

BEFORE THE WHANGAREI DISTRICT COUNCIL

IN THE MATTER of the Resource Management Act 1991

AND

IN THE MATTER of proposed Plan Changes 82A-B, 88, 88A-J, 109, 147 and 148 ("**Plan Changes**") to the Whangarei District Plan ("**Plan**")

**Evidence of Pam Butler, Senior RMA Advisor
Submitter: KiwiRail Holdings Ltd.**

1. INTRODUCTION

- 1.1 My name is Pam Butler and I am a Senior Resource Management Act ("**RMA**") Advisor for KiwiRail Holdings Limited ("**KiwiRail**"). I have over 30 years RMA and planning experience and I am a full member of the New Zealand Planning Institute.
- 1.2 This statement has been prepared on behalf of KiwiRail in connection with its function as a transport network utility operator in the Whangarei District and relates to the matters raised in the Plan Changes.

2. KIWI RAIL IN THE WHANGAREI DISTRICT

- 2.1 KiwiRail is the State-Owned Enterprise responsible for the management and operation of the national railway. KiwiRail's activities include managing railway infrastructure and land, as well as rail freight and passenger services within New Zealand. KiwiRail is also the Requiring Authority for land designated for "Railway Purposes" (or similar) in District Plans throughout New Zealand. As a requiring authority with a broad discretion to designate land for rail purposes, KiwiRail places great importance on the role of its designations within the operation of its core business, which is the use of rail for freight and passenger services.

2.2 KiwiRail's North Auckland Line and the Dargaville Branch Line pass through the Whangarei District, and the yet-to-be-constructed Marsden Point Line is wholly within the District boundary. These lines are designated and, through the recent Plan Change 134 process, are included in the Plan as Designations KRH1 and KRH2. The rail network through Whangarei is of regional and national importance, supporting the movement of freight through the country via rail. This critical function is also likely to become even more significant as the network is poised to take an increasing freight transport role in the region into the future.

3. KIWI RAIL'S SUBMISSION ON THE PLAN CHANGES

3.1 KiwiRail's submission raises a number of issues that arise from the drafting of the proposed Plan Changes as notified.

Points of agreement

3.2 KiwiRail accepts the reporting planner's recommendations in the section 42A report in relation to the majority of its submission points, irrespective of whether the recommendation is to accept or reject the submission point.¹ The submission points which the reporting planner has accepted are not discussed further in this evidence, other than being noted where they support related submissions. In respect of the submissions that the reporting planner has recommended be rejected, KiwiRail agrees with those recommendations for the following reasons:

Table One: recommendations for submission to be declined accepted by KiwiRail

Submission number	Provision	Reason
265.3	SD-P2 - Incompatible land uses	KiwiRail agrees to the amended wording of the policy recommended in the s42A report, and supports the inclusion of expansion to existing activities.
265.6	SD-P16 – Adverse Effects of New Regionally Significant Infrastructure	The amendments recommended in the s42A report achieve the aim of KiwiRail's submission.
265.9	SUB-O5 – Minimise Adverse Effects	KiwiRail is agrees with the amended wording of this Policy, and considers that it adequately supports the consideration of adverse effects on infrastructure as part of the environment.

¹ Submission numbers (as listed in Section 42A Report) 265.1 to 265.8, 265.15 to 265.18, 265.20, 265.21, 265.25 to 265.29, 265.32 to 265.41.

265.10	SUB-P5 – Infrastructure	KiwiRail accepts that the Council does not wish to extend this policy to include effects on planned and existing infrastructure. KiwiRail therefore agrees with the reporting planner's revised wording.
265.26	TRA-P8 – Vehicle Crossings and Access	KiwiRail accepts that the Policy provides adequate protection of sightlines and for level crossings, given that the definition of "vehicle crossings" includes level crossings.
265.32	New rules in Transport chapter permitting the development, operation, maintenance and minor upgrading of land transport networks, including the railway corridor	KiwiRail appreciates the reporting planner's agreement with the reason for KiwiRail's submission, and accepts the conclusion that the relief sought is not strictly required.

Points of disagreement

3.3 KiwiRail does not accept the section 42A report's recommendations on the balance of its submission points. These submission points can be broadly grouped into the following categories:

- (a) *Rail Noise and Vibration* – KiwiRail sought that a suite of new provisions be inserted into the Transport Chapter ("TRA") to require all new or altered buildings for noise sensitive activities in proximity to the rail corridor be appropriately mitigated in relation to rail noise and vibration.²
- (b) *Provision for Rail as Transport Infrastructure* – A number of KiwiRail's submission points sought that railways be provided for within the Plan as Transport Infrastructure and, in the same way as roads, be protected from potential adverse effects associated with the establishment of incompatible land uses in proximity to the railway corridor.³
- (c) *Safe and Efficient Operation of Rail Network* – KiwiRail sought the addition of new rules requiring all activities to be setback a minimum of 5 metres (m) from the railway corridor boundary, to ensure that all buildings can be accessed and maintained safely at all times, without the need to access the railway corridor.⁴ KiwiRail also sought a new rule requiring forestry activities to be setback from the railway corridor.⁵

² Submission numbers 265.22 to 24.

³ Submission numbers 265.9 to 14, 265.19 and 265.42.

⁴ Submission number 265.30.

