

Before the Whangarei District Council Hearings Panel

Under the Resource Management Act 1991 (the RMA)

In the matter of a submission by the New Zealand Transport Agency
(submitter number 453) on the Whangarei District Plan

and in the matter of Plan Changes 85 A-D, 86A-B, 87, 102 and 114

Primary statement of evidence of Mark Newsome for the New Zealand Transport Agency regarding Plan Changes 85 A-D, 86A-B, 87, 102 and 114

Dated 3 July 2017

Qualifications and Experience

- 1 My full name is Mark Joseph Newsome.
- 2 I have a Master of Engineering Studies (Transportation) with Honours and a Bachelor of Engineering (Civil) from the University of Auckland.
- 3 I am a Regional Safety Engineer for the New Zealand Transport Agency (*Agency*). My area of influence is primarily within the Auckland North and Northland State highway networks. I have been with the Agency for 10 years with the last 7 years as a Safety Engineer.
- 4 In my capacity as a Regional Safety Engineer, I am required to:
 - a) Deliver the Minor Safety Programme. This is a programme of safety improvements (each costing no more than \$300,000) but overall summing to about \$4M worth of investment each year. The work involves identifying, prioritising and addressing common crash trends on the State highway network to reduce death and serious injury casualties.
 - b) Provide technical road safety advice on capital projects (those greater than \$300,000) including participation in formal road safety audits (either as an auditor or as the client making final decisions on a project). The most recent of these were in November 2016 as an auditor on the Warkworth to Wellsford project and in August 2016 as a joint client (with Auckland Transport) for the Huapai Special Housing Area Transportation Improvements.
 - c) Provide technical road safety advice to address the effects of land use developments on the State highway network.
 - d) Review and set speed limits in accordance with current legislation.

Scope of Evidence

- 5 I have been asked to review impacts of development at three sites which I am advised are to be zoned *Strategic Rural Industry Zone* under in relation to Whangarei District Councils Plan Changes 85 A-D, 86A-B, 87, 102 and 114. The three sites are:

- a. Fonterra Kauri Site
 - b. Croft Timber and Poles
 - c. Golden Bay / Portland Cement
- 6 The Fonterra and Croft sites have direct access onto State Highway 1; Golden Bay Cement has access is via Portland Road / State Highway 1 intersection. Golden Bay Cement also has an additional access (directly to Stage Highway 1 which permits a low number of vehicle movements (50 one way movements per day) at Crossing Place 37A.
- 7 My evidence will address the following in relation to the Fonterra, Croft and Golden Bay sites:
- a. Existing Crash History;
 - b. Impact of changes to traffic generation; and
 - c. Commentary on proposed changes to rules.

Matters Considered

- 8 The Agency is not opposed to development in these areas but does need to make sure that adequate access provision is made for high traffic generating activities potentially affecting the State highway corridor. In my evidence, I have assessed the Fonterra/Croft sites together given their proximity, then the Golden Bay site.

State Highway 1 - Fonterra/Croft Corridor

- 9 Following is a summary of the crashes along State Highway 1 and how they relate to each point of access. In relation to the Fonterra and Croft sites, I have assessed a corridor from 250m north of Richards Road to 250m south of Saleyards Road (South).

