

Agenda for a meeting of the Infrastructure Committee to be held in the Council Chambers, District Office, 15 Galileo Street, Ngaruawahia on **TUESDAY 28 NOVEMBER 2017** commencing at **9.00am**.

Information and recommendations are included in the reports to assist the committee in the decision making process and may not constitute Council's decision or policy until considered by the committee.

1. APOLOGIES AND LEAVE OF ABSENCE

2. CONFIRMATION OF STATUS OF AGENDA

Ms Megan Jolly will be in attendance from 11.00am to discuss item 5.2

3. DISCLOSURES OF INTEREST

4. CONFIRMATION OF MINUTES

Meeting held on Tuesday 26 September 2017

2

5. REPORTS

- | | | |
|-----------|---|------------|
| 5.1 | Consenting methodology to obtain Waikato Regional Council discharge consents for non-routine discharges (insignificant network overflows) | 10 |
| 5.2 | Road Safety Education | 17 |
| 5.3 | Sport Waikato Report for July-September 2017 | 20 |
| 5.4 | Service Delivery Report for October 2017 | 29 |
| 5.5 | Te Awa/Horotiu Cycle Bridge Crossing Increase Approved Contract Sum – Contract 15/288 | 43 |
| 5.6 | Approval of Proposed Te Kauwhata Community Committee/Developer's Road Name List | 46 |
| 5.7 | North Waikato Integrated Growth Management Programme Business Case – In Principle Approved | 50 |
| 5.8 | North Waikato Public Transport Review and Options | 226 |
| 5.9 | Razorback Road Spring Site | 241 |
| 6. | <u>EXCLUSION OF THE PUBLIC</u> | 249 |

GJ Ion

CHIEF EXECUTIVE

Agenda2017\INF\171128 INF OP

Open Meeting

To	Infrastructure Committee
From	Gavin Ion Chief Executive
Date	27 September 2017
Prepared by	Lynette Wainwright Committee Secretary
Chief Executive Approved	Y
Reference #	GOV1318
Report Title	Confirmation of Minutes

1. EXECUTIVE SUMMARY

To confirm the minutes of the Infrastructure Committee meeting held on Tuesday 26 September 2017.

2. RECOMMENDATION

THAT the minutes of the meeting of the Infrastructure Committee held on Tuesday 26 September 2017 be confirmed as a true and correct record of that meeting.

3. ATTACHMENTS

INF minutes 26 September 2017

MINUTES for a meeting of the Infrastructure Committee of the Waikato District Council held in the Council Chambers, District Office, 15 Galileo Street, Ngaruawahia on **TUESDAY 26 SEPTEMBER 2017** commencing at **9.00am**.

Present:

Cr DW Fulton (Chairperson)
His Worship the Mayor Mr AM Sanson *[from 9.07am]*
Cr A Bech
Cr JM Gibb
Cr S Henderson
Cr SD Lynch
Cr RC McGuire
Cr BL Main
Cr EM Patterson
Cr JD Sedgwick
Cr NMD Smith
Cr LR Thomson

Attending:

Mr T Harty (General Manager Service Delivery)
Mrs LM Wainwright (Committee Secretary)
Ms A Hampton (Parks & Reserves Manager)
Ms J Remihana (Programme Delivery Manager)
Mr C Clarke (Roding Manager)
Mr K Pavlovich (Acting Waters Manager)
Mr D MacDougall (Open Spaces Team Leader)
Ms F Devonshire (Sport Waikato)
Mr M Cooper (Sport Waikato)
Mr P Simcock (NZTA)
Mr M James (Waikato District Alliance)
Mr C West (Downer)
Ms K Wilson (Woodlands)
Ms K Abbey (Woodlands)

APOLOGIES AND LEAVE OF ABSENCE

Resolved: (Crs Sedgwick/Thomson)

THAT an apology be received from Cr Church and Cr McNally;

AND THAT an apology for lateness be received from His Worship the Mayor Mr AM Sanson.

CARRIED on the voices

INF1709/01

CONFIRMATION OF STATUS OF AGENDA ITEMS

Resolved: (Crs Fulton/Patterson)

THAT the agenda for a meeting of the Infrastructure Committee held on Tuesday 26 September 2017 be confirmed and all items therein be considered in open meeting with the exception of those items detailed at agenda item 6 which shall be considered with the public excluded;

AND THAT all reports be received;

AND FURTHER THAT in accordance with Standing Order 9.4 the order of business be changed with agenda item 5.8 [*Service Delivery Report for September*] being considered after item 5.3 and that other items be considered as appropriate during the course of the meeting;

AND FURTHER THAT the Chair of the Raglan Community Board be given speaking rights for the duration of the open section of this meeting.

CARRIED on the voices

INF1709/02

DISCLOSURES OF INTEREST

There were no disclosures of interest.

CONFIRMATION OF MINUTES

Resolved: (Crs Patterson/Gibb)

THAT the minutes of a meeting of the Infrastructure Committee held on Tuesday 26 September 2017 be confirmed as a true and correct record of that meeting subject to the editing of Resolution No. INF1708/05 (Natural Parks Reserve Management Plan) from:

“THAT the Infrastructure Committee receives the Draft Natural Parks Reserve Management Plan and notes that this will be released (with any amendments) for public submission in September/October 2017;

AND THAT Council reappoint the Hearings panel comprising of Cr Fulton, Cr Gibb and Cr Main and invite representation from Waikato-Tainui to join the panel to hear any submissions received on the Natural Parks Reserve Management Plan.”

to read:

THAT the Infrastructure Committee receives the Draft Natural Parks Reserve Management Plan and notes that this will be released (with any amendments) for public submission in September/October 2017;

AND THAT Council appoint the Hearings panel comprising of Cr Fulton, Cr Gibb and Cr Main and invite representation from Waikato-Tainui to join the panel to hear any submissions received on the Natural Parks Reserve Management Plan.

CARRIED on the voices

INF1709/03

REPORTS

Halls (Community Space) Strategy - Update
Agenda Item 5.1

The report was received [INF1709/02 refers] and discussion was held.

Resolved: (Crs Sedgwick/Lynch)

THAT Council confirm the outcome of the May 2017 Workshop as being a requirement for staff to consult with the key stakeholders, including Hall Committees and User Groups, in order to prepare an initial draft of a Halls (Community Space) Strategy for presentation to Council following the analysis of data.

CARRIED on the voices

INF1709/04

His Worship the Mayor entered the meeting at 9.07am during discussion on the above item and was present when voting took place.

Coalfields Museum Update
Agenda Item 5.2

The report was received [INF1709/02 refers] and discussion was held.

Resolved: (Crs Lynch/Smith)

THAT Council supports, subject to Council procurement processes being met, sufficient funding be released from the sale proceeds held from the former Harlock Place site for use by Coalfields Museum for the purpose of completing an independent business case to establish the future direction for the operation and accommodation of the Coalfields Museum;

AND THAT Council rescinds Resolution No. WDC1603/13/1 from:

“THAT the report of the General Manager Service Delivery – Waikato Coalfields Museum Business Plan - be received;

AND THAT proceeds from the sale of Harlock Place property are credited to the Property Proceeds Reserve (8329);

AND FURTHER THAT subject to a satisfactory detailed investigation and business case/feasibility study the proceeds of sale less costs and previous advance are dedicated toward achievement of a district archiving facility and museum complex at Puketirini as a partnership between Council and the Waikato Coalfields Museum Board;

AND FURTHER THAT funding for the business case/feasibility study be taken from the Aspirational Projects feasibility studies budget (2MI21000);

AND FURTHER THAT the recommendation be released into open meeting but the report remain confidential and unavailable to the public.”

to read:

“THAT the report of the General Manager Service Delivery – Waikato Coalfields Museum Business Plan - be received;

AND THAT proceeds from the sale of Harlock Place property are credited to the Property Proceeds Reserve (8329);

AND FURTHER THAT funding for the business case/feasibility study be taken from the Aspirational Projects feasibility studies budget (2MI21000);

AND FURTHER THAT the recommendation be released into open meeting but the report remain confidential and unavailable to the public.”

AND FURTHER THAT the finalised business case be presented to Council as soon as practicable, to allow support, or otherwise, of the business case.

CARRIED on the voices

INF1709/05

Wastewater Overflow Continual Improvement Programme (CIP) - Update
Agenda Item 5.3

The report was received [*INF1709/02 refers*] and discussion was held.

Service Delivery Report for September 2017
Agenda Item 5.8

The report was received [*INF1709/02 refers*] and discussion was held. Further discussion was held later in the meeting.

The meeting adjourned at 10.10 and resumed at 10.33am.

Additional Funding Support – Sport Waikato
Agenda Item 5.4

The report was received [*INF1709/02 refers*] and discussion was held.

Resolved: (Crs Smith/Lynch)

THAT the Infrastructure Committee recommends Council support Sport Waikato in the provision of a part-time resource in the North with agreed funding of \$15,000 for the 2017/2018 financial year to be offset against the provision of office space in the Tuakau Office as well as the use of a Waikato District Council Pool Vehicle;

AND THAT Council consider what other funding will be available for future years in the Long Term Plan process.

CARRIED on the voices

INF1709/06

Woodlands Estate Update
Agenda Item 5.7

The report was received [*INF1709/02 refers*] and discussion was held.

Ms Wilson & Ms Abbey gave a verbal presentation and answered questions of the Committee.

Waikato Expressway Update: Presentation by New Zealand Transport Agency
Agenda Item 5.5

The report was received [*INF1709/02 refers*] and discussion was held.

Mr Simcock gave a powerpoint presentation and answered questions of the Committee.

Service Delivery Report for September 2017 (continued)
Agenda Item 5.8

This item was discussed earlier in the meeting and further discussion was held.

Waikato District Alliance – Annual Report
Agenda Item 5.6

The report was received [*INF1709/02 refers*] and discussion was held.

Resolved: (Crs Smith/Patterson)

THAT the Waikato District Alliance be congratulated on their performance to date.

CARRIED on the voices

INF1709/07

Approval of Proposed Te Kowhai Community Committee Road Name List
Agenda Item 5.9

The report was received [*INF1709/02 refers*] and discussion was held.

