UPDATE AND PREFERRED OPTIONS REPORT TO DISTRICT PLAN COMMITTEE

DATE: **DPC Meeting - 22 August 2018**

TOPIC: **District Wide - Transport**

SCOPE DESCRIPTION: **Update and Preferred Options for Transport (DW209)**

TOPIC LEAD: **Vicki Barker**

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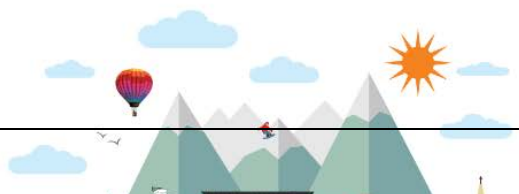
EXECUTIVE SUMMARY

Issue(s)	*1. Appropriate methods for managing activities in road reserve need to be determined;* *2. There are no provisions requiring Integrated Transport Assessments;* *3. Transport networks need to better recognise local character and amenity values;* *4. Modal shift needs to be more actively promoted;* *5. Car parking management in town centres is failing to promote efficient land use and positive economic and community outcomes; and* *6. Clear referencing of external documents is needed.*
Update	*To Update the Committee on the following Transport Issue:* • *Car parking management.*
Preferred Options	*In summary, the recommended Preferred Options for further development are:* • *Management of road reserves – Option 2: Roads continue to be managed as a Utility and subject to the centreline zoning, but the Utility rules are amended to detail what activities are permitted and to clarify what zone applies to whom.* • *Land use and transport integration – Option 6: Require Integrated Transport Assessments based on the scale of activities and for these requirements to be reflected in objectives and policies to achieve integrated land use and transport outcomes.* • *Street design - Option 2: Increase the minimum widths for the Local Minor and Local Intermediate Road categories and develop assessment matters to evaluate applications seeking narrower widths.* • *Vehicle crossing widths - Option 2: Reduce the maximum vehicle crossing widths in medium density areas and include controls where sections are less than 15m wide.*

	• *Footpaths - Option 2: Require two-sided footpaths on all Local Roads (where provided for within the legal road width) and develop assessment matters to evaluate the appropriateness of single-sided footpaths.* • *Walkable blocks - Option 2: Include subdivision performance standards requiring blocks with an 800m maximum perimeter.* • *Cul de sac design - Option 3: Retain the maximum 150m length and no cul de sac at the end of a cul de sac and require a line of sight to the adjoining street (where topographical constraints and existing networks allow).* • *Cycle parking rates - Option 2: Develop activity-based cycle parking rates using floor area and to cater for both long and short-term needs.* • *Cycle parking design and location – Option 2: Develop rules to establish the location and design of cycle parking facilities, including the incorporation of some Engineering Code of Practice requirements.* • *Public transport - Option 2: Include objectives and policies that support public transport outcomes and signal the need for Council to consider specific public transport facilities.*
Recommendations to DPC	*That the Update on the car parking Issue is received, the approach outlined in Section 5.0 is endorsed and Preferred Options are presented once the work streams have been completed.* *That the Preferred Options for District Wide – Transport outlined in Section 6.0 for the remaining Issues are endorsed for further development (including targeted stakeholder engagement, Section 32 analysis and Drafting Phase).*
DPC Decision	*That the Committee notes the report, including the update on car parking management.* *That the Committee endorses:* • *the approach to address car parking management (Section 5.0); and* • *the Preferred Options for 'Transport' for further development and engagement.* *That the Committee notes the Summary Plan.*



1.0 Introduction

Abley Transportation Consultants (Abley) and Jasmax Consultants Limited (JCL) were engaged to prepare a single integrated Transport Baseline Report that covers the transport engineering and urban design disciplines.

A link to the Transport Baseline Report (DW009) is contained in **Appendix 1**.

1.1 Update

This report provides an Update on progress with the car parking management Issue of the Transport Topic (Section 5.0). This Issue has been evaluated and preliminary recommendations included in the Transport Baseline Report. However, additional work and co-ordination is required before Preferred Options can be presented to the District Plan Committee for consideration.

This Update provides an overview of:

- The work undertaken to date, including the statutory context, best practice review, Issues analysis and interdependencies with other Topics and work streams; and
- The proposed next steps and indicative timelines for undertaking the balance of the work.

1.2 Preferred Options

This report presents the Preferred Options for the remaining prioritised Issues (Section 6.0), which include:

- Road reserve management - Managing activities being carried out in road reserves;
- Integrated land use and transport outcomes - Determining when Integrated Transport Assessments (ITAs) are required and to support these with objectives and policies;
- Amenity and character - Street design (Local Minor and Local Intermediate road widths), vehicle crossing widths;
- Supporting active modes of travel – Footpath provision, promoting walkable blocks, managing cul de sac design, cycle parking rates, cycle parking location and design and supporting the use of public transport; and
- Referencing external documents - Prioritise what is managed within the Proposed District Plan (the Proposed Plan), while ensuring appropriate outcomes and levels of service continue to be delivered.

2.0 Summary of Issues

2.1 Overview

The Transport Baseline Report is one of the key steps in reviewing the effectiveness of the transport provisions in the Operative Selwyn District Plan (the Plan).

The methodology for preparing the Transport Baseline Report included desk-top reviews and analysis of a Strength, Weakness, Opportunities and Threat (SWOT) assessment prepared by SDC

staff. It also included two workshops facilitated by Abley that involved key Council staff and strategic partners (including officers and advisors from Environment Canterbury, New Zealand Transport Agency (NZTA) and input from Mahaanui Kurataiao Limited. Further detail on the engagement that has been undertaken is documented in Section 7.0.

The Transport Baseline Report covers the following matters:

- An overview of land transport management across the district;
- How transport networks and outcomes are currently managed in the Plan;
- The statutory background that needs to be accounted for when reviewing the Plan;
- Neighbouring and best practice district plan reviews; and
- Issues based assessments and options analysis on transport themes summarised in Table 1 below.

2.2 Issues

The Transport Baseline Report makes recommendations on the prioritised Issues, which are outlined in Table 1 below:

Table 1: Baseline assessment Issues and recommendations

Theme	Issue
Road reserve management	Determining the need to control activities in road reserve, while avoiding unnecessary consenting requirements
Integrating land use and transport	ITAs to manage the effects of activities on the wider transport network and policy to support this
Amenity and character	Street design and vehicle crossing widths to achieve the desired amenity and character outcomes
Supporting active travel modes (walking, cycling and public transport)	Footpaths, cycle facilities, walkable blocks, managing cul-de-sac design, cycle parking rates, cycle parking location and design and supporting public transport
Car parking	Management approaches, better activity-based definitions, determining appropriate parking supply rates and designing car parks to promote more attractive and accessible town centres
Referencing external documents	Prioritising what is managed by the Proposed Plan, while ensuring appropriate levels of service and sustainable outcomes are delivered

All of the recommendations will require the Proposed Plan objectives, and more so the policies and methods (rules), to clearly link the outcomes sought to any consenting requirements. These will be developed through the subsequent phases of the District Plan Review (DPR), which includes a cost/benefit and risk analysis that incorporates stakeholder and Iwi feedback.

The following Issues include those where either no change or no significant change is recommended by the Transport Baseline Report, or they are covered by another DPR Topic(s):

- Transport resilience;
- Future transport needs;
- Protection of the strategic transport network;

- One Network Road Classification (ONRC);
- Amenity strips in roads;
- Cycling facilities within road corridors;
- End of trip facilities (such as showers and lockers); and
- Referencing relevant external documents.

Further detail on the context of these Issues, and the reasons why they have been discounted from further evaluation, is outlined in **Appendix 2**.

3.0 Statement of Operative District Plan approach

Section 3.0 of the Transport Baseline Report summarises the transport provisions. Transport is a district-wide issue that is of relevance to all the land use zones and environments managed under the Plan. The relevant objectives, policies, methods (rules) and anticipated environmental outcomes extend across both the Rural and Township Volumes and include objectives and policies within all four sections of Part B[1]. The relevant methods in Part C are primarily contained in the Roads and Transport and Subdivision sections. Appendices in both Volumes contain the parking, vehicle accessway and crossing standards and road design requirements. The Township Volume Appendices also include site specific Outline Development Plans that set out the strategic transport network integration outcomes for new 'greenfield' subdivisions.

