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June 2017 Engagement

### FEEDBACK SUMMARY



### **Route suggestions**

Some people talked about routes to the east of Levin, others would rather see a route to the west of Levin. It is important to find a route that minimises the impact on residential and agricultural land.

Suggestions about continuing the project further north.



### **Bypass**

Strong support for the need to bypass Levin and other townships/ villages. Some concern about removing passing traffic and potential trade from Levin, but the majority recognising the need to reduce congestion and have heavy vehicles out of town.



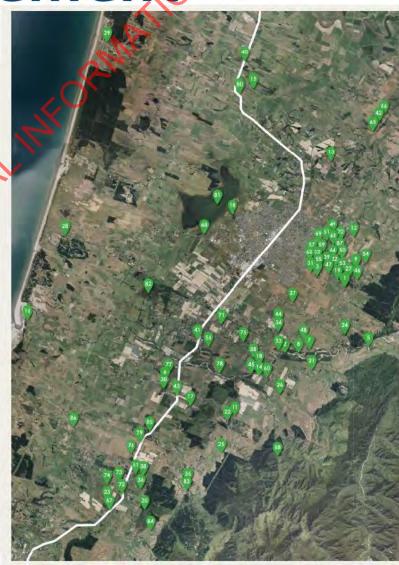
### Safety

Positive comments about the recent safety improvements, but many more comments highlighting other concerns, like dangerous intersections, the narrow bridges and lack of safe passing opportunities.



### Values

There are a number of features unique to the Horowhenua District: highly productive soils, village character; marae; rural lifestyle; spiritual connection between Lake Horowhenua and the Tararua Ranges; heritage buildings.



### **MCA**

### Workshop

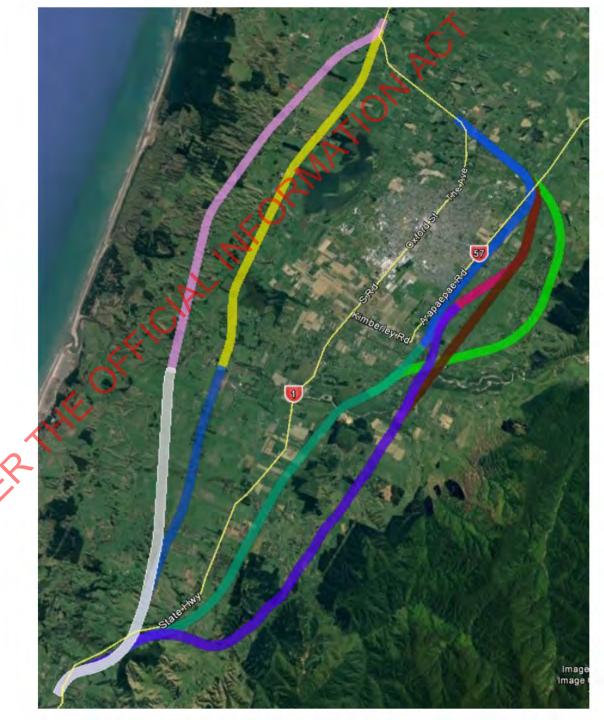
- 23 options
- 2x 1 day workshop
- Follow-up Meeting
- 12 Criteria
- 50+ people; incl. project team, specialist, community, iwi and stakeholders
- Scoring and weighting
- Analysis
- Worst performing options discarded



### **MCA**

### Workshop Outcome

- 10 shortlisted options
- 2 Western options
- 8 Eastern options
- Further Investigation
  - Traffic Modelling
  - Constructability
  - Tangata Whenua



Further Investigation

**Outcomes** 

### Traffic Modelling

- 10 options modelled
- Assesses the effects on the transport network
- Compares relative transport performance of the options against the relevant Project Objectives
- Width of blue line indicates traffic volume
- Modelling completed for various interchange layout
- Shows movements from south to north only









Traffic Modelling - Results

Eastern Options (excl. N8)

- Overall the majority of traffic used the new express but varied slightly between options
- Good time saving to north and east
- Slight time decrease to Levin



