

**IN THE ENVIRONMENT COURT OF NEW ZEALAND
WELLINGTON REGISTRY**

**I MUA I TE KŌTI TAIAO O AOTEAROA
TE WHANGANUI-Ā-TARA ROHE**

ENV-2020-WLG-00014

UNDER the Resource Management Act 1991

IN THE MATTER OF a notice of motion under section 87G of the Act seeking the grant of resource consents to Waka Kotahi NZ Transport Agency for Te Ahu a Turanga: Manawatū-Tararua Highway

**STATEMENT OF EVIDENCE OF DAVID JAMES DUNLOP ON BEHALF OF
WAKA KOTAHĪ NZ TRANSPORT AGENCY**

TRAFFIC AND TRANSPORT

12 June 2020

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INTRODUCTION

1. My full name is **David James Dunlop**.
2. I am a Principal Transport Planner and Head of Transport Planning and Advisory at WSP in Wellington.
3. My evidence is given in respect of the application for resource consents for Te Ahu a Turanga: Manawatū Tararua Highway Project ("**the Project**") lodged by Waka Kotahi NZ Transport Agency ("**Transport Agency**") with Manawatū-Whanganui Regional Council ("**Horizons**") on 11 March 2020.

Qualifications and experience

4. I have the following qualifications and experience relevant to this evidence:
 - (a) MSc in Planning Studies (focusing on Transportation), Oxford Brookes University in the United Kingdom (1996/97); and
 - (b) Bachelor of Resource & Environmental Planning, Massey University in New Zealand (1992/95).
5. I have 23 years of experience in the planning, assessment and design of transportation projects in New Zealand and the United Kingdom, working for a wide range of central government organisations, local and regional authorities, and private developers, both as an employee and a consultant.
6. I have provided advice on transportation matters to the Transport Agency, and a number of local authorities and private developers, in respect of various proposed developments. I have provided expert transportation evidence for the Transport Agency to the Boards of Inquiry for the Peka Peka to Ōtaki Expressway and Basin Reserve Bridge Projects, and have provided evidence in Environment Court proceedings, including for the Kāpiti Coast District Council in relation to the Paraparaumu Airport Plan Change 82.
7. I have also been involved in a number of significant projects within the Wellington and Manawatū-Whanganui Regions, including:
 - (a) Ngauranga to Petone Cycleway Strategic Transport Assessment, 2019-2020;
 - (b) Manawatū Gorge Detailed Business Case Safety Audit and Project Economic Review, 2016-2018;
 - (c) Wellington Resilience Programme Business Case, 2017-2018;
 - (d) Wellington Network Outcomes Contract, 2014-2018;

- (e) Wellington Northern Corridor Roads of National Significance Business Case, 2009 and 2013 update;
 - (f) Peka Peka to Ōtaki Scheme Assessment, Transport Assessment and evidence for the Board of Inquiry;
 - (g) Transmission Gully Scheme Assessment, Economic Evaluation and Transport Assessment, 2008-2012;
 - (h) Basin Reserve Transport Improvements Scheme Assessment, Transport Assessment and evidence for the Board of Inquiry, 2008-2013;
 - (i) Wellington Transport Strategy Model and Wellington Public Transport Model 2011 update and model build, 2011-2012; and
 - (j) Ashmore Trust Roberts Line / SH3 Plan Change and Residential Development, 2007-2009.
8. I am a member of a number of relevant associations including:
- (a) Chartered Member of the Chartered Institute of Logistics and Transport; and
 - (b) Affiliate Member of the Engineering NZ, Transportation Group.

Code of conduct

9. I confirm that I have read the Code of Conduct for expert witnesses contained in the Environment Court Practice Note 2014. My evidence has been prepared in compliance with that Code. In particular, unless I state otherwise, this evidence is within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.
10. I note that my employer, WSP, is a participant in the Te Ahu a Turanga Alliance (“**Alliance**”). I have explained to WSP and the Alliance my obligations under the Code in giving this evidence, including the overriding duty to assist the Court impartially on matters within my area of expertise.

Background and role

11. I was involved in the preparation and hearing of the Notices of Requirement for designations ("**NoRs**") for the Project, which were lodged on 2 November 2018. I prepared the following reports and evidence in support of the NoRs:
 - (a) Technical Assessment #1: Transport as part of Volume 3 of the Assessment of Environmental Effects ("**AEE**"), which accompanied the NoRs ("**NoR Technical Assessment**");¹
 - (b) The following evidence for the council-level hearing in respect of the NoRs:
 - (i) Statement of evidence dated 8 March 2019;²
 - (ii) Joint Witness Statement of Transport and Social Experts dated 21 March 2019;³
 - (iii) Addendum evidence dated 25 March 2019;⁴ and
12. As part of the Environment Court appeals process in respect of the NoRs, I prepared a further addendum to my NoR Technical Assessment dated 21 August 2019,⁵ which assessed the proposed modification of one of the NoRs to provide for a more northerly alignment of the Project (referred to as the "**Northern Alignment**").
13. The requirements for the Project, including the proposed modification to provide for the Northern Alignment and the Designation Conditions, were confirmed by the Environment Court by way of consent order on 27 March 2020.
14. I have provided the Alliance with transportation advice on aspects of proposed 'enabling works' that are to be the subject of separate applications for resource consent.
15. No specific technical assessment addressing traffic and transport effects was included in the suite of documents lodged with the current application for resource consents, although a summary of the traffic and transport elements and benefits of the Project is contained in the AEE.⁶ That said, I am familiar

¹ Available here: <https://www.nzta.govt.nz/assets/projects/sh3-manawatu/NZTA-NOR-Volume-3.1-Transport.pdf>]

² <https://www.pncc.govt.nz/media/3131517/6-evidence-of-david-dunlop-transport.pdf>.

³ https://www.pncc.govt.nz/media/3131609/58873334_joint-witness-statement-transport-and-social-21-march-v1.pdf. This was produced following conferencing between experts including, the transport experts being myself and Ms Harriet Fraser, who was the transport expert advising the territorial authorities in their reporting role.

