

SHAPE: RESILIENCE

Natural hazards and climate change

The investment needed to ensure our communities can withstand the effects of climate change and natural hazards will be significant. The longer we put off action, the more costly it will be to address this challenge.

We need to work together in facing these challenges and guide where we focus our efforts and investment.

Infrastructure

Infrastructure, such as roading, drinking water, stormwater and wastewater, is central to our community wellbeing. We need to plan for and invest in it wisely. Maintaining existing and building new infrastructure must respond to urban growth trends as well as climate change and other hazards.

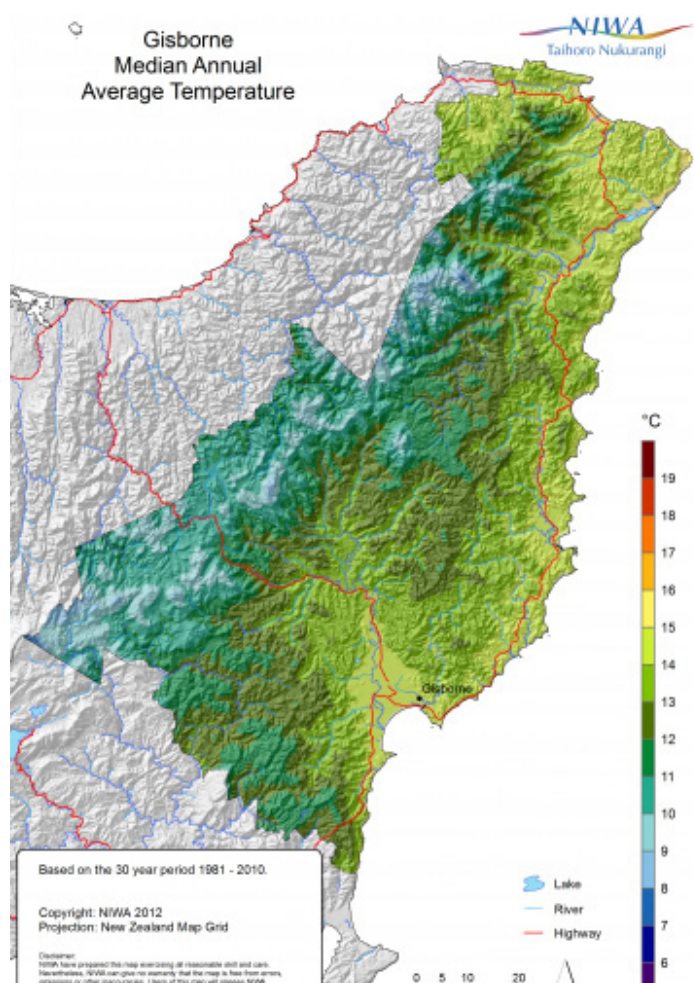
THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Mean sea level rise

- » Mean sea level rise projections for 100 years range between 0.55m-1.35m
- » Increased risk of inundation from tsunami and storm events as a result of sea level rise.
- » Surface and stormwater drainage affected by increased sea level and higher water tables.
- » Restriction of Waipaoa River mouth possible due to sea level rise and coastal sediment processes.
- » The Waipaoa Flood Control Scheme upgrade will protect the Poverty Bay Flats from a 100-year storm event including climate change factors to 2090.

Rise in temperature

- » An increase in the average number of days above 25 degrees from 24.2 now to about 34 days in 2040.
- » Number of evenings less than 0°C decreases from 8.5 to between 3.6 and 4.6 in 2040.
- » Fire danger index predicted to increase – the number of days with 'very high' or 'extreme' warnings will increase.

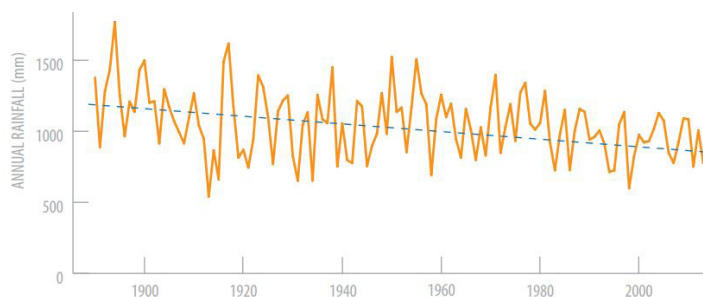


Gisborne District median annual average temperature 1981-2010

THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Rainfall changes

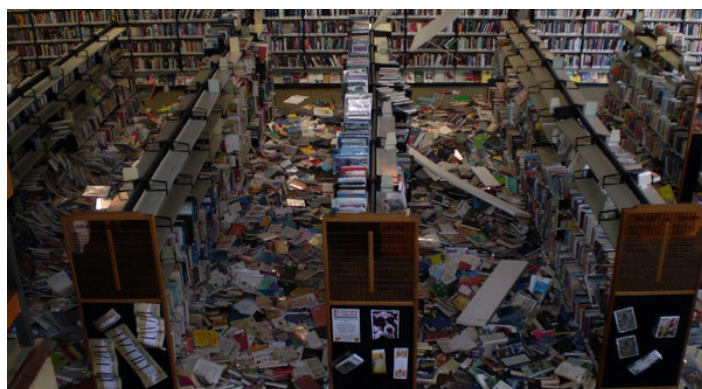
- » Annual rainfall expected to decrease 1% by 2040 and 3% by 2090.
- » Time spent in drought in the Gisborne Region is projected to increase by 5-10% by 2040 and 10% by 2090 for low elevations. Time spent in extreme drought in eastern New Zealand projected to double or triple by 2040.
- » Increase in storm frequency and intensity.
- » Flooding magnitudes expected to increase.



Annual rainfall for Gisborne/Poverty Bay Flats from 1890-2016

Natural hazards - tectonics

- » Tairāwhiti is a tectonically active region – we live 70–90kms from the edge of one of the earth's plates.
- » Two damaging earthquakes in recent years:
 - > 1966 (magnitude 6)
 - > 2007 (magnitude 6.8). Three buildings collapsed in Gisborne City; 23 more barricaded and closed. \$50 million damage to commercial buildings; more than 6,000 insurance claims from homeowners



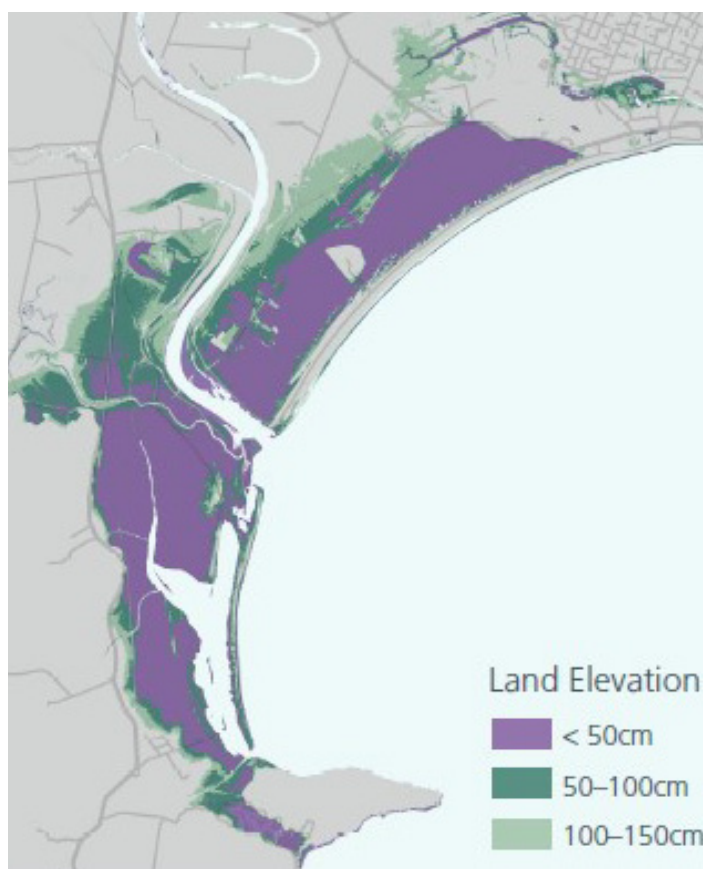
Gisborne Public Library after the 2007 Earthquake

Natural hazards - flooding

- » Remnants of tropical cyclones and storms periodically cause or contribute to flooding, erosion, coastal erosion and land instability.
- » In the last 100 years large floods on the Poverty Bay Flats in 2005 (Labour Weekend), 2002 (Muriwai), 1988 (Cyclone Bola), 1985 (Ngatapa), 1977, 1948 and 1906.
- » The Uawa and Waipaoa catchments were significantly affected by flooding during the June 2018 (Queens Birthday) storms. Uawa was heavily impacted by forestry slash mobilized by flood waters.

