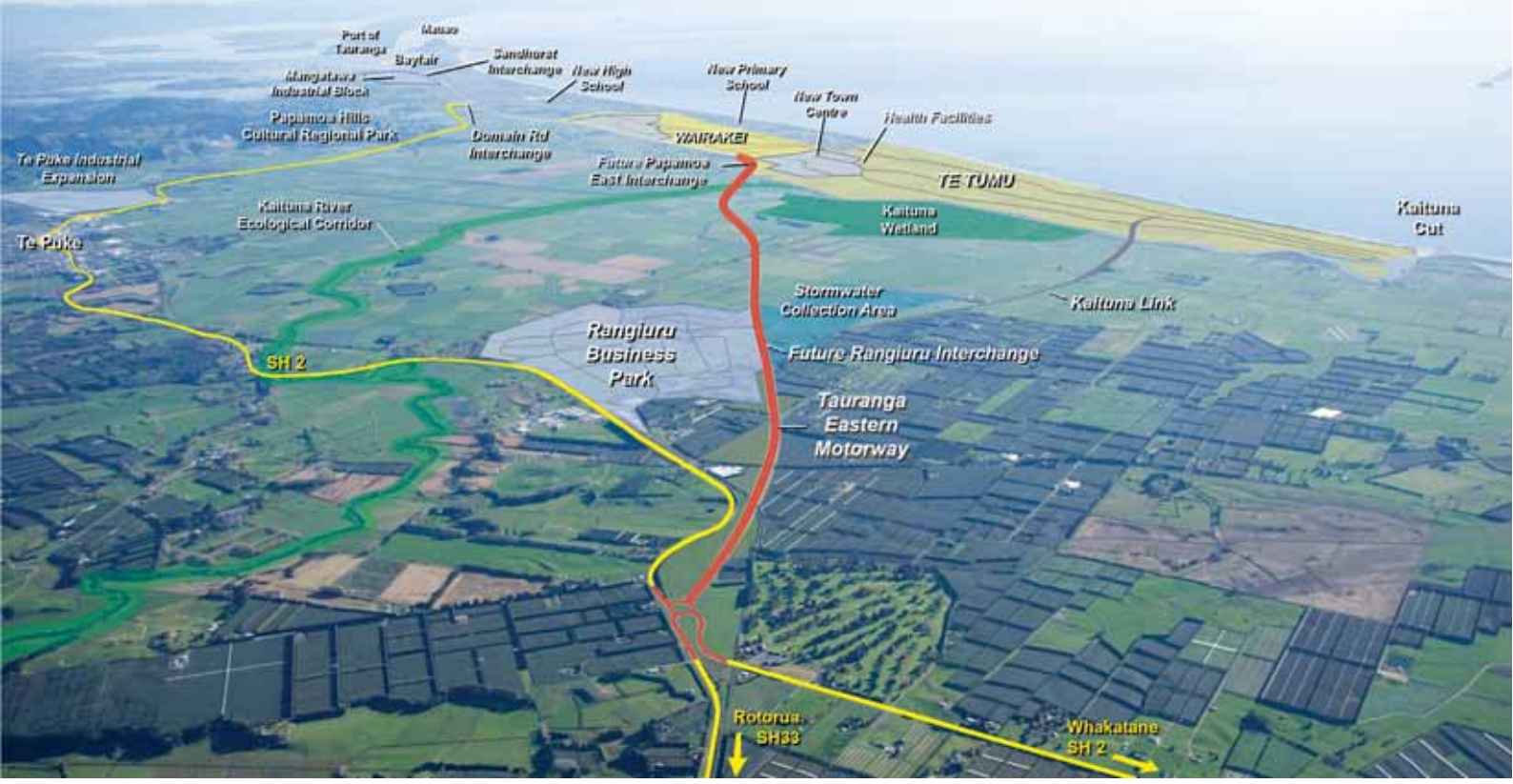





# The SmartGrowth Eastern Corridor

SmartGrowth

Building blocks to a better future



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# 1. Executive Summary

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

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

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 strategy for the Eastern Corridor covers the period out to 2051.

This strategy is a work in progress because of the long term nature of land use and transport along the Eastern Corridor. This document is version 2 of the Eastern Corridor Strategy which updates the original October 2006 document. There will be further revisions and updates to this work over time. For a history of the Eastern Corridor and all of the background work that has been completed to date, reference should be had to the *Eastern Corridor Dossier,* 2007.

In 2007 the Eastern Corridor Strategy received 'in principle' support from the Land Transport NZ Board. This version of the strategy has been updated to reflect the assessment that was undertaken for Land Transport NZ.

**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 at least 300[1] 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 major business park at Rangiuru.

[1] Gross developable area

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.