⁵ Submission number 265.32

3.4 Each of these points is discussed in the following sections of my evidence.

4. RAIL NOISE AND VIBRATION

Overview of issue

- 4.1 KiwiRail is concerned to ensure that the development envisaged by various elements of the Plan Changes do not adversely affect the operation of its rail corridor, as an important physical resource and strategic transport infrastructure, by resulting in pressure to limit the activities undertaken within that corridor. A particular concern for KiwiRail is the potential for reverse sensitivity effects that the location of sensitive land uses (eg dwellings) near the rail corridor will have on KiwiRail's activities. As part of its operations, KiwiRail requires the ability to operate trains as required to meet demand. This can result in changes to the timing, frequency, or length of trains passing along the route. This can also result in upgrades to the network that can provide passing opportunities for trains, or other associated rail improvements.
- 4.2 While KiwiRail attempts to be mindful of its neighbours, and is aware of its RMA obligations in relation to environmental effects and noise, trains create noise, and in some instances vibration, and it is not possible for KiwiRail to internalise all of these effects in all cases.
- 4.3 Trains are large, travel at speed, and are, in the main, powered by diesel locomotives. As such, they create noise and vibration effects in and around the rail corridor. These effects can, in turn, lead to reverse sensitivity effects on KiwiRail if nearby sensitive uses are not appropriately managed. While the level of noise and vibration from trains does not typically change, with new developments nearby the public expectation is often that such effects are the responsibility of KiwiRail to mitigate. The new activity therefore creates an effect on an existing one, or reverse sensitivity effects.
- 4.4 As noise and vibration from train movements cannot be internalised, the rail corridor cannot be protected from such effects unless there are appropriate land use controls in place in the relevant planning documents. Without such controls, the safe and efficient operation of the rail corridor may be compromised by undue constraints on KiwiRail's activities, arising because of complaints from nearby sensitive land uses. Rail noise and vibration can create annoyance and, in some cases, property damage.
- 4.5 A recent example of the effects of vibration relates to those experienced by Heathcote residents during remedial works on the rail corridor as a result of the 2011 earthquakes. While fixing earthquake-damaged rail infrastructure on the Main South Line, KiwiRail introduced a temporary speed restriction (40km/hr) through Heathcote. This was extended for some time in recognition of the sensitivity of local residents to noise and vibration effects, before the Line returned to full operation (with a corresponding increase in the level of effect). Similar issues

arose around commercially zoned properties on Moorhouse Ave adjacent to the rail corridor. These examples demonstrate the need to ensure that new development assesses and addresses the effects of rail noise and vibration, through appropriate use of acoustic mitigation and boundary setbacks.

4.6 KiwiRail's noise complaints database for the last three years shows that there is a correlation between urban development near the rail corridor and the number of noise complaints received. Figure One shows reported incidences, including one in Whangarei in 2019 (noting that rail activity declined during the period with the cessation of log trains from Otiria). Redevelopment and intensification near the rail corridor and increasing urbanisation has the potential to result in an increase in noise complaints. Figure Two provides information about the activities generating the complaints and shows that core operations are the main source.

Figure One:

Number of Noise Issues By City in last 3 Years

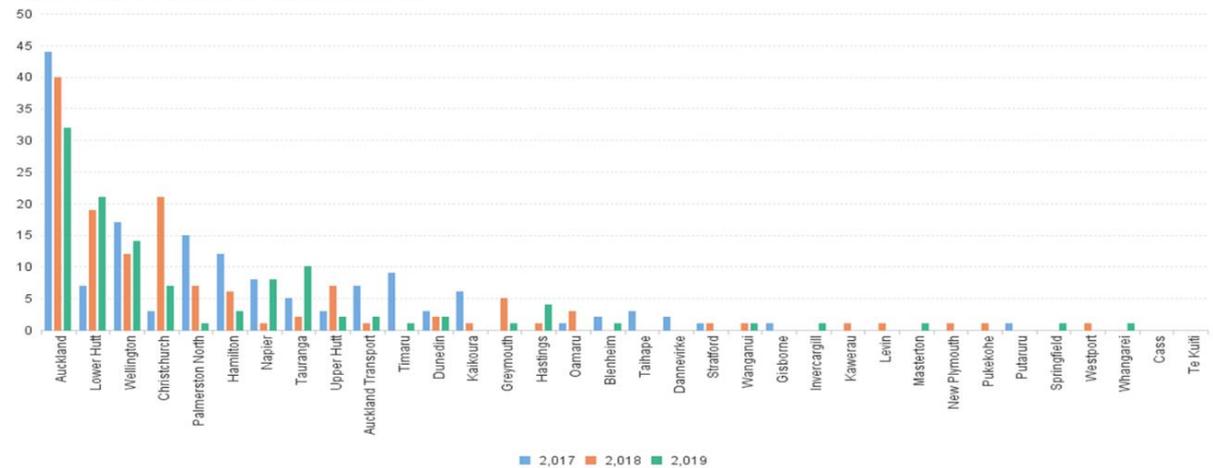
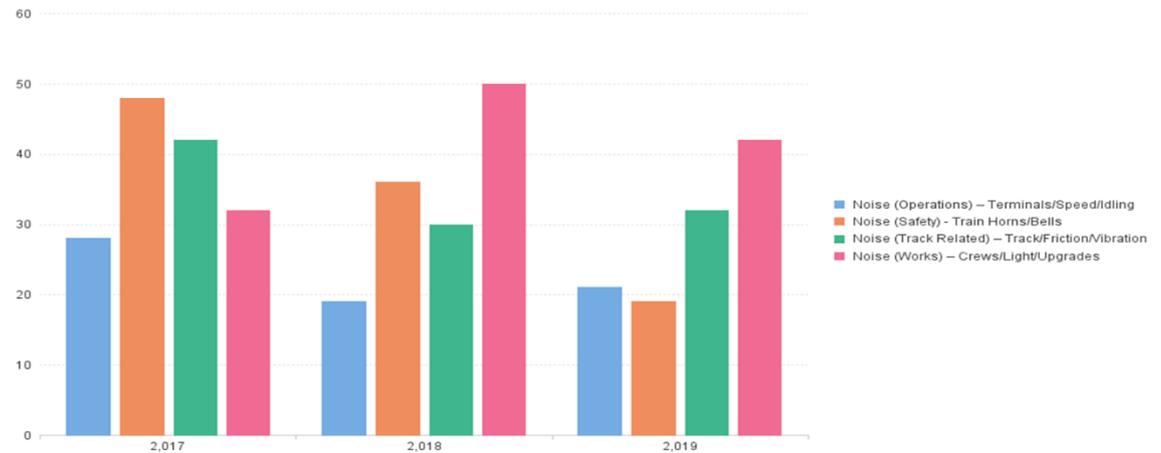


