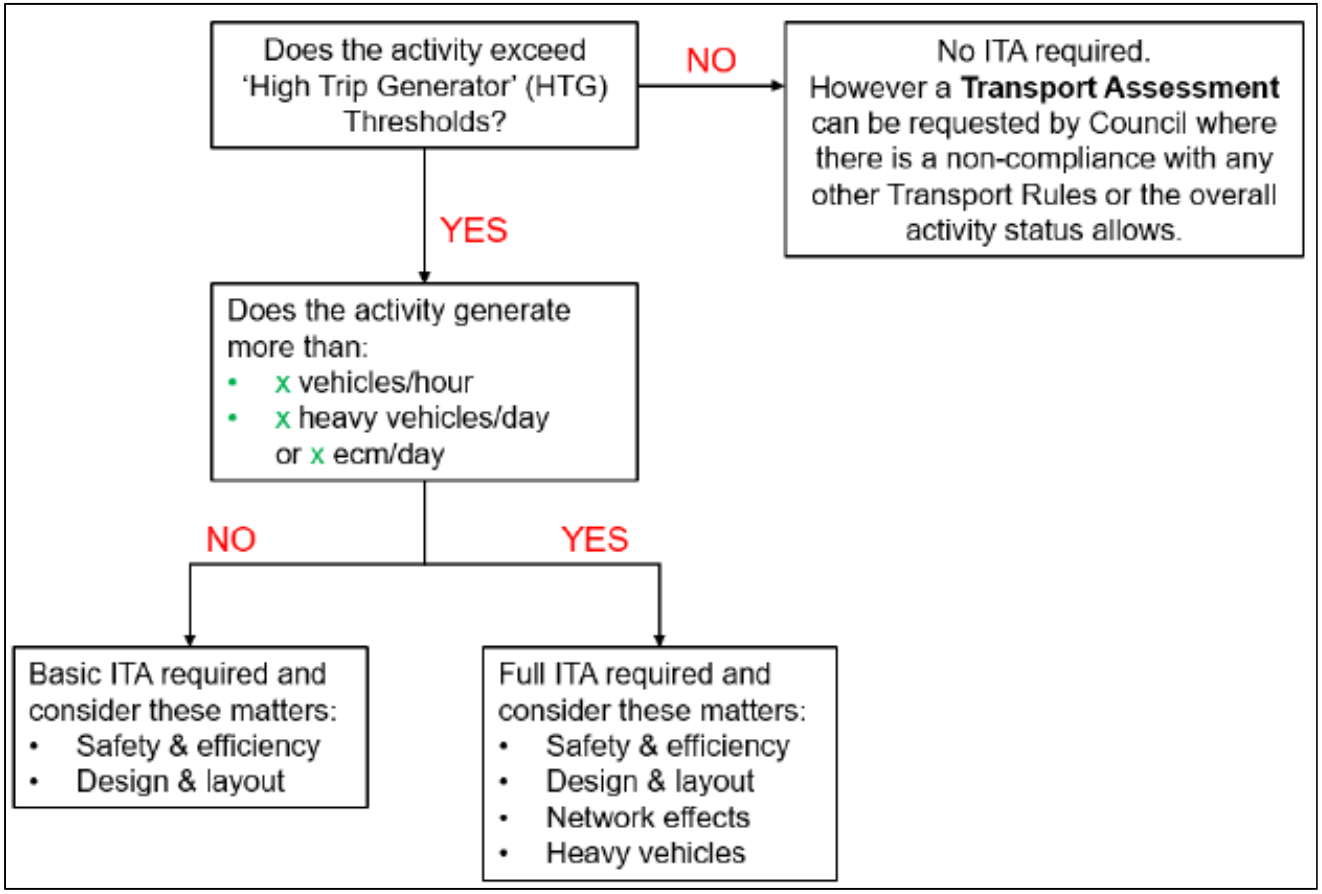
(T9)	Industrial activities	Warehousing and storage	20,000 m^2 GFA
(T10)		Other industrial activities	10,000 m^2 GFA

abley

Requiring ITAs

Suggested SDC ITA process



Selwyn District Council (SDC)

ITAs could be triggered as follows:

1. Plan change/ODP process
2. Notice of Requirement
3. Subdivision consent
4. Land use consent

Requiring ITAs

Option		Advantages	Disadvantages
1	Status Quo – no specific requirement		• Does not align with RPS • Does not support seeking better transport outcomes
2	Require ITAs based on **scale (thresholds) and activity status** (*e.g. Christchurch*)	• Less likely to get ITAs missed • Easy to apply	• Activity status adds another layer of consideration for potentially limited benefit.
3	Require ITAs based on **scale (thresholds) and zone** (*e.g. Auckland*)	• Easy to apply	• Risk that some activities in non-specified zone will generate unintended adverse impacts
4	Require ITAs based on **scale (thresholds)** (*e.g. Suggested to Selwyn DC*)	• No risk that an activity generates high traffic volumes will slip through • Easier to apply	• Some activities below the threshold could still have some effects • some activities scaled back to fit just under the threshold to avoid ITA.

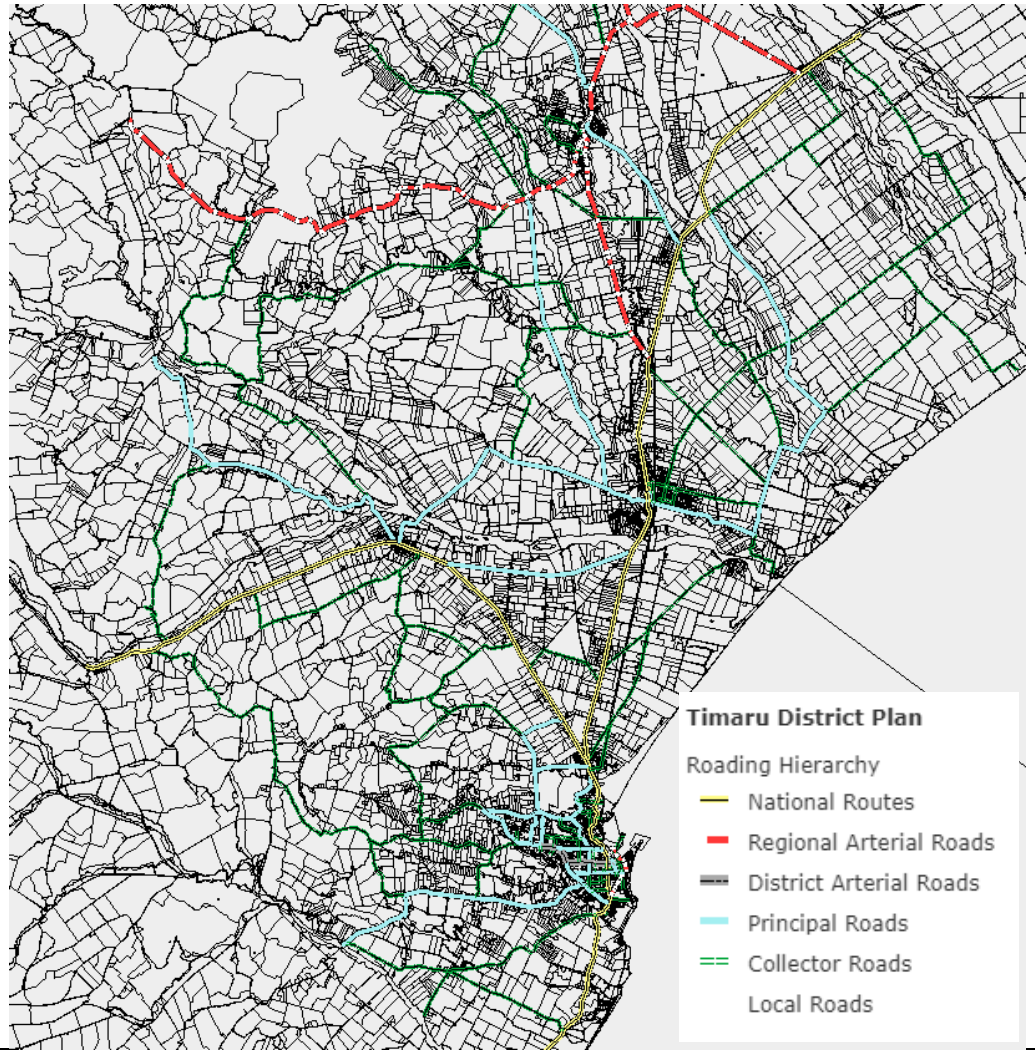
District Plan Road Classification - Relationship with ONRC

ONRC	Timaru District Plan
1. National	1. National Routes
2. Regional	2. Regional Arterials
3. Arterial	3. District Arterials
4. Primary Collector	4. Principal Roads
5. Secondary Collector	5. Collector Roads
6. Access	6. Local Roads

District Plan Road Classification

NZ Transport Agency is in the process of changing the ONRC…

- What is the problem with the current road classification?
- What is the purpose of road classification?



