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NEW ZEALAND COUNCIL FOR INFRASTRUCTURE DEVELOPMENT

## **Submissions**

**On the**

**Transit New Zealand Draft 10 Year State Highway Plan 2005 2006**

**March 2005**

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NEW ZEALAND COUNCIL FOR INFRASTRUCTURE DEVELOPMENT

## 1. Introduction

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- 1.1. The New Zealand Council for Infrastructure Development is a non profit organisation.
- 1.2. Members comprise a diverse range of private and public organisations that seek world class infrastructure developed and provided in New Zealand to help all New Zealanders achieve the standard of living to which we aspire.
- 1.3. NZCID's vision is to promote the provision of world class infrastructure by both the public and private sectors for the benefit of New Zealanders.
- 1.4. The Council seeks to work with Transit New Zealand to ensure the transport network builds a better New Zealand and it is in this collective vision that NZCID presents this submission of on the Draft 10 year state highway plan.

## 2. Acknowledgement of Transit 10 Year Plan Objectives

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### NZCID:

- 2.1. Acknowledges that Transit New Zealand has endeavoured to provide balanced progress towards each of the NZ Transport Strategy objectives of assisting economic development, assisting safety and personal security, improving access and mobility, protecting and promoting public health, and ensuring environmental sustainability.
- 2.2. Supports Transit New Zealand's goal to develop the state highway system in a way that contributes to an integrated, safe, responsive, and sustainable land transport system in conformity with its statutory obligations.
- 2.3. Acknowledges the requirement for Transit New Zealand to prioritise work its work programme within available funding.

### 3. NZCID Recommendations for Development of the Draft 10 Year Plan

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NZCID makes the following recommendations which it considers would enhance the draft plan to enable Transit to more effectively deliver its vision, meet its statutory obligations and enhance transparency for users of the plan:

- 3.1. In its current format the plan represents a works programme that has been developed in reaction to available funding and buildability constraints.
- 3.2. NZCID considers the plan would be improved if it were to proactively describe Transit's vision for development of state highway network over 20 year horizon and then detail the 10 year action plan to deliver on that vision.
- 3.3. The plan should set out Transit's view of the state highway quality and capacity standards that it considers will be necessary to meet the nation's mobility requirements (including estimates of the impact of enhanced travel demand management and transfer to alternative transport modes).
- 3.4. It should set out quantifiable performance indicators for urban and rural State Highways that will demonstrate the delivery of the plan outcomes in terms of:
  - reductions in congestion
  - environmental quality standards
  - road safety quality standards
  - transport mode and land use integration
- 3.5. It should set out Transit's view of the state highway infrastructure priorities that will enable it to deliver its statutory obligations including:
  - the minimum project delivery time lines that will be required to meet forecast travel demand
  - identification of barriers to meeting those timelines including funding, consent processes, industry capacity, decision making processes and
  - identification of means to overcome those barriers
- 3.6. Having clearly set out what Transit considers is necessary to meet its statutory obligations, the plan should then prioritise what can be achieved within the required 10 year time frame given current funding and buildability constraints and

- 3.7. The nature and expected social, economic and environmental impact resulting from the deferral of projects not able to be funded within the programme.
- 3.8. By this process, users of the plan will better understand the rationale behind the tradeoffs that Transit has been forced to make in its prioritisation process, and have improved understanding what policy options it considers are necessary to deliver the outcomes expected from it by Government and by suppliers and users of the transport system.

#### **4. Need to adopt a strategic corridor approach as distinct from current “project by project” approach.**

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- 4.1. NZCID is concerned at the piecemeal development of strategic corridors proposed under the current plan.
- 4.2. Corridors of strategic national importance, such as the Auckland South Western Corridor, for example, will remain incomplete and others such as Wellington’s Western Link are not programmed for construction start within the ten year plan horizon.
- 4.3. Under current Resource Management Act and Land Transport Management Act planning processes, each of the various projects comprising one strategic corridor require designation consent and funding approval as an iterative process, on a project by project basis.
- 4.4. Each individual project can be expected to be challenged through the RMA LTMA approval processes which in large part accounts for the extended project completion time lines currently proposed in the plan.
- 4.5. NZCID considers a more strategic approach to the development of state highway corridors is required and greatest priority for resource allocation should be given to those corridors of strategic national importance.
- 4.6. Individual projects comprising strategic routes should be logically grouped into a single corridor project and managed as one coherent whole by a project manager.
- 4.7. In the case of the Auckland Western Ring Route, for example, Transit should set as a goal completion of the corridor in an integrated manner by a certain date and develop the appropriate funding, resource and consents processes to deliver that outcome.