Traffic Modelling - Results

**Western Options** 

- Traffic travelling north of Levin use new road
- Traffic travelling to Levin or to Palmerston North would continue to use the existing road



Traffic Modelling - Results

Far Eastern Options (N8)

- Those travelling north or east use the road (2/3 of traffic)
- Those travelling to Levin use existing road from Manakau
- Good time saving to east



Traffic Modelling - Shortlisted Options

The traffic modelling results demonstrates the following:

- When considering the project objectives the western options and far eastern option (N8) do not generally perform well
- The western options do not provide good access to potential economic growth locations or connectivity to Levin.
- Options that use S6 provide the best journey time saving options (and thus will have the best safety and economic benefits).
- The eastern options are much better performing options from a transport performance perspective and provide much better opportunities to fit with the economic growth objectives

### Constructability

- The remaining options (S6, S7, N4, N5 and N9) were assessed to better understanding of construction risks and thus likely cost.
- Due to greater uncertainty and lack of accessibility, an aerial investigation was completed for \$7 which showed it would
  - · Traverse highly variable and incised terrain
  - Included a number of significant gullies
  - Cross floodplains
- In addition S7 traverses a fault line (which was already known)
- These conditions are significantly different to those that exist on the other corridor options and are reflected in the estimated cost

Constructability - S7 Aerial Images



Constructability - S7 Aerial Images



Constructability

a diam	Approx. Length		Indicative IBE cost estimates		
Options		Est. no. of bridges	Expected	95%	
S6-N4	24.8 km	9	\$695m	\$800m	
S6-N5	25.3 km	9	\$700m	\$800m	
S6-N9	25.4 km	9	\$700m	\$800m	
S7-N4	25.9 km	12	\$950m	\$1,100m	
S7-N5	26.3 km	12	\$960m	\$1,100m	
S7-N9	26.1 km	12	\$950m	\$1,100m	

This assessment shows that options that use S7 are approximately 35-40% more expensive (\$260m -\$300m) than those options that use S6.

Constructability - Southern Options

The MCA, constructability and traffic modelling assessments show that options that use S7:

- do not provide the same level of transport benefits as those that use S6;
- are 35-40% more expensive than options that use S6; and,
- would (as compared to \$6) minimise effects on the local community at Manakau (although it would still effect the southern part of the Manakau heights areas).

### Constructability - Option S7a

- During the MCA process the community members on the PRG identified an alignment that used the southern part of S7 and then joined onto S6 to the north, once past Manakau. This was called S7A.
- It would avoid most of the settlement of Manakau (like S7) but will avoid some of the areas that cause the significant costs differences between the options that uses S7 and those that use S6.
- Accordingly, options that used S7A were decided to be reconsidered and subject to traffic modelling and constructability assessments

Constructability and traffic modelling - Option 37a

Traffic modelling and constructability analysis of options that use S7A shows that these options would:

- provide less transport benefits than option S7 (and S6).
  - 2km longer than options that use S6
  - 1 km longer than those that use S7.
- cost 22% more than options that use S6
  - \$155m-\$180m More than \$6 options
  - options that use S7A are \$105m-\$120m cheaper than S7