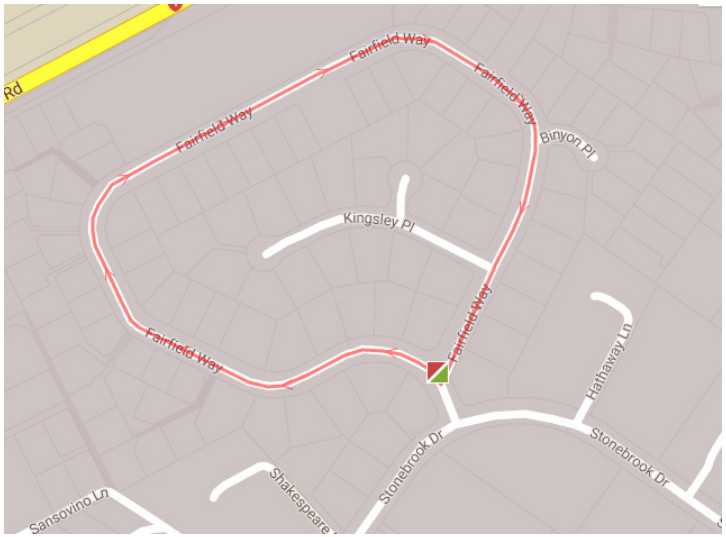
Control of activities in the road reserve

Issue: Transport networks currently have no zoning to provide for activities within them

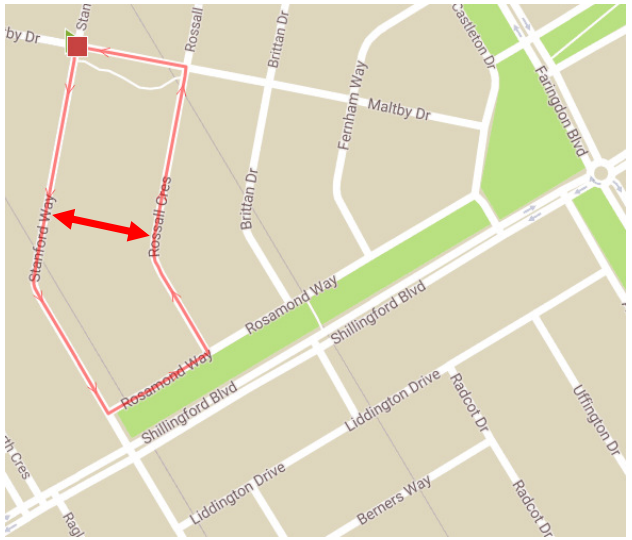
Option		Advantages	Disadvantages
1	Status Quo	• Does not appear to be causing any issues	• Low risk that work in road reserve may require consent
2	Road/transport zone (as per CCC and HCC approach)	• Roads can be managed under a rule framework appropriate for its purpose • Clarity over what is road versus other zone	• Requires road boundaries to be defined legally so may need to carry out surveys

Subdivision – Walkable blocks

Issue: Long continuous blocks restrict pedestrian access and permeability through the neighbourhood. Block size as a proxy.



(a) 980m



(b) 750m

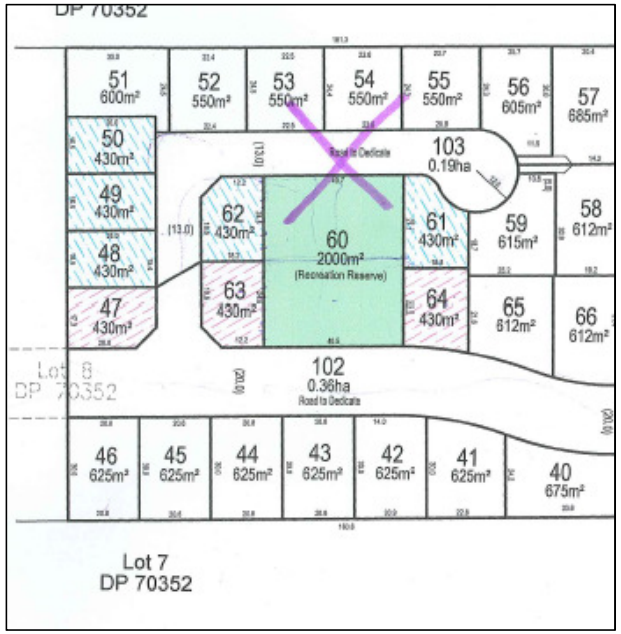
Subdivision – Walkable blocks

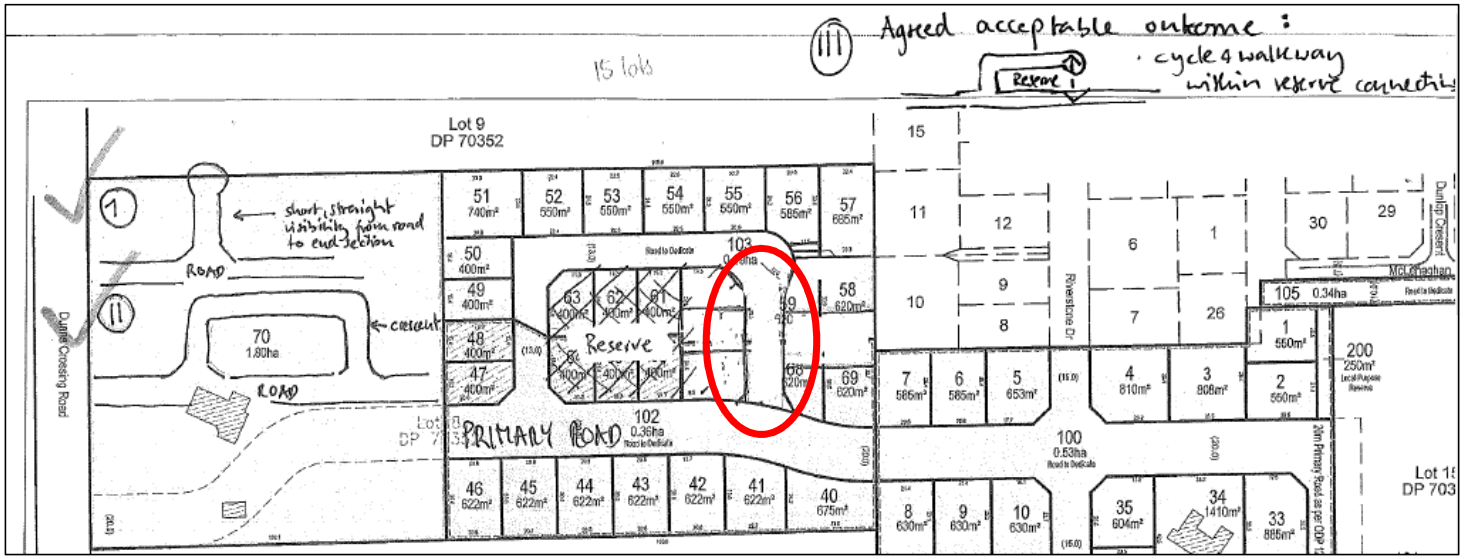
Issue: Long continuous blocks restrict pedestrian access and permeability through the neighbourhood.

Option		Advantages	Disadvantages
1	Status Quo		• Risk that development could have low permeability • Sets up large grain block structure that does not encourage walking and cycling
2	Introduce maximum block size (max. 800m perimeter)	• Requires pedestrian permeability • Easy to measure	• May result in blocks that are 300m+ in length.
3	Introduce alternative method such as maximum block length rule 150-200m for example	• Greater permeability achieved	• More intersections/conflict points created • More road infrastructure • Maybe too prescriptive for sites with topography

Subdivision – Cul de sac

Issue: Long and truncated cul-de-sac are poor outcomes that do not meet CPTED requirements





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Subdivision Cul-de-sac (e.g. Hamilton)

23.7.3 General Residential Zone, and All Special Character Zones

a)	Minimum transport corridor boundary length for a front site (except in the Terrace area of the Peacocke Character Zone and within ~~CDP Area 1 and CDP Area 2~~ the Character Areas of the Temple View Zone)	15m
b)	Minimum transport corridor boundary length for a front site within the Terrace area of the Peacocke Character Zone and within ~~CDP Area 1 and CDP Area 2~~ the Character Areas of the Temple View Zone	10m
c)	Minimum rear boundary length of a front site	10m
d)	Maximum number of allotments served by a single private way	6
e)	Minimum private way width serving 1-3 allotments	3.6m
f)	Minimum private way width serving 4-6 allotments	4.5m
g)	Maximum private way gradient	1:5m
h)	Maximum private way length	50m
i)	Maximum cul-de-sac length, including private way	150m
j)	Maximum number of private ways accessing directly on to a cul-de-sac	1
k)	Maximum number of culs-de-sac accessing directly on to a cul-de-sac	0
l)	Maximum pedestrian accessway length through a block	80m
m)	Minimum pedestrian accessway width through a block	40m or less in length: 6m wide 41m – 60m in length: 9m wide 61m – 80m in length: 12m wide

Subdivision – Cul de sacs

Issue: Long and truncated cul-de-sacs are poor outcomes that do not meet CPTED requirements

