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What and Why?

New Plymouth is a growing district and there are significant opportunities to improve the transport network to align with the future needs of the district and its people. The purpose of the New Plymouth Integrated Transport Framework (ITF) Programme Business Case (PBC) is to demonstrate the case for change to establish a comprehensive and integrated transportation system for the New Plymouth District over the next 30 years.

The ITF is a PBC that outlines the problems and benefits, the evidence to support the problems and the decision-making process that has led to the selection of a preferred option.

This document has been substantively prepared under the 2021-24 Government Policy Statement on Land Transport (GPS). With the change in Government in late 2023, a new GPS covering 2024-34 has been prepared. While some of the priorities are similar, such as road safety, resilience, and economic growth, there has been a change in emphasis towards maintenance, value for money and increased productivity.

These changes include shifting from a focus on reducing vehicle-kilometres travelled and emissions to making journey times more efficient, increasing public transport patronage, improving access to markets and employment areas, improving housing supply, and making better use of existing capacity. This, along with other Government policies, are still expected to reduce emissions over time but will while supporting economic growth and productivity.

As a result, the PBC has been updated to reflect the changes in the 2024-34 GPS, and feedback on the affordability of the programme to fit in with the New Plymouth District Council's Long Term Plan and 30 year Infrastructure Strategy.



PBC Process

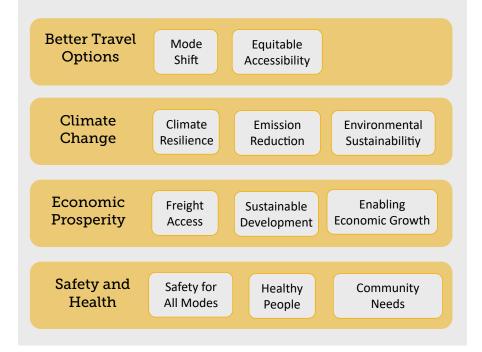
The ITF has been developed following the PBC process outlined below. The PBC team have worked closely with key stakeholders and the community to understand a broad range of views and priorities in the option development phase. Transport modelling was also used to develop, test and rank different short list options against the key performance indicators (KPIs).

Strategic case What is the compelling case for change?	Economic case Does the preferred option optimise value for money?	Commercial case Is the proposed Option commercially viable?	Financial case Is the investment proposal affordable?	Management case How can the proposal be delivered successfully?
	\$			
Develop (or refine)	Develop	High-level only – completed in activity-level business case	High-level only – completed in activity-level business case	High-level only – completed in activity- level business case



Strategic Priorities

The strategies and priorities of the project partners on a national and regional level have been summarised into the following four areas.





The New Plymouth District

The New Plymouth Proposed District Plan and Infrastructure Strategy outline a number of over-arching objectives for the future of the New Plymouth District.

A growing District

Source: Programme business case phase (NZTA website)



 There is a need to house 22,000 more people from 2024 to 2054

A sustainable lifestyle capital

- Community support community wellbeing by creating a safe, creative, active and connected environment that embraces Te Ao Māori
- Sustainability nurture and mitigate the impacts on the environment while also adapting to climate change
- Prosperity grow a resilient, equitable and sustainable economy

Reponding to change



- Transport emissions contribute to climate change and poor personal health outcomes
- Many places in the District are within close proximity to coastal and river environments



Problem Statements

Following an Investment Logic Mapping workshop with key project partners and stakeholders, four key problems were identified that encompass they key transport issues in the New Plymouth District.