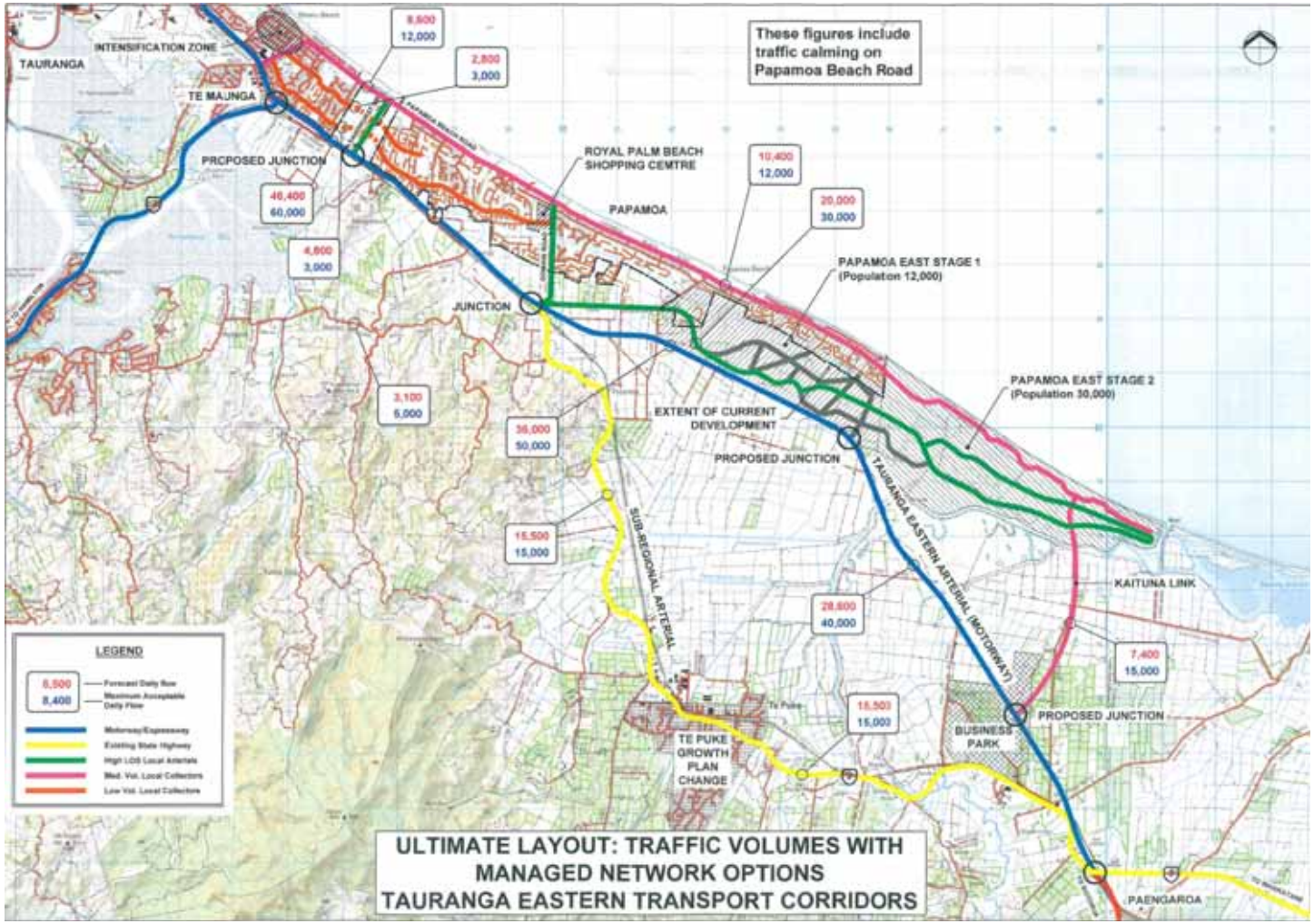
**Transport Modelling**

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, in 2006 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 Environment Bay of Plenty 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
- Papamoa East interchange
- Domain Road interchange
- Sandhurst Drive interchange - subject to further detailed engineering design (this is to ensure that the connections to Sandhurst Drive are managed safely)


These figures include traffic calming on Papamoa Beach Road
INTENSIFICATION ZONE
TAURANGA
TE MAUNGA
PROPOSED JUNCTION
ROYAL PALM BEACH SHOPPING CENTRE
PAPAMOA
JUNCTION
PAPAMOA EAST STAGE 1 (Population 12,000)
PAPAMOA EAST STAGE 2 (Population 30,000)
EXTENT OF CURRENT DEVELOPMENT
PROPOSED JUNCTION
TAURANGA EASTERN ARTERIAL (MOTORWAY)
SUB-REGIONAL ARTERIAL
KAITUNA LINK
PROPOSED JUNCTION
BUSINESS PARK
TE PUKE GROWTH PLAN CHANGE
PAENGAROA
LEGEND
ULTIMATE LAYOUT: TRAFFIC VOLUMES WITH MANAGED NETWORK OPTIONS
TAURANGA EASTERN TRANSPORT CORRIDORS

**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
- Domain Road / Tauranga Eastern Motorway interchange
- Sandhurst / Tauranga Eastern Motorway interchange
- Papamoa East / 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 the New Zealand Transport Agency (this includes national 'N' and regional[2] 'R' funds)
- The Bay of Plenty Crown Grant – 'C' or Crown funds (administered by the New Zealand Transport Agency)
- Regional fuel tax
- 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

In March 2008 Land Transport NZ approved design funding for the Tauranga Eastern Motorway. The funding will cover further work to refine the project and develop it to the point where resource consents could be applied for.

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.

Considerable challenges lie ahead for the successful implementation of the Eastern Corridor. A framework for moving forward with this strategy 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. Note that this will only be available until the end of the 2014/15 financial year, after which it will be incorporated into the nationally distributed fund.

# 2. Introduction

## 2.1. Objectives

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

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

## 2.2. The Eastern Corridor

This corridor (corridor is used in this strategy 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:

- Rangiuru business park – 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 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
- Papamoa East / Tauranga Eastern Motorway interchange
- Rangiuru Business Park / Tauranga Eastern Motorway interchange
- Domain Road / Tauranga Eastern Motorway interchange
- Sandhurst / 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)

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 Strategy Brief

A strategy which integrates the land use and transport components of the Eastern Corridor was initiated in September 2005 by SmartTransport. 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 and the New Zealand Transport Agency ("NZTA")[3]. This group reports to the SmartGrowth Implementation Management Group and the SmartGrowth Implementation Committee.

This work includes part of the planning that Transit (now the NZTA) has completed in order to progress the Tauranga Eastern Motorway ("TEM"). The position reached with regards to the TEM is shown in the map attached as Appendix 4.

Implementation of the Eastern Corridor Strategy will involve the development of an integrated funding package for all transport elements. This portion of the work will be finalised as part of the implementation actions that arise from this strategy.

A SmartGrowth Eastern Corridor Implementation Brief was prepared in September 2005. The purpose of this work, as set out in the original brief, 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 strategy that avoids lengthy and costly litigation in the Environment Court.

Work undertaken to date, as part of the Eastern Corridor Strategy, has included:

- SmartGrowth Eastern Corridor Implementation: Transportation Study report (November 2005);
- Traffic Modelling;
- A paper for the Transit Board (2006);
- Presentations to Transit and SmartGrowth;

[3] The New Zealand Transport Agency was formed on 1 August 2008 following the merger of Land Transport NZ and Transit NZ as mandated by the 2008 amendments to the Land Transport Management Act.

- Eastern Corridor Dossier (bringing together all of the work completed in relation to the corridor);
- Strategic evaluation of the Eastern Corridor for Land Transport NZ;
- Funding applications to Land Transport NZ;
- Western Bay of Plenty District Council decision on Plan Change 33 (Rangiuru Business Park);
- Tauranga City Council decision on Plan Change 44 (Wairakei);
- Rangiuru Business Park modelling (2008).

As a result of the strategic assessment undertaken in 2007, the Land Transport NZ Board (now the NZTA) has given "in principle" support to this Eastern Corridor Strategy.

## 2.4. Current Scope of Work

The main focus of this strategy is 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 strategy 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 strategy 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 8 of this strategy sets out several specific actions that will need to be implemented.

# 3. Context

## 3.1. The National Framework

**The New Zealand Transport Strategy**

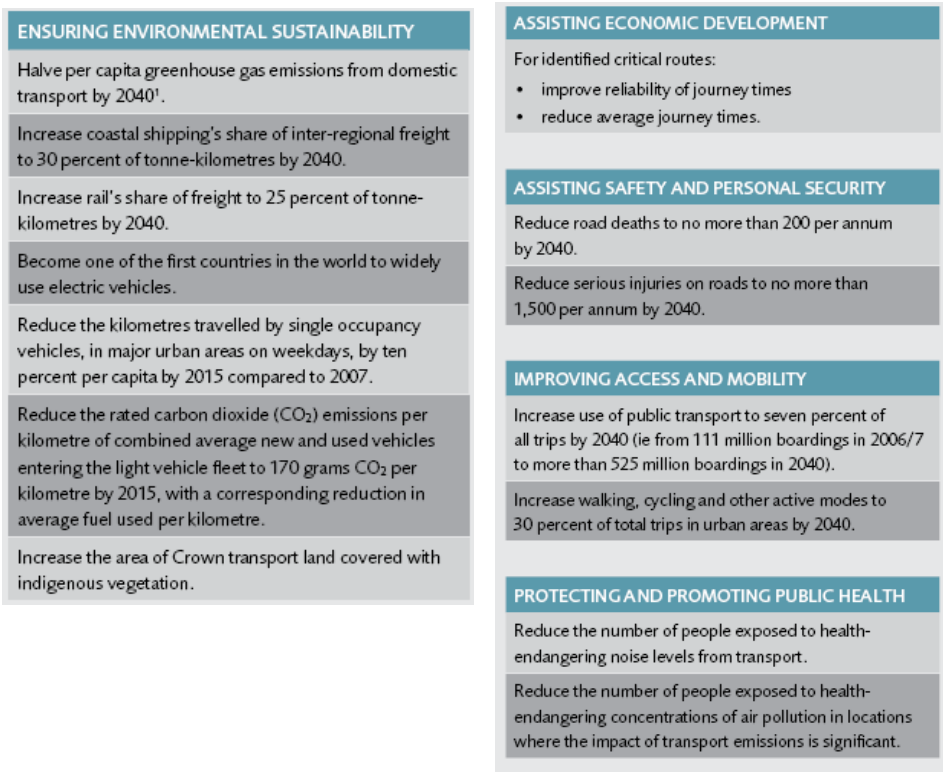
The New Zealand Transport Strategy ("NZTS") was updated in 2008. The Strategy sets out the Government's overall vision for transport, five key objectives (those objectives have been carried through into the Land Transport Management Act 2003) and a number of targets in order to support the delivery of the objectives. The government's overall vision for transport in 2040 is that:

*"People and freight in New Zealand will have access to an affordable, integrated, safe, responsive, and sustainable transport system."*

The vision is supported by five transport objectives:

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

The NZTS now sets out targets that support the objectives, provide a focus for future actions and a basis for measuring progress. The targets are as follows:



The NZTS also contains the following components which it signals will be the focus of increased priority for the government:

- Integrated planning
- Making the best use of existing networks and infrastructure
- Investing in critical infrastructure and the transport sector workforce
- Increasing the availability and use of public transport, cycling, walking, and other share and active modes
- Considering options for charging that will generate revenue for investment in transport infrastructure and services
- Using new technologies and fuels
- Maintaining and improving international links

**The Land Transport Management Act**

The Land Transport Management Act 2003 ("LTMA") governs the way the New Zealand land transport system is developed, managed and funded. The purpose of the Act is to contribute to the aim of achieving an affordable integrated, safe, responsive, and sustainable land transport system. The Land Transport Management Amendment Act became law in 2008. These amendments have involved some significant changes including reserving fuel excise duty for land transport purposes, enabling regions to put in place a regional fuel tax scheme, providing for a 6 year Government policy statement on transport priorities, changing to a 3 year funding cycle, introducing 3-yearly regional land transport programmes, increasing the term of an RLTS to 30 years, and merging Land Transport NZ and Transit NZ into a single Crown entity (the New Zealand Transport Agency).

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 Government Policy Statement**

The Government Policy Statement on transport funding ("GPS") is a requirement of the LTMA. The GPS covers the period 2009/10 to 2014/15 and indicatively out to 2018/19. The policy statement takes effect from 1 July 2009. It details the government's desired outcomes and funding priorities for the land transport sector. The GPS is intended to guide the National Land Transport Programme.

The seven components described under the NZTS are also a feature of the GPS. The GPS translates the long-term targets of the NZTS into short to medium term targets. These targets represent what the land transport sector is to achieve by 2015. The targets are as follows:

| Target Area | Specific Target |
|---|---|
| **Reducing green house gas emissions** | Reduce kilometres travelled by single occupancy vehicles, in major urban areas on |

| | |
|---|---|
| | weekdays by 10 percent per capita by 2015. |
| **Freight** | Increase the mode share of transporting freight by coastal shipping and rail by 2015 |
| **Travel Times** | No overall deterioration in travel times and reliability on critical routes by 2015 |
| **Road Safety** | Reduce fatalities and hospitalisations form road crashes by 2015 |
| **Public Transport** | Increase patronage on public transport by three percent per year through to 2015 |
| **Walking and Cycling** | Increase the number of walking and cycling trips by one percent per year through to 2015 |

**Other Strategies and Documents**

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

- Road Safety Strategy 2010 (2003)
- Transit Toll Systems Projects (released in late 2004)
- Surface Transport Costs and Charges 2005
- Getting There – on Foot, by Cycle 2005
- The National Rail Strategy 2005
- Transport Sector Strategic Directions Document 2006-2009
- Land Transport New Zealand: Participation in Land Use and Transport Planning Process 2006
- Auckland Road Pricing Evaluation Study 2006
- Transit Planning Policy Manual 2007
- National State Highway Strategy 2007
- National Energy Strategy 2007
- National Energy Efficiency and Conservation Strategy 2007
- Sea Change: Coastal Shipping Strategy 2008

## 3.2. The Regional Framework

**The Bay of Plenty Regional Land Transport Strategy**

The Bay of Plenty Regional Land Transport Strategy ("RLTS") was adopted in June 2007 and was developed as an update to the 2004 RLTS.

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 2007 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 2007 has also developed some targets for modal shift for Tauranga (see section 5.9).

**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**). Change 2 also provides for the timing and sequencing of growth areas. Environment Bay of Plenty has made its decisions on submissions on Change 2. Any appeals will now be heard by the Environment Court.

## 3.3. 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 Strategy was reviewed in 2007.

The sub-region is an area of rapid population growth. The 2006 census results show the western Bay of Plenty sub-region continues to be one of the fastest growing areas in New Zealand. The population of Tauranga City has increased by 14.0% and the population of the Western Bay of Plenty District has increased 10.1% between 2001 and 2006. This equates to an additional 16,566 people in the sub-region over the last five years.

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.

In order to accommodate this growth the SmartGrowth Strategy considered three growth scenario alternatives. These were consulted on as part of the development of the Strategy.[4] The three options were to maintain the current approach, lower density and higher density.

The three growth scenario alternatives were evaluated[5] and the high-density alternative ranked the strongest. The higher density option also emerged as the preferred option during public consultation. This option underpins the SmartGrowth Strategy.

The higher density option also gave the best outcome in terms of less vehicle kilometres travelled, less daily vehicle trips and less vehicle hours[6]. A more compact urban form will incur lower costs of infrastructure, particularly for transport systems. Public transport is more easily provided in a compact form of settlement with strong nodes of development.

The SmartGrowth Strategy allocates approximately 75% of all future growth to the Tauranga City Council area with the remaining 25% accommodated within the Western Bay of Plenty District.

The Tauranga City growth allocation will be achieved through higher density redevelopment of a number of intensification areas, as well as raising the development densities within

[4] SmartGrowth Project Team, *Development of Draft Vision and Outcomes and Growth Management Alternatives*, February 2003
[5] SmartGrowth Environment Project Team, *Evaluation of Growth Management Alternatives*, July 2003.
[6] Beca, *SmartGrowth: Refined Transport Modelling*, November 2002

undeveloped land on the edge of the city from 10 households per hectare to 15 households per hectare.

In sub-regional terms the development allocation is likely to be as follows:

- Greenfield Residential Development (average of 15 dwellings per hectare): 60% of all growth
- Intensification Areas (30 to 40 dwellings per hectare): 30%
- General Intensification: 7%
- Rural: 3%

Therefore 63% of future growth in the sub-region will be in greenfields developments and 37% will be intensification.

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.
- 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.

The SmartGrowth Strategy is being implemented through Change 2 to the Regional Policy Statement, District Plans, the Regional Land Transport Strategy and various other strategies and studies.