Option		Advantages	Disadvantages
1	Status Quo – up to 300m and >20 household units		• Risk of poor outcomes • Does not require line of sight from junction
2	Introduce requirements: • Reduce max. length to 150m • Require line of sight to adjoining street • Require pedestrian link at end • No cul-de-sac on the end of a cul-de-sac	• Reduce risk of poor outcomes • Allows short cul-de-sacs that can meet CPTED	• Reduces flexibility and may not be favoured by developers
3	Do not allow cul-de-sacs	• Eliminates risk of poor outcomes	• Could reduce options for irregular sized blocks of land

Subdivision – Cul de sacs (turning head)

Issue: No specific requirement on cul-de-sac turning head

Option		Advantages	Disadvantages
1	Status Quo – no requirement on cul-de-sac turning head		• Risk of poor outcomes
2	Introduce minimum cul-de-sac turning head requirement	• Reduce risk of poor outcomes	• Reduces flexibility and may not be favoured by developers

E.g. Christchurch DP – min. cul-de-sac turning head diameter

- Residential – 25m
- Business – 30m

Road standards - Example (Chch)

Appendix 8.10.3 New road standards

Road classification	Road widths (m)		Roadway widths (m)		Minimum lanes	Minimum Number of Footpaths	Median	Amenity strip	Cycle facilities
	Min	Max	Min	Max					
Major arterial road - Urban	25	40	14#	34	2	2	Yes	Yes	Yes
Major arterial road - Rural	25	50	15#	22#	2	No	Yes	Yes	Yes
Minor arterial road - Centres	24	30	14#	22#	2	2	*	Yes	Yes
Minor arterial road - Urban	23	30	14#	22#	2	2	*	Yes	Yes
Minor arterial road - Rural	23	30	12#	14#	2	No	*	No	Yes
Collector road – Urban	22	25	10#	14#	2	2	*	Yes	Yes
Collector road - Industrial	22	25	11#	14#	2	2	*	Yes	Yes
Collector road - Rural	22	25	10#	14#	2	No	*	No	*
Local road – Industrial	18	25	11	14#	2	2	No	Yes	*
Local road - Centres	20	25	8#	14#	2	2	No	Yes	*
Local road – Residential	16##	20	**	12	2	2##	No	Yes	*
Local road - Rural	16	20	7	14	2	No	No	No	*

Road standards - Example (Hamilton)

							Berm requirements[5]				
Transport corridor type[1]	Land use environment[2]	Design speed environment (max desirable)	Legal road width (min desirable)[4, 5, 14]	Carriageway width[3]	Movement lane width[15]	Berm requirements[5]	On street parking requirements (min desirable)	Passenger transport requirements (min desirable)[11]	Footpath requirements (min desirable)[12]	Cyclepath requirements (min desirable)	Service corridor (min desirable)[6]
Residential Land Use Environment											
Private Way	Residential (serving ≤ 6 units)	10km/h	3.6m or 4.5m	3m	2 way flow, not marked	One side	None	None	Shared zone	Shared zone – no dedicated facility	One side
Private Way or Local (low volume)	Residential (serving >7 and ≤20 units)	10 to 20km/h	9m	5.5m	2 way flow, not marked	1.5m both sides	None	None	Shared zone	Shared zone – no dedicated facility	1.5m both sides
Local	Residential	40km/h	20m	6m	2 way flow, not marked	7m both sides	Recessed parallel parking bays (2m) on both sides	None	1.5m wide footpath, both sides	Cycling on road shared in movement lane	1.5m both sides
Collector	Residential	40 to 50km/h	23m	9m	2 @ 3m, marked	7m both sides	Recessed parallel parking bays (2m) on both sides	All bus stops to be kerbside11	2m wide footpath, both sides	1.5m on road marked cycle lane, both sides	2m both sides
Minor Arterial	Residential (Managed or limited direct access)[10]	60km/h	Specific design[8]	Specific design[8]	2 @ 3.5m, marked, plus 3m flush median	Specific design[8]	Recessed parallel parking bays (2m) on both sides	All bus stops to be kerbside. Potential for bus priority at intersections	3m shared off road footpath and cyclepath on both sides		2.5m both sides
Major Arterial	Residential (Limited or no direct access)[10]	80km/h	Specific design[8]	Specific design[8]	4 @ 3.5m, marked, plus 3m solid median	Specific design[8]	None	All bus stops to be recessed. Potential for bus priority at intersections	3m shared off road footpath and cyclepath on one side		Specific design[8]

Current Road Standards

6.6.2(5) TABLE OF PRIVATE ACCESS AND SECONDARY ROADS WIDTHS (in metres)

Classification	Sub Classification	Type of Street	Development Served	Minimum Total Private Access	Recommended Berm and Footpath Width Combined	Minimum Carriageway Combination			Carriageway Total
						Parking	Cycle	Traffic	
Local(Urban)	Residential	Private access	1-2 hu	**3.5**	0.8			2.7	2.7
		Private access	3-6 hu	6.0 for first 9.0m then 5.0 thereafter	1.0 for 5.0m width			4.0 for 5.0m width	4.0 for 5.0m width
		Cul-de-sac	<100m length & <20 hu	**14**	footpath 1 x 1.5 berm 1 x 1.5, and 1 x 20	2 x 2.0		2 x 2.5	9.0
		Cul-de-sac	100<length<300 or >20 hu	**16**	2 x 3.0	2 x 2		2 x 3.0	10.0
		Minor Access (local through road)		**17**	2 x 3.0	2 x 2		2 x 3.5	11.0
	Industrial			**18**	2 x 3.0	2 x 2		2 x 4.0	12.0
	Industrial Washdyke			**20**	2 x 6.5[1]	2 x 2		2 x 4.0	12.0
Local (Rural)		Private access	Up to 7 hu and/or lots	**8.0**	2 x 2.5[1]			3.0	3.0
		Local road	Greater than 7 hu and/or lots	**20.0**	2 x 7.0[1]			6.0	6.0
Collector (Urban)	Residential			**18**	2 x 3.0	2 x 2.0	2 x 1.5	2 x 3.5	12.0
	Industrial			**18**	2 x 3.0	2 x 2.0		2 x 4.0	12.0
	Industrial Washdyke			**20**	2 x 6.5[1]	2 x 2		2 x 4.0	12.0

Road standards – width (footpaths)

Issue: One sided vs two sided, asset management vs supporting barrier free design and multimodal networks – widths?

Option		Advantages	Disadvantages
1	Status Quo – berm and footpath width combined		• Risk of poor outcomes
2	• Stipulate footpath width separately from berm/amenity width. • Require two sided footpaths on all urban roads and rural residential but allowing one sided footpath for narrow streets	• Clear requirement on berm width and footpath width	• Requires on going asset maintenance costs.

Road standards – width (amenity + utility)

Issue: Increasing demand for amenity and utility space within road corridors

Option		Advantages	Disadvantages
1	Status Quo – no specific requirement for amenity/utility strip	• Does not incur asset management costs for care of planting	• Does not encourage street amenity • Limited/no space for utility
2	Require amenity/utility strip for all new roads	• Encourages street planting and amenity on all streets • Ensures space for utility	• Will create cost of maintenance
3	Require amenity/utility strip and requirements for the spacing of street tree plantings	• Ensures street trees are planted • Ensures space for utility	• Will create cost of maintenance

Road standards – width (cycle lanes)

Issue: cycle provision on street or off street are important for the multi-modal network and to encourage active lifestyles.