Public transport (PT) is not competitive with private vehicle travel or convenient to access by active modes resulting in low public transport use and poor customer experience (35%)



0.5% of New Plymouth catch the bus to work



12.9% of New Plymouth catch the bus to education



The bus is typically 17mins slower to access the CBD compared to driving



Buses typically only depart every 1-2 hours

Locals identified numerous barriers to using PT in a 2023 survey Key employment hubs like Waiwhakaiho-Bell Block South and Westown have limited PT connections



Most urban areas have low density residential developments that make access by public transport, walking and cycling difficult resulting in high dependency on private vehicles and increasing transport costs for the community that especially impact lower socio-economic groups (30%)



The District features mostly low-density housing Many development areas are on the outskirts of town with limited PT or active mode connections



The cost of owning a car is a major household expense (\$215 a week in 2019) and is increasing

People living further away from New Plymouth who likely rely on driving have lower

median incomes



80% of people use a car to get to work in the District, higher than the NZ average



The network is configured to prioritise private vehicles and road freight over other modes resulting in issues across the city and towns including severance (particularly for centres on state highways, between communities and the coast, and residential areas with key destinations), and declining amenity (noise, dust, and pollution).

(20%)



Highways and Arterial roads across the District also serve as key activity and people focussed streets Places like SH45 and Bell Block where people want to walk or cycle for work or education are restricted by busy roads with no crossing facilities Traffic volumes on many highways through the District have over 12,000 vehicles a day using them and mean speeds of well over 30km/h where people are expected to cross



1,200 trucks travel through the centre of New Plymouth every day



The current active mode transport networks (walking, cycling, and micro-mobility) are fragmented and have unsafe connections resulting in safety issues, poor perception of the network and low active mode uptake (15%)

- The New Plymouth cycle network has significant gaps and unsafe existing facilities that discourage people from riding
- The Network Operating Framework report showed many pedestrian level of service gaps making it difficult to walk around the District urban areas



- There have been 184 crashes involving active mode users in the past five years (2018-2022)
- User counts are high on good quality facilities like the Coastal Walkway, but low everywhere else.



Resident perception surveys show declining satisfaction with the footpath and cycle network



Project Benefits and Interventions

The preferred programme is expected to deliver on the following four investment benefits, and some of the listed interventions.

Public transport (PT) is accessible, convenient and the preferred mode of transport for many (30%)

> Align PT routes with destinations and improve accessibility

Improve PT frequency and level-of-service

Improve PT infrastructure and travel time

Reduce the need to travel where PT is less viable

Decreased reliance on cars as the primary mode of transport and increased walking, cycling and PT use (35%)

> Compact urban form

Improve access to lower cost modes

Resilient network connections at pinch points

Improved access to amenities (coast, schools and services) and employment along engaging and enjoyable transport

Reconfigure streets for movement and place by reallocating space

corridors (15%)

Support lower-emission transport

behaviour

management

Safe road connections Travel demand and

A safe and

connected city and

towns to walk and

cycle with active

and healthy

communities (20%)

Complete the urban

cycle network

Improve active mode

accessibility and

attractiveness

Improve safety for

existing facilities

Short List Options

At the short list stage, four programme options were considered, which were tested with project partners and stakeholders.

These were the three options taken forward from the long list stage, as well as a new 'Common interventions' option that combined all of the common elements from the three unique short list options.

- Common Interventions Smaller scale works with a strong case for change that are present in all other short list options.
- Liveability Improved liveability and accessibility of centres with a focus on people and active modes.
- **Connected Urban Centres** Creating local activity centres with high efficiency transport corridors and active mode and public transport connections to New Plymouth CBD.
- **Reduce Transport Emissions Hybrid** Supporting increased urban densification by integrating transport with land use and maximising transport emissions reduction using all levers.



Programme Option Comparison

Transport modelling data, economic analysis and subject matter experts informed the Multi Criteria Analysis, which was used to select the preferred option.

The preferred option 'Connected urban centres' had the highest average MCA ranking following the sensitivity testing. The scheduling of this programme was then improved to increase affordability as detailed on the next page.

