

Eastern Corridor Study



Revision 1
September 2006

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1. Executive Summary

The purpose of this report is to complete an integrated land use / transportation study of the SmartGrowth Eastern Corridor. The broad objectives of this study are to:

- Enable confident decision making
- Provide a resource for SmartGrowth and transport organisations
- Put in one place the current land use and transport knowledge of the Eastern Corridor
- Provide for a balanced transport network and connectivity
- Broadly scope the land use picture for the Eastern Corridor out to 2050
- Set a platform for the relevant parties in terms of transport funding

The project is a SmartTransport initiative. The Eastern Corridor stretches from State Highway 2 to the coast and from Girven Road and Te Maunga intersections to Paengaroa junction (SH 2 and 33) – see map on page 4.

This study of the Eastern Corridor covers the period out to 2051. Further work on a detailed 10 year development and infrastructure staging plan for the corridor will take place in 2007.

This study is a work in progress because of the long term nature of land use and transport along the Eastern Corridor. There will be revisions and updates to this work over time.

Eastern Corridor Land Use

Papamoa is one of New Zealand's fastest growing residential areas. Once fully developed Papamoa East will be a city the size of Nelson with 40,000 people. The total population of the Eastern Corridor itself will be upwards of 60,000 people by this time. It will have around 300¹ hectares of business land spread between Papamoa and Rangiuru. It is not a matter of simply grafting on to what is already there. Much of the development occurring along the eastern corridor will require new services, amenities and infrastructure. Plan changes are already underway which, if approved, will establish a new residential area known as Wairakei and a business park at Rangiuru.

The urban form of the area is a challenge. Papamoa follows a narrow strip of land (approximately 2km wide) bordered by the sea, sand dunes, the Kaituna River, and lower lying peat lands.

Transport Modelling

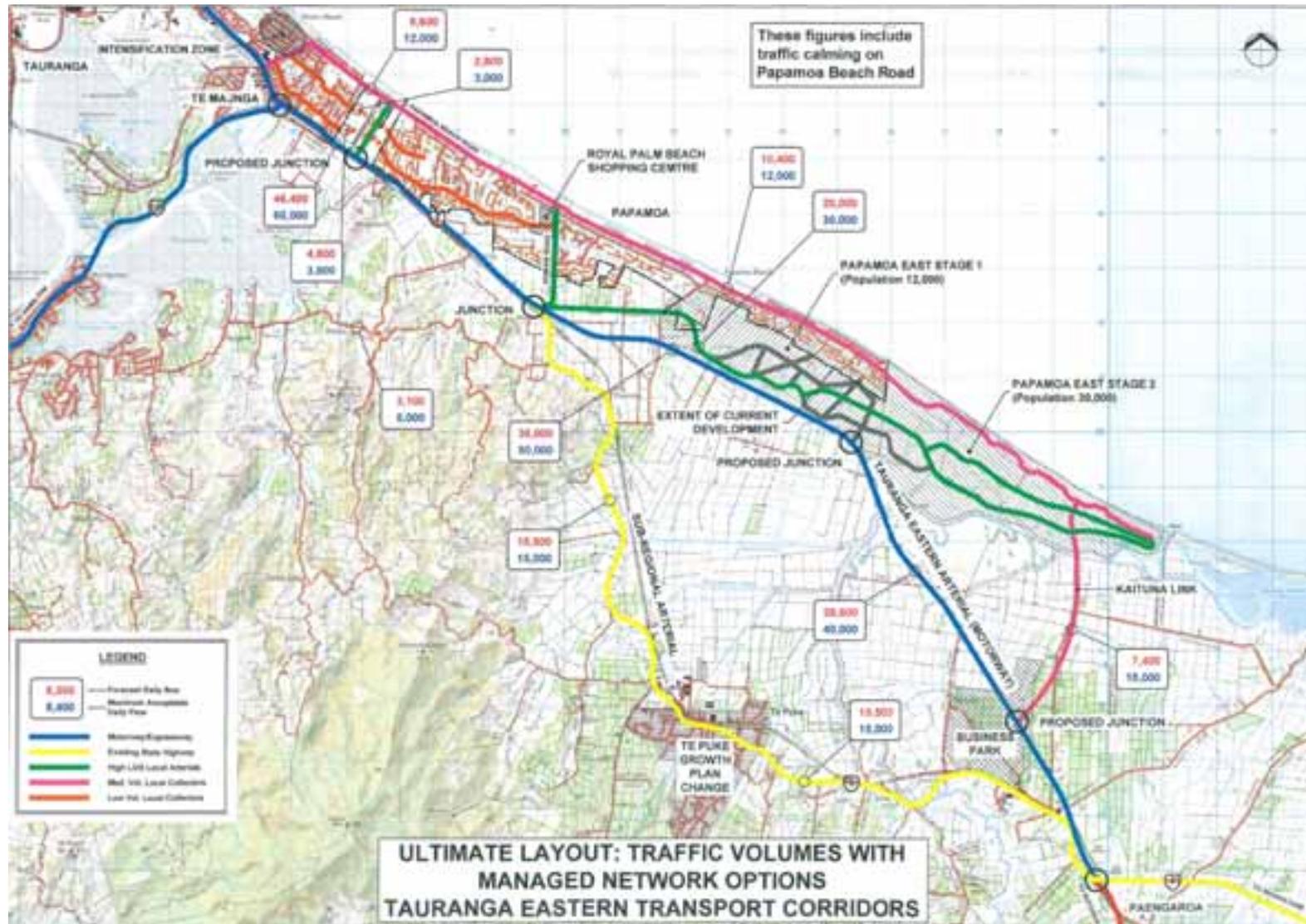
¹ Gross developable area

The map which follows summarises the traffic modelling that has been completed along the Eastern Corridor. The map shows the results of detailed traffic modelling of the whole network with all of the proposed land uses in place. Various scenarios of connectivity to the motorway and hierarchical status of the various elements of the network have been considered from the point of view of a balanced, sustainable network. The map shows two traffic flows – one is the forecast actual daily flow, the other is the maximum acceptable daily flow. This second measure is a threshold which indicates what is acceptable or desirable. Traffic flows above this start to have negative effects on both properties which have frontage to the roads, as well as the surrounding communities.

On the basis of the modelling work, the Transit New Zealand Board has agreed to all of the connections as shown on the map, subject to Tauranga City Council, Western Bay of Plenty District Council, and the Regional Council doing all within their statutory powers to ensure that the principles of the hierarchy and acceptable traffic volumes on this network can be achieved. Transit's agreement is also subject to the development of a funding plan for the Eastern Corridor. Modelling work has also been undertaken which examined the traffic effects on the Eastern Corridor transport network.

As a result of this modelling work the following motorway interchanges have been agreed to:

- Rangiuru Business Park
- Bell Road interchange
- Domain Road interchange
- Subject to further detailed engineering design, the Sandhurst Drive interchange (this is to ensure that the connections to Sandhurst Drive are managed safely)



Transport Elements

The transport elements for the Easter Corridor are as follows:

- Tauranga Eastern Motorway: Te Maunga to Paengaroa
- Te Okuroa Drive (stages 1 and 2)
- Upgrade of Tara Road, Girven Road, Domain Road , Parton Road and Welcome Bay Road
- Completion of Gloucester Road and Grenada Street
- Kaituna Link Road
- Te Puke Central realignment
- Papamoa Beach Road traffic management
- Upgrade of SH 2 between Paengaroa and Girven Road including intersection improvements either side of Te Puke (Transit NZ; Western Bay of Plenty District Council)
- Domain Road / Tauranga Eastern Motorway interchange
- Sandhurst interchange
- Bell Road / Tauranga Eastern Motorway interchange
- Rangiuru Business Park / Tauranga Eastern Motorway interchange
- Park and ride
- Public transport operating expenditure
- Public transport infrastructure
- Cycling and pedestrian activities, particularly within new developments
- Travel Demand Management (as per the Bay of Plenty Demand Management Strategy)

Funding

Funding for transport along the Eastern Corridor will be derived from multiple funding sources. Potential sources include:

- National Land Transport Programme allocations from Land Transport NZ (this includes national 'N' and regional² 'R' funds)
- The Bay of Plenty Crown Grant – 'C' or Crown funds (administered by Land Transport NZ)
- Territorial local authority funding from rates, vested assets and other sources
- Regional council funding from rates for public transport operating expenditure
- Regional cash injections (eg from shares and investments held)
- Development contributions (under the LGA 2002 – or Financial Contributions under the RMA 1991)
- Landowner / developer cost sharing contributions
- Tolling to pay for new infrastructure
- ONTRACK

Work is still being completed on the costs of all of the transport elements for the Eastern Corridor. A funding plan is also being worked on.

Conclusions

The Eastern Corridor is a significant challenge for the western Bay of Plenty sub-region in terms of land use and transport planning. The aim is to achieve integration between land use, infrastructure (particularly transport) and funding.

This study has involved a baseline investigation³ of long term land use and transportation along the Eastern Corridor. In completing this task the work to date and this report has substantially met the study brief.

Considerable challenges lie ahead for the successful implementation of the Eastern Corridor. A framework for moving forward with this study has been established through a series of actions. These actions will be implemented and monitored through the SmartGrowth Strategy.

² Regionally distributed funding from increases in fuel excise duty

³ Baseline investigation means an analysis based on our current knowledge

2. Introduction

2.1. Objectives

The purpose of this work is to complete an integrated land use / transportation study of the SmartGrowth Eastern Corridor. The broad objectives of this study are to:

- Enable confident decision making
- Provide a resource for SmartGrowth and transport organisations
- Put in one place the current land use and transport knowledge of the Eastern Corridor
- Provide for a balanced transport network and connectivity
- Broadly scope the land use picture for the Eastern Corridor out to 2050
- Set a platform for the relevant parties in terms of transport funding

2.2. The Eastern Corridor

This corridor (corridor is used in this study to mean a geographical area associated with a growth node, as defined in the SmartGrowth Strategy, it includes all land use and transport elements required to service the needs to the corridor) stretches from State Highway 2 to the coast and from Girven Road and Te Maunga intersections to Paengaroa junction (SH 2 and 33). The components of this corridor are as follows:

- Rangiora business park (Metroplex) (150ha from 2007) – major regional business park located to the east of Te Puke
- A new Tauranga base hospital (20ha post 2021)
- Additional residential and business development at Papamoa east (Papamoa stages 1 and 2) – this area will contain approximately 40,000 people by 2050
- New business and residential areas at Te



Puke

- Future extensions to Bayfair shopping area will also impact on the function of this corridor

Education facilities will also form part of this picture.

The transport components of the corridor are:

- The existing roading network (including SH 2)
- The existing public transport network
- Rail corridor

New works include:

- Tauranga Eastern Motorway: Te Maunga to Paengaroa
- Te Okuroa Drive (stages 1 and 2)
- Kaituna Link Road
- Te Puke Central realignment
- Bell Road / Tauranga Eastern Motorway interchange
- Rangiuuru Business Park / Tauranga Eastern Motorway interchange
- Domain Road / Tauranga Eastern Motorway interchange
- Sandhurst interchange
- Park and ride
- Public transport operating expenditure
- Public transport infrastructure
- Cycling and pedestrian activities, particularly within new developments
- Travel Demand Management (as per the Bay of Plenty Demand Management Strategy)

There will also need to be improvements to the existing transport network which include:

- Upgrade of Tara Road, Girven Road, Domain Road, Parton Road and Welcome Bay Road
- Papamoa Beach Road traffic management
- Upgrade of SH 2 between Paengaroa and Girven Road including intersection improvements either side of Te Puke

- Completion of Gloucester Road and Grenada Street

2.3. The Study Brief

A study which integrates the land use and transport components of the Eastern Corridor was initiated in September 2005. The Eastern Corridor study is a SmartTransport initiative. SmartTransport is the transport subset of SmartGrowth – the growth management strategy for the western Bay of Plenty sub-region. The SmartTransport group is made up of representatives from Tauranga City, Western Bay of Plenty District, Environment Bay of Plenty, Transit NZ and Land Transport NZ. This group reports to the SmartGrowth Implementation Management Group and the SmartGrowth Implementation Committee.