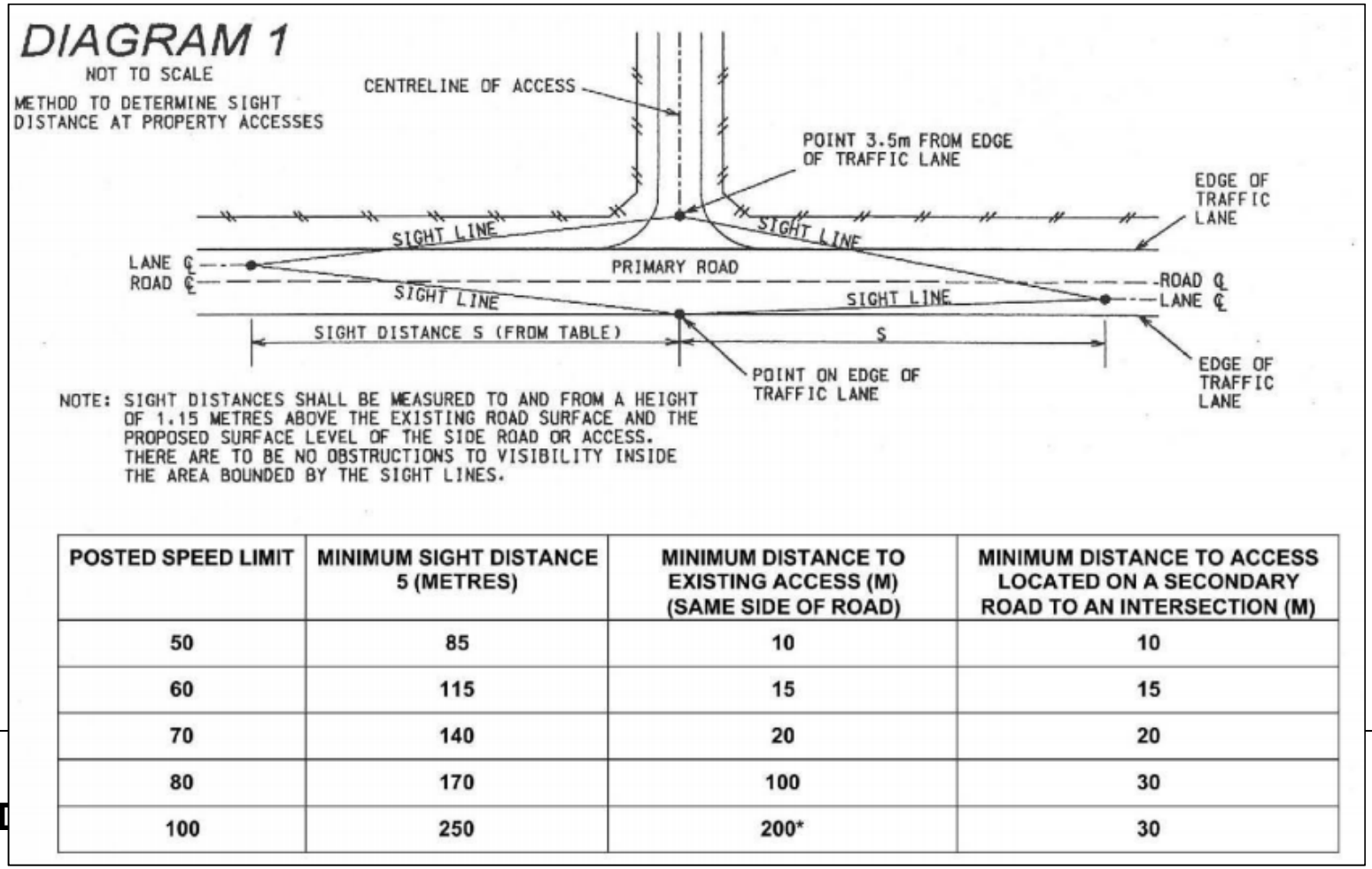
Option		Advantages	Disadvantages
1	Status Quo – 2x1.5m required for urban Collector roads in residential zones.	• Allows design specific solution to accommodate, as along as designer following best practice	• Less opportunity to achieve better outcomes
2	Update status quo to best practice widths – 1.8m	• Opportunity to achieve better outcomes	
3	Provide either on road or off road cycle provisions on more street types.	• Opportunity to achieve better outcomes	• Requires good direction on what facilities are appropriate for various context

Current Access Standards – Vehicle Crossings

Zone	Max. width	Max. number of crossings	Min. spacing	Distance from Intersection
Residential + Rural Residential (Brookfield Road)	• Yes (6m)		• Yes (7m)	• Yes (>10m)
Commercial & Industrial	• *"provide for two-way traffic onto and off the site except where a site is served by a service lane"*		• Yes (7m)	• Yes (>10m)
Rural & Recreation 1 and 3	• Yes (by vehicle type)		• Min. distance to existing access	• Min. distance to access on a secondary road to an intersection

Current Access Standards

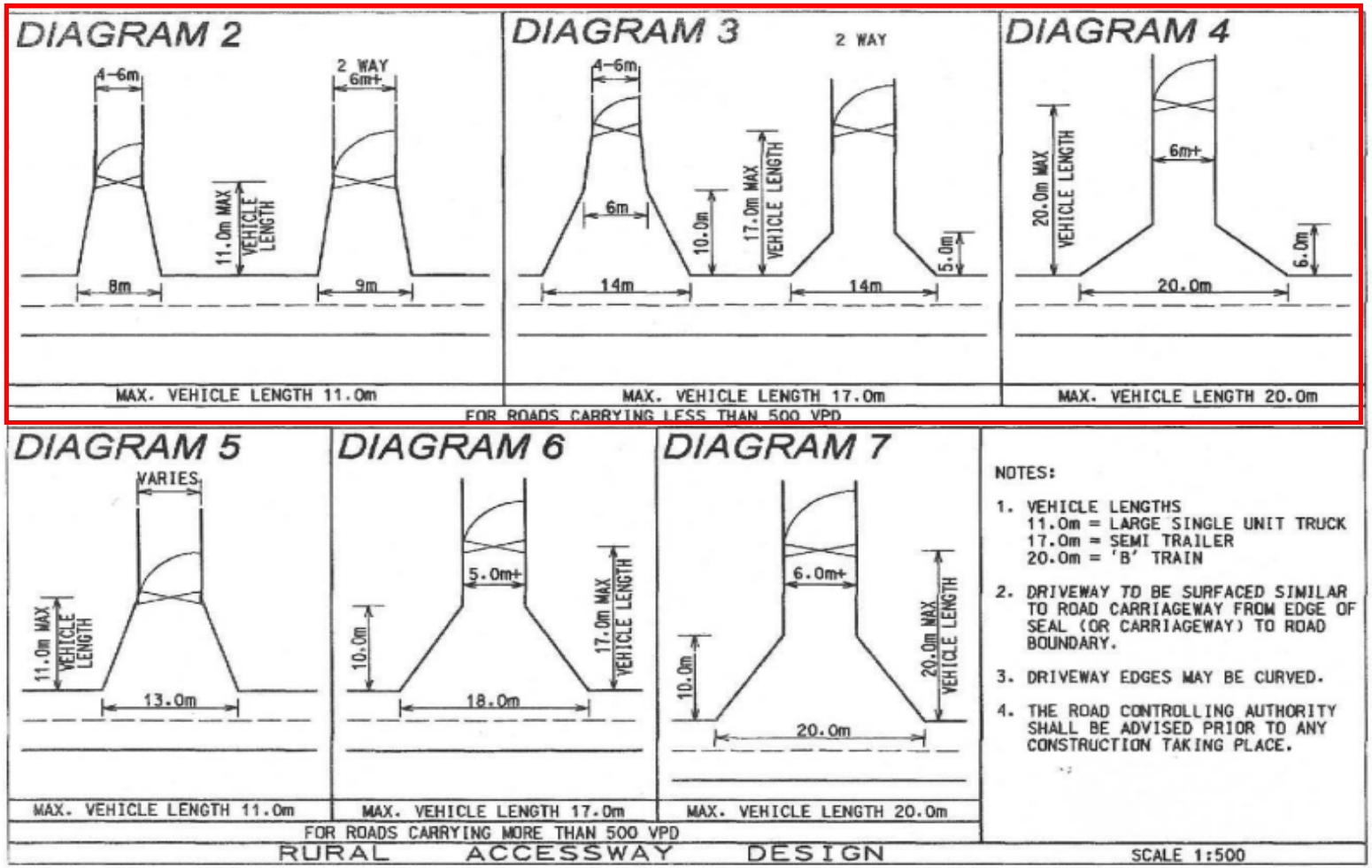
Rural and Recreation 1 and 3 Zones



POSTED SPEED LIMIT	MINIMUM SIGHT DISTANCE 5 (METRES)	MINIMUM DISTANCE TO EXISTING ACCESS (M) (SAME SIDE OF ROAD)	MINIMUM DISTANCE TO ACCESS LOCATED ON A SECONDARY ROAD TO AN INTERSECTION (M)
50	85	10	10
60	115	15	15
70	140	20	20
80	170	100	30
100	250	200*	30

Current Access Standards

Rural and Rec 1 and 3 Zones



Access standards – Vehicle crossings

All Zones except Rural Zones and Recreation 1 and 3 Zones

Option		Advantages	Disadvantages
1	Status Quo	• May appeal to some developers	• Leads to poor outcomes with poor street amenity
2	Introduce requirements: • Max. width • Max. number of crossings	• Reduce visual dominance of vehicle crossings • Provide pedestrian refuge in between vehicle crossings	• May get push back from some developers

Access standards – Vehicle crossings

Rural Zones and Recreation 1 and 3 Zones

Option		Advantages	Disadvantages
1	Status Quo	• May appeal to some developers	• Leads to poor outcomes with poor street amenity
2	Introduce/ revise requirements: • Max. width • Max. number of crossings • Min. spacing	• Reduce visual dominance of vehicle crossings • Provide pedestrian refuge in between vehicle crossings	• May get push back from some developers

Current Access standards – ROWs

Issue: ROW standards – development served, width and length

6.6.2(5) TABLE OF PRIVATE ACCESS AND SECONDARY ROADS WIDTHS (in metres)