⁴ <https://www.pncc.govt.nz/media/3131635/addendum-transport-attachment-revised-travel-times-david-dunlop-25-3-19.pdf>.

⁵ That was in turn attached to the affirmation of Lonnie Dalzell dated 16 October 2019.

⁶ Refer to sections 2.2.3 and 6.2 of the AEE.

with the now-proposed design of the Project, and the application for resource consents generally.

Purpose and scope of the evidence

16. The purpose of my evidence is to:
 - (a) provide a description of the Project's key elements from a transportation perspective;
 - (b) provide a strategic overview of the Project from a transport perspective;
 - (c) describe the existing traffic and transport environment, including issues which the Project is intended to address;
 - (d) provide an assessment of the transport benefits of the Project as it now stands;
 - (e) note briefly how construction traffic created by the Project will be managed (which is an effect addressed by the Designation Conditions confirmed by the Court);
 - (f) respond to relevant issues raised by submitters; and
 - (g) comment on the section 87F reports prepared for Horizons.
17. Where appropriate, I refer in my evidence below to the NoR Technical Assessment and evidence that I prepared for the NoRs, as referred to above. I do not repeat the detailed analysis contained in that previous assessment and evidence here, but rather summarise the key findings as well as specifically noting where my assessment has been updated in light of the more detailed design that is now proposed and/or updated information.

EXECUTIVE SUMMARY

18. The Project involves the construction of approximately 11.5km of new state highway connecting Ashhurst and Woodville via a route over the Ruahine Ranges, to replace the indefinitely closed section of State Highway 3 ("**SH3**") through the Manawatū Gorge. The highway will comprise a median separated carriageway with two lanes in each direction (one lane plus a crawler lane) over the majority of the route. The new state highway is expected to accommodate approximately 9,700 vehicles per day from its anticipated opening date in 2025.
19. Active transport modes will be provided for, including through the provision of a separated shared use (walking and cycling) path connecting Ashhurst and Woodville.

20. The Project is a key transport priority, and the National Land Transport Programme specifically highlights the Project as being of the highest priority both regionally and nationally. The closed Gorge route is the only strategic east-west link between State Highway 1 ("SH1") and State Highway 2 ("SH2") between Wellington and Napier-Taupo.
21. Saddle Road and Pahiatua Track have been the primary east-west 'alternatives' since the closure of the Gorge route in 2017. Traffic volumes have not diminished, and there are fundamental route and operational issues associated with both the Saddle Road and the Pahiatua Track alternatives which impact on safety and efficiency of vehicle movements (particularly trucks). There has been a significant increase in crash rate and severity since the closure of the Gorge route, and travel times have increased.
22. The Project will address these issues, and provide significant transport benefits, including:
 - (a) travel time savings, primarily as a result of the improvements in alignment and access efficiency attributed to the Project;
 - (b) redistribution of traffic demand from the existing routes, providing a better environment for residents, pedestrians and cyclists on the local road network (especially Ashhurst);
 - (c) a high-quality and resilient alternative route to the existing non-state highway routes (those other routes will remain available, creating an additional overall resilience benefit);
 - (d) safety benefits both in terms of significantly reduced demand and therefore crash risk for Saddle Road and Pahiatua Track, as well as the Project route itself being much safer than those alternatives (with an indicative KiwiRAP star rating between 4.1 – 4.5);
 - (e) the provision of excellent facilities for pedestrians and cyclists, including but not limited to the main separated shared used path and 1.5m wide shoulders on the highway itself; and
 - (f) a much improved route for potential future public transport links.
23. Construction traffic effects were considered in detail through the NoR process, and will be appropriately addressed through the Construction Traffic Management Plan ("CTMP") that will be prepared in accordance with the Designation Conditions.

PROJECT DESCRIPTION

24. The Project involves the construction of approximately 11.5km of new state highway connecting Ashhurst and Woodville via a route over the Ruahine Ranges which is to the north of the Manawatū Gorge and south of Saddle Road. The purpose of the Project is to replace the indefinitely closed section of SH3 through the Manawatū Gorge. **Figure 1** shows the location of the Project (in blue) and the indefinitely closed Gorge route (in black).
25. The Project comprises a median separated carriageway with two lanes in each direction (one lane plus a crawler lane) over the majority of the route and will connect with State Highway 57 ("**SH57**") near Ashhurst and SH3 near Woodville via two single-lane, four arm⁷ roundabouts (the "**Western Roundabout**" and "**Eastern Roundabout**" respectively).
26. The Project will provide 3.5m wide traffic lanes and 1.5m wide outside shoulders, and the following key features:
 - (a) A 3m wide central median and wire rope barrier provided from the Western Roundabout to the Eastern Roundabout;
 - (b) Three four-lane bridges and three box culvert underpasses; and
 - (c) Safe stopping areas along the alignment leading to viewing and resting areas.
27. The Project provides for active modes of transport in several ways. In particular, the confirmed Designation Conditions require that a shared use path connecting Ashhurst and Woodville (and the extension of the existing walkway in Woodville) be developed as part of the Project.⁸ As described further below, the Project will provide other pedestrian and cycling facilities in the vicinity of the Project.
28. Before it was closed, the Manawatū Gorge route accommodated 7,620 vehicles per day, of which 11.3% were heavy commercial vehicles ("**HCV**") (based on 2016 data). The new state highway delivered by the Project is

⁷ I note from the evidence of **Mr Tim Watterson** that the design of the Eastern Roundabout has been amended following the lodgement of the application for resource consents, such that a four-lane rather than five-lane roundabout is now proposed. This amendment does not impact my assessment of the transport and traffic effects of the Project.

