# BOARD PAPER

<table>
<thead>
<tr>
<th>Paper no:</th>
<th>2017/07/1159</th>
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<tbody>
<tr>
<td>Meeting date:</td>
<td>7 July 2017</td>
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<tr>
<td>Prepared by:</td>
<td>Neil Walker, State Highway Manager, Central</td>
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<tr>
<td>Recommended by:</td>
<td>Tommy Parker, Group Manager Highways &amp; Network Operations, Robert Brodnax, Acting Group Manager Planning &amp; Investment (as at 30 June 2017)</td>
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<tr>
<td>Board function:</td>
<td>Significant planning, investment and operational matters</td>
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<tr>
<td>Subject:</td>
<td>Nelson Southern Link - Programme Business Case</td>
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It is recommended that the NZ Transport Agency Board resolves to...

- **Support** the direction of the Nelson Southern Link Programme Business Case to undertake further investigations for a detailed business case to develop a new arterial road and other activities to ease congestion.

- **Note** that Nelson City Council’s support will be sought following completion of further investigation for the detailed business case.

- **Note** that formal support will be requested from the NZ Transport Agency Board during the detailed business case stage.

- **Note** the allocation of $3 million to develop a detailed business case to be funded from the Government’s Regionally Accelerated Project Tranche 3 funding ($12 million total).
## Key events leading to the development of the Nelson Southern Link Programme Business Case

<table>
<thead>
<tr>
<th>Date</th>
<th>Key event</th>
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<tbody>
<tr>
<td>2004</td>
<td>Notice of requirement for Southern Link declined by Environment Court due to social and environmental impacts and a lack of demonstrated benefit of the project</td>
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<td>2008-2011</td>
<td>Corridor studies indicated the requirement for a southern link within 20-25 years</td>
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<tr>
<td>2014</td>
<td>Transport Agency and Nelson City Council started a State Highway 6 Rocks Road walk/cycle investigation</td>
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<tr>
<td>2014</td>
<td>The Government initiated the Nelson Southern Link Investigation as an Accelerated Regional Roading Package (Tranche 3) project</td>
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<tr>
<td>2015</td>
<td>State Highway 6 Rocks Road was identified as a crucial 2km section of a 7.2km long coastal cycle route supported by Government’s Urban Cycleway Fund</td>
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<td>2015</td>
<td>Public engagement for Programme Business Case completed prior to June 2016</td>
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Nelson Southern Link Investigation area

- SH6 Haven Road Roundabout
- SH6 Rocks Road
- SH6 Annesbrook Drive Roundabout
- Southern Link alignment
- Waimea Road
The form and function of Nelson’s two key arterials results in congestion and delays and population is growing fast

- Nelson has two key arterials that connect the central city and port with employment and residential areas to the south west; SH6 Rocks Road (coastal route) and Waimea Road (inland route)

- Both arterials are experiencing delays during peak travel periods and growth is increasing; the Nelson region’s GDP grew by 4.4% in 2016, growth indicators rank Nelson highest in the country

- Developing the programme business case has been challenging; there are diverse views and stakeholders had difficulty agreeing the programme objectives

- Majority support for a Nelson Southern Link did not exist prior to the October 2016 local body elections
Nelson City Council and the Nelson community seek improved walking and cycling on Rocks Road (SH6)

- Improved cycling and walking is a Nelson City Council and community aspirations
- Widening Rocks Road to retain state highway traffic and improve walking and cycling requires coastal reclamation. This creates environmental challenges and is likely to be expensive
- To avoid reclamation, state highway traffic would need to be diverted to a new arterial route
- Rocks Road is identified as a crucial 2km section of a 7.2km long coastal cycle route supported by the Government’s Urban Cycleway Programme
The Nelson Southern Link programme aims to ease congestion on the two arterials and improve outcomes for active modes

- Stakeholder workshops were held to discuss investment objectives for the programme business case, the resulting objectives are:
  - Maintain travel times on the two arterials
  - Limit congestion on the two arterials by creating a peak hour volume to available capacity ratio of no more than 0.8
  - Improve walking and cycling safety on the two arterials
  - Double walking and cycling numbers on Rocks Road