This work includes part of the planning that Transit has completed in order to progress the Tauranga Eastern Motorway. The position reached is shown in a map attached as Appendix 4.

The Eastern Corridor Study also involves the development of an integrated funding package for all transport elements. This portion of the work is currently in the early stages and will be finalised as part of the implementation actions that arise from this study.

A SmartGrowth Eastern Corridor Implementation Brief was prepared in September 2005. The purpose of this work is to:

- Have a good understanding between the short, medium and long term land use planning, and the transport networks necessary to ensure environmental sustainability
- Obtain a knowledge of the costs of transport infrastructure in order to meet these on an equitable basis across all users of the network
- Get a timely resolution of the various issues given the level of potential public and private sector investment. Plan changes under the Resource Management Act 1991 are already underway as part of SmartGrowth implementation. The Councils, in particular, are seeking an outcome from this study that avoids lengthy and costly litigation in the Environment Court.

Work undertaken to date has included a draft SmartGrowth Eastern Corridor Implementation: Transportation Study report (November 2005); Traffic Modelling; a paper for the Transit Board; presentations to Transit and SmartGrowth.

2.4. Current Scope of Work

The main focus of this study was to complete an integrated picture of land use and transportation along the Eastern Corridor. There are a number of land uses along the corridor which are subject to plan changes or resource consents. This study has proceeded on an assumption that these developments will take place, reflecting the SmartGrowth growth assumptions for the western Bay of Plenty sub-region.

This report represents the completion of the scoping phase of the Eastern Corridor work. This part of the study sets the “big picture” for land use and transport along the corridor. Further

details still need to be worked through in order to ensure that there is an integrated and sustainable land use and transportation pattern for the area. For this reason section 7 of this report sets out several specific actions that will need to be implemented.

3. Context

3.1. Planning, Policy and Legal Framework

The New Zealand Transport Strategy (“NZTS”) sets out the Government’s overall vision for transport, principles to guide activities aimed at achieving that vision, and five key objectives for transport (those objectives have been duplicated in the Land Transport Management Act 2003). The government’s overall vision for transport is:

“By 2010 New Zealand will have an affordable, integrated, safe, responsive, and sustainable transport system.”

The vision is underpinned by four principles:

- Sustainability
- Integration
- Safety
- Responsiveness

The NZTS is based on a sustainable development framework and principles. This means that economic development, social and environmental improvements must, as far as possible, be progressed in parallel. In moving forward, the government is committed to following an approach that is:

- Forward-looking
- Collaborative
- Accountable, and
- Evidence-based

The government’s objectives for transport as set out in the NZTS are:

- Assisting economic development
- Assisting safety and personal security
- Improving access and mobility
- Protecting and promoting public health
- Ensuring environmental sustainability

The Land Transport Management Act 2003 (“LTMA”) governs the way the New Zealand land transport system is developed, managed and funded. The LTMA has involved a major overhaul of transport funding and policy and as a result has brought about a significant change in terms of the funding and management of land transport. The purpose of the Act is to contribute to the aim of achieving an integrated, safe, responsive, and sustainable land transport system.

Central aspects of the LTMA are the five criteria that permeate through the Act. These criteria are the Government’s five transport objectives as set out in the NZTS, referred to above.

The LTMA also allows for the use of tolling on new roads, subject to an Order in Council. Every toll road must have an alternative toll-free route.

The following policy documents have also been completed which are relevant to this work:

- Surface Transport Costs and Charges⁴
- The National Rail Strategy 2005
- Transport Sector Strategic Directions Document 2006/07
- Transit Planning Policy Manual Supplement
- Transit Toll Systems Projects (released in late 2004)
- Land Transport New Zealand: Participation in Land Use and Transport Planning Process 2006
- Auckland Road Pricing Evaluation Study 2006

Transit is also reviewing their National State Highway Strategy in 2006 and undertaking a more comprehensive review of their Planning Policy Manual. The Government is preparing a National Energy Strategy which is likely to be released in 2006. The National Energy Efficiency and Conservation Strategy will also be replaced. These documents have implications for the transport sector.

3.2. SmartGrowth



The SmartGrowth Strategy is the western Bay of Plenty sub-region's 50-year growth strategy.

SmartGrowth is a joint initiative of Environment Bay of Plenty, Tauranga City Council, Western Bay of Plenty District Council and Tangata Whenua.

The sub-region is an area of rapid population growth. Currently the area contains 3.4% of the nation's population. The population is projected to be 198,000 by 2021, and 284,000 in 2051. The sub-region looks set to become the fourth or fifth most populated region in New Zealand.

From a transport perspective, SmartGrowth aims to encourage land use changes (such as increased urban densities) to provide the opportunity for shorter trips and encourage pedestrian activity, cycling and passenger transport. The SmartGrowth work aims to direct growth in a way that extends the life of roading capacity and encourages more sustainable modes of transport. SmartGrowth identifies managing the residential intensification effects on future transport planning as a key challenge.

Key areas of growth and proposed land use changes, as part of SmartGrowth, are expected to include:

- Major new residential sub-divisions planned for Papamoa (east of Tauranga) and Pyes Pa (south of Tauranga), at greater densities than previous "greenfields" development.

⁴ Ministry of Transport, March 2005

- Significant industrial and business development at Tauriko (south) and both Rangiuru and Papamoa to the east.
- Intensification nodes for the Tauranga Central Isthmus and Mount Maunganui.
- Expansion of settlements at Omokoroa, Waihi Beach, and Katikati (north-west of Tauranga).
- The location of proposed new business land will have implications for rail. New residential sub-divisions will also need to link with transport infrastructure. Thought will need to be given to how new residential sub-divisions will be serviced by passenger transport in the future.

Appendix 1 contains the SmartGrowth sub-regional settlement pattern map for Tauranga City which indicates where growth is likely to occur.

3.3. The Bay of Plenty RPS

The Operative Bay of Plenty Regional Policy Statement 1999 (“RPS”), sets out objectives, policies and methods for the sustainable management of physical and natural resources within the region. Proposed Change No. 2 to the RPS (Growth Management) (“Change 2”) implements key aspects of SmartGrowth Strategy. The proposal incorporates into the policy statement two new chapters: Chapter 17 called ‘Growth Management’ and Chapter 17A, ‘Growth Management in the Western Bay of Plenty’. Chapter 17A includes policies and associated maps that establish urban limits for the western Bay of Plenty sub-region (see Appendix 3). Submissions on Change 2 were heard in May and June 2006. The Change will then be subject to the decision of the hearings panel and any further appeals.

3.4. Bay of Plenty Regional Land Transport Strategy

The Bay of Plenty Regional Land Transport Strategy (“RLTS”) was adopted in September 2004 and was developed to replace the 2003 RLTS. The RLTS is currently undergoing a comprehensive review and an updated strategy is expected to be adopted for public consultation in August 2006.

The vision for the RLTS is “*an integrated, safe, sustainable land transport system that meets the current and developing needs of the people of a vibrant and growing region.*” The strategic outcomes in the RLTS are based around:

- Integration and Land Use
- Safety and Personal Security
- Responsiveness
- Sustainability
- Economic Development
- Energy Efficiency



- Access and Mobility
- Public Health

The strategic option underpinning the Strategy is to manage traffic demand. For the western Bay of Plenty sub-region this means giving consideration to Travel Demand Management (TDM) charging tools, enhancing public transport, cycling and pedestrian facilities, and providing roading for the remaining traffic growth.

At the time of developing the RLTS strategic options it was unclear as to whether these measures would reduce the need for some components of the Smart Transport Corridors network, and work was carried out to identify whether the existing roading programme would remain. This work was done through detailed modelling. In short, the modelling work completed for the western Bay of Plenty sub-region showed that enhanced public transport and TDM measures does not remove the requirement for any of the major components of the Smart Transport Corridors network. This is because the changes in traffic levels as a result of enhanced public transport or TDM measures were not significant enough to warrant removing any of the Smart Transport Corridors network. However, it was found that there is potential to extend the life of roading projects through enhanced public transport and TDM.

The RLTS 2006 contains a Demand Management Strategy which contains the following packages for the western Bay of Plenty sub-region:

- Tauranga CBD Smart Transport Package
- Western Bay Growth Area Linkage Package
- Regional Pedestrian and Cycling Package

There is a need to ensure that there is consistent implementation of the strategy due to the integrated nature of TDM.

The RLTS 2006 has also developed some targets for modal shift for Tauranga (see section 5.7).

3.5. Integrated Transport Strategy for Tauranga

Tauranga City Council has developed an Integrated Transport Strategy which is a 10 year plan for the development of the transport system in Tauranga. This will provide the strategic basis for the development of the local transport network in line with the objectives of the LTMA 2003, the RLTS, SmartGrowth and Tauranga Tomorrow. The Strategy covers: Integrated Planning, Demand Management, Transportation Network, Walking and Cycling, Passenger Transport and Parking.

3.6. Urban Design Strategy for Tauranga

Tauranga City Council is a signatory to the *New Zealand Urban Design Protocol*. The Council has also developed an Urban Design Strategy for Tauranga. The Strategy includes urban design principles which seek to protect and reflect local identity; recognise and is sensitive to

the physical context; create safe, lively and comfortable places; connect people, places & spaces; enhance environmental quality; and make efficient use of resources.

3.7. Funding Tools

The following transport funding tools are available in the current New Zealand legislative and policy environment:

- Funding through the National Land Transport Programme (Land Transport New Zealand), including Crown Grants
- Funding from ONTRACK for rail
- Development contributions / financial contributions for local transport capital expenditure under the LGA 2002 and RMA 1991
- Tolling of new roads where there is an alternative route under the LTMA 2003
- Local funding from regional and city / district councils (eg rates, investments)
- Landowner / developer cost sharing contributions

3.8. Crown Grant

In April 2005 a Joint Officials Group (“JOG”) comprising of transportation officials from the Treasury, Ministry of Transport, Land Transport NZ and Bay of Plenty local authorities was established to examine funding options for the continued implementation of the region’s land transport infrastructure over the next 10 years.

In August 2005, the Minister of Transport announced the outcomes of the funding project, which included a \$150 million Crown Grant. The Crown Grant of \$150 million is to address congestion and improve access and safety through investment in:

- Strategic roading
- Passenger transport
- Transport demand management
- Walking and cycling

The JOG report also requires the local authorities in the region to match the Crown Grant with some local funding through the 2006-2016 Long Term Council Community Plans (LTCCP’s). This includes funding derived from development levies / contributions, rates, investments, and tolls.

3.9. Integration (land use, infrastructure and funding)

Land form and land use planning are critical aspects of land transport management. The interactions between spatial planning, and the design and operation of transport systems are

important. Land use planning provides the framework for the transport network and can assist with the integration of different modes of transport.

The provision of infrastructure will affect land use patterns and vice versa. Infrastructure can influence the timing and pattern of settlements, and development will influence when and where infrastructure will be required.

The physical setting of the Bay of Plenty region is such that a “corridor” pattern of development has emerged. These corridors are developing in a number of key areas, in particular to the north of Tauranga including Omokoroa and Katikati, to the east of Tauranga towards Whakatane, and to the south of Tauranga focussing on Pyes Pa Road towards Rotorua.⁵ Figure 2 from the SmartGrowth Strategy illustrates this corridor pattern (see Appendix 2). This corridor pattern has formed the basis for the packages of transport activities developed for the 2006 RLTS.

⁵ Source: SmartGrowth – The Western Bay of Plenty Sub-Region 50 year Strategy (2004) at page 20

4. Land Use

4.1. Growth in the Eastern Corridor (including urban form challenges)

The western Bay of Plenty subregion is an area which is experiencing significant sustained growth. The area is part of what Australian commentator Bernard Salt has popularised as “Sea Change”⁶: a long-term demographic push from metropolitan and inland settlements to the weather-and-amenity-rich coast across the British Commonwealth and US.