Natural hazards - tsunami

- » We have 270 kilometres of coastline - sandy beaches, rocky mudstone shores and headlands.
- » Our coastline is exposed to both distant and local Tsunami events.
- » Our region is close to the Hikurangi Subduction Margin. Tsunami generated here may arrive at our coastline in ten minutes to half an hour.
- » Our region has experienced sixteen local Tsunami since 1832. The largest tsunami had heights of 10 metres and 5-6 metres respectively.



Low-lying coastal land in Gisborne (Parliamentary Commissioner for the Environment)

THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Natural hazards – land instability

- » The East coast has young, easily erodible sedimentary rocks and coarser sandstones with slip prone soils.
- » The region is being uplifted at the rate of 4mm a year - this is very fast and results in rapid erosion of river systems.

Infrastructure

- » Drinking water: 31,700 residents connected to city water supply. Augmented water supply to Te Karaka and Whatatutu.
 - > Inadequate drinking water supplies for most of region (resilience)
 - > Resilience issues in town supply. A break in the supply pipe in February 2019 left the city with only a 24 hour supply.
- » Wastewater: Reticulated wastewater treatment for city and Te Karaka. Septage disposal sites are situated in Te Araroa, Tikitiki, Ruatoria and Te Puia.
- » Our road network is susceptible to surface flooding, landslides and weather degradation.
- » In 2016 there were 40 road closures due to flooding and landslides.
- » 630km (28%) of the local road network and 29km of our state highways were closed as a result of the 2018 Queen's Birthday storms. \$26 million in damage to road network.
- » Council's urban wastewater network consists of 223km of mains pipes, 2806 manholes, 40 pump stations and the treatment plant.
- » Our wastewater network can't cope with the volume of water going through it during heavy rain events. Council has needed to discharge wastewater into our city rivers on 14 occasions since 2014.



Landslide following storm event

THE CHALLENGES AND OPPORTUNITIES

Challenges – if we do nothing

- » There will be a greater risk of damage to public infrastructure and private property from long-term coastal erosion, inundation and sea level rise.
- » Remaining ecosystems unable to adapt to climate change. Shift in species composition and possible loss of regional biodiversity.
- » Increased erosion and landslides from more intense storm events.
- » Longer dry spells will place pressure on water supply and increase the likelihood of wastewater blockages and related dry weather overflows.
- » Some crops and farming activities may become unsustainable due to climate change.
- » Insurance implications for at risk areas.
- » Some Marae, waahi tapu and heritage sites may become more vulnerable to certain natural hazards.
- » An ageing population means reduced transport and mobility to respond.



Mangatokerau River following Queens Birthday storm, 2018

THE CHALLENGES AND OPPORTUNITIES

Opportunities

- » Diversify horticultural and perennial cropping within the region.
- » Start the conversation with our community around how we respond to climate change
 - > Mitigation: reducing greenhouse gases
 - > Adaptation: managed retreat, infrastructure upgrades
- » Strategic planning around the maintenance, delivery and location of resilient infrastructure.
- » Future irrigation demand planning.
- » Urban water tanks.
- » Low impact urban design.
- » Identify areas for development that are less vulnerable to the effects of climate change and natural hazards.
- » Development of a biodiversity restoration and ecosystem resilience programme.
- » Collaboration with neighbouring regions.



Crop production on the Poverty Bay Flats

THE QUESTIONS

- » What is an acceptable level of risk for our communities?
- » How do we get to this acceptable level of risk?
- » Our coastal communities are more vulnerable to sea level rise and coastal inundation. Should we:
 - > build more protection measures?
 - > let these areas run down and slowly be destroyed?
 - > managed retreat?
 - > something else?
- » How do we make our urban and rural communities more resilient to climate change?
- » What work do we need to prioritise to offset the effects of climate change?
- » What should our region do to mitigate the effects of climate change?
- » How do we secure reliability and quality of water supply for all of our communities?
- » How do we secure reliability and resilience in our energy supply network?



Mangatoitoi River following Queens Birthday storm, 2018

SHAPE: NATURAL AND CULTURAL VALUES

Protecting what we value

Our region's natural resources are fundamental to our wellbeing and standard of living. We need to balance the use of these resources with sustainable management and enhancement where they have been degraded.

Our cultural and historic heritage and open space values are central to our regional identity and connection to place. We have an opportunity to improve how we manage and celebrate these values.

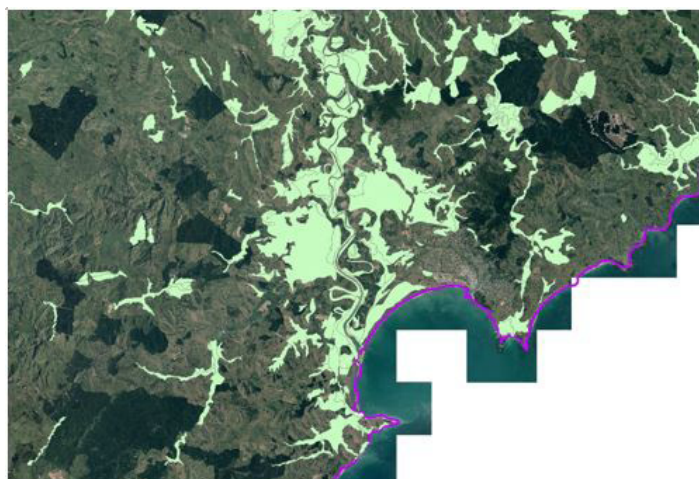
THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Freshwater

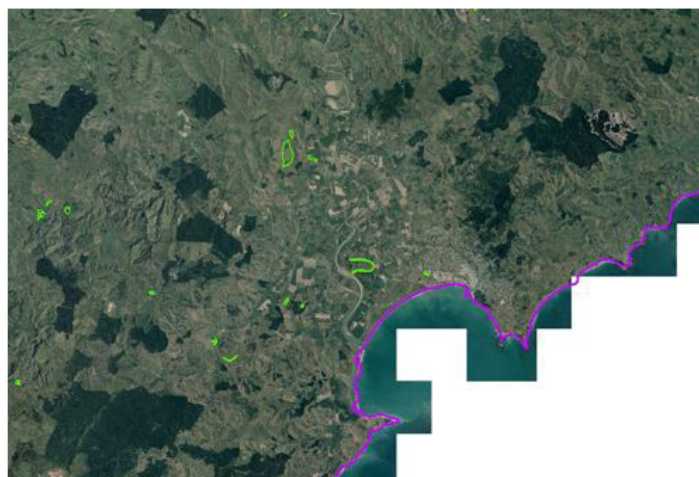
- » 4,697 ha of land consented for irrigation across the region.
 - > 36.1% from ground water
 - > 63.9% from surface water
- » 13.2 million cubic meters of water allocated from the Waipaoa River each year.
 - > Only 2.4 million cubic meters used
- » Urban stormwater is a significant source of heavy metal contaminants and hydrocarbons into urban streams and rivers.
- » Heavy rain events mobilise the easily erodible soils of our region – sediment enters our waterways and the sea.
- » Two measures of water quality fall below minimum acceptable states within the Waipaoa Catchment:
 - > Phosphate in the Taruheru River
 - > E. coli in the Wharekopae River, Taruheru River and Waikanae Stream

Biosecurity

- » Monitoring indicates that higher levels of trapping and poisoning are needed to successfully bring possum numbers in bush areas down.
- » Darwin's and Argentine Ants are continuing to spread slowly. 439 new infestations were identified from 2013-2015.



