



08 July 2010

Cameron Pitches
Convenor
The Campaign for Better Transport Inc.
PO Box 7763
Wellesley Street
Auckland 1141

Dear Cameron

Request made under the Official Information Act 1982

Thank you for your letter of 13 June 2010 requesting information under the Official Information Act 1982 on current and proposed roading projects in the Puhoi to Wellsford area.

I understand you discussed your request with Paul Glucina, Senior Transport Planner, on 25 June and agreed to it being responded to as follows.

- The NZ Transport Agency (NZTA) will identify and provide a high-level summary of any State Highway 1 (SH1) upgrade projects that have been investigated along the Puhoi to Wellsford route, including costs and cost-benefit analyses.
- Where more than one study has been undertaken on the same location or for the same project over a number of years, the NZTA will reference the most recent assessment and not historical studies.

You also confirmed that you are concerned with projects that will provide safety and journey time improvements. The NZTA will not therefore provide information on projects such as tourist destination signage investigations or maintenance and renewals.

The following seven projects are within the scope of your revised request.

1. Wayby Valley Road intersection

The project site is on SH1 approximately 5 kilometres south of Wellsford. Wayby Valley Road intersects SH1 from the east and Wayby Station Road intersects from the west.

Wayby Valley Road is currently used for activities associated with the Whangaripo Quarry and by commuters travelling to the growing Mangawhai area.

The project aims to:

- improve safety at the Wayby Valley Road intersection
- safely accommodate an increasing number of heavy truck turning movements associated with development in the area, particularly the development accessed off Wayby Valley Road
- provide additional capacity at the intersection so that the existing level of service is maintained in the future.

Preferred option

The preferred option is to provide an opposed right-turn bay layout into Wayby Valley and Wayby Station Road using a painted road marking. It will also include straightening Wayby Station Road.

Cost and benefit-cost ratio (BCR)

The cost of the project is \$2.5 million and the BCR is 5.0. The cost and BCR were updated in May 2010.

2. Schedewys Hill deviation

The Schedewys Hill site is located on SH1 between Warkworth and Puhoi. It is approximately 6 kilometres north of the SH1/Ahuroa Road intersection. The approximate 2.8 kilometre section of highway climbs steeply in the north out of the Hikauae Stream Valley onto Windy Ridge. It passes through a terrain of steep slopes with gradients as high as 10 percent and tight curves with radiuses as small as 55 metres.

The project aims to:

- improve the safety on SH1 through Schedewys Hill by improving the highway geometry
- reduce travel times and delays through geometric improvements and route shortening
- improve access and route security for all users.

Preferred option

No preferred option was adopted from the numerous options investigated in a 2002 study. However, the project team considered that of all the options identified, the most likely would be similar to options R17, R18 or R19.

These options involved investigating a direct alignment that would cut through the ridge. They calculated the existing grades rather than curved options that attempted to improve the existing alignment.

Cost and benefit-cost ratio (BCR)

The preliminary costs and BCRs undertaken in 2002 were:

	COST	BCR
Option R17	\$25.8 million	1.3
Option R18	\$57 million	1.4
Option R19	\$70 million	1.3

3. Pohuehue widening and edge protection upgrade

Pohuehue Viaduct is located on SH1 approximately 7.5 kilometres south of Warkworth. The viaduct is 157 metres long and allows for one lane of traffic in each direction.

The project aims to:

- develop feasible options for upgrading the viaduct's edge barriers
- investigate vehicle throughput improvements for the viaduct.

Preferred option

The preferred option is to widen the existing viaduct to provide three lanes (two southbound and one northbound) and upgrade the edge protection to a barrier that complies with the NZTA's standards.

Cost and benefit-cost ratio (BCR)

The cost in 2006 was \$4.7 million and the BCR was 3.2.