Papamoa East has been identified since the mid-1980’s as an area for long-term urban development. This was confirmed in the 1991 Urban Growth Study adopted by Tauranga City Council. SmartGrowth also identifies Papamoa East as a significant growth area. Further work has been done in order to plan for the area, including a *Papamoa East Urban Development Strategy* (March 2004) for Wairakei and Te Tumu.

Once fully developed Papamoa East will be a city the size of Nelson with 40,000 people. It will also have around 300 hectares of business land spread between Papamoa and Rangiuuru. It is not a matter of simply grafting on to what is already there. Much of the development occurring along the eastern corridor will require new services, amenities and infrastructure.

The urban form of the area is a challenge. Papamoa follows a narrow strip of land (approximately 2km wide) bordered by the sea, sand dunes, the Kaituna River, and lower lying peat lands.

The land use pattern for the Eastern Corridor is subject to the various plan changes outlined in section 4.4. At this stage only an indicative pattern can be given. This is also true for the land use data (population and household figures). This could all be subject to change depending on the outcome of the plan changes.

4.2. SmartGrowth Land Use Data

SmartGrowth has agreed the following data for the Eastern Corridor developments in Papamoa East - Wairakei and Te Tumu – note that the information below is for these new developments only it does not include what exists at Papamoa already:

Table 1: Papamoa East Land Use Data

	People	Dwellings	Retail	Non-Retail	Persons / Household	Average Density ⁷
Papamoa Stage 1 - ‘Wairakei’	12,600	6,300	1,400	3,600	2.01	17 households per hectare
Papamoa Stage 2 - ‘Te Tumu’	28,000	11,400	700	1,800	2.45	15 households per hectare

⁶ See: Bernard Salt: <http://www.bernardsalt.com.au/index.php>; and the Australian National Sea Change Taskforce: <http://www.seachangetaskforce.org.au/index.html>.

⁷ Note that the average density has been calculated using the total land area and the total number of residential units, ie it is a gross figure

4.3. Existing Land Uses and Communities (BayFair, Papamoa, Te Puke)

Arataki / BayFair

The shopping centre development at Arataki (Bayfair), is expected to lead to a doubling of retail land use over a 15 year period. This will likely lead to intensification of complimentary developments in the surrounding area due to the attractiveness of Bayfair as a destination.

This will require sensitivity testing in the traffic modelling for increases in retail and also intensification of approximately a third of the area surrounding Bayfair.

The area already has the following high traffic generating land uses:

- BayWave aquatics and leisure centre
- BayFair shopping mall (32,000m² regional shopping centre servicing an average of 15,000 customers daily)
- Blue Chip Stadium

Arataki, Central Parade and Mount Maunganui are intensification nodes under the SmartGrowth Strategy. The viability and detailed planning of these areas is currently being undertaken by Tauranga City Council through the 'Smart Living Places' project All of these areas potentially impact on the Eastern Corridor.

Papamoa

Papamoa is one of New Zealand's fastest growing residential areas. The proposed new residential development at Wairakei and the business park at Rangiuru can not be seen in isolation. They all need to be viewed within the context of what already exists at Papamoa. This is summarised below⁸.

- An existing population of 12,000 people.
- 4,458 people were added to the area between 1996 and 2001
- There are 3,504 families in Papamoa.⁹
- The average household size is 2.7, compared to 2.5 for Tauranga City as a whole.
- There are more people under the age of 15 in Papamoa than the Tauranga average.
- Several residential sub-divisions have been completed or are under construction (eg. Palm Springs, Golden Sands, Emerald Shores, Ascot Downs and Milford by the Sea).
- Papamoa Beach Gardens Retirement Village is currently being built
- There is a site for a proposed secondary school in Papamoa (on Tara Rd)

⁸ All figures sourced from Census 2001, combined totals for Papamoa East and Papamoa West

⁹ The census definition of a family is two or more people living in the same household who comprise either a couple, with or without children, or one parent and their children.

- A retail and commercial development 'Papamoa Junction' is currently underway.

This will include:

- A town centre with 9 ha of shops and apartments
- A 2.5 ha factory outlet complex "Outlet Central"
- 20 ha of commercial space that is already under construction
- New housing for up to 300 people
- Up to 50,000 m² of shopping
- A leisure zone expected to include cinemas, ten pin bowling, laserzone and ice skating arena
- A 160-unit 10ha retirement village "Papamoa Beach Gardens".
- A community medical and wellness centre
- Offices and service businesses



- A residential development on the 25ha Rifle Range block 'Papamoa Gateway' received resource consent from the Tauranga City Council in April 2006¹⁰. The new neighbourhood is being planned in seven stages and will be built over a 10 year period. It will:

- Contain 741 dwellings (a mixture of architecturally-designed houses, apartments and duplexes)
- Cater for 2000 people
- Include a small neighbourhood shopping centre

There is also some industrial land at the Maungatawa Block which may be developed in the near future, as well as potential residential developments in the vicinity of Tara Road.

The cumulative effect of all of the land uses described above and the major plan changes that are still to come, is to place considerable pressure on an already inadequate roading network. There is likely to be a community expectation that the decline in the existing level of service will be addressed before any new growth is added to the corridor.

Te Puke¹¹

Located to the south of Papamoa Te Puke is a rural town of 6,771 people, with a strong local economy. The town also services another 8,000 people living in the rural hinterland, in particular Maketu and Pukehina. Te Puke is 15 minutes drive away from Papamoa East. Te Puke's economy has a strong horticultural (particularly kiwifruit) and agricultural base.

¹⁰ Note that this resource consent is subject to appeals at the Environment Court

¹¹ Information sources from *Te Puke: The Way Forward, 20 year Development Plan*, Western Bay of Plenty District Council, 2004. Population figures from Census 2001.



The Western Bay of Plenty District Council has produced *Te Puke: The Way Forward*, which is a 20 year Development Plan for the area. It focuses on community and culture; recreation and leisure; the town centre; the economy; the environment; infrastructure; land use and growth areas. The vision for Te Puke's town centre is 'a country town with a business heart'.

The long term role of Te Puke in terms of how it will interact with Papamoa East, will need to be considered in light of the new developments that are set to occur along the Eastern Corridor.

4.4. Description of Plan Changes

It should be noted that for the purposes of modelling traffic impacts on the transport network as part of this study, an assumption has been made that all of the plan changes described below will proceed as planned through SmartGrowth.

Wairakei – Papamoa Stage 1 (Proposed Plan Change 44)

Papamoa East Stage 1 which is known as Wairakei extends from Parton Road to the V-bend in the Wairakei Stream (see the figure below). Tauranga City Council has notified Proposed Plan Change 44 to rezone 420ha of "Future Urban" land in Papamoa East Stage 1 for residential, business and open space development. The land use and transport matters were heard in mid-2006, with a stormwater hearing to be heard in August 2006.

The plan change will allow for the development of residential housing to accommodate a population of up to 12,600 people with 6,300 dwellings. The area concerned covers 420 hectares of land. Approximately 119 hectares of this will be business land in order to serve the local community. Wairakei will also have a town centre. While a structure plan design has been prepared further work needs to be done on the design of the town centre, particularly given the narrow area of land available and how it will interact with the Te Tumu development and the transport network.



Te Tumu – Papamoa Stage 2

Papamoa East Stage 2 which is known as Te Tumu stretches from Papamoa East Stage 1 to the Kaituna River and Te Tumu Pa. This area is likely to contain leasehold land which will influence the type of development that will occur (eg commercial development is more likely on leasehold tenure).

The Te Tumu development is likely to contain 65 hectares of business land and could potentially provide for a population of 28,000 people and 11,400 dwellings.

The SmartGrowth Strategy gave an indicative date of 2011 for Papamoa Stage 2 ‘Te Tumu, subject to further work being completed. This development is more likely to occur after 2021. The reason for this is that the Proposed RPS Change requires an 80% uptake of developed land in Papamoa Stage 1 ‘Wairakei’ before a new development can occur at Te Tumu. The 2021 timeframe will reduce the financial burden on Tauranga City Council as there will be a number of developments progressing at this time all requiring significant infrastructure investment. It is not practicable to have all of these developments proceed in a close timeframe. Tauranga City Council’s LTCCP assumes that development at Te Tumu will not occur within the 10 year period of the plan.

Rangiuru Business Park - Metroplex (Proposed Plan Change 33)

Metroplex Rangiuru requires a rezoning of rural land to a “business park zone”. The area will include 148 hectares of developed business land. It is likely, with the loss of the regional airport industrial land, that this could be expanded in the future. The plan change for the business park has been lodged and hearings have been completed. The target for the first stage of this development is 2007. The park will cater for a wide range of activities, including:

- Industrial activities, such as: ·warehousing and distribution activities; transport/contractor depots; trade activities; general industry / manufacturing.
- Limited retailing activities, such as: service stations; fast food/takeaway outlets; vehicle/machinery sales; commercial services/trade supplies; other ancillary retailing/wholesaling activities.
- Community facilities, such as: medical/veterinary centres; places of assembly; reserves and walkways; offices; residential dwellings/apartments.

Te Puke Growth Node¹² (Proposed Plan Change 25)

Proposed Plan Change 25 implements a blueprint for the long term residential and industrial growth and development of Te Puke, as a result of the Te Puke Comprehensive Development Plan which was prepared over the last year. The Plan Change covers the following:

- New Residential Areas
- Active Reserve
- Walkway/Cycleway
- Medium Density Residential Development
- Floodable Areas and Controls
- Structure Plan

A Town Centre Strategy has recently been completed for Te Puke.

It is projected that the Te Puke area will need to accommodate 8,400 people by 2021 which is 1,629 more than were recorded in 2001. There is additional household capacity of 1,100 dwellings. These are likely to be developed over the next 20 years.

Other Developments

Other developments will also have an impact on the Eastern Corridor. Such developments include the expansion of Bayfair and other development at Mt Maunganui and Te Maunga.

¹² Source: Western Bay of Plenty District Council

4.5. Impact of RPS Change 2

Change 2 to the RPS implements key aspects of the SmartGrowth Strategy. A new chapter is being inserted into the RPS on growth management. Importantly Change 2 will also establish urban limits for the western Bay of Plenty sub-region.

Section 17.5 contains the following principles in relation to growth management:

- High quality urban design
- The Live-Work-Play policy approach to future development



Section 17A specifically deals with growth management in the western Bay of Plenty sub-region. The objectives and policies cover growth sequencing and integration; reducing piecemeal

development and avoiding other adverse effects; and the development of Maori land.

The implications are that a local authority must amend a district plan to give effect to the RPS if the statement contains a provision which the District Plan does not give effect to (section 73(4) RMA 1991).

The implications for the Eastern Corridor include:

- The urban limits (see Appendix 3).
- Structure, timing and sequencing of development (see figures 2 and 3).
- Urban development yield and density requirements (minimum net yield of 15 lots or household units per hectare).
- Structure plans to be prepared for all large-scale land use changes (specific requirements to be included in each structure plan are also detailed in Change 2).

It should be noted that Change 2 may be subject to amendment following the outcomes of the hearing process and any subsequent appeals.

4.6. Timing and Sequencing of Development

The timing and sequencing of development along the Eastern Corridor is critical in order to ensure that infrastructure and development is coordinated.

This study covers the planning period out to 2051. The focus is on the broad land use and transport picture over this timeframe. Once this is understood the staging of development and infrastructure required will be reviewed with the following in mind:

- The rate of land uptake
- Affordability
- Practicality

The detailed land use and infrastructure staging for the Eastern Corridor will cover the period out to 2016.

A staging plan will be completed by mid 2007 on the presumption that the long term land use pattern will have been settled and all of the proposed land rezonings are in place.

The following table from the SmartGrowth Strategy sets out the timing of growth throughout the western Bay of Plenty sub-region. The Eastern Corridor areas are highlighted in black. This timing chart is currently being revised as part of the SmartGrowth actions review for 2006. The updated version will be available from the end of September 2006 and will replace the table below.