Pre-human wetland extent in part of the Gisborne District



Current wetland extent in part of the Gisborne District

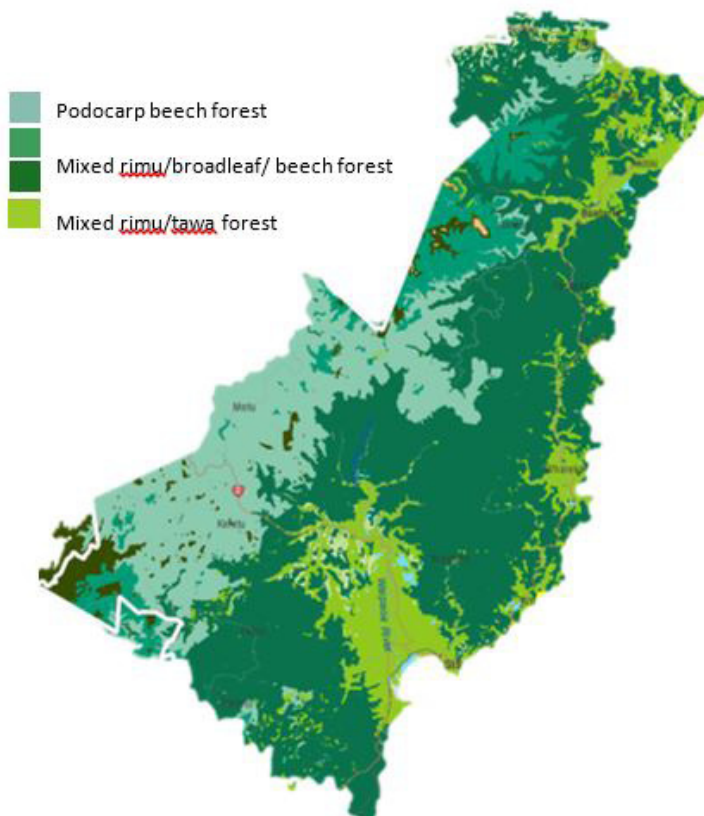
THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Biodiversity

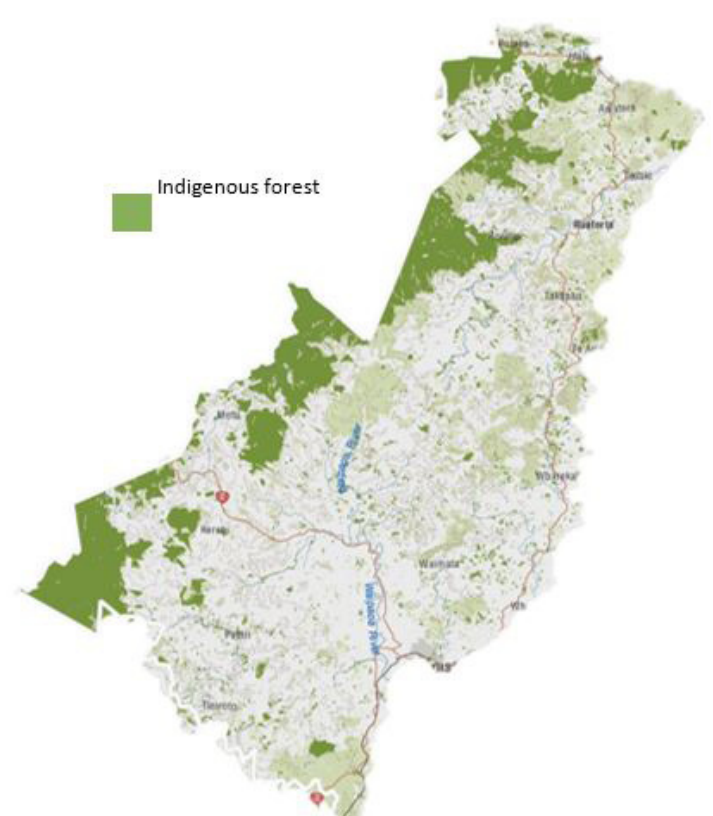
- » 23% of the region's landcover is native vegetation; 85% of the original vegetation has been cleared.
- » There are only 25 ha of remaining intact native forest in the lowlands of the region.
- » 14% of the native plants in the region are nationally threatened.
- » 7% of the region is identified as Protection Management Areas – our highest value native vegetation – of this only 0.1% is protected by covenant.
- » Since 2008 Council has approved the clearance of 2650ha of native bush, including 166ha of Protection Management Areas.
- » Wetlands are our most threatened ecosystem - only 1.75% remains.
- » Our state of knowledge of wetlands is poor, and only 9 are protected by covenant.

Coastal environment

- » The Gisborne region has 712km of diverse coastline.
- » Five surf breaks of national significance.
- » East Cape is an important migration landmark for several whale species.
- » 17 Outstanding Natural Landscapes.
- » Our beaches and coastline are highly valued by our communities – they are a popular destination for summer camping.
- » Coastal water quality is monitored at 22 beach sites and 5 estuarine sites.
 - > 83.6% of water samples within the safe swim category
 - > 1.3% in the public health warning category
- » There have been 11 overflows from the sewer system into the city rivers and the coastal environment since 2014.



Original indigenous forest cover



Current indigenous forest cover

THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Open spaces

- » Tairāwhiti – Gisborne has a high rate of parks per capita. Council administers a total reserve area of about 960 hectares.
- » Two thirds of the parks and community property assets are located within urban Gisborne with the balance spread throughout the district.
- » The most recent resident satisfaction surveys show that 82% of Tairāwhiti residents are satisfied with Council provision of parks. The survey also shows that rural wards are less satisfied (75%).
- » By 2023 it is projected that 23% of the population will be over 60 years and 28% will be under 17 years.
- » Council cannot afford to fund all the parks and open space activities that the community wants or needs.



THE CHALLENGES AND OPPORTUNITIES

Challenges – if we do nothing

- » Mātauranga Māori and te ao Māori not well understood or included in our resource management plans.
- » Continual species loss and decline in regional biodiversity.
- » Risks to water quantity and quality on Poverty Bay Flats.
- » Ongoing risk to water supply resilience to Gisborne city.
- » Rural townships not supported in guaranteeing reliable, safe access to household water supply.
- » Increasing stress on limited Council budgets to maintain an increasing parks and open space network.
- » Inappropriate development will impact the places and spaces that are important to our community.
- » Loss of taonga species.

Opportunities

- » Comprehensive assessment of ecosystem health.
- » Improved accessways to and along the coast (such as walkways, cycleways, boat-ramps).
- » Coastal restoration programme.

- » Update the Tairāwhiti Resource Management Plan.
- » Refreshed landscape assessment for coastal and inland environments.
- » Establish marine reserves/protected coastal areas.
- » Improve the mauri of our waterways and access to mahinga kai sites.
- » Managed Aquifer Recharge project and exploration of Alternative Use and Disposal of treated wastewater.
- » Support safer, reliable water supply options for non-reticulated rural townships.
- » Design multi-functionality into parks and reserves to enhance their use and value.
- » Council community partnership in managing parks and open space.
- » Improve our understanding of the values in our reserves.
- » Landscape - scale restoration.
- » Tourism benefits associated with celebrating our cultural, historic and natural heritage.

THE QUESTIONS

- » What biodiversity goals do we want to achieve for our region by 2050?
- » What are tangata whenua aspirations for regional natural heritage?
- » How should we design the long-term re-establishment of our natural heritage?
- » How should we support landowners in restoration initiatives?
- » What areas should we target for restoration and protection?
 - > Do we need tougher rules to protect what we have?
 - > How can we plan for and adapt to climate change?
- » Where are our nationally and regionally significant:
 - > recreational spaces?
 - > open spaces?
 - > ecological areas?
 - > landscapes and areas of historic heritage value?
 - > cultural spaces
 - > heritage journeys, pathways, trails, routes?
- » Where could landscape scale restoration occur?