⁸ This aspect of the Project was not covered in my NoR Technical Assessment because it was agreed to by the Transport Agency during the hearing on the NoRs.

expected to accommodate approximately 9,700 vehicles per day from its anticipated opening date in 2025.⁹

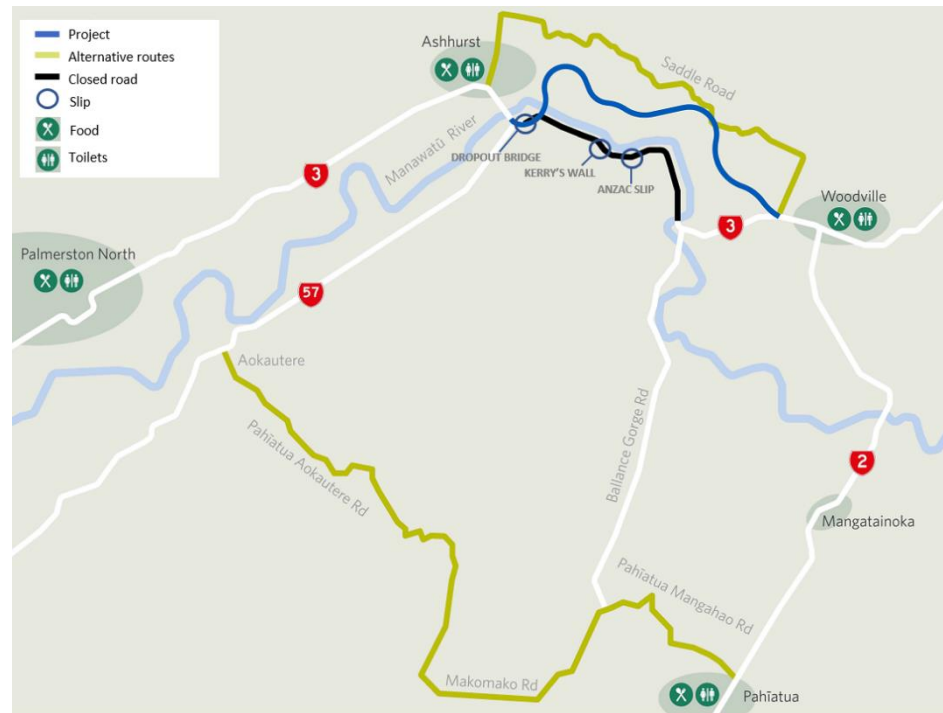


Figure 1: Te Ahu a Turanga Project Location and Alternative Routes¹⁰

29. The Project's objectives are to reconnect the currently closed Manawatu Gorge SH3 with:
- (a) a more resilient connection;
 - (b) a safer connection than the Saddle Road and Pahiatua Track; and
 - (c) a more efficient connection than the Saddle Road and Pahiatua Track.

STRATEGIC CONTEXT

30. The following national statutory and non-statutory documents apply to this Project:
- (a) Resource Management Act 1991 ("**RMA**");
 - (b) Land Transport Management Act 2003 ("**LTMA**");
 - (c) Government Policy Statement on Land Transport Funding, 2018/19-2027/28 ("**GPS**")¹¹; and

⁹ Te Ahu a Turanga: Traffic Assumptions Memo, WSP Opus, August 2018, which was appended to my technical assessment at the NoR phase. I note that, as a result of the nation-wide lockdown response to Covid-19, traffic demands in the region changed significantly. I do not expect this to impact on the number of vehicles expected to use the Project at its opening date. This evidence and prior work was based on historic data and projected trends, which provide the best prediction for the future at this time.

¹⁰ Note that the Project alignment shown in the figure pre-dates the 'Northern Alignment' change.

¹¹ The Ministry of Transport has released the draft Government Policy Statement on land transport 2021/22–2030/31 (the draft GPS 2021) for public feedback however this has yet to be finalised.

- (d) National Land Transport Programme 2018-2021 ("**NLTP**").
31. The following regional and district level statutory and non-statutory documents apply to this Project:
- (a) Regional Land Transport Plan, Horizons Regional Council, 2015-2025 (2018 Review) ("**RLTP**");
 - (b) Regional Public Transport Plan, Horizons Regional Council, 2015-2025 ("**RPTP**"); and
 - (c) Relevant district plans, including strategic transport plan and active and public transport plan, prepared by the following local councils:
 - (i) Palmerston North City Council ("**PNCC**");
 - (ii) Manawatū District Council ("**MDC**"); and
 - (iii) Tararua District Council ("**TDC**").
32. I consider that the Project is well aligned with the GPS and key strategic priorities of safety and access, particularly the access objectives of increased access for economic opportunities and resilience.
33. The NLTP was released in August 2018. The NLTP specifically highlights this Project as being of the highest priority both regionally and nationally. This includes a funding allocation of \$122m for the 2018-21 period.
34. An alternative to the Manawatū Gorge route is the number one priority activity in the RLTP 2015-2025.
35. The Project is also well aligned, from a transport perspective, with all other relevant Regional and District Plans. During the NoR process a number of transport considerations were worked through, and have been provided for in the Designation Conditions, such as access requirements to and from Saddle Road for construction and associated management of effects during this phase of the Project.
36. Overall, for reasons I outline below, I consider the Project has strong alignment with the strategic transport outcomes sought in these documents at a Regional and National level.

TRAFFIC AND TRANSPORT ENVIRONMENT

37. The strategic state highway road network in the region is displayed in **Figure 2**. The SH3 connection (old Manawatū Gorge) is the only strategic east-west link between the main north-south National/Regional state highway links

(SH1 and SH2) over the length between Wellington (SH58) and Napier-Taupo (SH5).