4. Falls Bridge to Waiteraire safety improvements

The section of SH1 between Falls Bridge and Waiteraire Bridge is winding and includes inappropriate curves for the road. It has a high accident rate with four fatal accidents between 2003 and 2007. Eighty-four percent of these accidents were related to loss of control/head-on crashes on bends.

The southern end is mountainous with high gradients, reducing heavy vehicles to crawl speeds. Together with the lack of passing opportunities, this creates driver frustration.

Preferred option

An option to address the problems outlined above is now being investigated more thoroughly. This involves seal widening and widening of cuttings on the inside of the road bends where necessary to improve the sight distance between Falls Bridge and Waiteraire Bridge.

Cost and benefit-cost ratio (BCR)

The project feasibility report undertaken in 2009 estimated a cost of \$1.4 million and a BCR of 2.5.

5. Sheepworld southbound passing lane

The section of road from Wellsford to Warkworth has a passing lane on the south side of Wellsford. There are no other passing opportunities until a short passing lane approaching the top of the Dome Valley, 9 kilometres from the end of the previous passing lane. A project feasibility report was commissioned to identify options and the feasibility of extending the existing southbound passing lane from 570 metres to 1400 metres.

The passing lane is located approximately 1.7 kilometres further upstream (north of the Sheepworld site) and is within a 80km/h zone in hilly terrain. The passing lane is located on a grade and is short with some curves towards the end being inappropriate for the road. The project feasibility report recommended further investigations to identify the risks of extending the southbound passing lane.

Due to the close proximity of the Sheepworld and Dome Valley projects, the project feasibility report recommended that only one project be progressed. Further investigations confirmed the Sheepworld project to be the only feasible option if the Dome Valley passing lane extension is found to be unviable.

Preferred option

A scheme assessment report undertaken this year recommends an option to extend the existing 570-metre long passing lane by 756 metres. This would provide three 3.5-metre lanes and 2-metre shoulders on both sides giving a total seal width of 14.5 metres. A guardrail is proposed on the western side for the full length of the extension. The widening includes an existing 80km/h curve.

Cost and benefit-cost ratio (BCR)

The scheme assessment report estimated a cost of \$4.7 million and a BCR of 3.4.

6. Waiteraire southbound passing lane

This section of SH1 was assessed as needing a passing lane to be consistent with the NZTA's new passing lane policy requirements (a passing lane every 5 kilometres). This would provide the first southbound passing opportunity for approximately 6 kilometres from the Wellsford township.

Preferred option

The project aimed to provide safer traffic movements and minimise delays. However, the project would only provide for 800 metres of passing lane which does not meet the 1400 metres required by the new passing lane policy. Further investigations identified a number of serious concerns relating to the safety of the option. The investigations also found the BCR to be lower than anticipated. As a result, the project was terminated.

Costs and benefit-cost ratio (BCR)

The scheme assessment report undertaken in 2008 estimated a cost of \$3.2 million and a BCR of 2.4.

7. Toovey Road southbound passing lane

This project investigated a southbound passing lane being constructed on SH1 just south of the Warkworth township. The investigation was undertaken due to a lack of safe passing opportunities through this section of SH1.

Preferred option

The preferred option starts 650 metres north of Toovey Road at McKinney Road. It ends past Valerie Close. It includes improving the substandard vertical curve through the project area and providing a 1.5 kilometre passing lane (excluding tapers). The option would require the purchase of approximately 25,000m² of private land.

This option was taken through to scheme assessment stage but was terminated following opposition from the Rodney District Council.

Cost and benefit-cost ratio (BCR)

The scheme assessment report undertaken in 2007 estimated a cost of \$2.9 million and a BCR of 2.1.

I hope this information meets your requirements. If you would like to discuss this reply with the NZTA, please contact Paul Glucina. Senior Transport Planner, by email to paul.glucina@nzta.govt.nz or by phone on (09) 969 9800.

Yours sincerely



Tommy Parker

State Highway Manager, Auckland and Northland
For Chief Executive