Tukutuku

Tukutuku are the woven panels that adorn meeting houses and are placed between pou, the carvings on the walls. Their purpose is to tell the stories of life which complement the pou.

This taonga symbolises the team weaving their pattern of the programme to tell the story of the UFTI Programme

Toru

Overview of the Connected Centres programme

Te Rau Whero (Red)
Te kura — the tohu Rangatira: the blood that runs through the veins in order to know where one belongs.

Part 3: Overview of the Connected Centres programme

Introduction

A final and optimal programme—'Connected Centres'—has been developed based on the analysis and knowledge gained from testing the shortlisted UFTI programmes. A critical element in the analysis was the need to factor in several land use constraints that arose from the more detailed assessment, particularly of the known constraints, including the wāhi toitū and the implications this has for where new growth areas can be located.

This more detailed land use and constraints assessment suggests most of the potentially developable land available at scale to support growth within the sub-region requires a trade-off in terms of potential constraints. There is limited available land within the sub-region where a trade-off is not required. The constraints requiring consideration are usually in terms of cultural significance, environmental significance (particularly with the harbour, water quality, and/or emissions), productive lands (for horticulture and agriculture etc.), known and potential hazards, and/or topography.

The constraints mean we need to carefully consider where we locate future new growth centres and balance the need to maximise space with the need to enable and support healthy and liveable communities.

The analysis of the shortlisted programmes shows where people live, and the density of the urban form, are the two most critical determinants to achieving the UFTI benefits and for a successful multimodal transportation system. If we locate growth out on the sub-region's fringes, enabling good transport choice and access becomes more challenging, complex, and costly with significantly less transport benefits derived for the community. However, intensifying existing areas and restricting new growth areas on the outskirts affects housing affordability and community wellbeing.

The Connected Centres programme tries to get the best and optimal balance between the intensification of existing urban and new growth areas ('up and out' development areas), which optimise existing services and infrastructure provision, along with the design of a future transport system that enables the effective and relatively efficient movement of people and goods. Getting the balance right between up and out development is necessary to meet National Planning Statement requirements and create competitive job and land markets.

Designing the Connected Centres programme

In developing the Connected Centres programme, the SmartGrowth Partners started with a set of key design concepts. These concepts include the following[23]:

1. In each greenfield growth area, we are targeting 30 dwellings per hectare average but recognise it could take 10 or more years to achieve this level of density and/or deliver frequent public transport services.
2. Assuming higher densities around public transport and community centres.
3. Where we are achieving greater densities, they are supported by good multimodal links (nodes and hubs).
4. Trying to create self-contained communities with improved accessibility, and trip containment within corridors where dwellings are allocated in relation to jobs, amenities and services.
5. Assuming regional public amenities are distributed on both sides of the Harbour.
6. Due to its special characteristics, no development has been assumed for Matapihi. However, given its strategic location, more intensive development would be appropriate if and when it has the required support from landowners.
7. Community concerns about the Crown-owned land at Greerton and the potential for redevelopment for intensified housing and open space is acknowledged. Providing open spaces and housing development of the Crown-owned land at Greerton is included.
8. There is a preference for delivering new centres and intensification in the Central, Eastern, and Western Corridors over developing the Northern Corridor further, although in the long-term, development in Te Puna/Plummers Point is planned for.

[23] Supporting the key design concepts and strategic transport journeys are a set of base assumptions that have been incorporated:

1. The strategic walking and cycling network for the western Bay of Plenty sub-region is built. This is shown as planned or envisioned on the Connected Centres programme map.
2. The Tauranga Northern Link and extension to Omokoroa with managed lanes is built, and is shown as planned.
3. Improvements to the Omokoroa intersection, and Pāpāmoa East and Rangiuru interchanges are designed and delivered in a way to support public transport access.
4. The Tauriko Long-Term Connections multimodal improvements (local roading, public transport, walking and cycling, and state highway) as per the yet to be finalised Detailed Business Case are constructed to support the current agreed Tauriko industrial and residential development as per the existing SmartGrowth agreed settlement pattern.
5. The Te Papa peninsula intensification and the proposed Te Papa multimodal transport system improvements will be incorporated into the preferred UFTI programme.
6. The Western Bay of Plenty Public Transport Blueprint (services and infrastructure) is implemented to support the multimodal transport system.
7. Both KiwiRail and Waka Kotahi will continue to invest in the natural hazard resilience of their current transport networks, irrespective of UFTI settlement pattern.
8. Key strategic assets such as the Port of Tauranga, the Tauranga Airport, and the Tauranga Hospital will not move within the planned UFTI timeframes.

In addition to these assumptions, the optimal programme does include an additional harbour crossing for public transport (including bus and walking and cycling,) and potentially future passenger rail connections. For illustrative purposes only, the additional harbour crossing is shown in the location of the current Matapihi Rail Bridge. The location and feasibility of an additional multimodal harbour crossing will be subject to future investigation and could be in a location anywhere within the vicinity of the SH2 Harbour Bridge and the Maungatapu Causeway.

9. As part of the new growth centres, industrial land will be planned for in the Western and Eastern Corridors, and in the Northern Corridor for when this new growth centre is brought onboard.

10. The aim is to intensify current urban areas across the board and along public transport corridors to 30-50 dwellings per hectare around identified nodes and centres.

11. Assuming Regional Policy Statement hazard provisions can be resolved and there are engineering solutions that are affordable for liquefaction risk in some locations.

12. Enabling the right trips and modes to use the right corridors as per the UFTI strategic journey functions.

13. The SmartGrowth partners are committed to achieving the New Zealand government's climate change targets for transport emissions.

In addition to these key design concepts, the function of several key strategic transport journeys has been considered and documented. Pinpointing the current and future functions of the key strategic journeys is important for the Connected Centres programme, as it identifies the primary purpose and the proposed mode prioritisation, and influences the transport interventions required to support or enable the future function.

Based on the strategic transport journeys, a number of transport interventions have been included within the Connected Centres programme to support future growth and intensification areas and enable the function to deliver a multimodal transport system that reduces, within reason, the conflict between the movement of people and goods.

Identifying the key current and future transport journeys and functions to support the final UFTI programme increases the planning certainty necessary for all the SmartGrowth Partners about the purpose and function of the future transport system.

About the Connected Centres programme

Summary

The Connected Centres programme is a settlement pattern that contributes to more affordable housing, and more competitive land and job markets through up and out future development. The supporting transport improvements will enable greater access, increased transport choice, and improve safety, while also maintaining important freight access, particularly to the Port of Tauranga.

A multimodal transport system is planned to ensure existing and future communities are connected by frequent public transport services along prioritised public transport corridors. These corridors are necessary to ensure public transport journeys and routes are reliable and provide excellent access to the many social and economic opportunities across the sub-region. Enabling more people to move via public transport will increase freight access, especially in off-peak periods.

Within the existing urban areas of the sub-region, high quality intensification is enabled, supported by high quality urban recreational amenities such as pocket parks and spaces. The intensification is concentrated around key transport hubs and the prioritised public transport corridors and routes allow people to have choice and move throughout the sub-region.

New communities are developed in the East, West, and North of the sub-region. These communities have higher densities, excellent public transport options, and are based around high quality urban amenity to support our live, learn, work, and play lifestyles.

Supplementing access, a network of safe and accessible cycling, walking and personal mobility routes are enabled to support connectivity to local shops, schools, and other services, as well as accessing neighbouring communities. The range of transport choice and the opportunity to live close to where people work will help reduce transport carbon emissions over time. The programme identifies and seeks to protect the critical transport and blue-green corridors required over the long term.

