



Wellington Northern corridor

Ōtaki to North of Levin section

Issue 05 May 2013

Have your say

As indicated in the last project update, we have been looking at how our long term goal of four-laning the Ōtaki to North of Levin section of the Wellington Northern Corridor road of national significance might be achieved over time. As a first step, we are focusing on improving the safety and efficiency of State Highway 1 (SH1) at certain locations.

Our work has now reached the point where we want to share our proposals with you and get your feedback on options and issues.

What we are proposing

In July 2012 we decided to take a staged approach to achieving our long-term goal of four-laning SH1 between Otaki and Levin. This initially focuses on improving safety and efficiency at key locations. It also follows on from previous work we did identifying constraints and asked for feedback on in 2011.

This newsletter explains the different proposals for specific locations along SH1 and SH57. We are also looking at how we can improve travel across the whole route, by including changes such as:

- installing more passing lanes on SH1
- widening the existing highway road edges to improve safety for all types of travel
- installing median barriers, such as wire rope barriers
- making road edges safer
- replacing old and narrow bridges
- changing intersection layouts, and
- improving walking and cycling opportunities.

How to provide your feedback

We want to know what you think about our proposals. Your views are important as they will help us to refine the proposals set out in this newsletter further.

There are a number of ways you can give us your feedback – either at one of our open days in the first week of May, on our website or in writing. Our contact details are on the back page of this newsletter. If you want any help talk to us direct by calling us on our freephone number.

We will summarise your feedback into a report that we will make publicly available later in the year.



Transport outcomes

The key to our proposals are the outcomes we want to achieve. While we aim to significantly improve safety and efficiency for SH1 users and the wider regional network, we are also considering how we connect people to employment, education, services and recreation because the land transport system through the project area is critical to the quality of people's lives. This is part of the NZTA's support for, and funding of, wider transport requirements beyond roads.

Equally important is how we connect freight and agriculture across a high performing transport system (including road and rail) to help support economic growth and productivity in the Manawatu/Wanganui and Wellington regions.

As the Ōtaki to north of Levin project crosses over both Greater Wellington and Horizons Regional Council boundaries, the project meets the outcomes sought by both regions' land transport strategies. These strategies aim to provide quick, safe and efficient connections and give people a choice about how they travel, by either bus, train, car, bicycle or on foot. The investment we are making is considerable with a combined cost of up to \$200 million worth of improvements contemplated, and represents the NZTA's approach to funding transport requirements.

The projects:

Our proposed improvements are targeted in different locations along SH1 and SH57. Each individual location has its own specific needs and issues. For each, we have identified the key safety and efficiency issues, what we propose and what we think needs to be considered to refine the designs further.

The locations are:

Forest Lakes (Taylors Road to Pukehou Railway Bridge) (p3)

Manakau (p4)

Manakau to Ohau Bridges (p5)

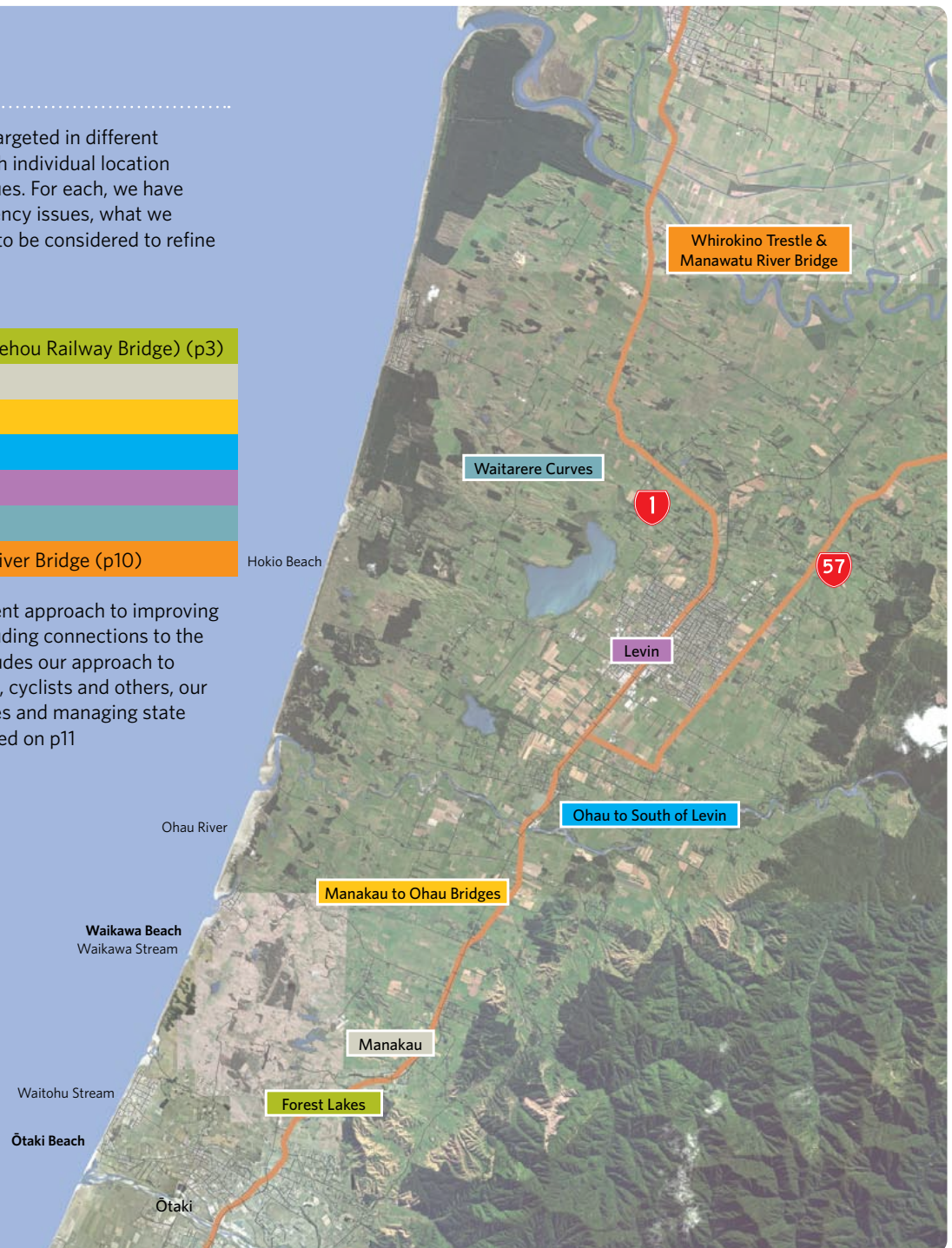
Ohau to south Levin (p6 and 7)

Levin (p8)

Waitarere Curves (p9)

Whirokino Trestle & Manawatu River Bridge (p10)

Our proposals include our consistent approach to improving travel across the whole route, including connections to the wider transport network. This includes our approach to improving facilities for pedestrians, cyclists and others, our approach to providing passing lanes and managing state highway access. This plan is outlined on p11



Why do we need these changes?

