BEFORE INDEPENDENT HEARING COMMISSIONERS

AT RANGIORA / WAIMAKARIRI

I MUA NGĀ KAIKŌMIHANA WHAKAWĀ MOTUHAKE RANGIORA / WAIMAKARIRI

IN THE MATTER	of the Resource Management Act 1991
AND	
IN THE MATTER	of the hearing of submissions and further submissions on the Proposed Waimakariri District Plan
HEARING TOPIC:	Stream 5 (Transport)

STATEMENT OF PRIMARY EVIDENCE OF LISA MARIE WILLIAMS ON BEHALF OF KĀINGA ORA – HOMES AND COMMUNITIES

(TRANSPORT ENGINEERING)

7 AUGUST 2023

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1. EXECUTIVE SUMMARY

- 1.1 This evidence relates to the Kāinga Ora submission and further submissions on the proposed Waimakariri District Plan (pWDP) Transport Chapter, specifically in respect of the following matters:
 - Seeking to delete or amend TRAN-R6 3. Which relates to when a road or accessway standard is appropriate.
 - (b) Reducing the residential local road requirements in Table TRAN-3.
 - (c) Reducing the residential accessway requirements of Table TRAN-7.
 - (d) Excluding residential activities from *TRAN-R20 High traffic* generators and reducing the Integrated Transport Assessment (ITA) requirements for restricted discretionary activities.
- 1.2 Reviewing the approach of other District Plans, the s. 42a Officer's Report (Officer's Report), supporting District Plan documents and considering the relevant transport effects, I consider that either TRAN-R6(3) (relating to when a road or accessway standard is appropriate) should be deleted or amended. It could be deleted as the proposed subdivision assessment matters would provide sufficient discretion on this matter. Alternatively, the rule should be amended to remove the threshold in TRAN-R6 (3)(a) referring to six residential units. This amendment leaves a 100 movements per day threshold which is less onerous and provides consistency across all activities.
- 1.3 The pWDP local road standards were found to be requiring wider roads than comparable district plans and industry standards. This can considerably impact on the amount of land needed for roading to service a new residential area and contribute to higher operating speeds. It is recommended the requirements for residential local roads be reduced and differentiated from local roads in other zones that may have different needs.

- 1.4 The submission seeks to reduce the width of residential accessways noting that wider accesses increases the cost to construct and may inhibit further residential intensification through loss of developable land. Even small increases in access widths can result in noticeable impacts on the proportion of a site used for residential access (refer to 4.20). It is important to balance safe and efficient access, with residential density and design outcomes.
- 1.5 Based on other examples and standards, access requirements should reflect the number of units proposed and the length of the access. These must provide safe and efficient access including for emergency vehicles but minimise the amount of residential land needed for access.
- 1.6 The submission opposes the application of the high traffic generator rule (TRAN-R20) to residential activities noting that the pWDP should be enabling of residential development. It also seeks that only basic rather than full ITAs are required for restricted discretionary activities.
- 1.7 The transport network in existing residential zones is generally already suitable for residential transport needs. Subdivision assessment matters consider the appropriateness of proposed transport infrastructure for new residential areas. Therefore, it is unnecessary for TRAN-R20 to also consider the effects of residential traffic generation on the surrounding road network. It is recommended that residential activities in residential zones be excluded from TRAN-R20.
- 1.8 Should the recommendation to exclude residential activities from TRAN-R20 not be accepted, amendments to the text are sought to reduce the consenting demands for residential activities. This includes: increasing the threshold from 200 to 500 vehicle movements per day; providing exemptions for existing traffic generation and that already covered by an approved ITA; and reducing the requirement for a Full ITA to a Basic ITA for restricted discretionary residential activities.
- 1.9 The recommended changes to the pWDP provisions are set out in full in Section 5.

2. INTRODUCTION

- 2.1 My full name is Lisa Marie Williams. I am a senior transport engineer and planner employed by Novo Group Limited, a Christchurch based resource management and traffic engineering consulting company. I hold the qualifications of a Bachelor of Environmental Management from Lincoln University and Master of Engineering (Transport) from the University of Canterbury. I have nearly 20 years of experience as a Transport Engineer and Planner in New Zealand. I am a Transportation Group member of Engineering New Zealand.
- 2.2 My specific experience relevant to this evidence includes processing and preparing traffic assessments under the Resource Management Act 1991, for notified and non-notified applications on a range of landuse activities. This specifically includes a variety of land use consents, plan changes, subdivision applications, and Outline Plans in the Waimakariri District; as well as transport assessments for Kāinga Ora developments within the Canterbury Region.
- 2.3 I have been asked to present transport engineering evidence on four matters relating to the submissions and further submissions by Kāinga Ora on the transport chapter.

Code of Conduct

2.4 Although this is a Council hearing, I have read the Environment Court's Code of Conduct and agree to comply with it. My qualifications as an expert are set out above. I confirm that the issues addressed in this statement of evidence are within my area of expertise.

Scope of Evidence

- 2.5 My evidence will address the following matters:
 - (a) The threshold for when a road is required rather than an accessway for residential development.
 - (b) Road design requirements for urban cul de sacs / low volume local roads.

