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Selwyn District Plan Review

DW009 – Transport

Selwyn District Council

Selwyn DISTRICT COUNCIL

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Quality Assurance Information

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Executive Summary

Background

The Operative Selwyn District Plan (District Plan) Review process is underway. 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 review is the first stage of progressing transport related changes to the District Plan.

The transport provisions of the District Plan were last amended through Plan Change 12 (PC12) in 2012. The amendments broadly addressed: integration of transport and land use; a safe and efficient transport network; protecting options for the future transport network; parking; road type and hierarchy changes and some other minor changes.

Findings

A 'Strengths, weaknesses, opportunity and threats' (SWOT) analysis of the transport provisions was undertaken by Council staff, which was made available to the consultant team to inform the review. In addition, two workshops were held to gain the views of council staff, the New Zealand Transport Agency (NZTA) and Environment Canterbury (ECan). Mahaanui Kurataio Limited were also consulted. Through this process the following review issues were identified:

- **Road reserve management** (hierarchy and control)
- **Integrating land use and transport** (Strategic Direction, Integrated Transport Assessments)
- **Amenity and character** (street design, vehicle crossings, amenity planting/berms)
- **Supporting active modes/modal shift** (walkable blocks, footpaths, cycle provision, cycle parking, end of trip facilities, public transport)
- **Car parking** (management and design)
- **Referencing external documents**

With the key issues identified, the review considered key strategic and district documents, neighbouring and other district plans, and best practice with respect to the management of transport effects and District Plan content in relation to each issue.

Through the issues and options workshops the following issues were discounted from further investigation:

- No need to have specific transport resilience provisions – to be addressed through the Natural Hazards topic and Transport Activity Management Plan.
- No need to have future transport needs (e.g. electric cars) provisions - to be addressed through the Transport Activity Management Plan.
- No need to address reverse sensitivity as this is being reviewed through the noise and vibration provisions by appropriate experts.
- No need to align the District Plan road hierarchy with the One Road Network Classification
- No requirement for end of trip facilities such as showers, changing rooms or lockers.

Key recommendations

Key recommendations to address the issues raised in the review include:

Road reserve management

- Amend the Utilities Rules to reduce the risk of resource consent being required for street upgrades. Also, define the zone boundary as the centreline of the road where the zone is different on either side of the road. Alternatively, consider a transport zone to manage activities in the road reserve.

Integrating land use and transport

- Require Integrated Transport Assessments that are based on scale of activity or a combination of scale and some defined activities. This requires further discussion and analysis in the next stage of the review.

Amenity and character

- Ensure the Transport objectives and policies include amenity and character considerations.
- As part of the next stage of work investigate the issue of narrow local minor and intermediate road widths with the intent of seeking better outcomes through the provision of assessment criteria. This is also related to when the consent process requires the cross sections to be submitted, rather than waiting until Engineering Approval.

Supporting active modes/modal shift

- Require the size of street blocks to be 800m maximum to promote walkable networks.
- Require that cul de sacs must include a pedestrian link at end and a line of sight to adjoining street.
- As part of the next stage of work investigate the issue of footpaths on local roads, acknowledging that this issue is linked to road widths issue.
- Require cycle parking supply specific to the activity.
- Require cycle parking to be well located (and designed possibly through the Engineering Cose of Practice).
- The objectives and policies developed for the new Plan need to incorporate the public transport related directions and also consider specific public transport developments, such as park & rides schemes and enable them.

Car parking

- Consider parking supply requirement for two types of town centres defined through this process, retain minimums elsewhere. This requires further discussion and analysis in the next stage of the review and is linked to the development of a District Parking Strategy.
- Consider the requirement for visibility splays where no building setbacks are required.
- Apply the KAC Lincoln Precinct 1 (West) parking assessment matters to other relevant town centre environments.
- Review the parking activity types and definitions, and supply rates.

All of the recommended changes will require that the objectives, and more so the policies are clearly linked to the outcomes sought and any assessment requirements.

Process related recommendations

There are also process related issues that require consideration as follows:

- Consider making it clear how non-District Plan methods such as those outlined in the Engineering Code of Practice and Design Guides relate to the District Plan. This could be best achieved through a process mapping diagram showing where various documents are required to be referenced. This matter is likely to have been raised in other topic reviews.
- Consider the provision of Outline Development Plan guidance for applicants.
- Update Urban Design Guidelines and integrate these where appropriate within the District Plan.

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Contents

1. Introduction

1.1 Scope

The District Plan Review process is underway. The outcome of the review 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), the Canterbury Regional Land Plan (RLTP), the Mahaanui Iwi Management Plan (IMP), the Greater Christchurch Transport Statement, the Selwyn 2031 District Development Strategy, the Selwyn Transportation Activity Management Plan, town centre plans, area plans and also council design guides. There is also consideration of the One Network Road Classification (ONRC) developed in partnership by the NZ Transport Agency and Local Government NZ.

Best practice with respect to the management of transport effects has evolved with greater emphasis on the integration of transport and land use planning. The District Plan review provides the opportunity to enhance the Plan to reflect best practice building on that achieved with Plan Change 12 (PC12) Integrated Transport Management Plan adopted in 2012. The PC12 amendments broadly addressed: integration of transport and land use; a safe and efficient transport network; protecting options for the future transport network; parking; road hierarchy changes and some other minor changes.

The PC12 project reviewed and updated where appropriate the technical engineering standards including car parking (space dimensions, queuing space dimensions), vehicle accessways (widths, maximum number of sites, distance from intersections, sight distances) and road intersection spacing (reduced requirement for low speed environments). It is not anticipated that these technical engineering standards require substantive review as part of this current review as no new issues have been raised by SDC staff and best practice has generally not changed since PC12 was prepared. However, an issue raised in PC12 was the referencing between the District Plan and the Engineering Code of Practice to avoid duplication, confusion and misalignment, which is still relevant and is discussed in this review.

There may also be opportunities to ensure some level of consistency where appropriate with neighbouring Councils, particularly if they have recently made transport related changes to their Plans. Consideration has also been given to the Greater Christchurch partnership that includes collaboration on transport matters across the Greater Christchurch area. Broader matters such as the promotion of modal shift, and amenity and character are also important to consider in the review.

It should be noted that 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 therefore does not specifically include these elements however the review teams will need to continue to communicate throughout the review process.

1.2 Consultant review team

The team engaged to undertake the transport review is made up of transportation experts from Abley Transportation Consultants Ltd and an urban design expert from Jasmax Ltd. This team facilitates an integrated approach with respect to transport and urban design.

Jeanette Ward, Transportation Engineer (MET, BE(Hons), NZCE)

Jeanette is a Chartered Professional Engineer with 20 years of practical and diverse civil engineering experience gained in both the UK and New Zealand. For the past decade, Jeanette has focused on traffic engineering/design, transport planning and project management of transport projects.

Jeanette has vast experience in district plan reviews. Her most recent district plan work was assisting the Christchurch City Council in the recent Replacement District Plan process. Her role was to develop bicycle parking and end of trip facilities rules that supported the vision of the Christchurch Transport Strategic Plan and also be expert witness in this topic area. In 2009 Jeanette was part of the team that undertook a review and update of the existing Selwyn District Plan transport provisions to reflect the strategic direction of Council. This review resulted in Plan Change 12 (PC12). Jeanette led the review process which involved three stages; scoping the plan changes, drafting Plan changes and the Section 32 Analysis.

Jeanette is very familiar with the Selwyn District having also worked on Plan Change 11, the Rolleston Town Centre (scheme design), Lincoln Town Centre (scheme design and parking management) and the Malvern and Ellesmere Area Plans (Transport Assessment).

Ann-Marie Head, Transportation Engineer (BE(Hons))

Ann-Marie is a Chartered Professional Engineer with 15 years of experience providing transportation planning and traffic engineering advice to public and private sector clients. She has valuable experience working on large and small complex projects in the United Kingdom, Australia and New Zealand.

Ann-Marie has a wide skill base ranging from transport strategy and policy development, Integrated Transport Assessments, District Plan reviews, and the planning, assessment and design of transport networks and facilities. Ann-Marie's recent and relevant experience includes the work for Waimakariri's parking plan change (PC40) and she was also involved in conferencing as an expert witness for the Transport Chapter of the Christchurch Replacement District Plan. More recently Ann-Marie was involved in a review of the Whangarei District Plan with respect to parking and Integrated Transport Assessments. She has been an expert witness at many other resource consent hearings, as well as for recovery plans and district plan reviews.

Edward Jolly, Urban Designer

Edward is a Senior Urban Designer at Jasmax with over 17 years' experience in Urban Design and Landscape Architecture. Edward leads the Jasmax Urban Design team in Christchurch. He has broad global experience in delivering a range of projects in both the private and public sectors. Edward has expertise in transport focused urban design projects with specific emphasis on public transport and passive transport modes. His experience includes the delivery of large scale strategic plans, land use and transportation strategies as well as site specific master planning and the design of public spaces and streets.

Edward has recently been involved in the Christchurch Replacement District Plan providing expert witness and advice to Christchurch City Council and Canterbury University on a number of zones within the plan. Edward has also recently been involved in the Christchurch Central Recovery Plan 'Anchor Projects' specifically the Cathedral Square, South Frame and An Accessible City. Edward has also recently been providing expert advice and evidence relating to Special Housing Areas (SHA's), tourism infrastructure and a number of residential focused outline development plans (ODP's).

1.3 Methodology

The methodology involved a number of reviews and assessments, two half day workshops with key Selwyn District Council(SDC) staff and external stakeholders (ECan and NZTA) and also targeted discussions with Mahaanui Kurataio Limited and other councils. KiwiRail were not included in the stakeholder workshops as the focus of the review was the road network, acknowledging that the road network crosses the rail network in a limited number of locations.

SDC staff had previously compiled a 'Strengths, weaknesses, opportunity and threats' (SWOT) analysis for the transport chapter and this was made available to the consultant team 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

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. The assessment 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 4 for the findings.

Approaches of Neighbouring Councils

The approaches of the neighbouring councils (Ashburton District, Waimakariri District, and Christchurch City), to the management of transport from an RMA perspective were also reviewed. Consideration was also given to cross boundary issues and potential consistency moving forward. Refer to Section 5 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 policies and 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 Sections 6 to 11.

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 Section 13 for the recommendations.

2. Land transport in Selwyn District

2.1 Overview

Land transport covers all land-based transportation systems that provide for the movement of people, goods and services, and includes road networks from state highways to local roads, rail networks, provisions for pedestrians and cyclists, and public transport networks (services and infrastructure). The current Selwyn District Transport Activity Statement provides a detailed overview of the transport system in the district at that time, and this is summarised below. The Draft Transport Activity Statement 2018 has been prepared, and although was not final at the time of preparing this report, consideration of this document has been included in the commentary below.

The Selwyn District has approximately 2,600km of roads that are managed by SDC, around 1,500km are sealed roads and the remaining 1,100km are unsealed roads located in the rural areas of the district. There are also state highways passing through the district (SHs 1, 72, 73, 74, and 77) that are managed by the NZTA. Route 72 is the Inland Scenic route that connects across the Ashburton, Selwyn and Waimakariri Council areas towards the hills and high country. KiwiRail manage two railway corridors through the district, the Main South line and the Midland line. There are 53 level crossings where the rail network interfaces with the road network in Selwyn District. The Rolleston Industrial Zone has two “Inland ports” with road and rail freight transport and distribution connectivity that includes rail sidings into some key activities in the industrial area.

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 Selwyn’s growing townships are continually being pursued to provide a wider range of transport choices for people. For example, within townships, pathways and cycleways are being integrated into the design and construction of new subdivisions, both residential and commercial/industrial. Ensuring that these pathways and cycleways link up to achieve a coherent network is one of the challenges when working across numerous land owners and developments. Council has a Walking and Cycling Strategy that looks to ensure there are networks within and between townships and has been constructing a series of key links such as the Lincoln to Rolleston Cycleway that connects to the Rail Trail in the eastern part of the District.

ECan operate four bus services in the district, the Yellow line to Rolleston, the No.80 service to Lincoln and the No.820 service between Lincoln and Burnham. New metro bus services and routes are only introduced if they are economically viable. A new express service, No. 85 between Rolleston and the Central City has recently started on a trial basis to determine if it will be viable. The more outlying townships generally cannot generate sufficient patronage to warrant or fund a subsidised metro service. This is unless a bus company provides a direct “user pays” service outside the system provided by ECan such as the morning and evening service that until recently ran between Darfield and Christchurch. How public transport services will be provided in the future across the Greater Christchurch area is currently being investigated by the Greater Christchurch Public Transport Joint Committee. The committee collectively represents the combined interests of the Greater Christchurch Councils and the NZTA on public transport matters.

In 2007 SDC completed a six-year comprehensive strategic study of the roading network to the south of Christchurch called the Christchurch, Rolleston and Environs Transportation Study (CRETS). SDC together with the other study partners including NZTA, Christchurch City Council, ECan and the Christchurch International Airport Limited (CIAL) formulated a strategy of roading, walking, cycling and public transport projects to cater for the increases in growth to 2021 and beyond. This has been the Council’s key transport strategy to date which has enabled the progression to more recent specific studies and business cases to progress major roading improvements around the local Rolleston and Prebbleton roading networks.

The Greater Christchurch Transport Statement (2012) looked at how collectively the key transport providers needed to work together to resolve transport issues going forward in the post-earthquake environment. More recently the Christchurch Transport Investment Story (2017) has identified key state highway and local roading projects associated with State Highway 1 and 73 in the Greater Christchurch part of the district that are needed for the assessed transport needs and demands in these areas.

Since its adoption, CRETS has also formed the basis of the major state highway improvement projects associated with the Roads of National Significance (RoNS) scheme, such as the Christchurch Southern Motorway Stage 2 (CSM2) to Rolleston which is currently under construction. Council continues to progressively plan and upgrade local roads and routes that CRETS identified and those informed and updated from more recent studies and business cases as referred to above. These improvement programmes and projects are detailed in Councils' Transport Activity Management Plan and approved and funded through respective Long Term and Annual Plans.

Council continues to work with its Greater Christchurch partners on joint initiatives such as public transport and travel demand management across Greater Christchurch to cater for the transport demands expected from the additional growth expected in the area. The Ellesmere and Malvern Area Plans completed in 2016 provide information and context about how transport needs are proposed to be catered for in these rural areas beyond the more specific focus relating to Eastern Selwyn and the Greater Christchurch parts of the district.

It is projected that Council will be spending on average around $15 million per year over the next 10 years on its routine road maintenance programmes, plus a series of major roading and transport improvement projects averaging $10 million per year. The majority of these projects relate to dealing with the issues of growth in the eastern part of the District. Eligible transport activities like maintenance and some improvement projects are subsidised by the NZTA at a rate of 51%.

2.2 Factors influencing the District's transport context

Population Growth

The Selwyn District is a fast growing district due to its proximity to Christchurch city which enables people to gain employment within a comfortable commuting distance of Christchurch, or to gain employment within the district and at the same time enjoy the lifestyle the district provides.

The impact of the 2010 and 2011 Christchurch earthquakes resulted in a steeper growth rate between the 2006 Census and 2013 Census than previous five year periods. Future population projections indicate that this growth is set to continue with an increase of almost 30,000 people bringing the District's population to over 74,000 by 2031 and over 100,000 by 2048. The district is made up of four Wards, much of the growth will be concentrated in the Selwyn Central and Springs Wards in proximity to metropolitan Christchurch. However, the Malvern and Ellesmere Wards are also anticipating growth in townships like Darfield and Leeston for example.

45% of Selwyn's working population, around 11,200 workers per day, commute between Selwyn and Christchurch for work purposes according to the 2013 census. These numbers will increase as the Christchurch central city continues to be rebuilt. Local road 'vehicle kilometres travelled' (VKT) has increased by 27% in the last six years to around 360 million per annum, as shown in **Figure 2.1**. This equates to approximately 4.1% increase per annum. Based on current predictions if the population of Selwyn doubles by around 2040 then so will VKT to around 720 million per annum.

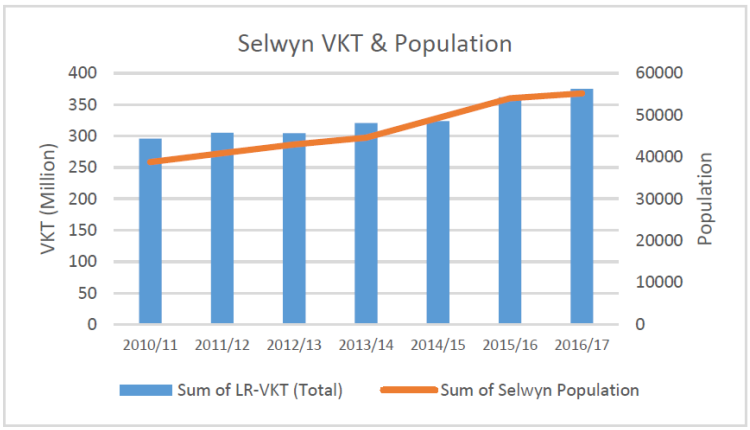


***Figure 2.1** VKT growth since 2010/2011*

The strategic direction for growth is discussed in Section 4.3. This direction seeks future urban growth in the district to be consolidated in and around existing townships, rather than creating new or isolated townships.

Population growth has the potential to adversely impact the capacity and safety of the transport network, but also the opportunity to increase demand for public transport and the use of travel demand measures to sustainability cater for growth over time.

Other factors

In addition to the increasing growth in population and the subsequent demand that places on the transport network, there are additional demands being placed on the transport network from other factors, these are outlined below. These factors are unlikely to have a large impact in the District Plan context except for maintaining a focus on road safety where appropriate.

- **Freight volumes** over Canterbury including Selwyn District are forecast to double over the next 30 years[1]. With the expansion of the Rolleston Industrial Zone covering an area of approximately 300 hectares, heavy vehicle traffic will be generated to and from this area. Dairy conversions have seen large areas of farm land converted to dairy operations with an increasing rise in milk tanker traffic to processing plants such Fonterra and Synlait in the District and Westland Milk. One of the factors expected to influence this growth is the increased productivity that will result from the Central Plains Water Scheme and also increased forestry and potentially mining activity in the hill and high country areas.
- **Increased tourism** will be a consideration in the Selwyn District as tourist numbers have continued to grow both nationally and within the Canterbury region and this is set to continue over the coming years. The main impacts of tourism tend to be on the inter-district routes, particularly those used as alternatives to the State Highway network. On major tourist routes traffic volumes are expected to increase with projected traffic volumes varying from 4% to 8% or more per annum. The capacity of the roading network will not be adversely affected by the increase in tourism, however safety issues may arise (e.g. driving on the wrong side of the road).
- **Increasing number of cycling tourists** which can be in conflict with the increase in traffic and heavy vehicles on main routes and some narrower high speed rural roads. High speed traffic environments combined with insufficient sealed shoulder width creates an uncomfortable and potentially unsafe situation for these cyclists in some situations. SDC has been constructing a series of off road cycleways between some townships that also link to the Christchurch to Little River Rail Trail used by tourists in the region and has a programme of seal widening some key rural arterial routes which will also provide wider shoulders for cyclists.

[1] Greater Christchurch Freight Study

3. Transport in District Plans

3.1 Overview

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[2] provisions in district plans should[3]:

- *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*
- *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. Other legislation also contains provisions that must be considered and often included in the District Plan, such as the Land Use Recovery Plan (LURP).

It is intended that the Selwyn 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.

3.2 Operative Selwyn District Plan

Overview

The Selwyn District Plan comprises two volumes. Volume 1 is for the townships of the District and Volume 2 is for the rural areas. The Plan is available on-line, it is an e-plan. Each volume comprises the following parts:

- Part A Introduction
- Part B Issues, Objectives and Policies
- Part C District Plan Rules
- Part D Definitions
- Part E Appendices

[2] Land transport means (under 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

[3] RMA Quality Planning Consultants (2013), Plan Topics - Land Transport

The transport provisions of the Operative District Plan were last amended through PC12 in 2012. The amendments broadly addressed: integration of transport and land use; a safe and efficient transport network; protecting options for the future transport network; parking; road hierarchy changes and some other minor changes. The PC12 project reviewed and updated where appropriate the following technical engineering standards:

- Car parking – space dimensions, queuing space dimensions
- Vehicle accessways – widths, maximum number of sites, distance from intersections, sight distances
- Road intersection spacing (reduced requirement for low speed environments)

It is not anticipated that these standards require substantive review as part of this current review as no issues have been raised by SDC staff and best practice has generally not changed since PC12 was prepared. Vehicle crossing width is included in this review given the link to urban design outcomes in medium density zones. An issue raised in PC12 was the referencing between the District Plan and the Engineering Code of Practice to avoid duplication, confusion and misalignment. This issue is still relevant and is discussed in this review.

The car and cycle parking rates were reviewed as part of PC12 however these will require further review given the development of town centre plans and specific issues raised by SDC staff and given an activity based plan is proposed.

A specific PC12 change that has been effective in encouraging walking and cycling networks that exhibit CPTED principles was the width requirement and requirement for low, permeable fencing (if over 1.2m high) for walkways/cycleways along public reserves. **Figure 3.1** shows a recent walking/cycling accessway in Faringdon that illustrates the outcomes sought by PC12.

Figure 3.1 *Wide walking and cycling accessway*

Since PC12 other location specific transport rules have been added for Outline Development Plan (ODP) areas and town centres.

Subdivision

The subdivision of land in Selwyn 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. Types and scales of subdivision are variable across Selwyn from large multi-hectare areas which have in the past been subject to the structure planning and ODP, and plan change processes, through to smaller suburban extensions and local neighbourhood infill developments, and also industrial areas.

The District Plan sets out the subdivision objectives and policies for both living, business and rural zones. In addition, the Selwyn District Council Subdivision Design Guide (2009) provides good practice guidance to developers, designers and landowners that are seeking to create new subdivision in the district. However this guide is non-statutory (except for subdivisions subject to Plan Change 7) and therefore is not widely used and does not have sufficient weight to require good subdivision outcomes. As discussed later in Section 4.5 there is no link to the Subdivision Design Guide from the District Plan or the Subdivision webpage, it can only be found on the 'Urban Design Guides' webpage. The Engineering Approval process is currently the key opportunity to seek outcomes that are aligned with the guide.

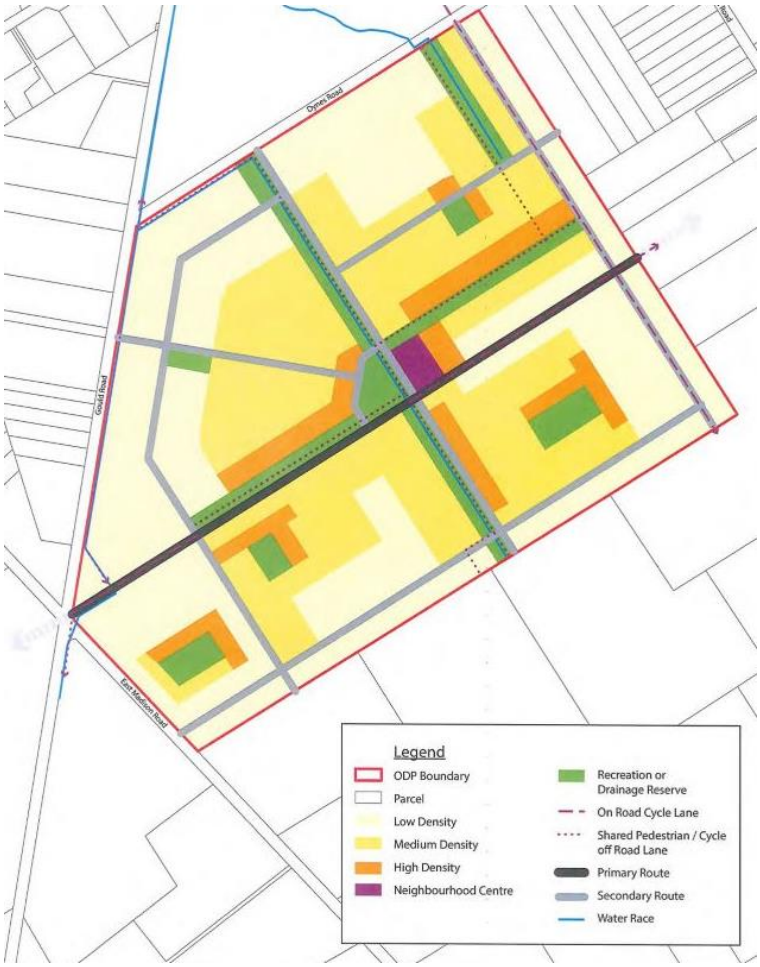
Plan Change 7 (PC7) rezoned land within Lincoln and Rolleston[4] to provide for the future urban growth of both townships. The purpose of the plan change was to enable the ability to subdivide land in these townships within areas that previously had an absence of strategic planning. PC7 established a new 'living Z' zone and requirement for Outline Development Plans (ODPs) to be approved before development could occur. PC7 also established changes to the subdivision section of the Operative Plan to implement principles of the Subdivision Design Guide. In summary, PC7 enabled principles of the Subdivision Design Guide to become statutory for the Living Z zone.

The implementation of ODPs in Selwyn has resulted in varying success in terms of the transport and urban design outcomes. Some have included added benefits to the transport network not necessary prescribed in the district plan such as surface storm water features and generous central medians containing amenity planting and footpaths such as those in Faringdon. However, some have had less success and brought over rules from the district plan that do not necessarily champion multi-modal networks or walkable neighbourhoods such as one sided footpaths. There does not appear to be any guidelines referenced by SDC with respect to preparation of ODPs. Overall the ODP process has been valuable in terms of working towards integrated outcomes.

An issue raised by SDC staff was that at ODP stage the road network is generally defined but the cross section is not always developed and it is not until engineering approval stage that is known and by then making changes can be problematic. For example a wider road than envisaged by the developer may be required to meet operation aspects. **Figure 3.2** shows an example of the roading network defined at ODP stage.

[4] As identified in Proposed Plan Change 1 (PC1) to the Regional Policy Statement and the Lincoln and Rolleston Structure Plans.

Figure 3.2
Example of ODP transport network



Matters over which the Council has restricted the exercise of its discretion for subdivisions are:

Access

- *If any allotment has access on to a State Highway or Arterial Road listed in Appendix 7:*
  - *Any adverse effects, including cumulative effects, on traffic safety and traffic flow on the Strategic Road; and*
  - *The design and location of the vehicular accessway and vehicle crossing; and*
  - *Whether access to the allotment(s) can be obtained off another road which is not a Strategic Road either directly or by an easement across other land.*
- *If access by a private accessway is proposed, whether the land the accessway serves has capacity for any intensification of density under District Plan averages for the zone and, if so, whether provision of a formed and vested legal road instead of a private accessway is appropriate.*
- *For Medium Density areas shown on an Outline Development Plan the ability to provide vehicle access to lots via a rear service lane to provide increased flexibility for future residential unit design and to minimise the visual impact for garaging on the street scene.*

- *For medium density areas, whether these areas are small pockets where the provision of a rear service lane is not practical or will result in significant design constraints on the layout of the balance area.*

Roads, Reserves and Walkways/Cycleways

- *The provision, location, co-ordination, layout and formation of all roads and vehicular accessways and walkways/cycleways; and*
- *The design and layout of any new road shall ensure the desired design speed is achieved with respect to the classification of road (including the subsets of local roads) and surrounding environment.*
- *The avoidance of areas which could create unsafe situations e.g. dark corridors, a lack of natural surveillance or clear sightlines across pedestrian and cyclist routes, or where a safe and secure environment may be compromised; and*
- *Whether the design and layout of roading, footpath patterns, and layout of allotments complements the natural characteristics of the site and the design and layout of any adjoining urban areas; and*
- *The length of cul-de-sacs and whether a pedestrian connection is appropriate from the end of the cul-de-sac through to another road; and*
- *The access to cul-de-sacs being from a through road rather than another cul-de-sac; and*
- *The balance of benefits of enclosing a subdivision i.e. gated subdivisions against potential longer term issues for residents, such as maintenance costs of facilities, and costs to the wider community including lack of connectivity or viability of public transport; and*
- *The provision, location, co-ordination, layout and formation of any land required for reserves, which is to comply with the 'Criteria for Taking Land Instead of Cash' clause of the 'Reserves Specific Issues regarding Development Contributions Assessment' in the Development Contribution Policy; and*
- *The provision of footpaths, lighting and street furniture; and*
- *Any landscaping and tree planting required in the road reserve, recreational reserves, and the margins of cycleways/walkways; and*
- *Whether roads and reserves have a coherent and logical layout to facilitate connectivity, legibility and permeability e.g. desire lines are provided to cater for cyclists and pedestrian users.*

Note: The consent authority shall consider any relevant provisions in the district plan or the Council's Engineering Code of Practice where appropriate, in using its discretion.

3.3 Transport rules

Table 3.1 provides an overview of where the transport rules are located within the District plan.

Table 3.1
Overview of where the Operative transport rules are located within District Plan

Section of plan	Content
Township volume	
C5 – Living Zone Rules - Roading	Road and engineering standards, vehicle accessways, vehicle crossings, traffic sight lines at road/rail crossings, vehicle parking and cycle parking (linked to Appendix E13)
C12 – Living Zone Rules – Subdivision	Access, corner splays, assessment matters (roads, reserves, walkways and cycleways, and point strips) and location specific rules.
C17 – Business Zone Rules - Roading	Road and engineering standards, vehicle accessways, vehicle crossings, traffic sight lines at road/rail crossings, vehicle parking and cycle parking, parking areas (linked to Appendix E13)
C24 – Business Zone Rules - Subdivision	Access, corner splays, assessment matters (roads, reserves and walkways and cycleways and point strips) and location specific rules.
Appendix E13 - Transport	Parking requirements, vehicle accessway and crossing standards and road design standards.
Rural Volume	
C4 - Roading	Road and engineering standards, vehicle accessways, vehicle crossings, traffic sight lines at road/rail crossings, vehicle parking and cycle parking (linked to Appendix E10).
C10 - Subdivision	Access, corner splays, assessment matters (roads, reserves and walkways and cycleways, and point strips) and location specific rules.
Appendix E10 - Transport	Parking requirements, vehicle accessway and crossing standards and road design standards.

3.4 Review issues

The SWOT analysis and the discussions held at the workshops identified the following issues which formed the basis of the review:

- **Road reserve management** (hierarchy and control)
- **Integrating land use and transport** (Strategic Direction, Integrated Transport Assessments)
- **Amenity and character** (street design, vehicle crossings, amenity planting/berms)
- **Supporting active modes** (street network layouts footpaths, cycle provision, cycle parking, end of trip facilities, public transport)
- **Car parking** (management and design)
- **Referencing external documents**

The following issues were not progressed following the Issues and Opportunities Workshop:

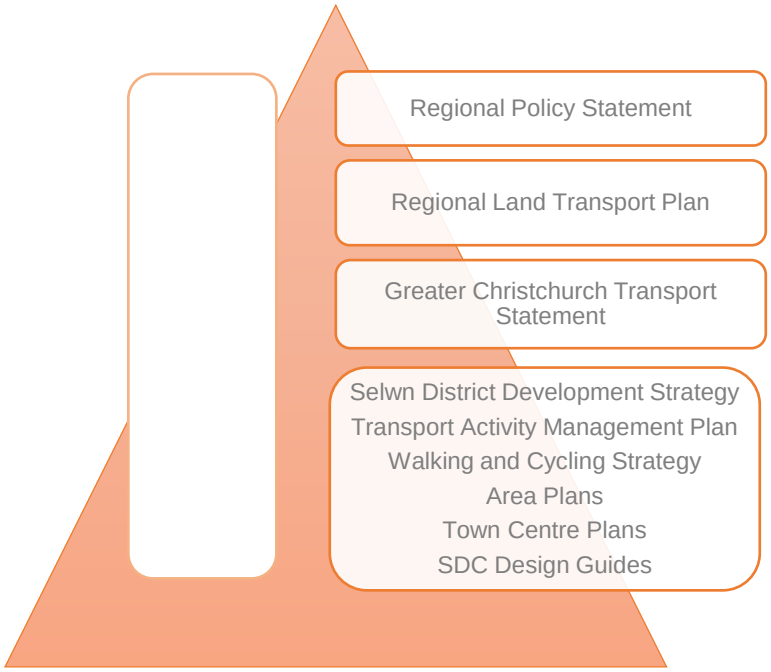
- **Resilience -** This will be addressed through the Natural Hazards Chapter and the Transport Activity Management Plan.
- **Future transport needs -** This will be addressed through the Transport Activity Management Plan.
- **Reverse sensitivity** - This is being reviewed through the noise and vibration provisions by appropriate experts. NZTA's reverse sensitivity policy (2015) includes variable setbacks from state highways, this is communicated through a GIS map showing the different setback requirements on different parts of the state highway network.

4. Statutory review

4.1 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. The key strategies and plans reviewed are shown in **Figure 4.1**. 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 Selwyn District. The assessment identified the nature of any changes that SDC may wish to consider in the Proposed Plan in order to fulfil statutory obligations or alignment with these documents.

Figure 4.1
Strategic Context overview



4.2 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; engage with the NZ Transport Agency to protect the appropriate functioning of the strategic land and transport network."*[5]

Chapter 6, Recovery and rebuilding of Greater Christchurch, provides a resource management framework for the recovery of Greater Christchurch, to enable and support earthquake recovery and rebuilding, including restoration and enhancement. However, it does acknowledge that while the speed of recovery is important, so too is the quality of the built form. It recognises that poorly designed development can adversely affect urban amenity values, rural amenity values, historic heritage, health and safety, integration with community, educational, social and commercial facilities, and overall liveability. Of particular note in Chapter 6 is Policy 6.3.4 (Transport Effectiveness) which requires territorial authorities to:

- *Include in district plans objectives, policies and rules (if any) to give effect to Policy 6.3.4.*
- *Include objectives and policies, and may include rules in district plans to ensure that, where possible, development provides for, and supports increased uptake of active and public transport; and provides opportunities for modal choice, including walking and cycling.*
- *Include trigger thresholds in district plans for development where an integrated transport assessment is required.*
- *Identify strategic freight routes.*

Regional Land Transport Plan (2016)

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 objectives of the plan are:

- *A land transport network that addresses current and future transport demand*
- *A land transport system that is increasingly free from death and serious injury*
- *The Canterbury earthquakes recovery is supported*
- *The land transport network is resilient and supports long-term sustainability*
- *Investment in land transport infrastructure and services is efficient*

The specific outcome sought under the fourth objective in relation to District Plans is that "*Transport infrastructure and services are integrated with and support land use and development patterns, contained in the RPS and district plans."*

It is noted that at the time of preparing this report the RLTP is being updated to a 2018 version. The draft RLTP proposes the following new investment priorities:

- *travel time reliability*
- *accessibility*
- *condition and suitability of assets*

[5] RPS Chapter 5.3.8, Methods 3 and 4

- *safety*
- *resilience*
- *environmental impact*

These investment priorities build on the existing priorities outlined in the current RLTP, but also take account of the comprehensive issues and challenges identified during phase one, as well as proposed changes signalled to date to GPS 2018.

Mahaanui Iwi Management Plan (2013)

The Iwi Management Plan (IMP) is an expression of kaitiakitanga (guardianship and conservation) and rangatiratanga (sovereignty). It is a planning document that provides a values-based, plain language policy framework for the protection and enhancement of Ngāi Tahu values, and for achieving outcomes that provide for the relationship of Ngāi Tahu with natural resources across an area bound by the east coast, the Hurunui River to the north, the Hakatere River to the south, and inland to the southern alps.

While the IMP is primarily a planning document to assist effective participation in natural resource and environmental management in the IMP area, a fundamental objective of the IMP is to enable external agencies to understand issues of significance to mana whenua, and how those issues can be resolved in a manner consistent with cultural values and interests.

In the context of the District Plan, the IMP also provides a tool for local authorities, other agencies and the wider community to meet statutory obligations under the RMA 1991. Part 5 outlines regional objectives, issues and policies. Part 5 is divided into 8 policy sections addressing Kaitiakitanga, Wai Māori (freshwater) and Ngā Tūtohu Whenua (cultural landscapes), and the domains of Ranginui (sky), Papatūānuku (land), Tāne Mahuta (mahinga kai and biodiversity), Tangaroa (oceans) and Tāwhirimātea (wind farms).