Figure Two:

Number of Noise complaints by Issue Type in last 3 Years



- 4.7 KiwiRail understands our duties under the RMA to use the best practicable option to ensure that noise and vibration from our activities does not exceed a reasonable level, and to avoid, remedy, or mitigate adverse effects on the environment. While KiwiRail continues to work with adjacent landowners to mitigate effects on them (eg through repair and maintenance of track and associated structures), it is critical that plan provisions recognise, provide for and appropriately address these issues.

Relief sought by KiwiRail

- 4.8 KiwiRail's submission seeks to introduce permitted activity performance standards for new or altered buildings containing noise sensitive activities within a 100m buffer area of the railway corridor boundary.
- 4.9 KiwiRail has been working with the New Zealand Transport Agency ("**Agency**") and other network utilities around nationally consistent planning standards. This has led to the development of a combined noise and vibration mitigation rule for activities near the road and rail network. The Agency's submission seeks the combined standard developed to that date, whereas KiwiRail's submission removes the road elements and adds a construction schedule pathway which, I understand, has been considered in draft by the national standard working group.
- 4.10 Both submissions seek the same indoor noise standard to which rooms occupied by noise sensitive activities would need to be designed to achieve reasonable mitigation of railway noise and vibration inside those buildings. If windows are required to be closed to achieve reasonable internal noise levels, then an alternative ventilation system would be required. The standard also includes provision for variable topography to be considered where this blocks line of sight or exposure.
- 4.11 As noted above, KiwiRail's submission also proposes an alternate construction schedule pathway to achieve a reasonable noise level indoors. The inclusion of a schedule outlining building techniques for compliance is intended to assist developers and the Council in achieving compliance without always requiring expert noise input into design. The rule sought by KiwiRail also provides two pathways to achieve compliance with the vibration standard which applies within 60m of any railway corridor.
- 4.12 In cases where it is not practicable to comply with these requirements or the landowner does not wish to comply with the standards, land-use consent can be sought as a restricted discretionary activity.

Response to Section 42A Report

- 4.13 The proposed noise and vibration controls are designed to avoid adverse health effects that would otherwise be caused by exposure to sound and vibration on future residents, students and other sensitive users.
- 4.14 This is reinforced in the report by Mr Styles, and he recommends that the indoor road and rail noise provisions be adopted subject to minor modifications. While the reporting planner (at paragraph 345 of the s42A Report) '*acknowledge[s] the merit in the requested provisions to manage noise effects, protect amenity values of sensitive activities adjacent to state highways and the rail network, and to manage reverse sensitivity effects on state highways and the rail network*' he does not support Mr Style's recommendations. The reasons for his position are that:
- the network operator should, at least in part, mitigate their impacts in terms of noise;
 - the lack of any cost and benefit evaluation;
 - the costs are too high; and
 - the controls could frustrate the delivery of feasible residential capacity in accordance with the National Policy Statement on Urban Development Capacity.
- 4.15 The reporting planner has reflected a view that while the noise and vibration from trains does not typically change, with new developments nearby the rail corridor it is often expected that the management of such effects is the responsibility of KiwiRail. KiwiRail expends considerable time and cost in keeping its track and infrastructure in good condition. Network OPEX is \$60m for 2019. This does not include renewals, which are considerably higher. Staff delivering on annual maintenance programmes are focussed on ensuring that the corridor and the tracks are maintained in good condition, which includes addressing railway effects on lineside neighbours (noise complaints) where feasible. Railway corridors are relatively narrow (generally 20m wide) and while internalising noise and vibration effects might be possible in some locations, this is not realistic in all cases due to physical, operational or amenity constraints.
- 4.16 KiwiRail acknowledges that developing and intensifying land near transport corridors is good planning practice, and initiatives to create sustainable and liveable urban development in accordance with national policy documents is fully supported. However, this can bring new occupants (or existing occupants) closer to existing noise and vibration effects areas. I believe that it is appropriate that the weight of responsibility to address the effects of incompatible activities locating near lawfully established infrastructure must lie with the new development, which is coming to the source and exacerbating these effects. Existing railway corridors

represent a significant social and economic investment in a region or district and are not easily relocated.