- (c) Residential accessway standards / widths.
- (d) High traffic generator assessments for residential activities.
- 2.6 Other transport aspects of the Kāinga Ora submission relating to objectives and policies, assessment matters, minor changes and procedural changes are addressed in the planning evidence of Clare Dale.

3. KĀINGA ORA'S SUBMISSIONS AND FURTHER SUBMISSIONS

- 3.1 The following Kāinga Ora submission points are addressed in this evidence:
 - (a) Oppose in Part *TRAN-R6¹* Formation of a new vehicle accessway seeking to delete clause 3.a "where any new vehicle accessway in Residential Zones or Rural Zones will serve six or more sites".
 - (b) Opposes TRAN-S1 in respect of Table TRAN-3² Design Standards for New Roads where the posted speed limit is 50km/h or less particularly in respect of road widths and the resulting impact on communities.
 - (c) Opposes in part TRAN-S4 in respect of *Table TRAN-7³ Design* Standards for new vehicle accessways seeking to reduce the legal and formed access widths and passing requirements.
 - (d) Opposes in part TRAN-R20⁴ High traffic generators and Tables TRAN-1 and TRAN-2 seeking they be amended to exclude residential activities and replace a Full Integrated Transport Assessment (ITA) with a Basic ITA for Restricted Discretionary activities.

¹ Submission Ref. 325.87

² Submission Ref. 325.84

³ Submission Ref. 325.86

⁴ Submission Ref. 325.83

3.2 The Kāinga Ora further submission on the primary submission of Fire and Emergency New Zealand [FENZ] objected to FENZ's support for TRAN-R6 in respect of the threshold for a road being more than 6 lots / dwellings⁵ and TRAN-S4 seeking to increase the minimum formed width of an access to 4m for 1-3 lots⁶. However, my recommendation is to accept the submission on TRANS-S4 in part, with the 4.0m width applying only for longer accesses.

4. RECOMMENDATIONS OF S. 42A REPORT AND RESPONSE

- 4.1 The Officer's Report has not accepted the Kāinga Ora submission points on a number of key aspects that affect the typical residential developments they undertake. In response to recommendations of the officer's report, I have provided evidence in respect of the following submission points:
 - TRAN-R6 Formation of a new vehicle accessway.
 - Table TRAN–3 Design Standards for New Roads (<50km/h).
 - Table TRAN-7 Design Standards for new vehicle accessways.
 - TRAN-R20 High traffic generators.

TRAN-R6 Formation of a new vehicle accessway

- 4.2 The submission (changes shown red) seeks the following amendment to TRAN-R6:
 - 3. in the circumstances specified in (a) and (b) <u>a.</u> below, a new vehicle accessway shall be designed to the standard of a new road as per Table TRAN-3 or Table TRAN-4, with the applicable standard based on the posted speed limit of the road with which
 - the accessway will connect: **a.** where any new vehicle accessway in Residential Zones or Dural Zones vill connect in the second secon
 - Rural Zones will serve six or more sites; or
 - <u>a.</u> where vehicle movements on any new accessway will exceed 100 per day.

⁵ Submission Ref. 303.24

⁶ Submission Ref. 303.27

- 4.4 The Officer's Report⁸ suggests that the need for the Restricted Discretionary (RDIS) activity status threshold of six units relates to consideration of service and emergency vehicle access.
- 4.5 FENZ has submitted on the accessway standards to ensure access for emergency vehicles and this is discussed below in relation to Table TRAN-7.
- 4.6 In my opinion, service vehicle access such as rubbish collection can be readily managed through other mechanisms including subdivision assessment matters. Most residential lots have 15-20m of road frontage and bin collection for 10-12 residential units can be managed from the frontage road. Whilst there is sometimes difficulty accessing bins due to kerb-side car parking demand, this is a road management matter. No noticeable increase in effects in that respect are anticipated for an access to 10-12 residential units relative to that for six units.
- 4.7 A comparison with other standards and District Plans is included in Attachment 1 and suggests that a threshold in the range of 10-20 units (roughly equivalent to 100-200 vehicle movements per day) would be appropriate. The amendment sought removing the six unit threshold and deferring to the 100 vehicle movements per day threshold, is therefore considered to be more reasonable.
- 4.8 It is noted that the Christchurch District Plan (CDP) does not include any threshold, with considerations for provision of a road rather than an access way occurring through the subdivision assessment matters⁹. Under the proposed Waimakariri District Plan (pWDP) all subdivision activities have at least controlled activity status with assessment

⁷ Per the rates in TRAN-APP6 for residential units (General and Medium Density).

⁸ Paragraph 178

⁹ Refer to Attachment 1.

matters "SUB-MCD2 Subdivision design¹⁰" and "SUB-MCD3 - Property access¹¹" applying to all subdivisions. These provisions already allow for consideration of property access / roads for subdivisions. Consideration of this matter within the subdivision consent process could therefore be relied upon instead of a threshold in TRAN-R6 (3).

4.9 I recommend that either TRAN-R6(3) be deleted entirely or that as a minimum the threshold in TRAN-R6(3)(a) be deleted as outlined in the submission.