Plan change 12 (PC12) – Integrated Transport Management

PC12[2] involved a comprehensive review of the Plan, with a focus on best practice and incorporating methods to integrate land use and transport planning. It included changes to promote a safe and efficient transport network, options to protect future networks and introduced road categories that reflect the levels of service and function of roads within a network hierarchy. The process also reviewed and amended the technical standards for managing car parking (space and queuing space dimensions), vehicle accessways (widths and site distances) and road intersection spacing's (reduced requirements for low speed environments).

The breadth of PC12 enabled the DPR Baseline review to be targeted to the Issues identified in Table 1. Officers have prepared a Supplementary Scope of Works (DW024) to evaluate the continued effectiveness of a number of detailed transport related provisions in the Plan to ensure all aspects of the Transport Topic have been covered, particularly where provisions interconnect with other Topics. This supplementary scope includes consideration of the amenity benefits that could be gained by better providing for amenity strips in private vehicle accessways, which is to be coordinated with the Residential and Subdivision Topics (this issue emerged during the Transport Baseline Report assessment but requires further consideration before a preferred option can be put forward)[3].

[1] B1 Natural Resources, B2 Physical Resources, B3 Health Safety and Values and B4 Growth of Townships

[2] PC12 became fully operative on 22 April 2013 - PC12 - hyperlink

[3] Refer to Page 60 of the Transport Baseline Report for discussion on this matter.

4.0 Summary of relevant statutory and/or policy context

Statutory Review

Section 4.0 of the Transport Baseline Report reviews and summarises the relevant planning instruments, strategies and guides that are relevant to this Topic. This includes assessments of the Plan against the Canterbury Regional Policy Statement (CRPS); Canterbury Regional Land Transport Plan; Greater Christchurch Transport Statement; Mahaanui: Iwi Management Plan; and Selwyn District Council strategies, activity management plans and urban design guides.

This evaluation confirms that the Plan generally gives effect to the higher order planning instruments, while identifying where further improvements are needed to achieve integrated land use and transport outcomes. An example of this is the requirement under the CRPS to incorporate appropriate trigger thresholds in district plans where ITAs are required and for the objectives and policies to better align with the integrated land use and transport outcomes. These areas for improvement are covered in the Issues analysis and will be investigated further through the Preferred Option evaluations and subsequent phases of the DPR.

National Planning Standards

The Ministry for the Environment (MfE) are required under the RMA to prepare National Planning Standards to improve consistency in the structure, format and content of plans and policy statements.

A draft of the National Planning Standards has been released for comment and includes standardised approaches to promote consistent plan structures, zone packages, definitions and electronic accessibility. The Transport Topic is not a general district-wide matter under the draft Standards, where it currently falls into the Infrastructure and Energy Chapter. The draft Standards do not require a mandatory Specific Purpose Transport Zone, but do require a statement in the Proposed Plan about the zoning status of roads. Transport networks are defined within the"*Infrastructure"*[4] definition and managed by *"Network Utility Operators"*[5].

Utilities is not part of the "first round" of the National Planning Standards. However, network utility providers have formed a Utilities Working Group and are developing objectives, policies, standards and clear activity status for utilities, including roading and rail (as well as telecommunications, electricity transmission and distribution, and three waters). The Working Group hope the provisions will be a national planning standard, or at least best practice guidance. The Transport and Energy and Infrastructure Topics will need to remain integrated going forward as the Utilities Working Group progress the development of relevant transport provisions.

[4] Infrastructure includes: *"… (g) structures for transport on land by cycleways, rail, roads, walkways or any other means…"*

[5] Network Utility Operator includes: *"… (f) constructs, operates, or propose to construct or operate, a road or railway line…"*

5.0 Update – Car parking

5.1 Overview

The Transport Baseline Report identifies that the Issue of car parking requires further analysis, and the completion of interdependent work streams, before a clear Preferred Option can be recommended to the Committee for endorsement.

The options to address the car parking Issues need to be coordinated with the Business Topic to assist in determining:

- Approaches for managing car parking in "Type 1" town centres (i.e. Rolleston and Lincoln);
- Whether the parking requirements in "Type 2" town centres (i.e. all other towns aside from Rolleston and Lincoln) are still appropriate, including the floor area ratios and supply and demand scenarios;
- Defining the types of activities and the appropriate car parking supply rates for each activity;
- Catering for Park N' Ride facilities that can be combined with other parking requirements and outcomes to support public transport services; and
- Appropriate parking design specifications.

Discussions are being held with Waimakariri District Council, who are at a similar stage in their District Plan Review, where the car parking Issues are similar in nature and scale and where there are benefits and efficiencies able to be gained through investigating consistent cross-boundary solutions. There also needs to be coordination with other DPR Topics to define appropriate activity-based thresholds and for the district-wide car parking strategy and other transport Issues to be further advanced.

5.2 Summary of Operative District Plan approach

The Township Volume of the Proposed Plan establishes the number of staff and visitor car parking spaces that are required based on the type of activity from the list in Appendix E13[6]. Activities in the Business 1 zones and identified Local and Neighbourhood Centres are all subject to minimum car parking requirements. These are based on existing and future on-street parking supply and demand rates within each township. There are also specific activity-based rates that apply to the Key Activity Centre Precincts in Rolleston and Lincoln.

The Rural Volume requires all parking to be either on the site or on an adjoining site, but not on the road reserve.

[6] Including Table E13(a) – Minimum parking spaces, Table E13.1(b) – Parking spaces to be provided in KAC's and Table E13.1(c) – Parking spaces to be provided in town centres and local and neighbourhood centres.

5.3 Summary of alternative management responses – Other Districts

The Transport Baseline Report (**Appendix 1**: Section 5.0) evaluates the neighbouring and best practice district plans. **Appendix 3** includes the summary findings of these evaluations as they relate to the car parking Issue.

The following sub-section evaluates these best practice review findings against the current Plan approach to inform this Update.

5.4 Issues analysis

The primary Issues identified for car parking are:

- The parking supply rates in town centres do not encourage good development and land use outcomes, including that the minimum activity-based supply rates are not fit for purpose and can result in large areas of business zoned land being used as parking;
- The activity definitions create uncertainty and can generate unnecessary consenting requirements, where some proposals do not sit comfortably within the activities that are listed and defined in the Plan; and
- There are two town centre types and the Proposed Plan needs to recognise the varying function's the centre's serve and where strategic planning has been carried out.

There are a range of best practice methods identified for managing on-site parking in town centres. These include:

(a) Relying on minimum rates to cater for day to day demand;
(b) Applying maximum thresholds or nil requirements based on the surrounding transport provision and parking availability to allow a more efficient use of land; and
(c) Applying parking reduction factors or incentives to encourage more optimal land use and transport outcomes that accounts for the local transport environment.

It is important to find the right balance between effectively managing car parking, while encouraging town centres to be economically resilient and attractive destinations to live, work and visit.

The promotion of maximums or nil requirements to actively manage car parking within town centres is recognised as current best practice (**Appendix 3**). However, the success of these approaches depends on other non-statutory initiatives, including overarching strategies to ensure parking is managed in a comprehensive, integrated and effective way.

5.5 Identification of possible options

Type 1 Town centre car parking supply options

The Transport Baseline Report has evaluated five Options that are outlined in Table 2 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary.

Table 2: Type 1 Town centre car parking supply Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status Quo – Minimum parking requirements	- Allows developers to supply more spaces in response to market needs	- Potential to result in an over-supply of spaces that are disconnected and result in poor urban design outcomes - Inefficient use of land (where parks occupy valuable business land) - Discourages shifts in transport modes
Option 2: Maximum rates in town centres	- Optimises land use (where the rates are set at the right level) - Potential to encourage development - Greater potential for quality town centres	- Risk of undersupply and overspill into residential streets (which may be inappropriate in some circumstances) - Likely to require Council to lead through the provision of consolidated/shared parking arrangements that could involve levied rates
Option 3: Parking reduction factors combined with minimum rates	- Optimises land use (where the rates are set at the right level)	- Requires good public transport and cycling options to support the reduced rates
Option 4: Revise the current minimum rates based on town centre plans and likely parking outcomes	- Allows developers to supply more spaces in response to market needs - Potential to reflect more appropriate minimum rates	- Potential to result in an oversupply of parking and inefficient use of land (where parks occupy valuable business land)
Option 5: No minimum requirement in town centres	- Potential to encourage development - Greater potential for quality town centres	- Likely to require Council to lead through the provision of consolidated/shared parking arrangements that could involve levied rates

The Transport Baseline Report evaluates the five options, concluding that Option 2 (apply maximum rates in the Type 1 town centres) or Option 5 (no minimum parking requirements in Type 1 town centres) are both appropriate to consider for further investigation.