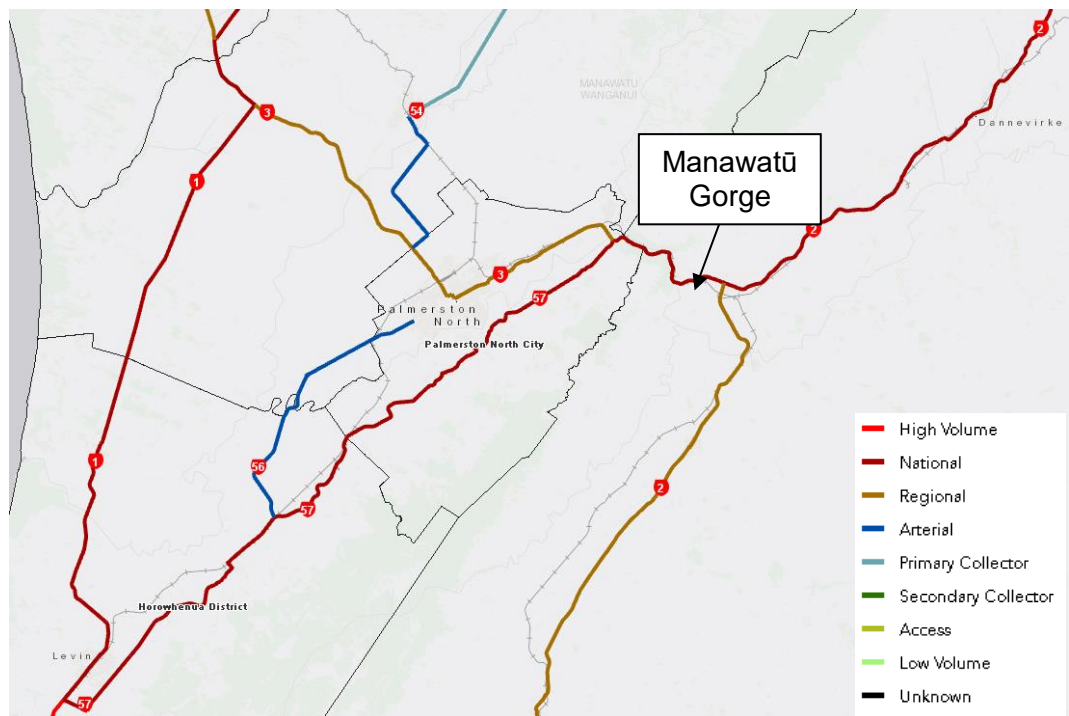


Figure 2: Transport Network - Strategic Context¹²

38. SH57 provides a 'National' (in terms of the relevant classification system) state highway connection between SH1 south of Levin and SH3 south of Ashhurst.
39. **Figure 3** below shows the road network in the region. There are three east-west connections (including the closed Manawatū Gorge (SH3)). The other two are Saddle Road to the north ('Arterial') and the Pahiatua Track to the south ('Primary Collector'). These are described in more detail below.
40. No regional public transport services are provided on either of the current east-west connections. Nation-wide bus provider Intercity¹³ operates bus services between the Hawkes Bay and Palmerston North/Wellington, which currently use Saddle Road.
41. The Palmerston North – Gisborne Line railway runs through the Manawatū Gorge and connects Palmerston North with Napier with a station/sidings in Woodville (the railway line provides freight services only).

¹² <https://nzta.maps.arcgis.com>, ONRC.

¹³ <https://www.intercity.co.nz/>.

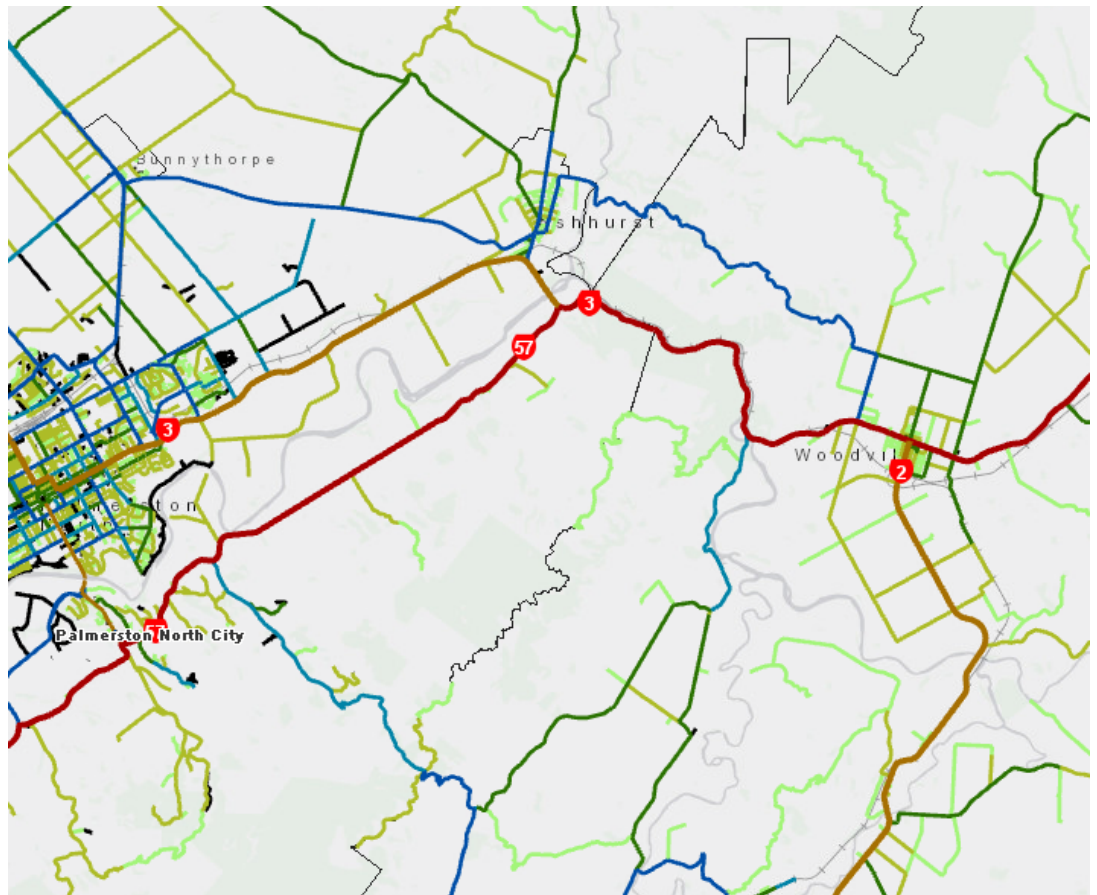


Figure 3: Transport Network - Regional Context¹⁴

Saddle Road and Pahiatua Track

42. The two remaining alternative routes - Saddle Road and the Pahiatua Track, have been the primary 'alternatives' to the SH3 route since the closure of the Gorge route (refer to **Figure 1**).
43. The closure of the Gorge route has not resulted in lower traffic volumes traversing the Ranges, illustrating the significance of this connection between east and west for the local communities and the Region as a whole. **Figure 4** shows the Transport Agency's data on the redistribution of traffic volumes soon after the closure, and the change in experience for road users.
44. Travel times are longer since the closure of the Gorge. In general, the travel time between east and west through Saddle Road is 21.6 minutes for light vehicles, which is over 8 minutes slower than the travel time was on the closed Manawatū Gorge route.