- 4.17 The proposed rule relates to new and altered buildings containing noise sensitive activities. It is not anticipated to apply retrospectively to existing unaltered buildings, nor to developments such as shops, offices and supermarkets. On reflection, and coming out of subsequent discussions between KiwiRail and the Agency, in order to ensure that the intended application of the proposed rule is clear for all plan users, I recommend the following amendment to the relief sought in KiwiRail's submission (shown in underline):

TRA-RXX

Insert New Text

At any point within 100m of a state highway carriageway or 100m from the legal boundary of the rail corridor

Permitted Activity

Where:

1A. A minor addition or alteration to an existing building containing noise sensitive activities, which is not a habitable room, or to be occupied by noise sensitive activities, is a permitted activity.

- 4.18 In my view, the above amendment appropriately clarifies that non-habitable spaces and other spaces not used for noise sensitive activities do not have to meet the proposed standards.
- 4.19 The reporting planner has taken issue with the controls because of the lack of a cost benefit analysis. A cost benefit analysis is not considered necessary, as KiwiRail's proposals are consistent with the approach taken by large infrastructure providers where their activities create noise and/or vibration effects beyond their boundary.⁶ Further, addressing noise and vibration effects through these controls is well established and has been adopted by many other councils around the country.⁷ The issue of whether it is unreasonable to provide a rule addressing the adverse effects of noise and vibration costs to achieve greater acoustic protection is also covered in the evidence of Dr Stephen Chiles.
- 4.20 The reporting planner notes that Mr Styles recommends adoption of the provision of adequate ventilation and cooling systems to enable windows to be closed. This is consistent with Dr Chiles' evidence. The inclusion of the requirement to provide ventilation systems is a necessary part of the rule as it gives the occupant a choice about whether windows are open or closed. This does not then create a serious monitoring or compliance issue (as suggested by the reporting planner) as it gives the occupant(s) full control over their internal noise environment – less sensitive occupants may be able to sleep with their windows open,

⁶ Transpower, Ports (eg Northport's Plan Change request to introduce a Port Noise Management Area), Airports.
⁷ Christchurch, Hurunui and Palmerston North.

whereas more sensitive ones may opt to keep windows closed for sleeping/recovery/treatment. The reporting planner suggests that a cost benefit analysis should be provided in relation to the provision of mechanical ventilation. For the reasons set out in Dr Chiles' evidence and at paragraph 4.18 a cost benefit analysis is not considered necessary for this provision.

- 4.21 The reporting planner notes that if the Commissioners recommend the adoption of the indoor road and rail noise rule, that the existing Building Code control (NAV.6.5) should be applied in place of the requested mechanical ventilation provisions, as this relates to mechanical ventilation. As noted in Dr Chile's evidence, and in Mr Styles report, this will not provide appropriate thermal comfort to building occupants, and is therefore not supported.
- 4.22 It is accepted that there are many contributing factors for the degree to which buildings and noise sensitive occupants experience vibration effects. KiwiRail receives a number of vibration complaints each year and it is clearly a significant adverse effect on those who experience it.
- 4.23 Mr Styles recommends that the indoor road and rail vibration provisions are not adopted, which is accepted by the reporting planner. Mr Styles considers that the vibration can largely be avoided (or significantly reduced) by regular maintenance of the track and rolling stock. I do not agree that these effects can be addressed or reduced in all cases in this way. As noted above, KiwiRail expends significant time and cost on maintaining its network, but vibration effects can still occur.
- 4.24 Mr Styles proposes a setback in rural areas to manage vibration. I do not concur that a simple setback would address the issue (although I understand it helps) – as vibration can be felt at some distance, such as in peat soil conditions (such as on parts of the Marsden Point line). With changing development patterns and densities, KiwiRail could not rely solely on a 'Rural' zone setback to address vibration as this land status is subject to change over time. This makes an activity based rule the most appropriate and effects based response. The proposed control provides two options for achieving compliance and is a practical response to this issue.
- 4.25 The reporting planner suggests in paragraph 360 of the s42A report that should the Commissioners be minded to apply the proposed rule, then it should be limited to residential activities. The current Plan definition for the activities subject to the proposed rule is:

Noise Sensitive Activities

means those activities that involve habitation of people within which concentration (of thoughts) is required and includes residential units, residential institutions, marae, hospitals, health care facilities and education facilities, excluding Airport staff and aviation training facilities or aero clubs (other than airport staff training facilities).

4.26 KiwiRail adopted the operative plan definition in its proposed rule for consistency with the Plan's policy framework and strategy. In section 5.3 of his report, Mr Styles highlights differences between the Agency, KiwiRail and the Council's definition of a noise sensitive activity. However, they are consistent in that they all apply to more than solely residential activities. Hospital wards, recovery rooms, places of worship, meeting rooms, marae buildings and classrooms all require reasonable noise environments, both day and night and are therefore appropriately included in the Rule requirements. I therefore do not support the planner's recommendations to remove these equally noise sensitive activities from the requested rule.

Summary

4.27 In my opinion, the standard put forward by KiwiRail which applies to land up to 100m from the rail corridor strikes an appropriate balance between allowing for development and protecting against effects on the health and safety of people, and wider reverse sensitivity issues.