Type 2 Town centre car parking supply options

The Transport Baseline Report has evaluated five Options that are outlined in Table 3 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary.

Table 3: Type 2 Town centre car parking supply Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status Quo – Minimum parking requirements	- Allows developers to supply more spaces in response to market needs	- Potential to result in an over-supply of spaces that are disconnected, that can result in poor urban design outcomes - Inefficient use of land (where parks occupy valuable business land)

		- Discourages shifts in transport modes - Could be too onerous and discourage development
Option 2: Maximum rates in town centres	- Optimises land use (where the rates are set at the right level) - Potential to encourage development - Greater potential for quality town centres	- Risk of undersupply and overspill into residential streets (which may be inappropriate in some circumstances) - Likely to require Council to lead through the provision of consolidated/shared parking arrangements that could involve levied rates
Option 3: Parking reduction factors combined with minimum rates	- Optimises land use (where the rates are set at the right level)	- Requires good public transport and cycling options to support the reduced rates
Option 4: Revise the current minimum rates based on current supply and any changes to floor area or extent of Business zones	- Allows developers to supply more spaces in response to market needs - Potential to reflect more appropriate minimum rates	- Requires parking surveys and analysis to establish the rates
Option 5: No minimum requirement in town centres	- Potential to encourage development - Greater potential for quality town centres	- Likely to require Council to lead through the provision of consolidated/shared parking arrangements that could involve levied rates

The Transport Baseline Report evaluates the five options, concluding that Option 4 (reassess the floor areas and current supply and demand to determine rates in the Type 2 town centres) is appropriate to consider for further investigation.

However, to reach a definitive conclusion on which Preferred Option is put forward to manage car parking in Type 1 and Type 2 Town Centres, it is recommended that additional consideration in partnership with the Business Topic is required. With respect to Type 1 Town Centres, further consideration of the implications of adopting either of the two Options is needed as they will likely require Council to provide shared car parking arrangements. Overarching strategy direction will be provided through non-statutory approaches, such as advancing a district-wide Parking Strategy. The Parking Strategy background work, such as parking surveys, will also help to provide certainty that reduced on-site parking rates in town centres will not give rise to adverse effects.

5.6 Approach to progress these Issues

Coordination between the Transport and the Business, Residential and Rural Topics will continue through the subsequent phases of the District Plan Review to ensure the methods for managing car parking are integrated. Discussions have also commenced with Waimakariri District Council.

Officers are progressing the development of a district-wide Parking Strategy through the engagement of a suitably qualified and experienced transport expert to undertake the study. Councillors have been briefed separately on the scope and timing of this study at the

Environmental Services Portfolio Holder forum. The aim is to have the Parking Strategy completed by the end of 2018. However, as acknowledged in the Environmental Services Portfolio Holder forum report, this is subject to the ambitious target of completing a draft by late August. Should this timeframe not be met then the Parking Strategy may not be completed until early 2019. Staff are aware of the risk to DPR timeframes, but believe this can be managed to enable the carparking management issue to be advanced.

Recommendations

It is recommended that additional work is undertaken on the car parking options analysis to assist in determining Preferred Options. This includes integrating the evaluations with other Topics, coordinating cross boundary responses with Waimakariri District Council and to progress a district-wide Parking Strategy.

The completion of these work streams will provide the necessary certainty required to establish the Preferred Options and for the implications associated with them to be outlined to the Committee for consideration.

6.0 Summary of Preferred Options Issues

This section evaluates and concludes with recommendations for the Preferred Options for the remaining Issues identified for the Transport Topic.

6.1 Managing activities in road reserve - Issues and options

Context and Issues identification

The Plan manages activities taking place in the road reserve in two ways. One is through designations that apply to the State Highway network. The other is through rules linked to the land use zone indicated on the Planning Maps. Roads are defined as "utilities" and there are a number of permitted activity rules in the Utilities Chapter that typically enable road works to be carried out by utility service providers and roading authorities without the need for resource consent.

The best practice review has identified that larger local authorities manage roads through Specific Purpose zones that clearly define roads and what provisions apply to them. The Transport Baseline Report identifies that the administration of the current permitted activity rule[7] requires subjective views to be made in determining whether the upgrading, maintenance, operation or replacement of utilities are *"…the same or similar in character and scale…"*. The report also references examples where the rules and definitions have created uncertainty. The National Planning Standards process has signaled the need for councils to review and clarify how district plans manage roads, although there is currently no mandatory requirement for Specific Purpose Transport Zones to be included in the Proposed Plan.

[7] Rule 6.1.1.1

Option analysis

The Transport Baseline Report has evaluated five Options that are outlined in Table 4 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 4: Managing activities in the road reserve Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status Quo – Roads are a "utility" and subject to the underlying zone	- Does not appear to be causing any significant issues	- Low risk that work in the road reserve would require resource consent - Uncertainty around how the underlying zone provisions apply to Utilities, including roads
Option 2: Roads continue to be a "utility" and subject to the adjoining zoning to the centreline of the road, but the Utility rules are amended to provide certainty (Preferred Option)	- Retains the current approach, with more certainty provided on what qualifies as a permitted activity - Can clarify what zone applies when a road intersects different zones	- No disadvantages identified
Option 3: Transport zone (that is determined upon vesting or dedication)	- Provides certainty over what is road and what zone provisions apply	- Will require some road boundaries to be legally defined, including survey work
Option 4: Designation following the vesting of roads	- Provides certainty on what is road versus what is subject to zone rules	- Will require some road boundaries to be legally defined, including survey work - Some works may require an outline plan of works
Option 5: Rely on the Local Government Act (no zone or Plan rules)	- No advantages identified	- Potential lack of control unless By-laws are developed as an alternative to Plan provisions - No control over land use activities e.g. signage in the road reserve

6.2 Preferred Option for managing activities in road reserve – Option 2

Option 2 provides certainty for managing activities in the road reserve in a cost effective and efficient manner. This option could also be assisted by the draft National Planning Standards, which do not currently propose that a Specific Purpose Transport Zone be a mandatory requirement, and that the Proposed Plan simply include a statement about the zoning status of roads. The remaining options, including in particular Option 3, have some merit in aligning the Proposed Plan with other best practice approaches identified in the Transport Baseline Report.

However, this could come with potentially significant costs to designate all roads (option 4) or to define the legal boundaries of roads (Options 3 and 4), where there is little to indicate that this level of investment is warranted.

Effectiveness in Addressing Issue:
Option 2 provides certainty in respect to managing activities in the road reserve in a cost effective and efficient manner. It provides the opportunity to investigate appropriate Utility rules that respond to the context of Selwyn district's road network and the activities that are anticipated to take place within them over the life of the Proposed Plan.

Risks:
There is a risk that activities may be carried out that aren't captured by the amended Utility provisions, which may result in adverse effects. However, the MfE Utility Working Group have approached Council seeking feedback regarding the options for the National Planning Standards and through this, and ongoing liaison, risks can be appropriately managed. At this point in time the draft Network Utility Rules are not National Planning Standards so Council can amend or add to them as needed.

Another issue is the lack of clarity about where the Transport rules are going to sit in the Proposed Plan as the National Planning Standards do not include a district-wide Transport Chapter and roading provisions are proposed within the Energy and Infrastructure Chapter. The Utility Working Group has written rules for building and maintaining roads and the activities that can go into road reserves, but not road hierarchies, rules for vehicle crossings and other design standards. At this stage the DPR Review Team's preference is to have a separate district-wide Transport Chapter that would contain all of the transport provisions, including those that manage the building of, and alteration to, roads and all the transport-related design standards. This matter will need to be worked through in liaison with other Topics Leads and Council departments.

Budget or Time Implications:
Option 2 will incur time and cost to Council to review the Utility provisions. However, they are being reviewed in any case and it provides the opportunity to improve the current provisions and to provide greater administrative certainty. The alternatives are likely to generate potentially significant time and cost investments (such as notices of requirement to designate roads or legal survey work to define roads for a Specific Purpose Transport Zone) to amend provisions that appear to be working reasonably well.

Stakeholder and Community Interests:
All identified stakeholders.

Other:
Liaison with the Energy and Infrastructure Topic, which includes utilities, is required in the subsequent phases of the District Plan Review.

Recommendation:

Proceed with Option 2, which is to continue to manage roads as a Utility, but to investigate amending the permitted activity Utility rules to provide greater certainty and to clarify what underlying zone applies.