As a part of the Wellington Northern Corridor, the Ōtaki to North of Levin section of SH1 is important to ensuring the full SH1 route between Wellington Airport and north of Levin provides a safe and efficient connection that communities and businesses can rely on to grow and prosper.

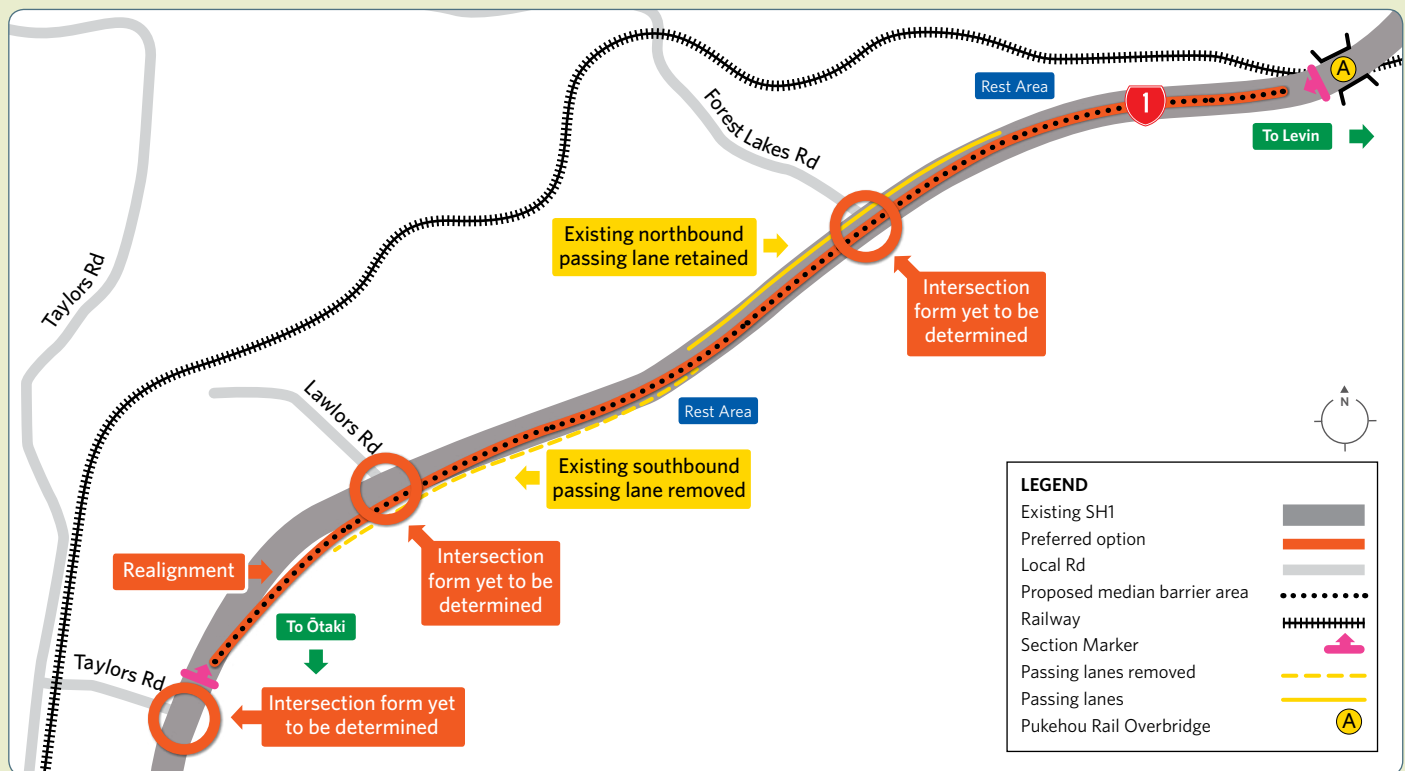
In keeping with the rest of the Wellington Northern Corridor, the changes outlined

for this section will improve how people get around, to and through the region, allowing them to spend more time on the things they want to do.

The key benefits of the Wellington Northern Corridor are that it will:

- make travel easier and safer, whether you walk, cycle, drive or take public transport
- reduce journey times and ease pressure on surrounding local roads
- help to reduce the cost of travelling and doing business
- offer the region a more resilient route in the event of disruption
- supports economic growth and productivity

Forest Lakes (Taylors Road to Pukehou Railway Bridge)



The issues

This section of SH1 covers the area from Taylors Road to the Pukehou Railway Overbridge and connects with the Peka Peka to Ōtaki project to the south.

Safety is a key issue for this section of SH1. This section has a history of serious crashes, most occurring when cars cross into opposing traffic. In the five year period between July 2007 and June 2012 there were 20 crashes, five of them serious. However, there have been other serious and fatal crashes outside that timeframe that need to be considered when making improvements to this section.

What we are proposing

In order to address the safety issues along this section of SH1, we propose the following improvements:

- a wire rope median barrier
- 1.5 metre median strip
- realigning the curve north of Taylors Road
- maintaining the current speed limit
- removing the southbound passing lane (as the Peka Peka to Ōtaki Expressway to the south provides passing opportunities)



Issues to consider

- Property impacts – we may need to purchase property to provide for the wider road space
- Property access – we may need to change how some properties access SH1
- Intersection changes – we will need to change the layout at Forest Lakes Roads, Lawlors Road and Taylors Road

- Connectivity to the Peka Peka to Ōtaki Expressway – how will we ensure we safely and efficiently connect to this project?