Resolved: (Crs Smith/Main)

THAT the Committee resolves that the August 2017 “Approved Road Name List” for Te Kowhai is restricted to the following fifty of the sixty names submitted:

Magner Road, Rolio Gillespie Drive, Bycroft Lane, Hartman Place, Mortimer Place, Mary Jones Place, Upton Way, Vic Knight Lane, Wilcock Lane, Hockin Drive, Peter Bently Road, Malvina Major Drive, Jim Hodgson Way, Wallace Way, Henton Way, Clow Road, Clear Road, Max Clear Way, Penbeagle Lane, Ken Cassey Crescent, Trigon Close, Diane Place, Alfred Corbett Close, Nicol Norman Way, Alf Hunt Lane, Con Voss Avenue, McBeth Place, John Bonfrey, Captain Stone Crescent, Corby Crescent, Carpenter Crescent, Byron Lane, Ruck Road, Major Wilson Drive, Les Pearce Drive, Gaskell Lane, Hardwick Lane, Kelsall Lane, O’ Connor Lane, Rochford Way, The Avon Rise, Blue Nose Lane, Opuatia Road, Blanche Lane, Delta Way, Gundagi Terrace, Freetrader Drive, Sandfly Terrace, Prince Albert Place and Ian McLennan Place.

CARRIED on the voices

INF1709/08

EXCLUSION OF THE PUBLIC

Agenda Item 6

Resolved: (Crs Patterson/Main)**THAT** the report of the Chief Executive be received;**AND THAT** the public be excluded from the meeting to enable the Committee to deliberate and make decisions on the following items of business:**Confirmation of Minutes dated Tuesday 22 August 2017****REPORTS**

- a. **Raglan Kopua Holiday Park – Chairperson’s Annual Report 1 July 2016 to 30 June 2017**

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: Ground(s) under section 48(1) for the passing of this resolution is:

Section 7(2)(a)

Section 48(1)(3)(d)

AND THAT the chair of the Raglan Community Board be permitted to remain in the meeting, after the public has been excluded, because of his knowledge of the Raglan Kopua Holiday Park.

CARRIED on the voices**INF1709/09**

Resolutions INF1709/10 – INF1709/12 are contained in the public excluded section of these minutes.

Having resumed open meeting and there being no further business the meeting was declared closed at 12.28pm.

Minutes approved and confirmed this day of 2017.

DW Fulton

CHAIRPERSON

Minutes2017/INF/170926 INF Minutes

Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	10 November 2017
Prepared by	Stephen Howard Senior Planner, Waters
Chief Executive Approved	Y
Reference #	INF2017
Report Title	Consenting methodology to obtain Waikato Regional Council discharge consents for non-routine discharges (insignificant network overflows)

I. EXECUTIVE SUMMARY

Staff have developed a methodology for Waikato District Council (WDC) to obtain necessary Waikato Regional Council (WRC) consents for wastewater treatment plant (WWTP) discharges, alongside insignificant non-routine discharges from the network. The ultimate outcome sought by WDC is that each discrete wastewater network (within river or coastal catchments) will, over time, have either:

- A single WRC discharge consent allowing for treated wastewater and non-routine discharges, or;
- A standalone insignificant non-routine discharge consent, in cases where no WDC wastewater treatment plant consent is held.

The Continuous Improvement Programme (CIP) project group recommend that both consenting processes should be undertaken in unison where possible. This lessens consultation complexity and consenting costs. CIP project team members have started engagement with WRC, allowing discussion on consent application methodology including:

- The establishment of wastewater advisory groups (WAG's) of key stakeholders for Resource Management Act 1991 (RMA) consultation purposes, and;
- Providing contingency time within the WRC consent renewals process, allowing for consideration of future WWTP options, where they offer both sustainable and cost effective asset management.

Discussions are also commencing on the long term options for wastewater treatment plants district-wide, with a view to optimising plants in the long term.

2. RECOMMENDATION

THAT the report from the General Manager Service Delivery be received;

AND THAT Council support the proposed WRC discharge consent consultation methodology where a Wastewater Advisory Group is formed to support and advise Council through the consulting process;

AND FURTHER THAT Council support the approach of investigating longer term sustainable wastewater treatment options for the district, through the consolidation of wastewater treatment plants over the long term.

3. BACKGROUND DISCUSSION

3.1 BACKGROUND

In June 2017, the Infrastructure Committee received a report outlining proposed stakeholder engagement in relation to planned WDC applications for non-routine network discharges. This earlier report recommended the applications and necessary stakeholder engagement for network discharge consents occur alongside treatment plant consent renewals. Since then additional investigations have been undertaken to identify methods of effective stakeholder engagement.

It has been identified that alternative WWTP solutions may be sought by Council in the long term which may impact upon this approach.

3.2 DISCUSSION

3.2.1 Stake Holder Engagement

The proposed consent application approach will require ongoing input from key parties at varying stages of the process. A key concept recommended by staff was the establishment of a 'Wastewater Advisory Group' (WAG). An overarching WAG group would be formed for the establishment of consistent consultation practices between all reticulated settlements and 'Mini WAG's' would be established to engage with stakeholders of the individual locations (Attachment 1 presents the WAG concept, and outlines proposed membership of each group). The expiry dates of existing consents are considered an appropriate prompt for Mini WAG formation. This would enable combined interaction on both renewal and non-routine discharge consenting processes. Standalone non-routine discharge consents for would be required for Pokeno and Tuakau.

Waikato Regional Council has supported this approach and discussions with Waikato Tainui on this approach are underway. Councillor advice on potential members of the WAG would be supported where representation from the following organisations is suggested:

- Waikato District Council
- Waikato Regional Council
- WaikatoTainui
- Waikato District Health Board
- Hamilton City
- Waipa District Council
- Watercare

3.2.2 Potential changes to existing wastewater treatment plant consents

Attachment 2 presents a list of existing WWTP consents with expiry dates. Alternative treatment options exist for most WDC wastewater networks (see Attachment 3) and initial

centralisation options are currently being investigated. Any implementation of these scenarios would be subject to future Council decision making processes and successful LTP consideration.

At this stage it believed to be beneficial to at least present these scenarios to WRC now, as it establishes appropriate principles relevant to discharge consent renewal applications.

Council's position would centre on the logic of the investment of greater time and resources in establishing longer term solutions, rather than any advanced and costly interim solution. An example would be the expiry of the Meremere WWTP consent in 2018. Options may exist to pipe wastewater to Pukekohe in the future to Watercare's Pukekohe WWTP. Benefits therefore exist with continued operation of the present Meremere treatment system as an interim solution (ie beyond 2018) while the potential for the longer term solution is investigated. RMA processes may allow for this, subject to WRC support. Present engagement is underway with appropriate WRC staff regarding both matters above. WRC has provided 'in principle' support for engagement processes proposed.

4. ANALYSIS OF OPTIONS

4.1 OPTIONS

There are two options for Council to consider:

- Option 1:** Council support the WAG consultation methodology to obtain WRC treatment plant and network discharge consents. Council also support staff investigation of centralisation options of WWTP and discussion with WRC on potential for these future scenarios.
- Option 2:** An alternative staff approach is taken in respect to discharge consent consultation and centralisation options are not introduced to WRC as feasible future scenarios at this time.

5. CONSIDERATION

5.1 FINANCIAL

Present WRC engagement is a staff activity only, requiring no additional financial resources. Future funding for necessary discharge consent applications (CIP non-routine discharges and WWTP renewals) will be addressed in the 2018-2028 LTP.

5.2 LEGAL

RMA

Schedule 4 of the RMA identifies information required as part of an application for resource consent. This includes an assessment of environmental effects, and identification of persons affected by the activity and any consultation undertaken (Clause 6 (1)(f)). Engagement undertaken through the WAG will meet this RMA requirement.

5.3 STRATEGY, PLANS, POLICY AND PARTNERSHIP ALIGNMENT

The Wastewater Overflow Continual Improvement Programme – 18 November 2016 (the Jacobs Report), ie presents Council's current position on addressing wastewater overflows.

Part 15 of the RMA states that discharge of water into water or onto land is allowed with resource consent. Rules within the Waikato Regional Plan allow for discharge consent to be issued for both WWTP and non-routine discharges.

5.4 ASSESSMENT OF SIGNIFICANCE AND ENGAGEMENT POLICY AND OF EXTERNAL STAKEHOLDERS

The WDC *Significance & Engagement Policy* is triggered by the proposal when considering:

- *Policy 1: Engaging with the community is needed to understand the views and preferences of people likely to be affected by or interested in a proposal or decision.*