6.3 Integrated Transport Assessments - Issues and options

Context and Issues identification

The Transport Baseline Report identifies that there is no specific requirement in the Plan for applicants to supply ITAs.

The Plan manages the effects of activities on the transport network through land use zones and activity-based performance standards that manage the effects through traffic generation, car parking rates, road, and accessway and parking formation requirements. The Plan does not require ITAs, or define high traffic generating activities. There are scale of activity rules for rural zones and non-residential activities in townships that are triggered by traffic movements and there are thresholds to determine whether an activity is permitted or not.

Generally, Council only requires a transport assessment where an activity fails to comply with the transport rules. The absence of appropriate triggers for ITAs often results in uncertainty during the consenting process, where Council needs confidence that the impacts of large scale or high trip generating activities on the wider network are identified. An ITA provides a starting point for further discussion regarding the scope of any mitigation measures, funding arrangements and conditions of consent associated with the development.

The statutory review identified that the CRPS requires territorial authorities to identify trigger thresholds in district plans for development where an ITA is required, which needs to be supported by objectives and policies to deliver integrated land use and transport outcomes. The best practice review establishes that a number of Council's require ITAs to accompany resource consent applications where certain thresholds are met and that it is appropriate to investigate their application to specific development proposals in the context of Selwyn district.

The Waimakariri District Council District Plan Review process has identified similar Issues, which presents an opportunity to develop an integrated cross-boundary response that achieves efficient and cost-effective outcomes.

Option analysis

The Transport Baseline Report has evaluated eight Options that are outlined in Table 5 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 5: Integrated Transport Assessment Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status Quo	- No requirements on the applicant	- Does not align with the CRPS

		- Fails to support seeking better transport outcomes
Option 2: Require ITAs using the number of car park spaces or peak hour generation thresholds	- Easy to apply as car park numbers will be known	- Car park numbers are sometimes not a true reflection of the effects - Trip rates are sometimes difficult to estimate - Risk that activities below the thresholds will generate some effects
Option 3: Require ITAs for certain activities	- Easier for the public to interpret if the activities are well defined	- Risk that activities that aren't listed will generate adverse impacts that are not initially identified
Option 4: Require ITAs based on scale thresholds and activity status	- Easier for the public to interpret if the activities are well defined - Less likely to miss the need for an ITA	- Overly complicated as the activity status threshold adds another layer of consideration for potentially limited benefit - Risk that activities below the threshold could still generate some effects
Option 5: Require ITAs based on a combination of zone and scale of activity	- Easier for the public to interpret as the zone is known and scale thresholds will be defined	- Risk that some activities in non-specified zones will generate unintended adverse effects
Option 6: Require ITAs based on the scale of activity threshold (Preferred Option)	- Easier for the public to interpret where the scale thresholds are well defined - No risk that an activity that generates high traffic volume will be missed	- Risk that activities below the threshold could still generate some effects - Risk that some activities will be scaled back to fall below thresholds and avoid an ITA
Option 7: Require ITAs as an information requirement related to selected zones	- No identified advantages	- Risk that some activities that aren't specified in the selected zones will generate adverse effects
Option 8: Require ITAs for certain activities and thresholds for the remainder	- A hybrid of Options 3 and 6	- As per Options 3 and 6

6.4 Preferred Option for ITA – Option 6

Option 6 is considered the most efficient and cost-effective approach to adopt as it will establish appropriate thresholds for determining when an ITA is required to form part of the consent process. This will require ongoing analysis and discussions with Waimakariri District Council,

Topic Leads and the various Council Departments who have a stake in transport and road management. It is further noted that this preferred option is consistent with the CRPS[8].

Option 8 (using the scale of activity and specified activities) also provides certainty in determining the circumstances when it is appropriate to require an ITA to be provided as part of a resource consent application. However, it incorporates a more specific activities-based approach to supplement assessment matters that may create administrative uncertainty. It is also likely that such specific activities would exceed threshold limits in any case, triggering the need for an ITA (Option 6). Lines of communication between key personnel involved in the Selwyn and Waimakariri District Plan Reviews have been established and meetings organised to advance discussions. There has been a consensus formed through these discussions that Option 6 is the most appropriate approach to progress to the next phase of the DPR.

The remaining options are considered to be less timely, cost effective and efficient when compared to Option 6. Option 1 would result in the Proposed Plan failing to give effect to the CRPS.

Effectiveness in Addressing Issue:

Option 6 will require Council to determine appropriate trip generation thresholds for capturing activities that may generate wider effects on the transport network and to require these effects to be evaluated and remedied through an ITA. However, this option provides greater certainty and efficiencies when compared to the alternative options. It also presents the opportunity to coordinate a response with Waimakariri District Council and other Topics to effectively address the identified Issue and assist in delivering integrated land use and transport outcomes.

Risks:

Option 6 presents the least risk that the identified poor outcomes will continue when balanced against the other options. There is a risk that the threshold for determining when an application requires an ITA may not capture the scale of activity anticipated by the rule, which emphasises the need for a cross-disciplinary and cross-boundary approach to be advanced to address this risk.

Budget or Time Implications:

Option 6 will incur time and cost to Council to determine appropriate thresholds for when an ITA is required to be provided as part of the consent process. However, this option provides the necessary certainty to progress to the engagement and evaluation phases of the process in a cost effective and timely manner. Efficiencies can also be achieved by coordinating this process with other Topics and the Waimakariri District Plan Review process.

Stakeholder and Community Interests:

All identified stakeholders.

[8] "**Policy 6.3.4 Transport effectiveness** - Ensure that an efficient and effective transport network that supports business and residential recovery is restored, protected and enhanced so that it maintains and improves movement of people and goods around Greater Christchurch by: …"

Other:

The next phase will require targeted discussions with the various council units that have a stake in the transport network management to ensure assessment matters for requiring an ITA capture all the relevant activities. It will also require coordinating the evaluations with all other Topics, particularly in respect to the development supporting objectives and policies.

Recommendation:

Proceed with Option 6, which is to require ITAs to supplement consent applications based on the scale of activities and for these requirements to be reflected in objectives and policies to achieve integrated land use and transport outcomes. This should be coordinated with the Waimakariri District Council and other DPR Topics, and be informed by cross council input, to ensure thresholds and the matters for assessment capture all the relevant activities.

6.5 Street design - Issues and options

Context and Issues identification

The Plan influences the amenity of streets and their function through a network hierarchy that covers the full range of road types, from State Highways through to Local Minor Roads. The design standards contained in the Appendices determine the levels of service required for each road type, through matters such as legal road and carriageway widths, traffic and parking lanes and provision for cycle and footpaths. These rules are supported by the Council's Engineering Code of Practice ("CoP") and Subdivision Design Guide that sit outside the Plan, but provide more detailed design guidance.

PC12 responded to the increased densities and housing typologies enabled under the Living Z Zone by increasing the range of road categories and design standards. In the majority of cases this has proved to be working successfully and without issue. The exception is the Local Minor and Local Intermediate Road categories, where there is an identified issue with the minimum legal road and carriageway widths provided for under the Plan. There are examples of roads being vested in Council that are not meeting the intent of the very localised 'shared space' environment anticipated by the Plan and the Subdivision Design Guide.

This has resulted in roads that are too narrow to support:

(a) Footpaths on one or both sides of the road;
(b) Roadside parking and efficient traffic flows;
(c) Amenity outcomes through the removal or reduced width of grassed berms;
(d) Space for wheelie bins; and
(d) The movement of refuse collection trucks and emergency service vehicles.

A contributing factor to these poor outcomes is that the methods contained in the Subdivision Design Guide have not been referred to or adopted at the design or consenting stages. The ability to pick-up potential poor outcomes at an early stage has also been hindered by the absence of proposed road cross-sections in consent applications.

The best practice review confirms that not all district plans provide for Local Minor and Local Intermediate Road classifications and that greater minimum road widths are generally required in comparison to the Plan.