What are your thoughts about our proposals?

Is there anything else we should consider at this location?

Manakau

The issues

This area roughly covers the section of SH1 from the railway underpass (which leads to Honi Taipua Street) to just beyond Waikawa Beach Road. It connects with three local roads – Honi Taipua Street, Mokena Kohere Street and Waikawa Beach Road. It has the rail line to the east and other land development on both sides of the road.

Safety is a key issue for this section of SH1. There have been 16 crashes in the five year period between July 2007 and June 2012, the majority of them from a car being rear ended. At their worst they caused minor injuries, however, there is a more serious crash history that lies outside the five year period, including one fatality in 2000 and a serious crash in 2012 where a car hit a pole.

A key consideration here is how to improve safety for SH1 users and maintain local network connections to and across the state highway through Manakau Township.

What we are proposing

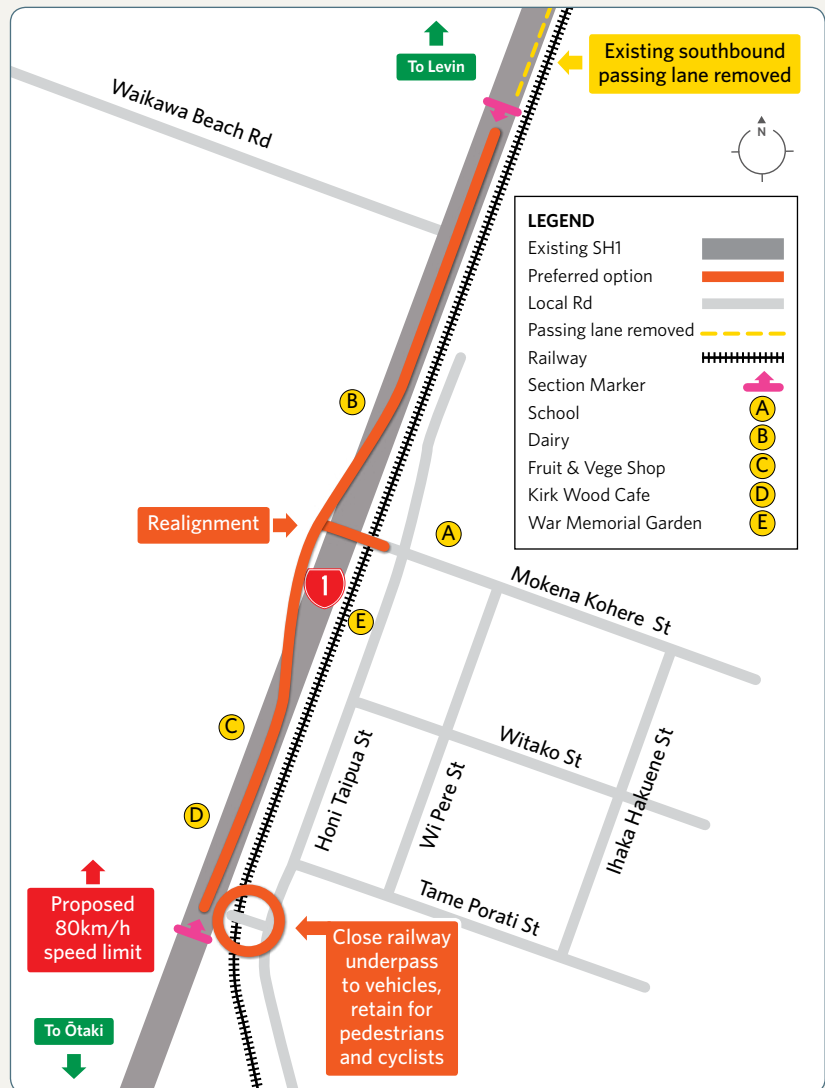
In order to address the safety issues along this section of SH1, we propose to:

- Reduce the speed limit to 80km/h
- Create a painted median strip and a wider road edge
- Remove the southbound passing lane, which ends north of Manakau
- Realign the road and create more waiting space on Mokena Kohere Street for heavy vehicles between the highway and railway tracks
- Close the railway underpass to traffic as there isn't enough space to provide a safe intersection for traffic turning right
- Reuse the railway underpass as a pedestrian/ cyclist/ equestrian only access

We consider an 80km/h speed limit is appropriate for this location given the rural township feel of this section of SH1, as well as providing for other safety benefits.

Issues to consider

- Property impacts – we may need to purchase property to provide the wider road space
- Property access – we may need to change how some properties access SH1
- Travel speed – changing the speed limit could increase travel time
- Intersection changes – we will need to change the layout at the railway underpass intersection, and on Mokena Kohere Street



- Safety adjustments – we may need to change where and how you turn on to or from the highway and where it is safest to park on the roadside

What are your thoughts about our proposals?

Is there anything else at this location that we should consider?

Manakau to Ohau Bridges

The issues

This section of SH1 covers the area roughly from the Manakau Railway Overbridge to just beyond the Ohau River Bridge.

There are a number of safety issues along this section of SH1. There have been 52 crashes here in the five years between July 2007 and June 2012. Two were fatalities and three resulted in serious injuries.

There are five existing bridges along this section of SH1, which may need to be either upgraded or replaced in the medium term. There are also a number of historical and cultural landmarks in the area that need to be considered when looking at possible options for improving this section of SH1.

What we are proposing

Two options were considered for improving the safety and efficiency along this section of SH1. These were to either:

- make various safety and efficiency improvements along the existing SH1, or
- divert the highway along the western side of the railway line.

Both options would include passing lanes and bridges to cross the Waikawa Stream, Kuku Stream and Ohau River.