Classification	Sub Classification	Type of Street	Development Served	Minimum Total Private Access	Recommended Berm and Footpath Width Combined	Minimum Carriageway Combination			Carriageway Total
						Parking	Cycle	Traffic	
Local(Urban)	Residential	Private access	1-2 hu	**3.5**	0.8			2.7	2.7
		Private access	3-6 hu	6.0 for first 9.0m then 5.0 thereafter	1.0 for 5.0m width			4.0 for 5.0m width	4.0 for 5.0m width
		Cul-de-sac	<100m length & <20 hu	**14**	footpath 1 x 1.5 berm 1 x 1.5, and 1 x 20	2 x 2.0		2 x 2.5	9.0
		Cul-de-sac	100<length<300 or >20 hu	**16**	2 x 3.0	2 x 2		2 x 3.0	10.0
		Minor Access (local through road)		**17**	2 x 3.0	2 x 2		2 x 3.5	11.0
	Industrial			**18**	2 x 3.0	2 x 2		2 x 4.0	12.0
	Industrial Washdyke			**20**	2 x 6.5[1]	2 x 2		2 x 4.0	12.0
Local (Rural)		Private access	Up to 7 hu and/or lots	**8.0**	2 x 2.5[1]			3.0	3.0
		Local road	Greater than 7 hu and/or lots	**20.0**	2 x 7.0[1]			6.0	6.0
Collector (Urban)	Residential			**18**	2 x 3.0	2 x 2.0	2 x 1.5	2 x 3.5	12.0
	Industrial			**18**	2 x 3.0	2 x 2.0		2 x 4.0	12.0
	Industrial Washdyke			**20**	2 x 6.5[1]	2 x 2		2 x 4.0	12.0

Access standards – ROWs - Example (Chch)

Table 7.5.7.1 - Minimum requirements for private ways and vehicle access

	Activity	Number of marked parking spaces provided (For residential activities, the number of residential units)	Minimum legal width (metres)	Minimum formed width (metres) (refer to b)	Maximum formed width (metres)	Central City Height (metres)
a.	Residential activity and offices	1 to 3	3.0 (refer to d)	2.7	4.5	3.5
b.	Residential activity and offices	4 to 8	3.6 (refer to d)	3.0	6.0	4.0
c.	Residential activity and offices	9 to 15	5.0 (refer to c and d)	4.0	6.0	4.0
d.	All other activities	1 to 15[1]	5.0 (refer to c)	4.0	7.0	4.0
e.	All activities	More than 15	6.5 (refer to c)	5.5	9.0	4.0

Access standards – ROWs - Example (Selwyn DC)

Table E13.4 – Minimum Requirements for any Shared Private Vehicular Accessway

Zone	Potential No of Sites	Length (m)	Legal Width (m)	Carriageway Width (m)	Turning Area	Passing Bay
Living Zones	2-3	Any length	4.5	3.0	Optional	Optional
Living Zones	4-6	0-50	5.0	3.5	Optional	Required
Living Zones	4-6	Over 50	6.5	4.5	Required	Required
Business Zones	1-6	All lengths	7.0	5.0	Required	Optional

Access standards – ROWs (e.g. Hamilton)

23.7.3 General Residential Zone, and All Special Character Zones

a)	Minimum transport corridor boundary length for a front site (except in the Terrace area of the Peacocke Character Zone and within ~~CDP Area 1 and CDP Area 2~~ the Character Areas of the Temple View Zone)	15m
b)	Minimum transport corridor boundary length for a front site within the Terrace area of the Peacocke Character Zone and within ~~CDP Area 1 and CDP Area 2~~ the Character Areas of the Temple View Zone	10m
c)	Minimum rear boundary length of a front site	10m
d)	Maximum number of allotments served by a single private way	6
e)	Minimum private way width serving 1-3 allotments	3.6m
f)	Minimum private way width serving 4-6 allotments	4.5m
g)	Maximum private way gradient	1:5m
h)	Maximum private way length	50m
i)	Maximum cul-de-sac length, including private way	150m
j)	Maximum number of private ways accessing directly on to a cul-de-sac	1
k)	Maximum number of culs-de-sac accessing directly on to a cul-de-sac	0
l)	Maximum pedestrian accessway length through a block	80m
m)	Minimum pedestrian accessway width through a block	40m or less in length: 6m wide 41m – 60m in length: 9m wide 61m – 80m in length: 12m wide

Access standards – ROWs

Issue: ROW standards – development served, width and length, and passing bay requirements

Option		Advantages	Disadvantages
1	Status Quo	• May appeal to some developers	• Leads to poor maintenance
2	Introduce new ROW standards/ requirements • Max. allotments • Max. length	• Council has greater say on outcome	• May get push back from some developers

Issue: No passing bay requirement

- CCC – passing opportunities every 50m (access formed width <5.5m and longer than 50m)
- HCC – a passing bay when access serves more than 1 allotment or more than 5 parking spaces and access formed width <5.5m and longer than 70m or unrestricted visibility is not available over its full length.

Modal shift - end of trip facilities (for staff)

Issue: Should the DP include shower and locker requirements

The Building Code requires showers for staff for some activity types:

- **Industrial** – *1 shower for up to 7 staff, 2 showers for 8-16 staff and 1 per every 10 staff after that*
- **Places of active recreation** (swimming pools, gymnasium, sports courts) – *1 shower for up to 30 staff and add 1 shower per 50 staff after that.*

Activities that do not require showers for staff under the Building Code:

1. Commercial (**offices**, banks, restaurants, libraries, shopping plaza)
2. Communal non-residential (including universities)
3. Community service and community care (including hospitals)
4. Hotels, hostels, motels, boarding houses, prisons
5. Camping grounds, motor camps, caravan parks

Modal shift - end of trip facilities (for staff)

Christchurch (Commercial, Tertiary education, Research activities and Hospitals)
– a function of staff cycle parking required

No. of staff cycle parks required	Number of end of trip facilities required
1 -10	None
11 - 100	• 1 shower per every 10 staff cycle parks required • 1 locker per every staff cycle park provided
>100	• 10 showers for the first 100 staff cycle parks + 2 showers for each additional 50 staff cycle parks required • 1 locker per every staff cycle park provided

District Plan Review: Parking Research (Abley, 2018)

Recommended staff cycle parking rate (office)

- 1 space per 100m^2 GFA
- **Office ≥ 1100m^2 GFA** to require 11 staff cycle parks

Modal shift – end of trip facilities

Issue: Should the DP include shower and locker requirements

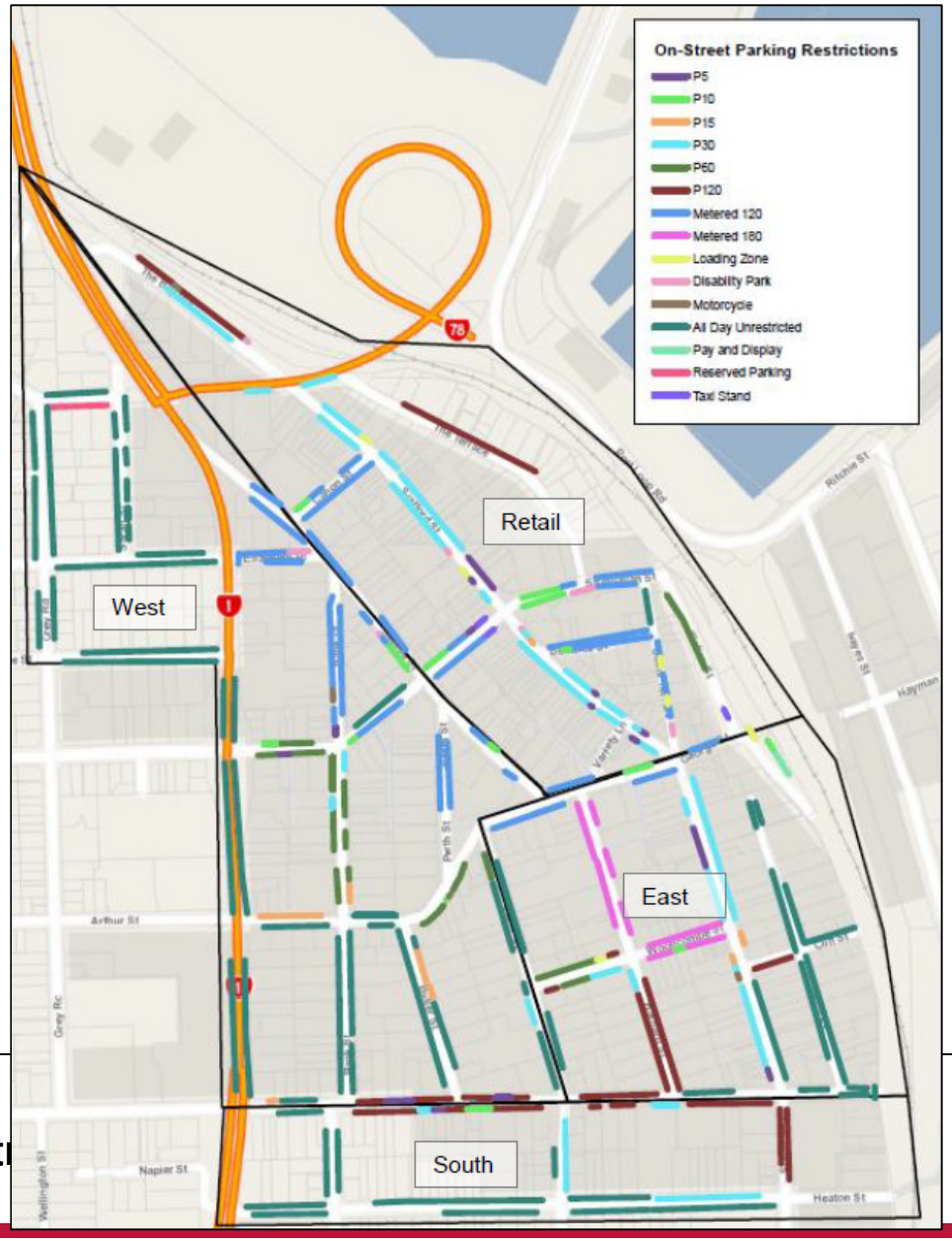
Option		Advantages	Disadvantages
1	Status Quo – no requirement for end of trip facilities	• Allows market to decide based on the demand they consider necessary • Reduces regulation costs to developers	• Barrier to cycling • Showers could be difficult to retrofit if they are not provided at the time of construction
2	Include requirements for showers for certain zone/activity based	• More likely to meet the expectations of current and potential cycle commuters.	• Additional cost to developers • Difficult to quantify staff numbers at application stage
3	Include requirements for showers + lockers for certain zone/activity based	• More likely to meet the expectations of current and potential cycle commuters.	• Additional cost to developers • Difficult to quantify staff numbers at application stage