## 3.4. Local Strategies

**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.

**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.

**Built Environment Strategy (Phase 1)**

The Western Bay of Plenty District Council has developed phase 1 of a Built Environment Strategy. The Strategy aims to guide development in a sustainable way based on the "live, work and play" principles of SmartGrowth. It is intended that the Strategy will inform planning tools such as the district Plan, Code of Practice and structure plans. The phase 1 Strategy focuses on the district level, phase 2 will concentrate on the respective growth areas.

## 3.5. 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 (NZTA), including Crown Grants
- Regional fuel tax
- 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
- Public-private partnerships

- Local funding from regional and city / district councils (eg rates, investments)
- Landowner / developer cost sharing contributions

## 3.6. 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 Long Term Council Community Plans (LTCCP's). This includes funding derived from development levies / contributions, rates, investments, and tolls.

## 3.7. 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.

A key aspect of the SmartGrowth Strategy is the integration of long-term land-use planning needs at a sufficiently large scale to support long-term infrastructure investment. Investing and building infrastructure in a timely manner is a core part of being able to influence and manage the location and pattern of future development that will occur as a consequence of the western Bay of Plenty sub-region's growth.

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.[7] Figure 2 from the SmartGrowth Strategy illustrates this corridor pattern (see

[7] Source: SmartGrowth – The western Bay of Plenty Sub-Region 50 year Strategy (2007) at page 20

**Appendix 2**). This corridor pattern has formed the basis for the packages of transport activities developed for the 2007 RLTS.

The SmartGrowth land use pattern will help to inform the requirements of the LTMA 2003 as amended which states that an RLTS must contain a statement of any relevant regional economic or land use considerations, and the likely funding of any land transport infrastructure associated with those considerations.

# 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"[8]: 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 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.

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[9] |
|---|---|---|---|---|---|---|
| **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 |

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

[9] 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 reviewed 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 below[10].

- 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.[11]
- 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 has recently been built.
- An outdoor shopping mall 'Fashion Island' was completed in 2006.
- There is a site for a proposed secondary school in Papamoa (on Tara Rd).

[10] All figures sourced from Census 2001, combined totals for Papamoa East and Papamoa West
[11] 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 residential development on the 25ha Rifle Range block 'Papamoa Gateway' received resource consent from the Tauranga City Council in April 2006[12]. 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 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 Puke[13]**

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.

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.

[12] Note that this resource consent is subject to appeals at the Environment Court

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

## 4.4. Plan Changes and New Developments

For the purposes of modelling traffic impacts on the transport network as part of this strategy, 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 released decisions on Proposed Plan Change 44 to rezone 420ha of "Future Urban" land in Papamoa East Stage 1 for residential, business and open space development. The Hearings Committee has recommended that Tauranga City Council adopt the plan change with some modifications.

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).

It is proposed that the Te Tumu development would 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. In 2007 Tauranga City Council prepared a report entitled *Response to Proposal to Proceed with Te Tumu at 2011.* This report was an analysis of the difficulties with proceeding with Te Tumu earlier than 2021. It found that to do so will displace growth in other parts of the city and will have both financial and growth management impacts. The report recommends that this development should not commence until 2021. This is consistent with Proposed Change 2 to the RPS which 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 practical to have all of these developments proceeding within 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 plan change is currently under appeal to the Environment Court. 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.

The Rangiuru Business Park could be expanded in the future given the shortage of industrial land in the sub-region post 2021.

**Te Puke Growth Node[14] (Plan Change 25)**

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. The Plan Change covers the following:

- New Residential Areas
- Active Reserve
- Walkway/Cycleway
- Medium Density Residential Development

[14] Source: Western Bay of Plenty District Council

- Floodable Areas and Controls
- Structure Plan

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

In December 2007, Western Bay of Plenty District Council publicly notified Proposed Private Plan Change 70. The plan change seeks to rezone approximately 72ha of land from rural to industrial. A public hearing on the plan change has been held.

It is projected that the Te Puke area will need to accommodate 11,008 people by 2021 which is 1,921 more than were recorded in 2006. 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 developments at Mt Maunganui and Te Maunga.

## 4.5. Why the Eastern Corridor?

The SmartGrowth Strategy identifies the Eastern Corridor as a significant development area. The following is a summary of why the Eastern Corridor was chosen as a growth area under the SmartGrowth Strategy:

- Residential development in the Eastern Corridor (at Papamoa) was already planned or 'in-train'.
- Papamoa East is the last remaining large greenfields area in the City and there are limited options for development in other areas due to various constraints.
- It is relatively easily to develop and service, with few topographic or ecological constraints.
- Development in this corridor will consolidate and build-on existing settlements south east of Mt Maunganui.
- The area has been identified since the mid-1980's as an area for long-term urban development.[15]
- The area fitted the criteria for evaluating the three growth scenario alternatives very well and forms a significant portion of the urban land demand required to satisfy continued population and economic growth in the western Bay of Plenty subregion over the next 20+ years.

[15] This approach was confirmed in the 1991 Urban Growth Study adopted by Tauranga City Council. The Strategic Plan for Tauranga, Strategic Directions (1998), identifies Papamoa East as a "planned new residential area" and shows two "planned new employment nodes" at Parton Road and Papamoa East.

## 4.6. 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 Tables 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).

These are all directly aligned to the SmartGrowth Strategy. The growth areas identified and the resulting urban limits link back to the SmartGrowth growth management areas. The timing, sequencing and density requirements also align with SmartGrowth.

Proposed Variation 1 to Proposed Change 2 to the RPS was publicly notified on 16 October 2007. This variation seeks to amend the staging of urban development for land within the urban limits for Omokoroa.

Change 2 may be subject to amendment following the outcomes of the Environment Court appeal process.

## 4.7. 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 strategy 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 is currently being completed on the presumption that the long term land use pattern will have been settled and all of the proposed land rezonings will be in place. The growth of Papamoa is directly related to the staging of the Eastern Corridor transport package, particularly the Tauranga Eastern Motorway.

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 Papamoa, Te Puke and Paengaroa. Table 3 is from Change 2 and shows indicative growth area timing and business land provision for the Eastern Corridor.