- 4.8. NZCID notes this is consistent with the kind of approach adopted in Australia which has achieved significant improvement in the connectivity of its strategic corridor network in the last decade.
- 4.9. The most obvious example is the Western Sydney Orbital (now known as Westlink M7, which went to consultation on environmental impacts in 2001 and is scheduled to open to traffic at the end of 2006:

The 40km Westlink M7 is Australia's biggest urban road project and is a key missing link in Sydney's orbital road network of motorways.

The project's Environmental Impact Statement went on public exhibition from 8 January to 5 March 2001. On 28 February 2002, the NSW Minister for Infrastructure and Planning approved the project. In February 2003, the WestLink Motorway Limited consortium entered an agreement with the Roads & Traffic Authority to finance, design, construct, operate and maintain Westlink M7 motorway. The Federal Government is contributing \$356 million towards the construction of this link with the remainder of the cost being met by the private sector.

The WestLink consortium has been selected to design, construct, maintain and operate the Westlink M7 for a total of 34 years, after which it is transferred back to the Government. The equity investors in the WestLink consortium are Transurban, Macquarie Infrastructure Group, Leighton Contractors and Abigroup Contractors.

The RTA coordinated the project's development, environmental assessment and planning approval phases. During the implementation phases, the RTA will administer the project deed and ensure that the consortium delivers the Westlink M7 according to the agreed scope and approval conditions.<sup>1</sup>

- 4.10. The development of a corridor approach would be more consistent with the stated intent of the Land Transport Management Act which requires land transport projects to be developed in an integrated manner.
- 4.11. RMA consents process might also be streamlined by means of ministerial "call in" of projects of national importance using amendments signalled under the Resource Management and Electricity Legislation Amendment Bill.
- 4.12. NZCID notes that Land Transport New Zealand (LTNZ) funding specifications now require Transit to consider "packages" for projects greater than \$20m where components such as land use, passenger transport, travel demand management, walking and cycling have to be integrated into a project before LTNZ will consider funding.

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<sup>1</sup> <http://www.rta.nsw.gov.au/constructionmaintenance/majorconstructionprojectssydney/westernsydneyorbital/?hlid=4>

4.13. There are now two statutory processes that a project has to go through before construction can commence:

- To get funding it must comply with the objectives of the LTMA and the NZ land Transport Strategy
- To get consent it must comply with the RMA

If Transit is not successful with either one of the processes in respect of any individual project, the project will not proceed. If that project is a component part of a strategic connection, completion of the corridor is delayed to the national detriment.

4.14. It is clear from these processes that LTNZ are seeking a more holistic approach to project development which is consistent with the kind of corridor approach proposed in this submission.

## **5. Deferral of projects of national importance has significant adverse economic and strategic impact**

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5.1. NZCID is concerned that the deferral of major projects of national significance beyond the 10 year planning horizon will result in an unmanageable bow wave of major projects from 2015 on and will result in significant economic opportunity cost to the nation.

5.2. The link between transport infrastructure investment and economic growth has been demonstrated by numerous studies.

5.3. In December 2002 the National Institute of Economic and Industry Research completed a study of 48 transport infrastructure projects with a combined cost of more than \$A20 billion and concluded:

“The main finding is unequivocal: there is a direct relationship between transport infrastructure investment and Australia’s economic growth.

The need to export and the emergence of the knowledge economy has, in fact, made investment in transport infrastructure more important as a driver of growth. This is because Australian institutions and businesses need the connectivity that comes with efficient transport hubs and because globalisation has increased the importance of:

- efficient goods delivery;
- labour market reach; and
- social invention and the knowledge economy.”<sup>2</sup>

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<sup>2</sup> “Transport Infrastructure: a perspective and prospective analysis of its role in Australia’s economic growth” National Institute of Economic and Industry Research trading as National Economics December 2002, p i

5.4. A recent study completed by The Allen Consulting Group which measured the economic return from completion of a package of four strategic roading projects including the Auckland Western Ring Route, the Tauranga SRN, the Wellington Western Corridor, and 402 Transit NZ passing lane package concluded:

“The findings of the study suggest that if all four of the proposed land transport infrastructure projects were undertaken, there would be a total benefit, net of costs, to the New Zealand economy in excess of \$1.5 billion dollars annually in 2012.