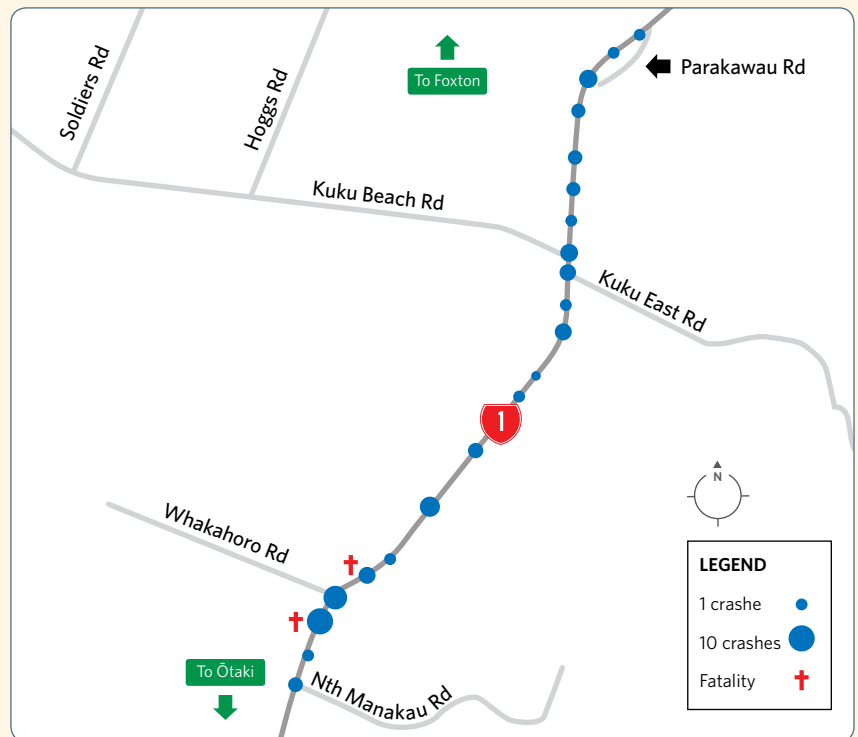
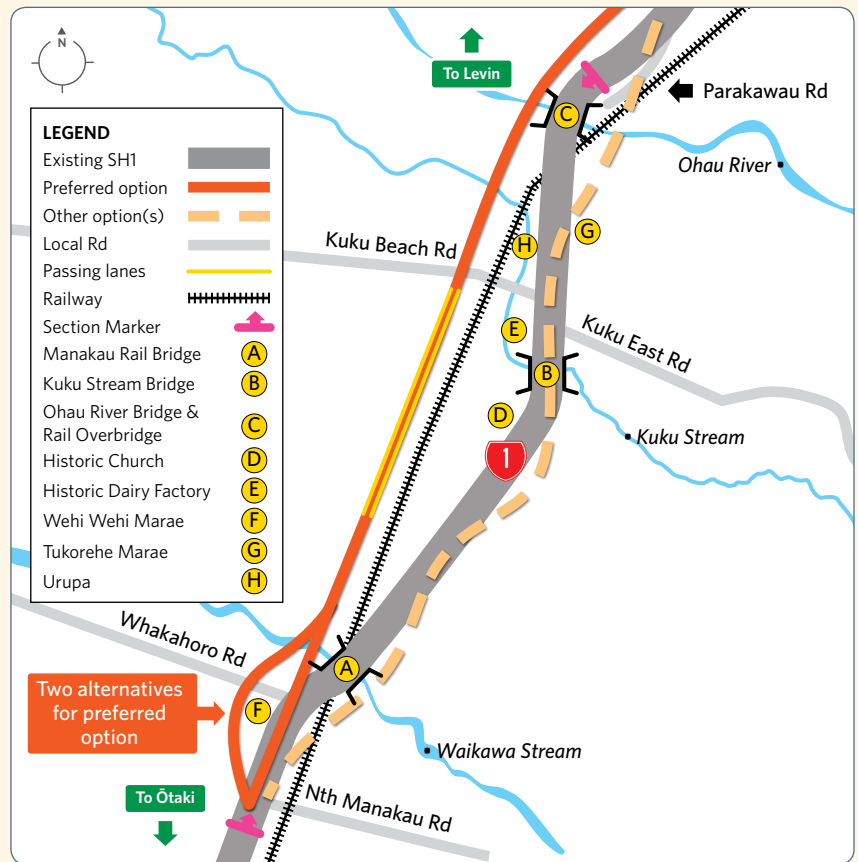
We would prefer to divert the highway. This avoids having to build replacement bridges over the railway track, provides a more direct route (thus reducing journey times), affects fewer properties; and, avoids listed or cultural buildings of significance, which are generally located alongside the existing highway.

This new route can be built to provide four lanes of traffic in future, and would involve constructing passing lanes in a section divided by a wire rope median barrier. Three bridges would be constructed:

- at Waikawa Stream west of the existing bridge
- over Kuku Stream
- at Ohau River west of the existing bridge

Issues to consider

- Property impacts - we will need to purchase property to provide for a wider road space and new section of road
- Property access - we may need to change how some properties access SH1
- Intersection changes - we want to stop right turns in and out of Kuku Beach Road
- Future of the two existing rail bridges - we will need to consider what happens to the bridges assuming the highway is diverted.



What are your views on our options?

Is there anything else at this location that we should consider?

Ohau to south Levin

We are proposing to make key safety and efficiency changes that meet the combined needs of this section of SH1:

- In Ohau, we propose safety improvements on the existing SH1 through the township, and
- Either making improvements to the existing SH1/SH57 intersection and SH57/Arapaepae Road intersection or constructing a new SH1 link to SH57/Arapaepae Road intersection to the east of Ohau. Both are expected to improve travel to Palmerston North and beyond.

While we have explained the changes separately for clarity, the proposals on this page should be considered alongside the ones proposed on page 7. They are two halves of a combined approach for the section between Ohau and south Levin.

Ohau township

The issues

This area covers the section of SH1 running through the Ohau Township, between Bishops and Vista Roads.

The key issue for this section of SH1 is safety and managing traffic through the Ohau Township.