¹⁴ <https://nzta.maps.arcgis.com>, ONRC.

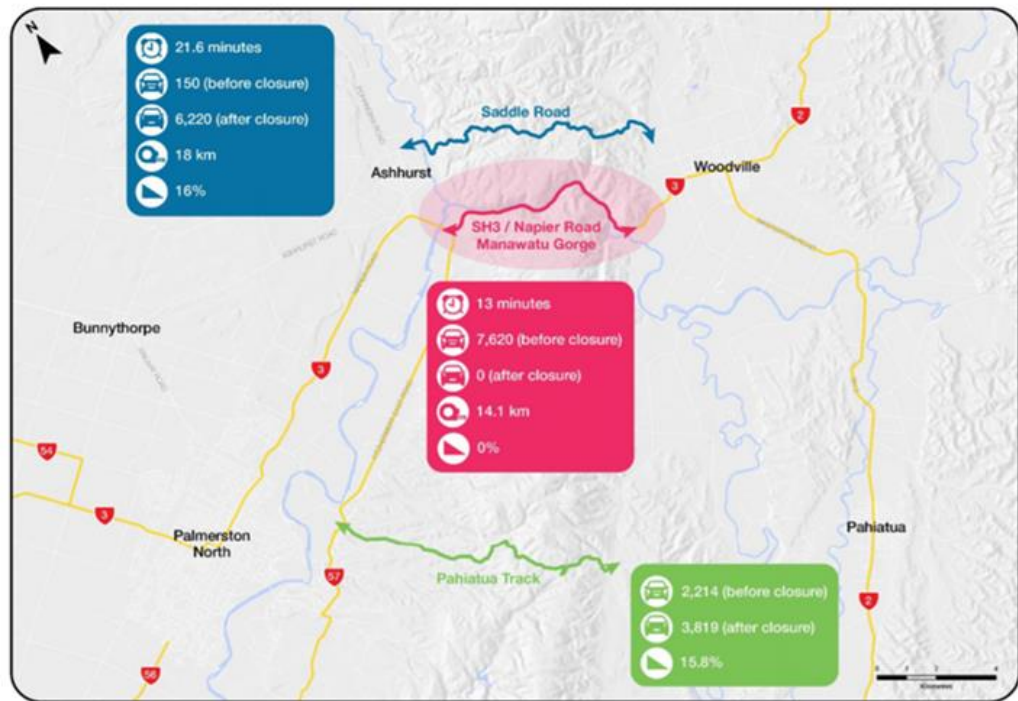


Figure 4:¹⁵ Journey experience via SH3, Saddle Road and Pahiatua Track.

45. Saddle Road connects Ashhurst with the northern outskirts of Woodville. At the Ashhurst end, Saddle Road connects to Salisbury Street which travels through the Ashhurst residential area. Along its length, Saddle Road provides rural property access and access to the Te Āpiti wind farm. At the Woodville end of the route, Saddle Road connects to Oxford Road/Woodlands Road.
46. Various alternative routes exist to bypass Woodville for traffic heading north, east and south (if desired, however these alternative routes are not promoted by the Transport Agency or TDC).
47. The Pahiatua Track (Pahiatua Aokautere Road) connects Aokautere (SH57) to Pahiatua (SH2). At the Aokautere end, SH57 provides access to the north (Ashhurst) and south/west (Levin and Palmerston North).
48. The Pahiatua Track (and linkages through to Gorge Road) has a narrow curvilinear alignment with one lane in each direction in locations, limited passing opportunities and approximately 350m vertical elevation.
49. There are fundamental operational issues associated with the terrain, pavement construction and geometry of both Saddle Road and the Pahiatua Track which impact on safety and efficiency of vehicle movements (particularly trucks). This issue is aggravated by increasing traffic volumes

¹⁵ From the NZ Transport Agency Detailed Business Case <https://www.nzta.govt.nz/assets/projects/sh3-manawatu/Manawatu-Gorge-alternatives-detailed-business-case-part-a-october-2018.pdf>

(for example, during holidays or harvesting), other incidents (such as crashes or over dimension vehicle movements) or during poor weather which at times result in a total closure of the route.

Walking and cycling

50. There are a number of walking and cycling routes around the Project area. Routes of particular relevance to the Project include:
- (a) Manawatū River shared path between Ashhurst and Palmerston North;
 - (b) walking trails around Ashhurst Domain (west of Manawatū River) and through the Manawatū Gorge (east/south of Manawatū River); and
 - (c) the cycle route traversing Pahiatua Track, which forms part of the New Zealand Cycle Trail Touring Route.¹⁶
51. A current gap in the cycling/walking network is across the Manawatū River at Ashhurst Bridge, which would otherwise connect the recreational areas in the Manawatū Gorge with the wider walking and cycling network. The Transport Agency is currently working on a solution to address this and has committed to a project which will provide a dedicated shared facility over the river.