### Constructability - Northern Options

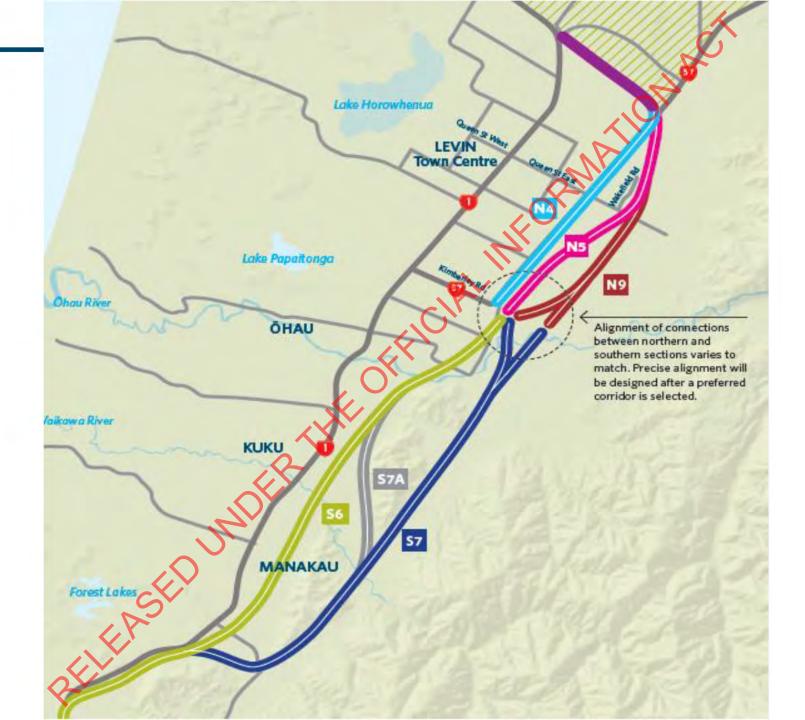
- All three northern options achieve the project objectives
- No Constructability concerns identified
- When assessed there were only minor differences in terms of scale effects

Constructability

		Approximate journey time saving from Ōtaki		Estimated reduction in		
	Length of option	to Foxton	to Levin Town Centre	to Palmerston North	deaths and serious injuries	<b>Estimated Cost</b>
S6 - N4	24.8km	6½ minutes	1¼ minutes	5¾ minutes	28-30	\$700m-\$800m
S6 - N5	25.3km					
S6 - N9	25.4km					
S7 - N4	26.0km		50 seconds	5½ minutes	26-28	\$950m-\$1.1bn
S7 - N5	26.3km	6 minutes				
S7 - N9	26.1km					
S7A - N4	26.9km	4	15 seconds	5 minutes	24	\$850m-\$980m
S7A - N5	27.4km	5½ minutes				
S7A - N9	27.1km					

### Tangata Whenua

- Additional hui have been held with Ngati Raukawa and Muaupoko regarding the O2NL project
- The information and opinion provided at the MCA workshops was repeated and reinforced
- Confirmed that options to the west of SH1 and Levin traverse and effect areas of cultural significance, including urupa, marae and land holdings
- Concerns about options located to the east of SH1 (and Levin), were also expressed. However, they advise that as compared with the western options, these issues will be able to be addressed through design and mitigation.



### February 2018 Engagement

### **Purpose**

The purpose of this round of engagement is.

- To outline the options investigated as part of the MCA process;
- Explain the MCA process and the outcomes;
- Obtain feedback on the short listed options to help us make a decision on the recommended option;
- Provide information on next steps for the project; and
- Highlight that S6 is currently technically best performing.

### February 2018 Engagement

### How

Similar approach from last time, including:

- · Contact individual landowners
- Newsletter
- Community Information Days
- Community and Stakeholder Toup Meetings
- Project Pop-up Shop, Levin
- Online

### February 2018 Engagement

### **Community Information Days**

Manakau information session: Saturday 10 February, 10am-2pm

Manakau Community Hall, 12 Mokena Kohere Street, Manakau

Koputaroa information session: Wednesday 14 February, 2pm-4pm

Koputaroa Community Hall, 399 Koputaroa Road, Koputaroa

Levin information session: Saturday 17 February, 10am-2pm

O2NL Project Pop-up shop, 183 Oxford Street, Levin

Ohau information session: Thursday 22 February, 3pm-7pm

Ōhau Public Hall, Muhunoa Road West, Ōhau

Family Fun Day information session: Saturday 24 February, 10am-4pm

Levin Adventure Park, 93 Oxford Street, Levin

Levin information session: Thursday 1 March, 4pm-6pm

Waiopehu College, 74 Bartholomew Road, Levin

Poroutawhao information session: Wednesday 7 March, 2pm-4pm

Poroutawhao Community Hall, 800 State Highway 1, Poroutawhao

Levin information session: Friday 9 March, 4pm-8pm

O2NL Project Pop-up shop, 183 Oxford Street, Levin