4.28 As noted earlier in this evidence, the issue of noise from the rail corridor has been the subject of complaints around the country, including Whangarei. Further, this is an accepted effect from the vast majority of Councils where similar provisions have been sought and adopted. Recent District Plan reviews that have accepted the need for these provisions include Christchurch, Hurunui and Palmerston North. I acknowledge that in Auckland the provisions were not accepted by the Hearings Panel, but were recommended by the Council reporting planners for acceptance. This is the only instance in the last four plus years where I am aware the requested provisions have not been accepted

5. RAIL AS TRANSPORT INFRASTRUCTURE/TRANSPORT NETWORK

Relief sought by KiwiRail

5.1 KiwiRail lodged a number of submissions seeking amendments to various provisions in order to clarify that rail and rail infrastructure are provided for as Transport Infrastructure and in the Transport Chapter (TRA).⁸ There are several reasons why the inclusion of rail within the Transport Chapter is an appropriate means of achieving the objectives of the Plan Changes. Rail is clearly a transportation activity, and is recognised as such (or similar) in various other district plans throughout the country. The RMA definition of infrastructure also expressly identifies rail as a land transport structure.

5.2 Recognition of rail as a transportation activity is appropriate and necessary to ensure that KiwiRail's operations, which form an integral part of Whangarei's freight transport network, are protected from potential reverse sensitivity effects. The Plan Changes include a range of objectives, policies and rules that seek to protect transportation activities from such effects.

⁸

265.19, 265.42, 265.36.

Without the recognition of rail as a transportation activity, rail activities will not enjoy the benefits of these protections (unlike other transportation activities) and the potential for reverse sensitivity effects on the rail network will not be sufficiently avoided, remedied or mitigated. This is unreasonable and inappropriate.

Response to Section 42A report

- 5.3 The section 42A report recommends that submission 265.19, which seeks that the TRA overview include specific reference to rail, be rejected. Submission 265.42 on the definition of "Transport Infrastructure"; is recommended to be accepted in part. KiwiRail sought that a range of transport related infrastructure items be added to the proposed definition, including the following rail related items: railway tracks, bridges, tunnels, signalling, access tracks and facilities, and rail furniture ie at stations, or within the railway corridor. The reporting planner has recommended that all of the infrastructure items sought by KiwiRail be included in the definition, except those relating to rail. Submission 265.36 seeks parity with roads, so that the effects on the railway (if any) are added to the evaluation requirements for Integrated Transport Assessments (ITA) under TRA-REQ1 where larger scale developments are being assessed. There is already a requirement to consult with the Agency if the state highway network is likely to be affected, and KiwiRail's submission mirrors this requirement for rail.
- 5.4 The reporting planner considers that as the TRA Chapter does not directly manage railways it should not include any reference to rail. I consider that this ignores the fact that rail clearly forms part of the District's transport network, in terms of:
- (a) its obvious physical presence throughout the District;
 - (b) it is accepted that specific safety requirements provisions should be included in the Plan;
 - (c) the designations for railway purposes in the Plan; and
 - (d) it is consistent with the regional policy framework which seeks to recognise and protect regionally significant infrastructure, including railways.
- 5.5 The omission of rail from the transport chapter assumes that all rail related activities and operations are designated and undertaken by KiwiRail. That is not the case. KiwiRail does not, and cannot, rely on its designations to protect its activities from potential reverse sensitivity issues. KiwiRail's designations only control land use activities within the designated corridor that are for railway purposes. They cannot be relied upon to ensure that the development of sensitive activities in proximity to the railway corridor is appropriately managed. For example, there are private rail sidings that are not owned by KiwiRail, but the use and maintenance of these sidings is our responsibility as the national rail operator. Further, in the same way that the railway network is able to be designated so too is the road network. In my view, where

provisions are considered to appropriate in to recognise and provide for the ongoing use, development and maintenance of roads, rail should also receive the benefit of such rules, as an integral part of the District's transport network.

- 5.6 By recognising that rail is also a form of transportation activity and part of the transport network, the Council would not only enable KiwiRail to undertake works that are essential to the ongoing safe and efficient operation of the railway networks as permitted activities, it would also clearly signal to the rest of the community that rail is a transportation activity that is required to be considered through development proposals. While that may seem logical, if the definitions of "Transport Infrastructure" specifically includes rail, all relevant objectives, policies and rules that relate to transport infrastructure would appropriately recognise and provide for rail, rather than just roads. This would provide greater clarity and certainty for users of the Plan, and in particular would remove the need for interpretation on the part of each individual planner as to whether rail should be considered when preparing applications for consent.
- 5.7 As with roads, larger developments near railway can have adverse effects on level crossing risk levels, sightlines and road and rail safety. It is not unreasonable for the effects of development on these matters to be assessed as part of an ITA. Submission 265.35 is recommended to be accepted in part where it seeks to add a requirement that ITA identify *'The location and type of any existing level crossings in the locality'*. Given there are existing policies and rules in the Plan about level crossings and further provision will be made as a result of related KiwiRail submissions it would be inconsistent for KiwiRail not to be consulted as the Agency is where its network is affected, and that this be added to the Plan's ITA requirements⁹.
- 5.8 For the reasons above I do not support the reporting planner's recommendations on these submissions.

6. SAFE AND EFFICIENT OPERATION OF RAIL NETWORK

Setback for buildings adjacent to the railway corridor

Relief sought by KiwiRail

- 6.1 KiwiRail's submission 265.30 seeks the addition of a new rule to the TRA chapter to require a 5m setback for buildings adjacent to railway corridor boundaries (excluding private railway sidings). The setback would apply to all new buildings and additions or alterations to existing buildings. In cases where it is not practical to comply with the requirements, or the landowner does not wish to comply with the setback requirement, land-use consent can alternatively be sought as a restricted discretionary activity. KiwiRail's submission requests that this rule be

⁹ Other KiwiRail submissions on level crossings accepted or accepted in part; 265.25, 265.28, 265.39, 265.34, 265.36 and 265.37.

added to the TRA chapter, as this is the most efficient means of giving effect to this submission, but would accept, as alternate relief, that the rule could instead be included in each zone.