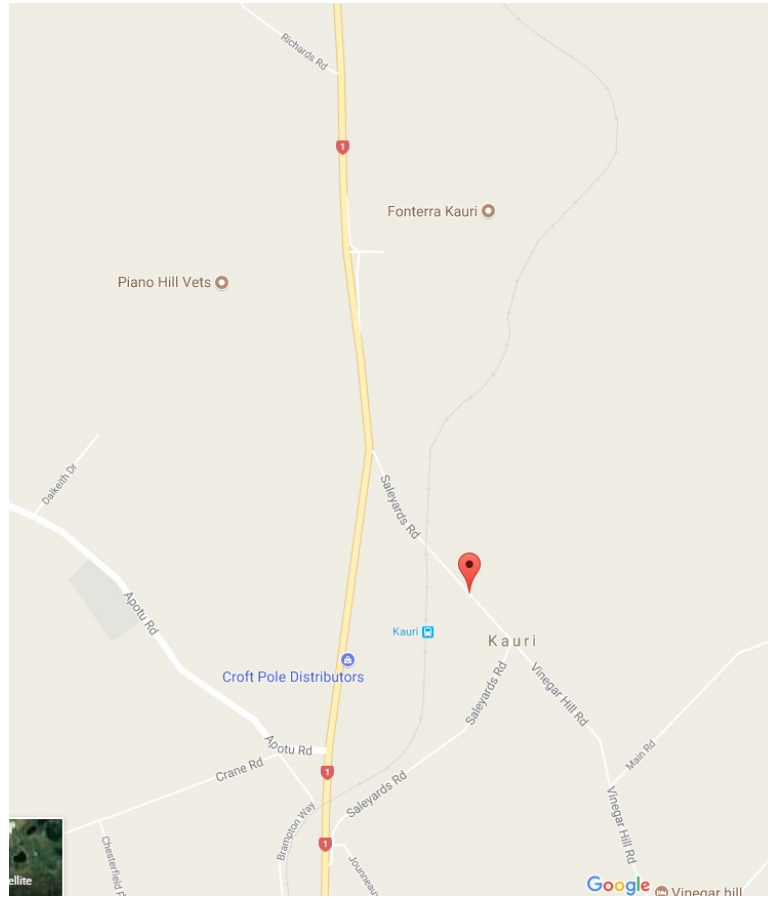


Figure 1: Assessed Corridor (Image: Google Maps)

- 10 The corridor is identified as a High Collective Risk (Crash Density) and Medium-High Personal Risk (Crash Rate) route with an average KiwiRAP Star Rating of 2.80. The KiwiRAP Star Rating system is the New Zealand equivalent of the international Road Assessment Program (iRAP). The KiwiRAP Star Rating provides an evaluation of the impact and severity of the various design elements of a given corridor would have in a crash scenario and provides a rating between 0 (poor) and 5 (excellent). In 2015, the traffic volumes on the State Highway 1 were approximately 11,000 vehicles per day.

- 11 There have been 37 crashes resulting in 4 deaths, 4 serious injuries and 17 minor injuries in the last 5 years (2012-2016). Of the 37 crashes that have occurred from 2012-2016:
 - a. 41% were Rear-End/Obstruction (compared to the national state highway average of 34%).

- b. 27% involved Road Factors (compared to the national state highway average of 13%).
- c. 15% involved a Disqualified Driver at fault or partly at fault in injury crashes (compared to the national state highway average of 1%).
- d. 38% occurred in Wet Conditions (compared to the national state highway average of 27%).

12 I have also looked at the specific access points for Fonterra and Croft sites and road intersections for Saleyards Road (North), Apotu Road and Saleyards Road (South) over the same 5 year period. These are summarised as follows:

Fonterra

- a. Six crashes within the extent of the acceleration/deceleration lanes entering and exiting this property. Three of these events were rear end crashes resulting in 1 death, 1 serious injury and 1 minor injury. The minor injury was a result of a rear-end crash entering the Fonterra site.
- b. On the 1st November 2006, there was also a fatal crash at this site where a vehicle entering the Fonterra site was impacted by southbound traffic. This event triggered the investigation and delivery of the channelised turning lanes in place today.

Saleyards Road (North)

- c. Three crashes resulting in 1 minor injury within a 50m radius of the intersection. All three crashes were intersection related.
- d. This intersection has a Low-Medium intersection risk rating. On a five point scale ranging from Low to High, the intersection risk rating is an assessment of the Death and Serious injury (DSi) casualty equivalents based on relationships between speed environment, intersection form and control type and crash movement type factors.

Croft

- e. One crash resulting in 2 serious and 2 minor injuries. This was a result of a rear-end crash entering the Croft site.

Apotu Road

- f. There have not been any crashes in the last 5 years but the opportunity is being taken to install a right turn bay at this intersection (line marking changes) while the contractor is established on site at Saleyards Road (South).
- g. Apotu Road has a Low-Medium intersection risk rating.

Saleyards Road (South)

- h. Five crashes resulting in 7 minor injuries within a 50m radius of the intersection. All five crashes were intersection related.
 - i. There is a safety improvement currently underway to 'square up' this intersection to make it easier for motorists to observe traffic coming from their right when exiting the intersection.
 - j. Saleyards Road (South) has a Low intersection risk rating.
- 13 I would expect to see the number of crashes at each of these sites rise with increasing traffic volumes. As such, we need to ensure that effective measures are taken to mitigate the effects of development.