Table 2: Residential Development Timing Chart*

Management Area	Total 2001	Additional People in Census Period				Total 2021	Additional People in Census Period						Total 2051
		2006	2011	2016	2021		2026	2031	2036	2041	2046	2051	
Waihi	3000	420	560	590	610	5180	590	600	600	600	600	600	8770
Katikati	6800	900	800	700	700	9900	650	570	570	570	550	550	13360
Matakana	300	30	30	30	30	420	30	30	30	30	30	30	600
Omokoroa	2000	300	800	1200	2400	6700	2570	2630	2460	1120	600	0	16080
Te Puna	2300	300	200	100	50	2950	50	30	30	30	30	30	3150
Kaimai	9000	1330	920	660	440	12350	330	210	210	100	80	70	13350
Tauranga West	27500	2490	3000	1870	1800	36660	1460	650	650	650	650	650	41370
Tauranga Central	18900	2580	3000	4000	4500	32980	5000	4060	3070	3330	3310	2800	54550
Tauranga South	14100	1640	2600	2070	1010	21420	500	2290	3540	2830	1540	1520	33640
Mount Maunganui	18400	2510	1600	1960	2020	26490	2060	1380	1360	1250	1360	1360	35260
Papamoa	11900	2270	2470	3200	3560	23400	3820	3520	3210	2760	3090	3390	43190
Te Puke	8600	550	530	530	530	10740	500	500	500	480	470	450	13640
Paengaroa	6300	340	290	290	270	7490	210	270	270	100	90	60	8490
Prediction Total	129100	15650	16800	17200	17900	196680	18000	17200	15800	13900	12400	11500	285450

*Source: SmartGrowth Strategy, May 2004 at page 23

Note: Predictions of residential development timing beyond 2021 are highly indicative.

Table 3: Approximate Business Land Staging from Change 2 RPS*

Growth Area	Shown on Maps 12 - 22	Explanation	Development Commences
Papamoa	Yes	This land is labelled "Papamoa Business Land".	2006
Te Puke	Yes	This land is labelled "Te Puke Business Land".	2006
Rangiuru	Yes	This land is labelled "Rangiuru Business park".	2007-09
Paengaroa	Not	Business land at Paengaroa depends on the relocation of Tauranga Airport.	2021

*Dates are indicative only. Table derived from Proposed Change 2 to the Bay of Plenty RPS as notified. Only those areas relevant to the Eastern Corridor are shown.

Table 4: Growth Timing Table (Residential) from Change 2 RPS*

Growth Area	Development commences	Estimated 80% Greenfield capacity reached by
Papamoa		
Papamoa East Part 1	2006	2011
Papamoa East Part 2 ¹³	2011	2041
Te Puke	Underway	2041

*Dates are indicative only. Table derived from Proposed Change 2 to the Bay of Plenty RPS as notified. Only those areas relevant to the Eastern Corridor are shown. See map attached in Appendix 3 for details.

There are some concerns associated with the timing of Papamoa East Stage 2 (Te Tumu). An indicative start date of 2011 was signalled in the SmartGrowth Strategy and has been followed through into Change 2 of the RPS. This start date has a proviso attached that it is subject to a number of preconditions being satisfied first, including further investigations. The concern is that the development will come on stream before the necessary infrastructure has been adequately planned for and costed.

From preliminary infrastructure costing work done to date it appears that Tauranga City Council will have significant upfront capital funding exposure in Papamoa East. The average land uptake rate is between 1,200 to 1,500 sites per year. Development on three fronts at Omokoroa, Pyes Pa and Papamoa Stage 1 along with intensification is considered sufficient to meet market needs over the next 10 years. Therefore, it is unlikely that Papamoa Stage 2 should proceed before 2021 without there being significant cost of capital implications for both Tauranga City Council and the Western Bay of Plenty District Council. Tauranga City Council's LTCCP has not made any provision for development at Te Tumu within the next 10 years. Further work will need to be done for Papamoa Stage 2 (Te Tumu) in order to better understand the infrastructure requirements and costs, particularly given the other developments taking place.

¹³ The commencement date of 2011 for development in Papamoa Stage 2 is subject to a number of preconditions being satisfied as a result of further investigations, namely the impact on the overall SmartGrowth Strategy, and timing in relation to the implementation of other parts of the strategy (in particular, residential intensification and the rate of uptake in Papamoa Stage 1).

4.7. Integration (Wairakei, Te Tumu, Rangiuru)

There is a need to take an integrated approach and look at the relationship between land use and transportation along the Eastern Corridor, particularly given that the ultimate development of the corridor:

- Will contain upwards of 60,000 people - it is comparable to a city the size of Nelson (this includes what exists now and the new developments);
- Has approximately 300 hectares of business land spread between Papamoa and Rangiuru;
- Must achieve land use, stormwater and transportation integration between Wairakei and Te Tumu (Papamoa Stages 1 and 2);
- Will be influenced by the proposed Tauranga Eastern Motorway as a piece of significant infrastructure;
- Needs to take account of the ongoing development of Te Puke;
- Will need to recognise the ongoing importance of the current SH 2;
- Needs to integrate with what already exists;
- Has to cope with ongoing rural and lifestyle subdivision;
- Has the potential to encourage modal shift from private cars to passenger transport (buses in the short term, possibly rail in the longer term); and
- Will make a significant contribution to both sub-regional and regional employment opportunities.

It is important that new developments such as Wairakei and Te Tumu fit with the existing residential communities. There needs to be good connections and interaction between new developments and what exists at Papamoa now.

New development and infrastructure needs to integrate with what already exists, this is particularly important in terms of transport networks.

4.8. Live, Work and Play

“Live, work, and play” is a concept that emphasises the need for balance within the management of growth. At sub-regional level, it includes the provision of land and services for housing, business, community activities and recreation. It emphasises the need to consider the interrelationships of these activities to provide for accessibility, minimising energy use and reducing vehicle emissions. At local level it includes providing the opportunity for people to meet most of their daily needs within their own local community, promoting community cohesion and more harmonious lifestyles. It includes careful design to contribute more to the public realm, provide for privacy, and diversity through mixed use development¹⁴.

The SmartGrowth Eastern Corridor comprises significant further development at both Papamoa and Papamoa East, a major business park at Rangiuru to service the employment

¹⁴ From the *SmartGrowth Strategy*, May 2004, at page 61

needs of the east in order to promote “live work and play” concepts which have the potential to reduce travel demand.

5. Transport

5.1. SmartTransport Corridors

The SmartGrowth partnership has adopted SmartTransport Corridors (previously known as the strategic roading network) as the base transport network for the western Bay of Plenty sub-region. The corridors have been designed to support the proposed growth within the sub-region and to provide intra and inter regional connectivity.



These corridors comprise the following:

Eastern Corridor

- Additional residential and business development at Papamoa east.
- Upwards of 60,000 people by 2051 (including what exists in Papamoa and Te Puke now)
- An eastern highway between Tauranga and Paengaroa.
- A regional business park at Rangioru.
- A new Tauranga base hospital (post 2021).

Southern Corridor

- A major new settlement at Pyes Pa of approximately 2800 sites and 8000 people commencing in 2006.
- A “twin-city” urban anchor model between the western Bay of Plenty subregion and Rotorua.
- State Highway links to Rotorua, and a fully upgraded Pyes Pa Road.

Northern Corridor

- Settlements at Omokoroa, Katikati and Waihi Beach.
- State Highway links to Coromandel and Auckland.
- Rural structure planning for Te Puna.
- SH 2 Northern Corridor.
- Katikati bypass

Western Corridor

- Employment land at Tauriko.
- State Highway links to the Waikato.

Central Corridor

- Intensification on the Tauranga Central Isthmus and at Mount Maunganui.
- Harbour Link (second harbour bridge crossing).
- Hewlett's Road Flyover (completed).
- Route PJK (completed).

To date Transit, Tauranga City Council and Western Bay of Plenty District Council have made significant progress on SmartTransport Corridors with the construction of Route PJK and the recent completion of the Hewlett's Road Flyover project. Funding has now also been approved for the construction of the Harbour Link project. The combination of these projects now results in there being a limited access expressway from Bethlehem in the northeast and Tauriko in the southwest, through to the city centre in Tauranga and into Mount Maunganui.

As identified in the SmartGrowth Strategy the Eastern Corridor is a major growth area for the sub-region. For this reason the Eastern Corridor is the next major focus for the development of transport corridors.

5.2. Eastern Corridor Transport Network

The transport network for the Eastern Corridor has been developed in a way which will provide a balanced and sustainable transport network across the whole of the corridor. The key elements of this network are as follows:

- **Tauranga Eastern Arterial** (note that Transit New Zealand wishes to have this declared as a motorway): This is the strategic corridor connecting SH2 and SH33 (Whakatane / Rotorua) to Tauranga. The land for this route has been designated and Transit New Zealand has within its Ten Year State Highway Forecast funds allocated to undertake the detailed design and, towards the end of that ten-year period, commence construction. As described further on in this report, the funding of this project will more than likely involve multiple sources.
- **Existing SH2:** This is the existing State Highway through Te Puke which will serve as a major sub-regional arterial. Predicted traffic volumes are likely to still remain relatively high. The real challenge for the road controlling authorities is to ensure that the volumes of traffic which are induced onto this road do not exceed the acceptable maximum volumes set out in section 5.3 and contained in the map attached as Appendix 4.
- **Te Okuroa Drive:** Within proposed developments at Papamoa East there are major arterial routes such as Te Okuroa Drive¹⁵ and others which have also been

¹⁵ Te Okuroa Drive will be located within the Wairakei (Papamoa Stage 1) development

assigned a hierarchy status in the network, including desired traffic volumes. The developments will require management rules to ensure that that status is able to be maintained. These rules will be established through the plan change process.

- **Papamoa Beach Road** is of particular concern to the joint roading authorities. It currently carries approximately 17,000 vehicles per day and it has been agreed that this volume is significantly greater than desirable for a road which fulfils a function as a connection to urban developments and is also adjacent to the main recreational beach, therefore generating high pedestrian movements across it. The balanced and sustainable network proposes that Papamoa Beach Road should only have approximately 12,000 vehicles per day on it. The partners will need to work together to ensure that this volume is achieved and that longer distance travel is diverted to more appropriate routes when the Eastern Motorway has been built. Further work is still to be done on the traffic management techniques that will be used.
- **Kaituna Link:** Tauranga City Council and Western Bay of Plenty District Council are currently investigating the options for a “Kaituna Link” to provide connectivity between Te Tumu (Papamoa Stage 2), the Rangiuuru Business Park, existing SH 2 and Te Puke.
- **Grenada Street / Gravatt Road:** Tauranga City local roads. Extensions of these roads will be required along with possible travel demand management measures.

5.3. Network Hierarchy

Detailed traffic modelling of the whole network with all of the proposed land use in place has been undertaken. The modelling data, results and reports have all informed this study and can be made available on request. Various scenarios of connectivity to the motorway and hierarchical status of the various elements of the network have been considered from the point of view of a balanced, sustainable network. To achieve this, the SmartTransport partners undertook some high level analysis of acceptable traffic flows, not necessarily based on a traffic engineering maximum capacity approach. Instead the approach taken was to consider what the appropriate traffic volumes were for roads in different land use environments or the ‘environmental capacity’ of various road types. This included taking account of the desired function of the road both from the point of view of through-traffic as well as adjacent land uses. This work was subsequently reviewed and the following is a summary of the findings of that review¹⁶:

- Setting acceptable traffic flows on different parts of the road network has a sound basis in engineering practice.