- 6.2 The proposed 5m setback is critical to manage the interface between operations within the railway corridor and the activities near the boundary adjoining activities. Increasing pressure on this interface will occur in the future, as services in the rail corridor increase and adjacent land use activities are intensified.
- 6.3 The Council has acknowledged that, in the Residential, Medium Density Residential and High Density Residential zones, "building setbacks are needed to allow for open space between buildings for site access, building maintenance, privacy, noise reduction and the like".¹⁰ The Plan Changes anticipate that boundary issues will arise, with separation distances and yard setbacks proposed to be included between zones and between development sites within the same zone. For example, the Medium Density Residential zones has specific setback rules for habitable and non-habitable rooms between neighbouring properties. While such controls are clearly largely designed to minimise physical and amenity effects between neighbours, it is acknowledged that increased adverse boundary effects between the same activities may potentially arise as a result of intensification.
- 6.4 In my view, this reasoning applies equally to the boundary between the rail corridor and adjoining activities. It is reasonable to anticipate that more intensive development (ie higher buildings, closer to boundaries) will also result in adverse impacts on neighbouring non-residential activities such as railways. There is arguably even greater justification for provisions protecting against such effects in the content of rail, as the nature of the rail corridor means that there is the potential for significant adverse effects in terms of health and safety, if this tension is not appropriately managed. This should have been addressed as part of the Council's section 32 analysis for the Plan Changes.
- 6.5 In my view, the balance between enabling intensification whilst avoiding reverse sensitivity effects on existing lawfully established activities has not been achieved in the zone provisions, and the setback changes sought by KiwiRail are an appropriate and effective means of achieving this balance in the Plan Changes.
- 6.6 KiwiRail needs to protect the ability of the railway corridor to operate safely now and into the future, and ensure that it can utilise the existing designated rail corridor without undue restrictions from adjacent land-uses that could generate health and safety risks from activities over which KiwiRail presently has no ability to control. Where the rail corridor adjoins a site that is owned or occupied by a third party, for instance, maintenance of that site (eg cleaning, painting, vegetation clearance) can give rise to significant safety issues for KiwiRail. From my experience with KiwiRail, trains travel at speed and are unable to stop quickly, with freight

trains often taking one kilometre to come to a complete stop. Any person or equipment, such as poles and ladders, can all potentially be hit by an oncoming train if they encroach into the rail corridor.

- 6.7 While the probability might be low, the consequence from a collision with a train is significant. Therefore, KiwiRail has a dedicated "Permit to Enter" system for all access to the rail corridor, which must be followed prior to access being granted. This can include the requirement for on-site safety personnel, or the temporary closure of the track (known as a block of line) for a set period to manage safety while activities occur. A block of line requires around six months to plan, as freight and passenger demands are required to be factored in and alternatives found. This process applies equally when KiwiRail needs to undertake work on its assets, as it does for third parties.
- 6.8 The proposed 5m setback rule (which is separate to the amendments sought by KiwiRail in relation to noise and vibration matters) are not intended to address mitigation for noise and vibration effects associated with rail activities. The setback rules are concerned with avoiding or minimising the potential adverse effects on the safety of the rail corridor (and people) that may arise from the location of any type of building (sensitive or not) adjacent to the rail corridor.
- 6.9 Reducing the need for access over or onto the rail corridor is an effective tool to successfully mitigate health and safety risks. In the instance of land adjoining the corridor, the most efficient and effective means of ensuring that mitigation is through the location of structures being setback from the boundary of the rail corridor. Designing in a physical setback reduces the adjoining landowners' likelihood of innocently accessing the rail corridor, mitigates against future behaviour/activities and reduces the risk of impact by train or the need to follow the permit to enter process. There are many activities that may not otherwise be seen as creating safety risk, such as water blasting and using equipment to maintain buildings, but do so by bringing people into contact with lines and/or trains, which clearly pose a significant risk from a health and safety perspective.
- 6.10 The amendments sought by KiwiRail are therefore necessary to ensure that the risk of incidents occurring as a result of encroachment into the rail corridor is appropriately managed and avoided throughout the Whangarei District. The proposed setback rule is also not unduly onerous on landowners seeking to develop their land, as it does not prevent the establishment of new buildings or activities within 5m of the railway boundary altogether. Resource consent can be sought for such activities as a restricted discretionary activity.
- 6.11 In addition to the above relief, KiwiRail also sought amendments to the rules proposed for various zones requiring buildings to be set back from road boundaries (at various distances,

depending on the zone)¹¹ to require the same setbacks from any railway boundary.¹² KiwiRail sought these changes as part of its broader objective to ensure that rail is provided for in the Plan Changes in the same ways as roads (ie as Transport Infrastructure). However, these setback distances were developed for roads only and do not account for the safety concerns that are unique to the railway corridor. As such, I consider that the addition of a district-wide 5 metre setback from the railway corridor boundary is a more appropriate control, as this has been developed by KiwiRail specifically with rail considerations in mind. In my view, a 5 metre setback from the rail corridor is an appropriate distance to ensure the safety of people in and near the rail corridor as it assists in reducing the risk of unsafe interactions with rail infrastructure.