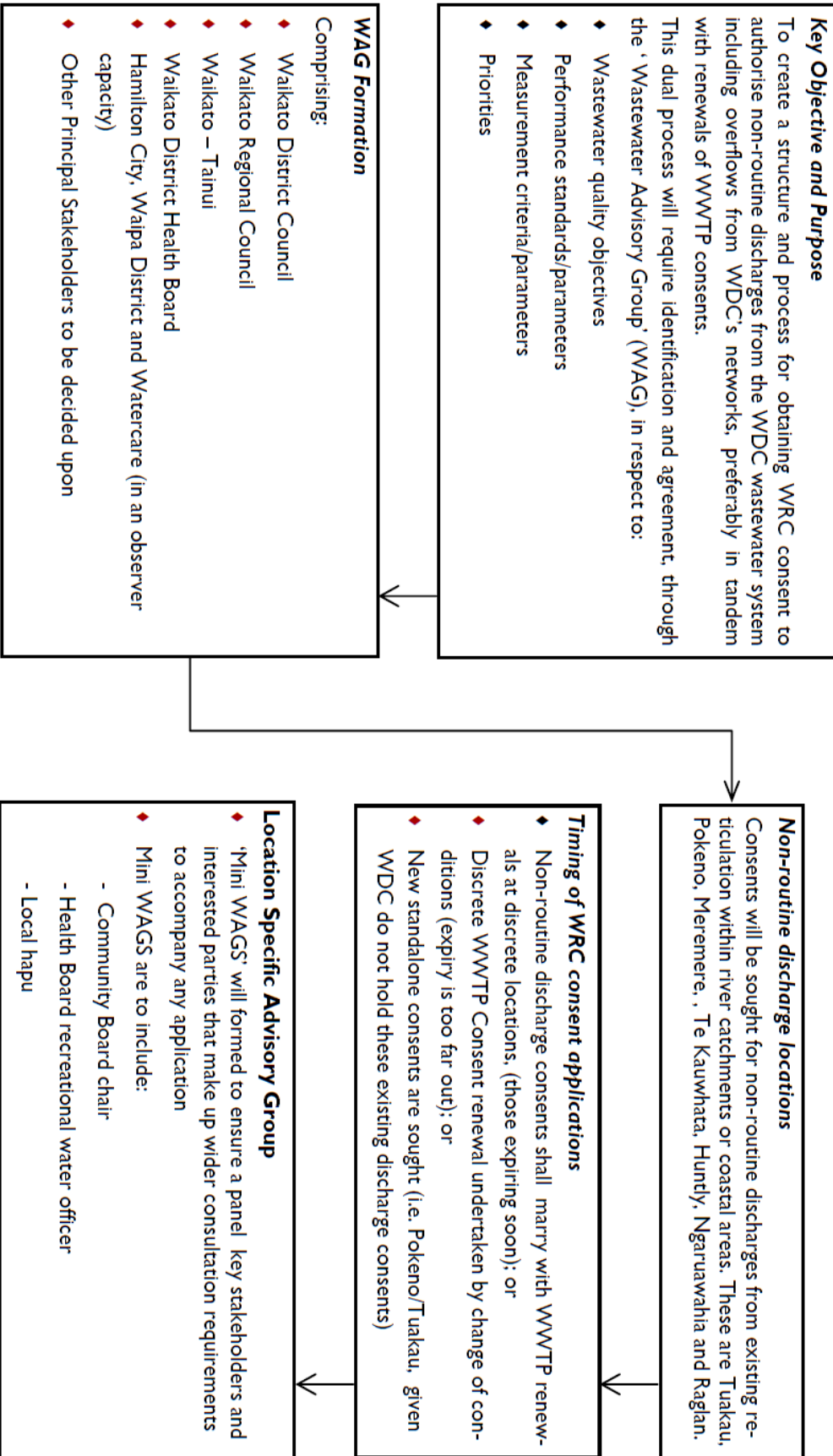
6. CONCLUSION

The strategies identified in this report are proposed to achieve effective consultation between WDC and stakeholders, through the preparation of discharge consent applications. WDC intend to work alongside WRC during this application process, where inter Council discussion needs to address future improved treatment scenarios that could affect the timing of renewal consenting, and subsequent applications. Methods outlined within this report are believed to be the most efficient manner to undertake such discussions.

7. ATTACHMENTS

- Attachment 1: WDC Non-routine Wastewater Discharge Consenting Overview
- Attachment 2: WDC Wastewater Treatment Plant Consent expiry dates
- Attachment 3: Potential wastewater treatment strategies for an improved WDC wastewater network

Attachment I: WDC Non-routine Wastewater Discharge Consenting Overview



Attachment 2: WDC Wastewater Treatment Plant Consent expiry dates

WWTP Permit Location	Permit Activity Type	Permit Expiry Date
Meremere	Discharge - To Water	2018
Te Kowhai	Discharge - To Land	2018
Raglan	Discharge - To Water/Air	2020
Matangi	Discharge - To Land	2021
Te Kauwhata	Discharge - To Water	2028
Huntly	Discharge - To Water	2029
Ngaruawahia	Discharge - To Water/Air	2029
Tauwhare	Discharge - To Land	2035
Maramarua	Discharge - To Land	2039
Other WDC WW Networks that utilise third party WWTP		
Pokeno	Watercare Consent Pukekohe WWTP	2052
Tuakau		2052

Attachment 3: Potential wastewater treatment strategies for an improved WDC wastewater networkHousing Infrastructure Fund (HIF)

A WDC HIF application was accepted by the Government for an upfront interest free loan of \$37 million to enable growth of Te Kauwhata (principally a proposed plan change allowing for 2,600 houses on the shore of Lake Waikare). Investigation started on a wastewater pipeline north (Pukekohe), and south (Huntly), where this has now been refined to a southern option only. It was the expectation that a Te Kauwhata discharge renewal would require an alternative to treated wastewater going to the lake. A successful HIF initiative could enable this scenario.

Centralised Wastewater Treatment Plant

Council is currently looking at options for wastewater treatment across the district but haven't determined a preferred solution as yet. As well as maintaining their current treatment facilities, one of the options being considered is consolidation of treatment facilities at one site, which would treat wastewater from Ngaruawahia, Huntly and Te Kauwhata at one central location, currently Huntly. This will have implication for resource consenting for the existing facilities.

Future Initiatives that could combine Smaller Networks with Larger nearby Networks*Te Kowhai /Matangi*

A longer term solution for these areas could be to discharge to the Hamilton Council wastewater network. WDC can investigate this environmentally sustainable option with Hamilton Council, where the Waikato DC Activity Management Plan (AMP) has identified budgets for implementation for the 2029-2033 period, as part of long term planning.

Meremere – Pukekohe WWTP via Pokeno/Tuakau.

As above, currently AMP funding is allowed for from 2018-2021. The upgrading of pump stations in Pokeno and Tuakau is likely to be required to allow this proposal to be implemented.

Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	10 November 2017
Prepared by	Megan Jolly Road Safety Co-ordinator
Chief Executive Approved	Y
Reference #	INF2017
Report Title	Road Safety Education

1. EXECUTIVE SUMMARY

The purpose of this report is to inform the Infrastructure Committee of key 'road safety education' activities and information for the months of July-October 2017. The report will also highlight the road safety issue of young driver crashes and outline education initiatives that aim to address these crashes. A summary of crashes to date for 2017 on Council managed roads is included.

2. RECOMMENDATION

THAT the report from the General Manager Service Delivery be received.

3. ATTACHMENTS

- Road Safety Education Report

I. Key Activities

The last three months saw completion of the following campaigns:

- Fatigue stop - Whatawhata. This stop targeted motorists travelling long distances but primarily to the Central Plateau.
- Restraint checkpoints - Tuakau 139 child restraints checked
- Senior driver workshops - Tuakau and Huntly
- Young driver days - Tuakau and Hamilton
- Motorcycle skills training x2
- School Initiatives - Supporting SADD, Road safety puppet shows to 6 schools.
- Driver Licence Programme – Monitoring the new licence programme. The pilot programme has been completed which has seen 18 students enrolled and to date 12 have their restricted licence. Talks are being held with the NZ Transport Agency to see if further funding will be available for continuation of the programme.



2. Upcoming Projects

- Motorcycle skills training- Hamilton (November)
- Safe Kids day at the Point Ngaruawahia- WDC focus on cycle helmets. (November)
- Sober driver campaign across the district. (December)
- Young driver training- Hamilton. (December)
- Motorcycle Police education stops- Raglan (December)
- Fatigue Stop- Huntly (December)

3. Young Drivers

This section of the report will briefly summarise young driver crashes within the district (2007-2016) and outline work currently being done by Council to assist young drivers to become safer drivers.

Statistics (2007- 2016) show that young drivers have been involved in 552 crashes on Council managed roads. There was a total of 28 fatalities, 167 seriously Injured and 657 with minor injuries.

- 44% of fatal crashes were alcohol related
- 20% of injury crashes were alcohol related
- 44%of injury crashes involved loss of control /and too fast.
- 15% of injury crashes involved failed to give way
- 10% of injury crashes involved lack of attention

Many of the vehicles involved in the crashes were high occupancy.

However young driver crashes are underrepresented in the Waikato district (15.8%) when compared to Peer Group D¹ (17.5%) and nationally (17.4%).

¹ Members of Peer group D are provincial towns and hinterlands (populations 20,000-75,000 and or rural crashes greater than 55%) Peer groups were developed by NZTA for the purpose of comparing road safety performance.

The Council has implemented many initiatives targeting young drivers over this ten year period. The next four years will be no exception with a variety of different approaches used to specifically target young drivers. These include the following outlined in Table 1.

Table1: Specific young driver initiatives.

Unlicensed Young Drivers	Learner Drivers	SADD	Skills Training	Beach Campaign Raglan
Provide training for facilitators of programmes. Provide resource Kit for the training.	Community mentorship programme for learner drivers.	Council works with other Councils to provide a regional workshop. Supports Students to go to National SADD conference. Provide resources for campaigns/projects.	5 skills training days a year are held.	Campaign targeting young drivers with an emphasis on sober driving.

4. Waikato DC Fatal and Serious Injury Crashes, 2017, Local Roads

There have been four fatal crashes and 33 Serious Injury crashes for January to October 2017 on Council managed roads. Fatal crashes were on Pukekohe East Road, Waerenga Road, Lyons Road and Whitikahu Road. A summary of crash factors follows.

Table2: Fatal and serious injury crashes

Motor cyclists	Truck	New Driver	Pedestrian	Failed to give way	Alcohol drugs suspected	Too fast	Inattention	Fatigue	Road Conditions
7	1	3	1	5	15	3	3	3	3

Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	10 November 2017
Prepared by	Karen Bredesen PA
Chief Executive Approved	Y
Reference/Doc Set #	INF2017
Report Title	Sport Waikato Report for July-September 2017

1. EXECUTIVE SUMMARY

Attached is the Sport Waikato Report for the period July to September 2017. In this report the Waikato District Sport Co-ordinator presents a summary of activities undertaken throughout the District with a number of schools and a variety of groups of all ages during that quarter.

2. RECOMMENDATION

THAT the report from the General Manager Service Delivery be received.

3. ATTACHMENTS

- Sport Waikato Report for the period July-September 2017



Sport Waikato Council Reporting

Waikato District Council July – September 2017

Fiona Devonshire
District Coordinator – Waikato District

Contributing to Council's community wellbeing outcomes

MOVING WAIKATO 2025

A STRATEGY TO GROW PARTICIPATION IN SPORT,
RECREATION AND PHYSICAL ACTIVITY

Moving Waikato 2025 is an evidenced based strategy that seeks to build on the positive momentum of existing loyal partnerships and to increase the provision of opportunities for both participation and sporting success for the people of the region.

ONE VISION

A HEALTHY,
VIBRANT, PHYSICALLY
ACTIVE & SUCCESSFUL
SPORTING REGION

OUR PEOPLE



A focus on the provision of opportunities that meet the needs of the people of our region - more adults and more children out there and active

Women and Girls
Young People
Maori
Rural Communities
Older People

BUILDING COMMUNITIES



A focus on quality local delivery of sport, recreation and physical activity experiences – helping communities to help themselves

Local Sport
Education
Recreation & Physical Activity
Maaori Settings

REGIONAL LEADERSHIP



A focus on regional and national partners working together to lead change and enhance outcomes – leading and delivering change

Insights
Facilities
Urban Growth
Home of High Performance

ACHIEVING SUCCESS THROUGH WORKING TOGETHER

Updates

- **Partnership Update**

Sport Waikato's Michelle Hollands (GM Regional Leadership), Leanne Stewart (Regional Facilities Advisor) and Fiona Devonshire (District Coordinator) presented a partnership update at the August Infrastructure meeting. Michelle spoke to the Partnership Update paper around the Waikato District Council Sport Recreation and Physical Activity Plan, Future planning for the Northern part of the District and the District Coordinator Report

- **Waikato District Council Sport and Recreation Plan**

The Waikato District Council Sport and Recreation Plan remains in draft. Progress has been on hold due to the LTP process. To progress the plan forward Council need to set a date to workshop the plan prior to progressing forward to formal adoption.