The objectives related to 'land' appear to be the most relevant to transport planning, specifically objective 7 that seeks that "*Subdivision and development activities implement low impact, innovative and sustainable solutions to water, stormwater, waste and energy issues*".

The 'land' issues of significance include "*Issue P16: Transport - The protection of sites of significance and indigenous biodiversity, and the potential for erosion and sedimentation are issues of importance with regard to land transport infrastructure."*

IMP transport polices generally focus on consultation and assessment of effects. The most relevant policy to transport provisions within the District Plan appears to be "*P16.8 To support sustainable transport measures in urban design and development, including public transport, pedestrian walkways, and cycle ways*."

These objectives, issues and policies align well with those reflected in other regional strategies, such as the RPS, and consideration of these will be made throughout the review and development of options.

Also of note are the Ngāi Tahu subdivision and development design guidelines that are outlined in the IMP, these include "*Urban and landscape design should encourage and support a sense of community within developments, including the position of houses, appropriately designed fencing, sufficient open spaces, and provisions for community gardens".*

4.3 Greater Christchurch Transport Statement (2012)

The Greater Christchurch Transport Statement (GCTS)[6] provides an overarching framework to enable a consistent, integrated approach to planning, prioritising, implementing and managing the transport network and services in the Greater Christchurch area. The GCTS focuses on the strategic links between key places within the Greater Christchurch area. The agreed outcomes will be delivered through the transport activities of the various partners. Further and other localised activities for active transport and improvements will continue to be developed through the local area transport plans of the Greater Christchurch partners.

The GCTS is designed to help guide the development and management of Greater Christchurch transport programmes and partners' investment strategies towards a strong and resilient future. It responds to the Christchurch Earthquake Recovery Authority (CERA) Recovery Strategy Built Environment goal of developing a transport system that meets the changed needs of people and businesses and enables accessible, sustainable, affordable and safe travel choices. It also takes account of national and regional transport objectives and policies, and contributes to the visions for social, economic and environmental well-being set out in the Greater Christchurch Urban Development Strategy (UDS).

This document updated the 2007 Greater Christchurch Urban Development Strategy (the Strategy) to respond to the significant events and changes that occurred since its release. It does not replace the 2007 Strategy, but rather complements it. The strategy also encompasses a range of common strategies such as; Greater Christchurch Travel Demand Strategy, Greater Christchurch Freight Strategy, Greater Christchurch Metro Strategy.

The GCTS was also informed by the Christchurch, Rolleston and Environs Transportation Study (CRETS, 2007) as discussed earlier in Chapter 2. CRETS was a comprehensive strategic study of the roading network to the south of Christchurch undertaken by SDC together with the other study partners including NZTA, Christchurch City Council, ECan and the Christchurch International Airport Limited (CIAL).

Conclusion

The District Plan provisions need to achieve, or be consistent with, the requirements of the higher order documents discussed above. The key issue for the District Plan is that there is currently no method for considering the integration of transport and land use.

The following are considered to be the key changes, or aspects that need strengthening to fulfil statutory obligations, which will be developed in more detail throughout the review:

- Integration of land use and transport is sought by all Greater Christchurch and regional agencies. The requirement for Integrated Transport Assessments (ITAs) is a specific direction from the RPS that must be addressed. What is considered a 'substantial development' needs to be determined and then ITAs need to be required for those (see Section 7 of this report for further development of the ITA requirement).

- 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 Council and Greater Christchurch collaborative strategies e.g. Travel Demand that seek more sustainable transport networks (see Section 9).

[6] http://greaterchristchurch.org.nz/assets/Uploads/GCTSDec2012-Copy.pdf

4.4 District Strategies and Plans

Selwyn 2031

The Selwyn 2031 District Development Strategy has the following vision "*To grow and consolidate Selwyn District as one of the most liveable, attractive and prosperous places in New Zealand for residents, businesses and visitors*."

There is a clear strategic direction set out in the strategy for future urban growth in the district to be consolidated in and around existing townships, rather than creating new or isolated townships. The Selwyn District already has 21 townships, the majority of which are not large enough to supply employment for residents and many do not have sufficient population to sustain basic business services and community facilities.

There are also a number of isolated pockets of rural-residential development (identified as Existing Development Areas in the District Plan) and clusters of small titles throughout the rural area which are a result of historical zoning. Council does not wish to see this dispersed township pattern being duplicated or expanded in the future. Rather, it is envisaged that all new urban development (including rural-residential) will occur in or adjacent to existing townships. A consolidated growth pattern will promote the efficient and effective provision of both service and social infrastructure and maintain an urban/rural contrast to protect the interests of both urban and rural communities.

Consideration also needs to be given to energy efficiency and the consumption of fossil fuels, particularly where there is already a dispersed settlement pattern established. Access to public transport, or conversely, a greater ability to live, work and play within the same township (which reduces travel demand), will be enhanced through the consolidation of existing townships and the provision of internal cycle and walking linkages[7]. Selwyn 2031 has no specific detail on car parking.

Transportation Activity Management Plan (2018 draft)

The key SDC document that references transport related issues, provides context, and offers ways to manage the issues is the Transportation Activity Management Plan (TAMP) (Draft 2018). The purpose of a TAMP is to support the Long Term Plan and outline and summarise in one place, Councils' strategic and long term management approach for the provision, administration and maintenance of the Council provided transport network.

Council's Land Transport Activity Goal, set out in the TAMP is "*To maintain, operate and if necessary, improve the road network and other transport activities to achieve a range of facilities that provide for the safe and efficient movement of people and goods to a standard that is both acceptable and sustainable"*. Council's aims are;

- *Short term (0-3 years): To look after what we have and better understand emerging issues*
- *Medium term (3-10 years): Implement what is needed with increased confidence*
- *Long term (10+ years): A resilient transport network that supports the district's development.*

[7] Selwyn District Council (2014) Selwyn 2031: District Development Strategy; Background Information; Chapter 6 Infrastructural Factors

Walking and Cycling Strategy (2018 draft)

The desired outcome of the Draft Walking and Cycling Strategy (2018) is "*A Selwyn where more people walk and cycle safely for transportation and enjoyment".*

The goals of the strategy are:

- *Goal 1: Improved Safety for Pedestrians and Cyclists*
- *Goal 2: More People Choosing to Walk and Cycle More Often*
- *Goal 3: Fit For Purpose Environments for Walking and Cycling Activities*
- *Goal 4: A More Accessible and Sustainable Transport System*

The strategy acknowledges that "*the District Plan is currently being reviewed and updated, and this will include how to improve the provision of walking and cycling in the District through future land use and development activities and opportunities."* However, there is a relevant district plan action under Goal 4 to "*Ensure sustainable transport is supported by the District Plan through appropriate rules, policies and objectives including the use of Integrated Transport Assessments where appropriate."*

The strategy also recognises that the District Plan identifies areas for development and includes Outline Development Plans showing how key transport, water services and reserves will need to be coordinated and connect together over new subdivision areas. It encourages the continued use of ODPs to show how all the main transport networks are to be provided and continued coordination with developers as part of the planning for their subdivisions.

The strategy seeks that there will be "*at least one footpath along the side of an urban street or road, or on both sides on busier roads to improve safety by reducing the need for pedestrians to cross the road to use a footpath. These paths may be either the standard width of 1.5m or wider where there are more pedestrians, shops and activities that warrant the need to accommodate more people."*

Area Plans

The Ellesmere and Malvern Area Plans were adopted by SDC in September 2016. The purpose of the plans is to provide high-level planning direction to guide the growth and sustainable management of each township in the Ellesmere and Malvern areas through to the year 2031. The plans identify initiatives to assist in the delivery of the Selwyn 2031: District Development Strategy (Selwyn 2031) vision.

A transport assessment (Abley, 2015) for the Malvern and Ellesmere Wards of the Selwyn District was carried out to inform the development of the Area Plans for both of these Wards. The assessment focused on the townships in the Malvern and Ellesmere Wards and the interconnections and sought to identify existing or future potential network issues, future opportunities and constraints. The issues and opportunities for the district plan were generally related to the urban context and specifically to the design of the transport network to support walking and cycling. Townships in the Malvern area also suffer from severance issues related to State Highway 73 and the requirements of NZTA.

Town Centre Plans

There are two town centre plans in Selwyn, the Rolleston Town Centre Master Plan (2014) and the Lincoln Town Centre Plan (2016). Rolleston's population is expected to grow from around 13,000 now to reach 20,000 in 2030 and Lincoln's population will increase from 5,000 to over 10,000 in that time. Changes affecting the zoning of both these town centres have now been adopted and included in the Selwyn District Plan.

The changes were made in response to the requirements of the Land Use Recovery Plan (LURP). The LURP seeks to ensure that the residential, commercial and industrial business needs of Greater Christchurch are met. In particular, Action 27 of the LURP required SDC to change the District Plan to identify and provide for Key Activity Centres at Rolleston and Lincoln and to ensure there was sufficient industrial land.

Both Lincoln and Rolleston town centres are identified as Key Activity Centres. These are focal points for commercial, community and service activity. The Key Activity Centres have been divided into precincts to allow activities to locate in areas where they are considered most suitable. Action 27 references specific LURP outcomes, the transport specific outcomes are:

- *Congestion arising from road works and from changes in travel due to development, including business and household relocations, is minimised.*
- *An attractive and financially viable public transport network supports significantly increased use.*
- *More people walk and cycle in and between centres of activity and for local trips.*
- *An efficient freight network provides for the needs of freight transport, particularly in relation to access to the port and the airport.*

The plans for the Rolleston Town Centre provide some new roads to increase permeability and developing a new town centre core with significant street upgrades to improve amenity and accessibility for all modes. Lincoln has a more transformational focus that includes cycleways along the length of Gerald Street, this impacts on street parking supply which means other alternatives are needed e.g. combined public parking areas. Overall the common issue for both town centres is provision and location of adequate car parking. This was reflected in the LURP actions that were adopted in the District Plan.

The overall intent of the town centre plans/masterplan is to consider the future of the Centre so it can support the needs of the community and the wider Selwyn District over the next 20 – 30 years and beyond; be a tool to coordinate development and other changes in the Centre; provide an overview of the expected quality, nature and form of the commercial areas; and assist Council and individual development decisions, so that collectively all new development and streetscape works combine to create an attractive and integrated centre. The plans also provide for the projected increases in traffic in both townships in a safe and effective way balancing the two key desired outcomes i.e. form/function.

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 to be 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 considering requirements to meet the desired outcomes of the Town Centre Plans and potentially Selwyn 2031. For example, Town Centre Plans seek attractive and integrated centres, this will require consideration of parking scale and location in the District Plan (see Section 10).

- Integration of land use and transport is important given the expected district growth, particularly in townships (see Section 7).

- 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.

4.5 Design guidance documents

There are a range of SDC design guides and an SDC Engineering Code of Practice (ECoP) available with respect to land development, outlined in **Table 4.1**. The table includes a description of the documents and their relationship with the District Plan and other New Zealand Standards or publications.

Council also has numerous urban design guidelines, including the ones listed inTable 4.1. Some guidelines however have not been adopted and are still in draft form only. These guidelines need to be further developed before being referenced in the District Plan.

The design guides can be found on the SDC 'Urban Design Guides' webpage[8]. These documents are provided to "*outline how well designed development can make our townships better and more pleasant places to live and provide a range of housing and lifestyle choices."*

The ECoP has its own website, the relevant chapter of the ECoP for transport is Part 8 – Roading and Transportation[9].

The Guides and ECoP are referenced in the District Plan, but are non-statutory and are not often utilised by developers or council consents planners.

The way the guides are referenced in the District Plan varies from being listed as a non-District Plan method beneath a policy or as a note applicable to a certain rule. For example, a note associated with Rule 16.12, Building and Urban in Business Zones is "*The Council has developed a Commercial Design Guide addressing the design of new developments and applicants are encouraged to consider the matters discussed within this as a useful reference. However, resource consent applications will be assessed only against the matters of control listed in these rules.*

[8] http://www.selwyn.govt.nz/services/planning/design-guides

[9] http://www.selwyn.govt.nz/__data/assets/pdf_file/0014/35402/Part08_Roading-transport_final.1908.pdf

Table 4.1 Design guides, their focus and relationship with District Plan

Name of guide	Focus	Relationship with the District plan
Medium Density Housing Design Guide - Design Guide for medium density housing Adopted September 2011	This guide is in three parts. Part One traverses general considerations, Part Two addresses the layout and development of small lots while Part Three concentrates on the design of comprehensive housing.	States that it is an aid to interpreting the provisions (objectives, policies, rules and assessment matters) of the Selwyn District Plan. Referenced in District Plan Growth of Township policy methods.
Commercial Design Guide - Design Guide for Commercial Development Adopted March 2011	The purpose of this guide is to illustrate how commercial development can contribute to an attractive, lively and viable town. It shows how shops and other commercial development should fit in with their surroundings and form part of the urban fabric.	Not stated but assumed to be an aid to interpreting the provisions (objectives, policies, rules and assessment matters) of the Selwyn District Plan. Referenced in District Plan Growth of Township policy methods.
Subdivision Design Guide Design Guide for residential subdivision in the urban living zones Adopted September 2009	The purpose of this guide is to explain to developers, designers and landowners what the Selwyn District Council is seeking for its new subdivisions in and around the townships of the district.	States that it is an aid to interpreting the provisions (objectives, policies, rules and assessment matters) of the Selwyn District Plan. Referenced in District Plan Physical Resources and Growth of Township policy methods.
A short guide to Urban Fencing in the Selwyn District- Brochure Not adopted	Outlines the fencing rules including desirable and undesirable outcomes.	This guide is a check to ensure that established fencing complies with Rules 4.13 and 4.17 of the District Plan. Does not appear to be referenced in the District Plan.
Engineering Code of Practice 20 February 2012	Comprehensive document that confirms Council's current technical design requirements and standards for subdivision and project works in the district. This code also refers to NZS 4404:2010 Land Subdivision and Infrastructure for some guidance.	States that this document is to be used by consultants, surveyors and contractors involved in design and construction of assets created through subdivision or capital projects to be vested in Council. Referenced in District Plan Physical Resources policy methods, noted in Roading rules, referenced throughout roading appendices.

Conclusion

The relationship between the District Plan and design and engineering guides is a key issue.

The key matters to note are that the majority of the Guides are referenced in the Plan, however they are non-statutory and are not often utilised by developers or council consents planners unless specifically referenced in the notes to a particular rule. It is important to consider how these will be referenced in the District Plan and how they can be updated over time to reflect technical best practice without triggering a plan change. Alternatively some material may be better included as provisions in the District Plan.

SDC has advised that all of the urban design guidelines will need to be updated and ideally that this needs to happen as part of the DPR process to ensure they reflect and are consistent with the Proposed Plan, however the approach has not been confirmed as yet.

This will be considered in further detail in Section 12.

5. Neighbouring District/ City plans review

Selwyn District is located in the Canterbury region and is bounded by Westland District to the west, Ashburton District to the south, Waimakariri District to the north and Christchurch to the east. The latter three districts are also part of the Canterbury region and these three were reviewed as relevant neighbouring plans. Discussion with planners from each district informed the reviews outlined below.

5.1 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 5.1**, 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.

Figure 5.1
Ashburton District Road Hierarchy (extract from District Plan)

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

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 such public carparking can be made in lieu of part or the entire parking requirement.*

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 intersection separation distances are fairly standard.

5.2 Waimakariri District Council

The Waimakariri District Plan (WDP) was declared Operative on 3 November 2005. The plan can be found on the Waimakariri District Council (WDC) webpage 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. A relevant transport plan change was the Council led plan change (PC40) in relation to district wide rules for parking, which was made operative in April 2016.

WDC is currently reviewing the WDP content and structure building on the previous 'rolling review' of the Plan. A District Plan Effectiveness Review[10] for Transport was undertaken and the main issues identified will be considered in the drafting of the new District Plan. Subsequent to the effectiveness review, a discussion document was prepared for public consultation and included findings from the District Development Strategy process - the key findings being that there is support for 'green transport technologies' such as improved public transport and electric vehicles, and also demand for improved access to and between towns.

The discussion document[11] looked at two options for managing transport in the WDP as outlined below. Consultation on this closed on 27 October 2017.

[10] WDC, 2016, District Plan Effectiveness Review - Infrastructure, Utilities and Transport

[11] WDC, 2017, District Plan Review - Issues and options - Transport and Utilities

- ***Option 1: Retain the current District Plan transport provisions*** *- This option would continue to specify largely detail or design requirements for on site parking, access and loading requirements, and encourage road safety. The plan also sets out a basic road hierarchy to enable transport services to function with minimal conflict between activities, traffic and people. Importantly, the plan identifies future residential and business development areas around the key towns and this approach to consolidation has benefits for transport infrastructure provision and its use.*
- ***Option 2: Factor in District Plan transport provisions that encourage enhanced network sustainability*** *-This option could specifically provide for activities within the road reserve, such as all roading activities, signage, lighting and vehicle access to properties (vehicle crossings). It could also better control effects of transport on adjoining land uses and vice versa; provide additional requirements for activities that generate high traffic levels and promote more sustainable forms of transport. Sustainable transport forms include walking, cycling, public transport services, and charging facilities for electric and hybrid vehicles. This approach could also include transport assessments that would consider a wide range of traffic matters and provisions to encourage environmentally sustainable development.*

Like ADC, roads in the WDP are zoned according to the zoning either side of the road. Where a zone boundary is shown as being on a road in the District Plan Maps, the boundary is deemed to be the centreline of that road.

The Transport provisions are district wide provisions which may apply in addition to any relevant Zone provisions. Chapter 11 (Utilities and Traffic Management) includes the district wide transport issues, objectives and policies and Chapter 30 (Utilities and Traffic Management – Rules), includes the district wide transport rules. There is no explicit requirement for ITAs, however there is a high trip generating activity rule meaning that any activity generating more than 250 vehicle movements per day is classified as a restricted discretionary activity. It is noted that 'Utilities' include activities such as the construction and operation of roads. The plan review will be addressing these matters of ITAs and road reserve management.

The road hierarchy includes five classifications, strategic, arterial, collector, urban collector or local roads. All unformed roads are classified as 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.

Table 30.1 in Chapter 30 outlines the road design attributes for each road type and zone (either rural or residential/business), except those roads subject to agreed ODP designs. It is noted that footpaths are required on both sides of B1 zone local roads, only one side of local roads in residential (except for the South West Rangiora Residential 2 Zone Outline Development Plan area shown on District Plan Map 173 where two footpaths shall be provided) and B2 zones, and on neither side in B3 zone local roads.

PC40 (operative April 2016) sought to address a range of issues such as ensuring activity categories matched modern day demands, introducing loading and cycle parking requirements, seeking better urban design outcomes for town centres, and addressing the effect parking provision has on good walking access especially for people with mobility impairments. It also proposed a cap on parking supply for car parks greater than 20 spaces based on 130% of the minimum parking requirements in all zones. The WDC advised that this particular provision was not successful for a number of reasons including that it included areas that do not have a high level of accessibility to alternative transport modes, and that the minimum parking rates (which would influence the maximum rates under this proposal) were not sufficiently refined to avoid unintended outcomes.

PC40 also introduced a financial contribution in lieu of on-site parking for sites located on Principal Shopping Streets in the Rangiora and Kaiapoi town centres within the Business 1 zone. This rule has been in place for approximately two years and for the few sites that have been developed on the Principal Shopping Streets, developers have been comfortable with parking not being required or seeking limited parking taking in account site constraints, as there is sufficient public parking supply in the vicinity. However, no cash in-lieu contributions have been requested as WDC monitor supply and demand of the

surrounding parking through annual surveys and use a parking model to determine if additional supply is required. To date thebalance of supply and demand has not warranted the need for significant additional public parking supply. Overall the nil requirement is working well in practice as there is sufficient public parking to support this and only one financial contribution has been necessary to date. As discussed later in Section 9, cash in lieu will no longer be an option beyond 2020 due to recent RMA changes, but as Council currently are not taking financialcontributions this change is not affecting the principal method of requiring no minimum car parking in their main centres. It is noted that WDC does not have a district wide Parking Strategy.

To better control the impacts of large car park areas the provision of 20 or more new car parking spaces on any site other than within the Rural Zone (and some exclusions) was made a discretionary activity (restricted) and subject to a range of location and design matters, and also the consideration of the effects on the function, amenity and character of town centre activities.

PC40 introduced cycle parking requirements for long term (secure) and short term (casual) parking and required it to be constructed to meet certain design and location requirements.

All other requirements such as vehicle crossing standards, and intersection separation distances are fairly standard.

5.3 Christchurch City Council

The Christchurch City Plan and the Banks Peninsula District Plan were reviewed under provisions of the Canterbury Earthquake (Christchurch Replacement District Plan) Order 2014 and the resulting plan is the Christchurch Replacement District Plan. The plan can be found on the Christchurch City Council (CCC) website as an e-plan.

A significant change within the Plan was the zoning of roads (and rail corridors) as 'transport zones' across the district. This was applied to the previous City Plan and Banks Peninsula District roads and rail corridors. Previously roads in the City were a 'special purpose zone - roads' and subject to design requirements regardless of whether they were new or existing roads. Now any land vested in the Council, or the Crown, as road, from the date of vesting shall be deemed to be 'Transport Zone' and be subject to all the provisions for that zone.

The deeming provisions for the Transport Zone are:

> *Any land vested in the Council, or the Crown, as road pursuant to any enactment or provision in this District Plan, from the date of vesting shall be deemed to be Transport Zone and be subject to all the provisions for that zone.*
>
> *If a road within the Transport Zone has been lawfully stopped under any enactment, and any relevant designation removed, then the land shall no longer be subject to the provisions for the Transport Zone but will instead be deemed to be included in the same zone as that of the land that adjoins it (as shown on the planning maps) and subject to all the provisions for that zone from the date of the stopping and removal of any relevant designation.*
>
> *Where the zoning of the land that adjoins one side of the road being stopped is different to that of the land that adjoins the other side of that road, then the road shall be deemed to be included in both zones (as shown on the planning maps) on the basis that the zone boundaries shall be deemed as the centre line of the road.*

The road design rules such as width now apply at subdivision stage and are outlined in Chapter 8 – Subdivision. This change required CCC, NZTA and KiwiRail to ensure that road and rail boundaries were legally defined, and where they were not a survey was required. This did involve a significant exercise due to the number of road widenings that had not been legally defined following their completion. This would not be such an extensive exercise in Selwyn District as the amount of road widening is likely to be less. Overall for CCC, changing from a Special Purpose Zone for roads to a Transport Zone that also includes

SHs and rail allowed more flexibility for work within established road reserves by authorities managing these.

Chapter 7 relates to transport requirements for all activities that occur throughout the District and to activities within the Transport Zone. Objectives, policies, rules, standards and assessment criteria relating to transport are provided that are not zone specific, as well specific provisions for the Transport Zone. This approach was informed by national and regional planning documents, but in particular the CRPS.

Where roads are stopped they become part of the adjoining zone as shown on the planning maps. Where there are different zones on each side of the road those zones shall apply to the area of stopped road on the basis that the zone boundaries shall be the centre line of the road.

The Christchurch District Plan requires Integrated Transport Assessments (ITAs) to be prepared for high trip generating activities over specific thresholds and are assessed as either a controlled or a restricted discretionary activity. The scope of the ITA depends on the size of the development (based on the expected trip generation) and whether the activity is anticipated in the zone. A full ITA is required for larger developments and a basic ITA for smaller scale developments. The methods to ensure compliance with an ITA are limited to conditions of consent.

Table 5.1 sets out the Christchurch thresholds for 'basic' and 'full' ITAs. The floor areas and other units were calculated by converting from vehicles per hour (vph) thresholds using standard trip generation rates for each activity. The threshold for a basic ITA is based on 50vph peak hour trip generation (a full ITA is based on 120vph). The Plan references ITA Guidelines (2015)[12] outlining the CCC expectations.

***Table 5.1** ITA thresholds in Christchurch District Plan*

Land Use	Basic ITA	Full ITA
Residential	60 units	120 units
Retail (excluding factory shops, trade suppliers and food and beverage outlets)	500m^2 GFA	1,000m^2 GFA
Retail (factory shops and retail park zones)	1,000m^2 GFA	2,000m^2 GFA
Office	1,750m^2 GFA	4,000m^2 GFA
Industrial	5,000m^2 GFA	10,000m^2 GFA
Warehousing and Distribution	10,000m^2 GFA	20,000m^2 GFA
Education	150 students (schools) 50 children (pre-school) 250 students (tertiary)	450 students (schools) 150 children (pre-school) 750 students (tertiary)
Health Care	500m^2 GFA	1,000m^2 GFA
Mixed use and other activities	50 vph per peak hour	120 vph or 1000 vpd whichever is met first

The Plan requires a minimum number of car parking spaces (standard and mobility) based on the activity type. Some activities are exempt based on location (e.g. Central City and Heritage buildings). However, the minimum requirement can be further reduced by applying parking reduction adjustment factors, which take into account the accessibility (public transport, walking, cycling, public parking and cycle parking) of the site. Two types of reductions exist, permitted reductions and reductions based on assessment through the resource consent process. Maximum parking rates were also introduced for parts of the central city.

[12] https://www.ccc.govt.nz/assets/Documents/Consents-and-Licences/resource-consents/ITAGuidelines.pdf

The previous District Plan required cycle parking for each activity and it was all required to be covered, a rule that was very rarely enforced. One of the key changes was defining supply rates for 'visitor' cycle parking (generally considered to be short periods of time and associated with activities such as shopping or visiting), and 'Staff/residents/students' cycle parking (e.g. generally considered to be people who need to park for longer periods of time (e.g. all day)). This was then consistent with the 2012 District Plan changes made for the Central City. A pragmatic approach was then taken to establishing the minimum supply rates, taking into account known issues with current supply rates, scenario testing and the direction and desired outcomes of the regional and local transport strategies with respect to cycling. Location and design rules for cycle parking were also included in the Plan.

Primary and secondary schools were made exempt from the rule relating to covering of the stands due to concerns from the Ministry of Education that there was insufficient evidence that the provision of covered cycle parking was a significant factor in whether school children cycled. Instead a design advice note was added "*It is recommended that cycle parking at schools is designed and managed to discourage theft of bicycles.*"

5.4 Conclusion

Selwyn's consistency with the neighbouring plans currently varies. Consistency is not critical but may have some advantages for people undertaking development across the districts. The cross boundary/shared boundary roading interface is also important to consider.

The ADP is considered the least critical in terms of striving for consistency as the plan is now four years old and is not intended to be updated again in the near future. The CDP has recently been updated and consistency for some aspects maybe relevant, however the context/scale will be important to consider. The WDP review is now underway and it would be preferable to work closely with WDC to ensure some level of consistency given the districts are closer in nature than Christchurch.

Table 5.2 provides a summary of the several key review aspects for each neighbouring plan, however conclusions as to which approach would be relevant to Selwyn is considered in more detail through the rest of the review and options analysis.

Table 5.2
Neighbouring Plans comparisons for key aspects

Aspect	Ashburton District	Waimakariri District	Christchurch City	Selwyn District
Managing road reserves	Zone as per underlying, generally rely on bylaws for managing activities in road	Zone as per underlying, roads are defined as a utility and subject to Utility Rules	Transport zone	Zone as per underlying, roads are defined as a utility and subject to Utility Rules
ITAs	No requirement	No requirement (being considered as part of current review)	Requirement based on being a high trip generator	No requirement
Road design	Refers to NZS 4404	Requirements for each classification in Utilities and Traffic Management Chapter	Requirements for each classification in Subdivision Chapter	Requirements for each classification in Appendices
Footpaths	No definitive requirement	Local residential roads minimium of one sided only (some exceptions)	Local residential roads minimium of one sided only (some exceptions)	Local living roads minimum of one sided only
Cycle parking	No requirement	Requirement for each activity and design/location requirements	Requirement for each activity and design/location requirements	Requirement for acitivites (with some exceptions) to provide a minimum of 2 spaces and then at a rate of 1 cycle space for every 5 car parking spaces required, to a maximum of 10 cycle spaces.
Parking in town centres	No parking required for sites in the CBD. However sufficient public parking supply to support this.	No parking required for sites on Principal Shopping Streets in Rangiora and Kaiapoi and cash in lieu. However sufficient public parking supply to support this and consequently limited financial contributions are being taken.	Parking reduction factors, maximums in core. However sufficient public parking supply to support this.	Requirement based on minimums for each acitivity type, in some cases precinct requirements exist.

6. Best practice review

6.1 NZ District/City Plans examined in the review

In addition to the review of the neighbouring district plans in section 5, the district plans in **Table 6.1** 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 Selwyn 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.

It is important to note that at the same time as this review the Ministry for the Environment are leading a National Planning Standards (Standards) process to improve consistency in plan and policy statement structure, format and content so they are easier to prepare, understand, compare and comply with. The Standards will also support implementation of national policy statements and ensure procedural principles of the RMA are followed. The Standards have been introduced as part of the 2017 amendments to the RMA (1991) and are expected to be notified in late May 2018.

The detailed reviews are outlined **Appendix A1** (road reserve management, integrating land use and transport and managing car and cycle parking) and **Appendix A2** (street design, character and amenity and supporting modal shift).

***Table 6.1** NZ District/City Plans Reviewed*

Plan	Status	Transport chapter
Auckland Unitary Plan	Operative in part	Chapter E – Auckland wide E27 - Transport
Hamilton City Plan	Operative, 2016	Chapter 18 Transport Corridor Zone
Tauranga City Plan	Operative, 2013	Chapter 4 0 General Rules, Section 4B Transportation Provisions
Dunedin City Plan[13]	Proposed Decisions on the Proposed Plan are currently estimated to be released at the end of 2017 at the earliest, possibly early 2018.	Part B. City-wide Activities Section 6 - Transportation
Queenstown 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

[13] Caution is advised regarding the provisions in the Dunedin City Proposed Plan as the plan is still going through the statutory submissions and hearing processes.

6.2 Review issue topic areas

Following the Statutory Review (Section 4) and neighbouring plans review (Section 5) the best practice and operative plan review are discussed together under these issue topic areas:

- **Section 7 - Road reserve management** (hierarchy and control)
- **Section 8 - Integrating land use and transport** (Strategic Direction, Integrated Transport Assessments)
- **Section 9 - Amenity and character** (street design, vehicle crossings, amenity planting/berms)
- **Section 10 - Supporting active modes** (walkable blocks, footpaths, cycle provision, cycle parking, end of trip facilities, public transport)
- **Section 11 - Car parking** (management and design)
- **Section 12 - Referencing external documents**

7. Road reserve management

7.1 Introduction

The brief sought an evaluation of the Operative transport provisions in relation to the One Network Road Classification[14] (ONRC) and the SWOT analysis highlighted potential issues with not having a specific road zone. These were considered to be 'road reserve management' issues and are discussed below.

7.2 Road hierarchy alignment with ONRC

The national 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.

Best practice review

A District Plan hierarchy helps to manage the effects of land use on roads and the effects of roads on land use under the RMA. An example is the stipulation of access controls to adjoining land, based on road hierarchy, to protect the long term efficiency and safety of important streets, roads and transport routes. It also aids Councils in managing its network, and in particular in establishing relevant standards, monitoring activities and in 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

PC12 replaced the category of 'Strategic' roads with 'State Highway' as this is a more accurate description of those roads that are the responsibility of the NZ Transport Agency. It also removed any confusion where the RLTS used the term 'strategic'. All other roads are the responsibility of Council. Another key change in PC12 was the addition of lower level local roads to reflect the outcomes sought by the SDC Subdivision Design Guide.

Selwyn District Council have reconciled their roading network in line with the ONRC for asset management purposes and this has been confirmed by the NZTA Road Efficiency Group. The District Plan hierarchy did not change. Table 7.2 shows the ONRC and District Plan hierarchies in Selwyn District. District Plan Appendix E7 (Townships) and Appendix E9 (Rural) list the roads that are higher than local classification.

[14] https://nzta.govt.nz/roads-and-rail/road-efficiency-group/onrc/

Table 7.2 ONRC and District Plan road hierarchies

ONRC hierarchy	Selwyn District Plan hierarchy
National	State Highways
Regional	
Arterial	Arterial
Primary Collector	Collector
Secondary Collector	Collector (B1 zone)
Access	Local-Business Local–Major (local area streets)
Low volume	Local–Intermediate (neighbourhood streets) Local-Minor (residents streets)

Discussion

Discussion with SDC staff and NZ Transport Agency staff at the first workshop confirmed the SDC road hierarchy having an Arterial classification is not creating any issues. It is also clear that other councils have some overlap in classification between their district plan and the ONRC and this also does not appear to be creating any issues.

No change is recommended to the Operative Plan.

7.3 Control of activities in the road reserve

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.

As discussed in Section 5.4, 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

State Highway and rail corridors are designated under the Plan. There is a note on the hardcopy of the zoning maps that says "*All rail corridors and road corridors shown on the planning maps are designated*". This note is not correct as it is only state highways and rail corridors that are designated. The note is also not apparent in the online version of the Plan.

Aside from state highways, all other roads in Selwyn District and are subject to the adjacent underlying land zoning. However, the way the zoning is applied when a road is between two different zones is not described in the Selwyn District Plan and the zoning maps are not always clear. For example, **Figure 7.2** shows an extract from a planning map illustrating roads covered by the underlying zone, but the map is not clear with respect to how it is determined which zone applies where zoning differs and the extent to which it applies. In this example there is also a section of road with a diagonal zone boundary. Typically in other district plans where a road adjoins different zones, the road takes on the zoning of the adjacent zone to the centreline of the road.

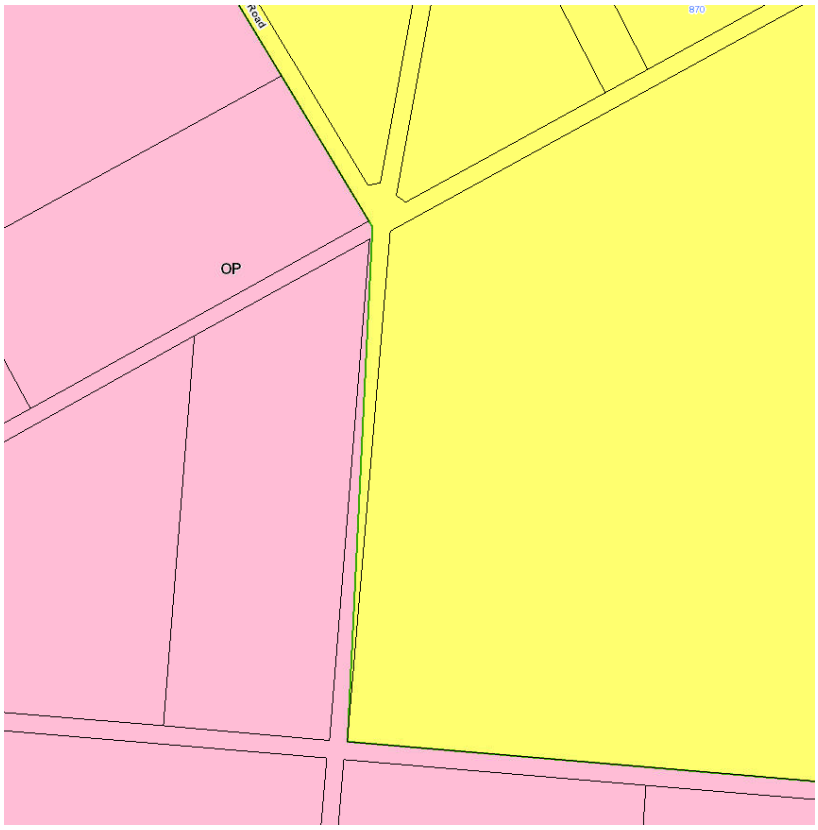


***Figure 7.2** Extract from a Selwyn Planning map*

Roads are defined as a utility and subject to the Utilities rules in the Plan.

> *Utility: includes the use of any structure, building or land for any of the following purposes; (f) Transport infrastructure, including (but not limited to) roads, accessway, railways, airports and navigational aids.*

The Utilities Chapter includes a rule (6.1.1.1) that "*Upgrading, maintenance, operation and replacement of existing utilities shall be permitted and shall not be subject to compliance with any other performance standards, conditions or rules in this Plan provided that the effects of such shall be the same or similar in character and scale to those which existed before such upgrading, maintenance or replacement activities commenced*." This is somewhat subjective in the case of roads, for example what would be considered effects beyond the same or similar scale to those existing. It could be considered that narrowing a road, such that parking capacity is reduced, or widening a road, such that the operating speed increases, creates effects beyond those existing.