SHAPE: SUSTAINABLE LAND USE

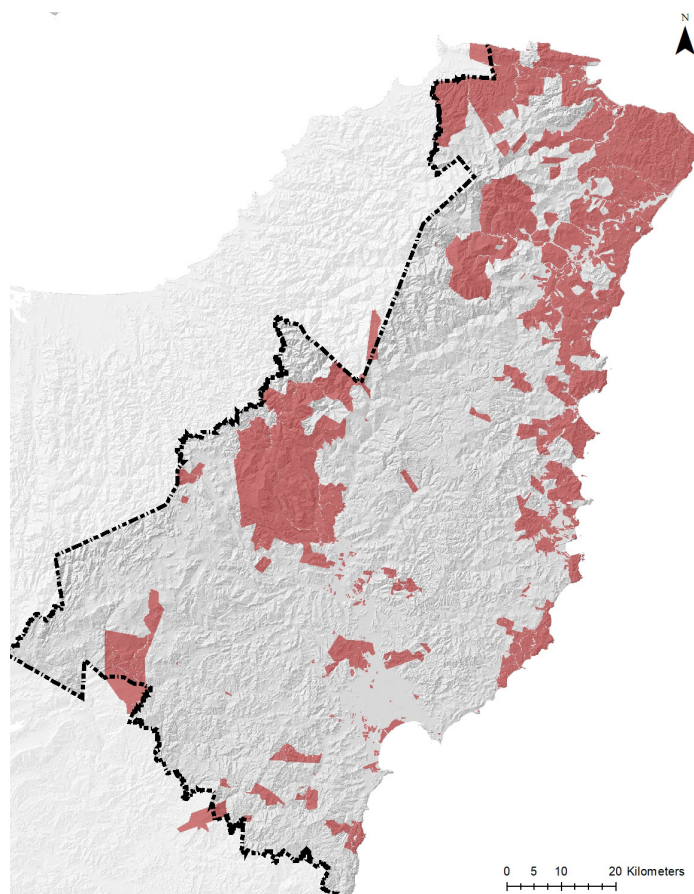
Sustainable land use

Our communities have made it clear that the degradation of our soils, fresh water, native bush and coastal environment is unacceptable. We need to support each other in protecting and regenerating the natural resources we all rely on for our economic, social and cultural wellbeing.

THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Land and soils

- » The Gisborne region covers approximately 839,000 Ha.
 - > 596,000ha (79%) is steep hill country.
 - > 71,000ha (8.5%) is flat to gently rolling land.
 - > 352,000ha (42%) of the region is used for pastoral farming.
- » Heavy rain events can mobilise the easily erodible soils of our region – sediment enters our rivers and streams before heading out to the coast.
- » The region covers 8% of the North Island but includes 75% of the most severe, erosion prone land.
- » The Waipaoa River discharges 15 million tonnes of sediment each year. The same as 4,100 truckloads of mud, silt and sand every day.
- » The Waiapu River discharges 36 million tonnes every year – the largest discharge of sediment in New Zealand.
- » There are 323,873.83 hectares (23% of 1.4m hectares of Maori land) made up of 4,484 separate titles within the Tairāwhiti & Otago region.
 - > The median size (40%) of titles is 1.28 hectares.
- » A specific challenge is the median title size with multiple owners and no governance or management.
- » 20% (22,158) of the Iwi within the region live within the region while 80% (89,214) live outside the region.
- » 83% (58,970 members) of Ngāti Porou live outside the Gisborne District Council region.



Location of Maori land in Tairāwhiti

THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Urban land use

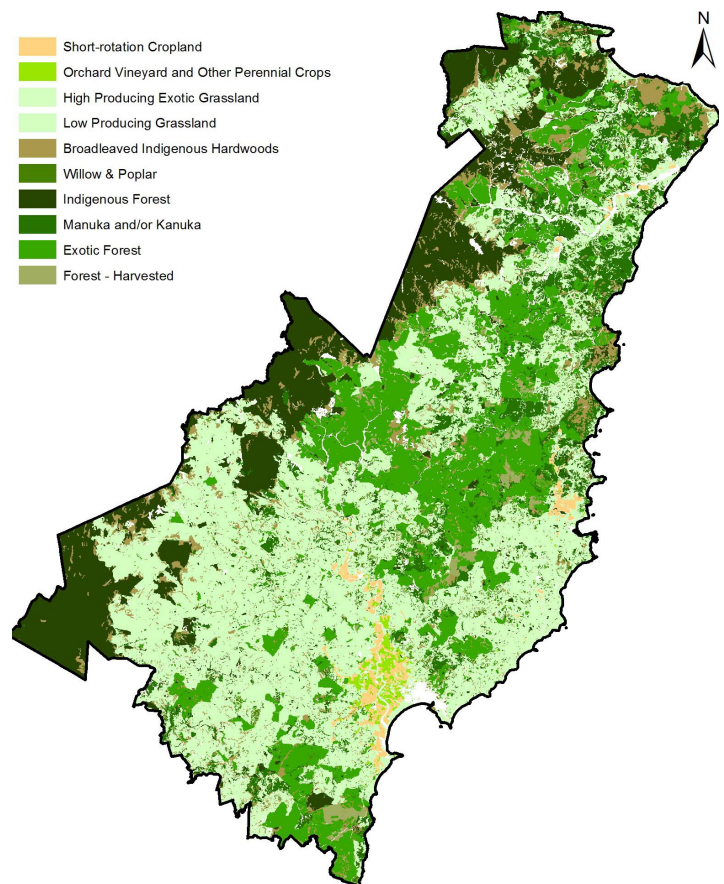
- » Gisborne city is a medium growth area. The population is set to increase by over 4000 in the next 30 years.
- » Uncontrolled urban growth has the potential to spread over the productive soils of the Poverty Bay Flats. This fragments and reduces the land available for food production. Key drivers of land fragmentation are demand for lifestyle block living and the financial gains derived from property owners subdividing and selling their land.
- » In Gisborne City, urban stormwater, polluted discharges and the legacy of contaminated sites are the main sources of pollution.
- » There are 566 known hazardous activity and industry sites across the region.
 - > 152 are motor vehicle workshops

Horticulture and agriculture

- » Poverty Bay has approximately 17,000 ha of land suitable for horticultural production. Approximately 5,000 ha on the flats around Uawa, Waipua and Tikitiki.
- » The total irrigated area in the region is about 4,700 hectares. This is mainly in the Poverty Bay Flats. 36% of this is irrigated using groundwater, with the remaining 64% from surface water sources.
- » Horticulture is a major user of both ground and surface waters on the Poverty Bay flats. Demand for abstraction is likely to increase.
- » In the Waipaoa Catchment, the amount of water available for economic uses such as irrigation is under pressure, with declining aquifers and fully allocated river water during the summer irrigation season.

Plantation forestry

- » The region's wood harvest is expected to peak at around 3.8 million tonnes through to 2035, then fall to around 2.5m tonnes for several years.
- » Approximately 14 percent of New Zealand's logging exports originate from the Gisborne region.
- » In 2017, the contribution of the forestry sector (forestry and logging, forestry support service and wood processing) to regional Gross Domestic Product (GDP), was \$132 million.
- » 70 percent of log harvests are from the north and the remaining 30 percent is from the western area.
- » Exotic forest now covers 20% of the region.



Main land cover types - 2012

THE CHALLENGES AND OPPORTUNITIES

Challenges – if we do nothing

- » Urban growth and development has the potential to reduce access to and fragment productive soils on the Poverty Bay Flats.
- » Flow on economic effects from reducing productive capacity.
- » Continued high sediment loading in our waterways – impacting in-stream values.
- » Post-harvest sites on steepest and most erosive country continue to be exposed to severe storm impacts. Downstream effects on freshwater values, communities, the built environment and the coastal environment.
- » The clearance of vegetation can negatively affect habitat and biodiversity values; it may also release silt and contaminants and run-off. It also creates the expectation that land near it can be developed in the same way.
- » Reliability of water supply for our important food production and economic uses – and for the Gisborne City water supply could be impacted if we don't use our water more efficiently.