Table TRAN-3 Design Standards for New Roads (<50km/h)

- 4.10 The submission opposes Table TRAN-3 as notified because the road widths are considered to be excessive, with the potential to create faster speed environments, do not align with the "Living Streets" initiative and do not support residential intensification.
- 4.11 This evidence focuses on one aspect of the submission relating to local residential streets in respect of legal and carriageway widths, footpaths, and parking requirements.
- 4.12 Table 1 below provides a comparison of the proposed residential local road standards and other District Plans, the New Zealand Standard for Land development and subdivision infrastructure NZS4404:2010 (NZS4404), and the recommendations of the Council commissioned Transport Technical Review¹² (Technical Review).

¹⁰ Particularly matters (as notified) "1. The extent to which design and construction of roads, service lanes, and accessways will provide legal and physical access that is safe and efficient." And "5 The provision and location of walkways and cycleways, the extent to which they are separated from roads and connected to the transport network." And "9a The extent to which subdivision subject to an ODP: provides for the protection of routes for future roads, and other public features of the subdivision, from being built on"

¹¹ (as notified) "The extent to which the subdivision makes provision for: the location, design, lighting, alignment and pattern of roads in relation to allotments; the provision of access; the location, design, and provision of vehicle crossings in particular, taking into account infrastructure and street trees in the roading corridor; the location and design of footpaths and cycleways including their convenience, safety and separation from roads by visual and/or physical means; and road reserves and links to future subdivision on adjoining land."

¹² Technical Review District Plan Review Prepared For Waimakariri District Council March 2019 <u>Report AP (waimakariri.govt.nz)</u>

Local Residential Roads	Min. Legal width / Road Corridor	Min. Carriageway Width	Footpaths and parking
pSDP ^{13 14}	13m	7m or 7.5m ¹⁵	Parking one side 1x Footpath
CDP ¹⁶ < 20 residential units < 100m long	14m	7m	1x footpath
CDP ¹⁷ other	16	7m	2 x footpath
NZS4404 (~2,000 vpd)	15m	5.5-5.7m	Recessed parking optional 1 x 1.5m wide footpath 2 x 1.5m wide footpath 20+ dwellings or 100m+
Technical Review ¹⁸	16m – No supporting analysis	6.0m local <150 AADT 8.0m Local	Parking within the carriageway Varies between nil and 2x footpaths
pWDP ¹⁹ AADT<150; <150m ; <20 res. units	16m	6.5m	Footpath 2x1.8m 1 x 2.5m parking lane within carriageway
pWDP ²⁰ AADT<1500 / <200 res. units	18m	8.0m	Footpath 2x1.8m 2 x 2.2m parking lane within carriageway

Table 1: Residential Local Road Comparisons

- 4.13 The above illustrates that the proposed legal widths are generally wider than the comparable requirements under other district plans and industry standards. Of particular note is that the Technical Review did not include any analysis of appropriate road corridor widths.
- 4.14 The corridor widths can have a significant impact on the amount of land used to service a new residential area. As an example, along a 150m low volume road, the 2-3m additional corridor width over and above the comparable examples would constitute 300-450m² of land which could have otherwise accommodated between one and three additional dwellings in a medium density zone. A loss of 1-3 dwellings for every 20 dwellings provided noticeably impacts on the overall density of

¹³ Proposed Selwyn District Plan (pSDP). Refer to: TRAN-SCHED3 - Road formation and operational standards. Officers Right of Reply version.

¹⁴ Excludes Large Lot Residential zones.

¹⁵ This is subject to submissions.

¹⁶ Appendix 8.10.3 New road standards

¹⁷ Appendix 8.10.3 New road standards

¹⁸ Technical Review District Plan Review Prepared For Waimakariri District Council March 2019 Report AP (waimakariri.govt.nz) ¹⁹ S.42A recommendations.

²⁰ S.42A recommendations.

housing. The adoption of narrower corridors in other Districts (see Table 1) confirms that narrower road corridors have been assessed as suitable for local residential roads.

- 4.15 Wider carriageways can also result in higher vehicle speeds. Local residential roads should have design speeds less than 50km/h and ideally <30km/h tolerable speeds for safety of pedestrians and cyclists. Generally, the design for local residential roads should take into account some parking within the carriageway as a form of traffic calming to reduce travel speeds²¹. Lower operating speeds improve safety and support design outcomes for more liveable pedestrian and cycle friendly streets. Narrower carriageway widths also make efficient use of space and allow for more landscaping without otherwise increasing the overall amount of land used for roads (i.e., corridor widths).
- 4.16 The Table 1 comparisons suggest that a 6.0m formed width would be acceptable for low volume local roads. However, where parking is provided on at least one side, I would recommend that this be a minimum of 6.2m. 6.2m provides for a 2.2m parking lane and 4.0m for emergency or service vehicle access. The above comparisons also suggest that only one footpath is necessary. This is reasonable noting the short length (<150m) of, and low pedestrian and traffic volumes serviced by, these low volume local roads.
- 4.17 For longer or higher volume local residential roads, I consider that the minimum carriageway width should only provide for parking on one side of the road²². This provides flexibility for residential areas where on-site parking is likely to be provided²³. This avoids a wide carriageway where little to no kerb-side parking demand exists, resulting in faster operating

²¹ This is because it reduces the traffic lanes such that either the clearances between vehicles passing in opposite directions is reduced so that they need to pass at lower speeds or because it reduces sections of the road to one-way whereby one vehicle needs to wait clear of the parked cars, for another to pass in the opposite direction.