- **Waikato Regional Facilities Forum #3 – Regional Aquatics Strategy**

Sport Waikato hosted the third Regional Facilities Forum for 2017 on 20th September at the Avantidrome, Cambridge. Richard Hutchinson (Global Leisure Group – GLG) presented progress thus far with the strategy and is currently being updated to the final version. Julian Todd, Sport NZ presented a National Facilities Update. Matthew Cooper, Sport Waikato presented on Community Led Development "Insights from Canada"

- **Northern Waikato District**

Sport Waikato would like to acknowledge the Waikato District Council for the additional funding support of \$15k secured for the northern Waikato Districts District Coordinator role. This support will be offset by office accommodation and the use of a pool vehicle in Year 1. The Youthtown Sport Waikato partnership initiative to increase delivery capacity to the northern Waikato is currently underway with a planning meeting scheduled for Oct 2017.

- **Reporting Review**

Sport Waikato and Waikato District Council have had discussions around changing the reporting format to Council. Possibly moving toward an interactive presentation rather than speaking to the report. The content will include Fiona's work in the community and initiatives Sport Waikato are undertaking on a strategic level. Further discussions to be had to progress this forward.

Outcome – Participation and Equity:	
KPI	Evidence/ Measurement
Coordinate local KiwiSport initiatives for primary and secondary aged children.	<ul style="list-style-type: none"> • Sport Waikato continues to manage the KiwiSport Funding Initiative for Sport NZ • Two application rounds for Kickstart funding have been held; July and September 2017 • Kickstart applications received within the recent funding round for the Waikato District include: <ul style="list-style-type: none"> ➢ Ngaruawahia Junior Community Softball • Successful CPF Applicants continue to deliver within the Waikato District include: <ul style="list-style-type: none"> ➢ Waikato Golf ➢ WaiBOP Football Federation ➢ Squash Waikato
Work with primary school's sport cluster. To increase sport opportunities and participation	<ul style="list-style-type: none"> • Huntly Schools Cluster Cross Country Event was held on 01 Sept at Te Kauwhata Primary School, 350 students from 10 local schools attended • The six week Huntly Schools Cluster Miniball Module was held across two schools; Te Wharekura o Rakaumanga and Huntly West schools. The Year 3 and 4's played at Huntly West Primary and the Year 5 and 6's and Years 7 and 8's played at Te Wharekura o Rakaumangamanga • 24 teams entered from 6 local schools • The five week Ngaruawahia Schools Miniball module was held at Ngaruawahia High School gymnasium • 18 teams from 4 local schools • The Ngaruawahia Cluster Touch and Netball Day was held on 15th August at Te Kura Kaupapa Maaori o Bernard Ferguson
Work with Secondary Schools in the Waikato District to increase sporting opportunities and participation.	<ul style="list-style-type: none"> • The North Waikato Secondary Schools Football Module was held in Term 3 and hosted by Te Kauwhata College and Ngaruawahia High School • Five teams entered the module from Te Kauwhata College, Huntly College, Ngaruawahia High School and Tai Wananga • Unfortunately, due to inclement weather all module games were not played • Planning is underway for a 2018 Term 3 module
Involvement in or working with providers to increase participation in local events.	<ul style="list-style-type: none"> • Ngaruawahia Junior Community Softball, planning and support around funding, health & safety, competition format provided to this community group with a view to start a junior softball module. The module will be played on Saturday mornings at Ngaruawahia High School
Support holiday programmes	<ul style="list-style-type: none"> • Sport Waikato's Team Energize team once again supported local holiday programmes in the Waikato District • Our Sport Waikato Team Energize team supported the Huntly West and the Huntly Oscar holiday programme by delivering a sports session during week two of the holidays

<p>Local community recreation projects</p>	<ul style="list-style-type: none"> • Sport Waikato continues to support the Huntly Upright & Active Class through the free provision of an exercise space to deliver this weekly class • Supported the Koroneihana Sports Days held on 19th August 2017 at Patterson Park, Ngaruawahia as part of the annual Kingitanga Movement celebrations coordinating the Ki-O-Rahi module • Sport Waikato are part of the planning group for the Te Awa The Great NZ River Ride, Ngaruawahia to Horotiu Perry Bridge Opening Event being held on 2nd November 2017. Planning meetings attended and organisation of Sport Waikato activities underway
---	--

Outcome – Increasing physical Activity and improving nutrition for health, fun and as a lifelong habit	
Quality of life:	Evidence/ Measurement
KPI	Evidence/ Measurement
<p>Deliver parent education sessions related to foundation and fundamental skills.</p>	<ul style="list-style-type: none"> • Our Under 5 Energize team continues to service 31 Centres/Kohanga in the Waikato District • Interactive Displays are designed to capture the parents/caregiver's attention during the picking up or dropping off of children, nine oral health interactive displays were held at various centres
<p>Raise awareness of the importance of fundamental skills through distribution of KiwiBaby, KiwiToddler and KiwiPreschooler manuals</p>	<ul style="list-style-type: none"> • Our Kiwi Manuals are now a free online resource accessible via the Sport Waikato website • eBooks have replaced the printed manuals
<p>Promote and support community activity options/groups</p>	<ul style="list-style-type: none"> • Supported the Plunket NZ Raglan focus sessions for mums and bubs via promotional support and attended the focus group sessions to identify needs of mothers • Marketing and promotional support given to the organisers of Fitness for Life Bootcamp run out of Davies Park, Huntly on a weekly basis. • Our Active & Well coordinator encourages all new Green Prescription clients to attend the Upright and Active group exercise class

<p>Healthy lifestyle sessions/workshops/events</p>	<ul style="list-style-type: none"> Facilitated at the Te Wharekura o Rakaumangamanga Hauora (Wellbeing) Day with a Sport Waikato pop up booth. 5 groups of up to 30 children attended our Sugary Drinks session and physical activity workshop throughout the day Ten sugary drinks, oral health and nutrition modelling workshops were delivered to educators and children by our Under 5 Energize Coordinator 13 nutrition and healthy lunch box workshops were delivered in centres to staff and parents Sport Waikato's Active & Well Team continue to deliver the Green Prescription and Enhanced Green Prescription programme which is a healthy lifestyle support service, delivered via email, phone, face to face and group workshops Team Energize healthy eating tip sheets were sent out to every family enrolled in an Energize school
<p>Support Green Prescription (GRx) programmes in the community</p>	<ul style="list-style-type: none"> Upright & Active weekly exercise classes continue to be held at the Sport Waikato Huntly office on a weekly basis. These classes are low impact and low intensity, ideal for all ages and activity levels Aqua Fit continues to be delivered by our Active & Well Coordinator at the Genesis Energy Huntly Aquatic Centre on a weekly basis. Numbers are stable with between 5-15 participants. This class is low impact and most participants have complex health issues

Outcome – Community Development:	Developing capability to ensure effective delivery of physical activity, recreation and sport
KPI	Evidence/ Measurement
<p>Provide ongoing training to primary school teachers and coaches in understanding and teaching fundamental skills</p>	<ul style="list-style-type: none"> Our Energizers in primary schools continue to deliver professional development workshops and modelling sessions in schools in the Waikato District including; Large ball skills professional development workshop held in Ngaruawahia Primary School Running professional development workshop held in Pukemiro School
<p>Work with primary, intermediate and secondary schools to facilitate development and implementation</p>	<ul style="list-style-type: none"> Leadership modelling session held at Te Uku Primary School Leadership modelling session held at Matangi Primary School Primary school cluster meetings were attended and supported by our school Energizers Attended and facilitated the North Waikato Secondary Schools Cluster meeting held at Sport Waikato Office Huntly Cluster meetings are facilitated by Sport Waikato in the secondary school's space and supported in the primary school's space

<p>Provide opportunities for secondary school leadership through local KiwiSport initiatives and other community sports events</p>	<ul style="list-style-type: none"> • Ongoing support and leadership opportunities offered to KiwiSport Leadership students at local cluster events • Waikato Institute for Leisure and Sports Studies students were offered leadership training at the North Waikato Secondary Schools Basketball module, this helping towards students attaining their Kiwisport Leadership Certificate
<p>Provide development or training for officials' administrators and coaches and clubs. Work with agencies to improve provision for sport.</p>	<ul style="list-style-type: none"> • Planning and club formation support provided to Ngaruawahia Junior Community Softball organisation • Discussions held with local clubs to gauge interest in delivering a Health & Safety workshop for Sports Clubs in early 2018

Outcome – Information and promotion:	Improve coordination and promotion of information of all physical activity recreation and sport opportunities in the district
KPI	Evidence/ Measurement
<p>Providing community with information on events, development and funding opportunities Effective use of communication including information on website, window displays, local newspapers, information centres and other stakeholders</p>	<ul style="list-style-type: none"> • Sport Waikato Be Active database on the Sport Waikato website continues to be a popular first point of contact for activities, class listings and sport club info for the community • Ongoing promotion of the Be Active section to clubs and organisers is promoted i.e. Huntly Line Dancing Club. • Our Sport Waikato Facebook page and local Active Waikato Hub pages are used regularly to share articles, stories, news and events to the community

Outcome – Creating pride in community:	Through supporting, encouraging and valuing volunteers
KPI	Evidence/ Measurement
<p>Recognizing volunteers by supporting volunteer recognition through the Sport Maker Initiative</p>	<ul style="list-style-type: none"> • The Sport Maker Initiative to celebrate and reward volunteers in sport continues to acknowledge Sport Makers and is now managed directly by Lotto NZ. • Volunteer nominations can still be received and entered by Sport Waikato
<p>Hosting Waikato District Sports Awards to recognise contribution to and excellence in sport</p>	<ul style="list-style-type: none"> • The 2017 Waikato District Sports Awards will be held on Wednesday 15th November 2017 • Nominations closed 30th Sept 2017 • 42 nominations have been received across 9 categories • Judging took place on 18th October 2017 • Our 2017 Judges are Jay Ferguson, NZ Police, Morgan Kutia, Te Wananga o Aotearoa and Lisa Wilson from Waahi Whaanau Trust • Ongoing preparation and planning is underway for this event with an America's Cup theme to celebrate the recent success



Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	10 November 2017
Prepared by	Karen Bredesen PA
Chief Executive Approved	Y
Reference/Doc Set #	INF 2017
Report Title	Service Delivery Report for October 2017

1. EXECUTIVE SUMMARY

This report is to inform the Infrastructure Committee of significant operations/projects commenced, in progress, or completed since the date of the last report.