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.

Discussion

Despite the issues raised in the SWOT analysis, SDC staff indicated in the Issues Workshop that there do not appear to be any issues with the current arrangement, except for some temporary activities. 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. Another example relates to existing land covenants from further subdivisions applying to new roads which prevents them being vested normally but only through a dedication if the risk is accepted. In addition, it is understood that the National Planning Standards are seeking Councils to review and clarify district plan road management methods. This is an opportunity to do so.

Options

A range of options were discussed at the Options Workshop as shown in **Table 7.1**. Note that Option 2 was added following further discussion with the SDC staff.

Table 7.1 Options - control of activities in the road reserve

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo – Roads are a Utility and subject to underlying zoning	• Does not appear to be causing any significant or ongoing issues	• Low risk that work in road reserve may trigger utilities rule and consent may be required. • Not currently clear how underlying zoning applies.
Option 2 Roads continue to be a Utility however the Utility rules are amended to be clearer as to what is permitted in roads to avoid resource consents and clarify zoning extent (i.e. subject to adjoining zoning to the centreline of the road).	• Retains current approach but the Utilities permitted activity rule can be more clearly worded to avoid any uncertainty as to what is permitted and negates any risk of work in road reserve triggering resource consent when not appropriate. • Can clarifiy which zone applies when a road intersects different zones.	
Option 3 Road/transport zone (deemed upon vesting or dedicating)	• Clarity over what is road versus other zone	• Some road boundaries will need to be defined legally if they have not been when road widening or other boundary changes occurred, this may require boundary surveys to be undertaken.

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 4 Designation following vesting	• Clarity over what is road versus other zone • Work in the designation not subject to DP rules	• Some road boundaries will need to be defined legally, if they have not been when road widening or other boundary changes occurred, this may require boundary surveys to be undertaken. • Some work may require an Outline Plan of works.
Option 5 Roads have no underlying zone or District Plan rules (rely on Local Government Act)/	• Nil	• Potential lack of control unless captured by a Bylaw • No control over e.g. signage in the road reserve

Option 2 is the option preferred by SDC. However it is considered that Option 3 would provide clarity over what is allowable etc in the zone containing the road and is consistent with neighbouring CCC. It is recommended that discussion is held with WDC regarding this issue as consistency with the Waimakariri District Plan may be more relevant than with the Christchurch District Plan.

8. Land use and transport integration

8.1 Introduction

As highlighted in Section 4, the RPS (5.1.4) gives specific direction to district plans to ensure an integrated approach between land use planning and the transport network is achieved. The integrated approach considers effects of the transport network on surrounding land use and vice versa. Integration of land use and transport is important given the expected district growth, particularly in townships.

The key land use and transport integration aspects that are considered to be related to the District Plan are:

- Objectives and policies
- Integrated Transport Assessment provisions

The other themes examined in this review also contribute to integration, but this Section focuses on the overarching direction and ensuring that integration is considered through the assessment process.

8.2 Objectives and policies

Best practice review

All of the District Plans reviewed include objectives and policies that promote integration of transport and land use.

Christchurch has established a Strategic Directions chapter that provides the overarching direction for their District Plan, and for its subsequent implementation and interpretation; and has primacy over the objectives and policies in the other chapters of the Plan, which must be consistent with the objectives in the Strategic Directions chapter. For example, *Objective 3.3.7 Urban Growth, form and design'* is an example of an objective that seeks "*A well-integrated pattern of development and infrastructure, a consolidated urban form, and a high quality urban environment*" including the movement of people.

In the Transport Chapter Objective 7.2.1 - Integrated transport system for Christchurch District

> *An integrated transport system for Christchurch District:*
>
> *i. that is safe and efficient for all transport modes;*
>
> *ii. that is responsive to the current recovery needs, future needs, and enables economic development, in particular an accessible Central City able to accommodate projected population growth;*
>
> *iii. that supports safe, healthy and liveable communities by maximising integration with land use;*
>
> *iv. that reduces dependency on private motor vehicles and promotes the use of public and active transport;*
>
> *v. that is managed using the one network approach.*

Operative Plan

The transport network issues are included in the Physical Resources part of the Plan. They are the same in both the Townships and Rural Volumes and are listed below:

- *Integration of land use and transport planning to reduce the demand for transport and also to achieve more sustainable travel within and beyond the district.*
- *Effects of activities on the safe and efficient operation of the transport network particularly roads, railway lines, cycleways, footpaths and airfields.*
- *A transport network that facilitates a sustainable transport system to meet the future needs of a growing population.*
- *Adverse effects including noise and vibrations from roads and rail networks and from the operation of aircraft utilising Christchurch International Airport and other airfields, on surrounding land uses and the environment.*
- *Effects on the operation of transport networks from adjoining land uses.*
- *Accessibility and effects of transport on energy use and the environment.*

It is noted that airfields are included in the Transport objectives and policies. We understand that the Airfields report recommends this be reviewed, and it may be more appropriate to have a land transport based only set of objectives and policies.

How each issue with transport networks is to be addressed (ie. policies and/or rules) is outlined in the Plan, however the last issue that relates to 'accessibility' is not addressed. If this issue remains, and the approach of outlining how each issue is to be addressed remains, then this mattershould also be included.

The operative Selwyn District Plan includes objectives that seek to both minimise the effects of surrounding land use on the transport network and to minimise the effects of the transport network on surrounding land uses. In terms of the effects of the transport network on surrounding land uses the focus is on 'reverse sensitivity; and amenity effects. The relevant objectives from the operative plan are listed here:

> *Objective B2.1.1*
> *An integrated approach to land use and transport planning to ensure the safe and efficient operation of the District's roads, pathways, railway lines and airfields is not compromised by adverse effects from activities on surrounding land or by residential growth.*
>
> *Objective B2.1.2*
> *An integrated approach to land use and transport planning to manage and minimise adverse effects of transport networks on adjoining land uses, and to avoid "reverse sensitivity" effects on the operation of transport networks.*
>
> *Objective B2.1.4*
> *Adverse effects of land transport networks on natural or physical resources or amenity values, are avoided, remedied or mitigated, including adverse effects on the environment from construction, operation and maintenance.*

In the explanation and reasons the following statement is made with regard to Objective B2.1.2, it introduces the importance of assessing land use and transport together without requiring ITAs.

Objective B2.1.2 recognises the potential impacts land use and transport can have on each other. Managing and mitigating such effects necessitates an integrated approach to the planning of transport and surrounding land uses.

Integrated assessments become increasingly important where activities are proposed out of zone, areas of land are rezoned, land is subdivided or activities that generate significant levels of traffic (all modes) are proposed.

The fundamental purpose of an integrated assessment from a transport perspective is to consider the accessibility of any proposal, for a range of modes and the ability to improve the accessibility for all modes. Other important considerations relate to how well the proposal fits with the objectives and policies of the wider area, the nature and scale of traffic (not just motorised) associated with the proposal and the impact on the existing transport network including any changes needed to meet appropriate policies and standards or improve connectivity (the linking of local facilities, adjoining land and surrounding neighbourhoods through connected transport networks) particularly for active modes.

The remaining objective below deals with promoting active modes.

Objective B2.1.3
Future road networks and transport corridors are designed, located and protected, to promote transport choice and provide for: a range of sustainable transport modes; and alternatives to road movement of freight such as rail.

There are 15 land transport (excluding rail) policies with explanation and reasons outlined following each group of related policies. There is also no objective related to parking management despite there being many policies related to parking.

Discussion

As discussed in the statutory review an important policy theme in the CRPS is the integration of land use and transport. This includes identification of zones/locations/activities within the district which may meet the definition of transport hubs and regionally significant infrastructure. This is being considered by the District Plan Review Infrastructure topic. It is acknowledged that ultimately there may be objectives and policies in both the Transport and Energy and Infrastructure chapters of the Plan.

All of the objectives and policies will require review to ensure they are strongly linked to any new and revised rules.

8.3 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[15].

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

[15] https://www.nzta.govt.nz/assets/resources/integrated-transport-assessments/docs/integrated-transport-assessments.pdf

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 we understand that even with the CCC guidelines there are often still further discussions required. This is often because interpretation of the assessment matters may differ.

Ideally an ITA will include a full assessment but in some cases the 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[16] 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. A recent NZTA Research Report 610[17] 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 (as discussed in Section 5.2), 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 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

[16] 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

[17] 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.

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 also 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, there are listed activity and 'scale of activity', rules.

'Activity' includes the use and subdivision of land (and the surface of water), and/or the erection and/or use of buildings or structures thereon.

Any activity which complies with all of the provisions of the Rules relating to permitted activities, shall be permitted activities as long as it is not 'listed'. The listed activities are included in the 'status of activity' chapters (Townships:C1 - Living Zones, C13 – Business Zones, and Rural: C9 Rural). These chapters define activities that are discretionary or non-complying in the various zones. Most of the listed activities appear to be related to effects other than transport, however there are several that relate to access in the living zones. These activities are:

- *Drive through retail outlets located on a site which has vehicular access onto any road in Prebbleton other than Springs Road.*
- *Service stations located on a site which has vehicular access onto any road in Prebbleton other than Springs Road.*
- *Transport depots.*

In addition to the 'listed' activities there are scale of activity rules that link back to policies such as Policy B3.4.18 which "*seeks to ensure non-residential activities in Living zones generate vehicle and pedestrian movements on a scale compatible with the surrounding residential environment".* This policy is implemented by a 'scale of activities' rule that sets traffic generation limits per day. **Table 8.1** outlines the transport related thresholds that define whether an activity is permitted or not in Living and Rural Zones. There are no transport related scale rules for Business zones.

Table 8.1 *Townships traffic generation*

	Permitted activity if the following is met
Townships (living) **Rule 10.8.1 (non-residential activities)**	Vehicle movements do not exceed a value as below. • State Highways, Arterial Roads and Collector Roads: 40 per day plus 4 heavy vehicle movements per day • Local Roads: 20 per day plus 2 heavy vehicle movements per day. • Excluding emergency service vehicles

Table 8.2 outlines the transport related thresholds that define whether an activity is permitted or not in rural zones.

Table 8.2 *Rural traffic related activity thresholds*

	Permitted activity if the following is met
Rural **Any activity which does not exceed the following maximum number of vehicle movements shall be a permitted activity:**	**Road Unformed and, or not maintained by Council**: (a) For any commercial or industrial related activity where access is required off an unformed and un-maintained road, excluding normal farming activities: Nil. (b) For any individual property access off an unformed and un-maintained road: 15 equivalent car movements per day (ecm/d) per site. **Road Formed, Sealed and maintained by Council**: (a) State Highway and Arterial Roads (as identified in Appendix 9): 30 ecm/d per site averaged over any one week period) (b) Local and Collector Roads: 60 ecm/d per site (averaged over any one week period) **Road Formed, Unsealed and maintained by Council**: (a) 60 ecm/d per site (averaged over any one week period).
Rural **Carparking, Vehicle Crossings, Access and Egress**	The activity shall comply with the rules for carparking, vehicle crossings, vehicle access and egress set out in Rule 4, and Appendix 10 for specific provisions applying to State Highways to be a permitted activity.

With respect to resource consents, it is understood that SDC 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 and best practice means that ITAs should be required for specific development proposals in Selwyn District. The scale of activities and the potential requirement for ITAs need to be considered together.

We understand that SDC would like to consider better controls around activities like forestry and mining that use both unformed and formed roads as links to an activity. Overall at the Issues Workshop SDC staff suggested the focus should be on business and living zones and the scale of the activity. There was also a suggestion that there could be different thresholds depending on the zone, e.g. A daily threshold in the rural zone and a peak hour threshold in the living/business zone.

Options

A range of options were discussed at the Options Workshop as shown in **Table 8.4.**

Table 8.4 Options - ITAs

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo	• No requirements on the applicants	• Does not align with the RPS • Does not support seeking better transport outcomes
Option 2 Require ITAs based on number of car parks or certain peak hour traffic generation	• Easy to apply as car park numbers known	• Car park numbers not necessarily related to effects • Trip rates difficult for public to estimate • Risk that activities below the threshold could still have some effects
Option 3 Require ITAs for certain activities	• Easier for the public to apply if the activities are well defined	• Risk that activities not on the list will generate adverse impacts that are not identified.
Option 4 Require ITAs based on scale (thresholds) and activity status	• Easier for the public to apply if the activities and thresholds are well defined • Less likely to get ITAs missed and inappropriate.	• Overly complicated as activity status adds another layer of consideration for potentially limited benefit. • Risk that activities below the threshold could still have some effects
Option 5 Require ITAs based on zone and scale combination	• Easier for the public to apply as zone known and scale thresholds will be defined	• Risk that some activities in non-specified zone will generate unintended adverse impacts

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 6 Require ITAs based on scale of activity (thresholds)	• Easier for the public to apply if the scale thresholds are well defined • No risk that an activity that generates high traffic volumes will slip through	• Risk that activities below the threshold could still have some effects • Risk that some activities scaled back to fit under the threshold and avoid ITA
Option 7 Require ITAs as information requirement for some zones		• Risk that some activities in non-specified zone will generate adverse impacts that are not identified
Option 8 Require ITAs for certain activities and thresholds for the remainder	• As per 3 and 6	• As per 3 and 6

Option 6 is the recommended option and is described in more detail below. It is acknowledged that Option 8 also has the potential to be effective for SDC if there are clearly defined activities that SDC consider to have transport effects that justify assessment regardless of scale. This also overlaps with the other topics where non-permitted activities for various zones may be defined. This requires further investigation in the next phase of the review.

Option 6

It is acknowledged that an ITA could be triggered in a number of ways in Selwyn 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 Selwyn (there is already an extensive list of transport assessment matters listed)
- At land use resource consent stage, in the case of Option 6, 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 (TDM) 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 the zone rules have not anticipated these activities.

The following four assessment matters are proposed (with names similar to CCC):

- 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 SDC consider traffic to be a peak hour issue or an 'across the day' issue. We understand that a HTG in Selwyn would generally not be associated with a peak hour issue (but there are exceptions such as schools). However 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. Alternatively, equivalent car movements could be used for the infrastructure related threshold.

The proposed process is outlined in **Figure 8.1**. 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 disecretion to ask for a Transport Assessment. Furthermore, in the case of a plan change/ODP, NOR or subdivision resource consent Council will continue to have the discretion to ask for a Transport Assessment as they do currently.

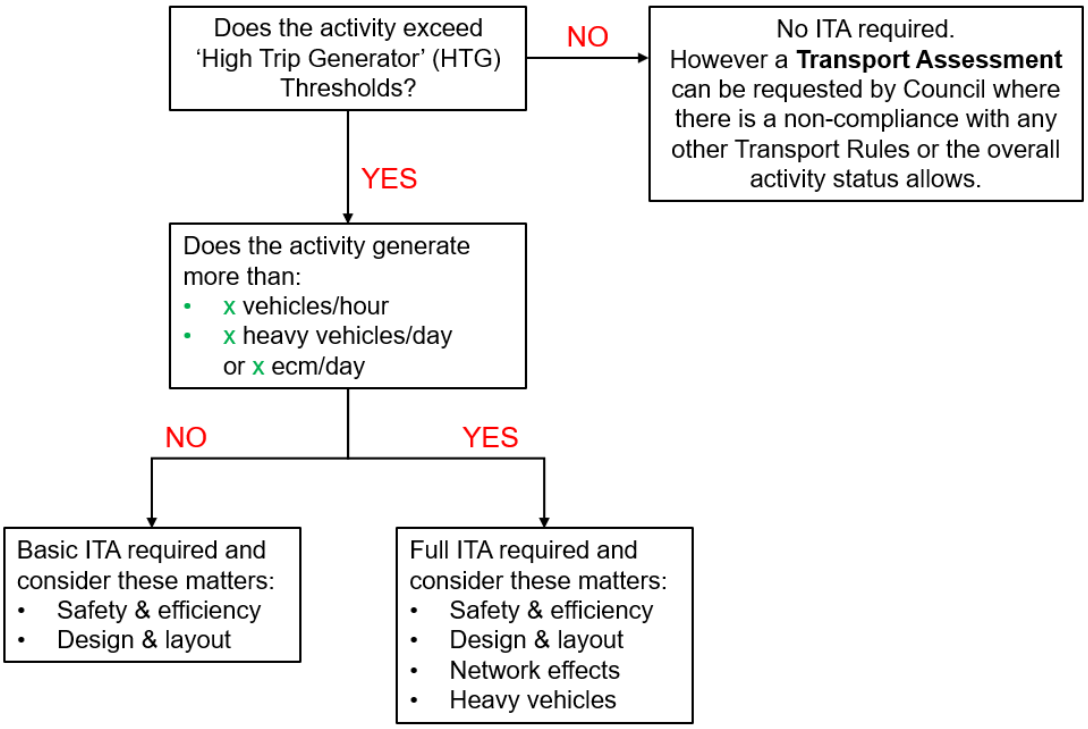


***Figure 8.1** Option 6 - Suggested ITA process*

Option 8

This is a combination of the Option 6 high trip generation thresholds process plus the listing of activities that automatically require an ITA. This has the potential to be effective for SDC if there are clearly defined activities that SDC consider to have transport effects that justify assessment regardless of scale. This also overlaps with the other topics where non-permitted activities for various zones may be defined.

Recommendation

ITA provisions require further investigation in the next phase of the review. Co-ordination with Waimakariri District Council is encouraged as a comparable neighbouring Council who is also considering ITA provisions.

9. Amenity and character

9.1 Introduction

The RMA does not specifically mention urban amenity[18] or character, however it does define 'amenity values' as follows:

> *Amenity values are those natural or physical qualities and characteristics of an area that contribute to people's appreciation of its pleasantness, aesthetic coherence, and cultural and recreational attributes*.

An 'Urban Amenity Project' for the Ministry for the Environment[19] found that a broader approach is necessary. Creating great places to live, work, and play is about more than meeting legislative requirements and District Plans can support this outcome.

The key amenity aspects that are considered to be related to the transport provisions of the District Plan are:

- Strategic direction
- Street design
- Vehicle crossing widths associated with medium density housing
- Amenity strips

There are other aspects that contribute to the amenity and character such as walkable environments, however these are covered in the next section with respect to supporting modal shift.

9.2 Strategic direction

Best practice review

Many of the district plans reviewed have sought to, at a strategic level, address deficits and/or roll over policies relating to amenity and character effects. Historically, issues of amenity and character have not featured extensively in the objectives and policies of transport chapters in most NZ plans. There is now an opportunity to introduce this focus with an aim to balance the strategic function of the transport network with land use outcomes and considerations.

By way of example, the recently adopted Christchurch District Plan has brought over policies from the previous Christchurch City Plan and supplemented these to specifically address issues of the effect of the road network on the character and identity of surrounding areas. Two examples of policy in the Christchurch District Plan that focus on this issue are:

- *Policy 7.2.1.1 – a. (identify a road network that connects people and places and recognises different access and movement functions for all people and transport modes, whilst:… iv) reflecting neighbourhood identity and amenity values;*

[18] Amenity can often referred to other ways such as 'Place'

[19] Urban Amenity Indicators: The liveability of our urban environments

- *Policy 7.2.1.8 – a. (Avoid or mitigate adverse effects and promote positive effects from new transport infrastructure and changes to existing transport infrastructure on the environment, including:.. iv.) amenity and effects on the built environment;*

Operative Plan

In terms of transport provisions in the Operative Plan, there is a lack of direction in regard to local character and identity. The plan does not specifically recognise areas that have specific or special qualities in terms of character and identity such as town centres within the transport provisions of the plan. The Lincoln town centre for example requires a specialised transport response as identified in the Lincoln Town Centre Plan to support the local identity and character in relation to for example car parking, pedestrian, cycle and vehicle movement and public realm design (footpaths, street furniture, amenity planting etc). General public spaces amenity objectives are contained in the 'Growth of Townships' objectives.

Discussion

On review of the approach taken by other plans, it is considered best practice that transport policy should require avoidance of adverse effects on the character and amenity of surrounding areas. As per the general public spaces amenity objectives that are contained in the 'Growth of Townships' objectives, transport objectives and policies that cover aspects such as street design are also required in the Proposed Plan.

It is recommended that the Proposed Plan include objectives and policies to recognise amenity and character.

9.3 Street design

Best practice review

Of the District Plans reviewed the approach to street design varies. Some (Ashburton and Dunedin) default to NZS 4404:2010 Land development and subdivision infrastructure (NZS, 2010), others include design standards, and some are silent on design. For those that do include standards, the requirements for higher classification roads are fairly consistent. Of interest in this review is the issue of local streets with respect to amenity and character, and well designed narrow streets that have the benefit of lower speed environments and the potential to create a 'place' rather than just a road.

The land development sector is generally moving towards more diversity in the approach to residential subdivisions. This includes a move to providing a greater range of lot sizes, density and layouts. One of the consequences of this is the increasing need to provide narrow streets or lanes that are intended to provide access to a limited number of residential units and not function as a through movement route. The success of these streets/lanes depends on the design and management of the space such that vehicle access, manoeuvring and servicing, car parking, pedestrian and cycle movement and amenity provision are balanced in a comprehensive design outcome.

The other plans reviewed have not provided for 'narrow streets' and generally maintained greater minimum widths for local streets. The Christchurch District Plan includes design standards for new roads in the Subdivision Chapter, rather than the Transport Chapter as roads are now a 'transport zone'. The standards set a minimum road reserve width for local residential roads at 16m with a conditional alternative of a 14m minimum that provides access to a maximum of 20 units and with a maximum total length of 100m long. The minimum carriageway (called a 'roadway' in the Plan) width for local residential roads is 12m however a "*local residential road with a roadway width 7m or wider, but not greater than 9m is a controlled activity. A local residential road with a roadway width greater than 9m, but not greater than*

12m is a restricted discretionary activity. A local residential road with a roadway width less than 7m or greater than 12m is a full discretionary activity."

Operative Plan

For new roads covered by the Townships Volume Table E13.8 outlines the Road Standards as shown in **Figure 9.2**. This table includes a note that "*The Engineering Code of Practice (COP) includes more detail on the design requirements of roads and cycle/pedestrian accessways."* There are also similar design requirements in the Rural Volume.

***Figure 9.2** Road standards in Township Volume*

Type of Road	Legal Width (m)		Carriageway Width (m)		Traffic lanes	Parking lanes	Specific provision for cycles (on road or off road)	Pedestrian Provision
	Min	Max	Min	Max	Min. No. of	Min. No. of		Minimum
State Highways	20	25	NA refer to NZTA	NA refer to NZTA	2	2	Yes	Both sides
Arterial	20	25	13	14	2	2	Yes	Both sides
Collector (except in Business 1 zone)	20	25	11	12	2	1	Yes	Both sides
Collector (Business 1 Zone)	20	25	13	14	2	2	Yes	Both sides
Local – Business	20	25	12	13	2	2 Both sides	Optional	Both sides
Local roads – Living								
Local Roads – Living 3 Zone at Rolleston (as shown within the Outline Development Plan at Appendices 39, 40 and 46)	18m	20m	6m	6.5m		Nil		One side only (Holmes) Nil, other than informal on both sides of road within berms (East Rolleston)
Local – Living 2 zone only	18	20	6	6.5	2	NA	NA	Optional but no more than one side.
Local - Major	16	20	8.5	9	2	1	Optional	One side
Local - Intermediate	13	15	7	8	2	1	NA	One side
Local - Minor	10	12	5	6	1	NA	NA	NA
Cycle/Pedestrian Accessway	6	10	2.5	3	NA	NA	Yes	Yes

The focus of the review are local roads as SDC staff have raised issues with the 'narrow street' concept that was introduced as part of PC12. These issues also include concerns from residents who live on narrow streets. Often they purchased the site without the street design being made clear to them. There do not appear to be any issues with the higher classification road design standards and they are generally consistent with other Plans.

There have been problems with the 'local-minor' street standards (minimum width of 10m). Skye Lane in Prebbleton is one example, as shown in Figure 9.3, that did not meet the intent of the narrow width allowable for a 'local-minor' street. The standards anticipated these streets would be provided as 'shared space' type roads or used as access to higher density developments such as rear accessways. This ability to use a narrower street was introduced in PC12 in response to concerns by developers that further restrictions on the use of private rights of way prevented them from providing effective access to some areas that were difficult to provide access to. However, developers also want to be able to serve higher density developments with service lanes.

Figure 9.3 *Skye Lane, Prebbleton*

In particular the absence of good design (creating a low speed, safe, high amenity space that allows for anticipated servicing and parking requirements) has resulted in following adverse effects:

- blocking of the carriageway by parked vehicles,
- parking on the footpath and berms,
- poor amenity as road and path are hard surfaces with no landscaping to break up the long stretch of ashpalt
- access constraints for refuse collection and emergency vehicles.

It is also noted that the low amenity is exacerbated by the tall privacy fencing erected on the road reserve edge. This is not a transport related rule and will be considered by the other topic areas.

Council anticipated that the District Plan narrow street rules would be applied in conjunction with the Subdivision Design Guide typologies for narrow streets (such as shown in Figure 9.4) however as these are non-statutory guidelines this has not always been the case, and developers have just provided a narrow version of a standard street by default.

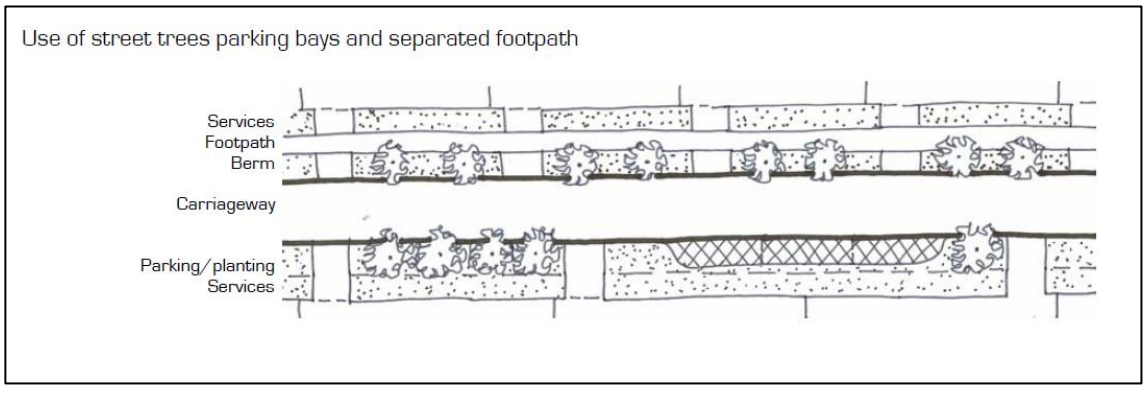


Figure 9.4 *Neighbourhood Street (Local Minor) Typology from the Subdivison Design Guide*

The SDC Engineering Code of Practice outlines cross section road design requirements as follows (Chapter 8.15.6). It is noted that often the cross sections are not developed sufficiently at subdivision stage to allow assessment against these requirements and at the time of Engineering approval it is difficult to make significant changes:

"Provide carriageway and legal road widths that comply with the District Plan. Design these widths as part of an optimal road cross-section, to achieve the following objectives:

- *Provide a safe layout for all users.*
- *Provide the required capacity for all road users including cyclists and pedestrians where required.*
- *Minimise the capital costs of construction by not exceeding the desirable widths for high cost elements like carriageway, cycleway and footpath;*
- *Minimise the ongoing maintenance costs by designing and constructing elements to achieve their design life;*
- *Provide all the specified roadway elements;*
- *Provide bus lanes or bus priority measures where required;*
- *Reinforce the speed environment through appropriate lane and carriageway widths;*
- *Provide an attractive streetscape, adding to the amenity and character of the area;*
- *Facilitate a safe, efficient and effective drainage system by ensuring that the new works do not detrimentally affect the existing drainage pattern or road users;*

There is further guidance on traffic lane widths and also the following statement that is relevant to the provision of narrow streets:

"When proposing narrower widths or where all elements may not be provided, carefully consider the reasons and balance them against the above objectives. Submit a non-conformance report detailing the process of trading off these objectives to arrive at the non-complying design widths, as part of the Design Report."

Discussion

It was anticipated that the District Plan rules would be applied in conjunction with the Subdivision Design Guide typologies for narrow streets, however this has not occurred. There is also robust guidance for street design contained within the ECoP which is not being referred to at subdivision stage. Cross-sectional detail of roading design is also routinely lacking.

If this existing guidance was more clearly linked to or became part of the District Plan, applicants would have clear guidance at the start of the development process and the design would be better addressed and any issues captured early.

On balance, it is considered best practice to allow for flexibility and a range of road reserve and carriageway widths. However, the allowance of narrow streets without specific design guidance or controls to ensure specific outcomes is not recommended. The following section outlines some possible methods to address this.

Options

A range of options were discussed at the Options Workshop as shown in **Table 9.5**.

Table 9.5 *Options - local road design*

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo - Local Minor road reserve width min 10m max 12m	• Allows narrow streets if designed well	• Risk of poor outcomes as evidenced in the District now • Reliance on good design (currently not prescriptive in plan – no statutory link to the design guidelines or link to ECoP)
Option 2 Increase the permitted minimum road reserve and carriageway widths for the local intermediate and minor road classifications - proposals for narrower roads would be subject to resource consent with clear matters of assessment.	• Allows minimum carriageway, footpaths, on-street parking. • Aligns with other district plans such as CCC	• Does not permit narrow streets, but still allows narrow streets to be proposed for consideration/assessment subject to resource consent (all subdivision currently requires resource consent in any instance and is expected to continue to do so).
Option 3 Retain the current road reserve and carriageway widths for local intermediate and minor roads but introduce controls (notes to the road design table), that apply to those widths for them to be allowable.	• Allows laneways and narrow streets in certain situations.	• Relies on road design table notes being adhered to to steer outcome – could be unclear as opposed to a clear permitted activity rule (Option 2). •

Option 2 is the recommended option. This will require the linkage to or transfer of some material from the Subdivision Design Guide and the ECoP to the Plan 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 (higher in medium density than low density). The matters need to be developed with consideration of the ECoP objectives and Subdivision Design Guide so there is consistency.

It is recommended that further discussion and analysis is required to agree the increased minimum permitted widths for local intermediate and minor roads, and to determine the assessment matters. This would involve representation from the various units of council who have a stake in the road design outcomes.

9.4 Vehicle crossing widths

Best practice review

Subdivision and development proposals are increasingly shifting to more intensive models of medium and higher density typologies. These are becoming more evident in the Selwyn District especially within the major growth centres of Rolleston, Lincoln and Prebbleton.

In general the traditional suburban subdivision with its generous sized lots and relatively wide interfaces with the street do not result in significant adverse effects relating to vehicle access and driveway crossings. In these developments any negative effects relating to vehicle crossings can generally be offset with amenity planting, building setbacks and road widths.

However, effects in relation to vehicle crossings, garaging and accesses within medium density developments generally become more acute. In medium density development in general 'space' is less abundant, lot widths are narrower and opportunities to mitigate vehicle access effects through amenity enhancements are limited. Vehicle crossing widths are often related to the ease of access into double garaging facing the street and hence access widths are widened to provide vehicle manoeuvring space.

Figure 9.5 shows an example of applying standard suburban style vehicle crossings to a medium density development resulting in poor provision of street amenity and loss of any on street parking opportunity or space for wheelie bins along the street.

Figure 9.5 *Example of medium density street interface, Silverstream, Kaiapoi*

Figure 9.6 shows an example at Hobsonville Point, Auckland, where good comprehensive design of the site street interface and the street itself allows appropriate single vehicle width crossings, on-street parking and amenity planting within the street berm.

Figure 9.6 *Example of good medium density site and street interface, Hobsonville Point, Auckland*

Although not specific to development density, some of the Plans reviewed have adopted methods to reduce the effects of vehicle crossings based on the number of vehicles accessing the lot or based on the number of dwellings serviced by the crossing.

The Auckland Unitary Plan is a good example where crossing width for a single house access is set at a maximum of 3m. Where access driveways service 2 to 5 houses crossing distances increase to a maximum of 3.5m and access driveways for 10 or more houses are permitted to be up to 6m wide based on two-way access.

Operative Plan

Vehicle accessway requirements were reviewed as part of PC12 to avoid long private rights of ways servicing many properties such as shown in Figure 9.7. The maximum number of sites per private accessway is 6 compared to 10 prior to PC12. This change reflected that the public and property owners expected that private accessways that catered for a higher number of lots should be provided as roads from the outset managed and maintained by the Council and providing access for refuse collections and other services. The width of the accessway increases as the length increases and turning areas and passing bays are required for living zone accessways over 50m long and all business zone accessways. It is understood that the rule is working well and no change is required.

Figure 9.7 *Right of way in Rolleston servicing at least 7 lots prior to PC12*

Figure 9.8 shows the vehicle crossing width requirements. It is noted that the wording in this table requires updating to reflect the intent to have either, a 1m separation between crossings or at least 7m, not less than 1m.

***Figure 9.8** Vehicle crossing widths – Selwyn Townships volume*

Zone	Distance Between Crossings (m) on Same Side of Road	Width (m)	
		Minimum	Maximum
Living zones	Vehicle crossing to a shared accessway Greater than 7m; All other vehicle crossings; Less than 1m or greater than 7m	Residential activities – 3.5m Non-residential activities - 4m	Residential activities – 6m Non-residential activities - 7m
All Business zones except the B2A Zone (Izone)	Less than 1m or greater than 7m	5m	7m or 8m for shared crossings
B2A Zone (Izone)	Less than 1m or greater than 7m	5m	12m

The plan currently provides for a minimum vehicle crossing width of 3.5m (single) and a maximum of 6m (double), but does not take into account the effect of street crossings relating to the density of residential development.

Vehicle crossings are not typically a significant issue for traditional suburban subdivisions where densities are relatively low. However in the medium density context, where sites are smaller and the road frontage width of sites is generally narrower, double width street crossings (i.e. 6m) can adversely dominate the visual amenity of the street and restrict opportunities for on-street parking and amenity planting.

The Plan currently states that for any small lot medium density areas located within an ODP that if the site has a net area of less than 430m2, garages with a vehicle door width greater than 3m (i.e. double garages) are to be accessed off a rear service lane only (Rule 4.9.26(b)). The demand for the development of double garaging has resulted in a number of resource consent applications for a breach of this rule. Through reviewing consents and talking to developers, SDC officers have advised that the majority of people want double garages, even on smaller sites.

Furthermore, as part of Stantec's review of the Residential character and amenity provisions of the Plan (RE007), it has been identified that the frontage width of allotments is more important than small variations in allotment sizes from a character and amenity perspective. Stantec have found that the size and shape rule in the subdivision provisions (Rule 12.1.3.6), which requires that any allotment within a site 400m2 or less contains a building area of not less than 15m x 15m, is achieving a minimum frontage width of at least 15m which is contributing positively to the streetscape. This 15m minimum width enables a double garage to be built and achieves a similar street scene to other low density sites despite the small site. Note that the same rule allows for sites greater than 400m2 in area in a medium density area shown on an ODP to have a minimum permitted building area of 8m x 15m, which is promoting narrower frontages.

A further related rule is Rule C12.1.4.2 (b) which requires medium density areas shown on an ODP to have the ability to provide vehicle access to lots via a rear service lane to provide increased flexibility for future residential unit design and to minimise the visual impact for garaging on the street scene. Comprehensive development blocks are to be a minimum of 35m deep to enable the provision of a rear service lane as part of a future comprehensive development.

Discussion

It is considered best practice to require medium density development proposals to minimise vehicle crossing widths to allow for appropriate street amenity and greater on-street parking opportunities. In the Selwyn context, this best practice finding needs to be balanced with the demand for double garaging in association with medium density development, the findings of Stantec that a frontage of 15m positively contributes to residential amenity, and the access provisions.

Minimising vehicle crossing widths was discussed at the Issues Workshop and examples were presented to illustrate the impacts of vehicle crossing widths for a range of section size scenarios. **Figure 9.9** illustrates

an Auckland example of 300m^2 sections with single detached houses with double garages. A crossing that caters for the width of a double garage (i.e. 6m) as shown in the left hand graphic limits the space for amenity such as landscaping, reduces the length of footpath conflicts, and limits on-street parking space. This is considered an undesirable outcome compared to the image on the right that uses narrower vehicle crossings, but still allows space for parking in front of the double garage.