**Table 2: Residential Development Timing Chart***

| SmartGrowth Growth Management Area | | | Projected Additional Resident Population | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Growth Type | | | Projection Period | | | | | | | | | | |
| Intensification Areas | 2001 Census | 2006 Census | 2006-2011 | 2011-2016 | 2016-2021 | 2021-2026 | 2026-2031 | 2031-2036 | 2036-2041 | 2041-2046 | 2046-2051 | 2051 Additional | 2051 Total |
| General Intensification (Infill) | | | | | | | | | | | | | |
| Urban Growth Area (Greenfield) | | | | | | | | | | | | | |
| **Mount Maunganui** | | | | | | | | | | | | | |
| | 963 | 1167 | 787 | 903 | 1152 | 1401 | 1379 | 1373 | 1189 | 796 | 398 | **9377** | 10544 |
| | 16710 | 17697 | 485 | 353 | 333 | 328 | 273 | 225 | 225 | 175 | 172 | **2568** | 20265 |
| *Sub-total* | **17673** | **18864** | **1273** | **1256** | **1485** | **1729** | **1651** | **1598** | **1414** | **971** | **570** | 11946 | 30810 |
| **Papamoa** | | | | | | | | | | | | | |
| | | | 0 | 190 | 401 | 700 | 499 | 441 | 157 | 160 | 199 | **2747** | 2747 |
| | 381 | 459 | 12 | 7 | 5 | 4 | 4 | 4 | 4 | 4 | 2 | **47** | 506 |
| | **12624** | **17124** | 3595 | 4794 | 4798 | 3817 | 4032 | 3905 | 3907 | 4320 | 4581 | **37750** | 54874 |
| *Sub-total* | **13005** | **17583** | **3606** | **4991** | **5203** | **4522** | **4535** | **4351** | **4069** | **4484** | **4782** | 40544 | 58127 |
| **Tauranga Central** | | | | | | | | | | | | | |
| | | | 630 | 1330 | 1683 | 1671 | 1746 | 1687 | 1380 | 1087 | 613 | **11826** | 11826 |
| | 17142 | 17967 | 299 | 190 | 147 | 134 | 134 | 110 | 75 | 75 | 75 | **1239** | 19206 |
| | 1803 | 2943 | 3368 | 2713 | 2211 | 1713 | 863 | 974 | 736 | 121 | 0 | **12699** | 15642 |
| *Sub-total* | **18945** | **20910** | **4297** | **4233** | **4041** | **3517** | **2742** | **2772** | **2191** | **1283** | **688** | 25764 | 46674 |
| **Tauranga South** | | | | | | | | | | | | | |
| | | | 0 | 0 | 0 | 0 | 0 | 0 | 295 | 389 | 697 | **1381** | 1381 |
| | 10324 | 10869 | 368 | 626 | 539 | 343 | 170 | 62 | 40 | 29 | 26 | **2203** | 13072 |
| | 3356 | 5340 | 848 | 340 | 405 | 1574 | 2087 | 2355 | 2025 | 1925 | 1926 | **13484** | 18824 |
| *Sub-total* | **13680** | **16209** | **1216** | **966** | **944** | **1917** | **2257** | **2416** | **2360** | **2342** | **2649** | 17067 | 33276 |
| **Tauranga West** | | | | | | | | | | | | | |
| | | | 0 | 114 | 200 | 450 | 467 | 540 | 689 | 798 | 959 | **4217** | 4217 |
| | 23508 | 24393 | 587 | 443 | 353 | 314 | 185 | 117 | 97 | 73 | 73 | **2242** | 26635 |
| | 4014 | 5607 | 1691 | 1098 | 663 | 390 | 62 | 37 | 0 | 0 | 0 | **3941** | 9548 |
| *Sub-total* | **27522** | **30000** | **2278** | **1654** | **1217** | **1155** | **714** | **693** | **786** | **871** | **1032** | 10399 | 40399 |
| **Waihi Beach** | 3000 | 2946 | 274 | 530 | 550 | 550 | 550 | 570 | 630 | 600 | 390 | **4644** | 7590 |
| **Katikati** | 6800 | 7932 | 918 | 850 | 700 | 760 | 800 | 900 | 900 | 800 | 650 | **7278** | 15210 |
| **Matakana Island** | 300 | 225 | 75 | 70 | 60 | 20 | 50 | 100 | 0 | 0 | 0 | **375** | 600 |
| **Omokoroa Community** | 2000 | 2208 | 592 | 1000 | 2250 | 2350 | 2000 | 1600 | 0 | 0 | 0 | **9792** | 12000 |
| **Te Puna** | 2300 | 2466 | 234 | 100 | 100 | 100 | 100 | 100 | 100 | 0 | 0 | **834** | 3300 |
| **Kaimai** | 9000 | 10119 | 1061 | 500 | 420 | 300 | 340 | 400 | 400 | 200 | 100 | **3721** | 13840 |
| **Te Puke** | 8600 | 9087 | 521 | 700 | 700 | 700 | 800 | 800 | 800 | 750 | 650 | **6421** | 15508 |
| **Paengaroa** | 6300 | 7095 | 455 | 350 | 250 | 150 | 200 | 200 | 200 | 100 | 0 | **1905** | 9000 |
| *Sub-total* | **38300** | **42078** | **4130** | **4100** | **5030** | **4930** | **4840** | **4670** | **3030** | **2450** | **1790** | 34970 | 77048 |
| *TOTAL* | 129125 | 145644 | 16800 | 17200 | 17920 | 17770 | 16740 | 16500 | 13850 | 12400 | 11510 | 140691 | 286335 |
| | | | | | | | | | | | | | |
| **Sub-Regional Split** | | | | | | | | | | | | | |
| **Western Bay of Plenty District** | | | 4130 | 4100 | 5030 | 4930 | 4840 | 4670 | 3030 | 2450 | 1790 | **34970** | 77048 |
| **Tauranga City** | | | 12670 | 13100 | 12890 | 12840 | 11900 | 11830 | 10820 | 9950 | 9720 | **105721** | 209287 |
| **Western Bay of Plenty District %** | | | 25% | 24% | 28% | 28% | 29% | 28% | 22% | 20% | 16% | **25%** | 27% |
| **Tauranga City %** | | | 75% | 76% | 72% | 72% | 71% | 72% | 78% | 80% | 84% | **75%** | 73% |

*Source: SmartGrowth Strategy, May 2007 at page 27
Note: Predictions of residential development timing beyond 2021 are highly indicative.

**Table 3: Indicative Growth Area Timing and Business Land Staging from Change 2 RPS***

| Growth Area | Development Commences | For residential Growth Area development estimated 80% capacity reached by | Provision of approximately 1000ha net for large-scale business land |
|---|---|---|---|
| Papamoa<br>Papamoa East Stage 1<br>Papamoa East Stage 2 | <br>2006<br>2011 | <br>2011<br>2041 | The commencement date of 2011 for development in Papamoa East 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 East Stage 1). |
| Te Puke<br>Dudley Vercoe Drive and Whitehead Ave areas<br>No. 1 Road area | Underway<br><br>2021 | 2041 | Business Land will be provided at Te Puke to support the local community. |
| Rangiuru | 2007 | | Rangiuru Business Park |
| Paengaroa | 2021 | | Business Land at Paengaroa depends on the relocation of Tauranga Airport. |

*Dates are indicative only. Table derived from Figure 1, Proposed Change 2 to the Bay of Plenty RPS - Council decisions version (November 2006). Only those areas relevant to the Eastern Corridor are shown.

## 4.8. 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, which could be expanded to 600 hectares;
- Must achieve land use, stormwater and transport 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.

Existing and new infrastructure also needs to be well integrated, this is particularly important for the transport networks. Integration between modes is also critical, for example between private vehicles and walking, and between cycling and buses.

## 4.9. 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 the 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 development[16].

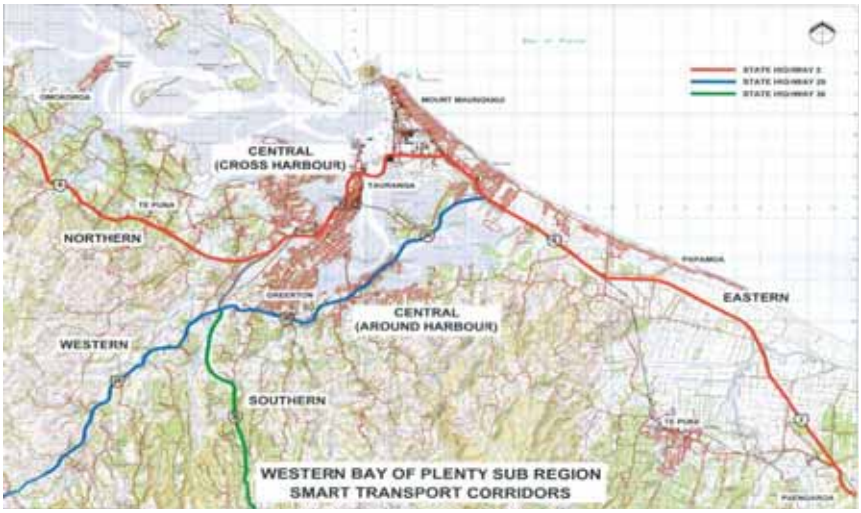
The SmartGrowth Eastern Corridor comprises significant further development at both Papamoa and Papamoa East, a major business park at Rangiuru to service the employment needs of the east in order to promote "live work and play" concepts which have the potential to reduce travel demand.

