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Transport for Future Urban Growth

Recommendations

That the Board:

- i. Endorse the Transport for Future Urban Growth Programme Business Case developed by Auckland Transport, New Zealand Transport Agency and Auckland Council (shown in Attachment 5)
- ii. Endorse the Transport for Future Urban Growth preferred programme and transport network (shown in Attachment 2 section 11) and includes:
 - a. land use and travel demand plans that influence travel demand patterns and provides a flexible and adaptable future transport network
 - b. prioritised operational and safety enhancements to make the best use of the existing network.
 - c. Rapid and Frequent public transit network extensions connecting to metropolitan and employment centres
 - d. safe walking and cycling plans that connect with regional networks and local attractors (schools, local businesses, recreational facilities)
 - e. strategic and arterial road improvements to enable efficient movement of goods and people and provide access and connections throughout the future urban areas.
- iii. Request Management to:
 - a. progress the preferred transport programme (as shown in Attachment 1) to:
 - i. urgently target provision of infrastructure that will deliver new housing and employment in Unitary Plan live zone and Council structure plan areas including Warkworth, Wainui, Redhills, Whenuapai and Paerata.
 - ii. target provision of connecting infrastructure to address existing conditions and network impacts of greenfield development as identified through ATAP first decade priorities
 - iii. route protection for the entire transport for future urban growth network.
 - b. Following the support of the programme business case by NZ Transport Agency the programme business case be made public

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Executive summary

Auckland Transport has worked in partnership with New Zealand Transport Agency and Auckland Council to jointly develop a programme business case in response to the scale and pace of growth in the Future Urban Growth Areas identified in the Proposed Auckland Unitary Plan. The identified preferred programme provides an integrated multimodal way forward and local movement networks which integrates with high level land use planning.

The cost range of the preferred programme is approximately \$7.6b (50 percentile cost) to \$9.8b (95 percentile cost) over 30 years (current day costs) and has a regional indicative benefit cost ratio over 4. A 50 - 95 percentile cost range provides for the feasibility cost estimates undertaken and the 30 year timeframe of the programme. The proposed transport network will open up the greenfield future urban land to provide for housing development and address regional transport requirements. The proposed transport network is also able to accommodate the recent changes to the Unitary Plan identified in the Council decision on the Independent Hearings Panel which has led to an increase in future urban land by approximately 30% above the original 11,000 hectares.

In developing the programme business case two rounds of public consultation, stakeholder engagement and a series of hui with iwi across Auckland has been undertaken. The feedback from these engagements have been incorporated into the preferred programme.

The Transport for Future Urban Growth (TFUG) preferred programme and associated costs have been incorporated by the Auckland Transport Alignment Project (ATAP) in their investigations and prioritisation process over the next three decades. This has led ATAP to identify in the first decade the future urban area proposed networks as a high priority in the investment programme to open up greenfield land for housing in Auckland with an urgency to route protect the transport network.

The programme business case has been presented and supported by the NZ Transport Agency NLTP Advisory Committee and Value Assurance Committee. The preferred transport network was endorsed by the Auckland Council Development Committee in September and the programme business case will be presented to the NZ Transport Agency Board in October.

Priorities for delivery of elements of the preferred programme have been developed to incorporate the following (as shown in Attachment 1):

1. urgently target provision of infrastructure that will deliver new housing and employment in Unitary Plan live zone and Council structure plan areas including Warkworth, Wainui, Redhills, Whenuapai and Paerata.
2. target provision of connecting infrastructure to address existing conditions and network impacts of greenfield development as identified through ATAP first decade priorities
3. route protection for the entire transport for future urban growth network.

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A communication plan and public facing programme business case is being developed to progress engagement with the community and key stakeholders following the NZ Transport Agency October Board meeting.