²² It is noted that in residential areas where parking on both sides may be necessary / desirable then a wider carriageway can be provided to accommodate this. The District Plan rules do not restrict this as the Table TRAN-3 carriageway widths are <u>minimums</u>. There is discretion within the subdivision rules for consideration of situations where a wider carriageway may be appropriate.
²³ For example, most Kāinga Ora developments provide on-site parking for each unit and visitor parking for larger developments.

speeds. In order to support a legible hierarchy of streets, a wider carriageway than the lower volume local roads would be appropriate. The comparisons in Table 1 suggest that a 7.0m width would be generally consistent with comparable roads in Selwyn and Christchurch and is therefore recommended.

4.18 Noting the above, it is recommended that a separate column be provided in *Table TRAN-3* for local roads in residential areas. This differentiates them from other zones²⁴ where higher parking demand and or different operating parameters may be appropriate. It is common for District Plans to recognise the different needs of roads in residential zones. The recommended changes²⁵ are shown in Table 2 below.

Design element	Road type			
	Low Volume Local Road	Local Road Residential Zones	Local Road <u>Other</u>	
Typical design AADT	<150	<1,500	<1,500	
Maximum length (m)	150			
Maximum number of residential units served	20	200	200	
Road reserve corridor width (m) ²	16.0 _ <u>13.0</u>	18.0-<u>15.0</u>	18.0	
Footpath (m)	<mark>2 <u>1</u> x 1.8</mark>	2 x 1.8	2 x 1.8	
Shared use path (m)				
Parking (m) ⁴	2.5 2.2 (within carriageway, one side only)	2.0 2.2 (within carriageway, one side cach side)	2.0 (within carriageway, each side)	
Cycle lane (m) ¹				
Traffic lane (m)	4.0 minimum	4.0 minimum	4.0 minimum	
Median (m)				
Minimum carriageway width (m)	6.5 - <u>6.2</u>	8.0 - <u>7.0</u>	8.0	

²⁴ For example, commercial areas.

²⁵ Changes annotated as: Black text indicates notified provisions, blue changes in the officers report and red those recommended in respect of Kāinga Ora's submission and deletions / additions.

Table TRAN-7 Design Standards for new vehicle accessways

- 4.19 The submission sought to reduce the width of residential accessways noting that wider accesses are cost-inhibitive and reduce the opportunity for further residential intensification. I note that the FENZ submission sought to increase the minimum access width to 4.0m and the Kāinga Ora further submission opposes this.
- 4.20 To provide some context for the concerns raised regarding access widths, a 1m difference in width can have a significant impact on the proportion of a site used for access. For the example of a 400m² lot, servicing three units, with a typical access length of 25m, the difference between a 4.5m and 5.5m legal width is 28% to 34%²⁶ of the site utilised for access. Similarly, an extra 1.0m formed width can have a noticeable impact in the proportion of hard stand / impervious surface area.
- 4.21 Noting the above example, even small increases in access widths can have a very noticeable impact on the overall design of a residential development. For this reason, it is important to balance safe and efficient access, with overall development outcomes. Table 3 provides a comparison of access design standards for guidance on what access widths may be appropriate.
- 4.22 I note that the Council-commissioned Technical Review also considered access widths however there appears to have been an error in respect of the minimum legal width recommended. This appears to have mis-interpreted the 5.5m min. legal width specified in NZS4404 clause 3.3.11.1 (g) Footpaths and Accessways. This clause is referring to accessways for pedestrian and shared²⁷ paths, where they are separate to legal roads. This is different to the property access requirements which are set out in Table 3.2 of that standard. NZS4404 Table 3.2 differentiates between Local Roads (vested / public) and Lanes (private access).

 $^{^{26}}$ 25m x 4.5m = 112.5m² / 400m² = 28.1% and 25m x 5.5m = 137.5m² / 400m² = 34.4%

²⁷ Shared use by cyclists and pedestrians.

4.23 There have also been a number of plan changes since the Technical Review was undertaken (2019) which are also summarised below for comparison.

Reference	No. Res. Units ²⁸	Min. Legal widths	Min Formed Widths	Passing Bays
NZS4404	1-3	3.6m	2.75 -3.0	Every 50m
Urban /	4-6	4.5m	2.75 -3.0	
Suburban Live and Play	7-20	9	5.5-5.7	N/A
CDP including	1-8	4.0m	3.0 ³⁰	
PC14 ²⁹ (as	9-15	6.0	5.0	Every 50m
notified)	>15	6.5	5.5	N/A
pSDP ³¹	1 (0-90m)	3.5m	3.0	Ontional
It is noted that	1 (90m+)	4.5	4.0	Optional
there are number	2-3 (0-90m)	4.5m	3.0	Optional
of submissions	2-3 (90m+)	5.5m	4.0	Optional
seeking changes	4-6 (0-50m)	5.0m	3.5m	Optional
to these	4-6 (50m+)	6.5m	4.5m	Required
provisions ³² .				
pTDP ³³ (as	1-2	3.5m**	2.7	Front and every
notified)	**135m+ from a road with a reticulated water supply 4m minimum for emergency access			50m ³⁴
	3-9	5.0m	4m	

Table 3: Comparison of Residential Access Requirements

4.24 FENZ's Designers' guide to firefighting operations Emergency vehicle access (F5-02 GD)³⁵ specifies a 75m hose run from the appliance. The CDP includes a requirement for a 3.5m minimum formed width and 4.0m clearance height where a building is more than 75m from the nearest road with a fully reticulated water supply for firefighting. Similarly, the FENZ submission on the pSDP sought a 4.0m formed width where the access exceeded 90m in length³⁶. The FENZ

³³ Proposed Timaru District Plan (pTDP)

²⁸ pTDP refers to number of parking spaces and this has been correlated on the basis of 1 car park per unit.