Portland Road / State Highway 1 - Golden Bay

- 14 As noted, Golden Bay Cement has two access points being Portland Road and Crossing Place 37A.

Following is a summary of the route characteristics and crashes along State Highway 1 and how they relate to each point of access.

Portland Road.

- 15 The corridor is identified as a Medium Collective Risk (Crash Density) and Low-Medium Personal Risk (Crash Rate) route with an average KiwiRAP Star Rating of 3.08.

- 16 In 2015, the traffic volumes on the State Highway 1 were approximately 16,000 vehicles per day.
- 17 Five crashes resulting in 1 minor injury within a 50m radius of the intersection. Two of these events were intersection related. Both were non-injury.

Crossing Place 37A

- 18 The corridor is identified as a High Collective Risk (Crash Density) and Medium Personal Risk (Crash Rate) route with an average KiwiRAP Star Rating of 3.21.
- 19 In 2015, the traffic volumes on the State Highway 1 were approximately 16,000 vehicles per day.
- 20 One crash resulting in minor injury within a 50m radius of the crossing point. The crash was not related to intersection use.
- 21 While both of these intersections appear to be working well enough for the volumes they currently serve, I would expect to see the number of crashes at each of these sites rise with increasing traffic volumes. As such, we need to ensure that effective measures are taken to mitigate the effects of development.

The New Zealand Transport Agency's submissions

- 22 Ms Heppelthwaite has provided detailed evidence in regards to the Agency's submissions. I only comment on those which seek application of traffic generation controls for the three identified sites. Ms Heppelthwaite has advised that there are few (if any) controls which would limit traffic generation from these three sites.
- 23 Ms Heppelthwaite has proposed a new rule which would trigger resource consent where more than 200 vehicle movements per day occurred for an activity on the site (both 'new' uses and increases in traffic generation related to the 'current' uses).

- 24 Below is my opinion on the appropriateness of the rule for the three sites.

Fonterra/Croft

- 25 I support a traffic generation rule as a method to enable access to both sites to be considered in the event there is a substantive increase in traffic generation. This will ensure that adequate access provision is made for changes in traffic generating activities affecting the state highway corridor.
- 26 As noted above, it is my opinion that the corridor has existing safety issues and increases in traffic need to be carefully managed to ensure these are not exacerbated.
- 27 I understand that the 200 vehicle per day limit is utilised in other parts of the Plan Change and in this regard, have relied on the Councils assessment for setting this numeric trigger.

Portland Road – Golden Bay Cement

- 28 I am satisfied that Crossing Place 37A has suitable existing controls and that there is no notable crash history associated with this access.
- 29 In regards to Portland Road, I am aware that the Agency is in the processing of preparing relevant applications for improvements to State Highway 1 to address safety and efficiency issues between Loop Road and Smeatons Hill. The project area includes Portland Road. Portland Road is proposed to be improved to include a right turn bay and left out acceleration lane.
- 30 The Agency is also currently considering (medium term) alignment options for the section of State Highway 1 between Whangarei and State Highway 15 (Whangarei to Port Marsden Highway project). While I am not directly involved in this project, I understand that consultation on various options will happen later this year with construction proposed within the next 5-7 years (subject to investigation, funding approval, consent and property acquisition).

The effects on Portland Road / Golden Bay Cement access are not yet confirmed.

- 31 While these options will potentially improve (Loop Road project) or change access, I still consider the traffic generation rule proposed by Ms Heppelthwaite is required for the Golden Bay Cement site.
- 32 This is because these projects have not been finalised and their timeframe for delivery remains uncertain.

Conclusion

The section of State Highway 1 which provides access to the Fonterra and Croft sites are a High Collective Risk (Crash Density) and Medium-High Personal Risk (Crash Rate) route. This indicates existing safety concerns.

Access for any increased traffic generation from the Fonterra or Croft sites needs to be provided for in a manner which does not exacerbate existing issues.

The section of State Highway 1 which provides access to Golden Bay Cement has a Medium Collective Risk (Crash Density) and Low-Medium Personal Risk (Crash Rate) at Portland Road and a High Collective Risk and Medium Personal Risk at Crossing Place 37A.

While both of these intersections appear to be working well enough for the volumes they currently serve, I would expect to see the number of crashes at each of these sites rise with increasing traffic volumes. As such, access for any increased traffic generation from the Golden Bay Cement site needs to be provided for in a safe and efficient manner.

Mark Newsome
3 July 2017