2. RECOMMENDATION

THAT the report from the General Manager Service Delivery be received.

3. ATTACHMENTS

- Dash Board Reports

REPORT

Service Delivery

Programme Delivery

Whatawhata Community Facility

The preferred site for a community facility has been identified as the former Whatawhata Hall site. Staff are working alongside the Whatawhata Residents and Ratepayers Association to develop a detailed concept plan and work through the resource consent process. The detailed concept plan will be included with the consultation documentation when Council undertakes the formal consultation process early 2018.

Tamahere Recreation Reserve

Final works to be completed under the earthworks contract. Contract award report for next phase construction is included in Infrastructure November 2017 agenda.

Tamahere Walkways

A design review is currently underway and once complete the works go to tender. This is targeted for December this year.

Te Kauwhata Walkways

A meeting is to be held with the sub-group of the Te Kauwhata Community Board to discuss the Te Kauwhata walkway/cycleway project.

A design review will then be undertaken to incorporate the feedback. On completion of the design review, the project will be tendered.

Waters Renewals

The 2017/18 contract document and designs are completed and procurement process has commenced with neighbouring Waipa District Council. Works are targeted to commence early 2018.

Wastewater Renewals

The 2017/18 wastewater renewals programme is focussed in Raglan following CCTV works undertaken last year.

Wastewater Pump Station Renewals

The 2017/18 wastewater pump station renewals programme has been provided by Waters Assets. Procurement planning is underway with a combined Waipa District Council and Waikato District Council collaborative work delivery model being considered.

Reservoirs

This project comprises construction of four reservoirs, and associated works. Central Districts reservoir located at Jackson Street, Ngaruawahia, is currently going through the commissioning process, however, the power supply by WEL has been delayed due to ongoing issues with KiwiRail (now finalised). Hopuhopu reservoir located at Tainui College is going through the commissioning process. Huntly Reservoir at the Water Treatment Plant is also completed. Filling and monitoring of settlement has been delayed due to other contract works (Hopuhopu to Huntly pipeline). The Pokeno Reservoir located at the end of Hitchens Road is fully constructed and ready to fill, pending initial base seal inspection. There are some delays whilst power is connected to the site.

Pipelines

- Ngaruawahia, Kent & George Stormwater Upgrade is progressing slowly due to the challenging ground conditions. Completion forecast is December 2017.



George Street Groundwater Dewatering

- Hopuhopu to Huntly watermain connection is progressing with 7.5km of the proposed 8km of mains installed to date. Two river crossings still remain. The main Waikato River crossing at Huntly is awaiting the finalisation of a land easement deal. There have been significant challenges on this project due to extensive unforeseen underground services encountered at the Huntly Water Treatment Plant. As a result, remote drill tracking for river crossings due to elevated river levels, and construction methodology change mandated by the Electricity Act 1992 due to close proximity to national grid electrical transmission lines, were required.

Staff are in discussion with the contractor on the impact of these challenges.

Wastewater Pump Station Emergency Storage Tanks

Daisy Street storage tanks are installed, and connection works are progressing.

Waikato Esplanade storage tanks consent applications have been lodged. Once consent is received, the construction of the tanks will commence.

Raglan Stormwater Reticulation Extensions

Detailed design of the Wainui Road Stormwater Upgrade is underway and a procurement process will follow.

Meremere Hall and Library

A community open day was held on Wednesday 6 September seeking feedback around functionality of the proposed library. Detailed design is underway taking into consideration the feedback from the community. Three design options are currently being progressed with a preferred option to be determined.

District-Wide Toilets

Renewal work to be completed for Tuakau and The Point facility, including removal of automation features and general tidy up.

The new toilet facility at Centennial Park has been scoped. The Customer Support team is organising a competition to design the artwork to appear on the outside of the toilets through the Ngaruawahia Library.

Pokeno design is a work in progress, resource consent issues need to be worked through.

Raglan Wharf Handrails

Agreement has been gained from key stakeholders around concept and design. High level costing will be completed with a budget shortfall likely. A report to Infrastructure Committee will be done, if additional funding is required.

Pokeno Wastewater Phase II

Pokeno Wastewater Scheme Phase 2 is nearing practical completion (2 weeks). The project encompassed connecting properties to the wastewater system, construction of approximately 6km of pipe (3.2km of mains and 2.8km of property connections), and approximately 45 manholes. All main infrastructure is constructed with one private connection to be completed. Reinstatement is underway with 85% complete.

Front of House/Call Centre

Contract has been awarded with initial works to start late December. Work to occur over the Christmas/New Year period. A temporary front counter to be located within the committee rooms, or to have the services provided out of the Ngaruawahia Library. Call centre works to start first with front counter to be installed over the Christmas break.

Roading

Rural Fire Season Declarations

Fire and Emergency New Zealand (FENZ) is the sole fire authority for NZ. In the past local bodies had differing rural fire season start and end points. Some local bodies had set start and end dates while others had season dates triggered by fire weather indices.

FENZ is signalling its intention to rationalise fire season start times and finish times across the Waikato. This will ensure continuity and consistency across the Waikato. Waipa District Council Otorohanga District Council and Auckland Council currently start their fire season on 1 December.

FENZ intends to maintain an open fire season from 1 April to 1 December. On 1 December a restricted fire season will start and any open fire in the rural boundaries will require a permit from FENZ. Permits are available for free from FENZ. See: <http://www.checkitsalright.nz/>

Should fire weather indices reach high levels permits may not be granted. If fire weather indices reach extreme levels a total fire ban may be implemented.

To ensure our local volunteer firefighting crews get some well-earned rest over the holiday season permits will not be issued from 20 December to 5 January (each year)

Fires that do not require a fire permit in a Restricted or Prohibited Fire Season include:

- Gas cooker or gas barbeque
- Contained barbeque
- Cultural (hangi, umu)
- Incinerator

The following restrictions will remain:

Fire permits are required for all fires on Public Conservation Land other than for an approved campground fire or a fire lit for cooking or for warmth:

www.doc.govt.nz/parks-and-recreation/know-before-you-go/wildfires/

365 day Restricted Fire Season status for:

- All Coastal areas
- Whangamarino swamp

365 day Prohibited Fire Season status for:

- Waiuku Forest
- Maramarua Forest
- Onewhero Forest

For fires in urban areas are currently managed by the local bodies until July 2018.

Further information around fire seasons and fire weather is available at <http://www.checkitsalright.nz/>

The current requirements of Council will be, on behalf of Fire and Emergency New Zealand (FENZ) undertaking the issuing of the fire permits. Any time and costs associated for this activity to be charged back to FENZ as per the Waikato District Council/FENZ transfer agreement. We also would like to use your existing media presence by providing information to your team to publish from time to time.

Council will also still be required to respond and enforce nuisance fire complaints, with the Regional Council enforcing air pollution/noxious smoke complaints (such as burning plastics and tyres etc).

Huntly Pedestrian Bridge Update

Waikato District Council has put together an approximate work programme to reinstate the Huntly footbridge.

The bridge was removed in September after a truck travelling on State Highway 1 hit it and damaged the two-legged pier that holds the footbridge up on the Main Street side of the bridge.

After working with insurers and completing required design and tendering processes for the work to go ahead, the following approximate timeframe has been completed:

- Fabrication of the new pier is due to start on 16 November and be completed by 22 November.
- Epoxy painting/coating is due to be completed by 28 November.
- Installation of the new pier and reinstatement of the bridge is planned for 30 November.

Status of Roading Projects

Rehabilitation

2017/18

Design Phase

Ward	Name/Location	RP Start	RP end	Lengths (km) to be constructed	Status
Ngaruawahia	Hakarimata Rd	2.600	3.414	0.814	Was 1.414km long but initial 600m has been deferred until property issues are resolved.
Onewhero - Te Akau	Highway 22 (walls)	26.700	27.450	0.750	Two main retaining walls completed. Detailed road alignment design is complete. Site visit needed to confirm design is suitable.
Hukanui - Waerenga	Keith Rd	0.600	1.945	1.345	Off Waerenga Rd east of Te Kauwhata. Section from RP 1.945 to 3.648 design is complete but has been deferred in order to carry out this section which has deteriorated faster than expected.
Onewhero - Te Akau	Mercer Ferry Rd	1.578	2.910	1.332	Hill ascent. Design being revisited to better match budget constraints.
Whangamarino	Kopuku Rd	6.080	6.965	0.885	Design underway.
Whangamarino	Kopuku Rd	7.940	8.140	0.200	Design underway.
Whangamarino	Kopuku Rd	8.440	9.374	0.934	Design underway.
Hukanui - Waerenga	Orini Rd	8.627	10.150	1.523	Tenfoot Rd to Piri Rd. Design underway.
Awaroa - Tuakau	Ray Wright Rd	0.385	1.265	0.880	From Nandina Lane west This project has been deferred until the 2017/18 season. The straight section at the western end of this site was not able to be rehabilitated due to stormwater issues still to be resolved between Auckland City and Waikato Regional Council. Re-design underway following decision not to proceed with the land purchase required for initial design.
Huntly	Tregoweth Lane	0.460	0.642	0.182	Deferred to 2018/19. From Metrapanel north.