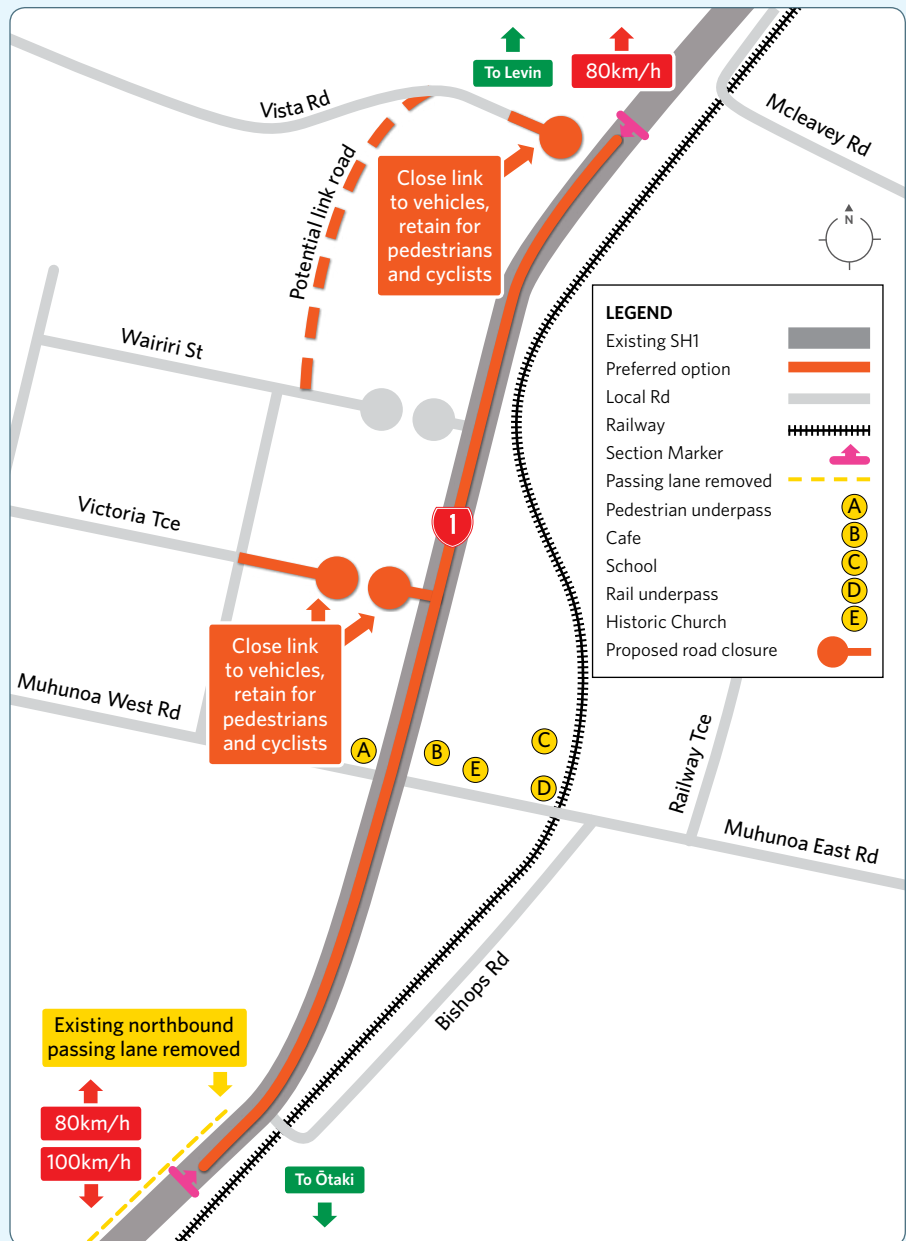
There have been 19 crashes in the five year period between July 2007 and June 2012, most involving rear end crashes, turning or crossing traffic. This happens when vehicles turn against the flow of traffic from local businesses and properties adjacent to SH1.

There was one serious crash in this period, however, like Manakau, there is a more serious crash history outside the five-year period. This includes three fatalities and one serious injury crash.

What we are proposing

To address the safety issues along this section of SH1, we are proposing to:

- Reduce the speed limit to 80km/h from Bishops Road to connect with the 80km/h zone south of Levin
- A painted median strip and a wider road edge
- Removing the passing lane south of Ohau (there will be passing opportunities included in the Manakau to Ohau improvements to the south)
- Closing Victoria Terrace



- Consider closing Vista Road and creating a new local road connection within the township
- Make Muhunua Road the main point to connect with the highway on this stretch of highway.
- Property access – we may need to change how some properties access SH1
- Travel speed – changing the speed limit could increase travel time
- Intersection changes – we want to reduce the number of local road connections with the highway (as described above), which will change the way you travel locally

We consider an 80km/h speed limit is suitable for a state highway that effectively runs through the middle of a rural township, as well as providing other safety benefits.

Issues to consider

- Property impacts – we may need to purchase property to provide the wider road space

What are your views on this proposal?

Is there anything else at this location that we should consider?

Ohau to south Levin

New SH1 link

The proposals outlined below are suggested in addition to the changes indicated on page 6. Depending on which option is preferred, other changes may be required through Ohau township.

The issues

The existing section of SH1 between the Ohau River and Levin includes the key intersection of SH1/SH57 Kimberley Road. A number of safety issues along this constrained part of SH1 have resulted in a high crash history and problems for local travel in Ohau.

The SH1/SH57 intersection has been identified as a key, and problematic, intersection from a safety perspective. On SH57, the Kimberley Road intersection with Arapaepae Road is also considered problematic from a safety and efficiency perspective.

There have been 79 crashes along these sections of state highway in the five year period between July 2007 and June 2012. The most concerning are side-on crashes, which lead to serious injuries and sometimes fatalities when vehicles are travelling at speeds higher than 50km/h. Five crashes were serious and half of all the crashes happened as a result of drivers losing control or turning against traffic.