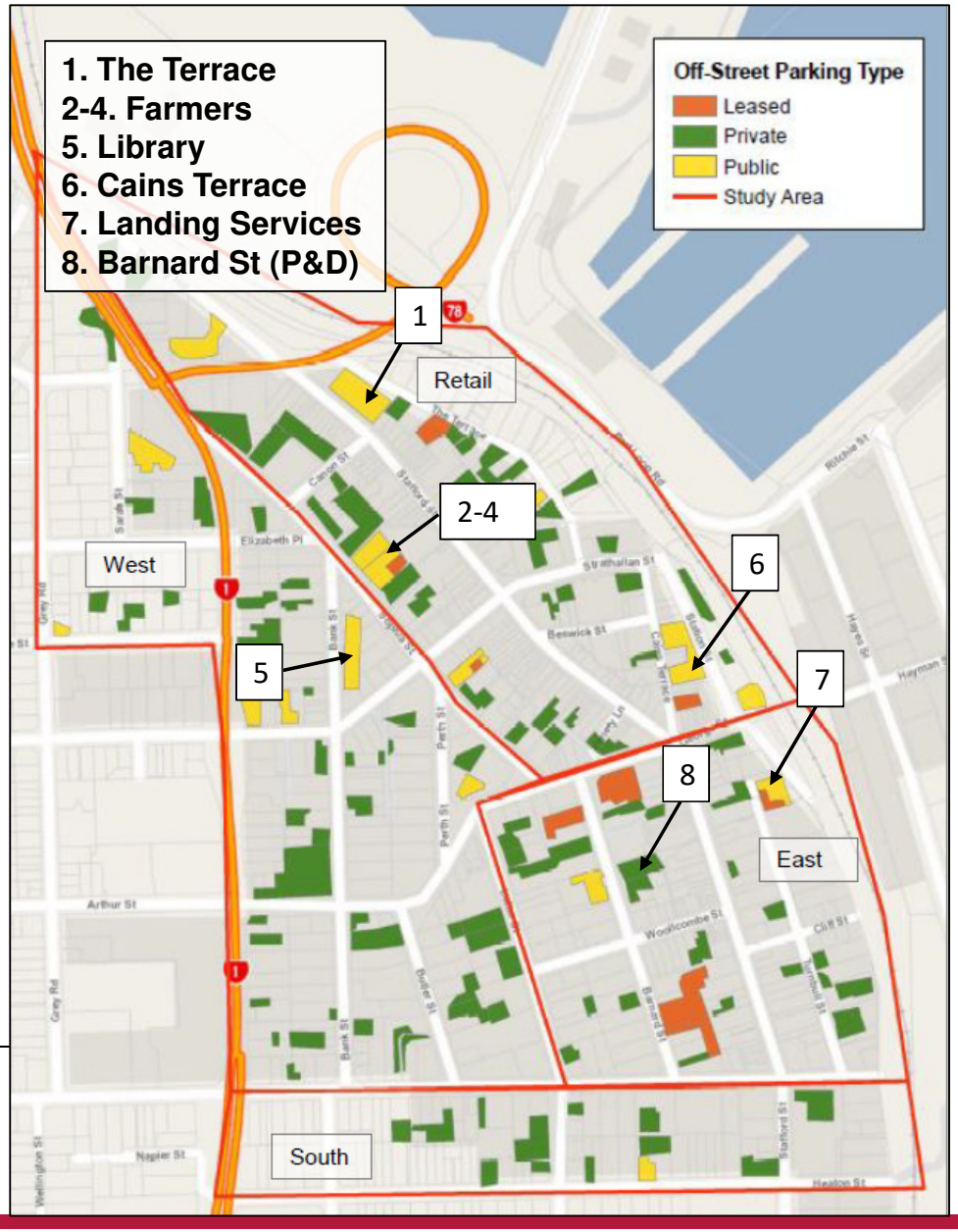
Timaru City parking

In the absence of a Parking Strategy…

- Parking occupancy survey
- Forecast growth in Timaru City (activity types)
- Forecast Council parking supply changes (on-street and off-street)

Timaru parking study (2016)