Figure 9.9 *Comparison of vehicle crossing widths for medium density housing (300m^2 sections)*

Options

A range of options were discussed at the Options Workshop as shown in **Table 9.6**.

Table 9.6 *Options - vehicle crossing widths*

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo - Min: 3.5m / Max: 6m for all streets	• Enables on street parking (the extent of which is dependent on lot frontage width) • Allows for street amenity (where allotment road widths are at a certain minimum (i.e. 15m)	• Can lead to poor outcomes with low street amenity and loss of on-street parking if frontages are not wide (i.e. less than 15m)
Option 2 Reduce crossing widths for medium density to 3.5m maximum (reliant on allotment widths being appropriately set and other controls such as garage setbacks)	• Can enable more on street parking than Option 1 • Allows for street amenity	• May result in resource consent applications for wider crossings (but also allows the rule to be tested)

A preferred option is not able to be recommended at this time given the interdependencies with the Subdivision and Residential Topics (i.e. size and shape of allotments - road frontage width, garage setbacks). This issue needs to be considered further in the context of these topics as part of the next phase of the review, noting that best practice is to minimise the vehicle crossing widths associated with medium density residential development.

9.5 Amenity strips or berms in roads

Best practice review

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.

The Christchurch and Hamilton District Plans require amenity strips in 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, Selwyn included, but street trees and landscape beds are the responsibility of Council to maintain. The type of planting can help mitigate this cost.

Figure 9.10 illustrates an example of good, low maintenance amenity planting along a street.

Figure 9.10 *Example of good street amenity, Long Bay, Auckland*

Operative Plan

There are living zone subdivision assessment matters that consider the design of the road in terms of complementing the natural characteristics of the site, however there are no requirements for amenity strips (landscaped berm areas) in the street design rules (Table E13.8).

The SDC Engineering Code of Practice does however require that all landscape proposals for subdivision development shall:

i. *Comply with the Selwyn District Plan and Engineering Code of Practice.*

ii. Comply with all Regional Council (Environment Canterbury) requirements.

iii. Be acceptable to landscaping, urban design, safe environmental design (CPTED) and engineering methods.

iv. Minimise, isolate or eliminate health and safety hazards during both its construction and future utilisation.

v. Minimise, isolate or eliminate any adverse ecological and environmental effects

10.2.5.2 outlines streetscape landscaping requirements as follows, it is noted that there is no hard and fast requirement but encourages good design by an appropriate qualified person:

a) *Streetscape design is to be considered as part of the design of every development and street redevelopment. The street verge should be more than a means to accommodate utility services.*

b) Designs shall provide for maximum long term benefit with minimum ongoing maintenance requirements for Council and shall not compromise the safe use of the road corridor or affect its structural integrity.

c) The Consent Holder is encouraged to engage a qualified Landscape Architect early in the subdivision design process, to allow for careful planning of the streetscape and a considered approach to include urban design and landscape principles. Doing so will likely result in a quality streetscape that is both attractive and functional, protecting essential utility services and road user safety.

d) As part of the Engineering Approval process, the Consent Holder shall enter into negotiations with the Council to reach agreement on the following;

i. An approved landscape plan and specifications.

ii. What elements of the landscape plan the Consent Holder will implement.

iii. The level of development to which completed works are carried out.

iv. The standard of finish to which completed works are carried out.

v. Future maintenance requirements.

e) Streetscape assets will be vested in Council once developed to the agreed level and the s224(c) certificate is signed off, although maintenance responsibilities will not be transferred to Council until after the specified maintenance and defects period.

Discussion

It is considered best practice to consider amenity provisions within streets in all new subdivisions with consideration of other aspects such as CPTED and rubbish collection arrangements and the cost to maintain these areas. It is appreciated that developers generally like their developments to be attractive and will provide for this and that current consenting requirements include submission of a landscaping plan for Council's approval. So, it could be considered that a requirement will only capture those smaller developments that avoid providing landscaping due to cost.

The ECoP encourages good practice with respect to amenity in the streetscape. As it was not raised as an issue it is assumed that these requirements and the associated engineering approval process provides for good amenity outcomes to be achieved. Amenity and character issues in private accessways is discussed separately further below.Options

Provision of street trees and landscaping is desirable from an amenity perspective but has cost implications for asset management. A range of options were discussed at the Options Workshop as shown in **Table 9.7**.

Table 9.7 Options - amenity strips in streets

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo – No specific District Plan requirement for amenity strips on new roads. Continue to rely on the ECoP requirements.	• Does not incur asset management costs for care of planting. • Low risk as developers generally seek to create attractive streetscapes.	• Does not encourage street amenity, risk that some developers may not create attractive streetscapes.
Option 2 Require amenity strips for all new roads.	• Encourages street planting and amenity on all streets. • Aligns with other district plans such as Christchurch	• Will create cost of maintenance
Option 3 Require amenity strips and requirements for the spacing of street tree plantings	• Ensures street trees are planted on all streets	• Will create cost of maintenance • May get some push back from developers

Option 1 is the recommended option.

Amenity strips in vehicle accessways

It is noted that currently the width of an accessway for private use (not vested as road) is dependent on the number of lots that are serviced. The minimum width is 4.5m minimum (up to 3 lots) with a 3m carriageway. This width only allows 1.5m for stormwater management and/or landscaping. This can result in low amenity outcomes for access users. It is considered that a width to facilitate greater amenity would be more in the range of 5-6m. This matter was not included in the SWOT or workshop discussions, however it became apparent that amenity benefits could be gained from addressing this matter. This could be achieved by the measures below:

- Introduce a subdivision assessment matter for landscaping and/or fencing treatment in principle, with consideration of practical matters, such as sufficient width to provide for carriageway and stormwater disposal and other services.
- Introduce a threshold into the provisions around accessway length. Length may be more relevant than lot numbers as even a small number of lots could have a long accessway resulting in a tunnel effect.
- Widening the current 4.5m access way width to 5m minimum, which allows for vehicular access, stormwater (if required) and some width to do amenity planting and/or fencing if required.

However the preferred approach for amenity strips in rights of ways/accesses will need to be determined in conjunction with the Residential and Subdivision Topics.

10. Supporting modal shift

10.1 Introduction

The District Plan has the potential to support modal shift and use of alternative modes, an outcome that is sought by both local and regional strategies.

The key aspects that are considered to support modal shift and are related to the transport provisions of the District Plan are:

- Footpaths
- Cycle provision
- Walkable blocks
- Management of cul de sacs
- Public transport

10.2 Footpaths

Best practice review

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.

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 movement 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[20]' 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. In some cases narrow streets may mean that footpaths could reduce the ability to provide landscaping and may interfere with being able to access underground services if they break or need repair.

[20] 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.

Operative plan

In PC12 the requirement for footpaths on both sides of arterials and collectors was introduced. The operative Selwyn District Plan (Road Standards E13.3.1) requires at least a footpath on one side of all local roads.

In the Selwyn District a number of new and old subdivision developments include streets with one sided footpaths. For example, in the townships in the wider Ellesmere and Malvern area residents have stated that they don't want the standard urban form as they want to protect their rural amenity. The draft Walking and Cycling Strategy has identified what footpaths the Community wants and where.

In urban areas there are cases where a footpath on only one side is not considered best practice[21] and has led to some undesirable outcomes. The example in **Figure 10.11** shows a footpath on one side of the road and a median with landscaping that restricts access to the footpath on the other side. This example is compounded by the fact the street provides access to a 'neighbourhood centre' (a small cluster of retail businesses on Faringdon Boulevard). This issue is exacerbated by the fact that the adjacent housing is Medium Density, with the higher density resulting in a higher number of users per street frontage. The outcome is one of restricted pedestrian connectivity to the neighbourhood centre and the link between landuse and transport provisions has not been addressed.

Figure 10.11 *Shillingford Boulevard, Farringdon, Rolleston*

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 comprises 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 operative plan only requires a footpath on one side of all local roads and whilst two sided footpaths on local roads can still be sought, the current plan is not strong in encouraging them. The best practice review found that an approach where one-sided footpaths are permitted but only under special circumstances is appropriate.

[21] Refer to Best Practice chapter of this document - section 5.7

Options

A range of options were discussed at the Options Workshop as shown in Table 10.8. Option 4 was added following the workshop.

***Table 10.8** Options - footpaths on local roads*

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo – requires one-sided on local streets.	• Minimises asset management costs. • Minimises cost to developers.	• Risk of poor outcomes • Does not align with goals of the W&C Strategy.
Option 2 Require two sided footpaths on all local streets (assuming the existing street widths for local minor and intermediate are increased), but allow for one-sided subject to resource consent where walking outcomes are not compromised.	• Aligns with other 2nd generation plans such as CCC. • Supports barrier free design and accessibility. • Aligns with W&C strategy goals.	• Requires increased upfront investment from developers. • Increases on going asset management costs. • Could compromise the ability to also include amenity strips and services strips.
Option 3 Require two sided footpaths on all 'local major' streets, one side on local intermediate and minor streets except in some situations.	• Width of road reserve supports footpath requirement and accommodation of other features such amenity and service strips. • Partially supports barrier free design and accessibility. • Partially aligns with W&C strategy goals.	• Requires increased upfront investment from developers (but less so than option 2). • Increases on going asset management costs (but less so than option 2). • Could result in disconnect with the network it connects to which may only have one sided footpaths (but less so than option 2).

At this time Option 2 is the preferred option, however given the interdepency 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.

10.3 Cycle provision

Best practice review

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.

Most plans associate cycle provision with the road classification hierarchy. 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

Table E13.8 requires 'specific provision for cycles (on-road or off-road)' on State Highways, Arterials and Collectors, it is optional for Local Business and Local-Major. The type of cycle provision beyond either on-road or off-road is not given. There is a note that "*Where cycling provision is made on street on Collector Roads in the Business 1 Zone, a 14m carriageway must be provided*."

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 which also make allowance for specific cycle network plans and non-road opportunities.

No change is recommended to the Operative Plan.

10.4 Walkable blocks

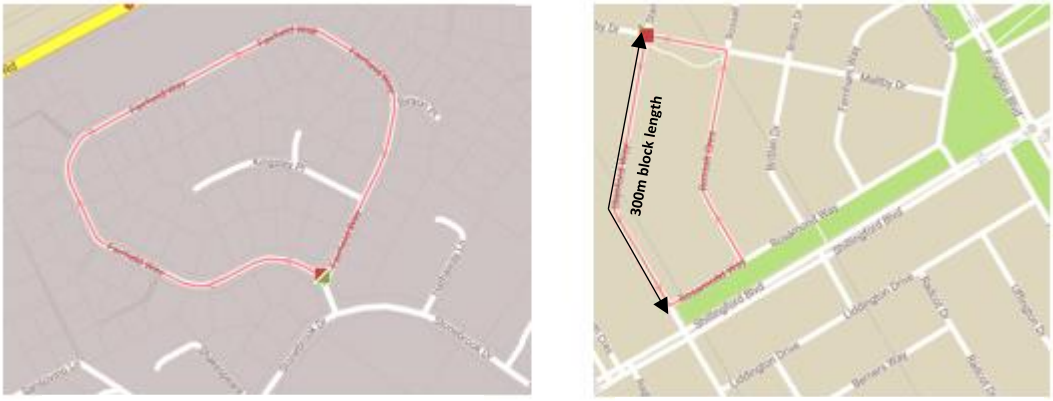
Best practice review

Appropriate 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.

Figure 10.12 shows typical suburban neighbourhoods in Rolleston which illustrates examples of large blocks that restrict permeability. Example a) illustrates a large 980m block that provides very poor permeability and pedestrian connectivity. Example b) illustrates a large 750m block and although

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 10.12 *Block examples in Rolleston*



Example a) – 980m block perimeter

Example b) – 750m block

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. The Growth of Townships Policy B4.2.10 sets the direction for achieving greater accessibility and permeability as follows:

> *Ensure that new residential blocks are small in scale, easily navigable and convenient to public transport services and community infrastructure such as schools, shops, sports fields and medical facilities, particularly for pedestrians and cyclists.*

The 'explanation and reasons' outlines well the rationale for the policy:

> *Limiting the scale of new residential blocks will encourage pedestrian, cycle and vehicular permeability within and through these living environments. Where this does not occur, pedestrians and cyclists will experience a higher degree of inconvenience than motorists, as extra distances prove a disincentive to use alternative modes of transport to private vehicles, including public transport systems. This subsequently increases the level of traffic on the road network, which in turn can adversely affect amenity values and create inefficiencies in the functioning of the township. Liberal use of cul-de-sac heads without provision for through connectivity may make it difficult to achieve sufficient permeability.*
>
> *A greater sense of community can be achieved with good access and views to community features and facilities e.g. mature trees, water races and sports fields. Smaller and more walkable block sizes reduce car journeys and encourage residents to walk and cycle. Residential blocks with perimeters of 800m or less will provide permeability and a choice of routes. As stated within the "Design Guide for Residential Subdivision in the Urban Living Zones", an average dimension of up to 800m per block was traditional for many cities prior to widespread car ownership and therefore emphasised walking and cycle routes. Those blocks with larger perimeters e.g. 1000m*

or more, can therefore be a greater barrier to such movement. Development should ideally limit block sizes to perimeters of no more than 1000m, with an average perimeter of no greater than 800m to help achieve an appropriate scale for a residential environment. In addition and as also stated within the Design Guide, all cul-de-sacs should be limited in lengths, preferably no greater than 150m, and have access from a through road rather than another cul-de-sac. Long meandering cul-de-sacs make it difficult for people to determine where they are going, and can limit connectivity. A safe pedestrian connection from the end of the cul-de-sac through to another road is often desirable, however a connection must be seen to serve a useful purpose in terms of connectivity to justify its future maintenance by Council.

There are also assessment matters in Living Zones – Subdivisions that seek walkable blocks:

Whether roads and reserves have a coherent and logical layout to facilitate connectivity, legibility and permeability e.g. desire lines are provided to cater for cyclists and pedestrian users.

Whether residential blocks achieve an average perimeter of 800m and maximum perimeter of 1000m, unless precluded by an existing pattern of development. NOTE: Section 4.6 of the "Design Guide for Residential Subdivision in the Urban Living Zones" can be referred to for other examples of how residential blocks can be measured.

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.

A commonly used maximum block perimeter in the design process is 800m, none of the District Plans reviewed included a maximum block perimeter length. From a public transport planning perspective, people should be able to be within 400-500m walking distance of a bus stop. The SDC ECoP states that "*In townships with a public bus service a serviced subdivision shall have, not less than 80 % of households within 500m of the shortest direct route distance from a bus route*".

Appropriate 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.

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 10.9**.

***Table 10.9** Options - walkable blocks*

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo Subdivision assessment matters (max 1000m perimeter)	• Does require some permeability – better than nothing	• Risk that development could have low permeability • Sets up large grain block structure that does not encourage walking and cycling
Option 2 Reduce subdivision assessment matter to a maximum block size (max 800m perimeter) with the block size being the 'walkable block'	• Requires more permeability • Aligns with Subdivision Design Guide • Aligns with other 2GP plans such as CCC • Easy to measure	• May still result in blocks that are 300m+ in length however low risk given current design practices.
Option 3 Introduce alternative method such as maximum block length rule 150-200m for example.	• Greater permeability achieved	• May result in the construction of more road infrastructure • May be too prescriptive for sites with topography issues • More intersections created and therefore more vehicle conflict points and locations where pedestrians are required to cross the road
Option 4 A combination of options 2 and 3	• Greater permeability achieved	• May result in the construction of more road infrastructure • Maybe too prescriptive for sites with topography issues • More intersections created and therefore more vehicle conflicts points and locations where pedestrians are required to cross the road

Option 2 is the recommended option. This requires further consideration as it may impact on the Residential topic rules.

10.5 Management of cul-de-sacs

Best practice review

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. 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[22] 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 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.

Figure 10.13 shows a good example of a short straight cul-de-sac with visibility from the adjoining street in Long Bay, Auckland.

Figure 10.13 *Short cul de sac, Long Bay Auckland*

Operative Plan

Cul-de-sacs are permitted on local business roads. Cul-de-sacs are also permitted for local intermediate or local minor roads but shall be restricted to a maximum length of 150 metres. Any cul-de-sac road must connect to a through road and shall not only connect to another cul-de-sac. Even with these controls there have been instances of complying cul-de-sacs that do not result in good CPTED outcomes. The SDC

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

Subdivision Design Guide shows examples of cul-de-sac arrangements, but some of these are not necessarily illustrating desirable 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

A range of options were discussed at the Options Workshop as shown in Table 10.10. An option of prohibiting cul-de-sacs completely 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.

Table 10.10
Options - cul de sacs

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo - Subdivision rule of 150m maximum length and no cul-de-sac on the end of a cul-de-sac (1+1)	• Does provide some restriction when cul de sacs can be provided	• Risk of poor outcomes • Does not require line of sight from junction.
Option 2 Reduce maximum length to 100m and introduce requirement for pedestrian link at end	• Reduce risk of poor outcomes • Provides additional permeability with pedestrian route	• Does not require line of sight from junction • A cul-de-sac shorter than 150m can look out of proportion to the 23m diameter turning circle
Option 3 Retain maximum length of 150m and no cul-de-sac on the end of a cul-de-sac and introduce requirement for pedestrian link at end + require line of sight to adjoining street (where topographical constraints and existing street networks allow it)	• 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 is the recommended option. This would require a clear description of what the 'line of sight' means and reference to the requirements of pedestrian accessways. There needs to be clear exception of the rule relating to pedestrian accesses and lines of sight given that the rules could be difficult to achieve in brownfield developments.

10.6 Cycle parking and end of trip facilities

Best practice review

Historically very few District Plans have required cycle parking and this has resulted in cycle parking in conjunction with development being generally poorly executed[23]. For example; cycle parking has often been under supplied in terms of demand, cycle stands have not always sufficiently supported the frame of the bicycle, and cycle parking has been located too far from public entrances and often in concealed or unlit areas. Plans that did require cycle parking were generally silent on design and location and did not differentiate between the needs of short stay and long stay users (unlike car parking).

It was found in a previous Abley study that there was a wide variation in the requirements for cycle parking supply and many of the required rates were expressed in different units, e.g. per Gross Floor Area (GFA), per number of beds, per number of staff. Unlike car parking, where parking surveys are regularly undertaken, it was found that there is limited data available on cycle parking demand and therefore supply rates are not always based on potential demand.

Of the plans reviewed, all but Tauranga and Dunedin require a minimum cycle parking provision. However, within QLDC the requirement only applies to one zone (the Three Parks Zone). The plans that require cycle parking require developments to provide sufficient cycle parking for short and long term users. In the Tauranga plan, even though cycle parking is not a mandatory requirement, by providing cycle parking the minimum car parking requirement can be further reduced.

Plans requiring cycle parking require it to be designed and located with respect to type of stand, distance from entrance, security, visibility and weather protection.

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

Appendix E13 includes a rule that any activity, other than residential activities, temporary activities, any Place of assembly, recreation or education activity and activities permitted under Part C, Living Zone Rules - Activities 10.9.1 are to provide cycle parking at a minimum of 2 spaces and then at a rate of 1 cycle space for every 5 car parking spaces required, to a maximum of 10 cycle spaces.

Any Place of assembly, recreation or education activity shall provide cycle parking at a minimum of 2 spaces and then at a rate of 1 cycle space for every 5 car parking spaces required. The rates are not specific to the activity and are not broken into staff and visitor cycle parking.

All cycle parking required shall be provided on the same site as the activity and located as close as practicable to the building main entrance and shall be clearly visible to cyclists entering the site, be well lit and secure. The type of stand must comply with the Engineering Code of Practice requirements for cycle

[23] The Cycle Parking Revolution, Ward 2016

parking rack systems. Figure 10.14 shows a good example of recent cycle parking provided in conjunction with a neighbourhood centre in Rolleston. It is under cover and the stand supports the bike frame. There is no requirement in the Operative Plan for end of trip facilities such as showers, changing rooms or lockers.

Figure 10.14
Cycle parking at recent commercial development

Discussion

Best practice is generally to provide cycle parking in conjunction with development. The requirement for end of trip facilities such as showers, changing rooms or lockers are requirements in larger metropolitan areas however given the scale of developments in Selwyn and the nature of the transport system it is not considered appropriate to require these facilities. Showers for some developments will be a requirement of the Building Code.

Options

A range of options for the overall cycle parking supply approach were discussed at the Options Workshop as shown in **Table 10.11**.

Table 10.11
Options - cycle parking

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo	• Easy rule to understand	• Potential under supply • Does not emphasise cycling as important compared to car parking
Option 2 Develop rates for each activity as per the car parking requirements (i.e. if car park based on floor area base cycle parking requirement on floor area). and cater for both long term (e.g. staff) and short term (e.g. visitor)	• More likely to achieve supply that meets demand • Recognises cycling as an important mode • Aligned with goals of the W&C Strategy	• More complex for DP users

Option 2 is the recommended option for cycle parking supply.

A range of options for the overall approach to design and location of cycle parking were discussed at the Options Workshop as shown in **Table 10.12**.

Table 10.12
Options - cycle parking design

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo	• Covers most of the essential elements	• Does not support cycling as important compared to car parking (where standards such as dimensions are included in the Rules)
Option 2 Develop rules that are more detailed regarding the location of the parking and reference the design aspects in the ECoP (if that is considered to be legally achievable in terms of referencing the ECoP).	• More likely to achieve good outcomes • Recognises cycling as an important mode • Aligned with goals of the W&C Strategy	• More complex for DP users

Option 2 is the recommended option for cycle parking design and location.

10.7 Public transport

Best practice review

District Plans can promote public transport through the objectives and policies. For example, Christchurch District Plan Policy 7.2.1.6 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 to note that local authorities provide the necessary infrastructure and suitable road network configuration to support the bus services run by the regional councils. This requires that both authorities work 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 Review

The operative plan includes several policies that consider public transport as shown below:

> *Policy B2.1.4(a)*
>
> *Ensure all sites, allotments or properties have legal access to a legal road which is formed to the standard necessary to meet the needs of the activity considering:*
>
> - *the number and type of vehicle movements generated by the activity;*
> - *the road classification and function; and*
> - *any pedestrian, cycle, public transport or other access required by the activity.*
>
> *Policy B2.1.5*
>
> *Ensure the development of new roads is:*
>
> - *integrated with existing and future transport networks and landuses; and*
> - *is designed and located to maximise permeability and accessibility;*
>
> *through achieving a high level of connectivity within and through new developments to encourage use of public and active transport; whilst having regard to the road hierarchy.*

There is no requirement in the operative plan regarding public transport provision. However there is a process at council which ensures that ODPs and consent plans are reviewed by the service provider (generally ECan). This allows any future consideration of public transport routes and potential infrastructure space requirements, however until a route is confirmed it is difficult to require a developer to provide infrastructure.

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. The current policy B2.1.5 recognises this to some extent however the most recent statutory direction needs to be recognised at an objective and policy level.

Recommendation

No new rules are recommended, however it is recommended that the objectives and policies developed for the new Plan incorporate the following public transport related directions:

- Signal the intention for a segregated public transport corridor between the City and Rolleston as identified in the GC PT Futures Business Case
- Encourage land use that supports public transport outcomes

The Plan provisions should also consider specific public transport developments, such as park & rides and enable them. This will involve co-ordination with other topic areas.

11. Car parking management

11.1 Introduction

Car parking is a key part of the transport provisions in the District Plan. The following aspects are examined in more detail below:

- Car parking supply approach in Town Centres
- Activity types and definitions
- Rates for activities
- Car park design

11.2 Car parking supply in Town Centres

Best practice review

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.

It is noted that although not a parking reduction factor the Frankton Flats Special Zone (B) travel demand management rules apply regardless for any non-residential activity which has 25 or more car parks for visitors and/or staff. This includes the requirement for a Travel Plan to be submitted as part of the application, the Travel Plan is required to include:

- *The expected number of workers present during different times of the day and the week*
- *Measures to promote reduced use of car travel by employees, including: providing facilities for walkers and cyclists including change facilities and lockers; encouraging car pooling and public transport use through managing car parking; and promoting travel outside peak hours, including telecommuting and flexible work hours.*
- *Measures to promote reduced car use by customers including: measures to improve the attractiveness of alternative modes including provision of bike stands and safe and attractive pedestrian paths to public roads and public transport stops: and effective use of car parks provided for customers, such as signage, space for drop off and pick up, time limits and enforcement processes.*
- *Monitoring of the above.*

Requiring Travel Plans for development as part of consents can be problematic in the long term as shown in Auckland's Wynyard Quarter where a Transport Management Association has been established including landowners, council organisations and the NZ Transport Agency. The effectiveness of the association has been limited due to a number of factors including that tenant membership is voluntary and on-going monitoring is difficult and costly to maintain.

In Tauranga, even though cycle parking is not a mandatory requirement, by providing cycle parking the minimum car parking requirement can be further reduced.

Most plans reviewed allow shared parking between closely located land activities as long as the hours of operation of the land use activities do not overlap. Securing this arrangement is generally required through some form of formal agreement.

As noted earlier, the Business A Zone of Ashburton town centre requires no on-site car parking 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 is feasible as there is a large public car park on the edge of the CBD.

For Kaiapoi and Rangiora town centres a financial contribution in lieu of on-site parking is required for sites located on Principal shopping streets. Financial contributions will not be viable in the future as the RMA has been amended so that from 18 April 2022, regional and district councils will no longer be able to require a financial contribution (of money or land) as a resource consent condition. This includes 'cash in-lieu' of parking.

The Queenstown Lakes District Plan acknowledges an alternative method as follows "*In circumstances, where car parking cannot be provided to meet the demand, it is a more practical alternative for the Council to levy rates for the provision of car parking. Such funds will be used to develop an integrated and convenient network of car parks. This will lead to improved quality of development and amenity, especially in the town centres.*"

Best practice for parking supply and management is context specific and ideally should be driven by an overarching Parking Strategy.

Operative Plan

In the Townships Volume any new activity, or any increase in an existing activity requires on-site vehicle parking, for use by staff and visitors, in accordance with minimum requirements in E13 (Table E13.1(a), E13.1(b) and E13.1(c)). Compliance with the car park dimensions in Table E13.2 and Diagram E13.1 is also required. In the Rural Zone all parking must be provided on-site or on the adjoining site and not in the road reserve (Rule 4.6.1.3).

Except for the Rolleston Key Activity Centre (Business and Living Zones), Town Centres and Local and Neighbourhood Centres, specific parking rates apply to each activity type. All parking rates are minimums. Parking rates below anticipated demand have been specified in some areas, namely, the Business 1 zone Town Centres of Lincoln, Rolleston, Darfield, Prebbleton, Leeston and Southbridge. These rates have been set considering the existing and future on-street parking supply and demand in each township and recognise a number of factors including: the slightly lower parking demand rate when a large conglomeration of retail activities occurs within a defined area, the acceptability of on-street parking use within these town centres, the desire to encourage business growth in the town centre Business 1 zones and the need to reduce on-site parking provision in order to facilitate improved urban design outcomes within these business zoned sites.

The applicability of the lower rates is currently limited to Retail and Food and Beverage activities within the main Business 1 zone in each township. It is not considered appropriate to apply these rates to isolated pockets of Business 1 zoned land or areas of Business 1 zone located outside of the main town centres.

Discussion

It is understood that the key parking issue is that town centre rates are problematic in encouraging good development and require review. This is considered below in the way that parking supply in Town Centres could be approached.

There also appear to be issues with some of the definitions whereby applicants choose the activity description that best suits their land size rather than actual demand (se Section 11.3). The issue of the supply rates for activities across the district are examined in Section 11.4.

Supply Options

For the purposes of this review two types of town centres have been defined as follows:

- **Type 1** - Town Centres that are also a KAC (Lincoln and Rolleston) – these are subject to Master Planning processes
- **Type 2** - Other Town Centres, Local and Neighbourhood Centres (where growth is not projected to be as high as a KAC)

Type 1 Town Centres

The Type 1 town centres both currently have parking requirements defined in the District Plan that were developed as part of the LURP. We understand that there was Council LURP evidence that supported a reduction in parking rates however this was not reflected in the final decision.

Council have sought legal advice on the ability to alter the car parking provisons in the District Plan resulting from the LURP directions (Action 27). The legal review concluded that the Council is able to alter the car parking ratios. The Council will need to use the standard schedule 1 RMA process to make any changes; and will need to advance a robust section 32 RMA argument to support its position on any reductions to the ratios.

A range of options for the overall approach to Town Centre parking was discussed at the Options Workshop as shown in Table 11.13. Options 4 and 5 were added after the workshop to reflect that retaining minimums may still be appropriate but with these being reviewed and revised to suit the Town Centre plans.

Table 11.13
Options - town centre type 1 parking

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo - minimums	• Allows developer to supply more if they want to.	• Potential to facilitate an over-supply of individual and disjointed parking leading to poor urban design outcomes, inefficient use of land and discourages mode shift.
Option 2 Maximums in the Town Centres	• Better facilitates good use of land as long as set at right level. • Potential to encourage development. • Greater potential for quality town centres.	• Risk of undersupply and overspill into residential streets (this may be inappropriate in some cases). • Potentially requires SDC to lead.consolidated/shared parking arrangements which could involve levied rates.
Option 3 Parking reduction factors used in conjunction with minimums.	• Better facilitates good use of land as long as set at right level.	• Need good public transport and cycling options to support the reduction.
Option 4 Revise current minimums based on the Town Centre plans and likely parking outcomes	• Allows developer to supply more if they want to. • Potential to reflect more appropriate minimum.	• Potential to facilitate an over supply of parking.
Option 5 No minimum requirement in Town Centres	• Potential to encourage development. • Greater potential for quality town centres.	• Potentially requires SDC to lead consolidated/shared parking arrangements which could involve levied rates.

Two options are considered appropriate for further development::

- **Option 2** – Maximum rates for Type 1 Town Centres, acknowledging that there is council will to supply public parking managed by SDC.
- **Option 5** – No minimum parking requirement in Type 1 Town Centres, acknowledging that there is council will to supply public parking managed by SDC and possiblya contribution to help fund the public parking (most likely through levied rates).

These options are underpinned by the need for a district wide car parking strategy to provide the strategic direction for parking, the need for which is currently being progressed by SDC staff. This strategy will help determine which option (for both the Type 1 and 2 Town Centres) will be progressed. This strategy will include an assessement of current and projected supply and demand. Council is also currently working on how public car parking can be provided as part of the implementation of the Lincoln Town Centre Plan and the Rolleston Town Centre Masterplan.

Council has already factored in public car parking areas as part of the Masterplan concept for the town centre in Rolleston. Stage 1 for example includes the development of 185 public car parks spread around 3 areas, and development is expected to commence in the short-term.

Type 2 town centres

The Type 2 town centres were reviewed as part of PC12, specifically they were analysed in terms of current floor areas and current parking supply and demand, the parking supply rates were then set based on this analysis. An issue has been raised by SDC staff that the current rates are too onerous and may be discouraging development. Options for Type 2 town centres were therefore considered and are outlined in **Table 11.14**.

Table 11.14
Options - town centre type 2 parking

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 1 Status Quo - minimums	• Allows developer to supply more if they want to	• Potential to facilitate an over-supply of individual and disjointed parking leading to poor urban design outcomes, inefficient use of land and discourages mode shift. • Could be too onerous and discourage development.
Option 2 Maximums in the Town Centres	• Better facilitates good use of land as long as set at right level • Potential to encourage development • Greater potential for quality town centres	• Risk of undersupply and overspill into residential streets (this may be inappropriate in some cases) • Potentially requires SDC to lead public car parking arrangements which may not be feasible in smaller centres.
Option 3 Parking reduction factors used in conjunction with minimums.	• Better facilitates good use of land as long as set at right level	• Need good public transport and cycling options to support the reduction
Option 4 Revise current minimums based on current supply and demand and any changes to floor areas or extent of business zones since PC12	• Allows developer to supply more if they want to • Potential to reflect more appropriate minimum	• Requires parking surveys and analysis to establish the rates.

Option	Advantages (Effectiveness and Efficiency)	Disadvantages (Limitations and Risks)
Option 5 No minimum requirement	• Potential to encourage development • Greater potential for quality town centres	• Potentially requires SDC to lead consolidated/shared parking arrangements

Option 4 is the recommended option for Type 2 town centres. The re-assessment of floor areas and current supply and demand is required in the next phase of the review.

Location of parking in Town Centres

Both types of town centres need to have the flexibility with regard to where the parking can be located, which is not the case within the current plan provisions.

Appendix E13 outlines some 'Parking Area Location' rules. All parking required and all loading (including unloading) areas (except in Type 2 town centres) shall be located on the same site as the activity for which the parking is required, the exceptions being:

- Within a Business 1, 2 or 2A Zone, the parking required may be provided on a physically adjoining site, or on a site within 100m of the site on which the activity is undertaken, provided that it meets the conditions related to parking on another site (see below).
- For Precinct 8 of the Rolleston Key Activity Centre, all car parking (required and/or provided) shall be provided in Precincts 1 and/or 6 in a public car park or public car parks, shall be available for general public use and shall meet conditions (c), (d) and (e) below.

Conditions when parking on another site:

a) the parking shall be clearly associated with the activity by way of signage on both sites, or alternatively be available for general public use, and

b) the parking is located on the same side of any road as the activity, and

c) the most direct route provided or available for pedestrians from the parking area to the activity is not more than 200m and,

d) if disabled parking cannot be physically accommodated on the same site as the activity, shall be provided at the closest point to the entrance to the activity with which they are associated and, the most direct route from the disabled parking spaces to the activity shall be accessible for mobility impaired persons, and

e) Parking on a separate site by an activity must be protected for the use of that activity (and any future activity on the activity site), or for the use of the general public, by an appropriate legal instrument. A copy of the appropriate legal instrument shall be provided to Selwyn District Council for their records.

These rules provide some flexibility and could be more enabling, for example providing an exception to b) above when there is a controlled pedestrian crossing provided directly between sites. Also, shared parking should be enabled to ensure efficient use of land as long as hours of operation do not overlap and a formal agreement can be entered into.

Alternative arrangements should also be encouraged, for example, currently Synlait are leasing an area from SDC in Rolleston for their staff to park and Synlait then transport their staff by bus to the Synlait plant in Dunsandel. This may lead to an opportunity for more formalised arrangements for example a joint car park used by both an organisation and the public during weekends.

Recommendation

It is recommended that SDC consider extending the current location based flexibility to Type 2 town centres.

It is recommended that SDC include a shared car parking rule and encourage alternative arrangements that facilitate desired outcomes.

11.3 Activity types and definitions

The activity categories, except for the Rolleston and Lincoln Key Activity Centre (Business and Living Zones), Town Centres and Local and Neighbourhood Centres, where parking rates apply are:

- Residential
- Industrial activities
- Places of Assembly and/or Recreational Activities
- Drive-throughs, excluding service stations
- Service stations
- Retail activities generally (including Commercial)
- Slow trade and bulk goods retail
- Food and Beverage
- Sports grounds and playing fields
- Carehomes
- Health care services
- Offices
- Research facilities
- Educational (excluding Preschools)
- Preschool
- Visitor Accommodation
- Activities providing automotive servicing

It is important for activity definitions to be watertight and it is helpful that these are consistent with other rules in the plan as this will avoid confusion and reduces complexity for users of the plan. Generally, parking rates should be based on measurable units that are unlikely to change, for example floor area or number of seats wherever possible rather than units that are subject to more variability or are sometimes unknown at the time of applying for resource consent, for example the number of staff.

Appendix D lists the activity categories within the operative plan, their respective definitions, and the current unit used for the parking requirement. Comments on any issues or gaps identified with the existing activity categories, definitions or units applied is provided. This exercise identified a number of issues, inconsistencies and gaps that require further investigation and co-ordination with other topics in the next phase of work.

11.4 Rates for activities

Guidance on appropriate parking supply rates for different activity types can be sourced from a number of locations including:

- The Trips Database Bureau (TDB) – a database that collects and maintains trip and parking data in NZ and Australia.
- NZTA Research Report 453[24], Trips and parking related to land use – a research report that compared trip making and parking demand characteristics for a range of land uses in NZ and the UK.
- Parking supply rates for activity types in other district plans

All of the above sources have benefits as well as limitations. This stage of work has focused on parking rates of neighbouring district plans to form an initial view on which supply rates require further investigation and research.