Opportunities

- » Support the development of maori-owned land
- » Contaminated land use studies
- » Remediation of Council and privately owned contaminated sites
- » Improve provisions for protecting Poverty Bay soils within the Tairāwhiti Resource Management Plan
- » Regional soil quality monitoring programme
- » Soils conservation programme (underway)
- » Use of 1 Billion Trees fund to support a transition to more sustainable land uses across the region
- » Retire the steepest eroding landscapes to permanent vegetation
- » Promote more efficient use of water and wastewater
- » Explore higher value uses of rural land
- » Riparian restoration public and private land

THE QUESTIONS

- » What type of land uses are suitable for our steepest most erodible land?
- » Is plantation forestry in the right place?
 - > Where shouldn't we have forestry?
 - > Where should it go?
 - > What are the alternatives?
- » What is the cost of plantation forestry for Tairāwhiti?
- » Do we need more land protected for horticultural use?
 - > Where should this be?
- » How can we support the development of maori owned land?



SHAPE: SETTLEMENT PATTERNS

Sustainable settlement

The places people call home are both urban and rural. The population is increasing. Shape Tairāwhiti gives us the opportunity to create new and improved places to live, and think about the kind of housing our communities will need in the future.

THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Urban settlement

- » Gisborne city is a medium growth area. The population is set to increase by over 4000 in the next 30 years.
- » Housing in Gisborne is becoming less affordable. Both rents and house prices are increasing.
- » Median house prices rose by \$44,000 during 2018 to \$390,000 in February 2019 up more than 25% on the same time last year.
- » There are currently around 355 hectares of vacant land zoned as General Residential (62%), the majority of it located in Tokomaru Bay - Ruatoria - East Cape.
- » Anecdotally, the supply of land available for residential development in Gisborne is not keeping up with demand. However, about 280ha of land zoned for residential use in the city has not yet been developed.
- » An increasing share of people will live in single-person households. Currently, there are 17,360 households in the region with the average household size being 2.76 people. By 2048, this is expected to decrease to 2.67 persons per household.
- » Our CBD has an area of 82ha – this is large for our population
- » A combination of big-box shopping and growth in online retail is challenging the traditional role and function of our CBD. There has also been a movement of small businesses away from the CBD out to the surrounding suburbs.



STERLING PARK

STERLING PARK DEVELOPMENT is your opportunity to purchase in an estate designed to set a new standard in residential living in Gisborne...

Your STERLING PARK home will be accessed through an attractive riverstone entranceway, opening to a fully formed, sealed roadway with kerbing and channelling. Concrete footpaths follow the road on each side. Illuminated at night with designer streetlighting and all lots will have services to the boundary.

Premium sections from a compact 505m² to a generous 1367m² will cater for all needs.

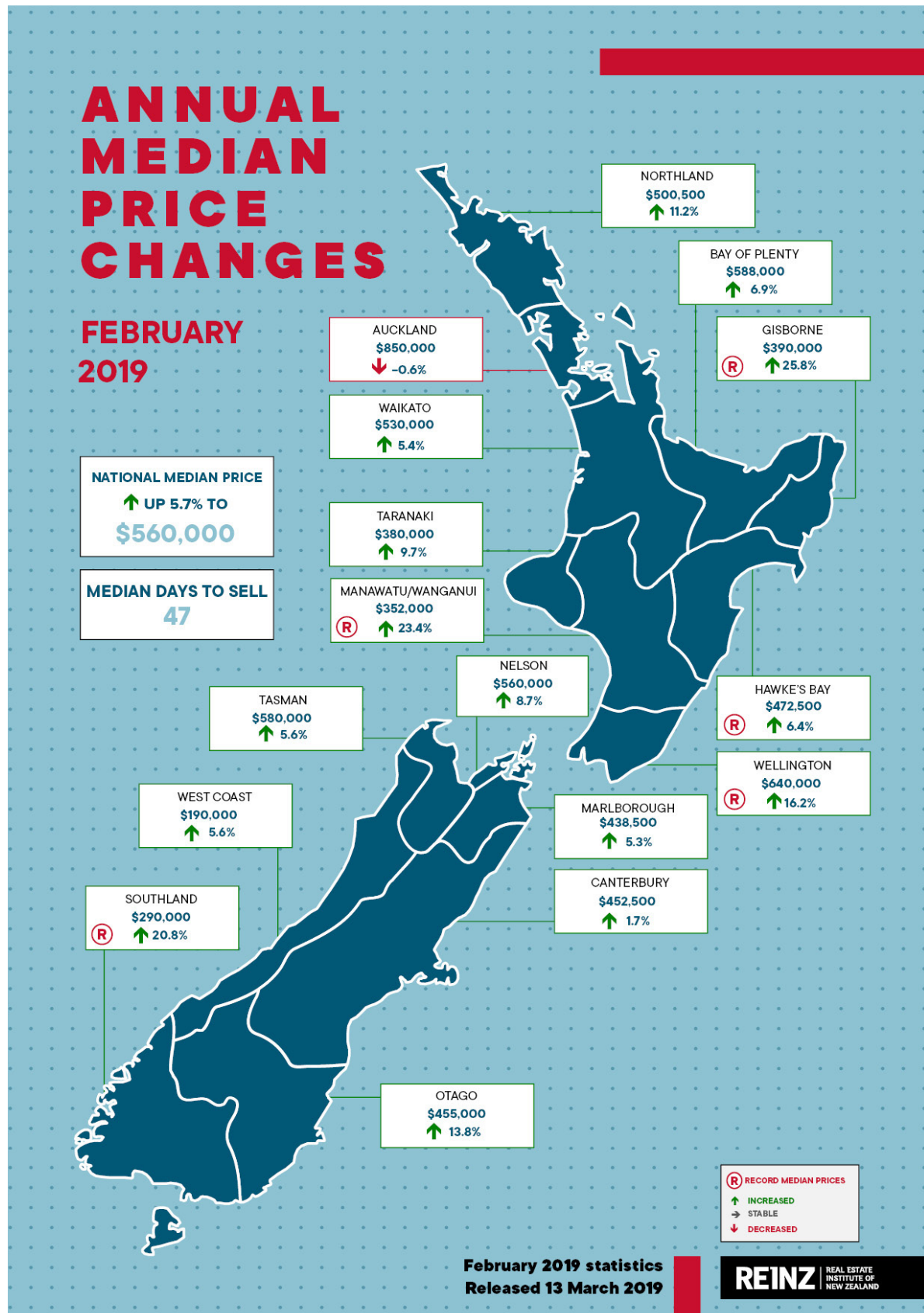
HARVEYS

FIRST CITY REALTY LTD HREINZ
Phone: 06 867 9679

For further information contact:
MELISSA WARRINGTON | A/H: 06 868 5808 | Mobile: 0272 794 362
RICHARD FLYGER | A/H: 06 867 4404 | Mobile: 0272 222 911

anticipated release dates:
STAGE ONE MAY 2007 LOTS 01 to 24
STAGE TWO JUNE 2007 LOTS 27 to 34
STAGE THREE MARCH 2008 LOTS 36 to 56

THE EVIDENCE – WHAT DO WE ALREADY KNOW?



THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Rural settlements

- » For rural townships there are challenges are around having:
 - > safe and reliable roading
 - > a safe, affordable and reliable supply of drinking water
 - > sustainable and clean wastewater management.
- » Our townships continue to face the prospect of population decline. Council will be challenged in providing and improving infrastructure and community assets in our rural areas.
- » Supporting these rural communities is important for social outcomes, for maintaining the region's competitive advantage in primary industries; and for the continuation of communities connected to traditional rohe.
- » Population projections suggest that people will slowly move away from our rural townships.
- » There are 9 rural transfer stations for waste management
- » There is one landfill at Waiapu servicing the northern half of the region. This landfill is nearing the end of its consented life.