²⁹ Christchurch District Plan, Plan Change 14

³⁰ Appendix 7.5.7 g (h under P14) requires 3.5m minimum formed and 4.0m high where a building is more than 75m from the nearest road with a fully reticulated water supply for firefighting.

³¹ Proposed Selwyn District Plan (pSDP) Officers Right of Reply version.

³² As such the decision version may differ from the Officers Right of Reply version listed here. The decisions are not yet available at the time of writing.

³⁴ Full text "When a vehicle access way is provided in the Residential Zones, where two-way access (5.5m formed width or greater) is not provided, a passing bay is required at the boundary, and thereafter at a minimum interval of every 50m. A passing bay should have a minimum width of 5.5m and length 7m with 45-degree tapers"

³⁵ https://www.fireandemergency.nz/assets/Documents/Business-and-Landlords/Building-anddesigning-for-fire-safety/F5-02-GD-FFO-emergency-vehicle-access.pdf

³⁶ This change was included in the Officers Right of Reply and is included in the dimensions shown in Table 3.

submission³⁷ on the pTDP sought a change to the District Plan text for accesses more than 75m in length with reference to their code of practise (*SNZ PAS 4509:2008*).

- 4.25 Noting the above, it is assumed that the minimum access width of 4.0m could also be applied only to longer accesses in the pWDP residential zones. This approach has been incorporated in the recommended changes below.
- 4.26 Table 4 sets out the recommended changes to the access widths to balance safe and efficient access, emergency vehicle access, consistency with similar provisions of other District Plans and minimising the amount of land utilised by access.

Zone	No. Res. Units <u>/</u> Length	Min. Legal widths	Min Formed Widths	Passing Bays
Residential	1-3 <mark><50m</mark>	5.5 <u>4.0</u>	3.0 ³⁹ 4.0 ⁴⁰	<u>No</u>
	<u>1-3 >50m</u>	<u>4.5</u>	<u>4.0</u>	Yes
	4- 6-<u>9</u> <50m	5.5 <u>5.0</u>	4.5 <u>3.5</u>	<u>No</u>
	<u>4-9 >50m</u>	<u>5.0</u>	<u>4.0</u>	Yes
	> 6 - <u>10 <50m</u>	7.0 <u>5.5</u>	<u>5.5</u> <u>4.5</u>	No
	<u>>10 >50m</u>	<u>6.5</u>	<u>5.5</u>	<u>N/A</u>

Table 4: Proposed Changes to Table TRAN-7 Design Standards for new vehicle accessways³⁸

TRAN-R20 High traffic generators

4.27 The submission opposes the application of the high traffic generator rule (TRAN-R20) to residential activities, noting that the pWDP should be enabling of residential development. Requiring an ITA for residential activities would also be cost-inhibitive and would result in unnecessary consenting requirements for residential activities, when viewed against the likely traffic generation. The submission seeks that the provisions

³⁷ Change sought "The vehicle access point complies with the dimensions required for fire appliances for developments in SNZ PAS 4509:2008 New Zealand Fire Service Firefighting Water Supplies Code of Practice where a driveway length exceeds 75m or a fire appliance is not able to reach the source of a firefighting water supply from a public road." See https://www.timaru.govt.nz/ data/assets/pdf file/0004/763168/Proposed-District-Plan-Submission-No.-131-Fire-and-Emergency.PDF

³⁸ It is noted that the Council may want update Table TRAN-18 for vehicle crossing widths to coordinate with changes to Table TRAN -7 for accessway widths.

³⁹ Submission seeks to retain as notified.

⁴⁰ Red shows S.42A report changes.

are amended to exclude residential activities and also that only basic (rather than full) ITAs are required for restricted discretionary activities.