[16] From the *SmartGrowth Strategy*, May 2007, at page 1

# 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 motorway between Tauranga and Paengaroa.
- A regional business park at Rangiuru.
- 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 Bethlehem, Omokoroa, Katikati and Waihi Beach.
- Rural structure planning for Te Puna.
- Links north to Coromandel and Auckland.
- Northern Arterial
- Katikati Bypass
- Potential rail corridor duplication

**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 been approved for Harbour Link and this project is currently under construction. 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 Motorway**: This is the strategic corridor connecting SH2 and SH33 (Whakatane / Rotorua) to Tauranga. The land for this route has been designated and Land Transport NZ has approved design funding. The project is forecast to be constructed within the next 10 years. As described further on in this report, the funding of the construction 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 Drive[17] and others which have also been assigned a hierarchy status in the network, including desired traffic volumes. The developments will require management rules to ensure that that status is

[17] Te Okuroa Drive will be located within the Wairakei (Papamoa Stage 1) development

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 Rangiuru 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 strategy 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 review[18]:

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

- 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.

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[18] SKM, *Tauranga Eastern Corridor Road Hierarchy Review*, February 2006: at page 8

- 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, in 2006 the Transit New Zealand Board 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 Environment Bay of Plenty doing all within their statutory powers to ensure that the principles of the hierarchy and desired traffic volumes of this network can be achieved. The Transit Board's agreement is also subject to the development of a funding plan for the Eastern Corridor.

Transit has agreed to the following motorway interchanges:

- Rangiuru Business Park
- Papamoa East interchange
- Domain Road interchange
- Sandhurst Drive interchange - subject to further detailed engineering design (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 in terms of connectivity.

Using the work completed to date a network hierarchy[19] has been established for the Eastern Corridor which is set out below.

**Table 4: Eastern Corridor Network Hierarchy**

[19] **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.

| 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 |

## 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 Easter 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 / Tauranga Eastern Motorway interchange
- Papamoa East / 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, demand management measures, public transport and walking and cycling facilities.

The RLTS 2007 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 of[20]:

- Value engineering
- Risk management

[20] See Transit *Long Term Procurement Plan*, June 2005

- 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 terms[21].

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

## 5.6. Options and Alternatives

A number of options and alternatives to the transport package proposed for the Eastern Corridor have been considered. Work on potential transport solutions for the Eastern Corridor has been developed over a number of years.

Traffic modelling has been completed in order to determine the best transport solution. The network tested is based on the designated Tauranga Eastern Motorway route. A number of options and alternatives have been considered for the Tauranga Eastern Motorway itself. Six options for bypassing Te Puke were considered in 1992 / 1993. The Tauranga Eastern Arterial Scheme Assessment further considered four of those options in 1998, this included the Sandhill Route, an alternative route (upgrade the existing route to four lanes and then follow a new alignment to the north of the existing route), the Swamp Route and the existing route.

A notice of requirement for the preferred option was lodged in 1999. The designation was confirmed by consent order in August 2000. For further detail on the various options considered refer to the Eastern Corridor Dossier (2007).

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.

## 5.7. 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 seven 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

[21] Transit *Long Term Procurement Plan*, June 2005

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.

Data indicates that between 2001 and 2006, bus patronage increased from 130,000 trips to 680,000 per year.

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 Tauranga City Council 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 included 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.

## 5.8. 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] – see Figure 1 below
- 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

**Figure 1: Tauranga City Walking and Cycling Network Plan[22]**

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.

## 5.9. Transport Demand Management

The RLTS 2007 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 77(e) of 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 the NZTA's direction and emphasis on demand management (see previous documents such as *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) [NZTA, TCC];

- Tolling strategy for Tauranga Eastern Motorway [NZTA];

[22] I*ntegrated Transport Strategy for Tauranga*, Appendix D at page 84

- Structure Plans / Road Hierarchy plans to link subdivisions [TCC; WBOPDC];
- Provision of direct cycleways and walking links within new subdivisions. [TCC; WBOPDC].

**Table 5: Programme for Western Bay Growth Area Linkage Package**

| 0 – 10 Years | Beyond 10 years |
|---|---|
| Public transport interchange / Park & Ride[23] | |
| 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 2007:

**Table 6: 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%** |

## 5.10. 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 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 and operations in 2008.

[23] 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.

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 Bay of Plenty 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 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 loops[24] or increasing the length of trains.

- Double tracking the rail line is not required in the foreseeable future.

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 freight[25]. 4.7 million tonnes / annum are shifted via rail to and from the Port[26].

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.

**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.

- 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 gong 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

[24] Passing bays for trains.
[25] Source: The Port of Tauranga
[26] Source: Toll New Zealand

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.

**Protection of the Rail Corridor**

It is important to ensure that development along the Eastern Corridor does not encroach on the strategic rail corridor. As identified in the Rail Strategy, Environment Bay of Plenty is undertaking work in this area that will identify where capacity may be increased in the future so that development does not locate too close to the rail network. All local authorities should plan to maintain the rail corridor at its normal width. The existing corridor is wide enough to allow for future capacity increases.

## 5.11. Urban Design

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

NZTA:

1. Optimal projects from an urban design perspective
2. Assessment of Environmental Effects (incorporating urban design principles into these assessments)
3. Best practice
4. Defining quality urban design and its implications for the NZTA
5. Incorporating urban design into planning and projects at the outset
6. Raising awareness of the value of quality urban design
7. Using best practice groups to develop design guides to achieve urban design principles
8. Consultative group across the whole transport sector.

Tauranga City Council:

1. Resource consent pre-application advice
2. Design guidelines
3. City-wide spatial framework
4. Incentives for great design
5. District Plan Review

6. Incorporate urban design criteria into Council project briefs
7. Support neighbourhood planning processes
8. Partnerships – private sector and others

Western Bay of Plenty District Council:

1. District Plan review
2. Code of practice
3. Structure plans
4. Incentives
5. Design and development guidelines
6. Communication and education

# 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 the NZTA (this includes national 'N' and regional[27] 'R' funds)
- Regional fuel tax
- A proportion of the Bay of Plenty Crown Grant – 'C' or Crown funds (administered by the NZTA)
- 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

[27] Regionally distributed funding from increases in fuel excise duty

rates. An estimated $12 million from development contributions is also sought as well as toll 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 Report[28].

**Table 7: Indicative funding contribution over the next 10 years[29]**

| 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 7 but it is yet to be determined exactly how much. The Bay of Plenty funding package, and in particular Table 7, should not be read as funding for the Eastern Corridor project only.