The settlement pattern and programme have identified spatial constraints and hazards and seek to avoid or moderate any future development in relation to these. The new growth areas for the 30 years plus are indicative and their actual spatial intent will be tested further before inclusion into regional and local planning statutory frameworks.

The look and feel of each corridor and the mix of interventions required to develop these places will be different, as they will need to reflect the distinct characteristics (heritage, amenity, etc.) and function of those places and the different communities who live in them.

The Connected Centres programme is built around four high frequency and dedicated public transport corridors, linking key centres for work, learning and play. Along these corridors and at these centres, the housing densities will be higher than has previously been seen in the western Bay of Plenty. These centres occur in both existing urban and new greenfield locations along our key passenger transport journeys and routes which allow communities to grow both up and out, provide greater transport choice, and over time, help transition to a low carbon system. With a renewed focus on partnership, the opportunities and decisions for tangata whenua to be involved in the future of the sub-region will be enhanced and the development of Māori and Treaty Settlement land, will continue to be retained by Māori.

The intensification within new and existing communities will be based around urban centres. The different types of dwellings around the centres are points of interest and enable most people to have easy access via a 15-minute walk or bike ride to the shops, community facilities, and recreational areas important for achieving the live, learn, work, and play vision of the sub-region. The frequent and reliable public transport services flow through the centres to provide access to jobs and education, as well as other social and economic opportunities within the larger centres. Via public transport, most people will be able to access everything they need within 30-45 minutes of travel. For those who choose to use their private vehicles (general traffic), especially at peak periods, these journeys will be less predictable. However, alternative transport choices are available for all.

Along these corridors we will see greater walking and cycling connectivity, high quality urban amenity, high frequency public transport services and supporting infrastructure, improved freight connections, and an increase in dwelling densities to an average of at least 30 dwellings per hectare. The range of transport choice and the opportunity to live close to where people work and learn will help reduce transport movements and carbon emissions.

Supporting the urban centres along the transport routes are larger new centres in the Eastern, Western, Northern Corridors, along with the established centres in the CBD, the Mount, and along the Te Papa peninsula. Within the larger centres, and particularly when the future passenger rail will operate between Apata and Paengaroa, the public transport hubs enable a quick transition between road, ferry, and rail modes where applicable. These hubs are also likely to provide shared and flexible working spaces for small and medium-sized business and those that wish to co-locate, as well as providing a focal point for the local communities. Like the other urban centres, access via public transport and walking and cycling is easy, safe, and convenient, which reduces reliance on private vehicles.

In the **Central Urban Corridor** (from The Tauriko Crossing to Mount Maunganui via Cameron Road) we will see the most significant transformation in the sub-region in the next 30 years, with a high frequency public transport system and higher densities (apartments, terraced housing, and duplexes) along the corridor, especially at areas such as around the Hospital and Greerton. At one end will be the employment and retail centre of Tauriko and The Crossing, and at the other end, a revitalised CBD with a mix of apartment living and city lifestyle, university buildings, and office space. The multimodal transport system will integrate with walking and cycling to enable safe access via personal mobility modes.

With the improved access to the CBD via the frequent public transport services, including the ferry, there are more mixed use commercial and residential buildings. Different opportunities for inner city living are provided to suit the needs of tertiary students, professionals, and retirees alike. With the increased number of people living in the CBD and easy access to the harbour, green spaces, and other amenities, the CBD has vibrancy and is a destination for residents and visitors alike.

As an urban regeneration initiative, implementation of change in this urban corridor is complex, requiring strong leadership—in particular from central and local government and tangata whenua—as well as exceptional community engagement and place-making, a clear vision of success and a flexible adaptive management approach, while working in partnership with all sectors and partners.

Due to the complexity and interdependencies of projects within the Central Urban Corridor to achieve the intensification and mode shift, the related actions for this Corridor are distinctly

different from other priority growth centres. Delivering the changes will require active management by the SmartGrowth Partners over a 30-year timeframe. The involvement and investment are more than would be expected in a new greenfield growth area where private developers take a stronger lead in delivery.

To be successful in delivering urban form and transport changes, it is likely a formal partnership arrangement will be required to drive delivery of the strategy in the Central Urban Corridor. It is recognised that urban intensification does take time, but it needs to be part of the immediate delivery works to display the well designed and executed new inner-city housing developments. Early delivery of key inner-city development will create a momentum for central city living and further investment as well as having the biggest impact in achieving the urban form and transport outcomes outlined in UFTI and the SmartGrowth Joint Spatial Plan.

Work within the Central Urban Corridor has already commenced with the proposed intensification plan changes to the Tauranga City Plan, the Te Papa Spatial Plan and Indicative Business Case, the Cameron Road multimodal programme, and planning for the multimodal connections from the Tauranga Northern Link.

In the **Eastern Corridor** (Te Maunga/Baypark to Paengaroa), the planned town centre at Wairakei and development at Te Tumu will offer higher density dwelling and working opportunities including apartments, major recreational facilities, and employment both in Wairakei and also at Rangiuru. High frequency public transport services will be provided linking Wairakei/Te Tumu and the CBD and beyond, with dedicated public transport prioritisation to enable reliable public transport movements. Ultimately, these areas may be serviced in the future by a public transport connection using the rail corridor to link Te Puke, Rangiuru and the CBD, although that will be dependent on a number of factors including dwelling densities, job distribution, and demand.

With the steady pace of growth, spatial planning for the new centre in the Eastern Corridor is completed earlier to help ensure there are strong community and physical connections between the new eastern centre, Te Puke, Wairakei/Te Tumu, and the rest of the sub-region. The envisioned growth areas in the east are enabled in a way that carefully balances intensification and new developments. The new centre also recognises the substantial growth occurring in the kiwifruit and horticulture industry in the east and the need for supporting housing and industry.

To support the growing population on the eastern side of the harbour, planning and design for an additional multimodal harbour crossing takes place in time to enable tangata whenua to participate in the decision-making and for the local community to be involved.

In the **Western Corridor** (beyond the Takitimu Drive/SH36/29 intersection into the Kaimais and toward Rotorua) new residential developments at Tauriko West and Keenan Road will be built. Linking these communities and the Tauriko Business Estate to the rest of Tauranga are high frequency public transport services and supporting public transport infrastructure from The Tauriko Crossing to the CBD.

Housing densities in these suburbs will tend to be lower in the first ten years (20–25 dwellings per hectare) but will reach an average of 30 dwellings per hectare over time. These communities will be designed as walkable neighbourhoods, with low carbon footprints, and where people can live, work, learn and play. Additional growth areas in the west are developed to maximise the number of dwellings and deliver a transport system that encourages multimodal use and ensures freight access via SH29 and 36 is not compromised by private vehicle demand.

In the **Northern Corridor** (from Takitimu Drive/Bethlehem to Waihi) new development at Omokoroa will be at higher densities around the town centre to support a frequent public transport service along the Tauranga Northern Link and existing state highway, respectively. It is possible in the longer-term that urbanisation may occur at Te Puna/Plummers Point. However, this is not planned to occur in the next 30 years. Likewise, the rail corridor may provide an alternative passenger transport connection from Apata (also servicing the northern area from Katikati to Waihi), to the CBD, and on to Rangiuru/Paengaroa in the longer term.

The sub-region's economic development strategy has been successful in building off the current foundations of the economy to support the urban form and transport developments. The success means incomes within the sub-region

have increased as productivity has improved and more skilled labour is required to support the horticultural, technology, and logistics manufactures that are attracted to the Bay's coastal lifestyle, warm climes, and easy access to the global economy via the Port of Tauranga.