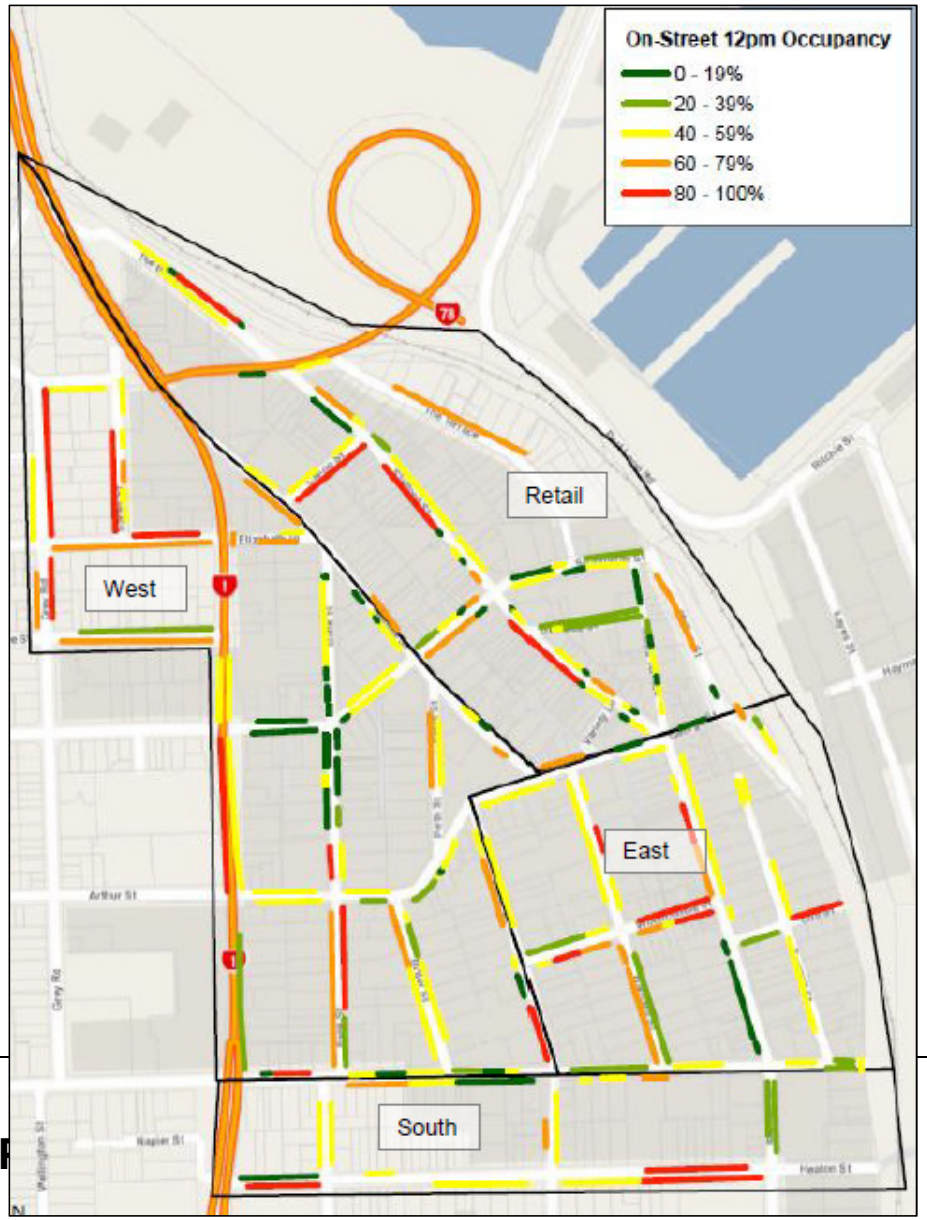


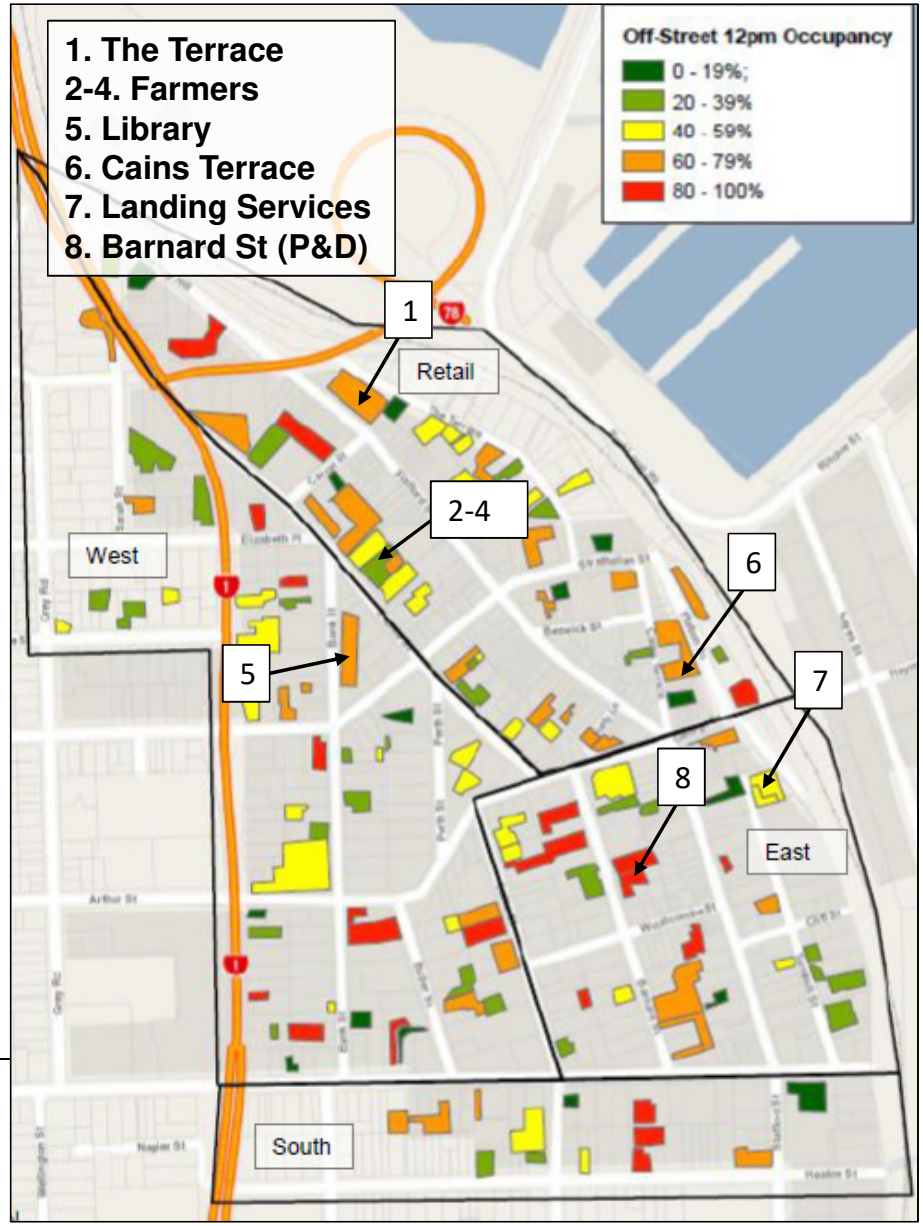


Timaru Distr

Timaru parking study (2016)

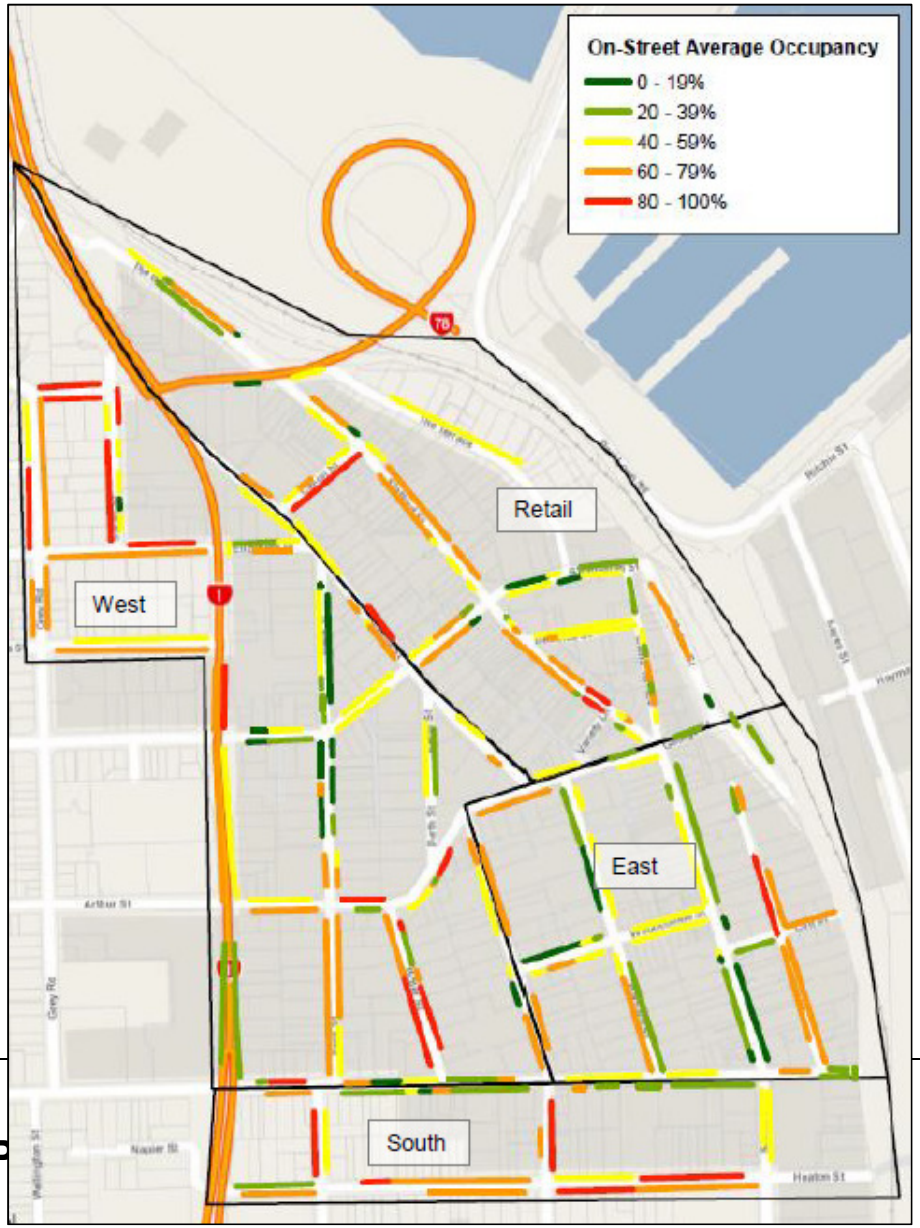
Peak Occupancy (12pm)