Option analysis

The Transport Baseline Report evaluated three Options that are outlined in Table 6 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 6: Street design Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Local Minor Road with a minimum reserve width of 10m and maximum of 12m	- Allows narrow streets in higher density developments - Provides an alternative to private rights of way	- Risk of poor outcomes - Relies on good design, but the Plan lacks prescriptive design requirements and there are no statutory links to the CoP or Design Guides
Option 2: Review with the intention to increase the Local Minor and Local Intermediate road reserve and carriageway widths, with narrower widths being subject to consent and evaluation against assessment matters (Preferred Option)	- Allows minimum carriageway widths that support footpaths and car parking - Aligns with other district plans - Integrates design and community outcome considerations into the evaluation	- Does not permit narrow roads, but allows proposals to be evaluated against assessment matters - Forms part of the subdivision application process, which requires consent for all activities
Option 3: Retain the current Local Minor and Local Intermediate Road widths, but introduce controls through notes in the road design tables	- Allows laneways and narrow streets under certain circumstances	- Relies on a road design table, which creates uncertainty in respect to determining what is a permitted activity - District plan notes have marginal statutory weight

6.6 Preferred Option for managing street design – Option 2

Option 2 is considered the most efficient and cost-effective approach to adopt. It will require further analysis and discussion with the various Council units who have a stake in road design outcomes to determine the appropriate minimum widths and assessment criteria. Option 1 fails to address the identified Issues and Option 3 is unlikely to provide the certainty that is needed to efficiently administer the Proposed Plan or to deliver the desired outcomes.

Effectiveness in Addressing Issue:

Option 2 will require Council to determine appropriate assessment matters and for subdivision applications to include a more detailed evaluation where narrower widths are proposed. However, this option provides greater certainty that the anticipated levels of service and amenity will be delivered in Local Minor and Local Intermediate Roads. It also presents the opportunity

to incorporate components of the Subdivision Design Guide, and potentially the Engineering CoP, into the assessment matters developed to evaluate applications seeking narrower road widths.

Risks:
Option 2 presents the least risk that the identified poor outcomes will continue when balanced against Options 1 and 3.

Budget or Time Implications:
Option 2 will incur time and cost to Council to amend the widths and determine appropriate assessment matters for evaluating applications seeking narrower road design specifications. However, this option presents the opportunity to improve the current provisions and provide the necessary level of certainty to address the identified Issues. Option 2 could incur costs to developers who wish to supply narrow streets as they will have to provide an assessment.

Stakeholder and Community Interests:
All identified stakeholders.

Other:
The next phase will require targeted discussions with the various Council units that have a stake in the road design outcomes. It will also require an integrated approach coordinated with the Residential and Subdivision Topics.

Recommendation:
Proceed with Option 2, which is to evaluate the appropriateness of increasing the minimum widths of the Local Minor and Local Intermediate Road categories and developing assessment matters to evaluate narrower widths. This should be coordinated with the Residential and Subdivision Topics and be informed by cross council input.

6.7 Vehicle crossing widths - Issues and options

Context and Issues identification
The width of vehicle crossings and the length of the property frontage in residential sections can result in conflicts with other activities such as street amenity and on-street car parking in more. Wide vehicle crossing widths in more intensive residential environments can compromise the ability of streets to provide the desired levels of amenity and function through grassed berms that are sufficient to accommodate street trees and amenity plantings, on-street parking spaces and space for refuse bins.

The Plan manages vehicle crossings through minimum and maximum widths that are linked to the Living and Business zones. A standard minimum width of 3.5m and maximum width of 6m applies across all the Living Zones[9]. These generic requirements are appropriate for the majority of residential densities where there is sufficient frontage available to provide adequate streetscape amenity. However, the absence of vehicle crossing controls tailored to support medium density developments is an issue. This is because a large proportion of homes being constructed in medium density areas include double garaging that require a wide vehicle

[9] Appendix E13 Table E13.7 – Vehicle Crossing Requirements

crossing. The maximum allowable vehicle crossing width and smaller section widths, coupled with the provision of double garaging, is reducing the length of roadside berm that remains to support streetscape amenity and utility functions.

The best practice review identifies the need to evaluate the appropriateness of vehicle crossing widths within medium density areas. It also signals that a reduction in the vehicle crossing widths could complement the amenity outcomes able to be achieved by securing a minimum 15m road frontage per lot. If the 15m frontage width is adopted, then the driveway width issue is less relevant. It is only when site widths of 8m to 10m or less, which are common in medium density where the driveway becomes greater than 50% of the frontage that the issue comes into play.

Option analysis

The Transport Baseline Report has evaluated two Options that are outlined in Table 7 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 7: Vehicle crossing width Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Minimum 3.5m and maximum 6m vehicle crossing widths	- Enables on-street parking (based on the width of the lot frontage) - Allows for street amenity where road frontages achieve minimums (15m)	- Can lead to poor outcomes with low street amenity and reduced road function
Option 2: Reduce vehicle crossing widths for medium density areas where the section is less than 15m wide with appropriate controls, such as garage setbacks (to say 3.5m maximum) (Preferred Option)	- Enables more on-street parking - Promotes streetscape amenity	- May result in additional consenting for increased vehicle crossing widths - May contribute to vehicles driving across berms to reduce manoeuvring for parking

6.8 Preferred Option for managing vehicle crossing widths– Option 2

Option 2 is considered the most appropriate approach, but will require further analysis and discussion with the Residential and Subdivision Topic team to deliver an integrated response to the identified issues. Option 1 fails to address the identified Issue.

Effectiveness in Addressing Issue:

Option 2 will require Council to determine appropriate maximum vehicle crossing widths for medium density zones, and to evaluate amenity outcomes and utility functions linked to the Residential and Subdivision Topics.

Risks:

Option 2 represents a limited risk when considered against the status quo, where issues have been identified with the current vehicle crossing widths controls on streetscape amenity and

how roads function in medium density areas. This approach is likely to generate interest as it promotes a relatively significant reduction in the vehicle crossing width maximums associated with medium density development (from 6m to say 3.5m) that could increase the circumstances for when a consent is required. One issue to consider is that reduced widths may contribute to vehicles driving across berms to avoid additional maneuvering or to access double garages in the absence of full width crossings.

Budget or Time Implications:
Option 2 will incur time and cost to Council to review the appropriateness of the current vehicle crossing widths as they apply to medium density areas. However, efficiencies are anticipated to be achieved by coordinating the evaluations with the Residential and Subdivision Topics.

Stakeholder and Community Interests:
All identified stakeholders.

Recommendation:
Proceed with Option 2, which is to evaluate the appropriateness of reducing the maximum vehicle crossing widths in medium density areas where sections are less than 15m wide from 6m to say 3.5m, and to develop assessment matters to evaluate applications seeking wider widths. This should be coordinated with the Residential and Subdivision Topics to deliver integrated transport, streetscape and residential amenity outcomes when determining optimal maximum vehicle crossing widths***.***

6. 9 Footpaths - Issues and options

Context and Issues identification
The provision of footpaths is a critical element in ensuring roads are safe and inviting spaces for people to be within. They are also critical components of a connected network that support active modes of travel, such as walking, cycling and public transport. The SDC Walking and Cycling Strategy aims to have more people walk and cycle safely for transportation and enjoyment.

The Plan uses the network classification of roads to determine when footpaths are required. Footpaths on both sides of Arterial and Collector Roads are mandatory, while Local Major and Intermediate Roads require a footpath to be provided on one side of the road as a minimum. This approach links the level of movement to the type of road in the network and whether it is a strategic connection. A key tool in the Plan for achieving primary road network connectivity across all travel modes is through Outline Development Plans. An important aspect of this current approach is that it recognises the additional costs in establishing and maintaining footpaths on both sides of all roads. The intention in the Plan for requiring a footpath in Local Minor Roads is to configure them as shared spaces that combine all modes in a specifically designed slow speed environment, as is indicated in the Subdivision Design Guide.

However, there are examples where the provision of single-sided footpaths in certain locations within the Local Road network is contributing to poor outcomes, primarily within medium density areas and how these neighbourhoods access adjoining commercial centres and public

facilities such as schools. It is critical that residential areas are supported by multi-modal networks that not only focus on vehicle movements, but also promote active modes of travel and cater for the mobility impaired.

The best practice review identifies that footpaths on both sides of Local Roads is standard practice because it promotes streetscape amenity, social interaction and the safe and efficient movement of pedestrians.

Council will need to weigh up the wider benefits of providing double-sided footpaths within the Local Road network, particularly the establishment and maintenance costs associated with providing this higher level of service and retro-fitting expectations. The options need to be evaluated alongside the width of roads Issue, as the outcome of these investigations will determine whether road reserves are wide enough to accommodate double-sided footpaths.