	Assessment Component	Common interventions	Liveability	Connected urban centres	Reduced transport emissions hybrid
	IO1: Improve public transport network access, reliability, and travel times.	Minor Positive	Minor Positive	Moderate Positive	Moderate Positive
	IO2: Reduce private vehicle reliance and increase mode shift.	Minor Positive	Minor Positive	Moderate Positive	Moderate Positive
ysis	IO3: Positive impact on local centres, network productivity and utilisation.	Neutral	Neutral	Minor Positive	Moderate Positive
Multi Criteria Analysis	IO4: Improve multi-modal access to key amenity locations.	Minor Positive	Moderate Positive	Minor Positive	Moderate Positive
Inw	IO5: Improve the safety and attractiveness of active mode networks.	Minor Positive	High Positive	High Positive	High Positive
	Critical Success Factors	Minor Negative	Moderate Negative	Moderate Negative	Minor Negative
	Impacts and Opportunities	Minor Positive	Moderate Positive	High Positive	Moderate Positive
	keholder Alignment nsultation results	Low	Medium	High	High
	Year Cost Range (\$M) P95 costs	498-773	912-1,635	1,362-2,514	941-1,654
	R Range sitivity testing	1.1 – 3.7	1.0 – 3.4	1.1 – 3.7	1.5 – 4.9



What we Heard

Following stakeholder and community feedback, the most and least prioritised initiatives for each project benefit/challenge are shown below.

Benefit/Challenge	Most prioritised initiative	Least prioritised initiative
Improve public transport	Increasing the frequency of public transport and infrastructure	Increasing parking fees
Adapt to urban development along our coast	Connecting public transport to key destinations and a seperate route for freight	Increasing road capacity
Enable reduced reliance on private vehicles and freight	Increasing accessibility around the district and shifting road freight to other modes	Reducing transport emissions and using alternative fuel
Fix our fragmented active travel network	Improving existing road connections, bridges and raised crossings	Reducing the road speeds

Preferred Option

A core preferred programme was developed from the short list stage to improve programme affordability while still delivering similar outcomes. This was achieved by:

- Rescheduling the costed interventions to smooth the annual and total programme costs while maintaining the critical path of the costed interventions to deliver the modelled outcomes.
- Descoping some of the higher-cost interventions to deliver similar outcomes with better value for money by considering the likely triggers for these interventions and testing different model scenarios.

Core Programme 30-year non-discounted cost range (\$M):

485 - 840

Economic 40-year Discounted Benefits (\$M)

Traffic travel time and reliability

395

Vehicle operating costs

34

Public transport travel time and reliability

1,192

Crash reductions

137

Cycling travel time and user health

882

External impacts of emissions

20

Benefit-Cost Ratio (BCR) range:

3 - 10



Next Steps

Aside from minor interventions already underway, next steps for the programme include follow-on studies to explore interventions in greater detail.

Studies in the first three years of this programme align with the Government Policy Statement on land transport 2024, as they focus on improving network productivity and reliability, providing better low-emission transport options, and enabling better housing supply.

Collaboration between NPDC TRC and NZTA will be required to deliver this programme as funding priorities may change over time. An increase in investment will be required from all parties to achieve the expected benefits of this programme.

Follow-on Studies Focuses

Public transport services detailed business case

Strategic upgrade priorities

District-wide One Network Framework classification

Network Operating Framework Update

District-wide active mode upgrade package investigation

Separated cycleway indicative business case and detailed business cases

Parking strategy

Identifying land use changes to support intensification and housing supply

Regional active mode connections

Road pricing strategy

Western Ring Route indicative business case



The Future Benefits

A selection of the Key Performance Indicators (KPIs) have been shown across the different modes to give an indication of the expected programme benefits.

The KPIs indicate benefits for all road users, including cars and freight, as a result of the projected mode shift and transport infrastructure interventions.