¹⁶ SKM, *Tauranga Eastern Corridor Road Hierarchy Review*, February 2006: at page 8

- Environmental and social impacts are being increasingly recognised; therefore the adoption of principles which seek to limit environmental effects by setting desirable standards is sound.
- It is necessary to derive specific quantifiable requirements for the desired environmental conditions.
- “Desirable” flows need to be viewed as guidelines across a network – they should not be regarded as absolute limits (ie reaching capacity on the network is not the target).
- The approach adopted to address key questions associated with development of the road network in the Tauranga Eastern Corridor, based on desirable traffic flows, is reasonable.

On the basis of this, the Transit New Zealand Board has agreed to all of the connections as shown on the map attached as Appendix 4, subject to Tauranga City Council, Western Bay of Plenty District Council, and the Regional Council doing all within their statutory powers to ensure that the principles of the hierarchy and desired traffic volumes of this network can be achieved. Transit’s agreement is also subject to the development of a funding plan for the Eastern Corridor.

Transit has also agreed to the motorway interchanges as follows:

- Rangiuru Business Park
- Bell Road interchange
- Domain Road interchange
- Subject to further detailed engineering design, the Sandhurst Drive interchange (this is to ensure that the connections to Sandhurst Drive are managed safely)

It is on the basis of this Transit New Zealand decision that detailed consideration is being given to the various plan changes along the Eastern Corridor.

Using the work completed to date a network hierarchy¹⁷ has been established for the Eastern Corridor which is set out below.

Table 5: Eastern Corridor Network Hierarchy

Corridor / Road Type	Hierarchy / Function	Maximum Acceptable Traffic Flows (vehicles / day)
Tauranga Eastern Motorway	Strategic route / Sub-regional arterial	60,000
Existing SH 2	Sub-regional arterial	15,000
Te Okuroa Drive (Wairakei)	Arterial route (district)	30,000
Papamoa Beach Road	Collector route	12,000
Residential Collector Roads (urban)	Collector route	3,000 – 10,000
Local Roads	Local roads	< 3,000

¹⁷ **Strategic Route / Arterial:** State Highway managed by Transit on behalf of the Crown. Through traffic function of road predominates. Heavy vehicles higher proportion of traffic access function of minor concern. The primary function is inter-regional traffic movement and to service large traffic volumes. Traffic volumes over 40,000 vehicles per day.

Arterial Route (Regional) / Arterial Route (District): Principal traffic routes between parts of a region or district which connect Strategic Routes to major traffic generators. Traffic function predominates with property access of lesser concern. Traffic volumes over 10,000 vehicles per day.

Collector Route: Connects roads of higher hierarchy which carry traffic from local roads to Arterial Routes and Strategic Routes. Provides controlled access to adjacent land use. Traffic volumes between 3,000 and 10,000 vehicles per day.

Sub Collector Routes: Less through traffic than a collector but still a significant traffic function as well as an access function. Traffic volumes less than 3,000 vehicles per day.

Local Roads: Roads which predominantly cater for local residents and access to private property. Through traffic should be discouraged. Traffic volumes less than 1,000 vehicles per day.

5.4. Modelling

Appendix 4 summarises the traffic modelling that has been completed for the Eastern Corridor.

As a result of the modelling completed to date, and work on developing a balanced transport network, two significant challenges have emerged:

Traffic effects on Papamoa Beach Road: Traffic management technology will be required in order to shift traffic away from this road to avoid adverse effects on people and communities.

Existing State Highway 2 either side of Te Puke: While the Tauranga Eastern Motorway will remove inter-regional traffic from the existing State Highway, the proposed growth of Te Puke and Rangiuru will result in increases of traffic on this route. This is likely to bring traffic levels back to what they are at present.

The modelling work undertaken also included an examination of the effects of tolling the Tauranga Eastern Motorway, with consideration given to the following:

- Revenue maximisation and the impact of the price of the toll
- The best tolling strategy for the most appropriate utilisation of the network
- Transaction costs (number of collection points)
- Performance on the route
- Performance on other routes (speed and flows)

The modelling of the network included preliminary sensitivity testing of the effects of tolling on the Tauranga Eastern Motorway. This was done to ensure that there was a level of understanding about the effects of tolling on the balanced network, should this be one of the funding mechanisms.

5.5. Eastern Corridor Transport Elements

The following are the transport components of the Eastern Corridor:

- Tauranga Eastern Motorway: Te Maunga to Paengaroa
- Te Okuroa Drive (stages 1 and 2)
- Upgrade of Tara Road, Girven Road, Domain Road, Parton Road and Welcome Bay Road
- Completion of Gloucester Road and Grenada Street
- Kaituna Link Road
- Te Puke Central realignment
- Papamoa Beach Road traffic management

- Upgrade of SH 2 between Paengaroa and Girven Road including intersection improvements either side of Te Puke
- Domain Road / Tauranga Eastern Motorway interchange
- Sandhurst interchange
- Bell Road / Tauranga Eastern Motorway interchange
- Rangiuru Business Park / Tauranga Eastern Motorway interchange
- Park and ride
- Public transport operating expenditure
- Public transport infrastructure
- Cycling and pedestrian activities, particularly within new developments
- Travel Demand Management (as per the Bay of Plenty Demand Management Strategy)

As indicated above, a complete transport solution for the Eastern Corridor includes not only the development of the State Highway network and its connections, but also the ongoing protection of existing local roads, the development of new local roads, public transport and walking and cycling facilities.

The RLTS 2006 has assessed all transport packages for the region against the outcomes of the RLTS (which align with the NZTS and LTMA outcomes), and against additional factors of seriousness and urgency, and funding and project management. The Eastern Corridor was ranked the highest according to the assessment completed. Note that this was only a qualitative assessment for the purpose of guiding regional transport priorities.

Value for Money

'Value for money' will be a consideration in terms of the projects listed above, particularly the roading projects. Value for money includes consideration of¹⁸:

- Value engineering
- Risk management
- Scope optimisation
- Staging
- Competitive pricing
- Design / construction
- Whole-of-life focus
- Time performance
- Social and environmental factors

The LTMA 2003 refers to value for money for procurement procedures having regard to the purpose of the Act. This gives value for money a sustainability context that requires functionality, efficiency, costs and benefits to be assessed in economic, social and environmental terms¹⁹.

All partners to the Eastern Corridor project should have regard to value for money principles in relation to any transport project.

¹⁸ See Transit *Long Term Procurement Plan*, June 2005

¹⁹ *ibid*

5.6. Passenger Transport (Buses)

In 1986 the urban bus service in Tauranga was largely abandoned. In 2001, Environment Bay of Plenty reintroduced a Tauranga-wide urban bus service back into the City. Over the last four years the urban service has become more comprehensive. Passenger transport usage in Tauranga is currently lower than other similar-sized New Zealand urban areas (eg Dunedin and Hamilton).. The Bay of Plenty region plans to grow passenger transport service levels over time consistent with the aims of the RLTS for mode switching into the future. One way to do this will be through higher service levels.

The main challenge for passenger transport along the Eastern Corridor is ensuring that services are operating early in order to influence travel behaviour. It is too late to wait for critical mass to be established. Once a development is in place and people are living in an area their travel patterns become entrenched and it is difficult to achieve modal shift. For that reason that Tauranga City will work with Environment Bay of Plenty to secure the early implementation of commuter bus services to new developments, even though it may be economically inefficient to do so initially.

Providing and Funding Passenger Transport

Environment Bay of Plenty and Tauranga City Council are beginning to collaborate more closely on Tauranga public transport issues. This developing partnership will lift the level of public transport service currently being provided in Tauranga.

Environment Bay of Plenty's LTCCP provides for a doubling in the current level of Tauranga bus service across the network, by the end of the 2009/10 financial year. In 2006/07 this increase includes moving two routes from 60 minute to 30 minute frequencies and starting public holiday services from Labour Day 2006. Public transport provision in Environment Bay of Plenty's LTCCP for Tauranga is outlined below:

- Increase the level of bus services in Tauranga to include services on public holidays, and increase the frequency of routes 2 (City/Bayfair/Mount) and 6 (Papamoa) from 60minutes between trips to 30 minutes (2006/2007)
- Progressively introduce 30-minute bus services on other routes in Tauranga (2007/2008, 2008/2009)
- Market contracted bus services
- Replace the Tauranga electronic ticketing system with a regionally integrated system (2007/2008)

Tauranga City Council is likely to commit to approximately \$9,315,000 of additional funding over 10 years for passenger transport through their LTCCP to achieve higher peak frequencies for passenger transport. The money will come from increased parking fees.

Tauranga City Council's Ten Year Plan includes the following passenger transport measures for the Eastern Corridor:

- Park and ride facilities
- Bus shelters
- Real time integrated information system for public transport
- Bus priority measures
- Other new infrastructure to support public transport

Preliminary costing work has indicated that the gross cost of providing a comprehensive bus service to the Eastern Corridor could be between \$3.4 and \$5.8 million annually.

5.7. Walking and Cycling

The role of walking and cycling in the region in the short to medium term, is to improve access and mobility and promote public health, and in the longer term to play a much more significant role in terms of modal shift and encouraging more sustainable and energy efficient transportation. If more commuter trips can be made by walking and cycling then these modes will become a tool in managing demand on the roading network.

The RLTS contains an action for new developments to incorporate walking and cycling facilities in an effort to encourage this mode of transport.

Tauranga City Council's Ten Year Plan includes the following walking and cycling measures:

- City wide cycle lanes
- New pedestrian underpasses and overbridges
- Other walking and cycling projects

Tauranga City Council's proposed spending on walking and cycling activities is \$12,010,000.

The Integrated Transport Strategy for Tauranga contains a series of walking and cycling actions which include:

- Design and construct a network of walk / cycle paths and cycle lanes [\$950,000 per annum over 10 years]
- Install appropriate number and styles of cycle stands around the city [\$20,000 per annum]

- Ensure a high level of maintenance of walking and cycling facilities [included in Asset Management Plan]
- Ensure safe, secure cycle access and stand at commercial developments through District Plan change
- Undertake a plan change to require pedestrian facilities in new developments
- Ensure through the District Plan and the Code of Practice for Development that walking and cycling networks are provided in new subdivisions



With the new developments planned for the Eastern Corridor care will need to be taken that walkways and cycle paths are linked together across different areas and link with existing areas. It is important that these modes are provided for in the planning and design of new developments at Papamoa East.

The details and costings of exactly what is going to be provided in terms of walking and cycling facilities along the Eastern Corridor is still to be worked through.

5.8. Transport Demand Management

The RLTS 2006 sets out a Demand Management Strategy for the region. The Demand Management Strategy has been developed in order to:

- Meet the region's aim of enhancing alternative modes and achieving modal shift
- Comply with section 175(2)(o) of the Land Transport Act 1998 (as amended by the LTMA 2003)
- Meet the requirements of the Joint Officials Group report and associated Crown Grant. Demand management is one of the top priorities for investment as outlined in the JOG report.
- Align with Land Transport NZ's direction and emphasis on demand management (see *Participation in Land Use and Transport Planning Processes*, Land Transport NZ, January 2006).

The relevant package in terms of the eastern corridor is the **Western Bay Growth Package**. The components of this package include:

- Public transport interchange (e.g. Arataki bus interchange and Papamoa East park and ride) [Environment BOP; TCC];
- Corridor protection for public transport (eg making space for bus lanes and cycleways) [Transit, TCC];
- Tolling strategy for Tauranga Eastern Motorway [Transit];
- Structure Plans / Road Hierarchy plans to link subdivisions [TCC; WBOPDC];
- Provision of direct cycleways and walking links within new subdivisions. [TCC; WBOPDC].

Table 6: Programme for Western Bay Growth Area Linkage Package

0 – 10 Years	Beyond 10 years
Public transport interchange / Park & Ride ²⁰	
Corridor protection for public transport	Corridor protection for public transport
Tolling strategy for Tauranga Eastern Motorway	Tolling strategy for Tauranga Eastern Motorway
Structure Plans / Road Hierarchy plans to link subdivisions	Structure Plans / Road Hierarchy plans to link subdivisions

Behaviour change and educational aspects of demand management are also encouraged. This includes travel plans for work places and large developments.