Construction Phase

Ward	Name/Location	RP Start	RP end	Lengths (km) to be constructed	Status
Awaroa - Tuakau	Whangarata Rd	1.356	1.586	0.230	Construction complete.
Eureka	Tauwhare Rd	5.924	6.940	1.016	Construction complete.
Awaroa - Tuakau	Bright Rd	0.003	1.840	1.837	Construction complete.
Whangamarino	Falls Rd I	0.010	1.333	1.323	From Waerenga Rd intersection. Vegetation removal underway.
Whangamarino	Falls Rd II	1.842	2.080	0.238	North of Waikiwi Rd. Earthworks underway.
Whangamarino	Falls Rd III	2.638	3.429	0.791	North of Waikiwi Rd. Earthworks underway.
Onewhero - Te Akau	Hetherington Rd	17.500	17.758	0.258	Construction of most of this project was completed in 2016/17 season. Some earthworks and rehabilitation will be undertaken to complete the project to provide two lanes.
Onewhero - Te Akau	Hetherington Rd	18.050	18.200	0.15	Construction of most of this project was completed in 2016/17 season. Some earthworks and rehabilitation will be undertaken in to complete the project to provide two lanes.
Onewhero - Te Akau	Hetherington Rd	19.375	19.741	0.366	Slumped area west of 2016/17 project. Removed vegetation and carried out drainage improvement works. Road will be re-levelled and left unsealed to assess success of drainage changes. If no further movement, will reshape pavement and seal.
Hukanui - Waerenga	Mangapiko Valley Rd	0.906	1.930	1.024	East off Storey Rd, alongside golf course. Pavement construction underway.
Awaroa - Tuakau	Ridge Rd	1.999	2.512	0.513	From the quarry south. Earthworks underway.
Hukanui - Waerenga	Tahuna Rd	17.299	17.586	0.287	From Te Hoe to the east.
Huntly	Waingarō Rd	14.550	14.780	0.230	West of long left bend (east of Rotowaro Rd). Vegetation removal underway.
Onewhero - Te Akau	Waikaretu Valley Rd	1.190	1.900	0.710	1.2km from Highway 22 past long slip area.
Awaroa - Tuakau	Whangarata Rd	2.892	3.663	0.771	From Ridge Rd (rail overbridge) past Ewing Rd then west.
Awaroa - Tuakau	Munro Rd Urban Upgrade	0.400	0.740	0.340	Urban upgrade alongside Pokeno Heights subdivision, including Helenslee Rd intersection.

Ward	Name/Location	RP Start	RP end	Lengths (km) to be constructed	Status
Awaroa - Tuakau	Helenslee Rd Urban Upgrade	0.785	0.904	0.119	Urban upgrade alongside Pokeno Heights subdivision, including Munro Rd intersection.

Waikato District Alliance (WDA)

Month Overview

October was a busy month dominated by continued maintenance focus on slip repairs, flooding and customer requests. Good progress has been made on both Rehab construction and Reseals.

Continued focus on our Zero Harm culture has ensured no Medical or First Aid injuries this month and all plant and property incidents have been investigated and staff briefed on outcomes/preventative actions. The most significant incident was the loss of twin wheels on a hired trailer. We are now carrying out audits of daily pre starts to ensure this sort of incident doesn't reoccur.

LED veranda lighting installation was completed in Huntly and Ngaruawahia CBDs providing enhanced lighting and at lower operational cost.

The new Alliance Manager Gary Dela Rue started this month and Whineray Arries was offered the position of Alliance Quality Co-Ordinator.

To enhance our pavement repair resources we have taken delivery of a brand new Water/Cement Combination truck unit .

In summary, October was a safe, responsive and highly productive month despite inclement weather.

Zero Harm

There were no Medical Treatment Injuries (MTI) and no First Aid Injuries reported in October.

Non-injury incidents included damage to plant due to driver inattention, lost wheels from a hired trailer, accidental damage to plant by a member of the public and fuel theft from vehicle. Topics raised during toolbox meetings during the month and with the individuals involved.

Near misses reported during the period, included a breach of the Code of Temporary Traffic Management which was discussed with staff involved and plant inspection not completed which was raised at the next Toolbox meeting.

Asset Management

The Asset Management team continue to work in conjunction with the WDC Roding team, on the Activity Management Plans, which form part of the Transport Agency and WDC LTP submissions.

Capital Works

The capital works team have been putting a lot of emphasis lately into looking at alternative low cost design concepts to reduce the overall budget spend on certain rehabilitation sites for this year's programme. This has been helped by the safety engineer coming up with alternative options to reduce the overall speed environment on problematic sites.

Enabling works are progressing well with four sites currently under construction on the network in preparation for pavement construction in late November.

Resurfacing of the network is progressing well with 26% of the programme complete to date. November and December are big months for the resealing on the network, this is when the WDA can see the benefit of the forward planning completed in the lead up to the start of the season.

Maintenance

Throughout the last couple of months we have completed underslip repairs on Bluff Road, Klondyke Road and Kellyville Road.



Bluff Road underslip repair

The maintenance team have also responded to additional damage caused during flooding which occurred predominantly in the wider Te Akau area.

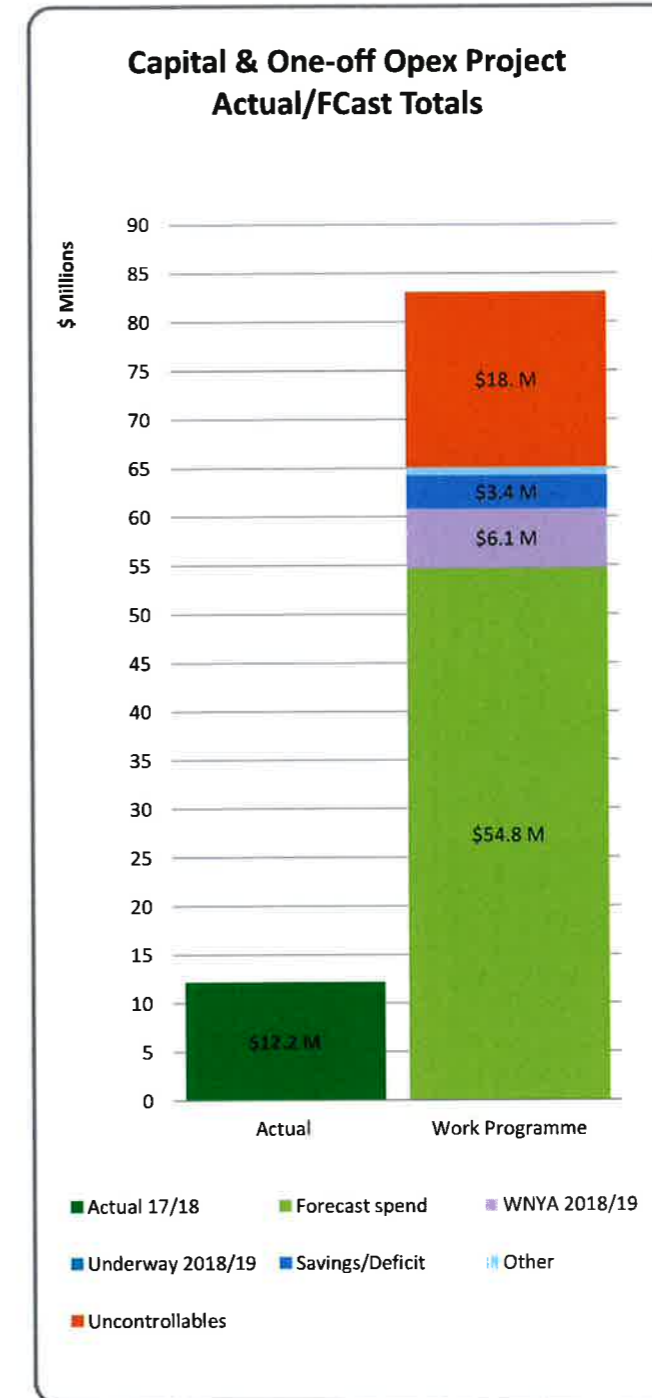
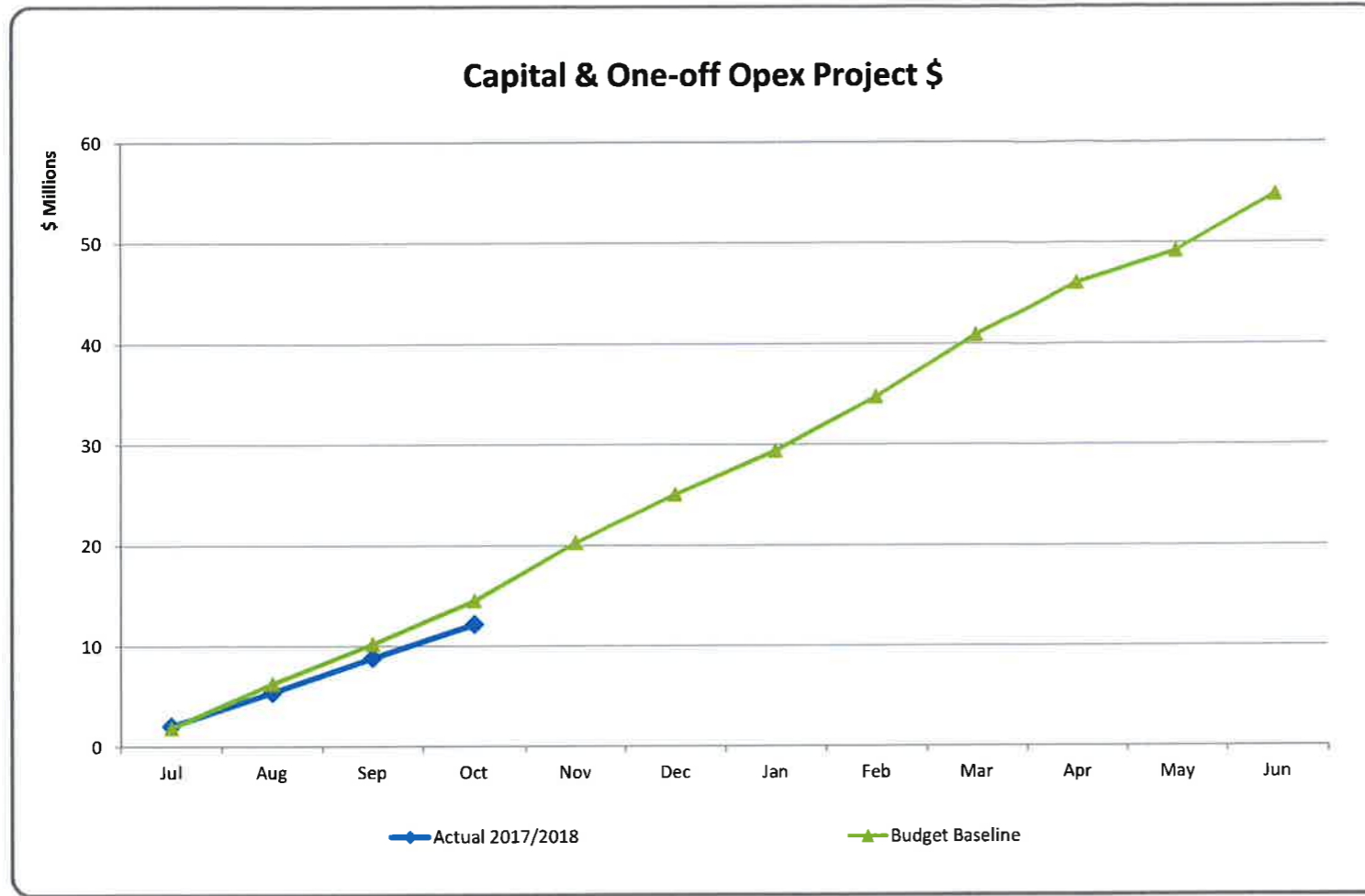
11 culvert installations were completed and predominately focused CRM response works around the Raglan area.