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reli	Improverselling public	ort rk s, , and
em	Reduc privat vehicliance ranspo relate issions increas	e e and ort d and se

Positive

impact on

local centres,

network

productivity and

utilisation

Improve the

safety and

attractiveness

of active mode

networks for

all users

school trips KPI 5: Tonnes of CO2E (change compared to do-minimum) KPI 6b: VKT (change compared to do-minimum) KPI 7: PT mode share for journey to work trips KPI 10: PT travel time minus car travel time (Average of 4 Origins to CBD in mins) KPI 13a: % of freight or non-arterial corridors KPI 13b: Freight travel

Von Borformano	Medium-Term		Long-Term	
Key Performance Indicators	Do Minimum	Preferred Programme	Do Minimum	Preferre Program
KPI 3: % of population within 400 metres PT walking catchments.	57.2%	57.2%	55.5%	57.5%
KPI 4b: PT mode share for AM journey to school trips	13.9%	17.7%	13.5%	28.2%
KPI 5: Tonnes of CO2E (change compared to do-minimum)	-	-6%	-	-15%
KPI 6b: VKT (change compared to do-minimum)		-4%		-14%
KPI 7: PT mode share for journey to work trips	0.7%	6.4%	0.7%	18.9%
KPI 10: PT travel time minus car travel time (Average of 4 Origins to CBD in mins)	17	13	16.7	8.7
KPI 13a: % of freight on non-arterial corridors	76.5%	76.1%	75.1%	77.9%
KPI 13b: Freight travel times from east to port (change compared to do-minimum in mins)	-	-0.1	-	-1.6
KPI 14: Annual deaths and serious injuries for cyclists	2.88	1.4	3.72	0.92
KPI 15: % of primary cycling network that is safe and separated	13%	23%	13%	29%