This total net benefit is made up of the following individual benefits:

- a net increase in GDP of \$1.0 billion in 2012. This is equivalent to a net increase in per capita GDP of around \$243. In other words, if the proposed set of land transport projects were to be undertaken as modeled, each person in New Zealand would, on average, be better off by \$243;
- a benefit of \$65.9 million attributable to the value of lives saved and permanent disability avoided; and
- a benefit of \$511 million from travel time savings related to non-work activities.”<sup>3</sup>

5.5. Broadly speaking the overall conclusions from the analysis was that:

- the current level and pattern of investment in New Zealand’s land transport infrastructure is sub-optimal; and
- there are substantial economic gains available to New Zealand from lifting investment in land transport infrastructure.
- the gross gains very substantially exceed the investment and financing costs required to undertake the four packages of projects selected for analysis.<sup>4</sup>

5.6. In addition the study found that central government would benefit from an increased tax take in excess of the cost of the projects resulting from the economic growth achieved, providing the opportunity for either a reduction in taxation or diversion of the increased tax revenue to additional government expenditure.

5.7. The strategic and economic benefits from investment in transport infrastructure were also evidenced in March 2004 when Business Economic Research Limited released an economic assessment of the value of completing Auckland’s Eastern Corridor.<sup>5</sup>

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<sup>3</sup> The Benefits of Investing in New Zealand’s Road Transport Network, The Allen Consulting Group August 2004, p vii

<sup>4</sup> Ibid – vii

<sup>5</sup> Investing for Growth: Economic and Strategic Importance of the Eastern Transport Corridor. BERL March 2004  
www.berl.co.nz

- 5.8. It concluded that the route would improve GDP by between \$1 billion and \$1.5 billion dollars on the grounds that urban intensification enabled by the corridor would lead to increased productivity.
- 5.9. The BERL study calculated the resultant productivity gain would yield more GDP per unit of transport thus achieving a partial decoupling of economic and transport growth.
- 5.10. As the Crown agency responsible for oversight of the development of the national state highway network NZCID considers it is incumbent upon Transit New Zealand to highlight to Government and users of the Transit plan, the opportunity cost of continued deferral of projects of national significance.

## 6. Greater Urgency Required for projects of National Importance

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- 6.1. NZCID considers the strategic corridors of national importance that should be completed within the next 15 years to be:

Strategic Corridor	Constructed by:
<ul style="list-style-type: none"> <li>Auckland Western Ring Route Manukau to Albany Transport Corridor</li> </ul>	2012
<ul style="list-style-type: none"> <li>Central Motorway Corridor From the South Eastern Arterial to Harbour Bridge</li> </ul>	2012
<ul style="list-style-type: none"> <li>Nelson Southern Link Stoke to Nelson Transport Corridor</li> </ul>	2012
<ul style="list-style-type: none"> <li>SH2 Maramarua Expressway Bombay to Rangatarata 4 lane expressway</li> </ul>	2015
<ul style="list-style-type: none"> <li>Wellington Western Corridor Ngauranga to Waikanae Transport Corridor</li> </ul>	2015
<ul style="list-style-type: none"> <li>Auckland Eastern Corridor Manukau to CBD Transport Corridor</li> </ul>	2015
<ul style="list-style-type: none"> <li>Christchurch Strategic Road Network Package of projects to include the Christchurch ring route &amp; northern and southern corridors</li> </ul>	2015

- Tauranga Strategic Road Network 2015  
As per BoP RLTS inclusive of  
the Tauranga Harbour Link
- SH1 Waikato Expressway 2020  
Auckland to Cambridge  
4 lane expressway
- Auckland Harbour Bridge 2020  
Advance planning to see  
completion within 15 years

## 7. Need for greater use of toll funding for roads

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- 7.1. NZCID projects the capital cost of completing the strategic corridors listed above and maintaining a balanced state highway network improvement programme across the country to be of the order of \$17 billion over the 20 year time horizon.
- 7.2. Current central government funding, including the 5 cent per litre fuel tax increase due to commence in April 2005, is projected at \$41 billion of which approximately \$11 billion would be available for the state highway capital works programme.
- 7.3. This leaves a funding gap of \$6 billion over the 20 year horizon.
- 7.4. NZCID considers greater use of toll funding of strategic corridors either through direct or shadow tolling mechanisms will be required to help bridge this gap and achieve the quality standards required to meet social and environmental objectives.
- 7.5. Potential candidates for such tolling initiatives in addition to the existing Alport B2 and Tauranga Harbour Link projects might include:
  - SH20 Avondale extension possibly also including Mt Roskill, and ASH16/18 Hobsonville Westgate to Upper Harbour Bridge to advance the construction of the Western Ring Route as a complete project. (direct toll)
  - Eastern Corridor – Auckland (direct toll)
  - Northern and eastern components of the of the Tauranga Strategic Roding Network (direct or shadow toll where appropriate)
  - Hamilton by-pass and other urban by-pass projects (direct toll)
  - Transmission Gully (direct toll)