Response to Section 42A Report

- 6.12 KiwiRail's submissions relating to setbacks are considered in two separate s42 reports. Paragraph 143 of Part 1 – Urban and Services Plan Changes: Overview, General Topics and Definitions s42A general overview report does not provide a rationale to reject the yard setbacks requested in the KiwiRail's zone based setback submissions 9-14 or 11-16. The report acknowledges the setback from the railway corridor in the Plan's rural zones but goes on to note *"that it is unlikely that the railway corridor will create any further adverse nor reverse sensitivity effects on the urban zones"*.
- 6.13 As parts of the railway are already located (and have been long established) in these zones, I agree that the railway will not create new adverse reverse sensitivity effects within these zones. KiwiRail's concern is that new and more intensive development on sites that are adjacent to the railway corridor boundary will result in adverse safety and reverse sensitivity effects that could lead to undue constraints on the safe and efficient operation of the railway. In my opinion, intensification of existing urban areas is highly likely to create reverse sensitivity effects near the railway corridor, as illustrated by Figures One and Two above.
- 6.14 The s 42A report (paragraph 143) states that, for the Residential, Medium Density Residential and High Density Residential zones, *"the notified side and rear boundary setbacks will manage any adverse or reverse sensitivity effects"*. However, minor buildings are permitted activities in these zones and exempted from the 7.5m to 10m setback requirement. This negates any safety margin for such activities and removes the ability to address adverse effects on neighbouring activities (such as the rail corridor). The railway corridor is not publicly accessible and access is highly restricted. Boundary development raises safety and amenity issues arising from the use and long-term maintenance of permitted development where it is close to, or on a railway corridor boundary.

¹¹ Light Industrial, Heavy Industrial, Low Density Residential, Medium Density Residential, High Density Residential, and Residential zones.

¹² Submissions 265.9 to 265.14.

- 6.15 In my view, these issues would be most appropriately addressed by the addition of targeted 5m setback from the boundary of the railway corridor to all zones in the Plan, as sought in KiwiRail's submission 265.31.

Forestry setback

Relief sought by KiwiRail

- 6.16 KiwiRail sought the addition of a new rule in the Transport chapter to require any forestry replanting that occurs within 5 years of harvesting plantation forestry to setback 10 metres from the railway corridor.¹³ Regulation 14 of the Resource Management (National Environmental Standards for Plantation Forestry) Regulations 2017 ("**NES Forestry**") provides for the same setback distance for afforestation from any adjoining property (ie including the railway corridor).
- 6.17 Afforestation refers to planting and growing plantation forestry trees on land where there is no plantation forestry, and where plantation forestry harvesting has not occurred within the last five years. Any replanting that occurs on land where plantation forestry harvesting has occurred within the last five years will therefore not be caught by the NES Forestry's setback requirement. In the absence of a relevant rule in the Plan Changes, if replanting of a harvested forest occurs within 5 years, trees may be located within 10m of the railway corridor as a permitted activity.
- 6.18 When planted near to the rail corridor, trees can intrude into sight lines which raises particular safety issues at level crossings and around curves. Such plantings often also drop branches or leaves onto the rail corridor, increasing the risk of derailment. Trains cannot stop in a hurry, nor are they able to drive over such impediments. Roots from trees can also undermine the safety of the rail corridor through the creation of mud spots. Mud spots occur where ballast under the rails is removed. When a train goes over a mud spot, the track bounces, creating a risk that either the track breaks or the train derails. Further, replanting trees often get closer and closer to the boundary and can end up encroaching into rail land.
- 6.19 Given these safety concerns, in my view, it is appropriate to include a rule in the Transport chapter requiring all forestry replanting to be setback a minimum of 10m from the railway corridor.

Response to Section 42A Report

- 6.20 The section 42A report raises an issue around the clarity of the setback rule requested by KiwiRail. To remedy this uncertainty, I propose that the rule be amended as follows (amendments shown in underline):

1. **Permitted Activity**

Forestry replanting within 5 years from harvesting ~~within~~ that is set back at least 10 metres from of a railway corridor boundary

Matters of discretion are restricted to:

1. *The extent to which the safety and efficiency of railway and road operations will be adversely affected.*
2. *The outcome of any consultation with KiwiRail.*
3. *Any characteristics of the proposed use that will make compliance unnecessary.*

Where this activity complies with the ~~following~~ above rule requirements: Nil

Notification:

Application for resource consent under this rule will be decided without public notification. KiwiRail is likely to be the only affected person determined in accordance with section 95B of the Resource Management Act 1991.

7. The rail corridor is adjacent to commercial forestry around many parts of the country, and increasingly issues are arising with trees being planted and replanted in proximity to the rail corridor boundary. As acknowledged by the reporting planner in the s42A report, the setback sought by KiwiRail is supported through existing objectives and policies which acknowledge that regionally significant infrastructure should be protected from adverse effects from other activities and that conflict between developments and the land transport network must be mitigated. If KiwiRail's submissions relating to the treatment of rail as Transport Infrastructure are accepted (as I consider it should be) then the proposed forestry setback rule is supported by objectives and policies in the Transport chapter that seek to provide and maintain a safe and efficient transport network, including through the control of land use and development.¹⁴

8. **RELEVANT NATIONAL AND REGIONAL PLANNING PROVISIONS**

Northland Regional Policy Statement ("NRPS")

- 8.1 There is a statutory obligation for district plan changes to give effect to the relevant regional policy statement. As such, it is necessary to consider the provisions of the Northland RPS.¹⁵
- 8.2 The NRPS seeks to enable the integrated management of the Region's natural and physical resources. The NRPS acknowledges that supporting economic potential and wellbeing is limited where "subdivision, use and development, particularly residential development, can compromise regionally significant infrastructure or where such infrastructure is not available

¹⁴ See for example Objectives TRA-O1 and TRA-O2.