Option analysis

The Transport Baseline Report has evaluated three Options that are outlined in Table 8 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 8: Footpath Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Requires one-sided footpaths on Local Roads	- Minimises asset management costs - Minimises costs to developers	- Risk of poor outcomes, including discouraging active modes of travel - Fails to align with the goals of the Walking and Cycling Strategy
Option 2: Require two-sided footpaths on all Local Roads (where able to be provided for within the legal road width), but require resource consents to evaluate the appropriateness of single-sided footpaths (Preferred Option)	- Reflects best practice - Supports barrier free design and accessibility - Aligns with the Walking and Cycling Strategy	- Increased up-front costs to developers - Increased asset maintenance and renewal costs - May undermine the ability to include amenity and service strips
Option 3: Require two-sided footpaths on all Local Major Roads, one-sided on Local Intermediate and Minor Roads except under certain circumstances	- Road reserve width supports footpath requirements and provision of amenity and service strips - Partially supports barrier free access - Partially aligns with the Walking and Cycling Strategy	- Increased up-front costs to developers, but less than Option 2 - Increased asset maintenance and renewal costs, but less than Option 2 - May undermine the ability to include amenity and service strips, but less than Option 2 - Risk of poor outcomes, including discouraging active modes of travel, but less than Option 1

6.10 Preferred Option for providing footpaths – Option 2

Option 2 is considered the most efficient approach to adopt at this point in time, which will require further analysis and discussion with the Residential and Subdivision Topic Leads and various Council Departments with a stake in the provision and management of footpaths. The analysis needs to be coordinated amongst these parties due to the interdependence of this Issue with the Street Design and permitted Local Road Width Issues. A whole of life cost/benefit analysis could be undertaken to determine Council's commitment to the cost of providing and maintaining double-sided footpaths within the Local Minor and Local Intermediate Road networks. This could also consider the expectations and practicality of upgrading all existing streets from one to two footpaths. However, an analysis of this nature is complex due to the difficulty in evaluating intangible costs society, such as social exclusion. The costs to Council to potentially add footpaths later due to land use changes also need to be evaluated.

Effectiveness in Addressing Issue:

Option 2 will require a coordinated approach between the Residential and Subdivision Topics and other Council Departments to achieve integrated outcomes that complement the design of streets. Assessment matters will also need to be determined for evaluating applications seeking single-sided footpaths within the Local Minor and Local Intermediate Road categories. However, this Option represents the opportunity to address the poor outcomes identified with the status quo (Option 1). Option 2 is considered to be more efficient than the more comprehensive review of the Local Major, Local Minor and Local Intermediate Road categories (Option 3), which isn't warranted by the findings of the baseline analysis and may not go far enough in addressing the identified Issue. Option 2 supports the Walking and Cycling Strategy.

Risks:

Option 2 presents some risk, particularly in respect to delivering integrated and cost-effective outcomes for the community. However, it represents a middle ground when the risks are compared against the two alternative approaches.

Budget or Time Implications:

Option 2 will incur time and cost to Council to review and possibly amend the Local Minor and Local Intermediate Road design standards and to develop assessment matters. However, efficiencies can be achieved by coordinating this review with the Street Design Issues analysis alongside the Residential and Subdivision Topics.

Stakeholder and Community Interests:

All identified stakeholders.

Other:

The next phase will require targeted discussions with the Residential and Subdivision Topic Leads, as well as other Council departments who have a stake in the provision and ongoing management of footpaths. It will be particularly important to evaluate the benefits and determine the cost implications of requiring double-sided footpaths.

Recommendation:

Proceed with Option 2, which is to require two-sided footpaths on all Local Roads (where provided for within the legal road width) and develop assessment matters to evaluate the appropriateness of single-sided footpaths. This should be coordinated with the Residential and Subdivision Topics, and other Council Departments, to deliver cost effective and integrated outcomes in respect to street design and the provision of footpaths within them.

6.11 Walkable blocks - Issues and options

Context and Issues identification

The establishment of walkable blocks at the time of subdivision assists in ensuring that there are options available for people to efficiently access destinations to provide for their everyday needs (permeability) using active modes. People are generally less inclined to walk, cycle or take public transport to reach their destination where distances are long and indirect. It also needs to be recognised that the densities within subdivisions need to be at levels that make it viable to develop from an economic perspective. The density of development also influences the level of permeability and accessibility.

The Plan supports walkable blocks through a policy[10], subdivision performance standards and Outline Development Plans that promote small-scale residential blocks that are easy to navigate around and provide convenient options to access public transport and other services. The subdivision performance standards identify an average walkable block of 800m and a maximum of 1,000m. However, there are no other rules or methods, other than the non-statutory Subdivision Design Guides, that require smaller walkable blocks.

The best practice review identifies that a maximum perimeter length of 800m is the tipping point for when the scale of a residential block is so large that it begins to influence travel choices due to distance and convenience. It is best practice to manage the maximum perimeter distance of subdivision layouts through controls on the block size to levels lower than what is currently required in the Plan to promote walking and cycling and support public transport as viable modes of travel.

Option analysis

The Transport Baseline Report has evaluated four Options that are outlined in Table 9 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary.

Table 9: Walkable block Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Subdivision performance standards requiring	- Requires more permeability, but is better than nothing	- Risk that development blocks have low permeability, which influences travel choice

[10] Policy B4.2.10

blocks with a 1,000m maximum perimeter		
Option 2: Subdivision performance standards requiring blocks with an 800m maximum perimeter (Preferred Option)	- Requires more permeability - Aligns with the Subdivision Design Guide and best practice - Is easy to measure	- May result in blocks that sit close to the maximum block perimeter
Option 3: Introduce a rule prescribing maximum blocks (e.g. a 150m-200m maximum block length)	- Greater permeability achieved	- Results in more road infrastructure with associated costs - May be too prescriptive for topographically constrained sites - Would create more intersections with increased risk of vehicle conflict points and increased pedestrian/cycling crossing points
Option 4: A combination of Options 2 and 3	- Greater permeability achieved	- Results in more road infrastructure with associated costs - May be too prescriptive for topographically constrained sites - Would create more intersections with increased risk of vehicle conflict points and increased pedestrian/cycling crossing points

6.12 Preferred Option for providing walkable blocks – Option 2

Option 2 is considered the most efficient approach as it requires a targeted review of the methods for managing walkable blocks that are consistent with the scale of the Issue. It will require further analysis and discussion with the Residential and Subdivision Topics to achieve an integrated approach.

Effectiveness in Addressing Issue:

Option 2 will require a coordinated approach with the Residential and Subdivision Topics to deliver walkable blocks that are consistent with the function of residential areas to support active modes of travel. This option is required to address the shortcomings associated with the status quo (Option 1), while meeting a balance between the scale of the Issue and the disadvantages that have been attributed to the more detailed responses (Options 3 and 4).

Risks:

Option 2 presents limited risk when considered against the status quo and the other two alternative options. This approach is likely to generate interest as it promotes the inclusion of additional subdivision performance standards to secure maximum 800m walkable blocks, which could increase the circumstances for when a consent will be required and how these are assessed.

Budget or Time Implications:

Option 2 will incur time and cost to Council to review and possibly include additional assessments matters. However, efficiencies can be achieved by coordinating this review with the

Residential and Subdivision Topics. This approach reflects the scale of the Issue and is more cost effective than the alternatives (Options 3 and 4).

Stakeholder and Community Interests:
All identified stakeholders.

Recommendation:
Proceed with Option 2, which is to evaluate the appropriateness of subdivision performance standards requiring blocks with an 800m maximum perimeter. This should be coordinated with the Residential and Subdivision Topics to deliver integrated land use and transport outcomes.

6.13 Cul de sac design - Issues and options

Context and Issues identification
Cul de sacs are a useful way to provide roading access into small development pockets and limit vehicle movements within contained development areas. They can promote social interaction, passive surveillance and active transport modes when designed with pedestrian and cycling through connections. Cul de sacs also increase the yield of sections within subdivisions through a reduction in roads that require more land. They are also an alternative to multiple private accessways (rights of way), which significantly reduce permeability and movement options.

However, because cul de sacs are often a termination point for vehicles they can be barriers to a well-connected street network, particularly where through connections for walking and cycling are not provided. The reduced number of vehicles and poorly designed cul de sacs can contribute to less optimal Crime Prevention Through Environmental Design (CPTED) outcomes. These include entrapment through the lack of appropriate sight lines, reduced passive surveillance and limited options to choose from when selecting exit points to access multiple destinations.