Road Safety

52. During the period in which there were no long-term closures of the Manawatū Gorge (2014-2016), there were a total 28 injury crashes and 68 non-injury crashes across all three east / west connections (Saddle Road, Manawatū Gorge and Pahiatua Track), with an annual average of 9 injury crashes and 28 non-injury crashes respectively. The period since the closure of the Manawatū Gorge route (2017-2020) has seen a significant increase in crashes, and the severity of crashes has significantly worsened as well; there have been 43 injury crashes (including 4 fatal crashes) and 99 non-injury crashes across the two available east / west connections (Saddle Road and Pahiatua Track) in that period, with an annual average of more than 14 injury crashes and 33 non-injury crashes respectively.
53. **Figure 5** below shows the increase in average crashes per year (for all levels of severity) on the key east-west connectors following the closure of the Manawatū Gorge. The figure shows the largest proportional increases are in serious injury and fatal crashes.

¹⁶ The New Zealand Cycle Trail – Pahiatua Road forms a 10km part of the Tararua Traverse Heartland Ride, which is part of the New Zealand Cycle Trail: <https://www.nzcycletrail.com/explore-trails/>. Currently the 10km section on Pahiatua Road is closed due to the increased volumes of traffic since the Gorge closure.

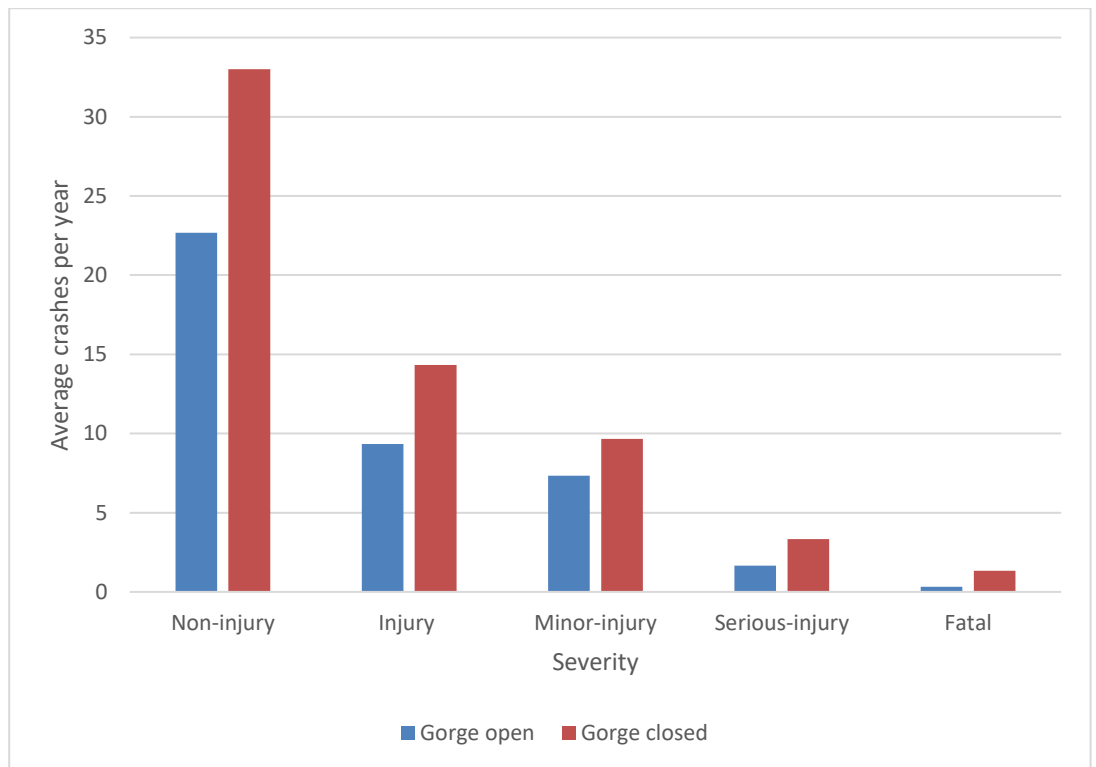


Figure 5: Average crashes per year on key east-west connector routes with the Gorge open and closed

54. This change in crash rate and severity is a significant concern and further illustrates the importance of the Project in delivering a safe outcome as soon as possible.
55. The majority of injury crashes prior to the closure of the Gorge occurred on SH3 through the Gorge itself. The Project is expected to serve all of the traffic demand previously using the Gorge and will be significantly safer than the previous Gorge route due to the Project's safe system design.

THE TRAFFIC AND TRANSPORT BENEFITS OF THE PROJECT

Introduction

56. The Project will have a significant positive effect on the transport network. The Project will improve resilience, increase capacity within the wider network, and improve safety and efficiency for general traffic and freight, including public transport and emergency services. It will improve route reliability by providing a route built to a higher standard that is more resilient to incidents and events.

Travel times

57. The introduction of the new route will see a significant reduction in travel times for key trips between SH3 West, Ashhurst, Palmerston North, SH57 South, SH2 North and South, and Woodville.

58. The Project will significantly reduce travel times between Palmerston North and Woodville by more than 8 minutes for light vehicles (“LV”), emergency services, buses and freight. Travel between Aokautere (SH57 South) to SH2 north of Woodville will gain an even larger travel time saving of more than 24 minutes, if compared to the current travel time via Pahiatua Track and Mangahao Road which takes more than 40 minutes. These travel time reductions will deliver significant benefits to all road users and the wider economy.
59. Overall, the significant travel time savings are primarily a result of the improvements in alignment and access efficiency attributed to the Project. The provision of dual carriageway in areas with steeper grade and indeed across the majority of the Project will reduce the delay imposed by slower HCVs on the travel time for general traffic.

Traffic redistribution

60. The Project will also redistribute traffic demand from the existing routes, which translates to an overall better environment for residents, pedestrians and cyclists on the local road network, particularly in Ashhurst, on Saddle Road and on the Pahiatua Track.