- Manawatu / Hawkes Bay toll link (probably via shadow tolling)
- Four laning state highway corridors with more than 15,000 vehicles per day (using shadow tolling)

## 8. Opportunity for procurement savings through increased private sector involvement

- 8.1. With the possible exception of the Penlink project in Rodney District, toll roads currently under consideration in New Zealand are public projects, notably the APURT B2 and Tauranga Harbour Link Toll projects.
- 8.2. In contrast, overseas experience has shown the benefit of private sector involvement not only in terms of providing the opportunity for additional private sector funding, but also in terms of delivering cost effective procurement and operation of large scale public assets.
- 8.3. Underestimation of project costs and/or the overestimation of traffic volumes and toll revenues can cause significant loss of public funds.
- 8.4. On the other hand, private sector involvement can reduce the risk associated with road projects by subjecting toll road proposals to true market assessment.
- 8.5. The risk associated with viability of traffic volumes has been clearly demonstrated in New Zealand with the Tauranga Route K project which has failed to attract anywhere near the number of vehicles projected when the council sought special tolling legislation to build it. The road lost nearly \$5.2 million in its first year of operation to June 2004 – a cost now being borne by Tauranga City rate payers.
- 8.6. It is difficult to see how the Tauranga Route would have proceeded as a private toll project had the proposition been tested in the market, or, if it had, the risk would have been much more clearly exposed at the time.
- 8.7. A 1999 survey, the UK National Audit Office reports that 73 percent of publicly funded projects exceeded the agreed contract price, and 70 percent were delivered late, whereas 2002 research by the UK Treasury showed that 76 percent of PPP projects were delivered on time or rarely with no cost overruns borne by the public sector.<sup>6</sup>

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<sup>6</sup> National Audit Office (NAO) (2003a); *Delivering Better Value for Money from the Private Finance Initiative*. Electronic document available on the Internet at [www.nao.gov.uk](http://www.nao.gov.uk); and (2003b). *PFI: Construction Performance*.

- 8.8. The Australian experience has been similar.
- 8.9. Sydney's M2 and Eastern Distributor projects had been sought on a negative tender basis because the State Government had evaluated that they would not be commercially viable and sought tenders for the required subsidies that they estimated would exceed \$A60m.
- 8.10. In the event, both winning tenders bid zero subsidies.
- 8.11. Current Australian examples of PPP projects include:
- Mitcham-Frankston Freeway Victoria
  - Cross City Tunnel Sydney
  - Lane Cove Tunnel Sydney
  - Western Sydney Orbital
- 8.12. The benefits gained from improved public and private sector alliance have also been recently demonstrated in New Zealand by the Grafton Gully project.
- 8.13. While financing of this project remained in public hands, a public private sector alliancing contract model for project procurement and delivery was formed, the first of its kind to be implemented on a public sector project in New Zealand.
- 8.14. The works were completed ahead of schedule and approximately 7% below the target out-turn cost.
- 8.15. It is apparent from this experience that the structure of the alliance improved cooperation between partners. The owner, designer and constructor were all based under the same roof, which improved communication and enabled decisions to be made in the best interests of the alliance, rather than an individual party.

## 9. Conclusions – 10 Year Draft State Highway Plan

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- 9.1. NZCID is supportive of Transit NZ's endeavours to develop the state highway network in accordance with its statutory obligations recognizing the constraints in funding, resourcing and consenting processes.
- 9.2. NZCID recommends the 10 year plan should more transparently set out Transit's recommendations for the development of the state highway network, the resource requirements that will be necessary and the barriers that need to be overcome, and clearly set out to users of the plan the trade-offs that have had to be made in the 10 year works program proposed.
- 9.3. NZCID recommends Transit NZ should adopt a strategic corridor developmental approach in the formulation of its works program to ensure more speedy construction of transport corridors of national importance.
- 9.4. NZCID is concerned at the cost to the nation of not completing major transport corridor developments in a more timely manner and considers major projects need to be advanced with urgency.
- 9.5. NZCID recommends greater use of toll funding and private public partnerships will enable earlier completion of projects ensuring earlier capture of the economic gains resulting from their construction as well as consequential savings in terms of procurement and contract management.

## 10. Appearance

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- 10.1. The Council confirms its desire to address the hearings panel in support of its submission.

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