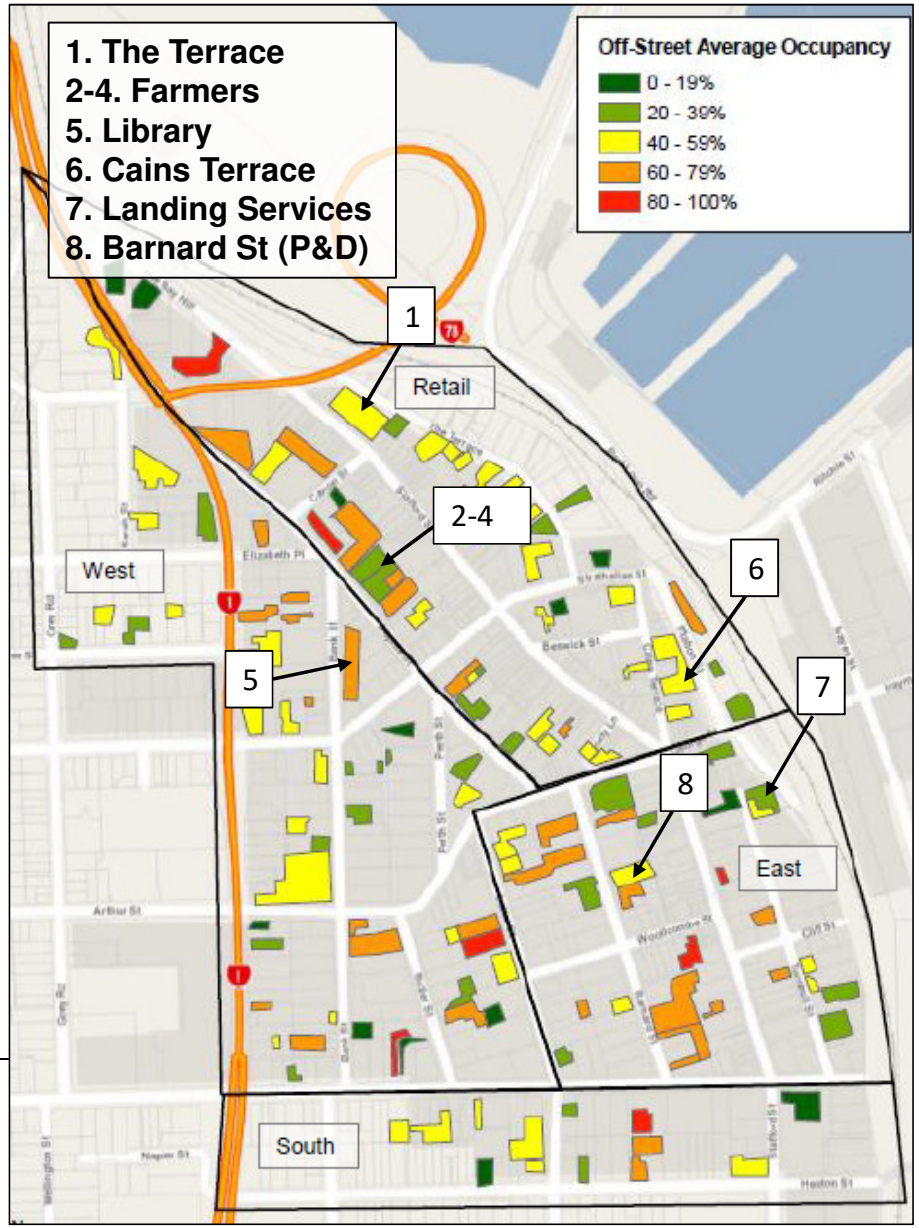




Timaru parking study (2016)

Average Occupancy (10am-4pm)





Timaru City parking

In the absence of a Parking Strategy…

- ✓ Parking occupancy survey
- Forecast growth in Timaru City (activity types)
- Forecast Council parking supply changes (on-street and off-street)

Timaru City – parking requirements

Issue: Parking rates may be in appropriate – particularly retail areas in Timaru City

Option		Advantages	Disadvantages
1	Status Quo – minimums and cash in lieu	• Allows developers to supply more if they want to	• Potential to facilitate an over supply of parking
2	Parking minimums with reduction factors and shared parking	• Better facilitates good use of land as long as set at right level	• Need good PT and cycling options to support the reduction
3	Cash in lieu	• Council has control on parking provisions within the Timaru City	• Limited Council land to provide parking may result in undersupply of parking
4	No parking permitted	• Potential to encourage development	• Potentially requires TDC to lead consolidated/shared parking arrangements which could involve levied rates.

Parking – other matters

We will address:

1. Assessment matters for parking shortfall
2. Staff parking requirements
3. Stacked parking and off-site parking
4. Review current travel plan provision

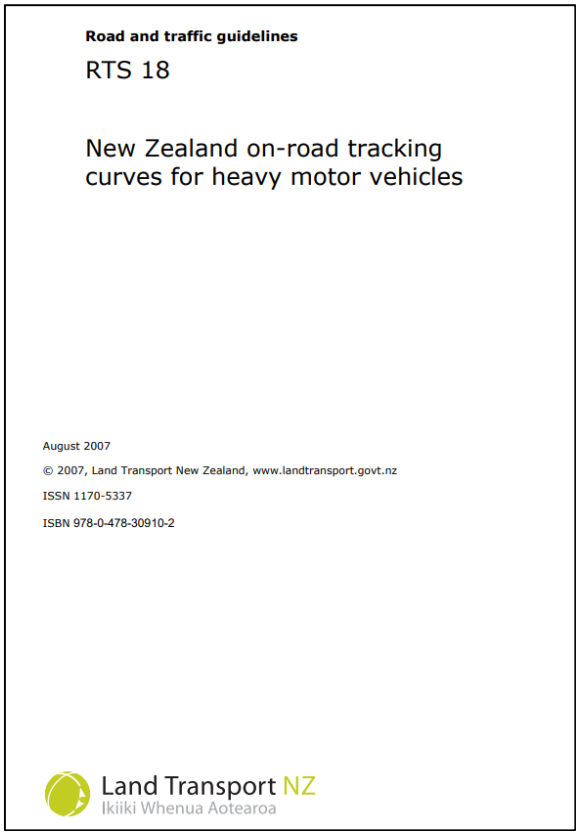
Financial Contributions??

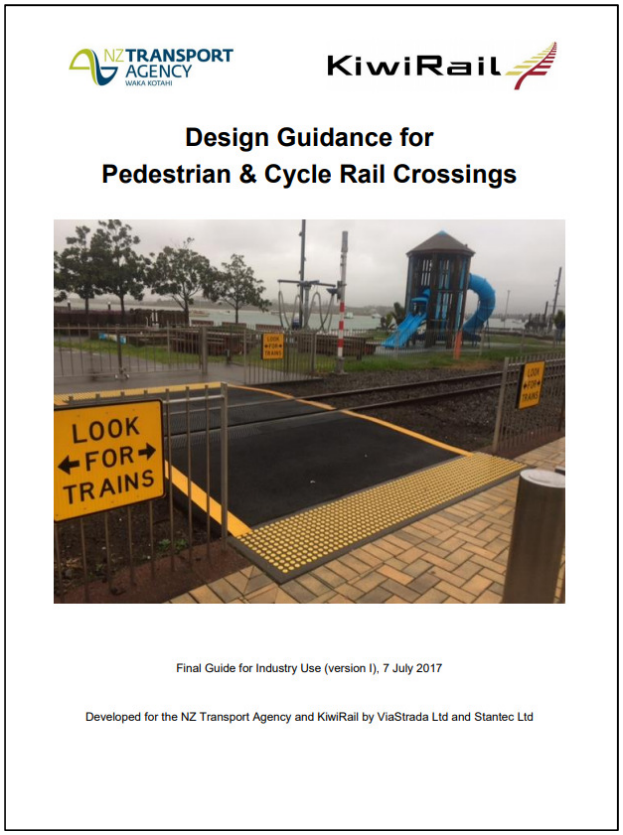
General purposes for which the financial contribution may be used:	To provide safe and efficient vehicle and pedestrian access to and within the subdivision and/or development, to mitigate the adverse effects of roading development, to enhance streetscape and general amenity values and to maintain, improve and develop the roading network.
Rural Residential (Brookfield Road) Zone:	The up-grading of the intersection of Landsborough/Coonoor/Fairview Roads for the purpose of safe vehicle movement up to a maximum of 25% of the actual construction costs.
	The upgrading of the single lane bridge on Brookfield Road to a two lane bridge – to a maximum of 50% of the total construction costs.

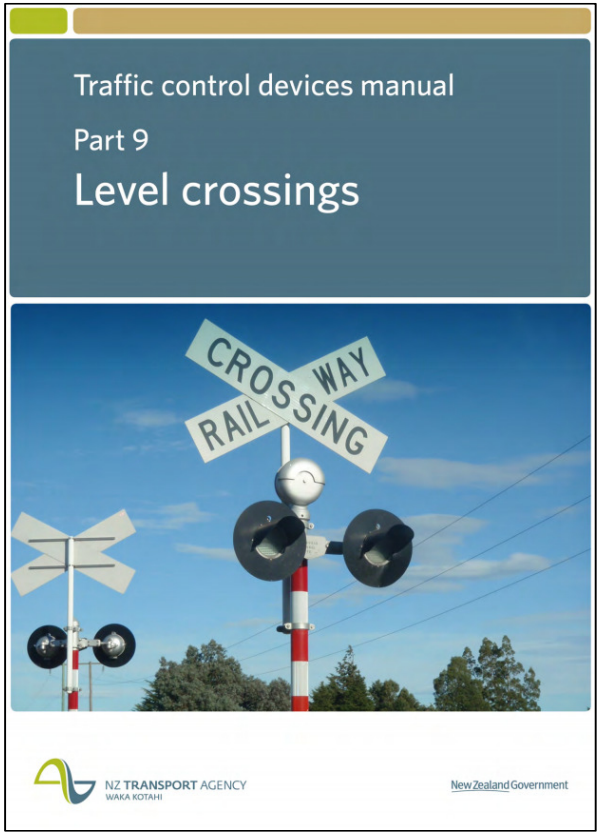
6.6.5 RULES FOR FINANCIAL CONTRIBUTIONS

Circumstances, maximum amount and general purposes of Financial Contributions.	
1 The provision of roads, private ways, access ways and service lanes including all future and/or indicative roads, access ways and service lanes.	
Circumstances:	Where new allotments are intended for human habitation or occupation.
Maximum amount of contribution:	The full and actual cost of providing for all roads, private ways, access ways and service lanes to and within the land being subdivided and/or developed, including but not limited to: • the value of the necessary land; and • the provision of access ways, service lanes and fences; and • the formation and grassing of road berms; and • the provision of road gardens, median strips, road name plates and road furniture; and • road splays, turning bays and slip lanes; and • road drainage and road crossing; and • actual road construction costs

Transport technical standards







Next steps

- Deliver draft report by 2 August
- Technical Working Group Meeting 1 (7 August)
- Feedback period (2 weeks) by 16 August
- Final report by 23 August