The LTMA secures the $150 million Crown Grant commitment for the Bay of Plenty. The Act also states that the new Agency must approve an activity as qualifying for payment up to the grant amount by 2015/16.

## 6.3. Funding Challenges

National or 'N' funding from the National Land Transport Fund is in decline. This is a significant funding challenge as it means that large scale transport projects will need to use different funding options if they are to go ahead. Regional or 'R' funds are due to finish in 2014/15. This means that the Bay of Plenty will need to look at using a variety of funding sources in order to meet the region's transport needs.

Project scope and cost escalations are also a significant funding challenge. Only preliminary work has been completed on the key transport projects for the Northern Corridor. 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.

[28] *Report of the Bay of Plenty Joint Officials Group,2005,* Table 7 at page 30
[29] Assumes all 'R' funding is allocated

## 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 currently three revenue sources able to be allocated by the National Land Transport Fund (controlled by the NZTA). One is nationally distributed funding ('N' dollars) and the 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 the Eastern Corridor transport 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 the NZTA, 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 included 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. The NZTA is 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.

- Regional fuel tax to fund projects that are of net benefit to the region, have a high regional priority and are not reasonably likely to be fully funded from other sources within the timeframe desired.

With regards to tolling, 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, the NZTA 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

Table 8 below sets out the the transport elements and associated cost estimates for the Eastern Corridor. All costs are in 2006 values.

In March 2008 Land Transport NZ approved design funding for the Tauranga Eastern Motorway. The funding will cover further work to refine the project and develop it to the point where resource consents could be applied for. Work is currently being undertaken to confirm the way in which transport projects, in particular the Tauranga Eastern Motorway, can be phased in their construction.

It is important to note that both the timing and costs are tentative and subject to the final design of the various projects.

Environment Bay of Plenty has developed a regional funding plan for transport projects across the region. The Eastern Corridor is part of this funding plan. The details are still to be worked through in terms of how the funding will be applied. For this reason it is not yet possible to include a detailed funding plan for the Eastern Corridor. A staging and funding plan is currently being worked on.

**Table 8: Transport Elements and Cost Estimates**

| Transport Element | Expected Start Date[1] (construction) | Cost Estimate[2] ($million) |
|---|---|---|
| Tauranga Eastern Motorway: Te Maunga to Paengaroa | 2011 – 2016<br>2016+ | $153 M<br>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* | | |
| Papamoa East / 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.
[1]The 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.
[2]The cost estimates are based on current knowledge and will be subject to variability.

## 6.7. Suggested Framework for Negotiations

Heads of Agreement is currently being worked on between Tauranga City Council, Western Bay of Plenty District Council, Environment Bay of Plenty and the NZTA for the Eastern Corridor. A draft agreement has been prepared as part of the regional funding plan. This agreements will set up a framework for progressing the transportation needs of the Eastern Corridor.

# 7. Monitoring and Risk

## 7.1. Implementation Risks

There is some implementation risk associated with SmartGrowth and the Eastern Corridor Strategy where decisions are beyond the control of the SmartGrowth partners. SmartGrowth manages this risk through its policies, implementation methods and governance structures. This risk is no greater in the western Bay of Plenty sub-region than elsewhere in New Zealand. In fact, the risk is probably less given the policies put in place by the SmartGrowth Strategy.

Some uncertainty exists with regards to the fact that proposed land uses in SmartGrowth and along the Eastern Corridor are subject to the completion of regulatory processes (eg plan changes and resource consents under the RMA 1991). This risk is being managed through Change 2 to the RPS which District Plans must give effect to. It will also be monitored as part of SmartGrowth implementation.

## 7.2. Performance Risks

This is always risk associated with new transport projects in terms of their long term benefits and sustainability. For the Eastern Corridor this risk can be managed through the package of demand management measures being implemented as part of the region's Demand Management Strategy and proposed as part of the Eastern Corridor transport package.

Modelling that has been undertaken for the SmartGrowth project also shows that the higher density land use pattern, which is the preferred option that underpins SmartGrowth, results in less vehicle kilometres travelled, less daily vehicle trips and less vehicle hours. This should make the overall network more sustainable given that the SmartGrowth urban form will result in fewer trips and shorter distances travelled.

The Eastern Corridor is about providing a balanced transport network and the SmartGrowth partners will do the best they can to provide for the long term sustainability of the network within the constraints of the regulatory processes which the developments will be subjected to.

## 7.3. Adaptability

The SmartGrowth Strategy contains a comprehensive monitoring and review framework in section 7.5.4. Monitoring and review is the responsibility of the SmartGrowth Implementation Committee. The SmartTransport group is subject to these monitoring frameworks.

Change 2 to the RPS also contains provisions for a review of Chapter 17A relating to growth management if certain situations occur, including population changes, insufficient land and changes to the SmartGrowth Strategy. Policy 17A.4(xi) also requires Environment Bay of Plenty and City and District Councils to undertake annual reviews of development trends to monitor, assess and report on the implementation of policies 17A.3.1(b)(vi) (population distribution), 17A.3.1(b)(vii) (Dwelling yields), 17A.3.1(b)(iv) (zoned Business Land) and

17A.3.1(b)(ix) (proportion of potential residential allotments approved under section 224 of the Resource Management Act 1991). Change 2 to the RPS also states that:

*Because the future is subject to change, the policy framework specifies how development trends will be monitored. It also specifies thresholds at which policy review will occur. This should ensure a high level of confidence in the growth management framework provided by the Regional Policy Statement*[30]

## 7.4. Monitoring the Eastern Corridor (land use and transport)

The actions set out in section 8 have been transferred into the transport section of the SmartGrowth Strategy when it was reviewed in 2007. They have been assigned to the SmartTransport team to progress. These actions are being implemented and monitored under the SmartGrowth Strategy in conjunction with the RLTS.

[30] *Proposed Change No. 2 to the Bay of Plenty Regional Policy Statement (Growth Management)* amended in accordance with the Council's decisions, Version 8.0c, 7 November 2006 at page 17

# 8. Actions and Agency Roles

## 8.1. Achieving Integration

This strategy has involved a high-level investigation of long term land use and transportation along the Eastern Corridor.

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.

A series of actions need to be completed in order to implement the Eastern Corridor land use and transport aims. Most of these actions have been transferred into the transport section of the SmartGrowth Strategy which was reviewed in 2007. The actions have been assigned to the SmartTransport team to progress. These actions are being implemented and monitored under the SmartGrowth Strategy and in conjunction with the RLTS. The actions are set out below in section 8.2.