Preferred

57.5%

28.2%

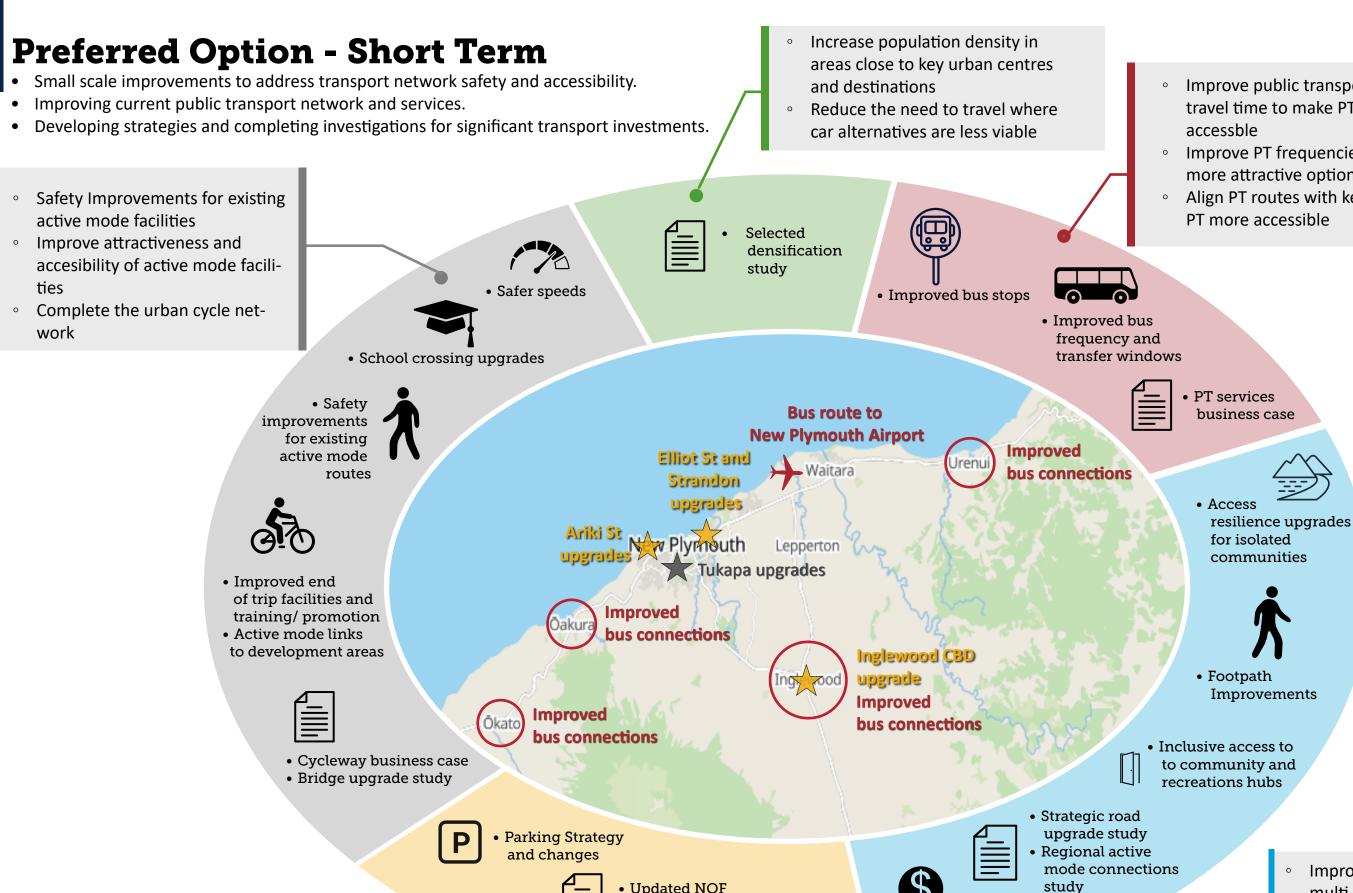
-15%

-14%

18.9%

77.9%

Programm



- Travel demand and travel behaviour management
- Reconfigure streets to align with One Network Framework outcomes and provide facilities for all modes

- **Updated NOF** and ONF Study



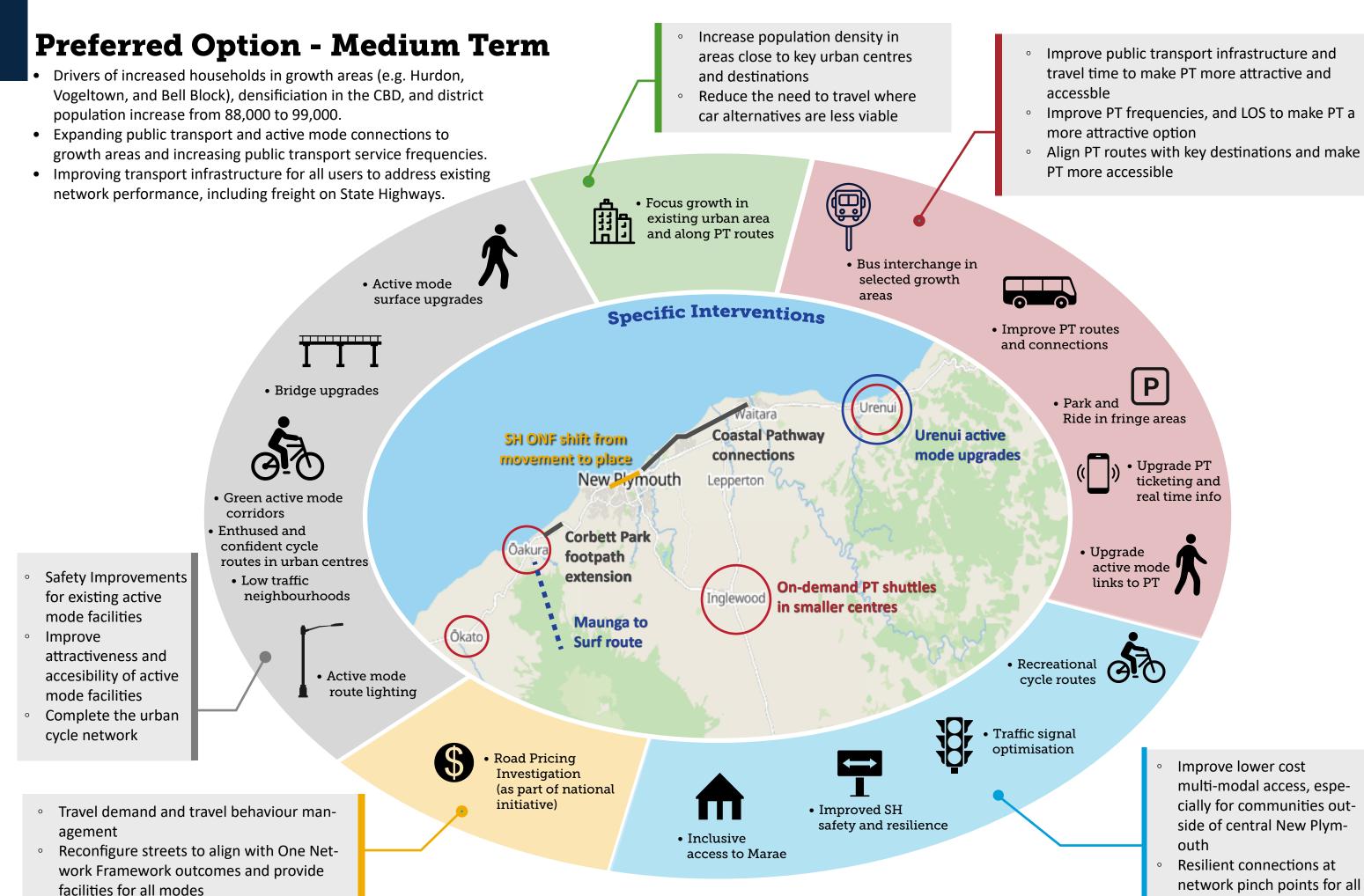
 Traffic calming to focus vehicles on arterials