Pre-reseal patch repairs have been progressing well with over 11,000m² completed during October. We have also taken delivery of a brand new water/cement spreading combination truck unit to supplement the new stabilising crew.



New water / Cement Combi Unit

SERVICE DELIVERY GM SUMMARY to OCTOBER 2017

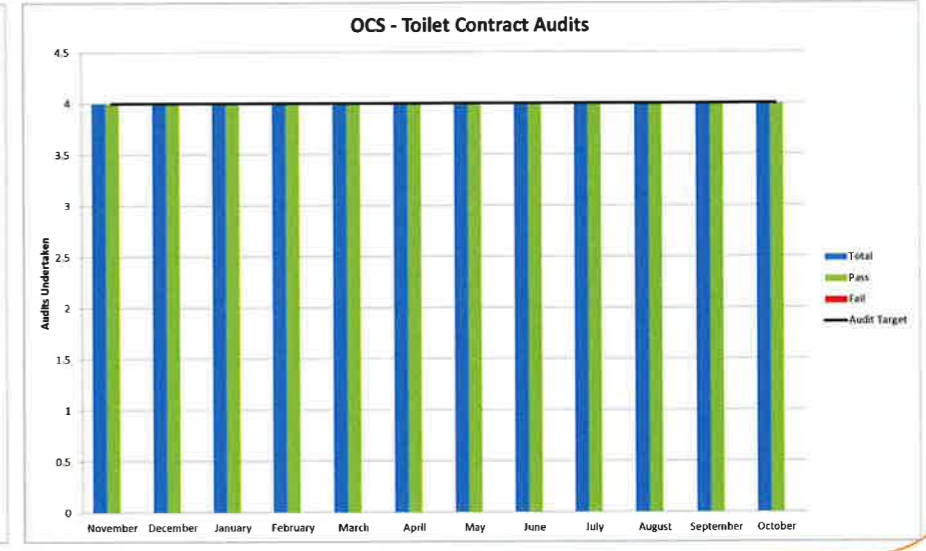
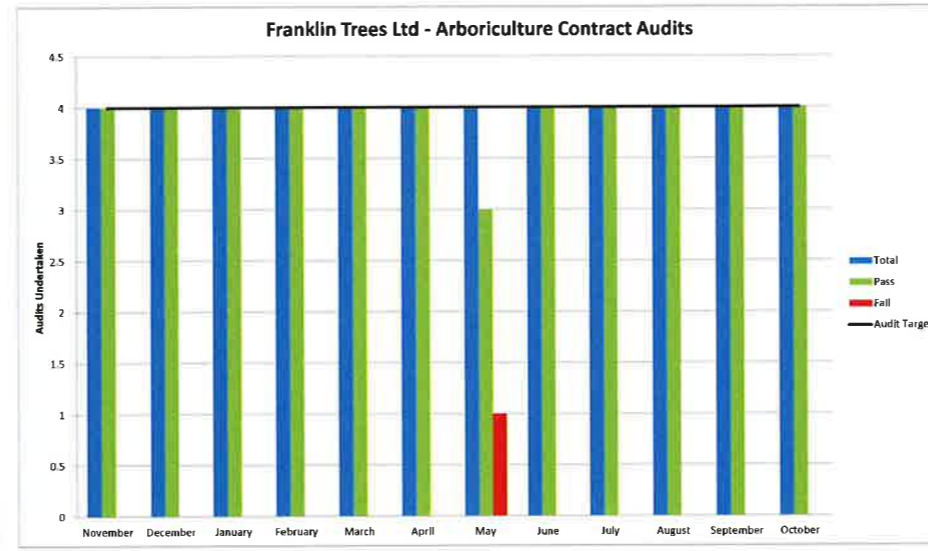
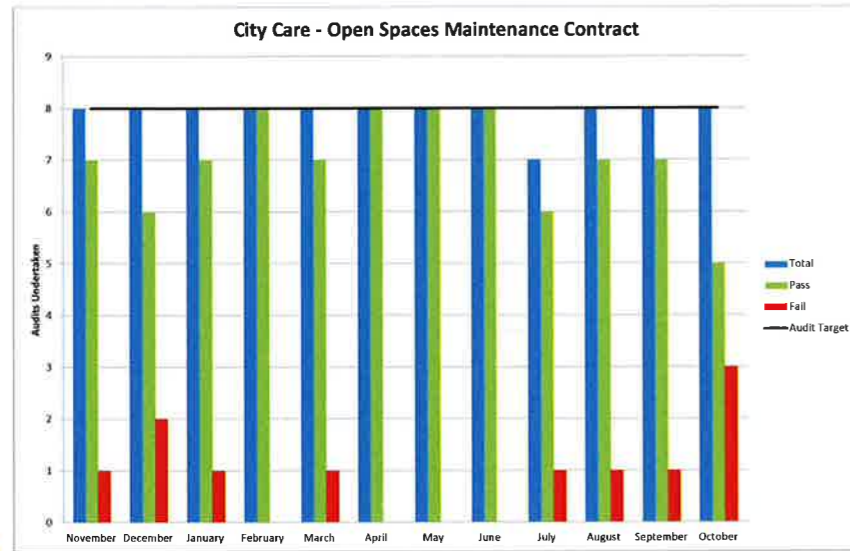
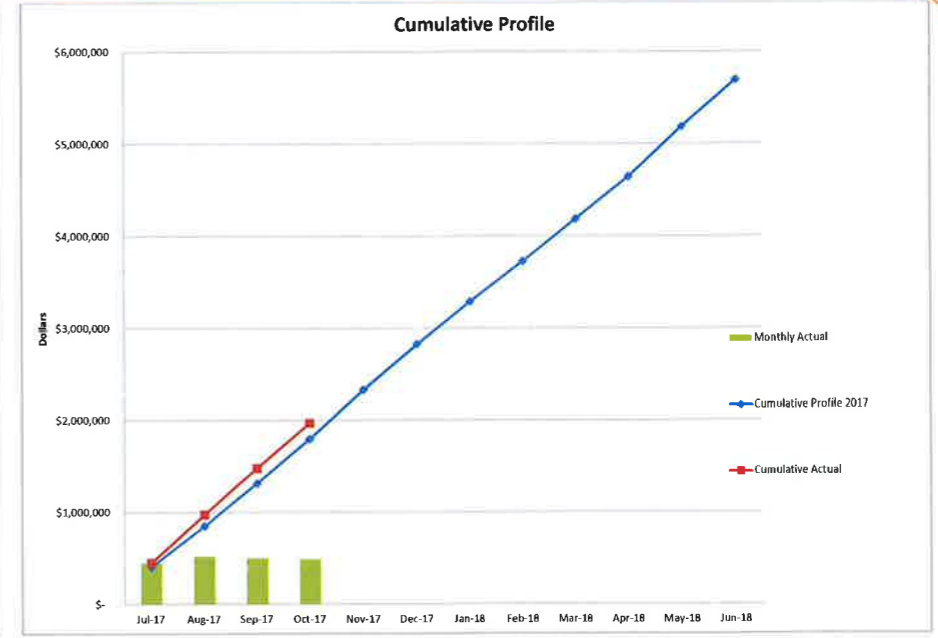
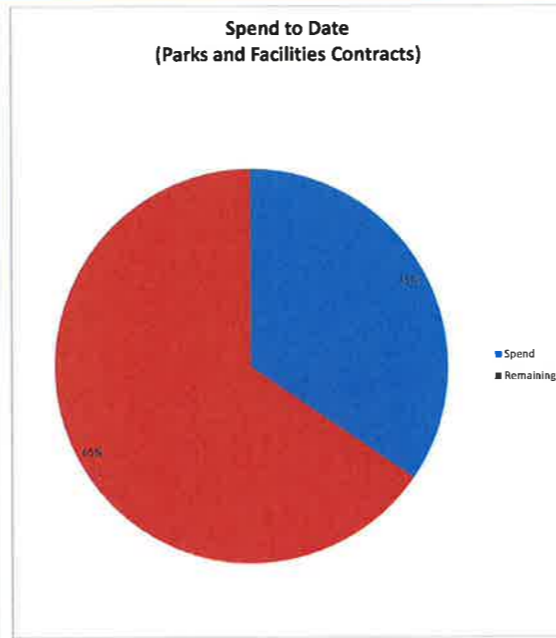
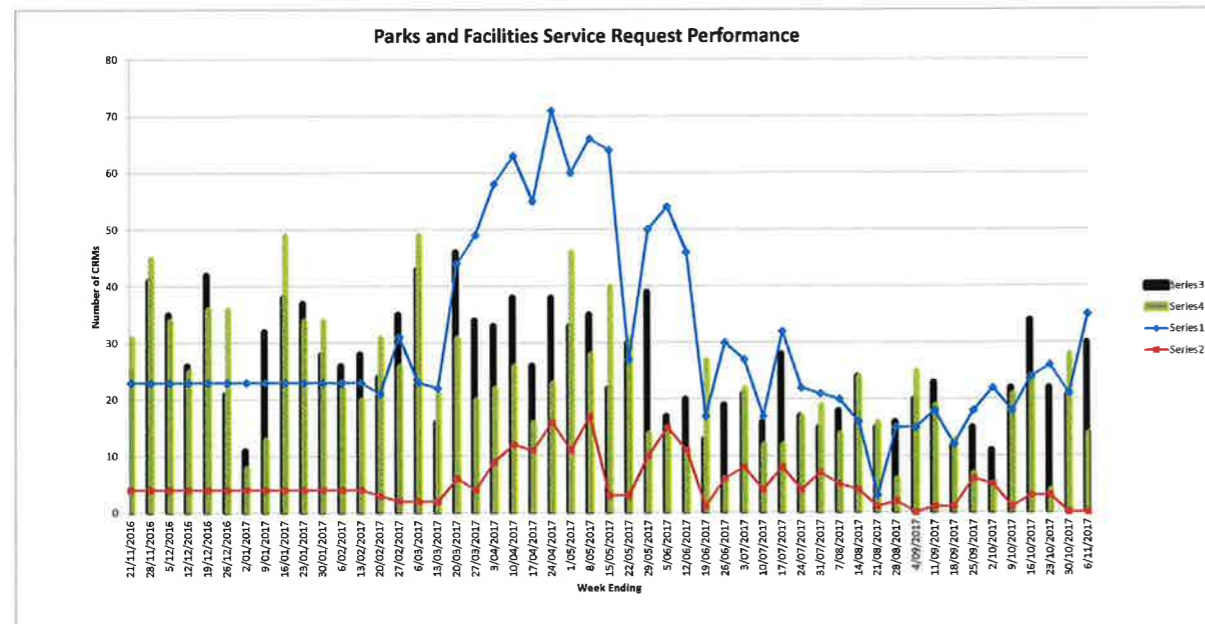


CAPITAL & ONE-OFF OPEX PROJECTS						
Team	Full Year Budget	YTD FCast	YTD Actual	Fcast vs Actual Variance	Variance %	Variance Status
Roading	29,067,137	7,254,415	6,371,813	882,602	12%	
Facilities	17,277,861	1,230,945	1,007,719	223,226	18%	
Waters	37,173,037	6,007,523	4,781,343	1,226,180	20%	
TOTAL	83,518,035	14,492,883	12,160,875	2,332,008	16%	

Activity Dashboard Report

Programme : Open Spaces Operations
 Manager: Amanda Hampton

Date: Oct-17
 Version: Final



Service Request Performance:

The number of service requests remains comparable to previous months. The majority of service requests received over October were ad hoc minor maintenance requests. Customer requests to mow verges also increased over October.