## 8.2. Future Actions

The following actions need to be completed for the Eastern Corridor. These actions also 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:

- Change 2 to the RPS
- Plan Change 44 – Papamoa Stage 1 'Wairakei'
- 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<br>SGIC / IMG to actively participate and monitor to ensure appropriate outcomes | 2008-2009 | Existing budgets | RPS<br>District Plans |

| **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<br>SGIC / IMG to monitor | 2008-2009 | | Wairakei Structure Plan |

| **Action 3: Develop a staging plan for development and transport infrastructure along the Eastern Corridor** | | | |
|---|---|---|---|
| This strategy for 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<br>SGIC / IMG to monitor | End of 2008 | | LTCCPs<br>NLTP<br>RLTP / 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
- Papamoa East / 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<br>TCC, WBOPDC, EBOP, NZTA<br>SGIC / IMG to monitor | End of 2008 / early 2009 | | LTCCPs<br>NLTP<br>RLTP / 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<br>TCC, WBOPDC, NZTA<br>SGIC / IMG to monitor | 2008-2009 | | District Plans |

**Action 6: 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

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,<br>EBOP,<br>TCC, WBOPDC,<br>NZTA<br>SGIC / IMG to monitor | 2008 - 2010 | | Local transport strategies<br>LTCCPs<br>RLTS<br>RLTP<br>Regional Passenger Transport Plan<br>District Plans |

**Action 7: 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,<br>EBOP, NZTA<br>SGIC / IMG to monitor | Ongoing | | SmartGrowth<br>RLTS |

**Action 8: 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,<br>TCC, WBOPDC,<br>NZTA,<br>SGIC / IMG to monitor | 2009 | | District Plan |

**Action 9: Progress Report on Eastern Corridor Strategy Implementation**

Report to New Zealand Transport Agency on Eastern Corridor implementation progress. This will need to cover:

- Population and household forecasts (ie are these on track)
- Land uptake rates
- Intensification targets
- Modal shift targets
- Demonstrable commitment to public transport, walking and cycling

| | | | |
|---|---|---|---|
| ▪ Investment in local infrastructure and services<br>Refer to the strategic evaluation of the Eastern Corridor Strategy completed for Land Transport New Zealand in 2007, SmartGrowth and RLTS implementation monitoring reports. | | | |
| **Agencies** | **Timeframe** | **Cost Estimate** | **Plan** |
| SGIC | First report by December 2008 | | SmartGrowth<br>RLTP / RLTS<br>LTCCPs |

## 8.3. Agency Roles

**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. The regional council will have the responsibility for preparing regional land transport programmes and regional fuel tax schemes as a result of amendments to the LTMA 2003.

**ONTRACK and Kiwi Rail**

ONTRACK owns and manages New Zealand's rail network on behalf of the Government. ONTRACK has responsibility for the East Coast Main Trunk which runs along the Eastern Corridor. On 1 July 2008, the Government purchased Toll Rail which has been renamed KiwiRail. KiwiRail is responsible for the movement of rail freight along the East Coast Main Trunk.

**New Zealand Transport Agency (combining Land Transport NZ and Transit NZ)**

The NZTA 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. The NZTA also has responsibility for the State Highway network. The NZTA will work with the SmartTransport team in order to ensure that a sustainable transport solution is implemented for the Eastern Corridor. The NZTA 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.

**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.

**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. 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.

# 9. Conclusions and Recommendations

## 9.1. 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 strategy 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 strategy 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 strategy for the Eastern Corridor covers potential development and transport infrastructure for the period out to 2051. Further work is still required on a detailed 10 year development and infrastructure staging plan for the corridor..

This strategy 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 strategy has been established through a series of actions. These actions will be implemented and monitored through the SmartGrowth Strategy.

## 9.2. Recommendations

This strategy makes the following recommendations:

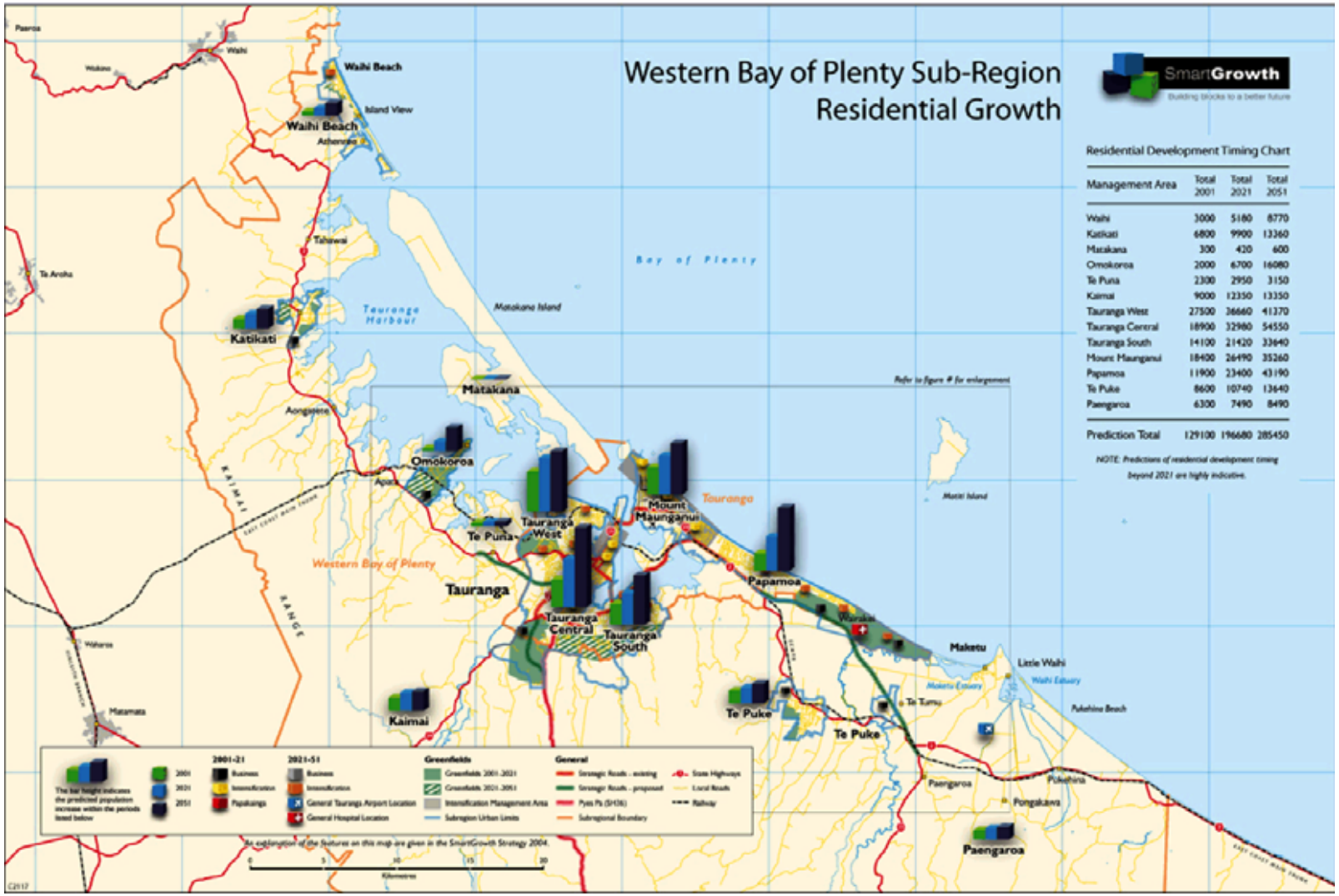
1. That this update to the Eastern Corridor Strategy, representing version 2, is adopted.

2. That the actions outlined in section 8.2 are adopted.

3. That the land use pattern for the Eastern Corridor outlined in this strategy is confirmed.

4. That these actions continue to be implemented and monitored as part of the SmartGrowth Strategy.

# Appendix 1: Sub-Regional Settlement Pattern Map[31]




[31] Source: SmartGrowth Strategy, May 2004 at page 7

## Appendix 2: SmartGrowth Regional Settlement Strategy, Corridors Map[32]


[32] 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)