Appendix E provides a comparison of the operative minimum parking requirements for Selwyn compared with adjacent district plans including Waimakariri, Christchurch and Ashburton. All of the plans stipulate minimum parking requirements for activities across the district except in specific zones such as town centres and the Christchurch city centre which are subject to different arrangements, for example maximum parking rates. The analysis compares the plans by activity type based on the current Selwyn activity types and definitions.

The analysis identified that most of the existing minimum parking supply rates require a more detailed review as well as input from other topic areas in the next phase of work.

11.5 Car parking design

Best practice review

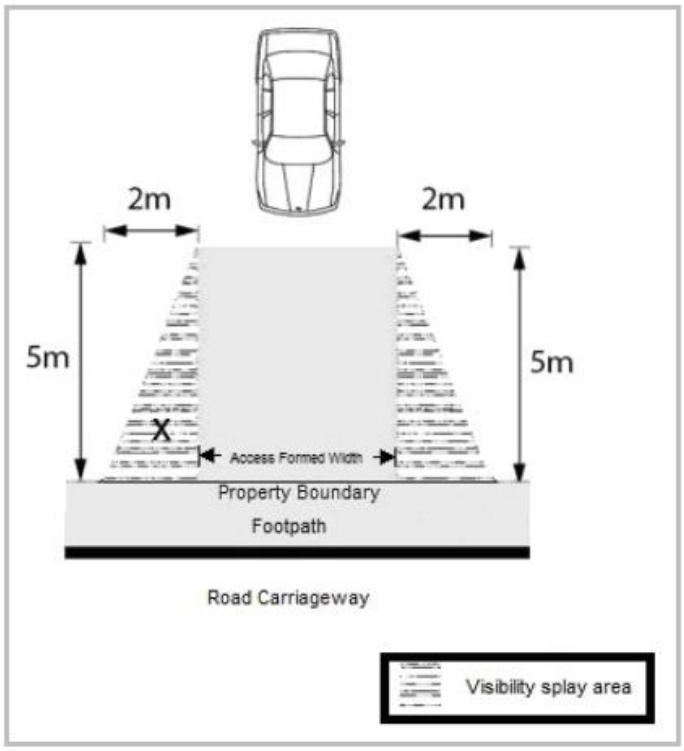
There is awareness that only stipulating car park space dimensions and not considering the wider car park design can result in poor outcomes for car park users and also amenity impacts. Plans are therefore asserting more control over car park design through rules and/or assessment matters. The Waimakariri District Plan includes a requirement to better control the impacts of large car park areas that provide 20 or more new car parking spaces on any site other than within the Rural Zone (and some exclusions). This makes the activity a discretionary activity (restricted) and subject to a range of location and design matters, and also the consideration of the effects on the function, amenity and character of town centre activities.

The Christchurch District Plan requires adequate lighting to be provided for all users and that there is convenient and safe pedestrian circulation at the accesses. There is also a requirement for visibility splays (see **Figure 11.1**) to ensure pedestrian and cyclist safety and if unable to provide, then audio/visual methods must be used to warn pedestrians. The visibility splay areas are to be kept clear of obstructions in all cases for visibility reasons, landscaping or other features may be contained within the visibility splay areas, as long as it does not exceed 0.5m in height. If the access is 4.5m wide or greater, and the access provides for two-way traffic flow, then there is no requirement to provide a visibility splay on the side of the access marked with an 'X' in **Figure 11.1**.

[24] Douglass, M and S Abley (2011) Trips and parking related to land use. NZ Transport Agency research report 453. 156pp

This requirement was important given the high number of streets in the city with no building setbacks, particularly car park buildings with high traffic flows and high pedestrian frontage flows. Consideration is given to whether the speed and volume of vehicles using a vehicle access, and/or the volumes of cyclists and pedestrians on the footpath or frontage road, will exacerbate the adverse effects of the access on people's safety.

Figure 11.1
Visibility Splay requirement in the Christchurch District Plan



Auckland is similar to Christchurch in terms of providing safe access and egress for vehicles, pedestrians and cyclists and avoiding or mitigating potential conflicts between vehicles, pedestrians and cyclists.

In the Queenstown Lakes District there is a requirement that the design of parking areas ensures the safety of pedestrians as well as vehicles. It is also recognised that "*Some sites can be small and restrictive to development and in some locations pedestrian access, convenience and other amenity values would be adversely affected by on-site parking"*

Operative Plan

For all Business 1 zone activities new car parking areas are complying if they meet certain landscaping requirements.

For all activities in the Business 1 zone and for all activities except industrial in the Business 2 zone, new car parking areas resulting in more than 20 parking spaces shall be a controlled activity. In the Business 3 zone, new car parking areas resulting in more than 40 spaces shall be a controlled activity. For these instances the exercise of Council's discretion is limited to the following:

- *The degree to which low level landscaping has been provided in order to break up the appearances of hard surfacing, particularly between the car park and pedestrian areas.*

- *Whether an adequate number of trees, within suitably sized planting beds, have been provided in appropriate locations within the car parking area in order to mitigate any adverse visual effects.*
- *Safety, circulation and access considerations for pedestrians within the site and moving past vehicle crossings.*

Parking for commercial development was dealt with in Plan Change 29 by introducing restrictions on parking in front of premises and requirements for active frontage (doors and windows facing the street) (Rule 16.9) and landscaping of car parking (Rule 17.7). The SDC Commercial Design Guide (2011) reinforces this.

The only parking assessment matters are those that apply to parking in Lincoln Precinct 1 (West), the Council shall restrict its discretion to consideration of:

> *The proportion of parking demand that can be met by the provision of on-site parking spaces, including staff parking.*
>
> *The ability for car park leases or formal sharing arrangements, to make efficient use of parking resource available on alternative sites where peak operating periods of activities do not coincide.*
>
> *The availability of public parking supply, for example on nearby roads, and any transport or amenity related effects associated with off-site parking.*
>
> *The benefits achieved in respect of improvements in urban design as a result of reducing on-site parking supply and the potential to encourage mode-shift towards walking and cycling*.

E13 provides a note to the rules for parking space dimensions to cover buildings "*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*." This is considered appropriate as these will be the exception in Selwyn.

Discussion

It is understood that layout design of car parks is generally not an issue. The current provisions appear to cover the design of car parks well. An issue of provision of the connections outside of the site has been rasied however this requires further discussion and is linked to the ITA, street design and footpaths aspects.

A requirement similar to the WDC Plan to be able consider a range of design related assessment matters could be considered however it is noted that this was proposed in PC12 and heavily opposed by some large organisations in the district.

The KAC Precinct Lincoln Precinct 1 (West) assessment matters are considered appropriate and provide greater flexibility for development and should be available for other town centre environments, predominantly Type 1 town centres.

However two recommendations are made below to enhance the current rules.

Recommendations

It is recommended that visibility splays apply where no building setbacks are required. This requires consideration in conjunction with the topic areas defining setbacks.

It is recommended that the assessment matters that apply to KAC Precinct Lincoln Precinct 1 (West) could be extended to cover other Type 1 town centre environments.

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.

Council have sought legal advice with regard to how to reference external documents in the District Plan, generally or specifically. It was advised that when referencing external documents, it is good practice to identify the document in a clear and precise manner (i.e. be specific). The full name of the document should be referred to along with its version number or date of publication, for example: NZS6808:1998 Acoustics – The Assessment and Measurement of Sound from Wind Turbine Generators.

Importantly, 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.

In summary it was found that:

- When incorporating an external document into a plan, there is a statutory process to follow, which must be strictly adhered to.
- When notifying the plan, ensure that any incorporated documents are publicly available. It can be helpful to include links to the incorporated documents within the notified version of the plan for ease of reference.
- Always check the external document carefully before incorporating it into the plan. Ensure it does not conflict with the existing plan provisions and does not import provisions that are ultra vires – as soon as it is incorporated, it has legal effect.

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*."

The ECoP and the SDC urban design guides are not statutory documents, except for the Subdivision Design Guide in the context of PC7. The ECoP and the guides include information that is useful at the early design stage and also at engineering approval stage. Mapping the process and when various documents apply would be beneficial to applicants.

The key issue raised in the SWOT and at the workshops was the apparent lack of reference by applicants to the non-District Plan documents leading to sub-optimal outcomes. Plan Change 12 (PC12) attempted to reference the ECoP in the District Plan as just the "current" version so that ongoing changes could be made without needing to trigger a specific plan change. However, a PC12 submission did not support this approach as the submitter asserted that SDC could make changes to a document directly linked to the RMA (and consent conditions requiring engineering approval in accordance with the ECoP) that no one had the opportunity to be potentially aware of. The result was that the ECoP was referenced as a specific version throughout (which is consistent with the recent legal advice).

The plan definition of the ECoP is*: Engineering Code of Practice: means the Selwyn District Council Engineering Code of Practice dated 20 February 2012, and includes any amendment to, or replacement of the Code of Practice, which shall have legal effect as part of the plan.*

This definition in the Plan reflects the PC12 outcome but also implies that subsequent amendments or a replacement of the ECoP are also included within the definition of the ECoP.

Examples of ways in which the guides are referenced in the Operative Plan are:

- *C12 – Notes: The Selwyn District Council "Design Guide for Residential Subdivisions in the Urban Living Zones" and "Engineering Code of Practice" should be consulted when preparing subdivision applications.*
- *C5 - Notes: In assessing a discretionary activity under Rule 5, the consent authority will refer to the Council's most recent Engineering Code of Practice where appropriate, as well as to the relevant objectives and policies of the District Plan.*

A recommended approach for Selwyn is discussed below.

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.

At this stage of the review it is considered that the requirements within Appendix E13 (Townships) and E11 (Rural) are appropriate for site development and the creation of roads, assuming the earlier recommendations in relation to narrow roads and footpaths are implemented.

13. Summary of issues

The review identified issues related to the following themes:

- Managing activities in the road reserve
- Integrating land use and transport
- Amenity and character
- Supporting modal shift
- Car parking
- Referencing external documents

The majority of the issues have been discussed with the SDC, NZTA and ECan stakeholders at two workshops.

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.

It is understood that SDC wish to progress specific changes through 'Preferred Options' papers. There will be interdependencies with other topics that will need to be identified and managed.

At a high level, the statutory, best practice and operative plan reviews have found that the following matters need to be considered when revising or developing new objectives and policies:

- There is a lack of direction in regard to local character and identity. The plan does not specifically recognise areas that have specific or special qualities in terms of character and identity such as town centres within the transport provisions of the plan.
- There is also no objective related to parking management despite there being many policies related to parking.
- The requirement for ITAs will require that the objectives, and more so the policies are clearly linked to the assessment requirements and outcomes sought.
- Consider whether objectives and policies should relate to land based transport only.
- Ensure that the public transport direction for the Greater Christchurch area is reflected in the issues, objectives and policies.

There are also process related issues that require consideration as follows:

- Consider making it clearer how non-District Plan methods such as those outlined in the Engineering Code of Practice and Design Guides relate to the District Plan. This could be best achieved through a process mapping diagram showing where various documents are required to be referenced. This matter is likely to have been raised in other topic reviews.
- Consider the provision of Outline Development Plan (ODP) guidance for applicants. An issue raised by SDC staff was that at ODP stage the road network is generally defined but the cross section is not always developed and it is not until engineering approval stage that its known and by then making changes can be problematic. Outlining the required level of detail at ODP stage may address this issue.

Table 13.1 Summary of recommendations

Issue topic area	Issue	No change recommended	To be addressed in DP review	Recommended option	Can proceed without further analysis	Requires further analysis	Dependancy with other Transport issues topic area or DP Review Topic
Management of the road reserve	ONRC alignment		Discussion with SDC staff and NZ Transport Agency staff at the first workshop confirmed the SDC road hierarchy having an Arterial classification is not creating any issues. It is also clear that other councils have some overlap in classification between their district plan and the ONRC and this also does not appear to be creating any issues.				
	Control of activities in road reserve		Yes	Roads continue to be a Utility however the Utility rules are amended to be clearer as to what is permitted in roads to avoid resource consents and clarify zoning extent (i.e. subject to adjoining zoning to the centerline of the road).		Yes	**Utilities Topic** It is recommended that discussion is held with WDC regarding this issue
Landuse and transport integration	Objectives and policies		Yes	All of the objectives and policies will require review to ensure they are strongly linked to the requirement for ITAs		Yes	All other review topics
	ITA requirement Scale of activities		Yes	Require ITAs based on either scale of activity (thresholds) only or combination of scale and certain activities		Yes	Other Review Topics are defining non-permitted activities It is recommended that discussion is held with WDC regarding this issue
Amenity and character	Street design		Yes	Increase widths but provide for consideration of narrower widths subject to resource consent and assessment criteria. Further discussion and analysis is required on this and footpath provision, in the next stage work of .		Yes	Supporting modal shift - footpaths
	Vehicle crossing widths		Best practice is to minimise vehicle crossing widths in association with medium density residential development, however a preferred option is not able to be recommended at this time given the interdependencies with aspects such as the size and shape of allotments, road frontage width, garage setbacks. It is noted that the wording in the table E13.7 requires updating to reflect the intent is to have either, a 1m separation between crossings or at least 7m, not less than 1m.				**Residential/Subdivision Topics**
	Amenity strips in streets		No specific District Plan requirement for amenity strips on new roads considered necessary, continue to rely on the ECoP requirements.				
	Amenity strips in accessways		Maybe	This matter was not included in the SWOT or workshop discussions, however it became apparent that amenity benefits could be gained from addressing this matter. This will need to be determined in conjunction with the Residential and Subdivision Topics.			**Residential/Subdivision Topics**
Supporting modal shift	Footpaths – sides of road		Yes	Require two sided footpaths on local major streets and one sided on local intermediate and minor street except in some situations. SDC staff workshop required on this and street design.		Yes	**Amenity and character – Street design**
	Cycle facilities in road		No specific District Plan requirement for cycle facilites beyond what is currently included in Table E13.8.				
	Walkable blocks		Yes	Rule requiring 800m walkable block		Yes	**Residential/Subdivision Topics**
	Managing cul de sacs		Yes	Retain maximum length of 150m and introduce requirement for pedestrian link at end + require line of sight to adjoining street	Yes		
	Cycle parking rates		Yes	Develop rates for each activity as per the car parking requirements		Yes	
	Cycle parking design and location		Yes	Include design and location rules (as per Waimakariri)	Yes		
	Public transport provision		Yes	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 and also consider specific public transport developments, such as park & rides and enable them. This will involve co-ordination with other topic areas.	Yes		**All other review topics**
Car parking	Management approach		Yes	**Type 1 Town Centres** – two options (maximums or nil) were considered appropriate for further consideration subject to the District Parking Strategy **Type 2 Town Centres** - Revise current minimums based on current supply and demand and any changes to floor areas or extent of business zones since PC12		Yes	**Business Topic**
	Activities definitions		Yes	Further investigate the initial analysis recommendations		Yes	**Business Topic**
	Supply rates		Yes	Further investigate the initial analysis recommendations		Yes	**Business Topic**
	Design of car parks		Yes	Require visibility splays, and other changes		Yes	**Business Topic**
Referencing external documents			Yes	Agree an approach with regard to where material is located so that the important requirements become statutory.		Yes	All other review topics

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Appendix A Review of New Zealand Second Generation District Plans

ConnectBetter

A1 Transport aspects

Transport aspect	Operative Selwyn DP	Christchurch DP **Operative**	Auckland Unitary Plan **Operative**	Hamilton City DP **Operative**	Tauranga City DP **Operative**	Dunedin City DP **Proposed**[1]	Queenstown Lakes DP **Operative**
Management of the road reserve from a District Plan perspective.	Roads are not zoned as such, they are subject to the underlying land zoning and where they are the boundary between two zones the zone boundary is the centreline of the road. They are also defined as a utility and subject to the rules etc of Utilities.	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 any public road, regardless of the underlying zoning on the Plan Maps (Part B) including a State Highway and any service lane.	Treated as an activity – 'Transportation Activities Category'.	Roads are defined as a utility and subject to the rules etc of Utilities.
ONRC classification versus District Plan classification.	The District Plan hierarchy includes one classification that uses the same term as the ONRC, that being 'Arterial'.	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 district plan hierarchy includes 8 categories. Motorway, Strategic, Arterial, Urban High Density Corridor, Commercial Centre Streets, Collector, Local and Industrial. One classification uses the same term as the ONRC, that being 'Arterial'	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 rule, only a mention of integrated assessments in the policies.	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 six 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	All high trip generating activities must include an Integrated transport assessment (ITA). The group of activities which includes: •Service stations, •Restaurant including. drive through; •Early childhood education - large scale •Schools •Quarrying (defined as part of mining); •New or additions to parking areas, which create 50 or more parking spaces; and •Any other activities that generate 250 or more vehicle movements per day.	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

[1] Note the Dunedin 2GP is currently a proposed plan and none of the provisions are operative. Hence, the proposed provisions must be considered with caution as they have not been through the necessary submissions / hearings processes.

Transport aspect	Operative Selwyn DP	Christchurch DP **Operative**	Auckland Unitary Plan **Operative**	Hamilton City DP **Operative**	Tauranga City DP **Operative**	Dunedin City DP **Proposed**[1]	Queenstown Lakes DP **Operative**
Car parking requirement approach. Min/Max/Shared/Parking reduction factors	Car parking is required on a 'minimum requirement' basis for a range of activities. No provision for shared parking.	The DP require a minimum number of spaces (standard and mobility) based on the activity type. Some activities are exempt based on location (Heritage building). However, the minimum requirement could be further reduced by applying parking reduction adjustment factors, which take into account the accessibility (PT, walking, cycling, public parking and cycle parking) of the site. Two types of reductions exist, permitted reductions and reductions based on assessment through the resource consent process.	Depending on the location of the development a maximum or minimum rate applies. Min and max for offices in Area 2. Sharing of parking is permitted.	Is based on the size of the activity (GFA or number of units or number of FTE staff,) 39 activity categories. However, Central City, Transport Corridor Zone and Natural Open Space Zone has no parking requirement. 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.	Car parking is required on a 'minimum requirement' basis for a range of activities. Parking reduction adjustment factors can be applied to reduce the required parking provision. Factors are categorised into three categories, Strategic, Transport and Geographic.	Car parking is required on a 'minimum requirement' basis for a range of activities. Parking spaces may be shared between land activities as long as the hours of operation of the land use activities do not overlap. Residential and office activities (excluding registered health practitioners) undertaken entirely within a scheduled heritage building do not need to provide any additional car parking other than what is already on-site and may remove any car parking that does not meet the performance standards for location of car parking.	Car parking is required on a 'minimum requirement' basis for a range of activities except for the High Density Residential (HDR) Zone and Queenstown Town Centre Lakeview sub-zone for residential activity. Min and max rate for Frankton Flats Special Zone B
Car parking design in terms of pedestrian flow and safety	No rules	Adequate lighting is provided for all users. convenient and safe pedestrian circulation at the accesses. The use of visibility splays to ensure pedestrian and cyclist safety and if unable then to use audio/visual method of warning pedestrians. whether the speed and volume of vehicles using a vehicle access, and/or the volumes of cyclists and pedestrians on the footpath or frontage road, will exacerbate the adverse effects of the access on people's safety.	Similar to CCC DP. provide safe access and egress for vehicles, pedestrians and cyclists; (c) avoid or mitigate potential conflicts between vehicles, pedestrians and cyclists; and	A minimum distance between a new vehicle crossing and a pedestrian crossing facility is specified. Sight distance at accesses are based on AustRoads Guides. No part of any parking space, cycle space, loading space or manoeuvring area shall be located on any outdoor living area or service area.	No specific rules on pedestrian safety within the car park. Assessment matters relating to the safe and efficient movement of pedestrians being provided for within on-site parking, access and manoeuvring areas and at vehicle entry/exit points.	No specific rules or guidance on pedestrian safety within the car park.	Requires the design of parking areas to ensure the safety of pedestrians as well as vehicles. Also recognises that "Some sites can be small and restrictive to development and in some locations pedestrian access, convenience and other amenity values would be adversely affected by on-site parking. In circumstances, where car parking cannot be provided to meet the demand, it is a more practical alternative for the Council to levy rates for the provision of car parking. Such funds will be used to develop an integrated and convenient network of car parks. This will lead to improved quality of development and amenity, especially in the town centres."

Transport aspect	Operative Selwyn DP	Christchurch DP **Operative**	Auckland Unitary Plan **Operative**	Hamilton City DP **Operative**	Tauranga City DP **Operative**	Dunedin City DP **Proposed**[1]	Queenstown Lakes DP **Operative**
Cycle parking requirement approach	Any activity, other than residential activities, temporary activities etc is to provide cycle parking at a minimum of 2 spaces and then at a rate of 1 cycle space for every 5 car parking spaces required, to a maximum of 10 cycle spaces.	Visitor/ Staff/ Residents/ Students cycle parking to be provided based on the activity type (36 types) and size.	Cycle parking is categorised as short stay or long stay and most activities are required to provide both.	Visitor/ Staff/ Residents/ Students cycle parking to be provided based on the activity type (36 types) and size. Cycle parking spaces shall not be required where: The building setback is 0m for the entire frontage of the subject site. A publicly available cluster of cycle spaces is located within 50m of the public entrance of the activity and in sufficient quantities to meet the levels otherwise required	Cycle parking is not required as a rule. However, by providing cycle parking the development can reduce the required minimum parking provision.	Cannot find any requirement.	Only required for Three Parks Zone. Three cycle parking categories exists. 1. Customer/Visitor Short-Term Bicycle Parking (Type One) 2. Customer/Visitor Short to Medium-Term Bicycle Parking (Type Two) 3. Private Long-Term Bicycle Parking (Type Four) Also required for Frankton Flats zone - In general the rate for staff should be 1 space per 10 employees.
Cycle parking location and design	Shall be provided on the same site as the activity and located as close as practicable to the building main entrance and shall be clearly visible to cyclists entering the site, be well lit and secure. The type of stand must comply with the Engineering Code of Practice requirements for cycle parking rack systems."	Cycle parking facilities requires to be clearly signposted or visible, should not impede pedestrian thoroughfares, away from vehicle movement, as close as possible to and no more than 30m from at least one main pedestrian public entrance. The end of trip facilities for commercial activities, tertiary education and research activities and hospitals (showers and lockers are based on the number of cycle parking spaces required. With a threshold of ten spaces.	Cycle parking facilities required to be clearly signposted or visible, should not impede pedestrian thoroughfares, away from vehicle movement, as close as possible to and no more than 30m from at least one main pedestrian public entrance. Long stay cycle parking must: i.be located in a secured area that is not open to the general public preferably behind a locked access gate or similar. ii.be located close to the employee entrance to the building. iii.be located where the cycle does not need to be carried up or down stairs. d.in addition to (b) above, short stay cycle parking must: i.be located close to the customer entrance. Further guidance on cycle parking can be found in Auckland Transport's Code of Practice.	Visitor cycle parking spaces shall be located within 30m of public entrances for the activity Staff cycle parking shall consist of a stand or enclosed space that: Allows the bicycle to be secured and Is undercover or otherwise protected from inclement weather.	Cycle parking should be positioned in a highly visible location on site to enable passive surveillance and discourage theft and vandalism and Located as close to possible to shower and changing facilities.	Cannot find any requirement.	Depending on the type of cycle parking the parking spaces should be located a certain distance from the destination main entrance. Type 4 parking should normally take the form of a bike locker, limited access enclosure, or bike station.

Transport aspect	Operative Selwyn DP	Christchurch DP **Operative**	Auckland Unitary Plan **Operative**	Hamilton City DP **Operative**	Tauranga City DP **Operative**	Dunedin City DP **Proposed**[1]	Queenstown Lakes DP **Operative**
End of trip facilities			End-of-trip facilities must be provided for Offices, education facilities and hospitals over 500m^2. Secure lockers and showers are reliant on the number of spaces. If the shower and changing facilities are independent of gender separated toilets one unisex shower is required however if showers are associated with gender separated toilets one per each gender is required. (up to 1000m2) one additional shower per every 7500m2 above the first 1000m2.				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.

A2 Urban Design Aspects

Urban Transport Issue	Operative Selwyn DP	Christchurch DP Operative	Auckland Unitary Plan Operative	Hamilton City DP Operative	Dunedin City DP Proposed	Queenstown Lakes DP Proposed	Best Practice Urban Design
Strategic direction of plan including Objectives and Policies promote good amenity, identity and character outcomes.	Objective B2.1.4 Adverse effects of land transport networks on natural or physical resources or **amenity values**, are avoided, Remedied or mitigated, including adverse effects on the environment from construction, operation and maintenance.	Policy 7.2.1.1 (a) Identify a road network that connects people and places and recognises different access and movement functions for all people and transport modes, whilst: (iv) reflecting neighbourhood **identity** and **amenity values**; and Policy 7.2.1.2 (a) Manage the adverse effects of high trip generating activities, except for permitted activities within the Central City, on the transport system by assessing their location and design with regard to the extent that they: (viii) mitigate other adverse transport effects, such as effects on communities, and the **amenity values** of the surrounding environment….; and Policy 7.2.2.3 (a) manage the adverse effects of an activity in the transport zone so that effects are consistent with the **amenity values** and activity of adjacent land uses, whilst providing for the transport network, in particular the strategic transport network to function efficiently and safely.	No specific objectives and policies relating to amenity and character outcomes.	Policy 18.2.2b The **amenity values** of adjacent land uses shall be protected from the adverse effects of works within the transport corridor; Objective 18.2.2 Adverse effects from the transport network are minimised and **amenity values** maintained.	Objective 6.2.1 (a) minimising, as far as practicable, any adverse effects on the **amenity** and **character** of the zone	In the operational DP: Policy 3.1 To protect the **amenities** of specified areas, particularly residential and pedestrian orientated town centres from the adverse effects of transportation activities.	Integrated transport and landuse: Transport policy should require avoidance of adverse effects of the transport network on amenity values and identity or character of an area. Specific areas such as town centre or special land use areas potentially require specialised transport provisions.
Street Amenity: Provision of street trees and landscaping is desirable from an amenity perspective but has cost implications for asset management.	Not covered in the plan.	Road Standards 8.10.3 Amenity strip required on all roads.	(ATCOP) Amenity strip recommended on all roads.	Transport Corridors Criteria - Table 15-7a: Amenity and infrastructure strips (BERM) required on all streets, non-residential subject to specific design.	Not covered in the plan.	In the operational DP – subdivision engineering standards: Table 3.1 Road Design Standards: Berm required on all roads.	The provision of street trees and planted or grass verges are important for the sustainability, biodiversity and amenity of all streets.
Local street design: Prescribing narrow road widths is problematic as it results in congested on-street parking, pedestrian safety and no amenity (trees or vegetation)	Road Standards; E13.3.1 New Roads. Local Intermediate min 13 max 15 Local Minor min 10 max 12	Road Standards 8.10.3 Local Residential Min 16m Max 20m Alternative Min 14m restricted to 20 units one sided footpath and 100m in length.	Not covered in the plan.	Transport Corridors Criteria - Table 15-7a: Local min 20m Alternative for shared space private lanes: 7-20 units min 9m Less than 6 units 3.6-4m	Not covered in the plan. Refers to NZS 4404	In the operational DP – subdivision engineering standards: Table 3.1 Road Design Standards: Local Road minimum 12m for short cul de sac otherwise min 18m for through road.	Narrow streets are important in a comprehensive hierarchy however to be successful they need to be designed so they are safe and balance all activities.

Urban Transport Issue	Operative Selwyn DP	Christchurch DP **Operative**	Auckland Unitary Plan **Operative**	Hamilton City DP **Operative**	Dunedin City DP **Proposed**	Queenstown Lakes DP **Proposed**	**Best Practice Urban Design**
Footpaths: One sided vs two sided, asset management vs supporting barrier free design and multimodal networks	Road Standards ; E13.3.1 New Roads. Arterial, collector and local (business) requires both sides. Local Major requires minimum one side Local Intermediate requires minimum one side Local Minor NA (assumed shared surface)	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 15-7a: Both sides for all zones with some minor variations in width etc except for shared space where no footpaths are required.	Not covered in the plan.	In the operational DP – subdivision engineering standards: Table 3.1 Road Design Standards: Minimum one sided on local residential streets and two sided on commercial and industrial zones. 2 sided on all collector and arterial roads.	All streets should have footpaths on both sides to encourage good connectivity, active lifestyles and so streets are accessible for all.
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.	Road Standards ; E13.3.1 New Roads. Arterial and collector requires either on road or off road. Local Business and Living Major requires one side only Local optional. Local Intermediate and Minor NA – assumed none.	Road Standards 8.10.3 All arterial and collectors requires either on or off street. Local Roads provision of is 'allowed for' in the road design, assumed optional.	Not covered in the plan.	Transport Corridors Criteria - Table 15-7a: Arterial – shared off road or cycle path both sides, business subject to specific design. Collector – marked on road, business on road in shared movement zone Local – on road in shared movement zone,	Not covered in the plan.	In the operational DP – subdivision engineering standards: Table 3.1 Road Design Standards:	Cycle provisions whether on street or off street should be provided on all streets to encourage active lifestyles and should be determined in accordance with the safety and design speed of streets.
Residential vehicle crossings: In medium density developments driveways can dominate the street and restrict on street parking and amenity planting.	No specific requirement for Medium Density General Standard: E13.2.4 Vehicle Crossing Design and Siting Min: 3.5m / Max: 6m	No specific requirement for Medium Density but tiered system based on vehicle numbers. 7.5.7.1 1-3 veh Min 2.7m Max 4.5m 4-8 veh Min 3m / Max 6m 9-15 veh Min 4m / Max 6m	No specific requirement for Medium Density but tiered system based on dwelling numbers. E27.6.4.3.2 1 house Min 2.7m Max 3.0m 2-5 houses Min 3m / Max 3.5m 10+ houses Min 5.5m / Max 6m based on two way access.	No specific requirement for Medium Density, standard 3m Min and 5.5 Max for residential.	No specific requirement for Medium Density General Standard Performance Standard 6.6.3.9: Min: 4.5m / Max: 6m	In the operational DP: No specific requirement for Medium Density, Rule 14.2.4.2 (i) standard 3m Min and 6.0 Max for residential.	Vehicle crossing become problematic the denser the development. Effects include loss of on street parking and amenity. To avoid a streetscape dominated by driveways medium density driveways should be restricted to single car access widths.
Cul-de-sacs: Long and truncated cul-de-sacs are poor outcomes that don't meet CPTED requirements	E13.3.1.5 any cul de sac must be connected to a trough road and must not be connected to another cul de sac E13.3.1.4 cul de sacs are permitted but shall be restricted to 150m	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.	Not covered in the plan.	Not covered in the plan.	Not covered in the plan.	Cul de sacs are not recommended as they can lead to socially isolated and unsafe street environments. However in some instances short cul de sacs are acceptable where there is direct line of sight from the end of the cul de sac to the adjoining street.

Urban Transport Issue	Operative Selwyn DP	Christchurch DP **Operative**	Auckland Unitary Plan **Operative**	Hamilton City DP **Operative**	Dunedin City DP **Proposed**	Queenstown Lakes DP **Proposed**	**Best Practice Urban Design**
Walkable blocks: Long continuous blocks restrict pedestrian access and permeability through the neighbourhood.	12.1.4.33 Whether residential blocks achieve an average perimeter of 800m and maximum perimeter of 1000m, unless precluded by an existing pattern of development. NOTE: Section 4.6 of the “Design Guide for Residential Subdivision in the Urban Living Zones” can be referred to for other examples of how residential blocks can be measured.	Subdivision Activity Standards;8.6.11 (i) Walkable block length perimeter of 800m.	Not covered in the plan.	Not covered in the plan.	Not covered in the plan.	Not covered in the plan.	To encourage walkable neighbourhoods it is important to allow permeability in the block structure and discourage large block forms that restrict movement.

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Appendix B
Issues and opportunities workshop material

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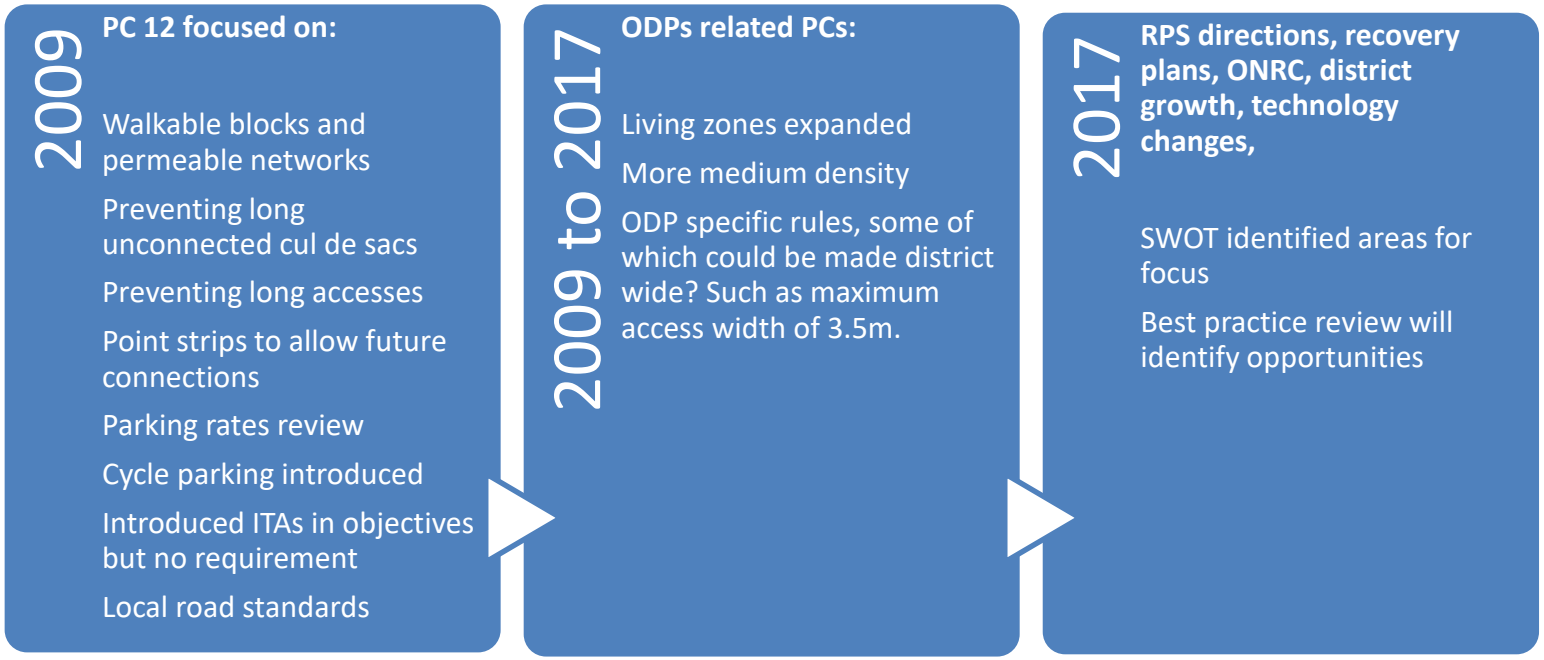
Selwyn District Plan Review
Issues and Opportunities Workshop

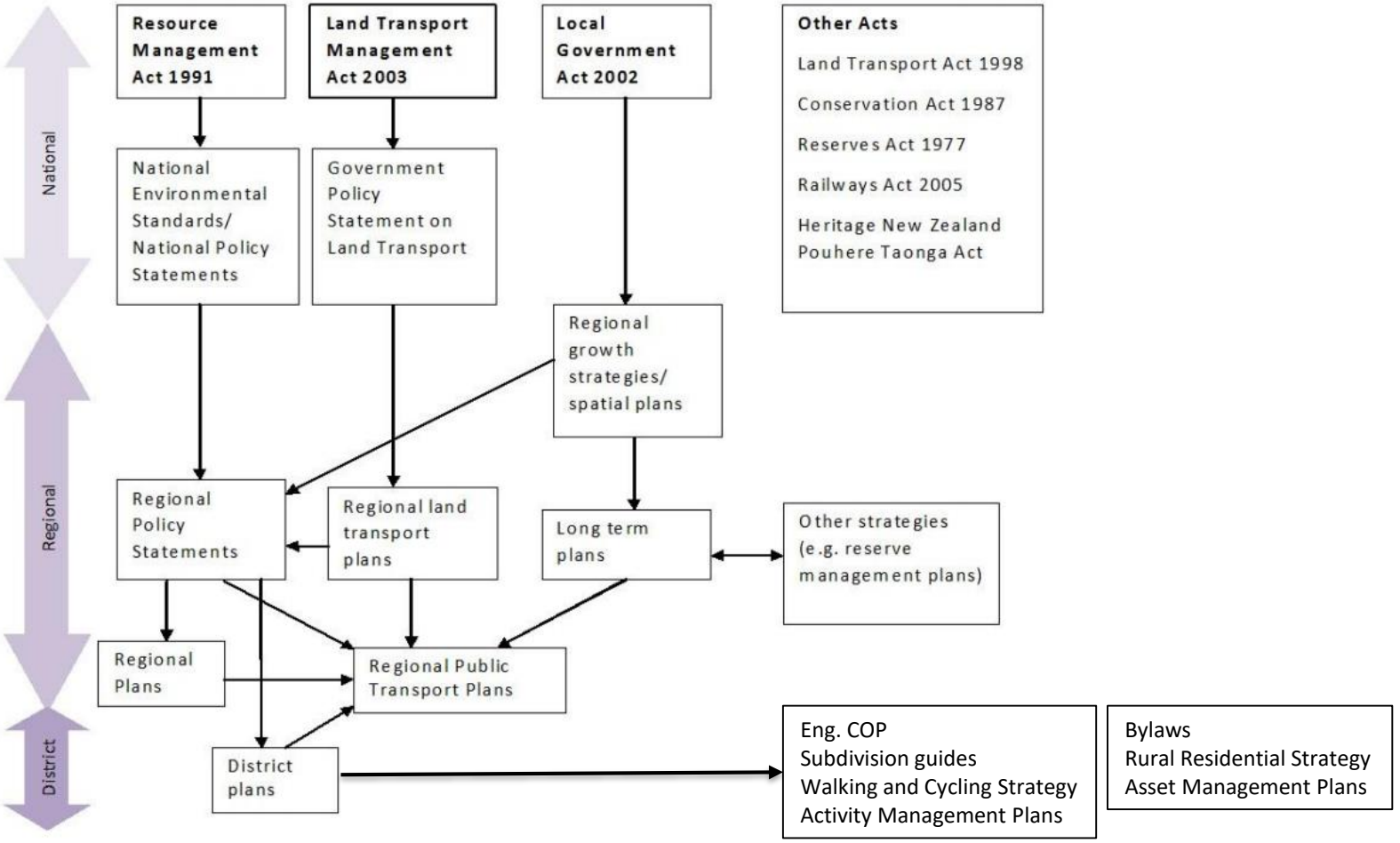
Agenda

- 9.00am Welcome and introductions
- 9.15am Confirmation and clarification of issues and opportunities
- 10.30am Tea Break
- 10.45am Continue with issues and opportunities
- 11.15am Best Practice Overview
- 11.30am Neighbouring Councils Plans
- 11.45am Wrap up, next steps

District Plan Transport – the last 8 years



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
- not be inconsistent 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 a key issue to ensure quality urban design outcomes are achieved in the plan.
- This issue effects 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 landuse on the transport network, second the effects of the transport network on the adjacent landuse.