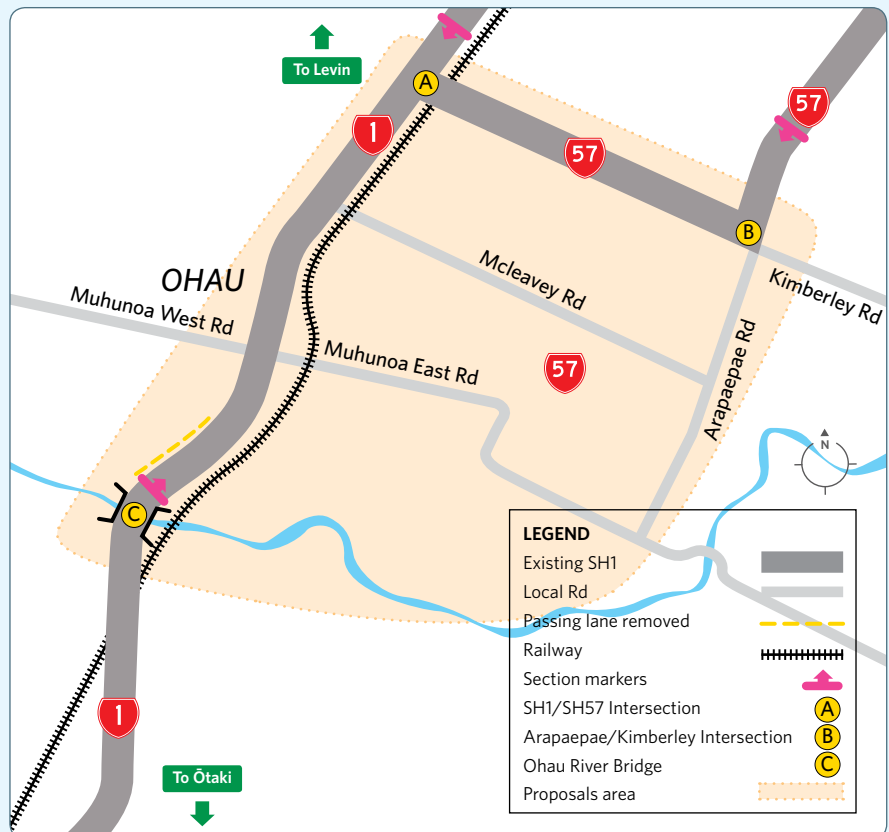
What we are proposing

To address the safety and efficiency problems on these sections of state highway, we are considering two main options. These are either:

- Make improvements to the existing SH1/SH57 intersection, such as an elevated interchange and improve the Kimberley/Arapaepae Road intersection, or
- Construct a new road to the east of Ohau linking SH1 with the SH57/Arapaepae Road. The alignment for this link is not confirmed, but we expect it will need to be located north of the Ohau River Bridge.

The first option of improving the SH1/SH57 and SH57/Arapaepae Road intersections will significantly improve safety for all SH1 users at these intersections.

Alternatively, a new road would also significantly improve safety as well as provide efficiency benefits. For example, it would remove traffic from Ohau township, reduce conflicts at the SH1/Kimberley Road and



improve the Kimberley/Arapaepae Road intersection (as traffic would be reduced in these two locations).

In addition, a new road will be easier to turn into a four-lane road compared with making intersection improvements as the latter will require bigger changes to provide four lanes.

Any new road would require a new structure, such as an overbridge, so traffic can cross from the new Manakau to Ohau Bridges section of SH1 to SH57 as outlined on page 5 (ie the new road needs to cross over the existing SH1 and the railway line).

Issues to consider

- Property impacts - we may need to purchase properties affected by any of the options
- A new SH1 link road north of Ohau River Bridge may affect more properties
- A new SH1 link road that begins south of the Ohau River Bridge is possible, but is more costly because it needs additional structures.

- Intersection changes - would ensure safety is significantly improved, but to four lane in the future we would need to purchase more properties
- Potential social and environmental effects - there may be impacts from changes required for any of the options
- Cost - we will need to consider what the construction costs for the options would be
- Future highway needs - we need to understand how the options would fit within our long-term approach to provide a four-lane highway
- Future of Kimberley Hospital - we need to understand what may happen to this land and buildings.

What are your views on the options?

What improvements will best meet the district, regional and national current and future needs?

What are your views on our combined approach for Ohau to south Levin?

Is there anything else we should consider in this location?

Levin

The issues

This section of SH1 covers the area through Levin and the connection to SH57 via Queen Street.

Improvements in this area are limited to considering a potential heavy vehicle bypass of Levin, and potential upgrades of existing intersections.

What we are proposing

We have considered a number of heavy vehicle bypass options through Levin, which would divert heavy vehicles off SH1 as they enter and exit Levin onto the existing local road network.

While each of the options investigated had some merit, we found that they would make heavy vehicle travel times longer and were likely to create additional safety issues as the number of heavy vehicle turning movements on and off SH1 would increase. As a consequence, we believe most heavy vehicle operators would not use such a bypass. We also consider that such bypasses may have social and environmental impacts on the local residents and businesses located along the bypass route.

As a result, we have decided to maintain the current arrangement and regularly review the potential need for a bypass, in consultation with the Horowhenua District Council.