- 4.28 The Council also commissioned a Technical Review for High Traffic Generators⁴¹ (dated 2019) (HTG review). The HTG review was not overly detailed and the recommendations focused on adopting a single traffic generation threshold rather than an activity specific threshold, referencing the Hamilton City Plan and Operative Selwyn District Plan provisions. I note that since that review, the proposed Selwyn District Plan has been notified and this moved away from the single threshold type approach to a rule more similar to the CDP which has different thresholds for residential activities.
- 4.29 Whilst the HTG review considered several District Plan examples, there was no critical analysis undertaken of the appropriateness of the thresholds for residential activities in residential zones. The transport network in existing residential zones is generally already suitable for residential traffic, all modes, and residential travel patterns⁴². As such, it would generally be unnecessary to consider the effects of residential traffic generation on the surrounding road network within those zones. The subdivision assessment matters already consider the appropriateness of new transport infrastructure for developing residential zones. There are also rules that adequately control on-site design for residential activities including manoeuvring and access. It is therefore generally unnecessary to require consideration of traffic generation as a matter of discretion in TRAN-MD11 for residential activities proposed in residential zones. I recommend that residential activities in residential zones be excluded from TRAN-R20.
- 4.30 Should the recommendation to exclude residential activities from TRAN-R20 not be accepted in full, the analysis below considers how the rule could be amended to reduce the consenting demands for residential activities. This would go some way to addressing the

⁴¹ https://www.waimakariri.govt.nz/__data/assets/pdf_file/0035/98378/2.-High-Traffic-Generators-Technical-Report-2019.PDF

⁴² Ongoing transport upgrades to meet current standards and anticipated growth in existing areas should be occurring part of standard practise managed through existing Council processes such as the Annual and Long Term Plans, Development Contributions and the like.

concerns raised in the submission in respect of enabling residential development / reducing onerous consenting requirements.

- 4.31 The thresholds proposed for this rule (200 vehicle movements per day) equate to around 20 standard residential units. A low threshold could have the unintended consequence of multiple smaller residential developments occurring in a segmented way, designed to avoid the requirement for an ITA. A more comprehensive approach can usually be achieved at a larger scale and generally achieve better transport outcomes.
- 4.32 Most District Plans with similar rules exclude traffic generation already existing on the site prior to the District Plan becoming operative and where traffic generation is within the scope of an existing approved ITA. This avoids the need for repeated resource consents where there are changes to a residential development that don't affect the traffic generation and associated traffic effects.
- 4.33 In respect of thresholds for ITAs, some comparisons of other District Plans are provided in Table 5.

District Plan	Basic	Full	Exemptions
pSDP ⁴³	50 sites / units	120 sites / units	If an ITA has already been approved for the site as part of a granted resource consent and the activity is within the scope of that ITA and in accordance with the resource consent, unless the resource consent has lapsed. Note also a submission seeking "When calculating the thresholds the level of trip generation and scale of activity that existed prior to the plan becoming operative will not be included".
CDP ⁴⁴	60 res. units	120 res. units	Any development that is within the scope of that ITA already approved for the site as part of a granted resource consent ⁴⁵ . Existing activities with access to urban roads, the level of trip generation and scale of activity that existed prior to the plan becoming operative unless more than 50 vehicle trips per peak hour will use a

Table 5: Comparison of ITA thresholds for residential activities

⁴³ Officers Right of Reply version.

⁴⁴ Rule 7.4.3.10 High trip generators and

⁴⁵ Unless consent has lapsed. Refer to full wording in Rule 7.4.3.10d

			new vehicle access or the volumes using any existing vehicle access to the activity increases by more than 50 vehicle trips per peak hour. Non-notification other than to Kiwi Rail or NZTA
pTDP ⁴⁶	40 units / lots	90 units / lots	an Integrated Transport Assessment has already been approved for the site as part of a granted resource consent, then these rules do not apply to any development that is within the scope of that Integrated Transport Assessment (unless the resource consent has lapsed).

- 4.34 The above examples suggest a threshold of 40-60 residential units equating roughly to 400-600 movements per day. The rule could be amended to be more reflective of that range, such as to the mid-point of 500 movements per day, for residential activities.
- 4.35 There are also two levels of ITA assessments for most of the above examples and whilst the pWDP rule relates to the overall activity status rather than the scale of the activity, similar assessment matters apply. The key difference between Basic and Full ITA assessments is that Full ITAs generally require additional assessment of transport network effects including any additional upgrades required to the transport network to cater for the traffic volume and demands of the proposed activity.
- 4.36 Generally, a restricted discretionary activity status suggests that an activity is of a nature and scale generally anticipated in that zone, provided that relevant matters of discretion are appropriately addressed. The associated traffic should also therefore be generally anticipated to occur in that zone and the surrounding infrastructure appropriate to accommodate that⁴⁷. As such, the Full ITA assessment matters are considered to be more appropriate for discretionary and non-complying activities which may be occurring out of zone or of a scale beyond that anticipated by the District Plan.

⁴⁶ and TRAN-S20 High Trip Generating Activities

⁴⁷ Noting that ongoing transport upgrades to meet current standards and anticipated growth in existing areas should be undertaken as part of standard practise managed through existing processes such as the Annual and Long Term Plans, Development Contributions and the like.

- 4.37 Restricted discretionary activity status for a residential activity, in my experience, typically relates to a non-compliance with a permitted activity standard, such as building design and on-site amenity related rules. Such rules in no way affect the traffic generation of the site or the appropriateness of residential activities in the location. Where any traffic rules are not complied with, for example manoeuvring requirements, there are already relevant assessment matters to consider the effects of those non-compliances. Requiring a Full ITA would not be necessary for residential activities.
- 4.38 Noting the above, the recommended changes are set out below. This includes the preferred change, to exclude residential activities in residential zones from TRAN-R20 but also an alternative relief in the event that a full exclusion is not accepted.