Most professional service jobs are concentrated in the current employment areas, but new opportunities have arisen with the development of the Rangiuru Business Park, and demand for further horticultural and aquamarine services. The freight corridors of SH29, Takitimu Drive, Hewletts Road, SH29A, and the Tauranga Eastern Link continue to provide access between the Port, the Eastern Bay of Plenty, and the upper North Island. Some additional capacity via managed lanes are necessary to enable freight access. With some people choosing to use public transport or personal mobility, most freight journeys are predictable, particularly during the interpeak. Most bulk loads accessing the various logistic sites and Port go via rail which helps reduce the demand and pressure on the transport system.

With the increase in multimodal use and improved access to the urban centres, the need to provide the same quantum of carparking could reduce. Parking costs are targeted to help encourage people to use the personal mobility or public transport options available to them. For the commercial areas throughout the sub-region, an appropriate level of turnover is the focus of parking management policy and activities. Where public and private parking is provided, most will cater for micro-mobility devices as well as charging of electric vehicles and bikes.

The delivery of the programme does not explicitly address interventions on corridors beyond the western Bay of Plenty but acknowledges that the envisioned settlement pattern will support enhanced linkages to other parts of the Bay of Plenty Region and the Hauraki Plains and Coromandel Peninsula for both freight and people. These linkages may support additional investments in transport logistics and infrastructure to the north of Omokoroa and toward Rotorua Whakatane and Kawerau. Growth along both the Southern and Eastern Corridors will result in changes to transport demand on SH5, SH30 and SH36 in particular, as a consequence of greater connectivity and commuting between Rotorua, the Eastern Bay of Plenty and Tauranga. We would expect to see UFTI form part of the strategic context in support of interventions to assist with freight and people movement on those corridors.

Delivery of the Connected Centres programme is phased over time and subject to availability of funding. The planning changes necessary to enable higher densities within the existing areas are planned to take place quickly following UFTI and the completion of the Te Papa business case work. The delivery of multimodal options, public transport prioritisation starting with the CBD to Tauriko strategic journey along Cameron Road, along with the lead community infrastructure to support Te Papa intensification is expected to take place in the first decade. These journeys are supported with the development of walking and cycling routes throughout the sub-region. Other growth corridors connecting people from Omokoroa to Te Tumu, and Tauriko to the Mount follow, with planning, design, and delivery phases completed concurrently to maximise momentum.

Overall, while there will be some further detailed planning and design work to complete, maintaining the momentum built from UFTI via the inclusion of the delivery plan into the Councils' Annual and Long-term Plans, and the Regional Land Transport Plan will be important.

How customers might experience the Connected Centres programme

Welcome to the western Bay of Plenty in the year 2070. We are known for our great lifestyle and many connected communities, each with a unique character.

The connected centres are focused around public transport hubs and a core of diverse retail shops, services, and offices often next to an urban plaza. Each community is a place where the buildings and spaces reflect our identify in unique ways, and residents and visitors value the different cultures and character present in the architecture and public spaces—especially in the CBD, which has developed around pedestrianised principles and taken advantage of the waterfront.

Housing choice is diverse. The CBD and Te Papa peninsula provide a diverse range of housing types. The CBD is a vibrant people-place with tall and low-rise apartments clustered around public transport stops, active streets, and local employment opportunities. Those in the city

centre and peninsula enjoy great views and amenities afforded by the harbour. These are a draw card for residents to enjoy the plazas and parks which dot the city spaces and waterfront. Other centres offer a sometimes quieter, yet trendy, city vibe and are known for a mix of low-rise apartments, townhouses, and semi-detached homes.

Streets are active places that welcome people to linger and watch urban community life unfold. A frequent bus service moves people easily between work, play, home, and school. We used to drive a lot more, and still do sometimes, but now, taking the bus or e-bike is often easier and quicker, and therefore a very popular option. Urban communities have grown around Omokoroa, Matua/Otūmoetai, Arataki, Pāpāmoa, Wairakei, and around Rangiuru and Paengaroa.

People can move freely within the busy urban spaces, and frequent buses move people to and between centres and the CBD, for work or school. in the busiest times of the day. Many people living outside of the CBD or the main urban centres use the many buses as part of their normal routines to go to home, work, or school. Getting around is easy for all ages and abilities.

Throughout the City, street trees, parks, and public gardens are part of the urban landscape, especially along the Te Papa and Otūmoetai peninsulas, the CBD and in the urban centres. These features invite many birds, bees, and wildlife to share our greenspaces as they travel along the green belts connecting the Kaimai Ranges to the harbour and Waihi Beach to Pukehina/Maketu via the City, Matakana Island, and Mauao.

Tree-lined people-friendly streets and local parks are well used by families, dog walkers, and workers enjoying the sunshine. Outside of the urban centres there are a mix of lower density housing types such as detached homes and semi-detached, as well as small apartment complexes. These areas are well connected for bikes and walking to schools, parks, and access to and through the community.

Employment has changed. While horticulture, agriculture and logistics are still economic mainstays, we are home to a thriving start-up culture backed by a highly educated and creative workforce. Our diverse lifestyle, coastal setting, and family-focussed City draw people to invest their capital and energy here. Most of us can travel from home to work or school in 30–45 minutes or less. While we pay more for parking than we used to, it is there when we need it. Electric cars are popular, and it is easy to get your car charged when you need to.

Pāpāmoa East, Te Papa Peninsula, and Greerton down to Pyes Pa/Tauriko have also changed and grown. They are well served by a frequent and reliable public transport system which can zip past queued traffic, especially in the morning and afternoon peaks. Buses are the choice for commuters living here. Residents from as far as Paengaroa and Katikati regularly take the bus to work in the CBD or at the offices and shops situated along Cameron Road. Many also take the opposite commute and head to work in Tauriko, Te Tumu and Rangiuru, which host a wide range of employment types—from high value horticulture servicing facilities to specialist niche manufacturing and IT start ups. These areas have seen significant growth in the past 50 years. Seasonal workers have appropriate housing and safe transport choices when accessing their many locations of work across the sub-region, and visitors enjoy easy access to the many highlights the sub-region provides via public transport.

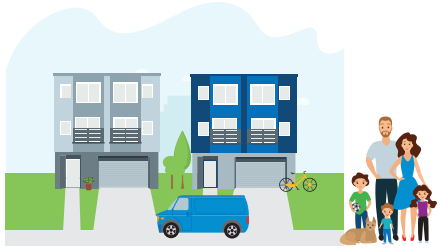
Mount Maunganui has continued to grow as a recreation area for the City and is a stunning setting for many cultural festivities. Lots of people still enjoy the vibrancy of the Mount, and it is the place to be seen on the weekend and best accessed via bus, e-bike, or ferry as it is so popular.

We have many places to play and explore in the sub-region, and we have the freedom to choose how we travel. While the sub-region has seen a great amount of growth in the past 50 years, the changes in the way we can use our City have kept up. New parks, schools, and open spaces have maintained and grown our lifestyle. We still enjoy the fantastic fishing, lovely walks and parks, amazing people, and gorgeous landscapes that brought us here in the first place.

People profiles

Aroha

I live in a student apartment building overlooking the harbour inlet, just behind the University in the CBD. It is a quick walk to my lectures on campus and my friends are always bouncing between The Strand and the Mount on the weekend. Tauranga has grown into a metropolitan City, and I am excited to launch my career here. I start my internship with a leading local manufacturer next week and I can't wait!



Thomas and Frances

We live in a new townhouse development in Tauriko. Our kids attend Tauriko school and access their sport and after school activities within the local community. Thomas works at a new IT start-up company that has co-located into one of the new incubator shared office spaces popping up in the Tauriko business estate. It's just a quick trip on his e-bike from home to work via the cycleways. As an electrician, Frances uses the highway network to access her many client sites and supply companies. Although the roads are busy, she usually arrives on time as the travel times are reliable.