- Public engagement in 2016 indicated 61% preferred a new route option, 21% preferred optimisation and 10% preferred widening; those that supported a new route option reduced to 46% in a statistically evaluated telephone survey
The Programme Business Case recommends a staged suite of interventions

- Network optimisation activities are recommended in the short term (2020)
- A new route is recommended in the medium term (2030); with protection of this route recommended in the short term
- The ultimate solution for upgrading walking and cycling on SH6 Rocks Road is dependent on the final new route alignment and classification

Key:
PBC (programme business case)
DBC (detailed business case)
The Programme Business Case recognises a new route will be required

- Under a medium growth scenario a new arterial route would be required around 2030; growth is already exceeding the medium growth scenario
- Route protection is recommended in the short term
- Further work is required in the detailed business case to confirm the route and alignment
- The Programme Business Case considered a number of new route options including a tunnel and with a cost range up to $300m; a tunnel may not represent value for money
Network optimisation in the short term requires support from Nelson City Council

- Network optimisation is recommended in the short term with activities including:
  - intersection improvements
  - clearways on critical sections of Waimea Road and SH6 Rocks Road
  - enhanced public transport
  - active transport and travel demand management on SH6 and Waimea Road
- Many of these activities include local road functions and require Nelson City Council support and delivery
- Nelson City Council has previously advised that should the Transport Agency ask for formal support of the programme business case findings, its ‘significance’ policy is likely to be triggered which could require it to undertake its own public consultation
- Formal Nelson City Council support is therefore proposed to be sought when more definitive conclusions are available during the detailed business case phase
Nelson Southern Link recommended programme

ROCKS RD WALK/ CYCLE INVESTIGATION
ROCKS ROAD WALK/CYCLE OPTIONS:
1. Do minimum – $6m
2. Enhanced safety (reduced traffic lane widths and shared path) – $8m***
3. On-road cycle lanes and shared path (reduced parking) – $21m
4. On-road cycle lanes and shared path (key parking retained) – $22m
*Cost are expected scheme costs
**Only possible if state highway is relocated

Note: Exact alignment and classification of a new route is to be determined
The estimated cost range of the recommended programme is $45 million to $160 million.

<table>
<thead>
<tr>
<th>Activities</th>
<th>Period</th>
<th>BCR range</th>
<th>Cost range (million)</th>
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</thead>
<tbody>
<tr>
<td>1. Network optimisation</td>
<td>2018 – 2033</td>
<td>0 – 2.9</td>
<td>$20 – $40</td>
</tr>
<tr>
<td>2. New route (excluding tunnel)</td>
<td>Built early 2030s</td>
<td>0 – 1.9</td>
<td>$70 – $135</td>
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<tr>
<td>3. Rocks Rd walk/cycle</td>
<td>To be determined</td>
<td>To be determined</td>
<td>$5 – $25</td>
</tr>
<tr>
<td>Overall programme</td>
<td>2018 to 2033</td>
<td>0 – 2.2</td>
<td>$45 – $160</td>
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</table>

- The investment assessment profile of the recommended programme is Medium strategic fit, medium effectiveness and a benefits cost appraisal 0 – 2.2
- The cost range reflects the range of potential activities considered that could form the programme; these will be narrowed to selected options in the next phase.
The estimated cost range of the recommended programme is $45 million to $160 million continued

- Initially network optimisation will reduce congestion, but as growth continues congestion will worsen until a new arterial route is necessary. Based on current forecasts, a new route will be required in the early 2030s to relieve expected congestion

- A new route on the Southern Link alignment could range from $70 million to $135 million

- The estimated cost is higher than the Accelerated Regional Roading Package estimate of $40m to $50m because it reflects an updated design with city connections, interchanges and new property requirements, and improved grades resulting in greater earthworks and retaining walls; the original estimate was based on an alignment and associated scheme designs that were undertaken nearly 20 years ago
Timing of a new route is dependent on growth and network optimisation

- Growth is already accelerating above the assumed medium scenario; Nelson City Council support for network optimisation has not yet been secured.
- If growth continues above the medium growth scenario and network optimisation is not put in place the new route could be needed sooner.

