

## High Trip Generating Activities

- The original submission of Waka Kotahi sought amendments be made to TRN Table 6, as it was considered that it was missing some activities that may generate high volumes of traffic. The table also does not provide a capture all for activities that aren't specifically identified.
- In review of this and with the advice of Mr Swears, we have recommended that further amendments be proposed which I consider to improve clarity to table 6.
- The amendments and the reasonings for this are described in Section 3 of Mr Swears evidence. Essentially, we consider that Table 6 should be replaced with the table proposed by Mr Swears in paragraph 33 of his evidence. This is an approach to address high trip generating activities that has been previously agreed through an environment court proceeding.
- The table does not provide for specific activities, but instead bases the level of assessment required on the traffic generation, with the use of Equivalent Car Movements as the metric, and the roading hierarchy, as discussed by Mr Swears.
- The type of assessment may result in no assessment at all, to a basic traffic assessment, then the greatest level of assessment being an Integrated Traffic Assessment.
- I consider that this approach is fairer, especially when considering the disparity in vehicle generation for different activities based on the proposed TRN Table 6 that Mr Swears identified in Paragraph 20 of his evidence. Our recommended approach ensures that all activities can be appropriately considered if they meet the thresholds within the table, which will identify where there may be potential effects and mitigation required, which will then ensure they maintain the safe and effective transport system.

## Vehicle crossings

- Waka Kotahi made a submission noting that no vehicle crossing diagrams have been incorporated into the proposed district plan. As currently proposed, this could result in new activities not being required to ensure that their access is sufficiently formed and sealed to manage safety effects on the transport system.
- I consider that this is inconsistent with the transport objective 3 and policy 2 of the proposed plan. Therefore, it should be considered in the rules and performance standards.
- The relief sought was to include the Diagram C and Diagram E standard vehicle crossings for the state highway into the district plan, with appropriate thresholds provided for each. However, it is noted that these are typically used for 70km/h or rural environments and are not necessarily used for the urban context. But I have to note that Waka Kotahi relies on Council vehicle crossing standards for the urban environment even on the state highway network. Unfortunately, there are also no vehicle crossing standards for the urban environment in the proposed plan.
- I consider that the district plan is the appropriate place to incorporate vehicle crossing standards, which can mitigate the effect prior to the activities operating by ensuring they have a sufficient vehicle crossing. Mr Swears supports the use of vehicle crossing design standards as per Paragraph 63 of his evidence.
- I have provided a table that can be incorporated in the transport performance standards, which should then be referred to in TRN-R1. This table also utilises Equivalent Car Movements, much like the high trip generating activities, and this ensures that there is a consistent approach to how car movement units are determined in the district plan. Subsequent changes may also be required in the zoning rules that refer to light and heavy vehicle movements.
- A similar approach of the use of this table was also used in, and generally agreed upon in the proposed Waimakariri District Plan.

- I still consider that there is a gap in the transport performance standards with the lack of vehicle crossing designs for the urban context. I think that this issue should be revisited to ensure that the plan gives effect to the objectives and policies, while ensuring that the safety and efficiency of the transport system is retained.
- I consider that the plan should adopt my recommendations to provide for vehicle crossing designs for the rural or 70km/h plus speed environments within the transport performance standards.

### TRN Table 3

- Waka Kotahi made a submission on TRN Table 3 by seeking amendments to the distances to be consistent with the Waka Kotahi Planning Policy Manual as this approach is generally used around the country.
- However, when preparing my evidence I was confused as to what Table 3 was trying to achieve when comparing it to Table 1. Both tables refer to access separation from intersections, with Table 1 referring to accesses onto state highways and table 3 referring to all accesses.
- I have attempted to describe my understanding of the intent of Table 3, by including Figure 1 in paragraph 7.2 of my evidence. Being that the vehicle crossing on a side road requires sufficient separation from the intersection with a main road. If this interpretation is correct, then I consider that there is benefit in including a figure to demonstrate what this standard is trying to achieve. I consider that this would also provide clarity to the difference between TRN Table 1 and TRN Table 3 when referring to separation from intersections.
- I also consider that the table should be updated in accordance with the recommendations of Mr Swears in section 5 of his evidence,

being consistent with the PPM and potential merit in taking into account zones as per paragraph 65 of Mr Swears evidence.

- If my interpretation is **not** correct, then I consider that further consideration should be given to Table 3 to ensure that it can be easily interpreted.

## ONRC v ONF

- The roading hierarchy referred to in the relief sought for High Trip Generating Activities is based on the One Network Framework. However, it is noted that the introduction of the Transport Chapter states that it uses the One Network Road Classification. Though I would like to point out that the roading hierarchy has not been identified within the district plan itself, either in the appendices or on the GIS map.
- We have sought to use the ONF for the high trip generating activities as this has now replaced the ONRC. Additionally, the ONF is now used for funding of the local road network rather than the ONRC.
- I consider that this is now the opportunity to ensure that the district plan is future proofed, by referring to the most up-to-date roading hierarchy classification system. This also ensures that any land use aligns with the roading hierarchy and associated level of funding and investment into the maintenance of these roads, which could then be subject to the high trip generating activity requirements and ensure that the appropriate level of assessment and potential mitigation is provided for.