Mila

My family lives in Omokoroa in a side-by-side duplex, just a couple of blocks from the main urban centre and transport hub. I attend the new high school, which I can walk or bike to safely and easily through the many community shared paths. I can also visit my friends in other urban communities or the city centre through the highly frequent bus system which is safe and has free WiFi.

Bill and Grace

We used to live rurally, but when Grace retired, we moved into an apartment in Pāpāmoa for the lifestyle. Being able to take our e-bikes to the beach is a real plus, as are the cafés and retail available nearby at the Pāpāmoa Beach town centre. Our kids and grandkids are often taking turns staying in our spare bedroom on weekends when they visit from out of town. Between the beach, great parks, and restaurants, this place has everything we want. If we want to go somewhere different, we can pop into the CBD on the bus or head up to the Mount too. We can spend a happy day in either place enjoying the parks and watching people go by.

Figure 23

Overview of the Connected Centres programme for a 400,000 population scenario

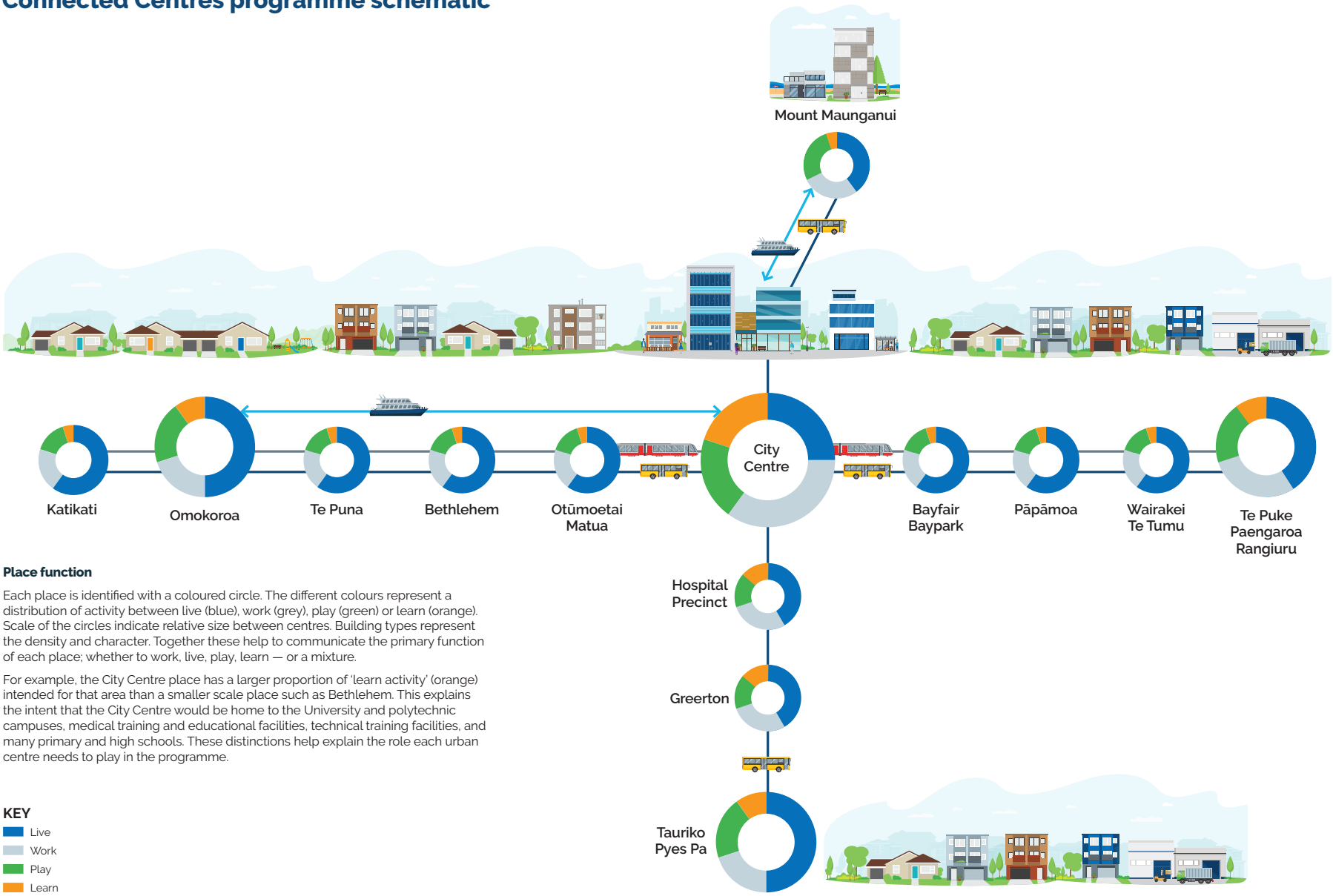
KEY

- State highways
- Roads
- Railway
- Public transport
- Cycle
- Freight
- Ferry
- Park and ride
- Public transport hub
- Public transport interchange
- New or improved major intersection
- Existing urban areas
- Planned urban growth areas
- Envisioned growth area – 30+ years
- Potential intensification areas
- Indicative area for multimodal crossing
- Waterways
- Parks, reserves, public conservation areas
- No go
- (ONFL) Outstanding natural features and landscapes (PostAppeals)

Planned Envisioned

Figure 24

Connected Centres programme schematic



Place function

Each place is identified with a coloured circle. The different colours represent a distribution of activity between live (blue), work (grey), play (green) or learn (orange). Scale of the circles indicate relative size between centres. Building types represent the density and character. Together these help to communicate the primary function of each place; whether to work, live, play, learn — or a mixture.

For example, the City Centre place has a larger proportion of 'learn activity' (orange) intended for that area than a smaller scale place such as Bethlehem. This explains the intent that the City Centre would be home to the University and polytechnic campuses, medical training and educational facilities, technical training facilities, and many primary and high schools. These distinctions help explain the role each urban centre needs to play in the programme.

KEY

- Live
- Work
- Play
- Learn

Connected Centres programme supporting details

The land use aspects of the Connected Communities programme are based on:

- The agreed SmartGrowth settlement pattern for the next 30 years and further intensification and greenfield development beyond this time period.
- Existing urban areas will have increased intensification, particularly in Te Papa Peninsular, Otūmoetai (and surrounding suburbs), and in Mount Maunganui and Arataki/Bayfair where possible.
- Development of the planned greenfield areas of Omokoroa, Tauriko West, Keenan Rd and Te Tumu over the next 30+ years.
- a new centre and community in the Eastern Corridor near Rangiuru Business Park and Paengaroa commences in the medium term (15–20 years).
- the extension of the Western Corridor, including extending into upper Belk, Merrick, and Joyce Roads in the long term (30+ years).
- development in the Northern Corridor in Te Puna and Plummers Point in the long term (30+ years).
- minor extensions to the existing Urban Limits to provide some short-term opportunities for growth.

Table 5 outlines the proposed dwelling allocations within each area and corridor within the next 30 years. The table identifies large scale allocations within the next 30 years and does not preclude small numbers of additional houses in other locations from being considered through future regional and district planning processes. Table 6 provides an envisioned scenario for the period beyond 30 years. It is important to acknowledge these are initial estimates only and more detailed investigations would be required to confirm the infrastructure requirements and development capacity in each of the growth areas.

