



NZ TRANSPORT AGENCY
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TAURANGA EASTERN LINK

Project Summary Statement
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ROAD OF NATIONAL SIGNIFICANCE: TAURANGA EASTERN LINK

1. PURPOSE OF DOCUMENT

This paper provides information on the context, strategic benefits and implementation plan for the completion of the Tauranga Eastern Link project, one of the seven Roads of National Significance (RoNS).

2. STRATEGIC CONTEXT

2.1 Population, employment and growth

The Western Bay of Plenty has experienced significant population growth in recent years, and this is expected to continue over the next 30 years, with the population projected to double to 286,300. The key drivers of this growth will be increasing use of the Port of Tauranga, New Zealand's largest port, and the development of new residential, commercial and industrial land to the east of the city. If achieved, this projected growth will put pressure on existing infrastructure.

Planning for future land use and transport in the Western Bay of Plenty has been considered in an integrated manner under the SmartGrowth Strategy, developed by local authorities and road controlling agencies. This strategy plans for a compact urban form in the Western Bay of Plenty sub-region, with a focus on corridors – known as SmartTransport Corridors – and nodes of development.

In order to achieve the desired land use pattern and deliver on “live, work and play” outcomes, the SmartGrowth Strategy is reliant on the completion of the regional SmartTransport Corridors. The Tauranga Eastern Link is a key priority within the development of the SmartTransport Eastern Corridor, and is an essential component of an integrated transport network.

The urban areas within the Eastern Corridor, including Papamoa East, Te Puke and Rangiuru, are expected to grow significantly in the future, with around 60,000 new residents anticipated to move to the area. Development in the Eastern Corridor will support and complement the existing developing areas located south-east of Mount Maunganui.

In broad terms, future development along the Eastern Corridor is expected to contribute around \$8.5 billion to the Western Bay of Plenty sub-region economy. This includes:

- 17,500 new homes;
- 450 hectares of industrial development;
- Up to 100,000 square metres of shops, office and commercial activity.

Residential development at Papamoa East will be split into two stages. Stage 1 is expected to be complete by 2011. There are no planning constraints on Stage 1 in relation to the construction of the Tauranga Eastern Link, and it is anticipated that around 67% of Stage 1 development would be complete prior to the opening of the road.

However, Stage 2 development could only start after the Tauranga Eastern Link opens. Around 50% of the 120 hectares of industrial land to be developed in Papamoa East would need to be served by the construction of a new interchange on the Tauranga Eastern Link. Similarly, planning constraints also apply to the Rangiuru Business Park, and for further expansion of Te Puke.

From a growth management and planning perspective, the Tauranga Eastern Link is integral to the development of the eastern parts of Tauranga and, together with other integrated transport links, will form a robust transport network that will support and enable the anticipated growth to occur.

2.2 Existing routes

The Tauranga Eastern Link is an alternative route to State Highway 2 (SH2) which passes through Te Puke and Waitangi (please refer to the map below).

SH2 connects the central North Island, Eastern Bay of Plenty, Gisborne and Hawkes Bay to Tauranga, and in particular the Port of Tauranga. Currently, the section of SH2 between Tauranga and Paengaroa is the second-worst state highway under the New Zealand Road Safety Assessment Programme, based on fatalities and serious ongoing crashes per kilometre.

SH2 carries 18,000 vehicles per day (AADT in 2008), including just under 2,000 trucks, many of which need to access the Port of Tauranga in a timely and efficient way.

2.3 Objectives of the Tauranga Eastern Link RoNS

Within this context, the objectives of the Tauranga Eastern Link RoNS project are:

- To enhance inter regional and national economic growth and productivity
- To support the managed growth for the area as outlined in the SmartGrowth Strategy;
- To improve efficiency and contribute to economic development through improved travel time (particularly base travel time);
- To provide a more direct route to the Port of Tauranga;
- To provide a safer route between Tauranga and Paengaroa.

Map 1: Proposed and existing routes



Note – We have completed consultation and hearings (October 2009) with the Bay of Plenty Community on a proposal to advance the timing of the construction of the Tauranga Eastern Link through debt funding repaid by toll revenue (see later)

3. BENEFITS

3.1 National network benefits

The Tauranga Eastern Link project is expected to deliver several significant benefits to the national network when it is complete:

- Enabling more efficient transport movements from southern and eastern Bay of Plenty to the Port of Tauranga, which could result in increased productivity for regional and national freight traffic; and
- Providing a safer and more direct route for vehicles travelling between Tauranga and Paengaroa, routing heavy traffic away from Te Puke and the existing State Highway.