Table 6: Recommended	Change to	TRAN-R20	High traffic	generators

All Zones	Activity	v status: RDIS
	Where:	
	1.	any activity generates an average daily traffic volume that
		exceeds the thresholds contained in Table TRAN-1 below except
		that the following shall be excluded from these calculations
		a. the level of traffic generation existing as at the date of the
		District Plan becoming operative;
		b. traffic generation within the scope of an ITA approved
		through a previous resource consent;
	2.	for the activities in (1) above:
		a. either a Basic ITA or Full ITA shall be required;
		b. the type of ITA to be provided shall be determined by the
		circumstances set out in Table TRAN-2 below; and
		c. the ITA shall be prepared by an independent suitably qualifie
		and experienced transport engineer.

Table 7: Recommended Changes to Table TRAN-1: High Traffic Generation Thresholds

Preferred Chang	je	Alternativ	re Relief Sought
Non-residential and Residential Zones Purpose Zone Nohoanga), Specia Zone (Pines Be Kairaki Regenerati	s / Special (Kāinga ial Purpose each and		Zones / Special Purpose Zone (Kāinga Special Purpose Zone (Pines Beach and eneration)
Average daily >	,	Average daily traffic generation	Residential Activities > 500vmpNon-residential ActivitiesNon-residential ActivitiesAll Activities> 50 hvmpd

Table 8: Recommended Changes to	Table TRAN-2: ITA Requirement
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Preferred Change Alternative Relie		Alternative Reli	ef Sought	
Activity status under all other applicable rules	Type of ITA required	Activity status under all other applicable rules	Type of ITA required	
Permitted	Basic	Permitted	Basic	
Controlled	Basic	Controlled	Basic	
Restricted	Full	Restricted	Residential activities in residential	
discretionary	Basic	discretionary	zones- Basic	
	_		Other activities / zones - Full	
Discretionary	Full	Discretionary	Full	
Non complying	Full	Non complying	Full	

5. SUMMARY OF PROPOSED CHANGES SOUGHT

- 5.1 For the reasons outlined above, a number of changes are recommended to the transport rules and standards in respect of the Kāinga Ora submission points relating to roads, accessways and high traffic generators. The recommendations are summarised below.
- 5.2 TRAN-R6 3 be deleted entirely or that as a minimum the threshold in TRAN-R6 3a be amended as below:
 - 3. in the circumstances specified in (a) and (b) <u>a</u>. below, a new vehicle accessway shall be designed to the standard of a new road as per Table TRAN-3 or Table TRAN-4, with the applicable standard based on the posted speed limit of the road with which the accessway will connect:
 - a. where any new vehicle accessway in Residential Zones or Rural Zones will serve six or more sites; or
 - <u>a.</u> where vehicle movements on any new accessway will exceed 100 per day.

5.3	The following changes are recommended to Table TRAN-3 Design
	Standards for New Roads (<50km/h)

Design element	Road type			
	Low Volume Local Road	Local Road Residential Zones	Local Road <u>Other</u>	
Typical design AADT			<1,500	
Maximum length (m)	150			
Maximum number of residential units served	20	200	200	
Road reserve corridor width (m) ²	16.0 - <u>13.0</u>	18.0-<u>15.0</u>	18.0	
Footpath (m)	<mark>2 <u>1</u> x 1.8</mark>	2 x 1.8	2 x 1.8	
Shared use path (m)				
Parking (m) ⁴	2.5-2.2 (within carriageway, one side only)	2.0 2.2 (within carriageway, one side each side)	2.0 (within carriageway, each side)	
Cycle lane (m) 1				
Traffic lane (m)	4.0 minimum	4.0 minimum	4.0 minimum	
Median (m)				
Minimum carriageway width (m)	6.5 <u>6.2</u>	8.0 - <u>7.0</u>	8.0	

The following changes are recommended to Table TRAN-7 Design 5.4 Standards for new vehicle accessways⁴⁸

Zone	No. Res. Units <u>/</u> Length	Min. Legal widths	Min Formed Widths	Passing Bays
Residential	1-3 <u><50m</u>	5.5 <u>4.0</u>	3.0 ⁴⁹ 4.0 ⁵⁰	<u>No</u>
	<u>1-3 >50m</u>	<u>4.5</u>	<u>4.0</u>	Yes
	4- 6 - <u>9 <50m</u>	5.5 <u>5.0</u>	4.5 <u>3.5</u>	No
	<u>4-9 >50m</u>	<u>5.0</u>	<u>4.0</u>	Yes
	> 6 - <u>10 <50m</u>	7.0 <u>5.5</u>	5.5 <u>4.5</u>	No
	<u>>10 >50m</u>	<u>6.5</u>	<u>5.5</u>	<u>N/A</u>

 ⁴⁸ It is noted that the Council may want update Table TRAN-18 for vehicle crossing widths to co-ordinate with changes to Table TRAN -7 for accessway widths.
 ⁴⁹ Submission seeks to retain as notified.
 ⁵⁰ Shows deletion of S.42A report changes.