The Capital Review Committee has been given regular progress updates since the project began

Strategic context

Population Growth

Up to an additional one million people are expected will live in Auckland by 2046 with approximately 250,000 - 300,000 living in future urban areas (shown in Attachment 2 sections 1-3). The Councils decision on the Independent Hearing Panel on the Auckland Unitary Plan identified over 12,000 hectares of rural land for future urban development through a future urban zone, with the potential to accommodate 150,000 dwellings over 30 years. In terms of employment potential, the future urban areas could provide approximately 1,400 hectares land for to support employment, around 50,000 jobs.

Changes in employment locations in Auckland

The addition of over one million people in Auckland over the next 30 years means an increase in the number of jobs from just under 600,000 to more than 850,000. Travel patterns during peak network use are generally set by where people live and where people work. Employment growth will be focussed on the existing employment centres, including the city centre and Albany with growth in emerging employment centres becoming greater after 2026 in locations such as Auckland Airport, Hobsonville / Westgate, Silverdale / Dairy Flat, Drury and Pukekohe (shown in Attachment 2 section 4).

Freight and Interregional links

Auckland is New Zealand's main "gateway" to international trade and commerce including tourism and is critical to New Zealand's economic welfare. Of significance to the transport network is the internal distribution of freight and other service trips which form the majority of business related trips within Auckland and inter-regional freight which requires road and rail movements between Auckland, Northland, Waikato and the Bay of Plenty (shown in Attachment 2 section 5). Population growth over the next 30 years within Auckland will see a growth in interregional movements between the ports in Tauranga, Auckland and Northland and an increase in internal freight demand by 78% in Auckland.

Current Transport Networks

The current transport network performance has experienced both historical growth and reliance on our strategic networks for intra and inter-regional travel. The future urban areas are located within close proximity to the strategic transport network but have few connections to the strategic road and rail networks and have predominantly a rural arterial and local transport network (shown in Attachment 2 section 6). Forecast population and employment growth between 2013 and 2046 in the future urban areas will see increases in demand on road transport corridors between 50 per cent to 300 per cent (eg Great South Road 11,100 vehicle trips a day in 2013 to 36,400 in 2046) as shown in Attachment 2 section 7. Population

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growth will also see significant increases on the public transport network in the morning peak period with an example showing public transport trips from Papakura are forecast to grow from 2.7 per cent of all trip demands in 2013 to increase to 17.5 per cent of trip demands in 2046¹.

Background

The TFUG project was commissioned following confirmation of the Auckland Council Future Urban Land Supply Strategy in November 2015 which identified the proposed sequencing of growth in greenfield areas.

The project aims were to develop a programme business case that identified a preferred strategic transport network to respond to the scale and pace of growth in these areas while supporting improved regional economic growth over the next 30 years.

The programme business case has been developed between Auckland Transport, the New Zealand Transport Agency and Auckland Council. A critical component of the business case was collaboration with ATAP to ensure alignment with proposed workstream, infrastructure investment proposals and sequencing of activities.

An Investment Logic Mapping (ILM) process was undertaken to confirm the focus of the programme business case identifying two core problems and benefits addressing the problems (shown in Attachment 2 section 8).

Evidence of the pace and scale of the growth was identified through the progression of Special Housing Areas, particularly in the North West and South, and expected pattern of 'live zoning' for future urban areas as per the Auckland Unitary Plan.

Evidence of the existing transport infrastructures' inability to accommodate increased demand without addressing significant deficiencies in local and national network performance or provide for modal shift to public transport, walking and cycling, was identified through ATAP regional modelling.

The project partners identified 5 investment objectives which were derived directly from the ILM benefits and their key performance indicators and measures that the programme business case could be measured against shown in Attachment 2 section 8.

In addition to the investment objectives, success factors were identified incorporating 'Reflecting Mana Whenua Values', deliverability, value for money and affordability.

¹ These figures exclude trips within Papakura and are taken from: Transport Assessment, Short list of Options, Flow, April 2016.

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Programme Business Case

Development of the Programme Business Case

The future urban areas were assessed as a regional programme but specific area based assessments were undertaken geographically to produce options, programmes and identification of a preferred programme and sequence shown in Attachment 2 section 9 - 10.

Key issues associated with each geographical future urban area were examined and a long list of options based on categories were developed for each area encompassing over 260 options.