Resilience effects

61. The Project will provide a high-quality alternative route to the existing non-state highway routes (i.e. Saddle Road and the Pahiatua Track) that customers are currently required to use since the closure of SH3 through Manawatū Gorge.
62. The Project route is a more reliable link, designed to a high standard, and is more resilient to incidents, minimising the risk of road closure and the extent of disruptions. This includes meeting the standard for pavement design, which allows the Project route to carry large volumes of HCVs with significantly reduced maintenance activities, compared to the ongoing pavement maintenance required on the existing routes. Most notably, the Project’s compliance with the higher seismic design standards for state highways, compared to those for local roads, means that the new route will be much more resilient to seismic activity.
63. The inclusion of shoulders and crawler lanes for HCVs provides additional resilience, both in terms of incidents (crashes) and natural disasters (e.g. slip/earthquake damage etc.), where traffic can be diverted into the other

lane/shoulder or even into a contraflow¹⁷ using the other direction over longer periods.

64. The existing Saddle Road and Pahiatua Track will remain available as alternative routes, in the event that the new route is closed. Altogether, this significantly increases the resilience for the overall road network.
65. Moreover, in the case of an emergency that causes a complete blockage along the Project route (for example, in the event of a major slip), there will be opportunities to utilise local roads and Meridian access roads with links to the Project for emergency/evacuation access.
66. There may also be instances where weather events including wind, snow and ice cause issues and necessitate partial or full closure of the Project route. This is a common issue to many passes in New Zealand and can be managed through the use of weather stations and a Variable Messaging System as a means for alerting road users of closures, or other forms of Intelligent Traffic System.

Safety effects

Existing routes

67. As outlined above, there has been a significant increase in crash risk on Saddle Road and Pahiatua Track, which is primarily associated with the sharp increase in traffic volume travelling on both routes (which are not designed for these traffic volumes) following the Manawatū Gorge closure. Traffic demand on these routes is expected to reduce significantly following the opening of the Project. It is anticipated that the crash risks on these routes will then revert to the levels prior to the Manawatū Gorge closure, and indeed safety will improve due to the ongoing upgrades that have already occurred.

Proposed route

68. The Project will be constructed to modern highway standards and will have an improved crash performance compared to the existing routes. The key features of the new route include the provision of wider sealed shoulders, a higher number of lanes and passing opportunities, median and edge barriers, and improved design speed and sight distances.

¹⁷ Running 2-way traffic within the same side of the carriageway using traffic management (e.g. dropping the wire rope barrier / cones etc).

69. An indicative assessment of the proposed route has been undertaken using the KiwiRAP tool, guided by the Transport Agency KiwiRAP Summary Report.¹⁸ This assessment indicates that the proposed Project should achieve a KiwiRAP star rating between 4.1 – 4.5. This compares very favourably to the current 2 and 3-Star rating for the majority of the existing network. Therefore, the likely future crash risk along the new route is assessed to be significantly lower than the current crash risks on the network, particularly on Saddle Road and the Pahiatua Track.
70. The increase in traffic demand on the section of SH3 between Woodlands Road to SH2 may have an impact on safety for all road users within the Woodville central area. However, I understand there was a strong community desire for traffic to remain through Woodville and the installation of the proposed roundabout will reduce access conflicts and vehicle speeds through this area, improving the existing situation.
71. Without the Project, the local roads within Ashhurst and Woodville will carry large traffic volumes on links that are not designed for such volumes, and therefore pose a much higher safety risk to road users.

Active modes of transport

72. A number of facilities for active modes of transport have been incorporated into the Project, which I describe below. I consider that the Project provides excellent facilities for pedestrians and cyclists.
73. The Project incorporates 1.5m wide outside shoulders along the new road, which cyclists will be able to use if they choose to. I consider these shoulders will be significantly safer for cyclists than the current situation (using the heavily trafficked Saddle Road or Pahiatua Track) and the previous route through the Manawatū Gorge.
74. However, as noted above, the Project now also provides for a generally 3m wide separated shared use path for walkers and cyclists connecting Ashhurst and Woodville alongside the new road alignment. The Project also provides for the extension of an existing walkway in Woodville. The shared use path was incorporated into the Project design following the hearing of the NoRs, in response to public submissions.
75. As noted in the addendum to my NoR Technical Assessment, the inclusion of a shared use path connecting Ashhurst and Woodville (and the extension of the existing walkway in Woodville) further enhances the benefits, or positive

¹⁸ KiwiRAP Summary Report Final V3, NZ Transport Agency, May 2011.

effects, provided by the Project. There was strong support for such an off-road facility during the NoR hearing, demonstrating the desire to enhance the overall connectivity and provision of the walking and cycling network in the Manawatū, with a real focus on providing safe off-road facilities. This also provides the opportunity for further linkages to a wider recreational network of walking and mountain bike tracks identified by the likes of PNCC during the NoR hearing.

76. As noted above, the provision of separated pedestrian and cyclist access on the Ashhurst Bridge on SH3 is being progressed independently of the Project. This facility will link the Project with Ashhurst, while also significantly enhancing access to the Manawatū Gorge Scenic Reserve and providing an important off-road linkage across what is currently a constrained bridge environment. Condition 35 of the Designation Conditions requires that these improvements are completed prior to the opening of the new road.
77. Additionally, a series of walkways and boardwalks will be created within a proposed "Wetland Experience Area", which can be accessed from the main shared use path or a new walking and cycling track from Saddle Road, which will create a recreational loop that is expected to be popular for residents of Ashhurst, other locals and visitors to the area.

Public transport

78. Although there are currently no public transport services operating in the area, the Project will provide a safer, more resilient, more reliable, and faster route which could attract more users towards public transport, and subject to sufficient demand, potentially lead to new public transport routes and services being introduced.

MANAGING CONSTRUCTION TRAFFIC

79. As with any large infrastructure project, there will be additional traffic arising from the construction of the Project; these effects were considered in detail through the NoR process.
80. As I explained in my Council-level evidence in respect of the NoRs,¹⁹ the construction activities associated with the Project have the potential to exacerbate (temporarily) negative transport effects that have been experienced on Saddle Road and through Ashhurst and Woodville since the closure of the Gorge route. It is expected that construction traffic will result in an increase in overall volumes and in general (before mitigation) have

¹⁹Available here: <https://www.pncc.govt.nz/media/3131517/6-evidence-of-david-dunlop-transport.pdf>.

moderate negative impacts, due to the potential impacts to safety and efficiency. Construction activities are also likely to impact on users of the Manawatū Gorge Scenic Reserve walkway, both in terms of access and parking.