¹⁵ I have reviewed the Northland RPS (May 2016, updated May 2018).

or sufficient to support development and community needs".¹⁶ This issue is addressed by the following key objectives:

- (a) Objective 3.6 "Economic activities – reverse sensitivity and sterilisation", which provides support for measures which work to protect the existing and planned regionally significant infrastructure from the adverse effects of new subdivision, use and development and enable its continued operation. KiwiRail's submissions address the mitigation of these potential reverse sensitivity effects where appropriate and practicable. This issue is well recognised in the NRPS and, as can be seen in the next section, is also anticipated by the Council. This is further reflected in the NRPS Policy 5.1.3 "Avoiding the adverse effects of new use(s) and development" when determining the location and nature of urban form. I believe that the mitigation of reverse sensitivity effects is an appropriate response to support the continued operation of the railway network.
- (b) Objective 3.7 addresses the need to "recognise and promote the benefits of regionally significant infrastructure (a physical resource), which through its use of natural and physical resources can significantly enhance Northland's economic, cultural, environmental and social wellbeing". Regionally significant infrastructure is defined as including (f) railway lines and associated railway facilities under the heading "Transport" in Appendix 3. NRPS Policy 5.3.1 lends further support to the recognition of rail as "regionally significant transport infrastructure", with its related economic and community benefits and for its contribution to social wellbeing. Objective 3.7 acknowledges the place and function of rail within the Region as an integral part of the Region's transport infrastructure and therefore, in my view, requires that a similar approach be adopted in the District Plan.
- (c) Objective 3.8 "Efficient and effective infrastructure" acknowledges that functionality and resilience of regionally significant infrastructure such as railways should be supported so that it can meet future needs, be efficient and adaptable.

8.3 The above objectives and policies recognise the potential for adverse effects on the railway network to arise from inappropriate subdivision, use and development and provide clear support for the inclusion of measures in the Plan Changes to appropriately manage the interface between regionally significant transport networks and urban form.

Plan objectives and policies

8.4 In addition to the relevant provisions of the NRPS, the following objectives and policies of the Plan are relevant to KiwiRail's submission.¹⁷

¹⁶ 2.3 Economic potential and social wellbeing

¹⁷ KiwiRail's submission seeks clarification that rail and rail infrastructure were provided for in the Transport Chapter, in which case there are a range of additional relevant objectives and policies.

- 8.5 Railways are included in the definition of a "Network Utility Operator" and therefore are afforded protection from the adverse effects of development under Objective 23.3.3, which seeks "*The protection of network utility operations from the adverse effects of adjacent land use and development*". This directly reflects the NRPS strategy.
- 8.6 The Built Form and Development Chapter contains objectives and policies which would apply to equally to both road and rail transport, and include two particularly relevant objectives:
- 6.3.8 *Maintain and enhance accessibility for communities and integrate land use and transport planning*; and
 - 6.3.12 *Avoid conflict between incompatible land use activities as a result of subdivision and urban development*.
- 8.7 These objectives are implemented through various policies, including Policy 6.4.11, which promotes "*effective and efficient transport systems*". Given KiwiRail's position that rail is appropriately considered as Transport Infrastructure, these objectives reinforce the need to actively manage the interface between the railway corridor and land use to avoid potential conflict.
- 8.8 Policy 6.4.8 "Reverse Sensitivity and Incompatible Land Use" further supports the preceding objectives by seeking "to ensure that land use activities, subdivision and development are designed and located so as to avoid or mitigate conflicts between incompatible land uses". The relevant arm of this policy seeks to "facilitate separation of incompatible land uses through location of District Plan Environments and Resource Areas, and specific requirements for land use activities". In my view, Policy 6.4.8 clearly anticipates the need to address the noise and vibration and associated reverse sensitivity effects. The Plan already achieves this for activities such as frost fans or Airport operations. The policy also supports the use of various management approaches to avoid or minimise potential adverse effects, such as the setbacks sought by KiwiRail to address lineside neighbour safety and railway operations.

9. RMA – PART 2

- 9.1 Although I do not consider that reference to Part 2 is required in assessing the appropriateness of the Plan Changes, for completeness, I consider that without the amendments sought by KiwiRail the recommendations in the section 42A report will result in an outcome that is not consistent with the sustainable management purpose of the RMA.

10. SUMMARY

- 10.1 I support the section 42A report recommendations in relation to each of the KiwiRail submission points listed at paragraph 3.2 above.

10.2 In relation to the submission points where the s 42A report recommendations are not accepted by KiwiRail, I request that the provisions of the Plan be amended to:

- (a) insert the new provisions to manage the noise and vibration effects associated with the use of the railway corridor;
- (b) amend the provisions of the Plan Changes to appropriately provide for rail as transportation infrastructure;
- (c) insert the new rules and policies to provide for appropriate management of the railway corridor.

Pam Butler

Senior RMA Advisor

7 November 2019