Table 5

Proposed dwelling allocations for 30 years to support the Connected Centres programme

Areas	Dwelling allocation 2020-2050	Notes
Operative zoned land (undeveloped greenfield) across the sub-region	10,000	
Intensification of existing developed urban land	10,800	Primarily focused on intensification in Te Papa followed by Otūmoetai (and surrounding suburbs) and the coastal strip from Mount Maunganui to Bayfair/Arataki.
Western Bay District Rural lifestyle	1,800	
Te Tumu	5,000	Still has capacity remaining at 30 years
Tauriko West	3,000	Estimate of full build-out capacity within 30 years
Keenan Road	1,200	Still has capacity remaining at 30 years
Omokoroa	1,800	Estimate of full build-out capacity within 30 years
Katikati	750	Estimate of full build-out capacity within 30 years
Te Puke	250	Estimate of full build-out capacity within 30 years
Eastern Corridor new settlement	800	Stage 1 of master planned new Eastern urban centre in Rangiuru/Paengaroa area
TOTAL	**35,400**	

Table 6

Proposed dwelling allocations to support the Connected Centres programme post 30 years

Corridor/area (post 30 years)	Dwellings	Comments
Intensification	22,000–24,000	Te Papa, Otūmoetai (and surround suburbs and Mount Maunganui – Arataki/Bayfair)
Eastern	18,000–20,000	Eastern — Final stages of Te Tumu, new township and community in Rangiuru/Paengaroa area
West/South (Upper Belk, Keenan, Joyce)	8,000–10,000	Upper Belk, Merrick, Joyce, and final stages of Keenan Rd
Papakāinga development across the sub-region	1,000–2,000	
Northern	5,000–8,000	Te Puna/Plummers Point
Total dwellings required	**54,000–64,000**	

In designing the Connected Centres programme, further areas that could potentially support development were also identified. These areas could be explored further as circumstances change. The dwelling allocation from these opportunities for the Connected Centres programme is shown in Table 7. The dwelling allocations in bold text are the allocations included in the programme, and the non-bold text in brackets highlights the potential capacity that could be achieved if development were to take place.

Table 7

Potential additional development opportunities within the sub-region

Corridor/area (post 30 years)	Dwellings	Commentary
Matapihi	**50** (5,000)	The area within Matapihi could be urbanised but would have to be iwi/hapū led. If urbanisation were to occur there would be excellent transport outcomes due to central location. However, only an allowance for further Papakāinga has been assumed.
Pāpāmoa Hills (Domain Road Interchange to Mangatawa)	**1,000** (5,000)	Multiply owned land but logical location for residential (or industrial) development. 1,000 dwellings allocated to Domain Rd South area
Crown owned land at Greerton	**1,000** (5,000)	Complex and partnerships required
1990/2000s Greenfield area	**0** (10,000)	Limited infill development along older established coastal strip at Pāpāmoa and no redevelopment/intensification assumed. Most developments subject to covenants precluding further subdivision. Cul de sac-based transport system causes connectivity issues.
Welcome Bay/Ohauiti	**0** (1,000)	Limited growth could occur (approx. 1,000 dwellings). Large scale growth limited due to infrastructure constraints and complex land ownership.
Bruce Rd, Domain Rd, and Tara Rd	**0** (5,000+)	Ground conditions (peat land), low-lying, flooding, etc.

Affordable and social housing actions included in the Connected Centres programme

Simply providing capacity for housing as per the tables above will not be enough to address the housing affordability challenge faced by our sub-region. While substantial work has been undertaken to improve land and housing supply to the market, there are many demographic and external economic factors that cannot be controlled at a local level and which influence affordability and deliverability. More active intervention by both local and central government and enhanced partnerships between the public and private sector will be essential if the challenge is to be met[24].

The affordable and social housing package[25] has been developed through research of comparable jurisdictions and with input from SmartGrowth and industry partners. The programme has been developed concurrently as the assessment of the UFTI shortlisted programmes took place. A workshop was held on 19 February 2020 with representatives from SmartGrowth Partners, Kāinga Ora, and Ministry of Housing and Urban Development (MHUD) to develop a preliminary programme of affordable and social housing interventions for UFTI. The outcomes of the workshop resulted in a draft affordable and social housing programme. The draft programme was then circulated to SmartGrowth Partners, MHUD, Kāinga Ora, and to industry stakeholders through the SmartGrowth Housing Affordability Forum for further comment. The SmartGrowth Partners reviewed the final housing programme and as the result, the housing programme focused on three key activities, as outlined below:

Priority A: Portfolio management of affordable and social housing

Take a portfolio management approach—across the public and private sectors—to foster greater collaboration and strategic decisions. This can facilitate an integrated approach to the investigation and delivery of urban regeneration, leading to the delivery of social and/or affordable housing via the market.

Priority B: Project delivery of affordable housing (firstly in Te Papa peninsula)

The intent is to capitalise opportunities for social and affordable housing (identified through the portfolio management approach in Priority A) through the most effective project structure.

A short-term focus on Te Papa peninsula can support benefits of intensifying in an area of improving accessibility close to amenities and employment opportunities. Te Puke may also present short-term opportunities. A broader focus can take place in the medium to long term, including emphasis on catalyst projects in commercial centres and close to public transport nodes and corridors. Strong and collaborative partnerships to invest and deliver affordable housing are necessary.

Priority C: Sub-regional social and affordable housing action plan

This action proposes to develop a collaborative sub-regional housing action plan to set out actions and responsibilities between partners. A detailed action plan can support Priorities A and B with a focus towards addressing regulatory and structural barriers to social and affordable housing.

These priorities along with more detailed interventions have been included in the final and optimal UFTI programme as a separate package of key moves in the delivery of the UFTI programme outlined in Part 4 of this Report. The social and affordable housing toolkit report is available on the UFTI report[26].

[24] Housing affordability includes both the capital cost of housing, including housing typology and choice and the household cost associated with the location, and transport costs which are a significant proportion of normal household costs, just below food. Consequentially, affordability and accessibility are closely linked.

[25] Affordable housing refers to assisted rental homes, assisted home ownership products (such as rent-to-buy, shared-equity and co-housing) and low-cost homes on the open market. Social housing means homes provided by central and local government or not-for-profit organisations, for people most in need.

[26] Tools for increasing social and affordable housing, in the Western Bay of Plenty, Research for the Urban Form and Transport Initiative, K. Ryan and S. Russell, March 2020 https://ufti.org.nz/wp-content/uploads/2020/05/FINAL-UFTI-REPORT-Social-and-Affordable-Housing-Report-April-2020.pdf

Implementation principles for delivering the Connected Centres programme

The implementation principles focus on elements of urban design and urban planning of critical importance to achieve the benefits of the Connected Centres programme. They are high-level and aspirational outcome statements to guide the implementation of the optimal UFTI programme through the upcoming SmartGrowth Joint Spatial Plan. Table 8 provides a summary of the implementation principles, with the detail included in Part 5. The principles do not apply to the rural environment unless explicitly stated.

Some UFTI implementation principles may conflict, such as the need to enable greenfield development on soils which are highly productive because there are limited other areas to develop. During planning decision making processes, a deliberate balancing of trade-offs will be needed from time to time. The collaborative methods underpinning the way SmartGrowth works are expected to sufficiently manage the balancing of these principles by the partners.

In developing the principles, it is noted that while Three Waters infrastructure is an important consideration in spatial planning, it was not part of UFTI's scope. It is therefore expected that the new joint spatial plan will develop similar implementation principles for management of the three waters aspects of urban growth.

Table 8

Implementation principles for the Connected Centres programme

Topic	Principles	Need
Macro-urban form	**The sub-region's urban form presents good quality, compact mixed-use urban development with density and destinations focused on public transport (PT) nodes and along corridors.**	High frequency PT benefits from density concentrated along corridors and nodes in areas of high access to PT services. Density done well and in the right place supports agglomeration benefits which enhance GDP/wage improvements and relative improvement of housing affordability to incomes. UGA connections: quality-built environments, while avoiding unnecessary urban sprawl; assist emission reductions and build climate resilience; enable quality-built environments. Our urban form should enhance transport's role in providing connections between people, product, and places.
Mode shift and micro-mobility	**Shared and active modes (including micro-mobility) are the most popular choices for local trips, enhancing travel choice and mode share throughout the sub-region.**	Mode shift has positive social and economic outcomes, as well as the reduction of GHG emissions. Micro-mobility represents an opportunity for our transport system to be more effective for short to medium-length trips, but needs enablement. Transform urban mobility by shifting from a reliance on single occupancy vehicles to more sustainable transport solutions for the movement of people.