The Tauranga Eastern Link provides a more direct alternative to SH2, which will lower the cost of transport and improve access to the Port of Tauranga. The port transfers the highest volume of export products in New Zealand, so is a key gateway to world markets.

The Tauranga Eastern Link will provide long term benefits for travel times and efficiency. Modelling of the Western Bay of Plenty road network indicates that without the Tauranga Eastern Link the peak period journey on SH2 from Baypark Stadium to Paengaroa will take 45 to 50 minutes in 2026 (compared to a free-flow journey time of 14 to 15 minutes).

Once the Tauranga Eastern Link is built, this same journey is expected to take around nine minutes on the Tauranga Eastern Link and approximately 20 minutes on

SH2 at peak times. This means that travellers on both routes will benefit from the construction of the Tauranga Eastern Link. This improved travel time provides the opportunity to improve productivity of national freight traffic.

Safer journeys are another anticipated benefit of this project. Conflicts will be reduced on the existing network between national, regional and local traffic, and by providing a safer route for vehicles travelling between Tauranga and Paengaroa. In particular, it will eliminate through-traffic from Te Puke, creating a safer environment for walking and cycling.

3.2 Regional growth benefits

The Tauranga Eastern Link project is also expected to deliver several growth benefits to the region when it is complete by:

- Contributing to a sustainable growth management strategy;
- Improving productivity for commercial transport operators;
- Reducing congestion in key areas to help enable future growth; and
- Providing essential access and connectivity for new residential, commercial and industrial development areas to the east of Tauranga

In order to manage the projected population growth in the Western Bay of Plenty in a sustainable way, development needs to be carefully planned and executed to avoid the negative consequences that unmanaged growth can bring, such as unplanned infill housing, traffic congestion and in some areas, a poorer standard of living. All of these things would negatively impact on people's ability to live, work and play in the area.

The Tauranga Eastern Link project will free up capacity on the existing SH2, which will facilitate more growth and improve the safety of this route, which is currently compromised by the volume of traffic on this road. In addition, by eliminating through-traffic, the Tauranga Eastern Link project will reduce the environmental degradation in Te Puke caused by high volumes of inter-regional traffic travelling through its main street, with heavy vehicles bound for the Port of Tauranga exacerbating this problem.

From a commercial transport perspective, certainty of travel times is critical for business productivity and growth. Drivers are required to travel continuously for no more than five hours before they must take a break, with a total number of 11 driving hours per day. So, for operators that make regular return journeys, having travel time certainty helps to determine whether a driver is able to make a return trip within the permitted driving time limits.

In the case of hauling freight to the Port of Tauranga from towns such as Kawerau or Rotorua, the Tauranga Eastern Link is likely to enable freight companies to undertake an additional return trip per day, due to the reduced congestion and improved travel times that the road will bring. The port is a major economic driver for the region through its direct and indirect employment, economic power, and its role in regional exports and associated local industries.

3.3 Local network connectivity

The Tauranga Eastern Link is an integrated package of works supported by a network of roads and services in the Papamoa growth area. Further growth is expected over time with associated roading network and services and a future interchange connection to the Tauranga Eastern Link at Papamoa East.

Tauranga Eastern Link will provide direct connections between the proposed Rangiuru Business Park and Tauranga. Connections between the business park and the local network will also be made.

Once the Tauranga Eastern Link is completed, the existing SH2 will be operated as a local road arterial focusing its use on local connectivity, including provision of walking and cycling. The main street of Te Puke will be improved to increase the amenity of the local area.

4. PROJECT SCOPE AND ECONOMICS

The proposed route for the Tauranga Eastern Link project begins near Baypark Stadium at Te Maunga in Tauranga, and extends along the existing SH2 to Domain Road. This road will be upgraded to a four-lane motorway with a divided carriageway. From Domain Road to Paengaroa a new four-lane motorway will be built.