- Subsidy for bus and bike users

- Improve public transport infrastructure and travel time to make PT more attractive and
- Improve PT frequencies, and LOS to make PT a more attractive option
- Align PT routes with key destinations and make PT more accessible

Improve lower cost multi-modal access, especially for communities outside of central New Plymouth

Resilient connections at network pinch points for all modes



Note all interventions in the medium term will proceed pending further investigation in the short term

modes

Preferred Option - Long Term

- Drivers of more households in larger growth areas (e.g., Hurdon, Smart Road, Bell Block, and Ōakura) and district population increase from 88,000 to 110,000+.
- Further expanding public transport and active mode connections to growth areas.
- Improving transport infrastructure efficiency, including further freight developments.
- Implementing significant transport infrastructure investments and land use changes to support and connect thriving centres across the district.

- Increase population density in areas close to key urban centres and destinations
- Reduce the need to travel where car alternatives are less viable

- Improve public transport infrastructure and travel time to make PT more attractive and accessble
- Improve PT frequencies, and LOS to make PT a more attractive option
- Align PT routes with key destinations and make PT more accessible



 Focus on mixed use developments away from the CBD Focus on medium and high density developments





- Interested but concerned cycle routes in urban centres
- Safety Improvements for existing active mode facilities
- Improve attractiveness and accesibility of active mode facilities
- Complete the urban cycle network
- Travel demand and travel behaviour management
- Reconfigure streets to align with One Network Framework outcomes and provide facilities for all modes

Priority lanes

New Plymouth

Lelmproved East-West connections

Walkway

Southern Coastal

Ökato active mode upgrades

 Freight hub development and remode freight

• Improved bus hubs



 Road Pricing (dependent on outcome of national initiative) Intersection capacity and resilience upgrades

People focussed

Inglewoodplaces in towns

and centres

- Improve lower cost multi-modal access, especially for communities outside of central New Plymouth
- Resilient connections at network pinch points for all modes

Note all interventions in the long term will proceed pending further investigation in the medium term