Topic	Principles	Need
Community design	**Communities are distinctive places focussed around public open spaces, major amenities (such as civic facilities or cultural assets), and frequent transit where people have easy access to daily destinations to live, work, play and learn, while travelling along streets that are great urban spaces.**	UGA connections: assist emission reductions and build climate resilience; enable quality-built environments, whilst avoiding unnecessary urban sprawl; improve access to employment, education, services. To mitigate required vehicle kilometres travelled, provide for half of trips with local destinations in each community.
Neighbourhood design/urban design	**Neighbourhoods are structured so higher-density, mixed-use, walkable, human-scale development focusses around frequent transit, while built form and open spaces express our distinct culture and let people socialise and enjoy our natural assets.**	High frequency PT requires density at nodes and the approach of transit-oriented community design can enable integrated land use PT outcomes that improve inter-related success factors (such as density, urban form, mode shift). Communities built in this way have proven to be particularly liveable, sustainable, and resilient places. Transit-oriented communities also make it possible to operate efficient, cost-effective transit services. UGA connections: improve access to employment, education, and services; assist emission reductions and build climate resilience.
Social equity	**Infrastructure and urban form improve all people's access to opportunities necessary to satisfy essential needs and advance wellbeing.**	The benefits of growth and change should be shared equally, and disparity reduced over time. Inclusive access is important to ensuring all people can reach essential services.
Housing quality/ affordability	**New developments and urban regeneration projects provide for a mix of housing types and tenure, places for people to play, and include social and affordable housing options.**	Wider range of housing can support supply which meets our changing needs. Quality and cost effectiveness need to be in balance, which will change from place to place. UGA connection: improve choices for the location and type of housing.
Aged care and accessibility	**People can choose to live independently in their communities and are enabled to age-in-place.**	Demographics of the sub-region are likely to continue to have a mix of 'ageing' population and inward migration of people seeking the lifestyle the western Bay of Plenty has to offer. The urban form and transport system need to cater for both these groups of people.

Topic	Principles	Need
Strategic corridor function	**A sub-regional network of strategic transport corridors integrates the purpose and context of each corridor by balancing place and link functions and user priorities.**	Encourage the right management approach to strategic corridors, helping prioritise ongoing investment which can strengthen transport outcomes for the primary designed strategic purposes of a route. This should lead to an overall improvement in how the network functions for all users. It can support place-making and the local economy by balancing design for place and link functions. Understanding corridor function and making investment and urban form decisions based on those functions will enhance transport's role to provide connections between people, product, and places.
Environmental design	**The harbour and catchment are healthy and thriving, linked with a blue-green network of natural features and recreational activities in a way which expresses landscape character and enhances natural health.**	Blue/green networks are a holistic way of planning based around waterways (blue), planting and parks (green). Landscape context and character help express the identity of the sub-region through its landscape and supports stronger sense of place and community identity. Environmental performance of urban areas is an important factor in environmental quality.
Tangata whenua/ Tauranga Moana	**Tangata whenua cultural narratives and profile are a vibrant and valued part of living in the western Bay of Plenty, articulating a deeper sense of place and enhancing the mauri of Tauranga Moana.**	Ensuring tangata whenua are an equal partner and are able and resourced to participate in decision making.
Recognising environmental constraints	**Protect wāhi toitū (places to remain undisturbed) from development in perpetuity, while in wāhi toiora (places to take care of and protect) change or development occurs with the greatest care.**	Need to manage rural and agricultural land as a resource to produce food; avoid development on hazard prone lands. Reinforce landscape character and sense of place through retained areas of value. Need to understand environmental constraints when designing an urban form that provides safe and resilient connections between people, product, and places. Our climate is changing, and the changes will have consequences for our urban form and transport systems—we need to make decisions about how we adapt our urban form and transport systems to these changes.
Hierarchy of interventions	**Optimise the use of existing infrastructure before committing to construct new infrastructure.**	Urban growth will always need new infrastructure to accommodate population growth, but it is important to make sure the plans and frameworks are in place to extract the most value from existing assets before investing in new assets. For example, see https://www.nzta.govt.nz/assets/resources/The-Business-Case-Approach/PBC-intervention-hierarchy.pdf

Topic	Principles	Need
Economic strategy	**The region's infrastructure and urban form support a sustainable knowledge-intensive economy, driven by innovative people and businesses applying technology, research and development, leveraging the strengths of our natural horticultural and marine-based food basket, with the strength of the Port and splendour of Tauranga Moana at the forefront.**	Agglomeration benefits to GDP improve wages and lead to better housing affordability. Higher amenity is known to attract certain classes of employees and therefore make a place increasingly attractive for some types of high-quality employers. Our transport system is critical to support regional development. We need to optimise transport's role in enabling regional communities to thrive socially and economically.
Climate change — mitigation	**Greenhouse Gas emissions from transport achieve net zero by 2050 through a combination of urban form, street design, technology changes and public transport services that allow people to drive less within the sub-region, while strategic transport corridors are made reliable and efficient for freight and inter-regional travel.**	Mode shift towards more sustainable travel can reduce greenhouse gas emissions. Urban form can encourage more opportunities to live, learn, work, and play in the same place ("self-containment") so that the need to travel is reduced. Technology has the potential to reduce transport emissions over time—if infrastructure to support cleaner technologies is in place and market incentives exist. Mode shift alone will not be able to achieve transport emissions targets of net zero by 2050; other actions will be required to support the transition to a low emission economy, including supporting new technologies and considering alternatives for offsets.
Monitoring, review, and managing uncertainty	**Performance measures are monitored so that implementation of the strategy adjusts through a regular review and update process. Opportunities are not closed off unnecessarily, including the potential option to use rail for PT purposes and land requirements for corridors.**	Monitoring of progress towards long-term strategic objectives is important to enable adjustments to tactics in response to unknowns. Maintaining strategic options and being prepared for change, enables ability to respond to risk or opportunity.

Implementation of these design principles within the redevelopment of the existing urban areas, the currently planned growth areas identified in the SmartGrowth 2015 Settlement Pattern, and the new envisioned growth areas, are critical to the success of the Connected Centres programme and the achievement of the UFTI benefits.

Benefits, cost, and economic efficiency

To help better understand the potential benefits of the Connected Centres programme and estimate the potential costs, the programme was tested via the Tauranga Transport Model, and the economic analysis IER tool. These analysis tools were used to help quantify the potential transport benefits associated with the programme. Overall, the Connected Centres programme will, over time, achieve the UFTI benefits.

Table 9 shows key transport measures for the 2048 and longer term 400,000 population Connected Centres scenario. A 'do minimum' scenario for the year 2048 is also shown to provide an indication of key measures under a minimal investment approach. It is not possible to model a 'do minimum' scenario for a longer-term scenario with a significant increase in population over a prolonged timeframe, as the transport model cannot return reliable results. A 'do minimum' of this scenario in the longer term would likely indicate low public transport and cycle use, poor accessibility and an extremely congested network that would severely restrict the movement of people and goods.