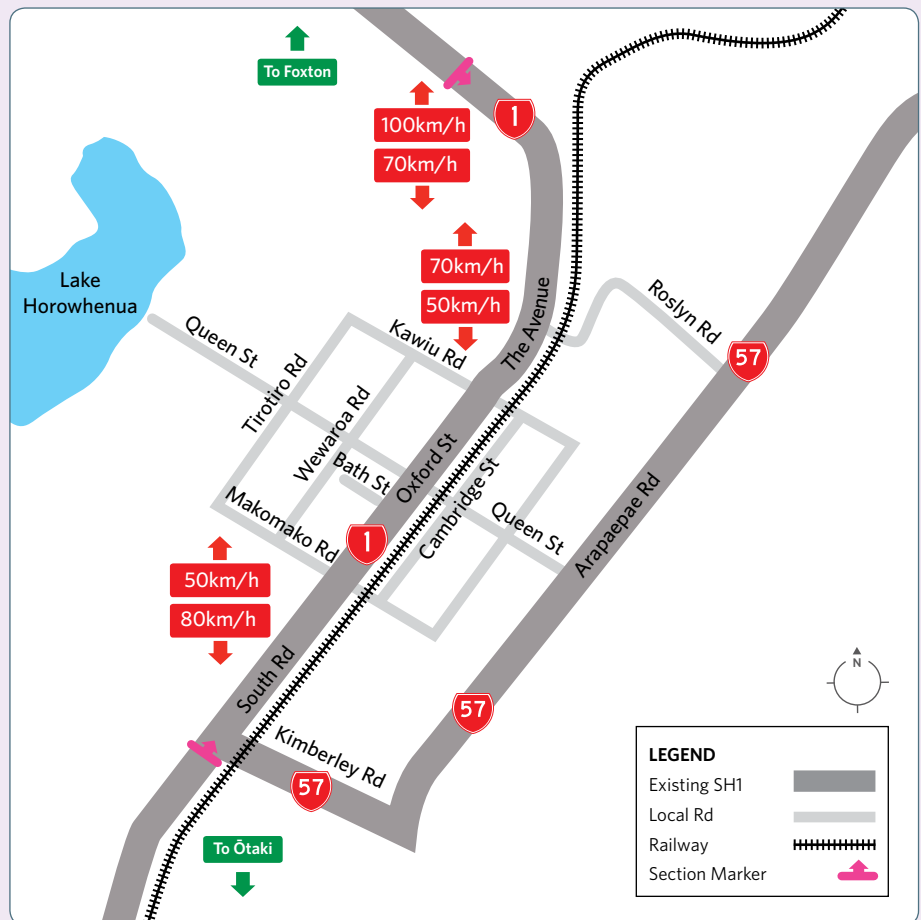
Key intersections - Levin

Key intersections on SH1 through Levin have also been assessed. In particular, we have looked at how the traffic signals could be improved to ensure freight moves efficiently.

We found that the current intersections operate satisfactorily and there is no need to modify them at the moment. A safety review did, however, identify some pedestrian issues, and some improvements are proposed at Bath Street to address this issue.

SH57 and Queen Street intersection

We considered if the intersection of SH57 and Queen Street East could be improved with a roundabout, specifically to address the conflict between traffic heading north on SH57 and vehicles turning right to Levin. Because the costs of a roundabout



and the impact on heavy vehicles would be considerable, we have decided to maintain the current arrangement here also. We will continue to review the performance of this intersection.

What are your thoughts on our decisions?

Is there anything else at these locations that we should consider?

Waitarere Curves

The issues

This section of SH1 is commonly referred to as the Waitarere Beach Road Curves. There are three sharp bends in the road creating a double S bend and fluctuating speeds. The area is surrounded by rural houses and some culturally significant features, including two marae, Urupa, Whare Rongopai.

While the bends or curves in the road were improved before the mid-1970s and further improvements made in more recent years, there have still been 12 crashes, two of them fatal and two serious. Of particular concern are crashes where a vehicle is turning and head-on crashes because they tend to result in more serious injuries.

What we are proposing

Two options were considered to improve the area from north of Clay Road to north of Waitarere Beach Road. The two options were:

- Improving the existing three curves on the road, or
- realign the road.

Our preferred option is to realign the road making this section 330m shorter and creating a new Waitarere Beach Road intersection.

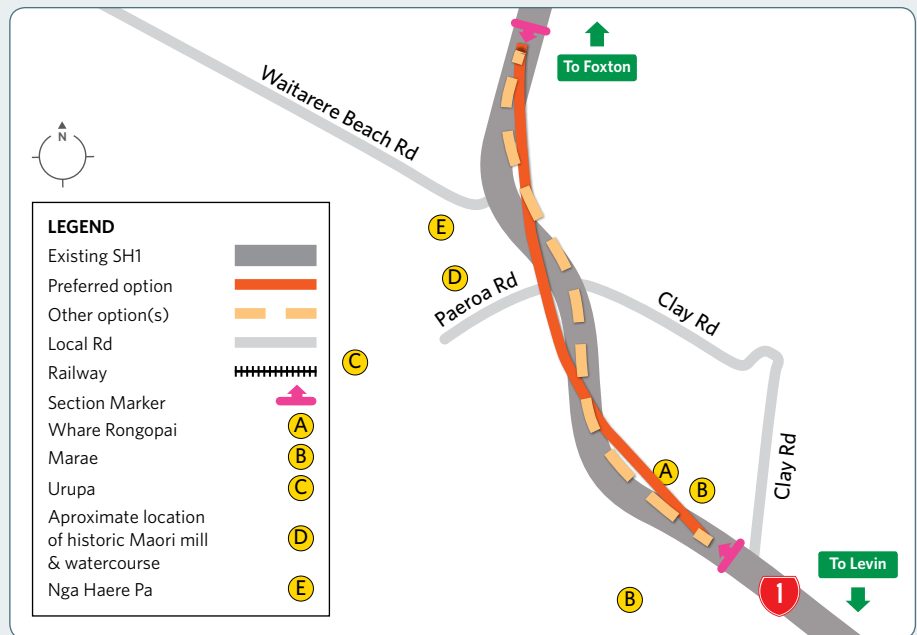
We will also consider installing a section of median barrier with appropriate local road connections in this area to reduce the risk of crashes caused by cars crossing into opposing traffic.

Issues to consider

- Property impacts - we will need to purchase a small number of properties
- Property access - we may need to change how some properties access SH1
- Intersection changes - we will need to consider the social and environmental effects depending on the final layout of the Waitarere Beach Road intersection
- Potential social and environmental effects - realigning the highway takes the road closer to the Whare Rongopai

What are your views on our proposals?

Is there anything else we should consider in this location?



Whirokino Trestle & Manawatu River Bridge

The issues

This section relates specifically to the Whirokino Trestle Bridge and Manawatu River Bridge.

Both bridges either need to be upgraded or replaced at some point within the next 10 years. We currently believe that the costs of either upgrading or replacing the bridges will be similar.

Other issues include:

- Neither bridge is strong enough to provide for High Productivity Motor Vehicles*, resulting in these vehicles needing to take a longer route to access the Wellington region
- The Manawatu River Bridge has a lack of safe, convenient cycle facilities
- Neither bridge provides wide enough lanes or road edges
- The age and condition of the Trestle Bridge increases the risk of it being affected by an earthquake
- Traffic is delayed from regular maintenance and repairs required, and to allow overweight/wide vehicles to cross
- The capacity of the floodway is currently constrained by the bridges.