Cul de sacs are managed in the Plan through a maximum 150m length requirement and controls to ensure they connect to a through road rather than another cul de sac. There is also direction provided in the Subdivision Design Guide, although the Transport Baseline Report signals that this guide could benefit from a review to ensure it reflects desirable outcomes. The Transport Baseline Report has identified several examples where less optimal design outcomes have occurred despite these methods being in place, confirming that the current methods for managing cul de sac design need be reviewed. Ideally cul de sacs should provide for at least public walking and cycling connections from its end point to the wider reserve and roading network to promote wider residential permeability.

Option analysis
The Transport Baseline Report has evaluated three Options that are outlined in Table 10 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 10: Cul de sac design Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Subdivision rule requiring a maximum 150m length and no cul de sac at the end of a cul de sac	- Provides some control over cul de sac design	- Risk of poor network outcomes - Does not require line of sight to opposite junctions
Option 2: Reduce the maximum length to 100m and require a pedestrian link at the termination point	- Reduced risk of poor outcomes - Provides additional permeability through pedestrian/cycling links	- Does not require line of sight to opposite junctions - A cul de sac shorter than 150m in length can look out of proportion to the 23m diameter turning circle
Option 3: Retain Option 1 (status quo) and require a line of sight to the adjoining street through assessment matters (where topography and existing networks support this) (Preferred Option)	- Reduced risk of poor outcomes - Provides additional permeability through pedestrian/cycling links - Allows shorter cul de sac lengths to support CPTED[11]	- Reduces flexibility - Creates more consenting requirements, so may not be supported by developers

6.14 Preferred Option for managing cul de sac design – Option 3

Option 3 is considered the most efficient approach as it builds on the current methods but includes stronger direction on how cul de sacs should be designed within a network. It will require a clear description of what 'line of sight' means in practical terms and to reference design standards to provide walking and cycling connections and CPTED outcomes. The status quo (Option 1) does not go far enough in addressing the identified Issue, while reducing the maximum length of cul de sacs (Option 2) is considered to be too inflexible and difficult to administer.

Effectiveness in Addressing Issue:

Option 3 will require detailed consideration of the design standards and assessment matters to ensure the methods can respond to varying subdivision layouts and context (such as topography or physical constraints). This option provides the necessary degree of control to meet the desired outcomes when compared to the two alternative options.

Risks:

Option 3 presents some risk as it will increase the need for subdivision proposals to comply with additional design standards (to provide sight lines with adjoining streets) and the development of rules that are responsive to the context of each site (including 'brownfield' locations). However, in comparison the status quo (Option 1) is giving rise to poor outcomes and reducing the cul de sac lengths (Option 2) is unlikely to address the identified Issue and is overly restrictive.

[11] Crime Prevention Through Environmental Design

Budget or Time Implications:
Option 3 will incur time and cost to Council to determine appropriate design requirement and assessment matters. However, it is considered that this investment is needed to provide well connected and safe communities.

Stakeholder and Community Interests:
All identified stakeholders.

Recommendation:
Proceed with Option 3, which is to evaluate the appropriateness of retaining the existing subdivision rule requiring a maximum 150m length and no cul de sac at the end of a cul de sac, and to require a line of sight to the adjoining street.

6.15 Cycle parking rates - Issues and options

Context and Issues identification
It is important to ensure that people who choose to cycle have a suitable cycle parking space available at their destination to support active modes of travel. The SDC Walking and Cycling Strategy seeks a district where more people walk and cycle safely for transportation and enjoyment.

The Plan currently requires cycle parking for some specific activities, where one supply rate is applied[12]. The best practice review has identified a large variation in how district plans manage cycle parking. However, overall it is best practice to include cycle parking requirements for each activity.

In many respects the Plan provides certainty around the provision for cycle parks, although the best practice review identifies that the rules should be extended to cover more activities and be specific to those activities both short and long-term users.

Option analysis
The Transport Baseline Report has evaluated two Options that are outlined in Table 11 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 11: Cycle parking rate Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Parking rates linked to some listed activities	- Rule is easy to administer and understand	- Risk of cycle parking being under-supplied - Understates the importance of cycling parking compared to car parking
Option 2: Activity-based parking rates (with parking based	- More likely to ensure supply meets demand (and encourage alternative travel modes)	- Marginally more complex to administer and for applicants to understand

[12] Part C Living Zone Rules – Activities 10.9.1 and Appendix E13

on floor area and long and short-term requirements) (Preferred Option)	- Recognises cycling as an important travel mode - Aligns with the Walking and Cycling Strategy	

6.16 Preferred Option for determining cycle parking rates – Option 2

Option 2 is considered the most appropriate as it represents a comprehensive approach to supplying cycle parking based on the scale and nature of activities. This approach is required to address the Issues identified with the status quo (Option 1).

Effectiveness in Addressing Issue:
Option 2 will require a detailed analysis of appropriate cycle parking rates for a broad range of activities, including floor areas and to cater for long (staff) and short term (visitors) needs. However, this Option represents the opportunity to incentivise cycling and to address the poor outcomes identified with the status quo (Option 1).

Risks:
Option 2 presents limited risk when considered against the status quo, where issues have been identified with how cycle parking is managed under the Plan. This approach is likely to generate interest as it will vary the parking rates and require additional assessments to accompany consent applications if the cycle parking does not comply.

Budget or Time Implications:
Option 2 will incur time and cost to Council to review and amend the cycle parking rules. However, it is considered that this investment is needed to provide well connected and safe communities.

Stakeholder and Community Interests:
All identified stakeholders.

Recommendation:
Proceed with Option 2, which is to develop activity-based cycle parking rates using floor area and to cater for both long and short-term needs.

6.17 Cycle parking location and design - Issues and options

Context and Issues identification
Cycling as a safe, efficient and convenient mode of travel can be encouraged by ensuring that cycle parking spaces are appropriately located and suitably designed. Even where there is provision made within district plans, cycle parking facilities are often underutilised due to the distance they are located from the pedestrian entrance to a destination, the use of poorly designed cycle stands or safety concerns due to poor lighting or concealment.

The Plan currently references the need for cycle parks to be located on the same site as the activity, to be as close as practicable to the buildings main entrance (where cycle parks are required) and that they are clearly visible (to cyclists entering the site), well-lit and secure. The Engineering CoP provides further guidance, including on the design of bike stands.

The best practice review has identified that the rules for determining the location and design of cycle parking facilities need to be extended to incorporate some of the design standards currently contained in the Engineering Code of Practice and other District Plans.

Option analysis

The Transport Baseline Report has evaluated two Options that are outlined in Table 12 below. This table has been adapted from the Baseline Report to provide wording clarification where necessary:

Table 12: Cycle parking location and design Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Some direction on cycle parking location and design	- Covers most of the essential elements	- Does not support cycling to the same degree as car parks (where there are more detailed design requirements)
Option 2: Add rules for determining the location and design of cycle parks, including relevant Engineering CoP design standards (Preferred Option)	- More likely to encourage cycling - Recognises cycling as an important travel mode - Aligns with the Walking and Cycling Strategy	- More complex to administer and for applicants to understand

6.18 Preferred Option for determining cycle parking location and design – Option 2

Option 2 is the most appropriate as it represents a comprehensive approach to investigate opportunities to improve the location and design of cycle parks to encourage active travel modes. This approach is required to address the Issues identified with the status quo (Option 1).

Effectiveness in Addressing Issue:

Option 2 will require a detailed analysis of appropriate cycle parking locations and design specifications to support cycling by ensuring safe, convenient and appropriate parking spaces are provided. This Option represents the opportunity to address the shortcomings identified with the status quo (Option 1).

Risks:

Option 2 presents limited risk when considered against the status quo, where issues have been identified with how cycle parking location and design is managed under the Plan. This approach is likely to generate interest as it signals the need for additional assessments to accompany consent applications if the cycle parking does not comply.

Budget or Time Implications:

Option 2 will incur time and cost to Council to review and possibly amend the cycle parking location and design. However, it is considered that this investment is needed to provide for active communities and support the SDC Walking and Cycling Strategy.

Stakeholder and Community Interests:

All identified stakeholders.

Recommendation:

Proceed with Option 2, which is to develop rules to establish the location and design of cycle parking facilities, including the incorporation of some Engineering Code of Practice requirements.

6.19 Public transport - Issues and options

Context and Issues identification

It is important to provide communities with appropriate access to public transport options and to encourage the use of more active modes of travel through district plans. This requires local authorities to not only provide the necessary infrastructure and road network configurations to support the bus services provided by Environment Canterbury, but to also support public transport through district plan objectives, policies and methods.