Area	2018 pop. estimates	2043 pop. predictions	Change
Tokomaru Bay-Ruatoria-East Cape	3,779	3,555	-244
Tarndale - Rakauroa – Te Karaka	1,993	1,677	-316
Tiniroto – Patutahi – Manutuke	2,980	2,957	-23
Wharekaka – Tolaga Bay	2,789	2,928	+139

	Reticulated water supply	Reticulated wastewater	Flood control	Kerbside rubbish / recycling	Stormwater network
Manutuke	Town supply				Yes
Muriwai					Yes
Matawai/Motu					Yes
Patutahu					Yes
Rangitukia/Tikitiki					Yes
Ruatoria			Groynes	Yes	Yes
Te Araroa					Yes
Te Karaka	Local bores		Waipaoa Flood Control Scheme		Yes
Te Puia Springs and Waipiro Bay					Yes
Tokomaru Bay					Yes
Tolaga Bay					Yes
Wharekahika and Potaka					Yes
Whatatutu	Local bores				Yes



THE CHALLENGES AND OPPORTUNITIES

Challenges – if we do nothing

- » Unmanaged development may occur in areas that are subject to increased risk from climate change and other natural hazards.
- » There is likely to be a mismatch between the areas where the household growth is expected (Te Hapara, Mangapapa and Whataupoko) and where the majority of vacant residential land is located.
- » A continuing shortage of housing supply will constrain economic growth and challenge affordability and home ownership rates.
- » Shops continue to move away from Gisborne's CBD as the retail landscape decentralises.
- » Continual slow decline in population and prosperity of rural townships. Council finds it harder to maintain supporting infrastructure and services to these locations.
- » However, there is an increase in visitor numbers that we need to cater for in townships.

Opportunities

- » Review of housing supply in Gisborne.
- » A revitalisation masterplan for Gisborne's CBD.
- » Alignment of township planning with regional spatial planning.
- » Invest in township enhancement projects to support township development.
- » Explore infrastructure, zoning, investment and other requirements to help establish a key regional service hub for the East Coast.
- » Improve condition of state highway to optimise transport connectivity along the East Coast.
- » Promote an East Coast journey that expands upon the Tairāwhiti Navigations Programme to boost regional tourism. This includes enhancing key destinations, township development, signage and other design elements to form a coherent regional experience that will enhance the visitor experience and increase visitor numbers.

THE QUESTIONS

- » Where should future residential and industrial development be located?
- » How do we make better use of our town centre?
- » Should we have less cars in our CBD?
- » Do we need to make the CBD:
 - > more compact?
 - > mixed use?
- » How can we future proof our settlements?
- » How to balance the need of the rural economy for protecting the high quality soils, with the need of households for more dwellings, and businesses for more commercial/industrial/retail space as the economy grows?
- » How do we support the growth and development of our rural townships?





SHAPE: CONNECTED REGION

Sustainable transportation

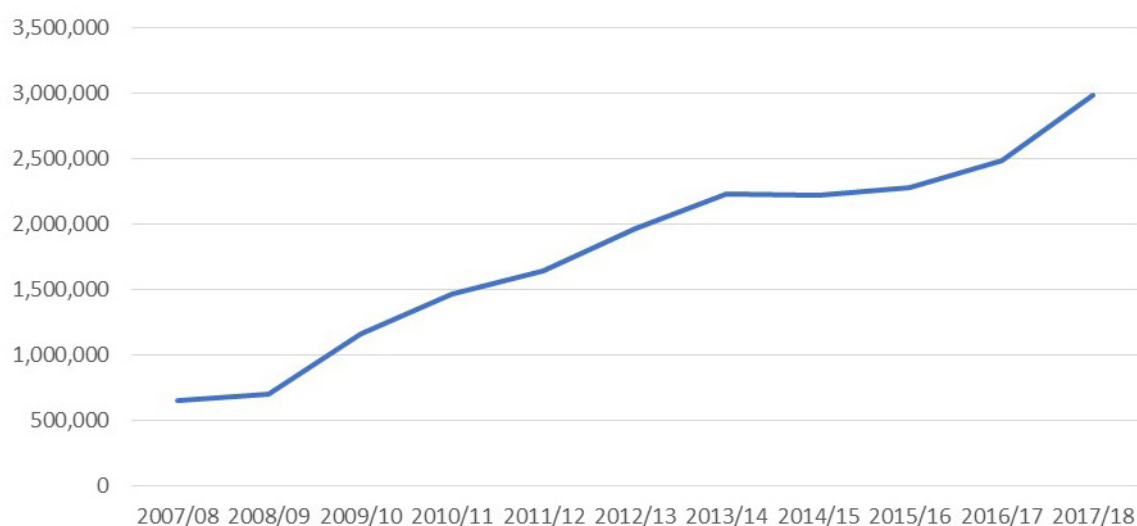
Moving goods and people safely, affordably and responsively is a core responsibility of the Council - with interagency support. Without sustainable transport links our economy and well-being will suffer.

Shaping our transportation network wisely will underpin success in Tairāwhiti.

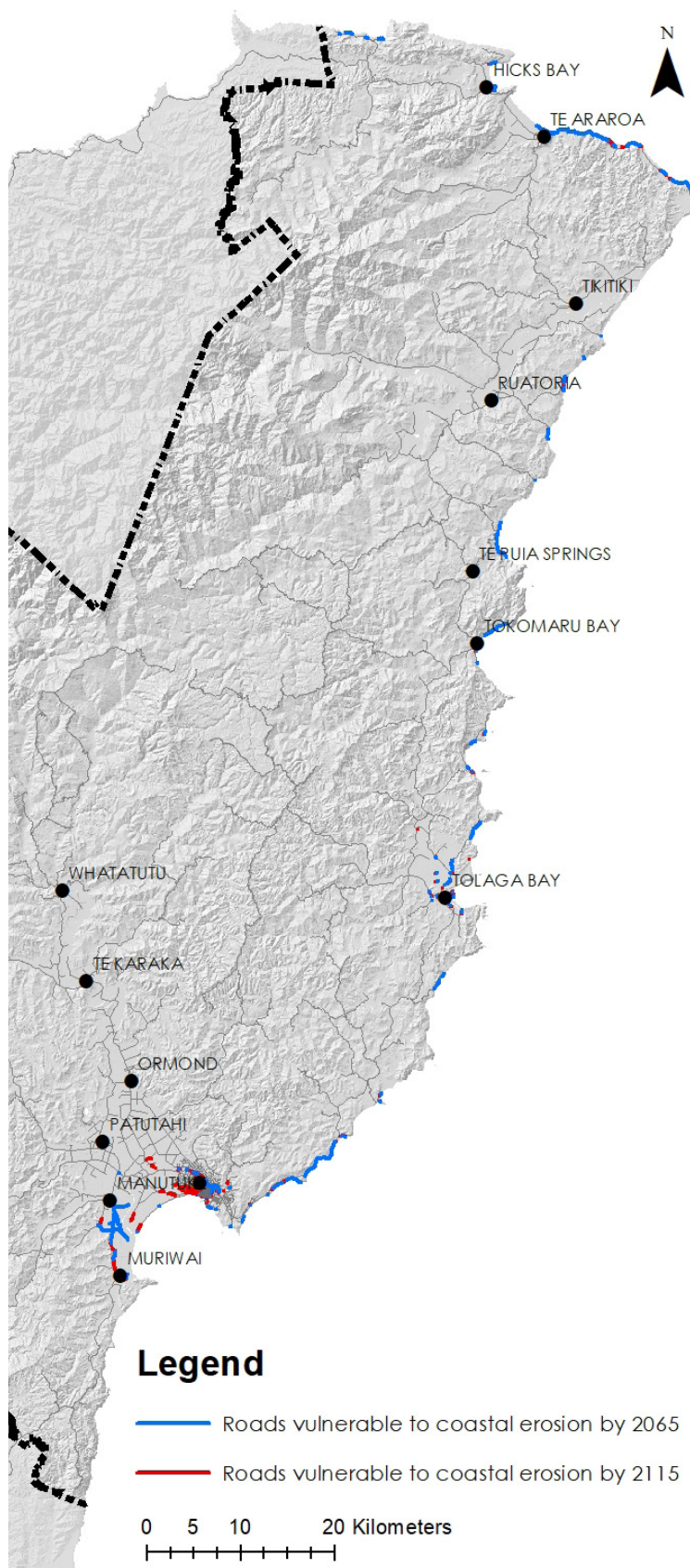
THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Road network