What we are proposing

We are considering upgrade and replacement options for both bridges. Our initial investigations show that the Manawatu River Bridge could be upgraded or replaced, but it is more than likely that the Whirokino Trestle will need to be replaced.

If both bridges are replaced, we need to consider if we keep them more or less on their existing alignment or choose a new alignment for them. The form of the bridges also needs to be considered further.

Issues to consider

- Property impacts – we will need to purchase a small number of properties, particularly if the bridges are to be replaced
- Road alignment - we may need to improve sections at the northern and southern approaches to any new bridge(s)



What are your thoughts on replacing the bridges and potential alignment locations?

Is there anything else at this location that we should consider?

* A High Productivity Motor Vehicle exceeds a mass of 44,000kg and/or the maximum length dimensions allowed for standard vehicles, but meets higher individual axle and axle group limits and is no wider or higher than a standard vehicle. It operates under a route specific permit issued by a Road Controlling Authority (RCA) on roads and bridges that have been determined to be able to accommodate the additional mass and/or length.

A consistent approach to improving your travel



All the previous information concentrates on the specific improvements that could be made at each location along the Otaki to North of Levin section. In many of these sections you will see proposals that are similar, such as installing or removing passing lanes, limiting the number of highway connections and widening roads. These improvements are part of a consistent approach for the section to make sure people can travel on the highway and connect with their local communities easily and safely for work, pleasure or business.

Improvements focus on:

- walking and cycling facilities
- the number and location of passing lanes
- providing rural highway connections
- making roadsides safer by widening the road edges and installing edge barriers

These issues are discussed in a little more detail below.

Walking and cycling

Outside Levin, separate walking and cycling facilities are limited and the demand for these facilities are concentrated at Manakau, Ohau and where there are groups of residential properties. Levin provides better facilities with footpaths, hatched areas, zebra crossings, pedestrian signals and a traffic island south of York Street.

We know there have been 20 pedestrian and cyclist crashes in the five year period between July 2007 and June 2012. The worst was one fatality and four serious

pedestrian injuries. Most have happened in Levin and more than half of the people struck were in their 70s or above.

As part of our overall approach to travel on this section of the Wellington Northern Corridor, we are currently focussing on providing short-term improvements, such as:

- sealed road edges for cyclists in all of the previously identified project areas
- cyclist facilities at ramp crossings and intersections
- better pedestrian crossing facilities in Levin, Ohau and Manakau
- make sure existing facilities are not affected negatively by any of the short-term projects

Safe roadsides

We know that safer roadsides help in providing a safer journey for many road users. The improvements we are considering across the whole section include:

- providing wider road edges as they provide significant safety benefits
- removing roadside hazards, such as power poles or protecting travellers from ditches, wherever possible.

Passing lanes

We know that passing lanes make our travel quicker, safer and more efficient. This is why many of the improvements we are suggesting for the full route include passing lanes. In some instances, passing lanes may be removed, but this will be because a better opportunity is included in a different location.

Our long-term approach for passing lanes will be to provide them at roughly 5-10km/h intervals where the road isn't four lanes wide.

Rural network connections with the highway

We know people are busy and want to get to their destinations without delay. In order to create a network that operates more efficiently we will limit the number of driveways that connect with the highway and improve other local road connections. Not only do these changes make travel more efficient, it also makes it safer.

These changes will ensure you can access you or your friends' homes by either linking them to a different highway connection point or creating a new link to an alternative connection, such as a service road.

Why do we limit connections with the state highway?

Every connection with the highway creates potential "side friction" in a high speed environment. In Ohau and Manakau there are vehicles travelling up to 100km/h that then have to slow down to allow people to turn on or off the highway at much slower speeds. You may have seen some near misses or crashes when a vehicle has tried to turn on to the highway from a side road or their own property.

These issues can be avoided by spreading out the highway connection points, regulating speed and providing highway entry points that have good visibility and a high level of safety. This is why in newer road developments the NZTA has less highway access points but better layouts so people merge better with faster traffic or have a separate space to turn off.

Location and time of info days

Wednesday 1 May, Manakau	2pm – 9pm	Manakau Community Hall
Thursday 2 May, Ohau	2pm – 9pm	Ohau School Hall
Saturday 4 May, Levin	10am – 4pm	Levin War Memorial Hall

Next Steps

We welcome your feedback as it will help us further refine our plans for each of the eight projects described in this newsletter.

Please either visit us at one of our public open days in May or send us your feedback via our website or email address. We will be summarising everyone's feedback in a report that we will make publicly available later in the year. Your personal details will remain private.

We expect to refine our proposals further and make key decisions by mid 2014. This will include the order in which different improvements will be made as the projects will be done in order of priority rather than starting with the southernmost project and working our way north. We will keep you informed of how our plans develop between now and then.

We currently expect to lodge RMA applications for some of the proposals either in late 2014 or in 2015 after further assessments have been carried out for the different projects. Detailed designs are expected to start in 2016 or 2017, and construction scheduled to start from 2019. Because a priority order will be established in future work, some projects could be constructed sooner than 2019 based on what delivers the most benefits. We know that splitting the full route into smaller projects gives us a better opportunity to do work faster than if we progressed a whole four-lane route.

Update on Kapiti Expressway projects

Peka Peka to Ōtaki

We lodged RMA applications with the Environmental Protection Authority (EPA) for the Peka Peka to Ōtaki section of the Wellington Northern Corridor on 18 March, 2013. This section (including the Ōtaki Bypass), together with the MacKays to Peka Peka section, form the Kapiti Expressway. We expect public notification of the RMA applications later in the year.

For more information on the RMA applications please visit: www.nzta.govt.nz/projects/peka-peka-to-otaki-application/

MacKays to Peka Peka

The Board of Inquiry for the MacKays to Peka Peka section of the Kapiti Expressway released its final decision on 12 April. Its decision approved the notice of requirement sought by the NZTA and grants the resource consents requested, subject to certain conditions. Construction is scheduled to start later this year.

The Board of Inquiry's Final Report and Decision is available at www.epa.govt.nz/Resource-management/m2pp/Pages/default.aspx. The full application and supporting information is available at: www.nzta.govt.nz/projects/mackays-to-peka-peka-application/.

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