The Tauranga Eastern Link is a strong candidate to be advanced through debt funding repaid by toll revenues. The new section of motorway to be built from Domain Road to Paengaroa is proposed to be tolled between the Rangiuru Business Park and Papamoa East in order to capture all of the through-traffic between SH33 and Domain Road that has opted to travel on the tolled route.

The forecast outturn costs of the RoNS corridor (in 2009 dollars) at the most likely level is \$500 million within a confidence range of \$450 million to \$550 million.

The final costs of the RoNS corridor will include future years escalation (normally three percent) due to increases in input costs largely following national economic inflationary pressures. The actual amount of escalation attributed to individual projects depends on the time frame for the construction. If a project is constructed earlier than predicted then the amount of escalation would be lower. Equally if construction is later than predicted the cost of escalation would be higher. However, at a RoNS corridor level the individual project effects are less marked. Thus the forecast outturn cost of the RoNS corridor would be \$560 million with a confidence range of \$475 million to \$608 million.

The standard benefit cost ratio (BCR), as currently calculated is based on an 8 percent discount rate. Some would argue that this discount rate leads to investment that is too focussed on short term projects at the expense of large long term infrastructure. To review the impact of the discount rate the BCR with discount rates at 6 percent and 4 percent were also tested.

The standard BCR measures the direct transport benefits arising from the road. The scale of these corridor investments means that it is appropriate to include wider

economic benefits (WEBs); that is, the flow-on effects from the transport improvements. The result is to increase the BCR. The results of the analysis are set out in the table below.

Tolled Results

Discount Rate	Standard NZTA BCR	BCR inc WEBs
8%	1.4	1.8
6%	1.8	2.3
4%	2.3	3.2

Untolled Results

Discount Rate	Standard NZTA BCR	BCR inc WEBs
8%	1.7	2.1
6%	2.1	2.8
4%	2.8	3.8

5. IMPLEMENTATION PLAN

5.1 Current status

Tolling

Public consultation on tolling the Tauranga Eastern Link has been concluded, in accordance with the Land Transport Management Act 2003. Community acceptance is a prerequisite to applying to the Government for an Order in Council (OIC) to toll the Tauranga Eastern Link. At this stage, there are indications that the level of community acceptance for tolling (both conditional and unconditional) to bring forward construction of the road is around 93%.

The NZTA Board will submit a formal tolling proposal to the Minister of Transport for his consideration. The Minister of Transport will then decide whether to take the proposal to Cabinet and, following discussions with Cabinet colleagues, will decide whether to recommend to the Governor General that an Order in Council (OIC) be established to toll the road.

The OIC sets out the parameters of the road tolling scheme, including all of the relevant conditions from which NZTA would be eligible to toll the route – such as when tolling can start, toll tariffs, and how the scheme will generally operate.

If the tolling proposal is approved by Cabinet, the OIC is likely to be in place by July 2010.

Concurrent with the OIC process, it will be necessary to determine an appropriate debt facility and debt repayment mechanisms with Treasury officials. These aspects are not able to be finalised until the OIC is confirmed.

Project development

The Tauranga Eastern Link project is well advanced, with the main designation and resource consents in place, and design of the road underway. There are some minor alterations to both the designation and resource consents which are being processed, and it is anticipated that these will be resolved before the end of 2009.

Project delivery

The Tauranga Eastern Link will be delivered in two stages:

1. **Enabling works contracts)** This stage will involve relocating service facilities such as water mains and electricity substations; making improvements to a flood water pump station and undertaking flood mitigation works; and completing minor ancillary improvements to Truman Lane and Kaituna Road.
2. **Main physical works contract** This stage of the project will be delivered as a design and construct (D&C) delivery model, incorporating the construction of all roading and toll infrastructure. This model has been selected because we consider that substantial opportunities exist for innovation from the supply chain, particularly through the management of earthworks and material selection.

We expect to begin tendering for enabling works in early 2010 with a view to completion of those works during the 2011/12 financial year. The main works contract is expected to be tendered during 2010, with a start to physical works in early 2011 and completion by 2016.

5.2 Stretch targets

We are progressing with enabling works contracts, as well as the specimen design of the design and construction contract in anticipation of tolling being approved.

Should a fast track approval process be adopted for the tolling proposal then we are confident of achieving a physical start to work on the first enabling works contract in March 2010.