The following stretch targets for public transport, walking and cycling in terms of trips to work in Tauranga have been set in the Bay of Plenty Demand Management Strategy as set out in the RLTS 2006:

Table 7: Proposed Stretch Mode Share Targets (Trips to Work)

Sub-Region / Time	Public Transport	Cycling	Walking	Total Non-Car Based
Tauranga 2001	0.5%	3.3%	4.6%	8.4%
Tauranga 2011	5.5%	4.0%	5.0%	14.5%
Tauranga 2021	10.5%	5.0%	5.5%	21.0%

²⁰ Note that this appears in the “Beyond 10 years” column of the Bay of Plenty Demand Management Strategy, however TCC has funding for the development of park and ride facilities within the 10 year period.

5.9. Rail

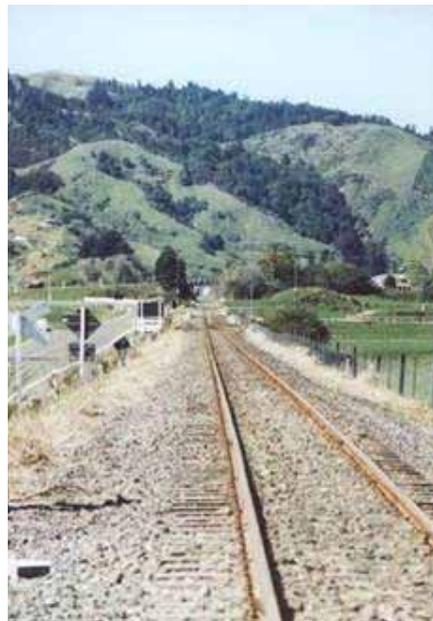
The railway follows State Highway 2 along the Eastern Corridor. Rail is used for the transportation of freight only at the present time.

Bay of Plenty Rail Strategy

The Bay of Plenty Rail Strategy (2005) was developed to advance a vision for rail in the Bay of Plenty region. The aim of the Strategy is to focus attention on the rail sector and to better understand how to move forward in the new rail environment which has emerged with the Crown taking ownership of the rail network in 2004.

The Strategy identifies opportunities for rail in the Bay of Plenty region which includes the following:

- Rail to continue to perform a significant freight transportation role for the region, especially to and from the Port of Tauranga.
- Identify opportunities for the re-utilisation of currently unused portions of the network, particularly in the Eastern Bay of Plenty and Rotorua.
- Increasing rail capacity (eg train size, train frequency, increasing axle loads, quicker run times)
- The importance of inter-regional rail freight movements (eg to and from Ports, Coal transport from Mt Maunganui to Huntly)
- Protecting rail corridors so that they are not compromised for future freight / passenger capacity
- Rail becoming an improved economic option, particularly for freight transportation. Factors that will influence this include, tolls and other road pricing and the rising cost of oil.



The Draft Rail Strategy also sets out some specific actions in order to take advantage of some of the opportunities noted above. Funding options are also considered.

As part of implementing the Bay of Plenty Rail Strategy a workshop was held in July 2006 in order to identify the future rail needs (both freight and passenger) for the western Bay of Plenty sub-region. The conclusions reached at the workshop are set out below under rail freight and passenger rail.

Rail Freight

The major freight products carried by rail in the Bay of Plenty are: forestry products; import-export goods; coal. Rail freight in the western Bay of Plenty sub-region revolves almost entirely around the Port of Tauranga.

Inter-regional rail freight connections run between the Bay of Plenty and the Waikato. Auckland is also a key part of the inter-regional rail movements and forms part of the significant Auckland – Hamilton – Tauranga triangle. This is a major corridor in terms of freight movement. The main hub for these rail freight movements in the Bay of Plenty is the Port of Tauranga.

The Port of Tauranga is the central hub for freight activity. At present rail carries 40% of all Port freight²¹. 4.7 million tonnes / annum are shifted via rail to and from the Port²².

The Rangiuru Business Park will be strategically located beside the rail network. There will be opportunities to transport freight to and from the Business Park via rail.

The rail workshop held reached the following conclusions concerning the future of freight rail in the western Bay of Plenty sub-region:

- The rail link between Tauranga and Auckland is vital and will remain so.
- The volumes of freight carried via rail for the Port of Tauranga will continue to grow.
- Most of the growth will take place in and out of Sulphur Point at the Port of Tauranga.
- The existing rail corridor has capacity for at least another 20 years and probably another 50 years.
- Capacity can be significantly increased with additional or expanded crossing loops²³ or increasing the length of trains.
- Double tracking the rail line is not required in the foreseeable future.

Passenger Rail

The rail workshop reached the following conclusions concerning passenger rail in the western Bay of Plenty sub-region and in particular along the Eastern Corridor:

- Buses are the preferred passenger transport option for the short to medium term.
- The location, design and function of Wairakei does not lend itself to passenger rail (note that a spur from the existing rail line would have to be built). It is better suited to buses.

²¹ Source: The Port of Tauranga

²² Source: Toll New Zealand

²³ Passing bays for trains.

- Passenger rail could be an option along the Eastern Corridor in the longer term. It is likely that this would utilise the existing rail line with park and ride to connect the settlements at Papamoa with rail. Ultimately this line could also link a passenger rail service between Omokoroa and Te Puke.
- Passenger rail could run on the existing rail freight line (this is much more efficient than building a new line).
- The existing Tauranga Eastern Motorway designation is wide enough to allow for a bus lane and to allow for light rail if this was going to be an option in the longer term. It should be recognised that there are design challenges for light rail at the on and off ramps. The proposed motorway layout may need to be reconfigured, or the stability berms used, at some time in the future if light rail is required.

5.10. Urban Design

Urban design principles also need to be considered within a transport context. The Ministry of Transport, Land Transport NZ, Transit and Tauranga City Council are all signatories to the *New Zealand Urban Design Protocol*. As signatories to the protocol Land Transport NZ, Transit and Tauranga City Council have specific urban design initiatives. These include:

Land Transport NZ:

1. Optimal projects from an urban design perspective
2. Assessment of Environmental Effects (incorporating urban design principles into these assessments)
3. Best practice

Transit:

1. Defining quality urban design and its implications for Transit
2. Incorporating urban design into planning and projects at the outset
3. Raising awareness of the value of quality urban design
4. Using best practice groups to develop design guides to achieve urban design principles
5. Consultative group across the whole transport sector.

Tauranga City Council:

1. Resource consent pre-application advice
2. Design guidelines
3. Incentives for great design

4. District Plan changes
5. Council actions
6. Partnerships – private sector and others

6. Funding

6.1. Funding Sources

Funding for transport along the Eastern Corridor will be derived from multiple funding sources. Potential sources are listed below.

- National Land Transport Programme allocations from Land Transport NZ (this includes national 'N' and regional²⁴ 'R' funds)
- A proportion of the Bay of Plenty Crown Grant – 'C' or Crown funds (administered by Land Transport NZ)
- Territorial local authority funding from rates, vested assets and other sources
- Regional council funding from rates for public transport operating expenditure
- Regional cash injections (eg from shares and investments held)
- Development contributions (under the LGA 2002 – or Financial Contributions under the RMA 1991)
- Landowner / developer cost sharing contributions
- Tolling to pay for new infrastructure
- ONTRACK

6.2. Bay of Plenty Funding Package Commitments (Crown Grant)

The Bay of Plenty funding package and associated Crown Grant have the following priorities:

- Strategic roading
- Passenger transport
- Transport demand management
- Walking and cycling

The Tauranga Eastern Motorway is the priority project under strategic roading in the Joint Officials Group report.

The region's funding package requires Tauranga City Council to contribute an extra \$23 million and Western Bay of Plenty District Council to contribute an extra \$5 million from rates. An estimated \$12 million from development contributions is also sought as well as toll

²⁴ Regionally distributed funding from increases in fuel excise duty

funding of approximately \$50 million. Environment Bay of Plenty is required to contribute an extra \$8 million from increased rates and \$40 million from investments.

The following table sets out the range of funding sources and potential contributions as identified in the Joint Officials Group Report²⁵.

Table 8: Indicative funding contribution over the next 10 years²⁶

SOURCE	High
Development levies	\$12.5m
Tauranga rates*	\$23m
Western BOP rates*	\$5m
Rotorua rates*	\$10m
Environment BOP direct rates*	\$8m
Environment BOP investments	\$40m
Tolls	\$50m
Crown	\$150m
Total	\$300m (approx)

*These local authorities have the rate amounts included in their Long Term Council Community Plans for 2006-2016

The Eastern Corridor is part of the regional funding package along with other projects throughout the region. The Eastern Corridor will receive some of the funding that is detailed in Table 8 but it is yet to be determined exactly how much. The Bay of Plenty funding package, and in particular Table 8, should not be read as funding for the Eastern Corridor project only.

6.3. Funding Challenges

There is a degree of uncertainty surrounding the sources of funding, in particular the difficulties of getting longer term commitments to funding from Government. The National Land Transport Programme is funded on an annual basis with a 10 year forecast. Budget 2006 has confirmed a transport funding package over the next five years. The package guarantees funding for a five-year package of state highway construction and for other land transport activity, including local road construction activity, public transport services and maintenance of the roading network. The Tauranga Eastern Motorway is one of the projects listed for acceleration.

While this five year certainty is to be commended, funding beyond this period is still uncertain. This stands in contrast to the requirements of the LGA 2002 which provides that Council LTCCP's must have a 10 year timeframe and provide a degree of certainty over this period. This poses a challenge in terms of aligning Crown funds allocated on an annual basis with the 10 year funding requirements of LTCCP's under the Local Government Act 2002 and the 10 year funding requirements of Regional Land Transport Strategies under the Land Transport Act 1998, as amended by the LTMA 2003.

²⁵ *Report of the Bay of Plenty Joint Officials Group, 2005, Table 7 at page 30*

²⁶ Assumes all 'R' funding is allocated

A consistent and equitable approach to funding arrangements is required. This is particularly important for contributions negotiated with developers for transport infrastructure. Through a partnership approach to funding significant transport infrastructure, contributions from developers can be taken in anticipation that the proposed works will proceed within an agreed timeframe. If however, this is not the case, then Councils and the developers may be in the situation where a particular project does not proceed on time despite the fact that funding contributions from those parties have been made.

Project scope and cost escalations are also a significant funding challenge. Only preliminary scheme design work has been completed and given the significance of the projects there is still a considerable cost risk issue which will require careful and diligent management. It is therefore important to take this into account and attempt to factor this into the overall cost when developing a funding plan for a project so that there is not a large shortfall.

6.4. Funding Opportunities

As noted above under sub-section 6.1 on funding sources, there are various opportunities for funding the different elements of the Eastern Corridor. These are discussed in more detail below.

For the region there are three current revenue sources able to be allocated by the National Land Transport Fund (controlled by Land Transport NZ). One is nationally distributed funding ('N' dollars) and second is regionally distributed funding ('R' dollars), from which it is anticipated there will be reasonably significant contributions to both the State Highway and some of the local road components of this network. The third revenue source is the \$150 million Crown grant. The Tauranga Eastern Corridor is one of the highest priorities to be funded by the grant.

In addition to funding allocated by Land Transport NZ, there are also the following opportunities:

- Landowner / developer cost sharing contributions over and above the traditional development / financial contributions (under the LGA 2002 and RMA 1991). This can be for transport infrastructure such as interchanges on motorways.
- Tauranga City Council and Western Bay of Plenty District Council local contributions towards meeting the costs of upgrading of local roads and provision of additional links in the network as well as the provision of passenger transport infrastructure and provisions for cycling and walking. This can include sources such as rating, vested assets and development / financial contributions.
- Bay of Plenty Regional Council funding for passenger transport in addition to their commitment to provide additional capital funds as required by the Crown grant towards transport infrastructure.
- Tolling to fund new roads. Transit New Zealand is currently undertaking a toll screening process to determine the validity or otherwise of the opportunity to

raise capital funds from tolling to assist with the construction costs for roading projects, in particular the Tauranga Eastern Motorway.