- » Largest local road network in New Zealand relative to its population (48,000) and ratepayer base.
- » Local urban roads - 229 km
- » Local rural roads - 1,624 km
- » State Highways - 331 km (SH 2 and SH 35)
- » The road network is susceptible to surface flooding, landslides and weather degradation.
- » We have two main roads into the region: SH2 from Wairoa; and SH35 to Bay of Plenty via Waioeka Gorge. Both are vulnerable to road closure from slips.
- » In 2016 there were 40 road closures due to flooding and landslides.
- » Following the Queens Birthday storms in 2018, 630km of local roads and 29km of State Highway were closed.
- » Road maintenance costs have increased in line with the intensification of heavy vehicles on the roads due to the surge in regional forestry activities.
- » Coastal roads vulnerable to erosion and flooding include:
 - > Makorori Road
 - > the access to Waihou Bay
 - > Kaiaua Beach
 - > the access to Nuhiti Beach from Anaura Bay
 - > Waima, Tokomaru Bay
 - > beach roads at Waipiro Bay
 - > the East Cape Road
- » Central Government has approved a total investment of \$369 million for the Tairāwhiti roading network.



THE EVIDENCE – WHAT DO WE ALREADY KNOW?



THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Public transport

- » Gizzy Bus service: two buses operating over six routes.
- » Steady decline in Gizzy Bus patronage since 2012/13 and a steady increase in school bus patronage.

Active transport

- » Cycling within the Gisborne District represents 3.3% of total commuter share.
- » Council's Urban Cycleways Programme (UCP) will build a spine of protected cycleway routes designed to separate riders from motor vehicles.
- » Five schools have implemented the Bikes in Schools programme.

District	Commute share 2013 (%)
Gisborne	3.3
Opotiki	1.4
Whakatane	2.8
Wairoa	1.7
Hastings	3.9
National trend	3.2



Rail

- » The Palmerston North-Gisborne Line provides a railway connection between Gisborne, Hawke's Bay region and the North Island Main Trunk railway in Palmerston North.
- » The line was closed in 2012 following several large washouts north of Wairoa resulting in significant damage to rail infrastructure.
- » In early 2018 KiwiRail announced the reopening of the line between Wairoa and Napier following support from the Regional Infrastructure Growth fund.
- » Up to \$600k is currently available to undertake a feasibility study for re-opening the Gisborne to Wairoa section.

Sea and air

- » Gisborne Airport is located 4.2 km from the city centre. The runway is night capable and 1,300m long.
- » 20,066 take-offs and landings at Gisborne airport during the year to March 2018, up from 15,494 the year before.
- » 170,993 passenger movements during the year to March 2018, up from 156,146 the year before.
- » The Government committed \$5.5 million in the redevelopment of Gisborne Airport. Total development cost: \$12.5m. Remainder to be co-funded by Eastland Group Ltd and the Eastland Community Trust.
- » Eastland Port is located 800m from the city centre. It is New Zealand's second largest log exporter and the most easterly commercial shipping port in New Zealand.
- » Forestry is the main user of the Port. Raw logs represent 99% of trade out of the port by volume.
- » Eastland Port exported over 3,000,000 tons of logs, kiwifruit and squash during the 2017/18 financial year, equating to over 100,000 full truck movements. With growing volumes of logs, kiwifruit and apples from the region this volume will top between 4.5 and 5 million tons by 2025.
- » Eastland Port is committing \$70m to a port expansion to increase berthing capacity.
- » 11 cruise ship visits to Gisborne in 2016-17 added \$3million to gross domestic product.

THE CHALLENGES AND OPPORTUNITIES

Challenges – if we do nothing

- » The roading network will become increasingly degraded and costly to repair and maintain.
- » Road closures and maintenance costs will increase for both local roads and State Highways.
- » The safety of the road network will decline – leading to more likelihood of accidents.
- » Heavy vehicles will continue to dominate our roads, rather than seeing an increase in other forms of transport.
- » The airport may be hemmed in by the City and unable to grow.
- » Uncertainty around the future and role of rail.
- » The effects of climate change will continue to impact on our transportation network.

Opportunities

Cycling and walking

- > the Poverty Bay Flats
- > the Waipaoa Flood Control Scheme
- > pathway from Midway Surf Club to Waipaoa River mouth
- > a regional cycle and walking trail network
- > improved access across the CBD

Road network

- » Restore and maintain the condition of State Highway 35 to support safe and efficient travel along the East Coast.
- » Promote an East Coast journey that expands upon the Tairāwhiti Navigations Programme to boost regional tourism. This includes enhancing key destinations, township development, signage and other design elements to form a coherent regional experience that will enhance the visitor experience and increase visitor numbers.
- » Potential for sea and rail:
 - > northern barge berth to reduce road freight in favour of coastal transport
 - > a northern port to support coastal shipping
 - > rail to take a proportion of logging freight
 - > rail tourism

THE QUESTIONS

- » Investigate and build alternative routes for sections of the road network that are more vulnerable to coastal hazards and erosion.
- » We know that the movement of logging trucks through our communities to the Port is a major challenge. How can this be made more sustainable/less impactful on our roads?
- » Should we consider:
 - > an alternative Port location?
 - > use of rail?
 - > a northern port ?
 - > a heavy vehicle bypass for Gisborne city?
- » Should Tairāwhiti consider a wider regional walking / cycle trail network?
- » Where could new walking and cycling trails be located?
- » How can we increase walking and cycling access through the CBD?





SHAPE: ECONOMY

Sustainable economy

The GDP of Tairāwhiti is small - 0.7% New Zealand's GDP

This is partly geography (location, population and landscape) and partly a historical reliance on primary industries.

If we want to grow our share of the GDP, and have a stronger, more resilient economy, we may need to re-shape what we do, how we do it and where we do it.

"He tangata – it is people"

THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Population growth is significant

- » In 30 years we expect to have another 4,000 people living in our region (nearly 9% increase) – mostly from inward migration.
- » Gisborne is facing the prospect of an aging population. Currently the 70+ years age group accounts for 10% of the population. This is expected to increase to 16% of the population aged over 70 years by 2048.
- » Housing affordability is becoming an issue within Gisborne city. Median house prices rose by \$44,000 during 2018 to \$390,000 in February 2019 - up more than 25% on the same time last year.

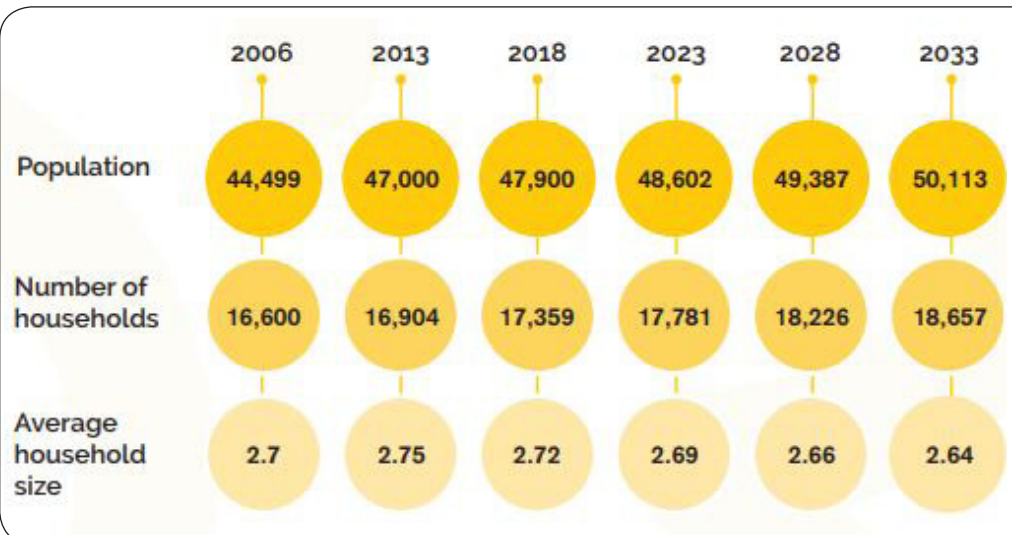
Primary Industry

- » Nearly a quarter (23.8%) of jobs are in the Agriculture, Forestry and Fishing sectors
- » Agriculture, Forestry and Fishing experienced a 18.7% overall drop in the number of workers between 2000 and 2017.