5.5 The following changes are recommended to TRAN-R20 High traffic generators.

All Zones	Activit	y status: RDIS				
	Where	:				
	1.	any activity generates an average daily traffic volume that exceeds				
		the thresholds contained in Table TRAN-1 below except that the following shall be excluded from these calculations				
		a. the level of traffic generation existing as at the date of the				
		District Plan becoming operative;				
		b. traffic generation within the scope of an ITA approved				
		through a previous resource consent;				
	2.	for the activities in (1) above:				
		a. either a Basic ITA or Full ITA shall be required;				
		b. the type of ITA to be provided shall be determined by the				
		circumstances set out in Table TRAN-2 below; and				
		c. the ITA shall be prepared by an independent suitably qualified				
		and experienced transport engineer.				

5.6 The preferred and alternative relief changes recommended to Table

TRAN-1: High Traffic Generation T	Thresholds are set out below.
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Preferred Change	Alternative Relief Sought			
Non-residential activities in	Residential	Zones / Special Purpose Zone (Kāinga		
Residential Zones / Special	Nohoanga),	Nohoanga), Special Purpose Zone (Pines Beach and		
Purpose Zone (Kāinga	Kairaki Regeneration)			
Nohoanga), Special Purpose				
Zone (Pines Beach and				
Kairaki Regeneration)				
Average daily > 200 vmpd	Average	Residential Activities > 500vmp		
traffic > 50 hvmpd	daily traffic	Non-residential Activities > 200 vmpd		
generation	generation	All Activities > 50 hvmpd		

5.7 The preferred and alternative relief changes recommended to Table

TRAN-2: ITA Requirements are set out below.

Preferred Change		Alternative Relief Sought	
Activity status under all other applicable rules	Type of ITA required	Activity status under all other applicable rules	Type of ITA required
Permitted	Basic	Permitted	Basic
Controlled	Basic	Controlled	Basic
Restricted	Full	Restricted	Residential activities in residential
discretionary	Basic	discretionary	zones- Basic
			Other activities / zones - Full
Discretionary	Full	Discretionary	Full
Non complying	Full	Non complying	Full

Stottean

Lisa Marie Williams 7 August 2023

ATTACHMENT 1: ROAD AND ACCESSWAY THRESHOLD COMPARISONS

Reference	Limit / Threshold	Other Notes
pSDP TRAN-REQ-7 (as per officers Right of Reply ⁵¹)	10+ lots ⁵²	Note that this was subject to a number of submissions and the decision has not yet been released.
CDP	No limit or Threshold where a road is required.	Road v Accessway decided via subdivision application matters of control and discretion (see below).
Proposed Timaru District Plan TRAN -S10	10 or more properties should be vested as a road.	
NZS4404:2010	Suburban and Urban Areas "Live and Play ⁵³ " a local road is recommended for more than 20 dwelling units / ~200vpd	
NZTA Planning Policy Manual -Appendix 5B ⁵⁴	Accessways to State Highways likely to generate 100+ ecm/day or 20ecm/h should be treated as roads / intersections.	Only applies to access to a State Highway.

Table 9: Summary Comparison of Road versus Accessway Thresholds

Example Christchurch District Plan Subdivision Assessment Matters

8.8.2 Property access

a. The location, safety and efficiency of any access, including whether the location, formation and construction is suited to the development it serves, and whether any associated works or upgrades are required.

b. The provision of vehicular access to all properties, including for fire fighting purposes, unless topography of the ground prevents such access to any part of the site (including non-contiguous areas of a site).

c. In case of multiple site subdivision where parking is provided as a common facility, whether that parking area has appropriate access to a formed road.

d. The safety and efficiency of state highways, limited access roads and rail corridors.

⁵¹ See <u>https://www.selwyn.govt.nz/ data/assets/pdf_file/0008/558269/Right-of-Reply-Report-Transport-27-Oct-2021.pdf</u>

⁵² Although the recommendation was to require resource consent for 7-9 units (permitted activity for less than 6 subject to meeting the standards required for legal and formed widths). ⁵³ The equivalent of residential zones.

⁵⁴ See page 214 and the section titled "Medium to high volume accessways"

8.8.3 Roads

a. Whether the provision, location, design, safety and efficiency of any road, frontage road, corner rounding, intersections or landscaping, including the formation and construction, is suited to the development it serves.

b. Whether new roads or upgrades to existing roads are required, including in relation to any network utility, state highway or rail line.

c. Whether new roads are appropriately routed and integrate safely and efficiently with the existing road network.

d. Whether new or upgraded roads are satisfactorily designed and constructed, including providing a safe environment for road users and pedestrians, and are acceptable to the Council.

e. Whether subdivision layout and new or upgraded roads provide for public transport, cycling and walking, where appropriate, including access to reserves, facilities, commercial areas, and public transport facilities.

8.8.4 Service lanes, cycle ways and pedestrian access ways

a. Whether service lanes, cycle ways and pedestrian access ways are required or appropriate, and whether their provision, location, design, safety and efficiency, including the formation and construction, is suited to the development it serves.

b. Whether the subdivision layout and access network supports walking, cycling and public transport, including access to reserves, facilities, commercial areas, public transport facilities.

c. Whether provision of a cycle way or pedestrian access way encourages active modes of transport, including to community facilities.

d. Whether service lanes, cycle ways and pedestrian access ways are satisfactorily designed and constructed, including providing a safe environment for road users and pedestrians, and are acceptable to the Council.