The transport modelling shows improvements in key measures for the Connected Centres programme in terms of accessibility, public transport use, cycling uptake and emission reductions. In the long-term scenario, traffic volumes exceed road capacity on some key routes including parts of the state highway network, although priority lanes would allow buses and freight to bypass congestion. The long-term output is highly indicative due to uncertainties around behaviour change and technology advances, for example. The modelling indicates that a much more significant shift away from single occupant vehicle use and improved travel demand management will be necessary over the much longer term to maintain accessibility and support movement of people and goods.

The same economic efficiency and cost estimation methodology used to assess the shortlisted UFTI programmes has been applied to assess the Connected Centres programme and is sufficient to provide a high-level economic analysis commensurate for a programme business case. As improvements are investigated further, the cost and benefits can be calculated with increased certainty, particularly as detailed designs are prepared. As such, the rough order costs are indicative only and are used to estimate the benefit cost ratio for the Connected Centres programme. Table 10 outlines the high-level economic analysis and cost estimate for the Connected Centres programme.

Table 9

Summary of high level macro modelling data summary

Programme	Approximate increase in population from 2018	Increase in vehicle transport travelled from 2018	Reduction in transport CO_2 emissions from 2018[27]	Transport crash costs	Percent of total jobs accessible in 45 minutes by PT	Public transport and cycle mode share of the morning peak
2048 'do minimum'	41%	50%	58%	$185m	18%	7%
2048 Connected Centres	41%	50%	58%	$185m	46%	15%
Long-term Connected Centres[28]	112%	113%	47%	$253m	58%	18%

[27] The transport model assumes uptake in energy efficient and electric vehicles in line with the Ministry of Transport Vehicle Emissions Prediction Model (VEPM).

[28] Uncertainties in the long term model runs are significant.

Table 10

Indicative and high level economic analysis of the Connected Centres programme

Benefit	Assumptions	Do minimum (PV $)	Connected Centres (PV $)
Safety	Proportional to population growth	$800,000	$220m
Access — Active Modes	Proportional to population density or closeness to rail	$120m	$150m
Access — Congestion	Proportional to population growth, and density or closeness to rail	$65m	$740m
Access — Resilience	All programmes assumed equally resilient	N/A	N/A
Access — Public Transport	Proportional to population density or closeness to rail	$1.6m	$90m
Wider economic benefits (WEBs)	15% of total benefits	$10m	$125m
Total net benefits (PV $)		**Not analysable**	**$1.0b**
Total net costs (PV $)		**$510m**	**$1.05b**
Total programme costs (undiscounted)		**$2b**	**$6.9b** ($6b without rail)
Total programme capital costs (undiscounted)		**$400m**	**$3.2b** ($2.7b without rail)
IER		**N/A**	**1.1**
IER (construction at same time at full growth)	Single year construction at full growth	N/A	1.9
IER Range (based on 4% discount rate, lower/higher growth profile)		N/A	1.0–1.4

From this analysis, the Connected Centres programme is estimated to have an indicated efficiency rating range of 1.0–1.4. The economic analysis and cost estimate report containing the details of the methodology and analysis is included in Part 5 as a standalone report.

Financial tools/analysis

The Connected Centres programme has been estimated to be approximately $7 billion in 2020 dollars over the next 50 to 100 years, including capital expenditure (new infrastructure) of approximately $3.2 billion and operational expenditure (for instance public transport services, road maintenance) of $3.8 billion. Based on the timing of the actions set out in Part 4, the expenditure is likely to be spread over the timeframes set out in Table 11.

Note: financial analysis is based on assuming a return on investment of 10 percent per annum, net of the do minimum programme. The financial analysis is based on the rough order cost estimates. The difference between Table 10 and Table 11 are due to the non-linear effect of private financing.

The financial estimates and the period in which they could incur are high level and indicative only. They will be refined as further technical work is completed on each package of interventions in the programme.

The costs of implementation of the programme will be split between local and central government. Under current funding models, the bulk of the expenditure would come from the National Land Transport Fund, rates and farebox recovery. Based on the rough order capital and operational costs and if current funding processes were followed, approximately 54 percent of the estimated costs are operational mainly due to the significant increase in public transport services, and 46 percent are for the capital expenditure. Of the total programme costs, approximately 65 percent fall to central government through Waka Kotahi and KiwiRail; with the remaining 35 percent split between Bay of Plenty Regional Council, Tauranga City Council, and Western Bay of Plenty District Council.

Given the high level cost estimate for the Connected Centres programme, it is unrealistic to assume all of the estimated level of expenditure outline in Table 11 will be able to be covered by current revenue sources and revenue. To better understand potential financial and investment mechanisms that could be applicable, NZIER was commissioned to analyse alternative approaches to help fund and finance the Connected Centres programme. Key observations from the analysis include:

Table 11

Summary of the financial analysis for the Connected Centres programme

Period	Capex ($m)	Opex ($m)	Total ($m)
2021–2030	$1,250	$20	$1,270
2031–2040	$580	$145	$725
2041–2050	$580	$145	$725
2051–2060	$1,780	$540	$2,320
2061–2070	$1,780	$520	$2,300
2071–2080	$-	$390	$390
2081–2090	$-	**$390**	**$390**
Total	**$5,970**	**$2,150**	**$8,120**

1. The traditional rates-based approach to capital planning will continue to have a major role to play in this programme. It provides simplicity, is well understood and partners understand oversight and accountability. The rating base will however come under stress given the significant rate rises that will be needed to fund both capital and operational components of the programme.
2. Public private partnerships (PPP) have a place if the projects are discrete and time-bound. They work even better where the partner can innovate. Tolling forms a potential part of the revenue stream. They may not be the cheapest procurement method, but they can give a high degree of confidence in delivery. Projects such as dedicated bus lanes or alternative harbour crossings may be well suited to a PPP approach as part of a programme of infrastructure construction and delivery over the next 30 years.
3. The concept of value capture (where the uplift in land value for land that benefits from the construction of new infrastructure is used to contribute to funding that infrastructure) could be useful—but it is a tool that is hard to get right (counterparties face strong incentives to push back on the 'value'). As a targeted rate, it is a known tool and could be used.
4. The Regulatory Asset Base model proposed in the Infrastructure Funding and Financing Bill 2020 seems to have considerable potential. This model captures the benefits of a PPP using a public utility entity model rather than a private sector PPP. It is a better model than PPPs at managing complexity over a long duration than the PPP model. A Regulatory Asset Base approach also has the capacity to manage government and multiple private investment arrangements, which are likely to by required in the case of the multi-faceted UFTI programme.
5. Demand management tools such as road pricing were not considered to be good tools for revenue raising and cannot be used for this purpose under the current legislation. Although, demand management tools can provide a useful mechanism to improving the function of the transport system by pricing demand.
6. Other tools such as Infrastructure Bonds or off balance sheet financing were considered but not recommended at this stage as "…the less direct the relationship between users and funding, the higher the risk that the funding is simply an ad-hoc tax on selected assets of businesses, and the more likelihood of misallocation of scarce capital. Ultimately all debt has to be repaid."

Further work led by the SmartGrowth Partners will be completed to identify the preferred funding tools applicable to deliver the Connected Centres programme.

IAF assessment and investment profile

Waka Kotahi require a self-assessment of the UFTI Connected Centres programme to be undertaken using the Investment Assessment Framework (IAF). The assessment is used to help determine the investment priority that could be attributed to the UFTI programme. The self-assessment is subject to the independent review by Waka Kotahi, and the independent peer reviewer reviewing all the UFTI programme business case.

The Connected Centres programme covers several National Land Transport Programme activity classes. Since much of the UFTI Connected Centres programme is focused on public transport and regional, local road and state highway improvements, the IAF assessment criteria for these activity class has been used. The self-assessment is included in Table 12.