81. These impacts will be addressed through the implementation of the CTMP, to be prepared before construction starts as required by Condition 29 of the Designation Conditions. The CTMP forms part of the Construction Environmental Management Plan ("**CEMP**") which is required to be submitted under the Designation Conditions and must also be included in the outline plan(s) that are required to be submitted.
82. I consider that, in accordance with the Designation Conditions, a CTMP will be produced which contains thorough and robust management measures for construction traffic effects.
83. I note also that, as described in the AEE for the proposed resource consents, the current design for the Project has detailed various improvements to access tracks, including a left hand turn on the eastern end of Saddle Road at the Pohangina River Bridge which will allow construction traffic to utilise an access track under the bridge, without needing to turn across traffic.²⁰
84. I consider that the effects of construction traffic associated with the Project will be adequately mitigated through these measures.

COMMENTS ON SUBMISSIONS

85. As I would expect, a number of submitters have expressed support for the Project, with the transport benefits and accelerated timeframe being (either expressly or implicitly) key to that overall support. This aligns with my expectation for the Project, as a proposal for infrastructure which will provide significant traffic and transport benefits for the Region and New Zealand.
86. **Manawatū District Council, Ken Barnett, Business Central, Tararua District Council, Automobile Association NZ and Palmerston North City Council** have all submitted in support of the Project, in part because of the economic benefits which will be brought about by the Project through employment, economic activity and reduced transport costs. Several of these submitters have noted that the economic benefits are such that the Project should be advanced as part of the Government's economic response to Covid-19.

²⁰ CEMP, page 73.

87. As I have outlined above, one key benefit of the Project will be improved accessibility throughout the Region, in particular to key facilities such as Palmerston North hospital. **Ken Barnett, Business Central** and **Automobile Association NZ** have highlighted this improved accessibility as a crucial benefit of the Project, and a reason for their support of the Project.
88. As I have outlined above, the Project will provide a significantly safer route for road users than currently exists. **Automobile Association NZ** in its submission, highlighted the significant safety risks associated with the former SH3 route through the Manawatū Gorge and the safety improvements presented by the Project as key reasons for why it "strongly supports" the Project. **Manawatū District Council** has also submitted in support of the safety benefits of the Project for the Region.
89. Social benefits associated with the removal of traffic from local roads is the key reason for support from **Carl Westwood**. I agree with Mr Westwood that increased traffic on local roads has been a significant impact of the closure of the former SH3 route through the Manawatū Gorge, which will be addressed by the Project. The sooner the Project is constructed, the sooner these benefits will be realised.
90. The submission from the **Automobile Association NZ** strongly supports the current design of the Project, noting its strong preference for a four-lane road along the entire route. In an early proposed design the road tapered to two lanes along the top of the route across the Ruahine Ranges. However, as described above, the Project design now comprises a median separated carriageway with two lanes in each direction (one lane plus a crawler lane) over the majority of the route, and reduces to a single lane in each direction for short sections on the approach to the roundabouts at either end.
91. I support the road having two lanes in each direction for the extents proposed in the design as this will minimise the potential for safety and efficiency issues associated with slower moving vehicles. I consider it is appropriate that the Project provides for a single lane in each direction in the approaches to the roundabouts because it helps to transition vehicles from a standard corridor to the existing state highway network, while also providing sufficient capacity to maintain an acceptable level of service and reduce crossing distances for pedestrians and cyclists that might be crossing at this location (especially the Eastern Roundabout).
92. The submissions outlined above accurately identify a number of key benefits associated with traffic and transport which will arise as a result of the Project.

These submissions reflect my understanding that the Project will deliver an extremely important piece of infrastructure for the Region, which will bring about benefits both nationally and to the local communities.

COMMENTS ON SECTION 87F REPORT

93. No issues were raised in Horizons' section 87F reporting relating to traffic and transport. I note, however, that the planning report by Mark St Clair acknowledges the positive effects of the Project as set out in the AEE, including that the Project will enhance safety, increase network resilience, and improve connectivity, modal choice and recreational benefits through the provision of the shared path. I endorse these comments, and would add from a transport perspective that these benefits will make significant improvements for transport users in (and travelling through) the area.

CONCLUSION

94. The closure of the Manawatū Gorge has had a significant impact on the safety, efficiency and reliability of the existing routes for all modes of travel, attributed to a major consequential increase in the traffic demand utilising local roads. Without the Project, it is expected that the performance of the existing routes will continue to worsen in future years.
95. The Project will have a significant positive effect on the transport network. The Project will improve resilience, increase capacity within the wider network, and improve safety and efficiency for general traffic and freight, including public transport and emergency services. It will improve route reliability by providing a route built to a higher standard that is more resilient to incidents and events.
96. The Project will redistribute traffic demand from the existing routes, which translates to an overall better environment for residents, pedestrians and cyclists on the local road network, particularly in Ashhurst, on Saddle Road and on the Pahiatua Track.
97. The shared use path will provide a safe off-road link between Woodville and Ashhurst, while cyclists will also have the opportunity to utilise wide shoulders on the Project should they choose to travel over the new route.
98. I have read and responded to the submissions received on the Project relating to transportation effects. The key topics in the submissions are listed below:

- (a) support for the economic benefits the Project will provide through employment, economic activity and reduced transport costs;
- (b) support for the improved road safety the Project will provide;
- (c) support the removal of traffic from the local roads; and
- (d) support for the construction of two lanes in each direction.

99. In respect of the last point, the Project design provides a median-separated carriageway with two lanes in each direction (one lane plus a crawler lane) over the majority of the route. There is a short 'single-lane in each direction' section at either end of the route, in the approaches to the Eastern and Western Roundabouts, for safety reasons.
100. Overall, the Project will have a significant positive effect on the transport network and the users of the transport system. In transport terms, I consider the Project should be progressed as a matter of urgency.

David Dunlop

12 June 2020