District Plans – structure

Issues (optional)

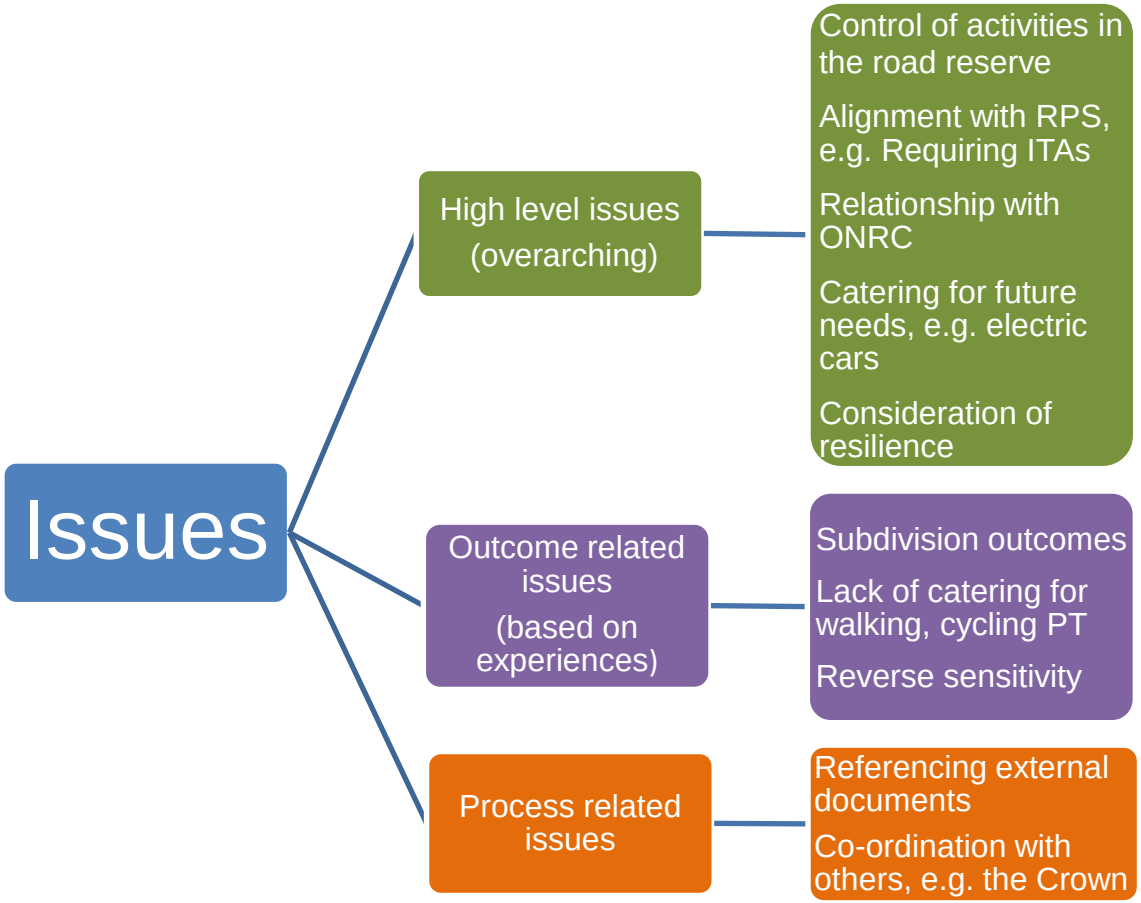
- a means to enable clear linkages to matters contained in other strategic or higher-level documents that do not sit within the regional or district plan
- the context to the plan provisions that followed
- a logical starting point or heading around which related objectives and policies could be grouped.

Objectives (must have)

Policies to implement the objectives (must have)

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

Issues and opportunities



Examples of Opportunities

- Require ITAs for certain activities/scale
- Apply road zone or designation
- Update road standards
- Shared parking
- Parking reduction factors
- Cycle parking design and location
- Others….

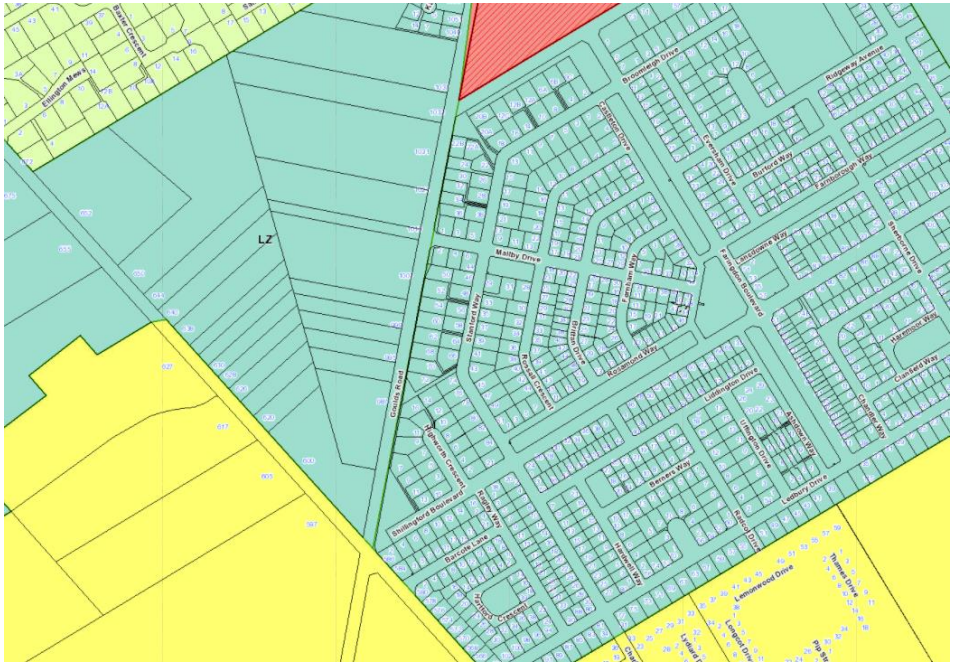
Control of activities in the road reserve

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

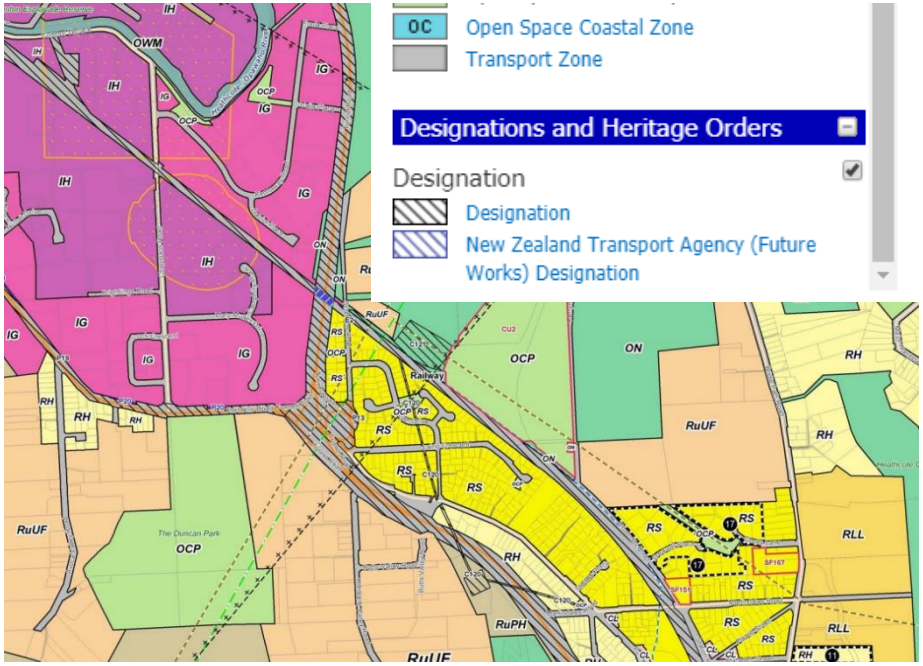
- Currently consent teams have been operating as if they were designated but they aren't.
- Plan currently has roads under the definition of 'Utility'
- Permitted activity "*Upgrading, maintenance, operation and replacement of existing utilities shall be permitted and shall not be subject to compliance with any other performance standards, conditions or rules in this Plan provided that the effects of such shall be the same or similar in character and scale to those which existed before such upgrading, maintenance or replacement activities commenced"*
- Issues include - SDC may need consent for major changes to existing roads?

Managing activities in the road reserve

SDC, WDC and many others define roads as utilities



CCC – roads are part of a transport zone

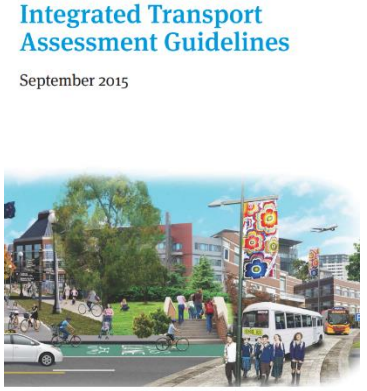


Key question – Does this need fixing?

Requiring ITAs

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

- Currently mentioned in District Plan policy explanation and reasons but no rules requiring them
- 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 SDC are
  - Should ITAs be required?
  - If so we will look at the activities and thresholds?
  - 1 or 2 levels/scale of ITA?
  - Provide guidelines or reference national docs?



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

Relationship with ONRC

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

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
- to allow local authorities and NZ Transport Agency to compare the state of roads across the country, and direct investment where it is needed most

Relationship with ONRC

ROAD & STREET CATEGORIES/CRITERIA	FUNCTIONAL CRITERIA AND THRESHOLDS									
	MOVEMENT OF PEOPLE & GOODS				ECONOMIC AND SOCIAL					
	← LINK — PLACE →				← LINK — PLACE →					
	TYPICAL DAILY TRAFFIC (AADT)[1]	**HEAVY COMMERCIAL VECHICLES**[2] (daily flows)	**BUSES** (urban peak)[3]	**ACTIVE MODES**[4]	**LINKING PLACES**	**CONNECTIVITY**	**FREIGHT - INLAND PORTS/PORTS** (per annum)	**AIRPORT PASSENGER NUMBERS** (per annum)[5]	**TOURISM**[6]	**HOSPITALS**
NATIONAL Meet 3 criteria (incl. at least 1 of Typical Daily Traffic, HCV or Buses & 1 economic or social)	U[7]: > 25,000 R: > 15,000	>800	> 40 buses or 2000 people per hour		>100,000 population[8]		>2 million tonnes (or >$3 billion)[9]	>3 million[10]		
(HIGH VOLUME) Meet at least 1 high volume (Typical Daily Traffic or HCV)	U: > 35,000 R: > 20,000	>1200								
REGIONAL Meet 2 criteria (incl. at least 1 of Typical Daily Traffic, HCV or Buses & 1 economic or social)	U: > 15,000 R: > 10,000	>400	> 40 buses or 2000 people per hour		>30,000 population[11]	Linking remote regions (regional councils) or sole connectivity in urban areas	>1 million tonnes[12]	>500,000[13]	Top 5 tourist destinations	Access to tertiary hospitals
ARTERIAL Meet 2 criteria (incl. at least 1 of Typical Daily Traffic, HCV or Buses)	U: > 5,000 R: > 3,000	>300	> 15 buses or 750 people per hour	Significant numbers of pedestrians and cyclists (urban peak) or part of identified cycling or walking network	>10,000 population[14]	Critical Connectivity (no alternative routes)		>250,000[15]	Regionally or locally significant tourist destinations or significant scenic routes	Access to regional hospitals
PRIMARY COLLECTOR Meet 1 criteria (incl. at least 1 of Typical Daily Traffic, HCV or Buses)	U: > 3,000 R: > 1,000	>150	> 6 buses or 300 people per hour		>2,000 population		< 1 million tonnes	<250,000		
SECONDARY COLLECTOR Meet 1 criteria (incl. at least 1 of Typical Daily Traffic or HCV)	U: > 1,000 R: > 200	>25			>250 population					
ACCESS All other roads	U: < 1,000 R: < 200	<25			<250 population					
(LOW VOLUME) Meet low volume Typical Daily Traffic	U: < 200 R: < 50									

Relationship with ONRC

ONRC (place)	CCC (place)	SDC (urban design)
National	Major Arterial - Urban Major Arterial - Rural	State Highways
Regional		
Arterial	Minor Arterial – Urban Minor Arterial – Rural Minor Arterial - Centres	Arterial?
Primary Collector	Collector – Urban Collector - Rural Collector - Industrial	Collector Collector (B1 zone)
Secondary Collector		
Access	Local - Centres Local - Residential Local - Rural Local - Industrial	Local Local-Business Local–Major (local area streets) Local–Intermediate (neighbourhood streets) Local-Minor (residents streets)
Low volume		

Catering for future transport needs

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

Consideration of resilience

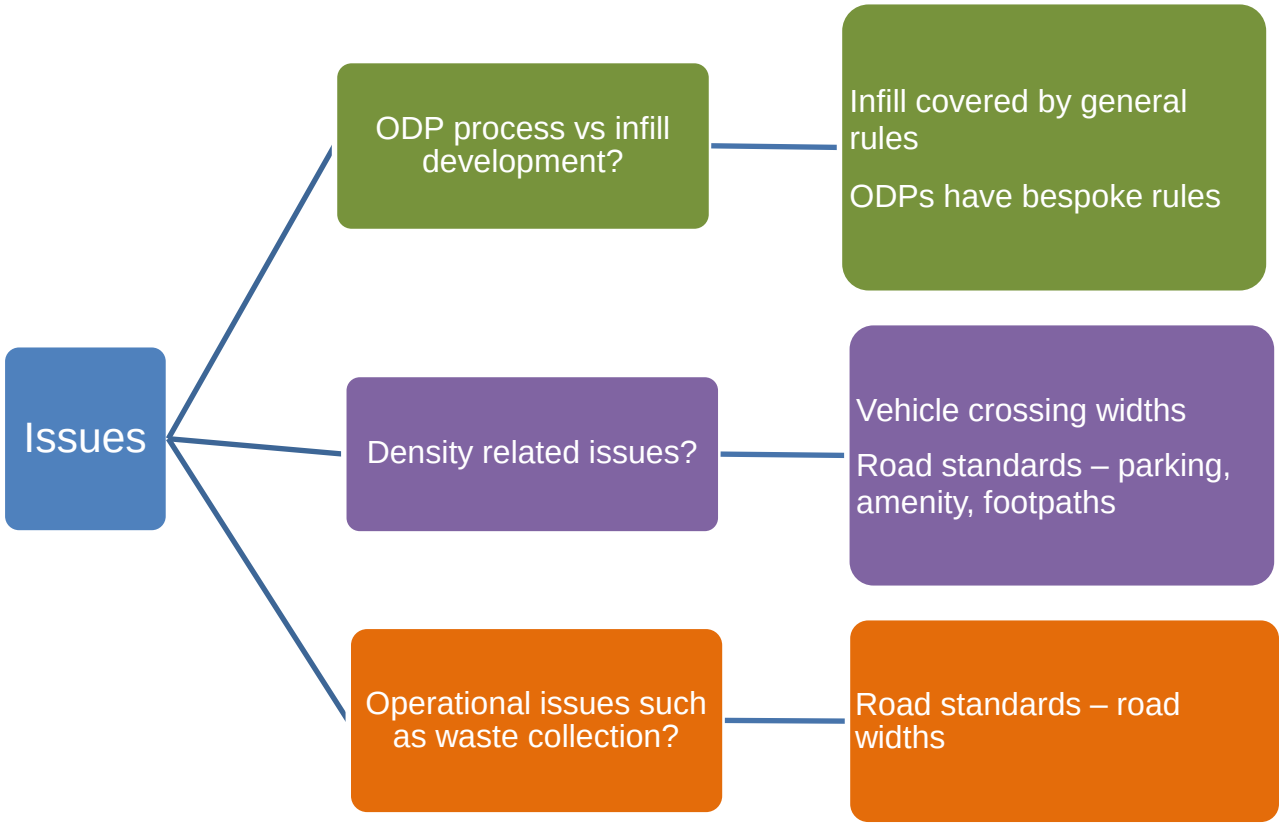
Issue: Nothing in Selwyn District Plan regarding the transport network and natural hazards with regard to the resilience of the network.

Key questions for SDC:

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

Subdivision – achieving good outcomes

Issue: Are good integrated design outcomes being achieved for new subdivisions?



Subdivision – achieving good outcomes

Integrated Landuse and Transport – Issues / Objectives and Policies

The current plan (B2.1) focuses on issues relating to the effect of landuse patterns on the transport network such as

- adverse effects of sprawling development in terms of dependency of private vehicle use;
- Reduce the demand for private vehicle transport and provide more sustainable alternatives such as walking and cycling;

However it does not focus on the effects of the transport network on adjacent landuse in terms of specific needs of that use or response to local identity.

The recent Christchurch DP review has included policies such as:

- Policy 7.2.1.1 – a,iv) reflecting neighbourhood identity and amenity values;
- Policy 7.2.1.1 – a,ii) providing for public places in accordance with the function of the road to enable community activities including opportunities for people to interact and spend time;

Subdivision – achieving good outcomes

Landuse integration is also important when you consider the characteristics and requirements of different landuses, these are not all the same….

- A good example of this is the medium density residential scenario.
- Where traditional neighborhoods with low densities can absorb effects these issues become for more acute with higher density neighborhoods.

Subdivision – achieving good outcomes

Hobsonville Point, Auckland Buckley Terrace – good example of integrating parking, garaging and street amenity

Subdivision – achieving good outcomes

Skye Lane, Prebbleton – poor example where road widths do not allow street amenity on street parking and negative effects of fencing are enhanced!

Subdivision – achieving good outcomes

Integrated Landuse and Transport - Examples

Typical Low Density Layout

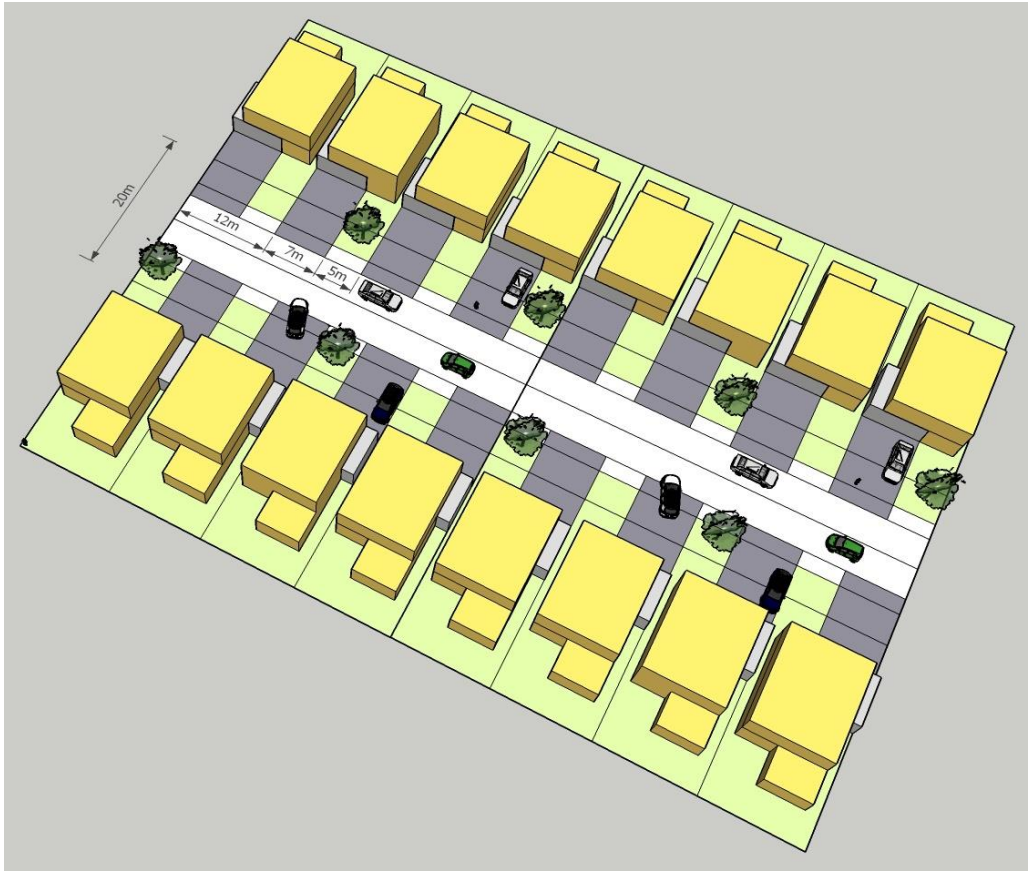
- 500sqm sections
- Single detached house
- Double garage
- 20m street frontage
- 20m road reserve
- 6-8m crossing
- Plenty of on-street parking
- Plenty scope for street amenity / tree plantings etc

Subdivision – achieving good outcomes

Integrated Landuse and Transport - Examples

Med Density Layout

- 300sqm sections
- Single detached house
- Double garage
- 12m street frontage
- 20m road reserve
- 6-7m crossing
- No on-street parking (5m)
- Limited street amenity / tree plantings etc

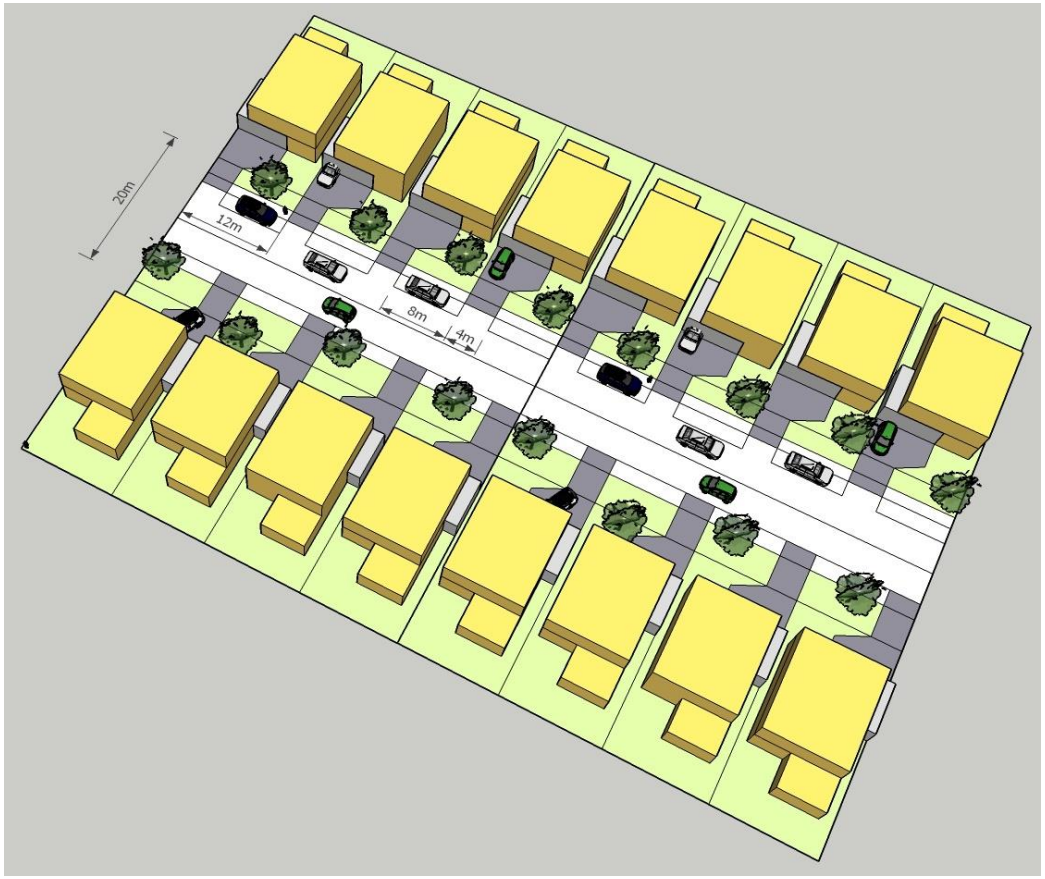


Subdivision – achieving good outcomes

Integrated Landuse and Transport - Examples

Med Density Layout – limit crossing widths

- 300sqm sections
- Single detached house
- Double garage
- 12m street frontage
- 20m road reserve
- 3-4m crossing
- on-street parking
- Scope for street amenity / tree plantings etc

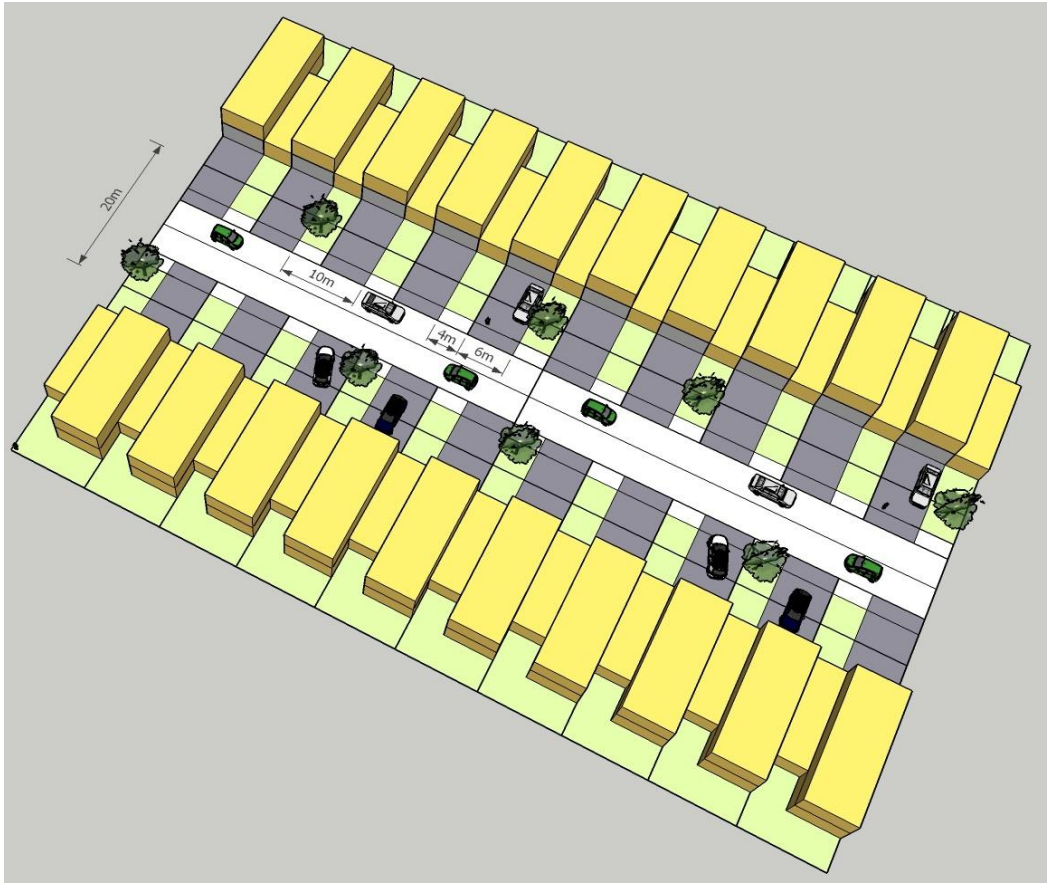


Subdivision – achieving good outcomes

Integrated Landuse and Transport - Examples

Med Density Layout

- 250sqm sections
- Row housing
- Double garage
- 10m street frontage
- 20m road reserve
- 6m crossing
- No on-street parking (4m)
- Limited street amenity

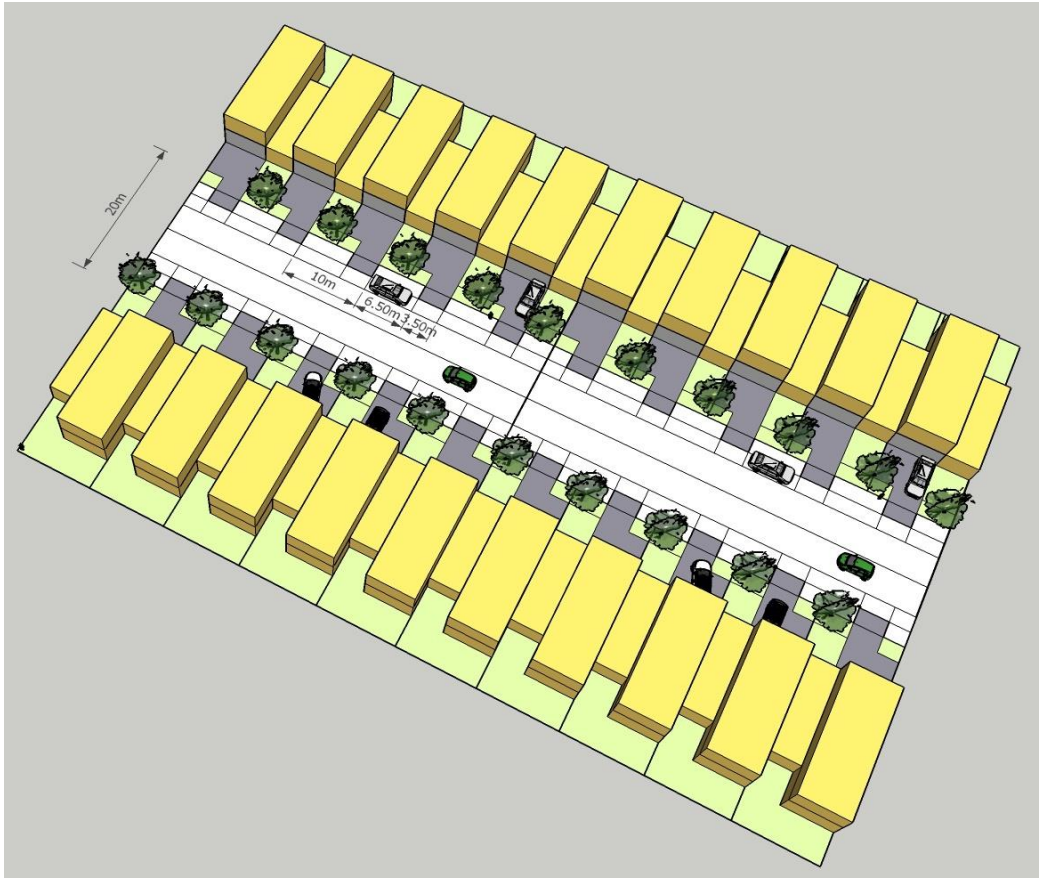


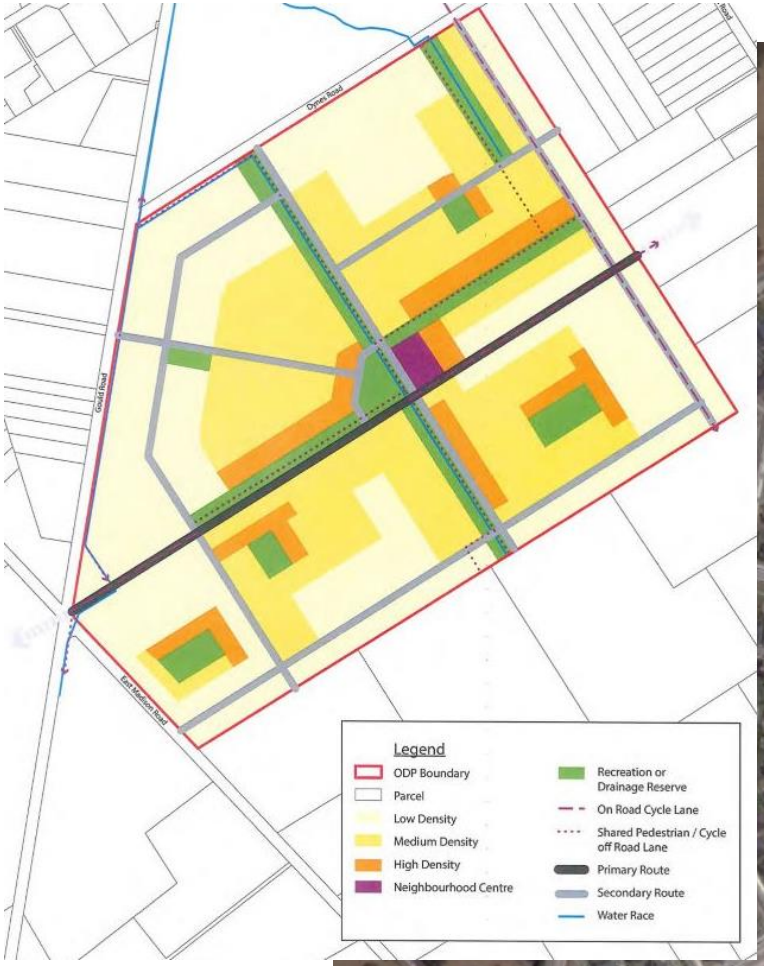
Subdivision – achieving good outcomes

Integrated Landuse and Transport - Examples

Med Density Layout – limit crossing widths

- 300sqm sections
- Single house
- Double garage
- 10m street frontage
- 20m road reserve
- 3.5m crossing
- Some on-street parking
- Limited street amenity
- Scope for street amenity / tree plantings etc





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Subdivision – road design standards

Issue: Current standards in District Plan don't necessarily reflect the adjacent land use, for example varying housing density.