It is important to note that careful consideration needs to be given to the location of tolls and the level of charges. Key considerations include the agreed transport hierarchy and network as well as the acceptable maximum traffic volumes. For example, a high toll on the motorway may result in larger than desirable traffic volumes being diverted on to the existing SH2 through Te Puke. As part of its toll analysis, Transit will need to consider the importance of maintaining a balanced and sustainable transport network.

6.5. Tolling

The LTMA 2003 contains provisions for the tolling of new roads where there is an alternative route. Tauranga already has one toll road under the Tauranga District Council (Route K Toll) Empowering Act 2000. The potential for toll income to support the Tauranga Eastern Motorway is being explored. Tolling can be used as both a means of raising funds and as a demand management tool.

Modelling the effect of tolling on the network has been undertaken. A shortlist of potential strategies and a detailed forecasting study will be completed as a result of the modelling work.

The results of the tolling strategy work will provide traffic forecasts which can be used to assist the examination of how tolling of the Tauranga Eastern Motorway will manage demand and sustain capacity, and also show the effects on the rest of the roading network.

The toll strategy examination will not focus solely on revenue maximisation, but also on what is the best tolling strategy for the most appropriate utilisation and sustainability of the network. Indicators produced by the modelling will include:

- Revenue and transaction costs (number of collection points)
- Performance on the route itself
- Performance on the other routes (in terms of speed and flows)
- Examination of forecasts to assess the effects of diversions etc
- Toll levels and locations
- The collection system
- Network optimisation which has a balance between performance and utilisation (i.e. might make more money, but network will be



running inefficiently, so optimise).

- Other indicators.

The behavioural impact of tolling versus no tolling on the Eastern Corridor transport network and the community will be a key consideration. This is particularly so for the potential for traffic diversion from the proposed Tauranga Eastern Motorway onto existing State Highway 2.

6.6. Eastern Corridor Transport Elements and Costs

Work is still being completed on the costs of all of the transport elements for the Eastern Corridor in order to gain a better level of confidence on:

- The component projects
- Costs
- Funding sources

It is expected that this work will be available by mid 2007 once the nature and extent of the proposed zoning pattern has been finalised through the Environment Court.

The following table is a list of possible costs for some of the components of the network.

Transport Element	Expected Start Date¹ (construction)	Cost Estimate² (Million)
Tauranga Eastern Motorway: Te Maunga to Paengaroa	2011 – 2016 2016+	\$153 M unknown
Te Okuroa Rd (stages 1 and 2)	2007/08	\$60 M
Upgrade of Tara Rd, Girven Rd, Domain Rd, Parton Rd and Welcome Bay Rd	2009	\$38.7 M
Completion of Gloucester Road and Grenada Street*		
Kaituna Link Rd	2016+	\$44.6 M
Te Puke Central realignment	2016+	\$20 M
Papamoa Beach Rd traffic management	2008/09	\$5 M
Upgrade of SH 2 between Paengaroa and Girven Road including intersection improvements either side of Te Puke	2008/09	\$35 M
Domain Road / Tauranga Eastern Motorway interchange*		
Sandhurst interchange*		
Bell Rd / Tauranga Eastern Motorway interchange enlargement	2008/09 (stage 1)	\$82 M
Rangiuru Business Park / Tauranga Eastern Motorway interchange	2008/09	\$14.1 M

Park and ride	2010/11	\$0.83 M
Cycling and pedestrian activities (citywide cycle lanes, pedestrian underpasses and overbridges, other projects)	2006/07	\$4.1 M
Public transport infrastructure (bus shelters, real time information, other infrastructure)	2006/07	\$4 M
Public transport operating expenditure		\$5.8 M
Total		\$467.13 M

*Timing and cost estimates for these projects are still to be developed.

¹The expected start date is an estimate only and is based on current knowledge. These may be subject to change. The start dates have relied on information contained in Long Term Council Community Plans, Transit's 10 year State Highway Forecast and Land Transport New Zealand's National Land Transport Programme.

²The cost estimates are based on current knowledge and will be subject to variability.

A funding plan is also being worked on. This will aim to match the costs which appear in the table above through multiple funding sources. The funding plan will take into account the principle of “growth paying for growth” while acknowledging that there is a “public good” component to infrastructure. The development of a staging plan will need to occur before the funding plan can be completed so that the timing of key projects is better understood.

The budget 2006 announcement has allocated an extra \$425 million to accelerate major projects. One of these projects is the Tauranga Eastern Motorway.

Land Transport New Zealand’s National Land Transport Programme for 2006/07 includes \$55 million for investment in the Bay of Plenty’s land transport network, including:

- \$45 million for the maintenance of state highways and local roads
- \$5 million for construction of state highways and local roads
- \$3 million for passenger transport maintenance and service improvements.

Design work on the Tauranga Eastern Motorway has been included as a project which may be funded during the year.

6.7. Suggested Framework for Negotiations

A Heads of Agreement is currently being worked on between Tauranga City Council, Western Bay of Plenty District Council, Environment Bay of Plenty and Transit NZ for the Eastern Corridor. These agreements will set up a framework for progressing the transportation needs of the Eastern Corridor.

6.8. Risk Assessment / Management

A detailed risk assessment will be completed on the land use and transport picture for the Eastern Corridor out to 2051. The assessment will look at:

- The transport network configuration and the risks (eg geotechnical risks)
- Ability to fund

This assessment will assist in the development of the staging plan referred to in section 4.6.

7. Future Actions and Agency Roles

7.1. Achieving Integration

This study has involved a baseline investigation of long term land use and transportation along the Eastern Corridor. In completing this task the work to date and this report has substantially met the study brief.

However, some uncertainty still exists with regards to the following:

- Much of the proposed land use along the Eastern Corridor is subject to the completion of regulatory processes (eg plan changes and resource consents under the RMA 1991).
- The transport costs of the Eastern Corridor are still to be confirmed as are the funding sources.

This report has been prepared following the conclusion of the scoping phase of the Eastern Corridor work. The most appropriate way forward is a series of actions which will be transferred into the transport section of the SmartGrowth Strategy which is being updated this year and assigned to the SmartTransport team to progress. These actions will be implemented and monitored under the SmartGrowth Strategy and in conjunction with the RLTS. The future actions are set out below in section 7.2.

7.2. Future Actions

The following actions need to be completed for the Eastern Corridor. These actions will appear in the transport section of the SmartGrowth Strategy (section 7.4.1).

Action 1: Regulatory Processes / Land Use Changes			
SmartGrowth and the partner Councils need to actively ensure that the following land use changes are implemented:			
<ul style="list-style-type: none"> • Change 2 to the RPS • Plan Change 44 – Papamoa Stage 1 ‘Wairakei’ • Smart Living Places – Arataki area (BayFair) • Plan Change 33 – Rangiuru Business Park • Plan Change 25 – Te Puke • Timing for Papamoa Stage 2 ‘Te Tumu’ 			
SmartGrowth will need to ensure that appropriate outcomes are achieved across new developments and that these are integrated with what exists. Change 2 to the RPS will be the lead document and sets the framework for land use along the Eastern Corridor, particularly in terms of the urban limits. SmartGrowth should actively participate in these land use processes to ensure good outcomes.			
Agencies	Timeframe	Cost Estimate	Plan
TCC, WBOPDC, EBOP SGIC / IMG to actively participate and monitor to ensure appropriate	2006 – 2007	Existing budgets	RPS District Plans

outcomes			
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Action 2: Ensure appropriate design for the town centre shared across Wairakei and Te Tumu with a particular focus on transportation

The location and design of the town centre at Wairakei is a critical component of the Eastern Corridor. This town centre will likely support both Wairakei and Te Tumu and will potentially provide for the whole of Papamoa. Its location and design, particularly its relationship with the transport network, is critical. There is a need to achieve an integrated land use relationship across the two developments (Wairakei and Te Tumu), particularly in terms of the town centre.

Agencies	Timeframe	Cost Estimate	Plan
Wairakei developer, TCC, WBOPDC, EBOP, Smart Transport SGIC / IMG to monitor	2006 – 2007		Wairakei Structure Plan

Action 3: Develop a staging plan for development and transport infrastructure along the Eastern Corridor

This study of the Eastern Corridor covers potential development and transport infrastructure for the period out to 2051. Further work on a detailed 10 year development and infrastructure staging plan for the corridor needs to be completed. This work will inform the funding plan for the Eastern Corridor.

Agencies	Timeframe	Cost Estimate	Plan
SmartTransport (lead), TCC, WBOPDC, EBOP, Transit, SGIC / IMG to monitor	Mid 2007		LTCCP's Transit / Land Transport NZ 10 Year Plans RLTS

Action 4: Prepare and agree a multi agency funding plan for the Eastern Corridor

A funding plan which includes costs for the transport components of the Eastern Corridor along with funding sources and contributions needs to be agreed and finalised. The transport elements that need to be funded are as follows:

- Tauranga Eastern Motorway: Te Maunga to Paengaroa
- Te Okuroa Drive (stages 1 and 2)
- Upgrade of Tara Road, Girven Road, Domain Road , Parton Road and Welcome Bay Road
- Completion of Gloucester Road and Grenada Street
- Kaituna Link Road
- Te Puke Central realignment
- Papamoa Beach Road traffic management
- Upgrade of SH 2 between Paengaroa and Girven Road including intersection improvements either side of Te Puke
- Domain Road / Tauranga Eastern Motorway interchange
- Sandhurst interchange
- Bell Road / Tauranga Eastern Motorway interchange
- Rangiuru Business Park / Tauranga Eastern Motorway interchange
- Park and ride
- Public transport operating expenditure
- Public transport infrastructure (bus shelters, real time information, other infrastructure)
- Cycling and pedestrian activities, particularly within new developments
- Travel Demand Management (as per the Bay of Plenty Demand Management Strategy)

A risk assessment will also need to be completed as a precursor to this work.

Agencies	Timeframe	Cost Estimate	Plan
Smart Transport TCC, WBOPDC, EBOP, Transit SGIC / IMG to monitor	2007		LTCCP's Transit 10 Year Plan National Land Transport Programme RLTS

Action 5: Agree Eastern Corridor transportation layout, interchange and connection locations and design

The long term transport network layout for the Eastern Corridor needs to be agreed and finalised, particularly the interchanges for the Tauranga Eastern Motorway. The various elements that make up the transport corridor (including their function and form) need more detail and scoping including access control, traffic management, interchange form and capacities. This work will need to take into account the traffic flow modelling work completed to date (see Appendix 4).

Agencies	Timeframe	Cost Estimate	Plan
Smart Transport TCC, WBOPDC, Transit SGIC / IMG to monitor	2006 – 2007		District Plans

Action 6: Develop specific quantifiable requirements for desired environmental conditions along the Eastern Corridor transport network

It is necessary to derive specific quantifiable requirements for the desired environmental conditions along the Eastern Corridor. Environmental and social impacts are being increasingly recognised as relevant transportation matters. Principles which seek to limit environmental effects by setting desirable standards should be developed and put in place to along the network and surrounding land use to function in a sustainable manner.

Agencies	Timeframe	Cost Estimate	Plan
Smart Transport TCC, WBOPDC, Transit	Late 2006		District Plans

Action 7: Investigate alternative modes for the Eastern Corridor

This includes considering:

- Public transport (buses) (eg priority lanes, public transport interchange centre, bus frequencies, ensuring that buses run to new developments early on).
- Walking and cycling (ensuring that there is provision for this and that walkways and cycle paths link between developments)
- Demand management - implementing the Bay of Plenty Demand Management Strategy.(including encouraging tools such as travel plans)
- Passenger rail for the long term

Note that some of this work will be completed as part of the RLTS review and implementation of the 2006 RLTS. Bus public transport is currently being addressed through a working group made up of EBOP and TCC representatives. Particular attention will need to be given to the public transport requirements of the Eastern Corridor.