Potential range when needed
An investigation of wider economic benefits is underway

• The Minister of Transport has asked the NZ Transport Agency to work with Nelson City Council to understand future growth and economic projections for Nelson and the role that transport infrastructure plays in developing the right outcome for Nelson

• In addition, the NZ Transport Agency, Treasury, and the Ministry of Transport are working together to assess the impact of capturing wider economic benefits on transport investment models

• This assessment includes three case studies; Auckland Airport to City Centre mass transit, Penlink in Auckland and the Nelson Southern Link

• For each case study, the wider economic benefits will be identified and quantified and it will be noted if these sit within the existing method to evaluate costs and benefits (the economic evaluation manual) or outside it

• Based on that, a recommendation will be made for each case study whether other sources of funding should be sought from the private sector (willingness to pay) or local or central government

• This work has commenced and is expected to be completed by September 2017

• This information will inform the next stage of the investigation and funding decisions for this project
Further investigation is required during the next phase

- Funding for the detailed business case phase is provided within the Accelerated Regional Roading package
- The next steps to progress the detailed business case are:
  - Continue dialogue with Nelson City Council to understand their views on network optimisation
  - Review the wider economic benefits and growth rates to confirm timing of a new route
  - Confirm the new route form, alignment and timing and subsequently preparation for route protection and identification of the options for walking and cycling on Rocks Road
  - Seek formal support from Nelson City Council once the above is resolved
## Potential risks include Council’s position, community views and consenting challenges

<table>
<thead>
<tr>
<th>Risk</th>
<th>Mitigation</th>
</tr>
</thead>
</table>
| 1. Nelson City Council has not yet supported the programme | • Nelson City Council has previously advised that should the Transport Agency ask for formal support of the programme business case findings, its ‘significance’ policy is likely to be triggered which could require it to undertake its own public consultation.  
• Formal Nelson City Council support is therefore proposed to be sought when more definitive conclusions are available near the end of the detailed business case phase |
| 2. Delay in walking and cycling | • The community may be frustrated with a perceived further delay in decisions related to walking and cycling along Rocks Road while the detailed business case phase is carried out.  
• A communications strategy will be developed to manage this. |
Potential risks include Council’s position, community views and consenting challenges  

<table>
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<th>Risk</th>
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<tbody>
<tr>
<td><strong>3. Lack of community support for Network Optimisation</strong></td>
<td>• There is a risk that there would be little community support for network optimisation. This could see it not implemented and bring forward the need for the new route. This risk could be mitigated by progressing with the new route investigation and consenting to allow for earlier implementation if needed.</td>
</tr>
</tbody>
</table>
| **3. Consenting challenges**              | • The new route option presents significant consenting challenges. All projects of this scale carry risk, however it is a greater risk in this case given the history of the route being declined in the 2004 Environment Court decision in circa 2004. It is considered that this risk is manageable given:  
  • There is a stronger case for the need for the project (and this considers the wider transport system, not just a new route in isolation)  
  • The Transport Agency undertakes these projects differently to 2004, with extensive stakeholder and community consultation part of the process  
  • The new route could potentially be designated as a State Highway with Rocks Road no longer the key strategic route, and potentially being revoked to the Council  
  • The next phase of the programme should be commenced to be prepared for all potential growth scenarios |
The following information will be made available on the Transport Agency website ...

If the Board agrees to the recommendations in this paper, the following information will be made available on the Transport Agency website:

- The Nelson Southern Link programme business case demonstrates gaps in journey time reliability and the congestion and capacity levels of service which adversely affect the Nelson transport system
- The recommended programme identifies a number of opportunities to improve economic and social outcomes, including making better use of the existing transport capacity. These can also provide benefits to tourism and freight
- The programme business case has been assessed as Medium strategic fit, Medium effectiveness and Benefit Cost Appraisal of 0 – 2.2
Supporting information available in the Resource Center of Diligent Boards…

- Nelson Southern Link Programme Business Case
- Investment assessment for Nelson Southern Link Programme Business Case