Table E13.8 – Road Standards

Type of Road	Legal Width (m)		Carriageway Width (m)		Traffic lanes	Parking lanes	Specific provision for cycles (on road or off road)	Pedestrian Provision
	Min	Max	Min	Max	Min. No. of	Min. No. of		Minimum
State Highways	20	25	NA refer to NZTA	NA refer to NZTA	2	2	Yes	Both sides
Arterial	20	25	13	14	2	2	Yes	Both sides
Collector (except in Business 1 zone)	20	25	11	12	2	1	Yes	Both sides
Collector (Business 1 Zone)	20	25	13	14	2	2	Yes	Both sides
Local – Business	20	25	12	13	2	2 Both sides	Optional	Both sides
Local roads – Living								
Local Roads – Living 3 Zone at Rolleston (as shown within the Outline Development Plan at Appendices 39, 40 and 46)	18m	20m	6m	6.5m		Nil		One side only (Holmes) Nil, other than informal on both sides of road within berms (East Rolleston)
Local – Living 2 zone only	18	20	6	6.5	2	NA	NA	Optional but no more than one side.
Local - Major	16	20	8.5	9	2	1	Optional	One side
Local - Intermediate	13	15	7	8	2	1	NA	One side
Local - Minor	10	12	5	6	1	NA	NA	NA
Cycle/Pedestrian Accessway	6	10	2.5	3	NA	NA	Yes	Yes

Subdivision – road standards

CCC Replacement District Plan

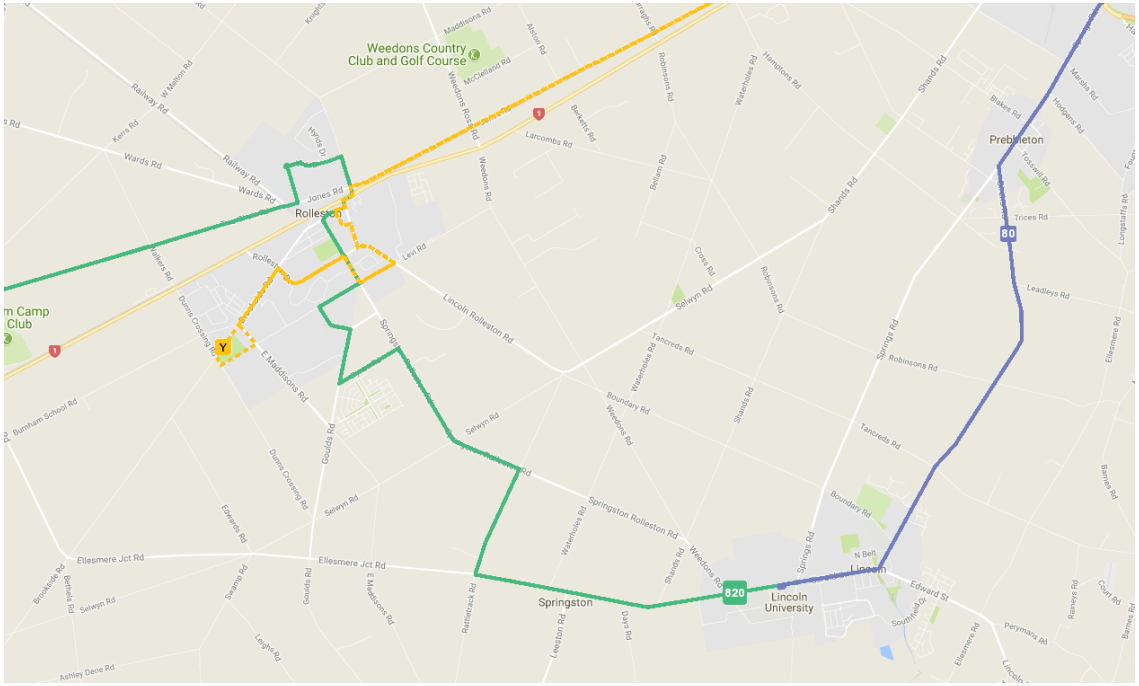
Appendix 8.10.3 New road standards

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	*

Public transport

Issue: Can the District Plan better allow/promote public transport?

- Currently considered in the ODP process?



Parking

Issues: No parking standards for non-rural activities in the rural volume?

Any others?

Reverse sensitivity

Issues (SWOT):

- No reverse sensitivity protection provisions for the rural zone other standard roading setbacks (20m for SHs)
- For business zones there are no provisions relating to protecting SHs form reverse sensitivity effects
- Little in reverse sensitivity protection for strategic transport networks in townships

Referencing external documents

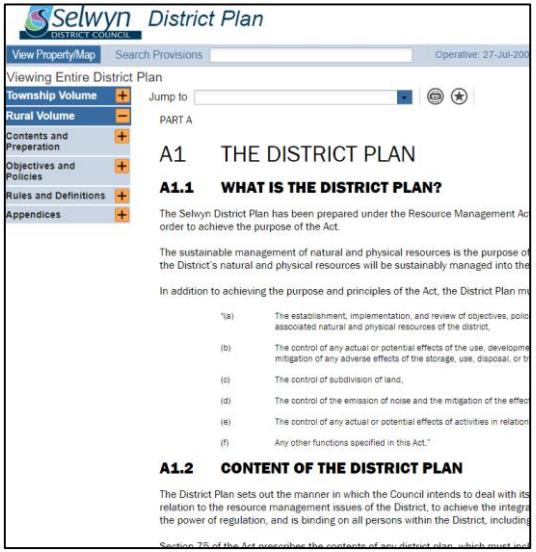
Issue: Are documents being referenced by the District Plan being used at resource consent stage? or only at subdivision consent?

Referencing external documents

Issue: Some engineering info in COP, some in District Plan, have there been issues with this?

Cul de sac turning circle
Cycle parking
Sight distances
Road widths
Access widths
Vehicle crossings

Required design vehicles
Hammerhead design
Road design details



Co-ordination with others, e.g. Crown

Issues: Need to better co-ordinate transport outcomes with Crown agencies, particularly in designation process (e.g. schools)??

Best Practice review

- MfE research shows that **district plan structure is highly variable** despite all district plans covering similar topics and zones. The biggest variation between plans occurs in how the objectives, policies and rules for different topics or zones relate to each other and where these are located within a plan.
- A number of Plans around NZ have or are being reviewed and transformed into 2nd generation plans.
- Chch, Auckland and Wellington formed a Metro working group to share ideas

Best Practice review – Transport

Key District Plan transport features:

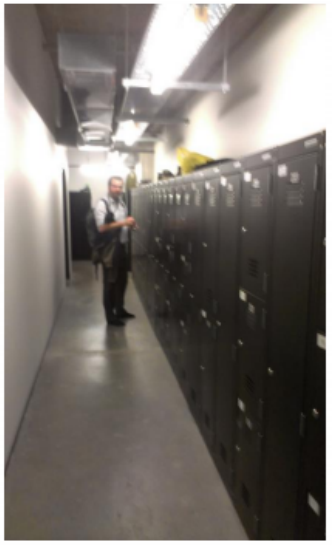
- Creating transport zones
- Requiring ITAs (sometimes with specific guidelines)
- Seeking consolidated use of parking
    - Parking maximums
    - Parking reduction factors
    - Shared parking
- Cycle parking quantity (staff and visitor) and design/location

Best Practice review – cycle parking

Best Practice review – cycle parking

Plan comparison

For an 8000m² GFA office	Christchurch	Hamilton	Auckland
Staff cycle parks required	**53**	**32**	**26**
Visitor cycle parks required	**11**	**10**	**8**
Showers required	**5 showers**	**2 showers**	**2 showers**
Changing Areas	NA	Minimum of **2**	**1**
Lockers	**17 lockers**	NA	NA



Neighbouring Councils

Christchurch City Council

- Replacement District Plan

Waimakariri District Council

- Undertaken effectiveness reviews for topics
- Starting full 2nd Generation process later this year

Ashburton District Council

- Adopted the 2nd generation Ashburton District Plan in 2014

Next steps

- Confirm the issues and areas for changes from today and best practice review
- Develop options - rules and non District Plan
- Present options at workshop late August/early Sept
- Prepare Stage 1 report
- Seek feedback on Stage 1 report, mid-October

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Selwyn District Plan Review - Transport Issues and Opportunities Workshop

Prepared for: Workshop 1 Invitees

Job Number: SDC-J020-01

Issue Date: 2 August 2017

Prepared by: Ann-Marie Head, Associate

Reviewed by: Jeanette Ward, Associate and Edward Jolly, Senior Urban Designer

These meeting notes are to be read in conjunction with the Issues and Opportunities Workshop slides.

1. Attendees

Name and Organisation

- Craig Friedel, Selwyn District Council
- Andrew Mazey, Selwyn District Council
- Gabi Wolfer, Selwyn District Council
- Clare Hamilton, Selwyn District Council
- Jocelyn Lewes, Selwyn District Council
- Emma Larsen, Selwyn District Council
- Vicki Barker, Selwyn District Council
- Michael Rachlin, Selwyn District Council
- Len Fleete, Environment Canterbury
- Caroline Hutcheson, NZ Transport Agency
- Stuart Pearson, NZ Transport Agency
- Edward Jolly, Jasmax
- Jeanette Ward, Abley Transportation Consultants (Abley)
- Ann-Marie Head, Abley

2. Apologies

- Ben Wong, Selwyn District Council
- Billy Charlton, Selwyn District Council
- Rosie Flynn, Selwyn District Council
- Lorraine Johns, Environment Canterbury

3. Introduction

Jeanette opened the workshop and explained the purpose of the day. Each attendee introduced themselves and their reason for attending the workshop.

Jeanette explained the history of transport provisions in the District Plan (DP) from the development of Plan Change 12 which commenced in 2009, and how District Plans fit into the wider planning framework and other statutory and non-statutory documents in the Selwyn District.

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4. Issues and Opportunities

The project team presented common and key issues and opportunities that were identified in the SWOT Analysis Framework prepared internally by Council staff in 2016. These were grouped into high level issues, outcome related issues and process related issues. Each issue was discussed in turn (in no particular order) and a conclusion or general view arrived at for most issues.

4.1 Issue 1: Control of activities in the road reserve

The transport network is defined as a utility in the DP which allows maintenance and upgrading works. Currently operate under the Local Government (LGA) Act when maintaining or upgrading activities on the transport network. Attendees could not recall any issues with operating in this way.

Conclusion: The general view of attendees was that the current method operating under the LGA is probably sufficient and moving to a 'transport zone' arrangement or designating all roads is probably not necessary in Selwyn. However, there may need to be some wording amendments to ensure definitions are robust and Council is able to carry out maintenance and upgrade works as necessary to roads under their control.

4.2 Issue 2: Alignment with RPS

This issue predominantly relates to the RPS requirement for Integrated Transport Assessments (ITA's) to be prepared for substantial developments.

Developing ITA's can support the bigger picture in terms of high level issues and community outcomes rather than focussing on access and parking only.

Conclusion: General support for requiring ITA's for substantial development. Project team to look at methods of implementation.

Action: Caroline to provide Greater Christchurch Transport Programme Business Case to project team as this will provide direction for context and community outcomes.

4.3 Issue 3: Relationship with ONRC

One Network Road Classification (ONRC) was developed by NZTA and moderated between territorial authorities in 2015. The DP roading hierarchy focuses on how roads interact with adjacent land use, whereas the ONRC is focussed on customer LOS. It is not an expectation of NZTA that the ONRC would be adopted by territorial authorities, but it can be used as a tool to measure LOS.

Outline Development Plans use different naming of road classification so these are distinct from general road hierarchy.

Conclusion: The general view of attendees is not to align the District Plan roading hierarchy with the ONRC as they serve different purposes.

4.4 Issue 4: Catering for future transport needs

How should/could future technology and other transport changes be encouraged or supported through the District Plan?

There is lots of uncertainty in terms of future transport needs and it is difficult for the District Plan to be proactive in this respect. Bylaws such as that controlling the use of drones are already managing some of these effects.

Conclusion: General view that the District Plan cannot be future-proofed in terms of future technology because the effects are not known and there is too much uncertainty. Therefore, this issue does not need to be further addressed.

4.5 Issue 5: Consideration of resilience

There is currently no mention of resilience of the transport network in the DP. The transport network is a lifeline utility. There are provisions for emergency powers under the RMA. Need to ensure there are no impediments to carrying out emergency work under the RMA as happened in Hurunui where a resource consent was required to do operational work on the transport network.

Conclusion: General view that resilience does not need to be specifically addressed in the District Plan as it is adequately addressed through risk assessments in other areas of Council's work.

Action: There was discussion about a map showing lifeline routes in the District. Andrew and Caroline to investigate/identify whether this exists.

4.6 Issue 6: Subdivision outcomes

Gabi introduced concepts of infill and intensification which are not defined anywhere. In brief, 'infill' is adding residential dwellings to existing development, whereas 'intensification' is where land use is intensified from low to medium density residential.

The current plan focuses on issues relating to the effect of landuse patterns on the transport network such as adverse effects of sprawling development in terms of dependency of private vehicle use and reducing the demand for private vehicle transport and provide more sustainable alternatives such as walking and cycling. However, it does not focus on the effects of the transport network on adjacent landuse in terms of specific needs of that use or response to local identity.

Land use and the transport network could be better linked in the DP to reduce the likelihood of poor outcomes. For example, there are quite different effects on the transport network that occur from different residential densities. Edward presented visuals of how land use and the transport network interacts through different residential densities.

Discussed particular subdivision outcomes that have been poor including provision of footpaths, on-street parking provision, road widths for shared spaces, and operational issues such as how waste collection is managed. There is also a disconnect between areas that fall under Outline Development Plans (ODP) and those areas that do not.

There is a lack of information provided by many applications at subdivision consent stage. This can make it difficult to achieve good outcomes particularly when developments are staged.

The subdivision design guide provides useful information but it is under-utilised by applicants and is seldom used by the consents team due to the number of assessment matters that need to be checked. This guide may need to be updated and a stronger link made from the District Plan.

Need to ensure Council is comfortable with the statutory bottom line outcome and then better practice guidelines sit outside the District Plan.

Conclusion: This issue needs to be addressed in the DP review through changes to the District Plan as well as changes to practice. It also may require changes to other documents such as the Subdivision Design Guide and Engineering Code of Practice.

4.7 Issue 7: Promoting public transport

There are processes in place to ensure new roads and subdivisions are futureproofed to allow buses to use the transport network. This should occur at ODP and subdivision consenting stages.

Len suggested reference should be made to the Public Transport Guideline that Environment Canterbury produced approximately 10 years ago.

Conclusion: No significant changes are considered necessary to address this issue although need to ensure processes to support public transport through the District Plan are robust.

Action: Len to provide ECan Public Transport Guideline to project team.

4.8 Issue 8: Parking standards

Provisions relating to parking did not come across as a major issue in the SWOT register. The group identified shortcomings in the current DP parking provisions including that some of the parking rates are onerous and the rules do not provide flexibility in terms of how and where parking is provided.

There is still an expectation from the community that they can park directly outside the activity they wish to visit.

Conclusion: Project team to investigate options to address the shortcomings discussed above.

4.9 Issue 9: Reverse sensitivity effects

Caroline explained NZTA's reverse sensitivity policy (2015) particularly in relation to setbacks from state highways. There is a GIS map showing the different setback requirements on different parts of the state highway network. This variable setback may be difficult to apply through the DP.

The policy includes recommendations on the types of rules that can be included in DPs regarding reverse sensitivity.

Council would like to ensure good design of the setbacks rather than just a bund with a fence on top. Also need to consider reverse sensitivity effects of dust from unsealed roads on residential activities.

Conclusion: This issue needs to be addressed in the DP review.

Action: NZTA (Caroline) to provide Reverse Sensitivity Policy to project team and also find out if and how the variable set back has been implemented through other DPs.

4.10 Issue 10: Referencing external documents

External documents are currently included as a reference in the DP which means they are not always used/applied.

Conclusion: Ensure the appropriate level of information is provided in DP, COP and Subdivision Design Guide and that the documents integrate and are consistent with each other.

4.11 Issue 11: Co-ordinating with others, e.g. Crown

Discussion that there is no ability to influence Crown entities, e.g. the Ministry of Education and have had to engage on goodwill to achieve good transport outcomes.

Conclusion: General view that this is a practice issue rather than a weakness of the DP provisions. The requirement to prepare ITAs may go some way to achieving good outcomes by providing a certain level of information to start discussions.

5. Best Practice Review

Jeanette provided a brief overview of some of the options and opportunities the project team will be investigating further. She also summarised what Selwyn's neighbouring councils are doing in terms of their second generation plans.

6. Next steps

Jeanette summarised the next steps in the work programme which are:

- Project team to confirm the issues and areas for change based on the workshop and best practice review
- Project team to develop options (including District Plan and non-district plan options)
- The options will be presented at a second workshop with the same attendees. Workshop scheduled for late August/early September
- Project team to prepare Stage 1 report
- Feedback on Stage 1 report will be sought in mid-October.

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Appendix C
Options workshop material

Jasmax

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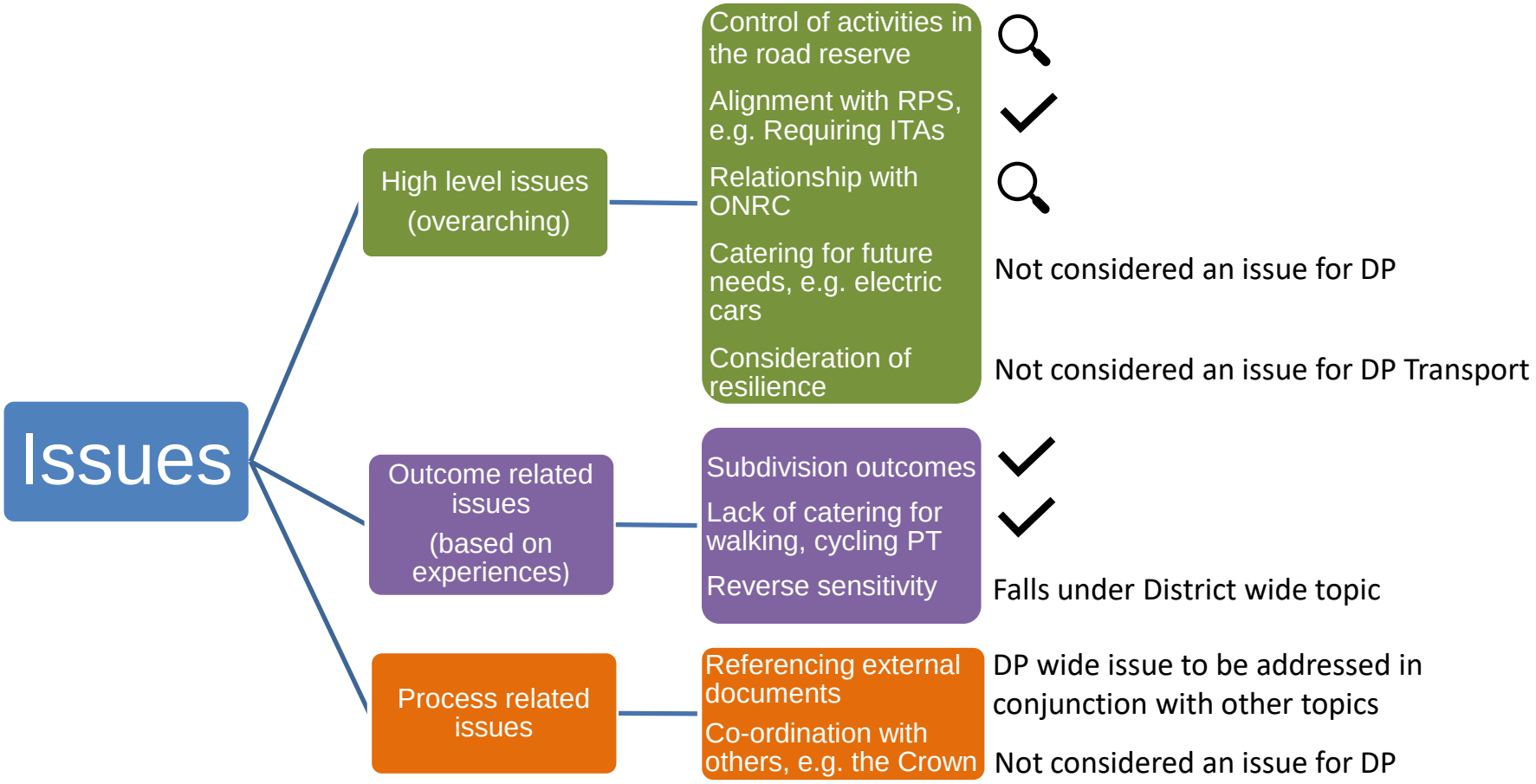
Selwyn District Plan Review
Options Workshop

Agenda

- 9.00am Welcome and introductions
- 9.15am Set the scene
- 9.30am Further issues for consideration
- 9.45am Option assessments
- 10.30am Tea Break
- 10.45am Continue with options assessment
- 11.45am Wrap up, next steps

Set the scene - First Workshop - Issues



Further issues and opportunities

- Discussion with consenting planner, internal emails and best practice reviews:
  - Long and truncated cul-de-sacs are poor outcomes that don't meet CPTED requirements
  - Footpath widths
  - 'Amenity' provision in the road reserve
  - Activity descriptions in the parking table causes confusion or default to lowest amount
  - Scale of activity rule issues – overlap with rural topic?

Aim of today

- Discuss the options for addressing the issues
- Confirm and/or identify advantages and disadvantages of each option
- Classify each issue in terms of priority to address (go to last slides)

Issue	Priority	COP	Design Guide	Other DP topics
ITA requirement	HIGH			

Requiring ITAs

Issue: To achieve better outcomes and align with PRS

- Option 1 – Status Quo
- Option 2 – Require ITAs based on number of car parks
- Option 3 – Require ITAs for certain activities
- Option 4 – Require ITAs based on scale and activity status
- Option 5 – Require ITAs based on zone and scale combination
- Option 6 – Require ITAs based on scale of activity
- Option 7 – Require ITAs as information requirement for some zones

Requiring ITAs

Option	Advantages	Disadvantages
Option 1 Status Quo		• Does not align with the RPS • Does not support seeking better transport outcomes
Option 2 Require ITAs based on number of car parks or certain peak hour traffic generation (example - old CCC plan)	• Easy to apply as car park numbers known	• Car park numbers not necessarily related to effects • Trip rates difficult for public to estimate
Option 3 Require ITAs for certain activities	• Easier for the public apply if the activities are well defined	• Risk that activities not on the list will generate unintended adverse impacts

Requiring ITAs

Option	Advantages	Disadvantages
Option 4 Require ITAs based on scale (thresholds) and activity status	• Easier for the public apply if the activities and thresholds are well defined	
Option 5 Require ITAs based on zone and scale combination	• Easier for the public apply as zone known and scale thresholds will be defined	• Risk that some activities in non-specified zone will generate unintended adverse impacts
Option 6 Require ITAs based on scale of activity (thresholds)	• Easier for the public apply if the scale thresholds are well defined • No risk that an activity that generates high traffic volumes will slip through	
Option 7 Require ITAs as information requirement for some zones		• Risk that some activities in non-specified zone will generate unintended adverse impacts

Control of activities in the road reserve

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

Option	Advantages	Disadvantages
Option 1 Status Quo	• Does not appear to be causing any issues	• Low risk that work in road reserve may trigger utilities rule and consent may be required
Option 2 Road/transport zone (as per CCC approach)	• Clarity over what is road versus other zone	• Requires road boundaries to be defined legally so may need to carry out surveys
Option 3 Designation following vesting	• Clarity over what is road versus other zone • Work in the designation not subject to DP rules	• Requires road boundaries to be defined legally so may need to carry out surveys

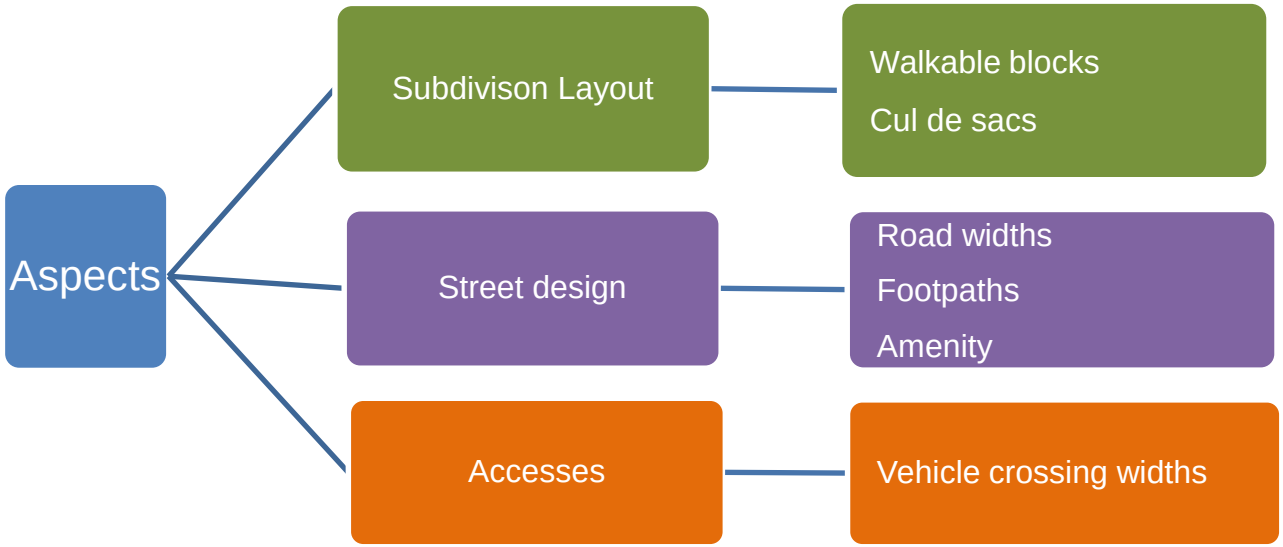
Relationship with ONRC

Issue: There is one classification that is the same in both the One Network Road Classification and the District Plan hierarchy, 'arterial'.

Option	Advantages	Disadvantages
Option 1 Status Quo		• Potential confusion between ONRC Arterial and DP Arterial
Option 2 Rename the DP 'Arterial' classification to another word	• Avoids potential confusion with ONRC	• Requires updating the maps and lists for DP
Option 3 Split DP 'Arterial' classification into two classifications, such as Rural Arterial and Urban Arterial	• Avoids potential confusion with ONRC	• Requires updating the maps and lists for DP • Some arterials may move from 'rural' to 'urban' over time and would updating in the DP

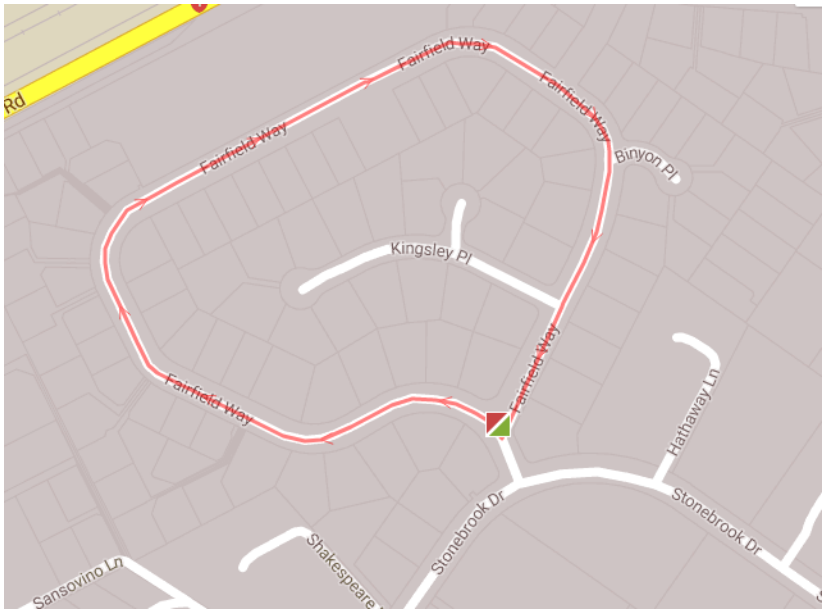
Subdivision – achieving good outcomes

Issue: Layout issues, Street design, Accesses, Amenity

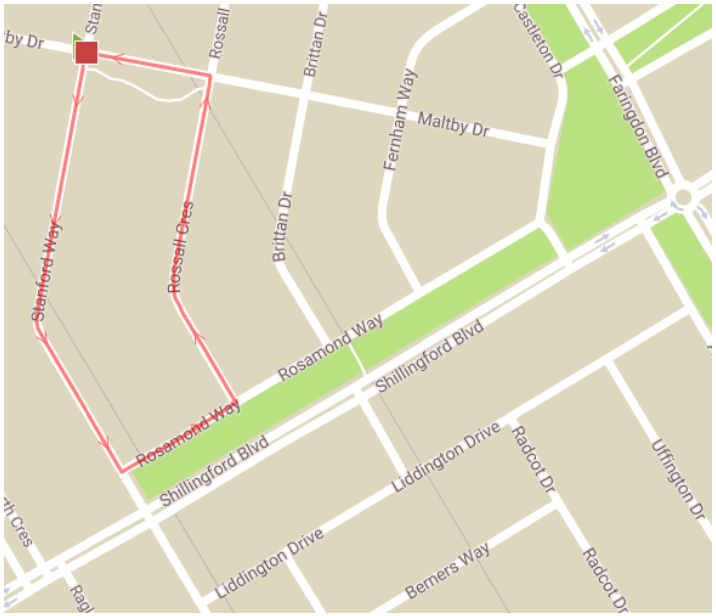


Layout – Walkable blocks

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



980m



750m

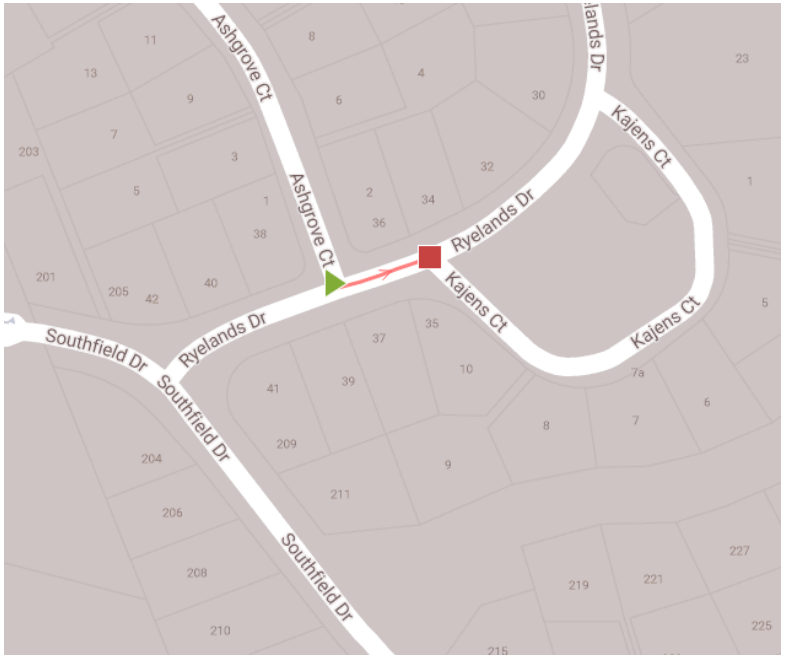
Layout – Walkable blocks

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

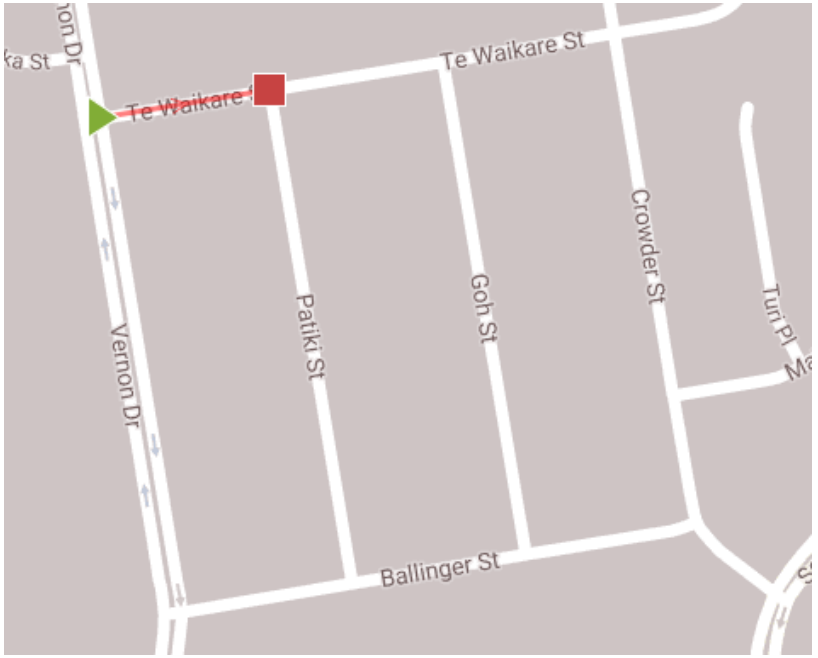
Option	Advantages	Disadvantages
Option 1 Status Quo RD Subdivision Standard (max 1000m perimeter)	• Does require some permeability – better than nothing	• Risk that development could have low permeability • Sets up large grain block structure that does not encourage walking and cycling
Option 2 Reduce maximum block size RD Subdivision Standard (max 800m perimeter)	• Requires more permeability • Aligns with subdivision design guide • Aligns with other 2nd gen district plans such as CCC	• May still result in blocks that are 300m+ in length
Option 3 Introduce alternative method such as maximum block length rule 150-200 for example.	• Greater permeability achieved	• May result in the construction of more road infrastructure • Maybe do prescriptive for tricky sites with topography

Layout – Walkable blocks

Issue: Intersection spacing rule – minimum of 75m for urban 50km/hour – could make block size too large?



40m



70m

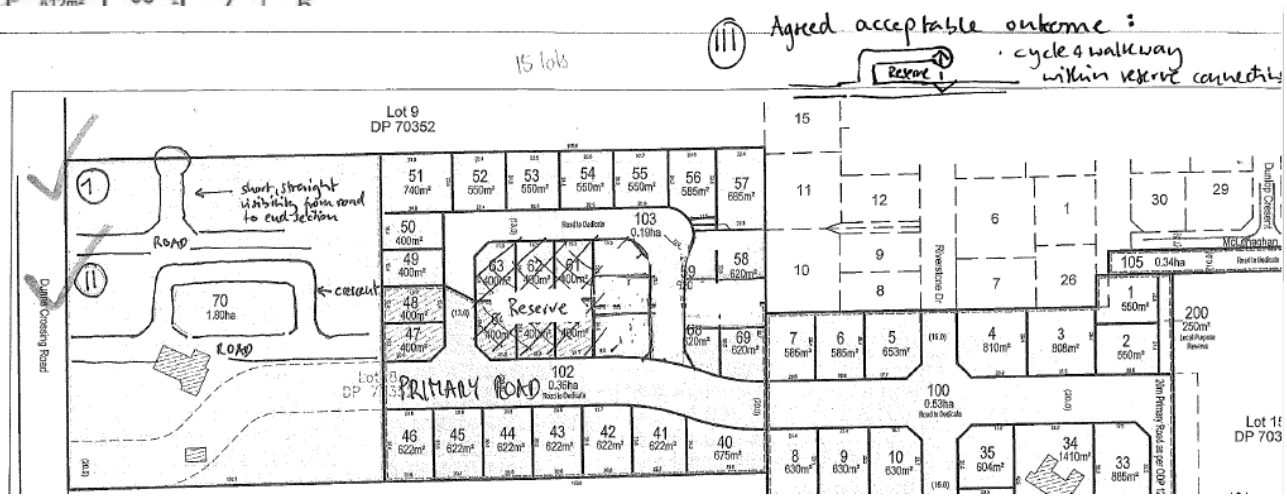
Layout – Walkable blocks

Issue: Intersection spacing rule – minimum of 75m for urban 50km/hour – could make block size too large

Option	Advantages	Disadvantages
Option 1 Status Quo	• Mostly ignored anyway? • Most spacings around 70-90m in new developments	• Risk that development could have low permeability • Sets up large grain block structure that does not encourage walking and cycling
Option 2 Reduce maximum spacing requirement, to say 40m	• Provides more flexibility in layout design	
Option 3 Remove a requirement for spacing for speeds 70km/hour and less	• Provides more flexibility in layout design	• Could reduce safety if spacing too close

Layout – Cul de sacs

Issue: Long and truncated cul-de-sacs are poor outcomes that don't meet CPTED requirements.