Agencies	Timeframe	Cost Estimate	Plan
Smart Transport, EBOP, TCC, WBOPDC, Transit SGIC / IMG to monitor	2006 – 2008		Local transport strategies RLTS Regional Passenger Transport Plan District Plans

Action 8: Monitoring the Eastern Corridor

Ongoing monitoring of the Eastern Corridor needs to be undertaken. This includes monitoring of traffic generation, journey times, densities (persons per hectare), population, household composition (persons per household). It should also include checking that new developments are conforming to the structure plans put forward as part of resource consent or a plan change. This monitoring should be in line with SmartGrowth and the RLTS.

Agencies	Timeframe	Cost Estimate	Plan
TCC, WBOPDC, EBOP, Transit SGIC / IMG to monitor	Ongoing		SmartGrowth RLTS

Action 9: Investigate a possible Kaituna Link road

Further work needs to be completed on investigating the options for a “Kaituna Link” to provide connectivity between Te Tumu (Papamoa Stage 2), the Rangiuru Business Park, existing SH 2 and Te Puke.

Agencies	Timeframe	Cost Estimate	Plan
SmartTransport, TCC, WBOPDC, Transit, SGIC / IMG to monitor	2006		District Plan

7.3. The Role of Land Transport NZ, Transit, Local Authorities

Land Transport NZ

Land Transport NZ is responsible for administering the National Land Transport Programme and the National Land Transport Fund. In the Bay of Plenty this includes national or ‘N’ funds; regional or ‘R’ funds, and the crown grant or ‘C’ funds. It is important that there is commitment to long term funding as part of the National Land Transport Programme.

Environment Bay of Plenty

Environment Bay of Plenty has the responsibility for regional land transport matters through the Regional Land Transport Strategy, including the regional Demand Management Strategy. The Council also has a specific responsibility for the operation of public transport services. Environment Bay of Plenty also has a commitment as part of the Joint Officials Group to contribute funding to the land transport network.

SmartGrowth

The SmartGrowth Implementation Management Group and the SmartGrowth Implementation Committee act as overseers for major land use and transportation issues for the western Bay of Plenty sub-region. SmartGrowth is responsible for strategy implementation which includes ensuring that development occurs in an integrated manner and that targets and timeframes are met.

SmartTransport

SmartTransport is a key component of SmartGrowth. It is a partnership formed to coordinate land transport development in the western Bay of Plenty sub-region and is responsible for coordinating the planning and delivery of improved transport infrastructure. The group oversees the detailed development and implementation of transport in the western Bay of Plenty sub-region in line with the SmartGrowth Strategy.

Transit NZ

Transit NZ have responsibility for the State Highway network. Transit is also working with the SmartTransport team in order to ensure that a sustainable transport solution is implemented for the Eastern Corridor. Transit will be responsible for the development of the Tauranga Eastern Motorway and will also have a role to play in terms of considering the

network as a whole which means having regard to the local roading network, opportunities for modal shift and managing traffic demand.

Tauranga City Council

Tauranga City Council is responsible for the planning, funding and construction of the local roading network at Papamoa. Tauranga City is working to ensure that the developments along the Eastern Corridor occur in a manner which does not prejudice the best transport outcome and that sensitive land uses are not compromised by the transport network. The Council is also responsible for public transport infrastructure (eg bus shelters). Tauranga is the responsible authority for Plan Change 44 – *Papamoa Stage 1 'Wairakei'* and also for the future Papamoa Stage 2 'Te Tumu' development.

Western Bay of Plenty District Council

Western Bay of Plenty District Council is responsible for the planning, funding and construction of the local roading network in part of the Eastern Corridor. The Council is also responsible for public transport infrastructure. Western Bay of Plenty District is the responsible authority for Plan Change 25 (Te Puke) and the Rangiuru Business Park (Metroplex). Western Bay will also have a role to play in terms of managing smaller developments along the Eastern Corridor, particularly those that occur off side roads adjacent to the existing State Highway 2. These may have an adverse cumulative effect on that portion of the network and its ability to function as desired.

8. Conclusions and Recommendations

8.1. Conclusions

The Eastern Corridor is a significant challenge for the western Bay of Plenty sub-region in terms of land use and transport planning. The aim is to achieve integration between land use, infrastructure (particularly transport) and funding.

This study has involved a baseline investigation of long term land use and transportation along the Eastern Corridor. In completing this task the work to date and this report has substantially met the study brief.

The future land use pattern is by no means certain as there are still decisions to be made on plan changes and resource consents along the corridor. This study of the Eastern Corridor covers potential development and transport infrastructure for the period out to 2051. Further work on a detailed 10 year development and infrastructure staging plan for the corridor will take place in 2007.

This study is a work in progress because of the long term nature of land use and transport along the Eastern Corridor. There will be revisions and updates to this work over time.

A funding plan for the transport elements is still to be agreed and confirmed.

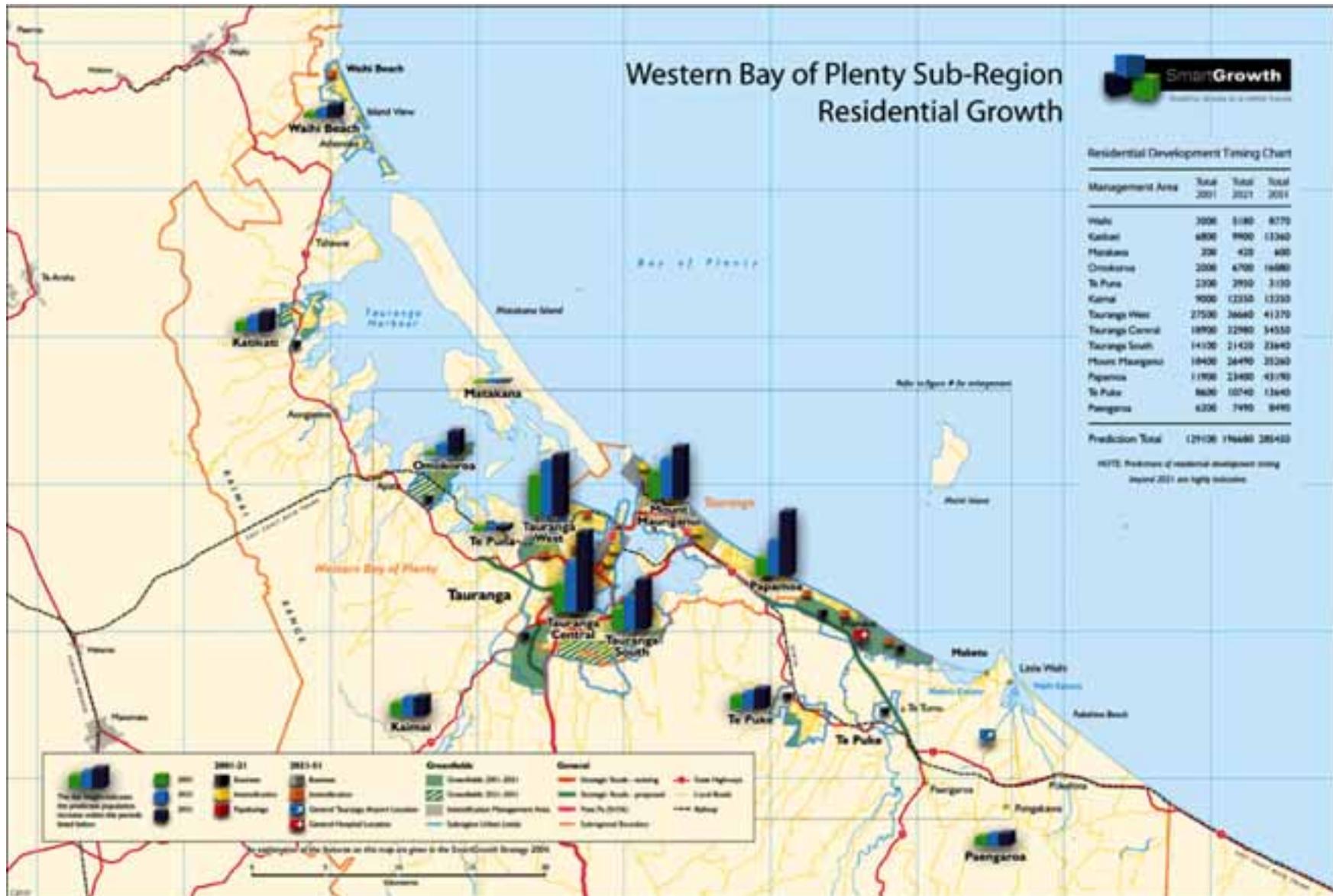
Considerable challenges lie ahead for the successful implementation of the Eastern Corridor. A framework for moving forward with this study has been established through a series of actions. These actions will be implemented and monitored through the SmartGrowth Strategy.

8.2. Recommendations

This study makes the following recommendations:

1. That this baseline study of the Eastern Corridor, including the proposed transport network hierarchy and sustainable traffic volume targets, is adopted (see map in Appendix 4).
2. That the actions outlined in section 7.2 are adopted.
3. That the land use pattern for the Eastern Corridor outlined in this study is confirmed.
4. That the actions are transferred into the transport section of the SmartGrowth Strategy.
5. That these actions are implemented and monitored as part of the SmartGrowth Strategy.

Appendix 1: Sub-Regional Settlement Pattern Map²⁷



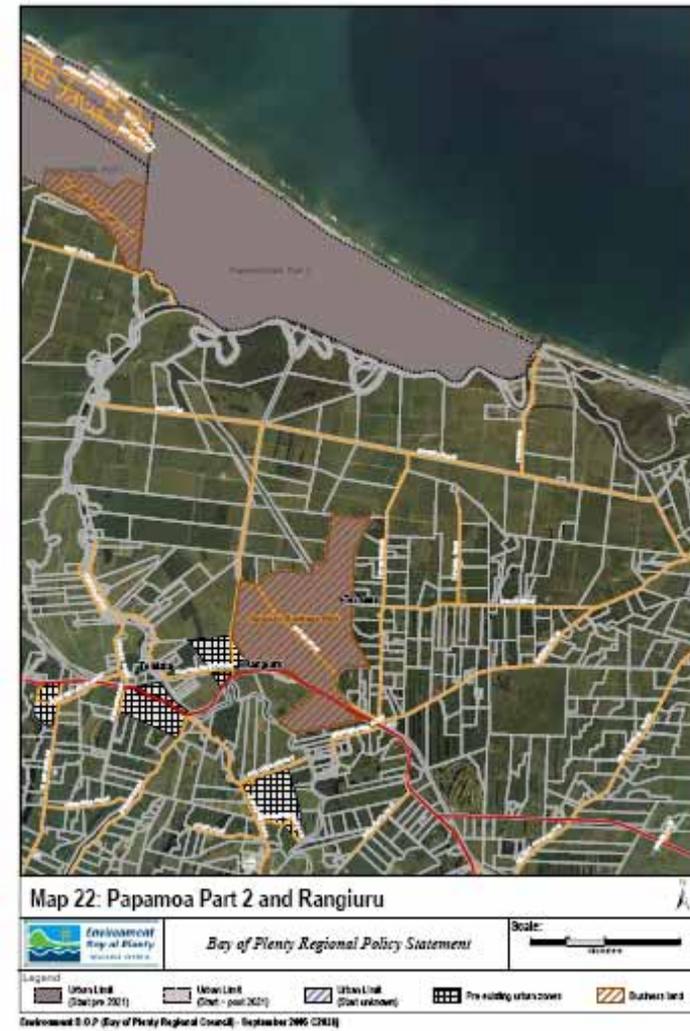
²⁷ Source: SmartGrowth Strategy, May 2004 at page 7

Appendix 2: SmartGrowth Regional Settlement Strategy, Corridors Map²⁸



²⁸ Source: SmartGrowth Strategy, May 2004 at page 8

Appendix 3: Urban Limits (from Proposed Change 2 - RPS)



Appendix 4: Eastern Corridor Transport Network (incl. traffic flows)