The Plan policies consider public transport when evaluating the effects of land use and subdivision activities[13] and when assessing new roads[14]. Council has also undertaken structure planning exercises to identify where network capacity is needed to support public transport through the selection of appropriate road categories, which are referenced in Outline Development Plans. The best practice review has identified the need to strengthen the policy level directions to align the Proposed Plan with the most recent statutory direction.

This includes the Regional Land Transport Plan 2016 that requires the importance of public transport to be recognised through objectives. It also identifies the need to signal the intention for a segregated public transport corridor between Christchurch City and Rolleston[15] and to encourage land use and subdivision development that supports public transport outcomes. An example includes establishing Park N' Ride facilities in Type 1 town centres in close proximity to public transport facilities, services and corridors.

Option analysis

The Transport Baseline Report has evaluated two Options that are outlined in Table 13 below. This table has been developed from the Baseline Report content:

Table 13: Public transport Options

Option	Advantages (Effectiveness & efficiency)	Disadvantages (Limitations & risks)
Option 1: Status quo – Reference public transport outcomes in the policies	- No change, which creates efficiencies in administering the Plan	- Fails to give effect to the most recent strategic requirement for public transport to be supported by objectives
Option 2: Include objectives and policies to support public transport outcomes and reference the need	- Reflects current best practice	- Uncertainty around the timing and funding of public transport facilities and

[13] Policy B2.1.4(a)
[14] Policy B2.1.5
[15] That is identified in the Greater Christchurch Public Transport Futures Business Case

for Council to consider specific public transport facilities to support related public transport services (Preferred Option)	- Requires more integrated land use and transport outcomes - Promotes the use of public transport	services across Greater Christchurch

6.20 Preferred Option for promoting public transport – Option 2

Option 2 is considered the most effective approach to adopt as it will ensure the Proposed Plan is consistent with best practice and contains clear direction on the methods for promoting public transport through objectives. These methods include referencing the need for Council to consider the establishment of specific public transport facilities, such as the provision of a segregated public transport corridor between Christchurch City and Rolleston and Park N' Ride facilities.

Effectiveness in Addressing Issue:

Option 2 represents the opportunity to address the shortcomings identified with the status quo (Option 1), where the current policies need to be supported by objectives to achieve integrated land use and transport outcomes and for specific public transport facilities to be considered by Council.

Risks:

Option 2 presents limited risk as it reflects best practice and will ensure the Proposed Plan is able to give effect to higher order planning instruments. There are uncertainties associated with referencing the need for Council to investigate specific public transport facilities, including the timing and funding of these initiatives. However, these risks are considered to be minor given they are providing high level direction and can be addressed in the drafting phase. Any costs incurred in establishing these facilities would need to be determined through Asset Management Plan and Long Term Plan processes.

Budget or Time Implications:

Option 2 will incur time and cost to Council to review and include additional objectives and policies into the Proposed Plan. However, this investment is needed to ensure land use and subdivision development supports public transport.

Stakeholder and Community Interests:

All identified stakeholders.

Recommendation:

Proceed with Option 2, which is to evaluate the appropriateness of incorporating objectives to encourage land use and subdivision development that support public transport outcomes, including signaling the need for Council to consider the establishment of specific public transport facilities.

7.0 Summary of stakeholder engagement

Stakeholder engagement has been undertaken as part of the process to prioritise the Issues, determine the Preferred Options and finalise the Transport Baseline Report.

Two workshops were held, the first to identify Issues and Opportunities and the second to review Options. These workshops included Selwyn District Council staff, including personnel from the Assets (Asset Manager – Transport and Development Engineer) and Environmental Services (District Plan Topic Leads, Senior Town Planner/Urban Designer and Senior Resource Management Planners) Departments and representatives from the NZTA and Environment Canterbury.

Targeted discussions on the Mahaanui: Iwi Management Plan took place with Mahaanui Kurataiao advisors, who were also invited to attend the workshops but did not attend.

Discussions were held with neighbouring councils with regard to their district plans provisions. There are several Issues where it is recommended that discussions are held with Waimakariri District, who are at a similar stage in their District Plan Review. These Issues are similar in nature and scale and there are benefits and efficiencies able to be gained through investigating consistent cross boundary solutions.

These stakeholders have also contributed to the content and review of this Update and Preferred Options Report. Environment Canterbury and NZTA staff support all the proposed Options. The advice received identifies that the recommended approach is proactive and that it represents a strong basis for achieving land use and transport integration and encouraging active travel modes.

8.0 Conclusion

Overall, there is strong direction provided in the Transport Baseline Report to provide confidence to Council that the identified Preferred Options can proceed to the consultation, Section 32 evaluation and drafting phases. The exception relates to the car parking Issue, where further work is recommended to deliver process efficiencies, ensure an integrated approach to land use and transport planning is achieved and to provide certainty to Council that the preliminary Preferred Options are viable before they are presented for consideration.

9.0 Update and Preferred Options for further consideration

The Project Team recommends that:

1. The above Update is received, the approach outlined in Section 5.0 is endorsed and Preferred Options are presented once the work streams have been completed.

2. The Preferred Options for District Wide - Transport that are outlined in Section 6.0 are endorsed for further development (including targeted stakeholder engagement, Section 32 analysis and Drafting Phase).

APPENDIX 1: Transport Baseline Report (DW009)

Click on the following link to read the:

Transport Baseline Report

APPENDIX 2: Summary of discounted Issues or Issues where no change is recommended

Issue	Context	Reason for discounting the Issue
Transport resilience	- *Does the Plan contain the necessary provisions to ensure transport networks are resilient to natural hazard events, including the effects of climate change?*	- This Issue is being addressed by the Natural Hazards Topic and Transport Activity Management Plan
Future transport needs	- *Does the Proposed Plan need to more actively support future technologies, such as through the provision of vehicle charging points?*	- This Issue is being addressed through the Transport Activity Management Plan and by private developers (for example New World supermarkets and Rolleston Square Shopping Centre)
Protection of the strategic transport network	- *Does the Plan protect the strategic transport network from activities that may undermine their efficient operation?*	- This Issue is being addressed through the Noise and Vibration Topic
One Network Road Classification (ONRC)	- *Does the Plan sufficiently incorporate NZTA's ONRC standards into the road classifications?*	- This Issue was addressed in the Transport Baseline workshops, where NZTA confirmed that there is no need to align the Proposed Plan with the ONRC
Amenity Strips in roads	- *Does the Plan ensure legal road widths provide sufficient space for amenity strips?*	- The Transport Baseline Report has established that no changes are considered necessary
Cycling facilities within road corridors	- *Does the Plan ensure legal road widths provide sufficient space for cycling?*	- The Transport Baseline Report has established that no changes are considered necessary
End of trip facilities	- *Does the Proposed Plan need to more actively promote cycling through end of trip facilities, (such as showers, changing rooms or lockers?*	- The Transport Baseline Report has established that end of trip facilities can be appropriately managed outside the Plan
Referencing external documents	- *How will non-statutory documents and standards, including the Engineering CoP and urban design guides, be referenced in the Proposed Plan to ensure they are given appropriate statutory weight?*	- This Issue needs to be addressed by all other Topics to ensure non-statutory documents are integrated into the Proposed Plan where it is required to achieve sustainable outcomes

APPENDIX 3: Neighbouring and best practice review – Car parking

Issue	Car parking
Selwyn District Plan	Activity-based minimum on-site parking requirements are set, including within some Key Activity Centre Precincts.
Ashburton District Plan	No Central Business District (*"CBD"*) on-site parking requirements (NB: Sufficient public parking is available).
Waimakariri District Plan	No CBD on-site parking requirements in the 'Principle Shopping Streets' in Rangiora and Kaiapoi, with cash in lieu of parks required (NB: Sufficient public parking is available).
Christchurch District Plan	Actively promote reduced on-site parking requirements, with maximums set in the central city core (NB: Sufficient public parking is available).
Auckland Unitary Plan	Maximum parking rates are set for the central city core, with minimum and maximum rates set for some office-based activities.
Hamilton District Plan	Activity-based minimum on-site parking requirements except in the core Business zones where more than 20 spaces cannot exceed 125% of the minimum required.
Tauranga District Plan	Activity-based minimum on-site parking requirements. Parking reduction factor incentivises reduced on-site parking where criteria are met (e.g. walkable distances and accessibility to public transport).
Dunedin District Plan	Activity-based minimum on-site parking requirements.
Queenstown District Plan	Minimum and maximum parking rates, where exceedance of the maximum triggers assessment against a number of matters.