Layout – Cul de sacs

Issue: Long and truncated cul-de-sacs are poor outcomes that don't meet CPTED requirements.

Option	Advantages	Disadvantages
Option 1 Status Quo - RD Subdivision Standard 150 length and no 1+1	• Does provide some restriction.	• Risk of poor outcomes • Does not require line of sight from junction.
Option 2 Reduce length to 100m and introduce requirement for pedestrian link at end	• Reduce risk of poor outcomes • Provides additional permeability with pedestrian route	• Does not require line of sight from junction
Option 3 Reduce length to 100m and introduce requirement for pedestrian link at end + require line of sight to adjoining street	• Reduce risk of poor outcomes • Allows short cul de sacs that can meet CPTED	• Reduces flexibility and may not be favored by developers
Option 4 Restrict cul de sacs completely	• Eliminates risk of poor outcomes	• Could reduce options for irregular sized blocks of land • Will not be favored by developers

Street design – Road widths– Local streets

Issue: Narrow road widths if designed poorly can lead to congested on-street parking, reduced pedestrian safety and no amenity (trees or vegetation)

Option	Advantages	Disadvantages
Option 1 Status Quo - Local Minor min 10 max 12	• Allows narrow streets if designed well	• Risk of poor outcomes such as Skye Lane in Prebbleton • Reliance on good design (not prescriptive in plan)
Option 2 Increase minimum widths to for example 14m with limits to length and no' dwellings serviced	• Allows minimum carriageway, footpaths, on-street parking. • Aligns with other 2nd gen district plans such as CCC	• Does not allow laneways or narrow streets
Option 3 Maintain narrow widths but introduce controls, council discretion and assessment criteria.	• Allows laneways and narrow streets • Council has greater say on outcome	• Relies on assessment criteria to steer outcome. • May not be favored by developers as it requires assessment

Street design - Amenity

Issue: Provision of street trees and landscaping is desirable from an amenity perspective but has cost implications for asset management.

Option	Advantages	Disadvantages
Option 1 Status Quo – No specific requirement for amenity strip to new roads.	• Does not incur asset management costs for care of planting	• Does not encourage street amenity
Option 2 Provide amenity strip for all new roads.	• Encourages street planting and amenity on all streets. • Aligns with other 2nd gen district plans such as CDP	• Will create cost of maintenance
Option 3 Provide amenity strip and requirements for the spacing's for street tree plantings	• Ensures street trees are planted on all streets	• Will create cost of maintenance

Street design – Footpaths– Local streets

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

Option	Advantages	Disadvantages
Option 1 Status Quo – requires one-sided on local streets.	• Reduces asset management costs. • Reduces cost to developers	• Risk of poor outcomes • Doesn't align with goals of the W&C Strategy
Option 2 Encourage two sided footpaths by requiring two sided on all streets but allowing one sided for narrow streets (e.g. CCC).	• Aligns with other 2nd gen district plans such as CCC • Supports barrier free design and accessibility • Aligns with W&C strategy goals	• Requires up front investment from developers • Requires on going asset management costs.
Option 3 Require two sided footpaths on all streets	• Supports barrier free design and accessibility • Aligns with W&C strategy goals	• Requires up front investment from developers • Requires on going asset management costs

Street design – Catering for cyclists local street

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

Option	Advantages	Disadvantages
Option 1 Status Quo	• Allows design specific solution to accommodate, as along as designer following best practice	• Less opportunity to achieve better outcomes
Option 2 Provide either on road or off road cycle provisions on all streets.	• Opportunity to achieve better outcomes • Alignment with W&C Strategy	• Requires good direction as to what facilities are appropriate for various contexts

Street design – Vehicle crossings

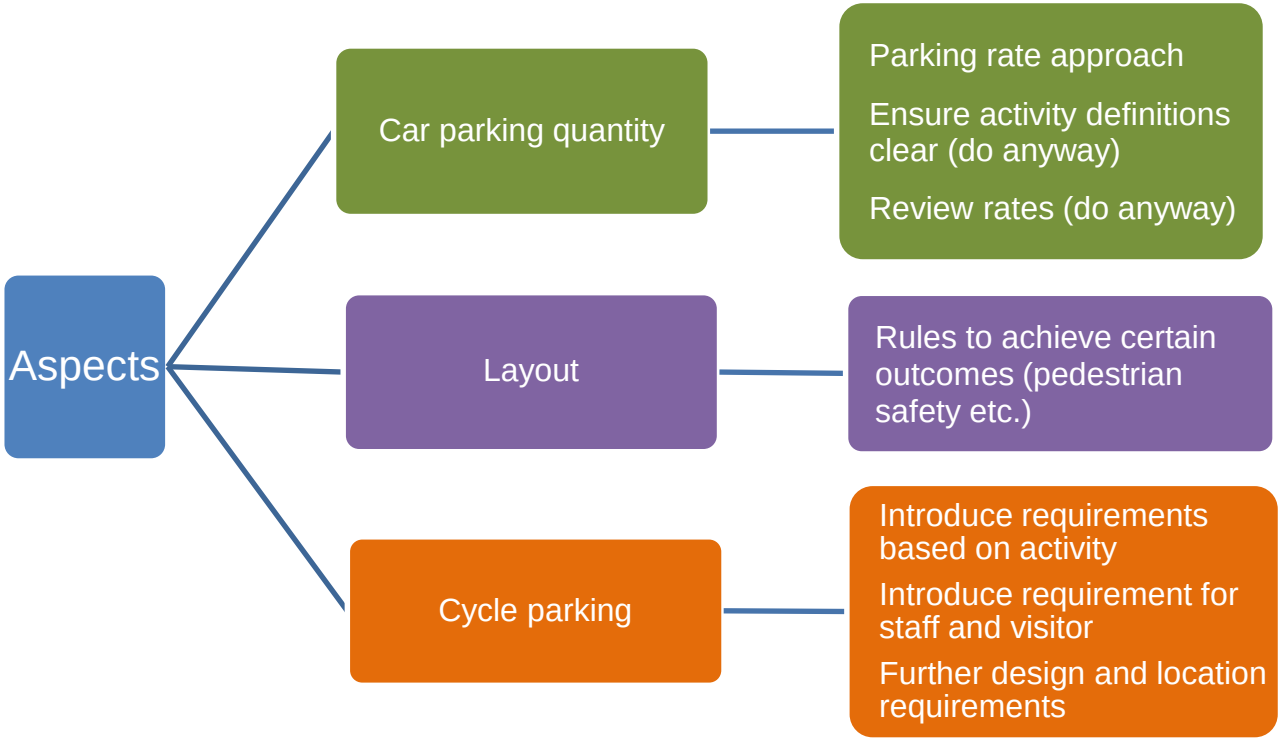
Issue: Residential vehicle crossings: In medium density developments driveways can dominate the street and restrict on street parking and amenity planting.

Street design – Vehicle crossings

Issue: Residential vehicle crossings: In medium density developments driveways can dominate the street and restrict on street parking and amenity planting.

Option	Advantages	Disadvantages
Option 1 Status Quo - Min: 3.5m / Max: 6m for all streets	• May appeal to some developers	• Leads to poor outcomes with poor street amenity and loss of on-street parking
Option 2 Reduce crossing widths for medium density to say 3.5m	• Will enable on street parking • Will allow for street amenity • Will reduce visual dominance of driveways	• May get push back from some developers
Option 3 Introduced tiered system based on number of vehicles – similar to CDP approach: 1-3 veh Min 2.7m Max 4.5m 4-8 veh Min 3m / Max 6m 9-15 veh Min 4m / Max 6m	• Provides flexibility • Aligns with other 2nd gen district plans such as CCC and the AUP • Will enable on street parking • Will allow for street amenity • Will reduce visual dominance of driveways	• Can be complicated to enforce, i.e. how many vehicles

Parking issues



Parking – Parking rate approach

Issue: Rates may being inappropriate for the activity - particularly retail in town centres.

Option	Advantages	Disadvantages
Option 1 Status Quo - minimums	• Allows developer to supply more if they want to	• Potential to facilitate an over supply of parking
Option 2 Minimums but some maximums (say in the Town Centres) Recognises that some on-street parking ok.	• Better facilitates good use of land as long as set at right level • Potential to encourage development	• Risk of undersupply and inappropriate overspill into residential streets
Option 3 Parking reduction factors used in conjunction with minimums (as per CCC approach)	• Better facilitates good use of land as long as set at right level	• Need good PT and cycling options to support the reduction
Option 4 Shared parking	• Better facilitates good use of land as long as set at right level	• Needs cooperation between parties for long term

Parking – Design of car parks (layout)

Issue: Large car parks need to consider good pedestrian movement and safety

Option	Advantages	Disadvantages
Option 1 Status Quo	• Less regulation for developer	• Risk of poor outcomes
Option 2 Car parks over x number of spaces subject to assessment matters (e.g. Waimak 25 spaces)	• Better facilitates desired outcomes	• Likely to be seen as onerous by applicants

Cycle parking – supply rates

Issue: Ensuring that supply meets the anticipated demand, including future demand

Option	Advantages	Disadvantages
Option 1 Status Quo	• Easy rule to understand	• Potential under supply • Doesn't recognise cycling as important compared to car parking?
Option 2 Develop rates that aligned with the car parking basis of measurement (i.e. if car park based on floor area base cycle parking requirement on floor area)…. and cater for both long term (e.g. staff) and short term (e.g. visitor)	• More likely to achieve supply that meets demand • Recognises cycling as important as car parking? • Aligned with goals of the W&C Strategy	• More complex for DP users?

Cycle parking – design and location

Issue: Rule doesn't quite reflect best practice, mainly in relation to design of the stand

Option	Advantages	Disadvantages
Option 1 Status Quo "Shall be provided on the same site as the activity and located as close as practicable to the building main entrance and shall be clearly visible to cyclists entering the site, be well lit and secure. The type of stand must comply with the Engineering Code of Practice requirements for cycle parking rack systems."	• Covers most of the essential elements	• Doesn't recognise cycling as important compared to car parking?
Option 2 Develop rules that are more detailed are don't rely on the COP	• More likely to achieve good outcomes • Recognises cycling as important as car parking • Aligned with goals of the W&C Strategy	• More complex for DP users

Priority of issues and inter-relationships

Issue	Priority	COP	Design Guide	Other DP topics
ITA requirement	HIGH			
Activities in road reserve	LOW			
ONRC alignment	MED	yes		
Walkable blocks	MED		yes	
Intersection spacing	LOW		yes	
Cul de sacs	HIGH		yes	
Road widths	HIGH	yes		
Footpaths – sides of road	HIGH			
Footpaths - widths	HIGH	yes		
Cycle facilities in the road reserve	MED	yes		

Priority of issues and inter-relationships

Issue	Priority	COP	Design Guides	Other DP topics
Parking requirement approach	HIGH			
Revise rates	HIGH			
Clarify definitions in parking rates table	HIGH			District Wide
Design of car parks	MED			
Cycle parking	MED	yes		
Scale of activities	MED			Rural?
Others				
Reverse sensitivity				District Wide
Resilience				Natural hazards

Next steps

- Deliver draft Stage 1 report – 24 October
- Feedback period 3 weeks
- Amend report – 28 November final report due

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ConnectBetter

Selwyn District Plan Review - Transport Options Workshop – 19 September 2017

Prepared for: Workshop 2 Invitees

Job Number: SDC-J020-01

Issue Date: 6 October 2017

Prepared by: Ann-Marie Head, Associate

Reviewed by: Jeanette Ward, Associate

These meeting notes are to be read in conjunction with the Options Workshop slides.

1. Attendees

Name and Organisation

- Craig Friedel, Selwyn District Council
- Andrew Mazey, Selwyn District Council
- Gabi Wolfer, Selwyn District Council
- Clare Hamilton, Selwyn District Council
- Jocelyn Lewes, Selwyn District Council
- Jessica Tuilaepa, Selwyn District Council
- Caroline Hutcheson, NZ Transport Agency
- Stuart Pearson, NZ Transport Agency
- Edward Jolly, Jasmax
- Jeanette Ward, Abley Transportation Consultants (Abley)
- Ann-Marie Head, Abley

2. Apologies

- Emma Larsen, Selwyn District Council
- Ben Wong, Selwyn District Council
- Billy Charlton, Selwyn District Council
- Rosie Flynn, Selwyn District Council
- Lizzie Thompson, Ngai Tahu
- Vicki Barker, Selwyn District Council
- Len Fleete, Environment Canterbury
- Lorraine Johns, Environment Canterbury

3. Introduction

Jeanette opened the workshop and set the scene from the previous workshop including the issues that were discussed. Additional issues have arisen since the last workshop from discussions with the consenting planner, internal emails and the best practice reviews.

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4. Issues and Options

The project team presented each issue in turn with a range of options put forward for addressing the issue. The advantages and disadvantages were then discussed and modified or added to if necessary. Through discussions some options were discounted to create a shortlist of options for each issue. Finally, the options were prioritised in terms of how important they are to address in the District Plan review.

4.1 Requiring ITAs

Seven options were put forward for this issue and the participants discussed/agreed the following:

- Option 3 'Require ITAs for certain activities' was not favoured by workshop participants.
- Option 4 'Require ITAs based on scale (thresholds) and activity status' includes a disadvantage that these can be complex to apply (e.g. Christchurch City Council).
- Option 5 'Require ITAs based on zone and scale combination' workshop participants liked this option.
- Option 6 'Require ITAs based on scale of activity (thresholds)' can be combined with Option 2 as they are both based on thresholds.
- Option 7 'Require ITAs as information requirement for some zones' add an advantage that this would only result in preparation of an ITA if Council believes it would be useful, i.e. saves unnecessary assessment. This option was not favoured by participants as it would be difficult to enforce as an information requirement rather than a rule.

Overall workshop participants suggested the focus should be on business and living zones and scale of the activity. There was also a suggestion that there could be different thresholds depending on the zone, e.g. A daily threshold in the rural zone and a peak hour threshold in the living/business zone.

This issue is ranked high priority to address.

4.2 Control of activities in the road reserve

Three options were put forward for this issue and the participants discussed/agreed the following:

- Add another option: No zone on roads, therefore relying on Local Government Act to manage and maintain roads. Disadvantage is there is no control over e.g. signage in the road reserve.

Jessica pointed out that the National Planning Standard is likely to state that the District Plan must explain how roads are treated in the plan, not necessarily zoned.

Example of historic piece of road at Rolleston School that has two designations and an underlying zone that has made it tricky to divest.

Although in the first workshop this issue was not ranked highly, this issue is now seen by participants as medium priority to address.

4.3 Relationship with ONRC

Three options were put forward for this issue and the participants discussed/agreed the following:

ONRC is a funding tool to provide consistency around the country and it is not necessary to align District Plan hierarchy with ONRC hierarchy. Some participants supported the Status Quo for this issue.

4.4 Subdivision layout – walkable blocks

Block size as a proxy

Three options were put forward for this issue and the participants discussed/agreed the following:

- Option 1 'Status Quo' check that the measurement includes accessways not just roads.

Perimeter rule is crude as walkability is not just about being able to walk around the block.

Intersection spacing

Three options were put forward for this issue and the participants discussed/agreed the following:

- Option 2 'Reduce maximum spacing requirement, to say 40m' disadvantage is this could result in unintended outcomes such as staggered intersections and resulting unusual traffic movements.
- Option 3 'Remove a requirement for spacing for speeds 70km/hr or less' some participants did not support this option

There was also discussion about how to address intersection spacing in medium density residential areas. The bulk, location and fencing requirements of residential activities are all impacted by the layout of the subdivision and block size so this is an important issue to get right.

4.5 Subdivision layout – cul de sacs

Four options were put forward for this issue and the participants discussed/agreed the following:

- Option 3 could include keeping a maximum 150m length of cul de sac

Participants commented that a cul de sac shorter than 150m looks out of proportion to the 23m turning circle. Cul de sacs are essential in brownfield developments but not necessary (easier to design out) in greenfield development. Right of ways at the end of cul de sacs are not desirable.

4.6 Street design – road widths – local streets

Three options were put forward for this issue and the participants discussed/agreed the following:

- Add new option to remove Local Minor road type

Participants discussed that Council wants to provide choice in street widths but developers have circumvented good outcomes with the current widths. Councillors want a minimum 14m road reserve with a 7m wide carriageway, then alternatives can be assessed on their merits (e.g. parking / servicing arrangements).

4.7 Street design – amenity

Three options were put forward for this issue and no changes were made by participants.

Some views were discussed about whether this is an issue that requires a rule in the District Plan as developers tend to include landscaping etc to make their subdivision look attractive. IZone was discussed as an example.

4.8 Street design – footpaths – local streets

Three options were put forward for this issue and the participants discussed/agreed the following:

- Add new option: Require one sided footpath and require two sided footpaths in specific situations
- Add new option: Local Major/Intermediate = two-sided footpath, Local Minor = one-sided footpath

Participants discussed there are trade-offs between providing footpaths and amenity strip.

Also discussed footpath widths and that some Councillors believe 1.5m is not wide enough. Agreed that footpath and cycle facility widths should remain in Code of Practice not included in District Plan.

4.9 Street design – catering for cyclists – local street

Two options were put forward for this issue and no changes were made to these options.

Participants discussed that the current rule provides flexibility to provide off-road or alternative cycling connections rather than an on-road facility if appropriate.

4.10 Street design – vehicle crossings

Three options were put forward for this issue and no changes were made to these options.

Discussion included that the shared accessway table in the District Plan does not align with vehicle crossing widths, i.e. 3m width for shared access but 3.5m minimum for one residential dwelling. Also need to tailor vehicle crossing widths for medium density residential development. Need to consider whether 5.5m setback from garage can be reduced to 4.5m as has been done in some cases.

4.11 Parking rate approach

Four options were put forward for this issue and no changes were made to these options.

Discussion included that the retail parkting rate is currently too onerous and some supermarket development is supplying too much parking as there is no maximum requirement. Also, robustness is required to deal with parking in town centres especially if parking is being provided through another method or is being shared with other activities.

4.12 Parking – design of car parks (layout)

Two options were put forward for this issue and no changes were made to these options.

Comment that there is already a requirement for parking to be located behind or beside buildings rather than in front in business zones.

4.13 Cycle parking – supply rates

Two options were put forward for this issue and no changes were made to these options.

4.14 Cycle parking – design and location

Two options were put forward for this issue and no changes were made to these options.

Comment that design of cycle stands may be over the top for including in a District Plan. Also comment that the definition of a cycle stand could include a design and location description rather than including a rule for this.

5. Prioritisation of issues

Table 5.1 outlines the issues and their associated priority as discussed at the end of the workshop.

Table 5.1 Issues and associated priority

Issue	Priority
ITA requirement	HIGH
Activities in road reserve	MED/HIGH
ONRC alignment	MED
Walkable blocks	MED
Intersection spacing	LOW
Cul de sacs	HIGH
Road widths	HIGH
Footpaths – sides of road	HIGH
Footpaths - widths	NA – keep to COP
Cycle facilities in the road reserve	LOW/NA
Parking requirement approach	HIGH
Revise rates	HIGH
Clarify definitions in parking rates table	HIGH
Design of car parks	MED
Cycle parking	MED
Scale of activities	MED

6. Next steps

Jeanette summarised the next steps in the work programme which are:

- Project team to deliver draft Stage 1 report – end October
- Feedback on report 3 weeks
- Amend and finalise report – end November

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Appendix D
Parking activities and definitions

Activity	Current definition	Summary of current minimum parking requirement	Discussion
Residential	Land and buildings used for living accommodation and ancillary activities including accommodation for not more than five guests for reward or payment where proprietor resides on-site, emergency or refuge accommodation, supervised living accommodation where residents are not detained on the site	2 spaces per dwelling except no spaces required for Living Z medium density areas identified on an ODP.	It is appropriate for a lower parking requirement for medium density residential development. This is captured in the current parking requirement (no spaces required for Living Z). However, other types of smaller residential dwellings, for example, retirement units should also be subject to a lower rate.
Industrial	Activity involving manufacturing, production, processing, assembly, disassembly, packaging, servicing, testing, repair and/or warehousing.	1.5 spaces per 100m^2 GFA	In many other plans, warehousing and storage activities are separated from industrial activity and a lower parking rate applies. This should be considered for Selwyn.
Places of Assembly and/or Recreational Activities	Places of assembly: [includes any land and building used for gathering of people. Excludes residential accommodation or places of work. Recreational activity: includes the use of any land, building or structure for the primary purpose of recreation or entertainment and is available to be used by members of more than one household.	10 spaces per 100m^2 public area or 1 space per 10 seats, whichever is greater	Current rate only based on public area or seats. Public area should read public floor area which is defined in the plan as floor area or outdoor area used by the general public excluding liftwells, stairwells, bathrooms and parking areas. These definitions cover a broad range of activities where the parking requirements may not be appropriate for all. There is also potential cross over with sports grounds and playing fields.
Drive-throughs, excluding service stations	Retail activity where goods are sold to customers whom remain within their vehicle.	5 stacked parking spaces per booth or facility	It is not clear whether this rate applies to only the drive-through component of an activity and additional parking spaces would be required e.g. for food and beverage floor area
Service stations	Site where dominant activity is retail sale of motor vehicle fuels and may include sale of other accessories, repair and servicing of motors, WOF testing, sale of other merchandise, truck stops. Except when	1 space beside each facility, car wash shall have 5 stacked parking spaces per facility	The requirement for car wash stacked parking seems excessive. Many service stations have a convenience retail component where the retail parking rate would apply and some are co-located with food and beverage or drive through facilities so these parking and queuing requirements would also apply.

Activity	Current definition	Summary of current minimum parking requirement	Discussion
	calculating car parking requirements, the above activities are separately assessed.		
Retail activities generally (including Commercial)	Land and buildings for displaying, selling or hiring goods to the public including service stations.	4.5 spaces per 100m^2 GFA or outdoor display area	Definition as it stands could be confusing as it includes service stations, and there is also a separate parking requirement for service stations. However, the rate is appropriate to apply to the convenience store portion of a service station. This could be clarified by adding retail parking rate to service station activity or through a change to the definition to refer to 'retail activities associated with a service station'. Commercial service activities are not defined in the plan which may be the cause of confusion in applying parking requirements for these types of activities, such as hairdressers. Suggest a definition for commercial services would be useful such as in the Christchurch District Plan which states 'Commercial services means a business providing personal, property, financial, household, private or business services to the general public' There could be some confusion because there are definitions for Small and Large Format Retail activity which is any retail tenancy with less than or more than 450m^2 GFA respectively. Presumably these definitions are applied in other parts of the plan, however it may not be clear that one parking requirement applies to both types of retail activity.
Slow trade and bulk goods retail	No separate definition for slow trade or bulk goods retail, however under retail activity slow trade and bulk goods retail shall mean large goods which typically have a low turn-over such as building supplies, white wares, furniture and vehicles.	2.5 spaces per 100m^2 GFA or outdoor display area	Lack of a definition may be confusing to users of the plan.
Food and beverage	Retail activity involving sale of food and/or beverages prepared for immediate consumption on or off the premises.	4.5 spaces per 100m2 PFA for the first 150m2 then 19 spaces per 100m2 PFA thereafter. If no PFA, e.g. drive through only, one space per staff member employed on site at any one time	Food and beverage drive through facilities must apply both the staff parking rate as well as the stacked parking for drive through activities.

Activity	Current definition	Summary of current minimum parking requirement	Discussion
Sports grounds and playing fields	No definition provided.	15 spaces per hectare of playing fields	There is an overlap with recreational activities.
Carehomes	An old people's home or home for the care of people with special needs excluding a hospital.	1 space per 3 clients	This definition needs to be assessed in broader context of health care facilities and rest homes and independent units. Parking rate would need to be based on number of clients that the carehome could accommodate or suggest modifying to number of beds as a more practical unit.
Healthcare services	Land and buildings for services relating to physical and mental health of people and/or animals including vets, general practices, medical centres, and dentists and for car parking requirements includes a hospital.	3 spaces per professional staff member employed on-site at any one time	The units of 'Professional staff member' may be difficult to identify at resource consent stage and the definition of what constitutes professional staff may also be subject to variation. Hospitals are likely to have different parking requirements to healthcare centres and the professional staff member rate is unlikely to be practical or appropriate to apply.
Offices	A place where administrative, business, clerical or professional and/or management activities are conducted.	2.5 spaces per 100m^2 GFA	
Research facilities	Land and buildings for scientific research, inquiry or investigation, product development and testing, and consultancy and marketing of research information; and includes laboratories, quarantines, pilot plant facilities, workshops and ancillary administrative, commercial, conferencing, accommodation and retail facilities.	1 space per 2 FTE staff	Staff numbers may not be known at time of consent application.
Educational (excluding pre-schools)	Land, building or structure which is used for provision of regular instruction or training of students… and includes any preschool.	1 space per full time equivalent staff member, plus 1 space per 8 students over 16 years of age, and	Parking demand differs between primary and secondary schools due to the age of children and their ability to travel independently using other modes (e.g.

Activity	Current definition	Summary of current minimum parking requirement	Discussion
		Visitor/set down parking at: Primary schools: 1 space per 6 students All other education facilities: 1 space per 20 students under 16 years of age except that in respect to student parking, any required on site parking provision can be deferred until a minimum of 5 spaces are required. At such time that the 5th space is required, the car parks shall be formed and sealed on site within 6 months of that time.	walking/cycling). Therefore it is appropriate for parking rates to be lower for secondary schools than primary schools. Tertiary education will be subject to the top line rate.
Preschool	Land and buildings used for care and/or education of more than 3 children… under the age of 6 years.	0.26 spaces per child (including drop-off and staff parking)	Note, the parking rate per child includes parking requirement for staff.
Visitor accommodation	Land and buildings for transient accommodation offered on a daily tariff, except as provided for under the definition of a residential activity.	1 space per bed plus 1 space per 2 staff	The number of beds may not be known at the time of consent, particularly if there is flexibility in the layout of the rooms, for example including a double and single bed in one room to provide for double or twin occupancy. On the other hand, some accommodation may have large rooms with multiple beds. Suggest the rate could be based on either beds or bedrooms whichever is lower.
Activities providing automotive servicing	No definition	3 spaces per work bay.	Lack of definition could be problematic. Note that service station definition states that parking requirements for repair and servicing of motors should be calculated separately but many automotive servicing facilities are not part of service stations.

The above exercise identified a number of issues, inconsistencies and gaps in the activities, definitions and units that require more investigation in the next phase of work.

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Appendix E
Parking supply rates comparison

Activity	Selwyn Operative Plan	Waimakariri District Plan[25]	Christchurch District Plan[26]	Ashburton District Plan[27]	Discussion
Residential	2 spaces per dwelling except no spaces required for Living Z medium density	2 spaces per dwelling except in specific zones where 1 space applies.	1 space per dwelling where dwelling less than 150m^2 GFA, 2 spaces/dwelling otherwise.	2 spaces per dwelling, plus 1 space per 5 units for visitors	Parking rate is in line with other plans although it may be appropriate to include a lower rate for smaller dwellings recognising that this is partially in place through specific parking requirements in some ODP areas.
Industrial	1.5 spaces per 100m^2 GFA	1.4 spaces per 100m^2 GFA	1.5 spaces per 100m^2 GFA	Minimum of: 2 spaces per 100m^2 GFA plus 2 spaces for visitors; or 2 spaces for every 3 employees plus 2 spaces for visitors.	Selwyn comparable with other plans for industrial activities, however the rate is not appropriate for warehousing and storage activities.
Warehousing and storage	No specific rate so Industrial rate applies, i.e. 1.5 spaces per 100m^2 GFA	1 space per 100m^2 GFA	0.5 spaces per 100m^2 GFA	No specific rate so industrial rate applies.	Consider including a definition and lower parking rate for warehousing and storage activities.
Places of Assembly and/or Recreational Activities	10 spaces per 100m^2 public area or 1 space per 10 seats, whichever is greater	10 spaces per 100m^2 Net Floor Area	Parking rate specific for different activities including, cinemas, theatres, museums and galleries, libraries, gymnasiums. Other entertainment/recreation activities if not specified above at 11 spaces per 100m^2 PFA or 1 space per 10 seats, whichever is greater	Greater of: 10 spaces per 100m^2 PFA or 1 space per 10 seats	Selwyn comparable with other plans for places of assembly, however suggest more fine grained approach to different recreational activities..

[25] The parking requirements in the Waimakariri District Plan were modified under Plan Change 40 which became operative in April 2016.
[26] The Christchurch District Plan separates car parking space requirements by Residents/ Visitors / Students and Staff. These rates have been combined in the table for comparison purposes. The transport provisions became operative in early 2016.
[27] The Ashburton District Plan became operative in August 2014.

Activity	Selwyn Operative Plan	Waimakariri District Plan[25]	Christchurch District Plan[26]	Ashburton District Plan[27]	Discussion
Drive-throughs, excluding service stations	5 stacked parking spaces per booth or facility	No relevant activity type included	No relevant activity type included	5 queuing spaces per booth or facility	This is an unusual requirement given 'stacked parking spaces' are in fact referring to queuing spaces on the approach to a booth. This requirement is generally not included in district plans, possibly because it is in the interest of the developer to design sufficient queuing space for customers so a rule is unnecessary. This requires further investigation.
Service stations	1 space beside each facility, car wash shall have 5 stacked parking spaces per facility	No relevant activity type included	1 space per 100m^2 GLFA (visitors) and 1 space per 100m^2 GLFA (staff)	3 spaces for staff plus 1 space per 50m² Gross Floor Area of retail shop plus 1 space per 25m² of workshop area plus 1 queuing space for an air hose or vacuum plus 3 queuing spaces for a carwash	The Selwyn requirement is referring to queuing space requirements. Queuing space for car wash is considered excessive, particularly if car parking is also provided on site that can be shared between the car wash and convenience retail activity. Requires further analysis. Rate should include spaces for convenience retail portion of service station.
Retail activities generally (including Commercial)	4.5 spaces per 100m^2 GFA or outdoor display area.	3 spaces per 100m^2 GFA (4 spaces per 100m^2 GFA for supermarkets)	4.5 spaces per 100m^2 GLFA for first 20,000m^2.	3.5 spaces per 100m^2 GFA (10 spaces per 100m^2 GFA for retail sales in the Rural and Residential Zones)	Parking requirement is slightly higher than other plans. This may be appropriate as it would only apply to retail outside town centres where opportunities for modes other than the car are limited. Requires further analysis.
Slow trade and bulk goods retail	2.5 spaces per 100m^2 GFA or outdoor display area	1.67 spaces per 100m2 GFA (for large format retail)	2 spaces per 100m^2 GFA (for factory shops and retail in commercial retail park zones)	No specific rate so retail rate would apply	Rate is high compared with other plans and not clear what the activity includes. Requires further analysis.

Activity	Selwyn Operative Plan	Waimakariri District Plan[25]	Christchurch District Plan[26]	Ashburton District Plan[27]	Discussion
Food and beverage	4.5 spaces per 100m^2 PFA for the first 150m^2 then 19 spaces per 100m^2 PFA thereafter. If no PFA, e.g. drive through only, one space per staff member employed on site at any one time	10 spaces per 100m^2 Net Floor Area	10 spaces per 100m^2 PFA	10 space per 100m^2 PFA	Selwyn parking rate is an old differential rate that was also present in other plans but has since been replaced by a standard rate of 10 spaces per 100m^2 PFA. Will require revision.
Sports grounds and playing fields	15 spaces per hectare of playing fields	25 spaces per hectare	15 spaces per hectare plus 1 space for staff	15 spaces per hectare	Selwyn comparable with majority of other plans reviewed, no change likely but should be reviewed.
Carehomes	1 space per 3 clients	1 space per 3.3 clients	1 space per 2.7 clients	1 space per 5 beds plus 1 space per 2 staff	Selwyn comparable with other plans, however further analysis is required to ensure appropriate unit is used (clients, beds etc) and definition appropriate.
Healthcare services	3 spaces per professional staff member employed on-site at any one time	Greater of: 3 spaces per registered medical practitioner or 5 spaces per 100m^2 GFA	5 per 100 m^2 GFA, 1 spaces per 175 m^2 GFA for hospitals	2 spaces per professional staff member plus 1 space per 2 other staff	Consider changing unit to GFA as this is measurable and not open to interpretation.
Offices	2.5 spaces per 100m^2 GFA	2.5 spaces per 100m^2 GFA	2.625 spaces per 100m^2 GFA	2 spaces per 100m^2 GFA	Rate appears appropriate and in line with other plans.
Research facilities	1 space per 2 FTE staff	No relevant activity type included	25.5 spaces per 100 FTE students (activity is included with tertiary education)	No relevant activity type included	Little to compare with other plans. Requires further investigation.

Activity	Selwyn Operative Plan	Waimakariri District Plan[25]	Christchurch District Plan[26]	Ashburton District Plan[27]	Discussion
Educational (excluding pre-schools)	1 space per full time equivalent staff member, plus 1 space per 8 students over 16 years of age, and Visitor/set down parking at: Primary schools: 1 space per 6 students All other education facilities: 1 space per 20 students under 16 years of age	1 space per 25 students (year 8 and below) and 0.5 spaces per 25 students (year 9 and above) plus 0.5 spaces per FTE staff	1 space per 25 students (year 8 and below), 0.5 spaces per 25 students (year 9 and above) plus 0.5 spaces per FTE staff	1 space per 10 students under 16 years (for drop off/pick up) plus 1 space per 5 students 16 years and over plus 1 space per 2 staff	Waimakariri and Christchurch have adopted Ministry of Education recommended parking requirements which allow for a higher parking requirement for drop off / pick up activities for younger students, and a lower rate for older students who are able to travel by themselves. Therefore the parking rates for schools will need to be revised.
Preschool	0.26 spaces per child (including drop-off and staff parking)	0.1 space per child plus 0.5 space per FTE staff (equates to 0.16 spaces per child including for staff assuming staff / child ratio is 1 staff member / 8 children)	0.1 space per child plus 0.5 space per FTE staff (equates to 0.16 spaces per child including for staff assuming staff / child ratio is 1 staff member / 8 children)	1 space per 10 students plus 1 space per 2 staff (equates to 0.16 spaces per student including for staff assuming staff / child ratio is 1 staff member / 8 children)	Rate appears high compared with other plans. Further investigation required.
Visitor accommodation	1 space per bed plus 1 space per 2 staff	1 space per 2 bedrooms or 1 space per 4 beds for dormitory style accommodation	1 space per unit or 1 space per 2.5 bedrooms plus 1 space per 10 units or 1 space per 10 bedrooms	1 space per 2 beds or 1 space per unit, whichever is greater, plus 1 space per 2 staff	Rate appears high compared with other plans, in particular requirement for 1 space per bed. Also, number of beds may not be known or may change over time. Further investigation required.
Activities providing automotive servicing	3 spaces per work bay.	No relevant activity type included	3.5 spaces per work bay.	1 space per 100m^2 GFA plus 2 spaces for visitors or 2 spaces per 3 employees plus 2 spaces per visitors.	Rate appears appropriate and in line with other plans provided that definitions are comparable. Requires further investigation.

The above comparison table has identified that there are issues with most of the existing minimum parking requirements by activity type in the District Plan. The following summarises the activities that require further review in the next phase of work:

- Residential activities – consider including a lower parking requirement for smaller dwellings.
- Warehousing and storage - consider including a definition and lower parking rate than industrial activities.
- Places of assembly and/or recreational activities – consider separating recreational activities into sub-types (cinema, gym etc) with more appropriate rates
- Drive-throughs and service stations – consider removing or at least shifting the requirement for queuing spaces to a more appropriate section of the plan and ensure parking space requirements for these activities are applied, for example by applying retail or food and beverage parking requirements.
- Retail – review parking requirement for retail and consider separate parking rate for commercial services
- Slow trade and bulk goods retail – consider lowering the parking requirement and provide definition.
- Food and beverage – consider increasing parking requirement to match adjacent district plans.
- Sports grounds and playing fields – review parking requirement
- Carehomes – consider different units (clients, beds) and ensure definition is appropriate
- Healthcare services - consider changing unit to GFA as this is measurable and not open to interpretation or at least including a floor area rate as well.
- Research – investigate appropriate rates further
- Educational – consider adopting Ministry of Education recommended parking requirements.
- Preschool – consider lowering parking requirement.
- Visitor accommodation – consider lowering parking requirement.

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