Table 12

Self-assessment of the UFTI programme using the Investment Assessment Framework

GPS priority	Public transport, rapid transit, and transition rail improvements — very high results alignment criteria	Regional, local road and state highway improvements — high results alignment criteria	UFTI self-assessment
Safety — a safe transport system free of death and serious injury	• N/A	• Addresses safety issues presenting a high crash risk, affecting communities subject to high safety risk, and/or in Safer Journeys area of high concern • Addresses safety issues presenting a high societal consequence risk	***Results alignment for safety for regional, local road and state highway improvements* — high results alignment** There are numerous improvements planned across the multimodal transport system to improve road safety and reduce safety risks for all users, and particularly more vulnerable users, using active modes. Much of the safety benefits are related to the significant increase in public transport use. Where improvements are made throughout the UFTI programme, the expectation is that road safety will be considered, and a safe system design will be incorporated. Transport modelling suggests despite a significant increase of people, costs associated with crashes decline with the Connected Centres programme. The modelled safety improvement is related, in part, to the increase in multimodal use across the transport system. Within the Connected Centres programme, there are some specific short to medium-term programmes and projects that will deliver safety outcomes including: • delivery of the Cameron Rd multimodal project; • the Te Papa urban form and transport improvements; and • the Western Bay of Plenty District Council and Tauranga City Council cycling programmes which will address a number of safety issues within known safety areas such as the CBD, Totara Street, journeys to schools, and other key destinations where safety (real and perceived) is an issue for all active mode users. • Enhancements to the public transport services and improved public transport infrastructure

GPS priority	Public transport, rapid transit, and transition rail improvements — very high results alignment criteria	Regional, local road and state highway improvements — high results alignment criteria	UFTI self-assessment
Access to opportunities, enables transport choice and access, and is resilient — liveable cities	• Enables a substantial increase in access to social and economic opportunities for large numbers of people along dedicated key corridors and enables transit-orientated development	• Supports high priority elements in agreed integrated land use and multimodal plans • Addresses significant gap in access to new housing in high growth urban areas • Addresses a significant resilience risk to continued operation of key corridors • Makes best use of key corridors that prioritise multimodal use and freight	***Results alignment for access for public transport, rapid transit, and transition rail improvements*** **— very high results alignment** The Connected Centres programme is centred on higher density growth areas (new and within existing) with average densities of a minimum 30 dwellings per hectare which will be implemented over time. The increase in intensification is deliberate to substantially increase access to social and economic opportunities for the communities within the western Bay of Plenty sub-region and enable transit-orientated development. Within the new and existing growth areas, dwelling densities around key dedicated multimodal corridors and centres will be greater than 30 dwellings per hectare. Modelling shows an approximate 18 percent increase in AM peak mode shift (public transport and walking and cycling), and an increase of 58 percent in terms of access to jobs via public transport. The modelling is likely to be conservative as the model runs are based on the current settlement pattern for the first 30 years, despite plans and intent to increase intensification within existing urban areas and implement the UFTI principles for increasing housing densities. Further, the modelling does not take into account the potential modal shift that can be experienced because of a shift in public perceptions about public transport. However, the modelling does provide a useful indication at the macro level.

GPS priority	Public transport, rapid transit, and transition rail improvements — very high results alignment criteria	Regional, local road and state highway improvements — high results alignment criteria	UFTI self-assessment
			***Results alignment for access for regional, local road and state highway improvements* — high results alignment** UFTI is about the integration of land use, urban form, and transport. The Connected Centres programme has been designed based on where people can live and move in the future. The starting premise has been to focus on where people live and the supporting urban form (i.e., densities, etc.), and then designing the improved and multimodal transport system to enable the efficient and effective movement of people and goods in a way that increases access and improves transport choices. The UFTI programme and approach to the programme development is a significant departure from previous transport business cases or land use planning—where the integration between land use and transport has been lacking, and significant emphasis placed on the levels of service provided to general traffic. UFTI provides a marked and significant turning point for the sub-region. The UFTI programme focuses on the development of a multimodal transport system that supports and increases access to current and new growth areas. The improved access is often by way of providing public transport prioritisation improvements to regional, local, and state highways, and enabling safe walking and cycling access. Improvements to enable predictable freight journeys to the Port of Tauranga and to/from Rotorua and the eastern Bay of Plenty—particularly during the interpeak—are also included in the programme. Through the multimodal and freight improvements, there are likely to be secondary benefits for all general traffic. However, this is not the primary purpose of the transport improvements put forward To help improve network resilience, the UFTI Connected Centres programme includes improvements to some of the existing harbour crossings structures such as additional capacity on Turret Rd to support multimodal journeys. A new and/or upgraded rail/public transport crossing is also proposed. This crossing is a significant cost in the programme; however, it does provide significantly greater opportunities for a more efficient and effective multimodal transport system and provides increased network resilience.

GPS priority	Public transport, rapid transit, and transition rail improvements — very high results alignment criteria	Regional, local road and state highway improvements — high results alignment criteria	UFTI self-assessment
			The western Bay of Plenty sub region is susceptible to all natural hazard risks. Through the constraints map, envisioned land use in the Connected Centres programme generally tries to avoid the known natural hazards. The envisioned dwelling allocations reflect this, for example, there is minimal intensification envisioned for Pāpāmoa around Bruce Rd, Domain Rd, and Tara Rd taking into account the known natural constraints within this area. As the envisioned growth areas are investigated further, more information will arise about potential hazards which will be incorporated in the master and structure planning. Much of the existing transport system is used to enable access for the envisioned growth areas. Where transports improvements are required, more detailed investigations will take place taking into account the localised natural hazards. Based on investigations decisions to engineer up or adapt the alignment to improve resilience can be made. If resilience were assessed on its own, a 'medium' resulting alignment rating would be applicable. However, the other results alignment factors out-weight this dimension and an overall 'high' results alignment remains.

GPS priority	Public transport, rapid transit, and transition rail improvements — very high results alignment criteria	Regional, local road and state highway improvements — high results alignment criteria	UFTI self-assessment
Environmental	• Enables significant reductions in harm to the environment and people, particularly arising from land transport related air pollution and noise • Enables long-term reductions in greenhouse gas emissions from land transport	• Addresses significant reductions in regard to the environment and people, particularly arising from land transport-related air pollution, noise, and impact of construction and ongoing use of transport infrastructure on water quality and biodiversity • Addresses long term significant reductions in greenhouse gas emission from land transport	One of the benefits of the UFTI Connected Centres programme, is the reduction of transport related air pollution. Modelling suggests that with the Connected Centres programme, GHG transport emissions will be significantly less than the corresponding potential population growth would normally create. As stated earlier, the modelling is considered to be conservative and there is potential for further emission reductions with an increase in modal shift that could be achieved with the prioritisation of investment to develop a truly multimodal transport system. The packages of work also include investigation and if necessary/appropriate active involvement by the partners in the planning and delivery of alternative transport fuels infrastructure to accelerate a shift to low emission transport technologies. The use of the wāhi toitū and wāhi toiora approach to constraints mapping helps ensure that areas of high sensitivity are avoided in future growth plans. The implementation principles that form part of the programme and act as a guide for implementation decision makers include emphasis on protecting and enhancing the quality of Tauranga Moana and improving the quality of urban amenities.

Based on the self-assessment, the UFTI Connected Centres programme is assessed to have a **high** results alignment. The indicative efficiency rating range of 1.0–1.4, means the programme has a **low** efficiency score.

Overall, the UFTI Connected Centres programme has a score of **HL**, and therefore an investment priority of **5** (where 1 is the highest investment priority and 8 is the lowest). Based on the indicative investment priority and subject to the national prioritisation of transport investment of Waka Kotahi, and funding availability, the Connected Centres programme could seek transport funding and be included in future National Land Transport Programmes.