Identification of a preferred programme

Following the consultation of the long list and short list of options programmes were developed incorporating community and stakeholder feedback utilising the category interventions shown in Attachment 2 section 11.

The programmes were assessed against the investment objectives through a multi-criteria assessment to differentiate and identify a preferred programme. Transport modelling assessments were undertaken against preferred programme and the do minimum to demonstrate the results of preferred programme as shown in Attachment 3. The executive summary of the programme business case is shown in Attachment 5.

Stakeholder engagement and communication

The programme business case was undertaken with engagement across key stakeholders and incorporating mana whenua as partners. Mana whenua were engaged for the following purposes:

- To seek feedback on the draft preferred transport networks
- To develop a set of mana whenua values that could be considered and further developed at the next phase of the project
- To provide information that will help to inform the project.

The project partners also identified and engaged with the following key stakeholders throughout the programme business case: local boards, KiwiRail Group, Transpower and other utility providers, Watercare, major developers, business associations, National Road Carriers, Bike Auckland, NZ Defence Force, Ministry of Education, Ministry of Transport, Ministry of Health, Ministry of Business, Innovation and Employment, Greater Auckland, Automobile Association and Auckland Business Forum.

Two stages of consultation were undertaken during the programme business case at the long list of options and at the preferred programme stage. These involved a series of community general public based open days, feedback sessions, online forms and a business owner/operator survey. These were redefined as the process progressed. Results of the consultation are shown in Attachment 4.

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Financial Allocation

Cost range of the preferred network is \$7.6billion (with a P50-P95 cost range of between \$7.6-\$9.8 billion). The Benefit cost ratio is over 4.

The next stage of business case development can be absorbed within existing operational budgets in the current RLTP 2016-2018 for Auckland Transport's component of investigations. NZTA will need to seek variations to RLTP to progress priorities.

There is an opportunity to progress funding of elements of the TFUG network through the Housing Infrastructure Fund. Auckland Transport is currently working with the Council and Watercare to progress Housing Infrastructure Funding opportunities.

Next steps

Following adoption of the programme business case a delivery programme will be undertaken and procured to confirm the prioritisation of the preferred network (as shown in Attachment 1) incorporating;

1. urgently target provision of infrastructure that will deliver new housing and employment in Unitary Plan live zone and Council structure plan areas including Warkworth, Wainui, Redhills, Whenuapai and Paerata.
2. target provision of connecting infrastructure to address existing conditions and network impacts of greenfield development as identified through ATAP first decade priorities
3. route protection for the entire transport for future urban growth network.

A communication plan and public facing programme business case is being developed to progress engagement with the community and key stakeholders following the NZ Transport Agency October Board meeting.

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Attachments

Attachment Number	Description
1	Next steps – priorities
2	Strategic Context and Programme Business Case– Maps and Tables <ol style="list-style-type: none">1. Auckland Population Growth projection2. Population growth forecast and Future Urban Areas3. Household and employment growth within Future Urban Areas4. Changes in employment locations around Auckland5. Proposed growth in freight and Interregional links6. Current Transport Networks7. Forecast Trip Demand for the Future Urban Growth Areas8. Programme Business Case – Problem, Benefits and Investment Objectives9. Programme Business Case – Process undertaken and key issues assessed to deliver a preferred programme10. Option development for programmes11. Identification of a preferred programme and preferred programme maps
3	Transport modelling results of preferred network compared to 2046 do minimum network
4	Public consultation results on the preferred network
5	Transport for Future Urban Growth - Programme Business Case Executive Summary

ATTACHMENTS 2 – 5 – saved in the Resource Centre in Boardbooks

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Document ownership

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Glossary

Acronym	Description
TFUG	Transport for Future Urban Growth
ATAP	Auckland Transport Alignment Programme
PBC	Programme Business Case
ILM	Investment Logic Mapping
RLTP	Regional Land Transport Programme
RTN	Rapid Transit Network
FULSS	Future Urban Land Supply Strategy
HLLUR	High Level Land Use Report