Amount of highly productive soils on Poverty Bay Flats	18,000 ha
--	-----------

Area of the region used for agriculture	588,500 ha
---	------------

Area of the region planted with pine trees	151,139 ha
--	------------



THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Labour market

- » Employment growth in Gisborne has lagged behind the rest of the country. Between 2000 and 2017 Gisborne employment grew around 5.5%, while the rest of the country experienced growth of around 28%.
- » In 2017 the largest sectors were:
 - > Agriculture, Forestry and Fishing
 - > Health care and social assistance, and
 - > Manufacturing.
- » The Agriculture, Forestry and Fishing sectors currently make up a large share (23.8%) of employment, relative to other sectors. Sheep, beef cattle and grain farming is the largest sector in terms of employment - 2,093 workers .
- » Other large sectors include:
 - > Health care and social assistance (2,653 workers)
 - > Professional, scientific, technical, administrative and support services (2,123 workers)
 - > Education and training (2,103 workers).
- » By 2048, the largest sectors are expected to be:
 - > Agriculture, forestry and fishing support services (3,080 jobs; +84% from 2018)
 - > Sheep, beef cattle and grain farming (2,730 jobs; +10%)
 - > Professional, scientific, technical, administrative and support services (2,710 workers; +15% from 2018)
- » The working-age population is decreasing as our people get older.
- » 400 jobs need filling immediately and yet...

Unemployment rate	6.4%
Maori unemployment rate	16.1%
15-24 year olds not in employment	22%

Tourism

In 2018, Gisborne was New Zealand's fastest growing tourism region with the total spend increasing by 14.4% to \$166m

52,700 international visitors visited the region in the year ending December 2018, up from 36,300 the year before (+40%).

Longer term average increase of 5.5% per annum since 2007.

Reasons for visiting in 2018

Holiday	54%
International visitors coming to visit friends or relatives	30%
Business or other purposes	16%





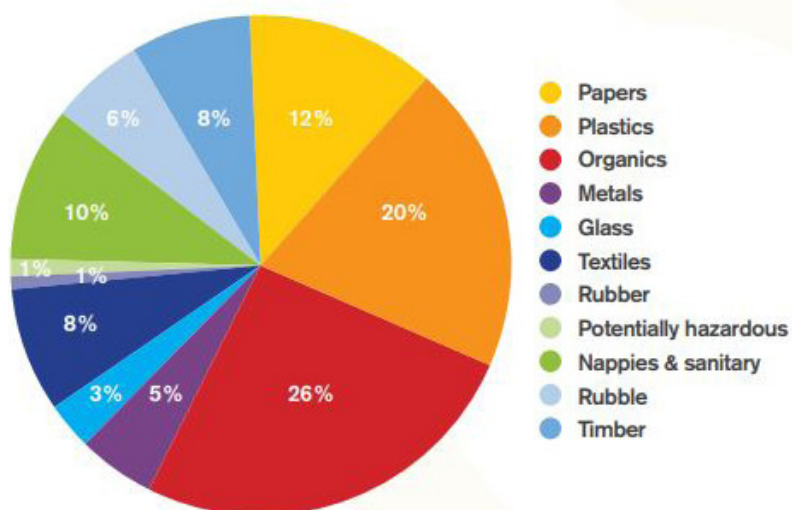
THE EVIDENCE – WHAT DO WE ALREADY KNOW?

Growth and development

The government announced \$153 million of funding to develop Tairāwhiti outlined below:

Project	Description	PGF Funding
Tairāwhiti Roding Package	Package of upgrades to the roading network across the Gisborne region	Up to \$137m
Mt Titirangi - Puhi Kai Iiti Connection	To build 'Titirangi - Puhi Kai iti' landscape and facilities, including a new wananga, and a bridge other facilities at the Cooks Landing Site	Up to \$6.1m
Gisborne Airport	Redevelopment of the Gisborne Airport terminal building and supporting infrastructure	\$5.5m
Cooks Landing Restoration New Zealand Macadamia	Restoration of the Cook Landing Site (CLS) National Historic Reserve	\$1.6m
Industry Development Project	Growing macadamia on Maori land for export	\$995,000
Tairāwhiti Rail Feasibility Study	Feasibility study for a rail tourism venture, including an extended Gisborne-Napier rail cycleway, and use of the Wairoa to Gisborne line for freight purposes (joint study)	Up to \$600,000
Far East Sawmill	To recommission and improve a Gisborne mill site	\$500,000
Manaia Forestry Skills Training (Priority)	Feasibility study to establish a ManaiaSAFE Forestry School	\$301,000
Regional Action Plan Programme Manager	The Programme Manager role has been both valuable and crucial to coordination and reporting on project progress, and coordinating effort in order to accelerate the region's growth.	\$90,000
Tairāwhiti Honey Strategy	Development of a Tairāwhiti Manuka Honey strategy	\$40,000
Water and Waste Management	Application for a feasibility study on a water recycling plant and waste management initiative	\$30,000

- » The Waiapu landfill is the only class 1 landfill in the region
- » We truck most of our waste approximately 300km to a landfill in Paeroa
- » We have too much organic waste currently going to landfill:
- » Green waste currently 5.9% of total waste stream at TPI (748Tpa)
- » Food waste currently 22% of total waste (2795Tpa)
- » Approx. 10,000Tpa of wood bark is transported to Hawke's Bay for processing into compost
- » 87% of Tairāwhiti have access to refuse and recycling services



THE CHALLENGES AND OPPORTUNITIES

Challenges – if we do nothing

- » Tairāwhiti will continue to rely on primary industries that may not be sustainable for example, our economy is the most reliant on forestry in all of New Zealand.
- » The continual shortage of labour will continue to negatively impact on economic growth in the region.
- » An aging population will place constraints on rates affordability.
- » A continuing shortage of housing supply will constrain economic growth and challenge affordability and home ownership rates.
- » Our waste mountain will continue to grow – the economic cost of managing this waste will continue to grow as well.

Opportunities

- » Continue to promote Tairāwhiti as a lifestyle destination and the best place to live in New Zealand.
- » Look at opportunities to invest in local townships to support regional economic development.
- » Support the growth of tourism through an East Coast journey with development of key destinations, activities and infrastructure to support an increase in visitor traffic.
- » Ensure availability of land for new housing to attract and support new businesses establishing in Gisborne.
- » Consider alternative waste technologies to landfill disposal.
- » Promote the reuse of treated wastewater.
- » Development of circular economy for the region.
- » Tech industry development and innovation.

THE QUESTIONS

- » How do we fill the labour market shortage?
 - > How do we attract more people to the region?
 - > Where will they live?
 - > What further infrastructure will we need to support this growth?
- » What infrastructure do we need to support the sustainable development of our key regional industries?
- » What are the opportunities to reduce our waste stream?
- » How do we move towards a more circular economy?
 - > How do we eliminate waste?
 - > How do we create a more liveable region?
 - > How do we regenerate natural systems?
- » What are the opportunities for new industries and business sectors across Tairāwhiti?
 - > Tech hub?
 - > Manufacturing / value added to primary products?