Financial:

Operational spends for October have tracked over the cumulative profile due to an influx in unscheduled maintenance items across the City Care, OCS and Franklin Trees contracts. Reactive graffiti removal has contributed approximately \$25,000 over October, more than twice over Septembers spend on graffiti. Staff are working with contractors to address this issue. Contracts are being managed closely by staff to manage spend and move back within budget.

Audits: City Care (Open Spaces Maintenance Contract)

The contract specifies that 8 joint site audits are to be undertaken each month in conjunction with the contractor. The audit pass mark is 90% and above. City Care averaged 88% over October. The highest score was 97% and the lowest score 76%. 3 Audits failed due to the work not being completed to the levels of service outlined in the contract. One failed due to the lawns not being mown when it had been indicated the task was complete. The remaining two failed due to work not being completed to the required quality standards. Staff are working closely with City Care to ensure that issues causing the audit failures do not reoccur.

Audits: Franklin Trees (Arboriculture Maintenance Contract)

The contract specifies that 4 site audits be undertaken each month. The audit pass mark is 95% and above. Franklin Trees audits averaged 100% over the October period. All Audits scored 100% over October.

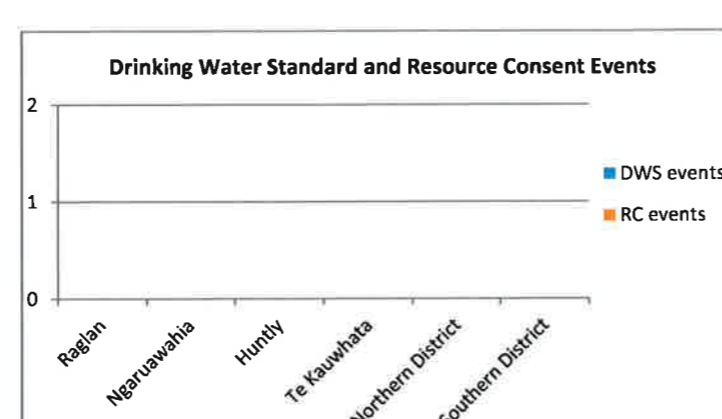
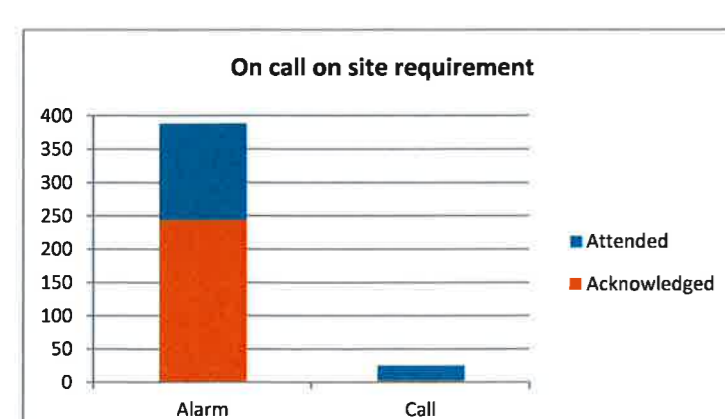
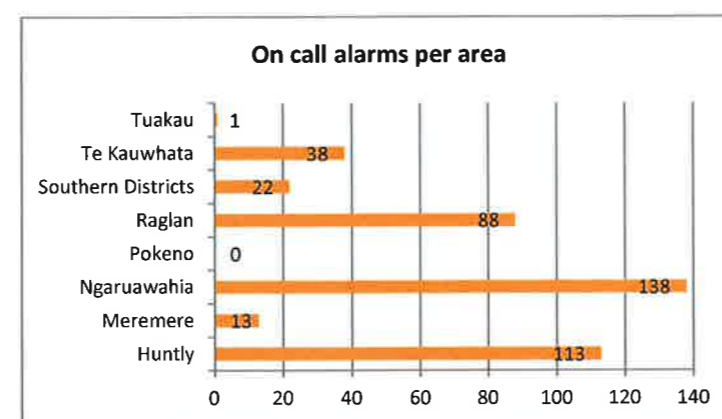
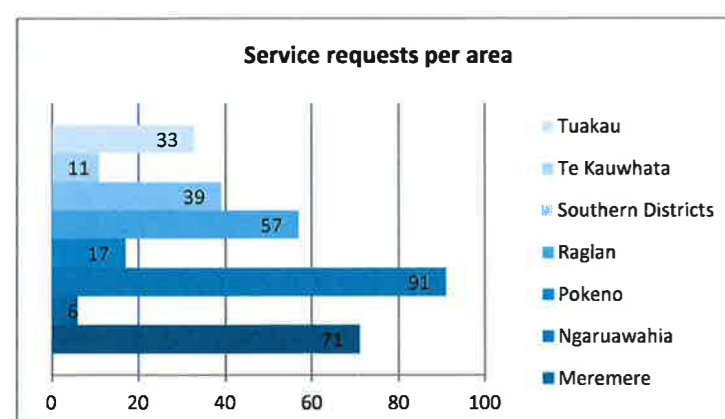
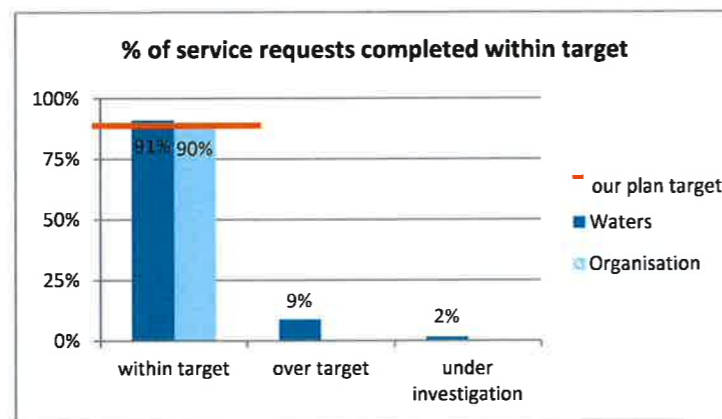
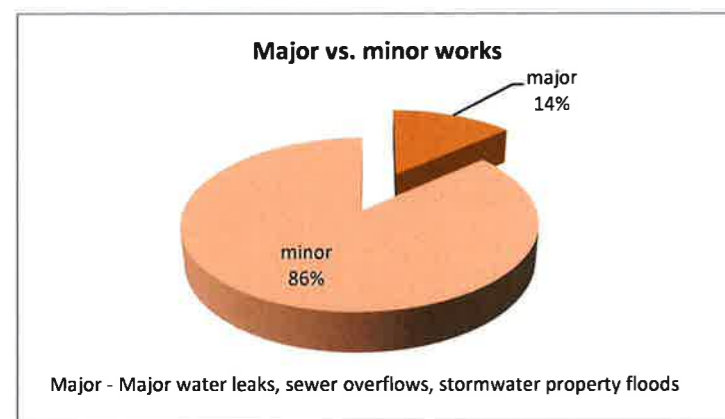
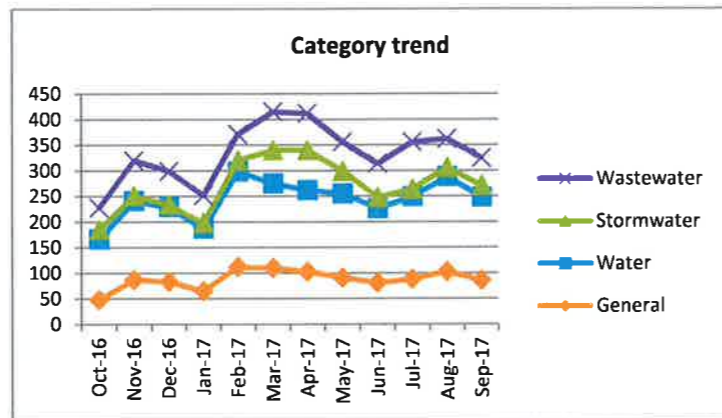
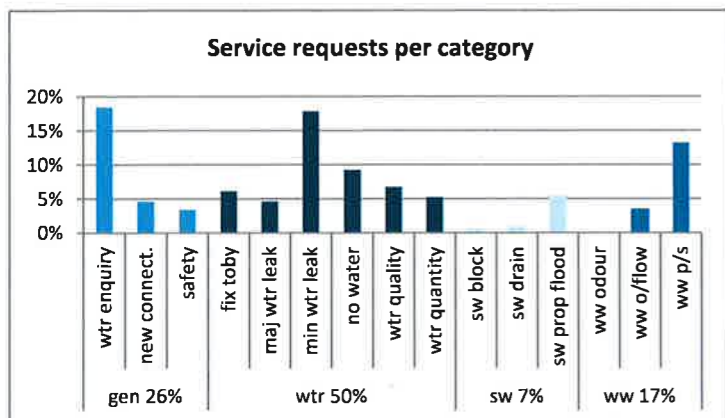
Audits: OCS (Public Facilities Cleaning Contract)

Programme: Waters – District Wide
Manager: Karl Pavlovich

Date: August – September 17

Version: Final

Service Requests Breakdown



Mandatory Performance Measures – district wide

Measure	Measure	August (16 th)	September	
		August (16 th)	September	
Water	The number of complaints received by WDC about drinking water clarity, taste, odour, pressure, flow, continuity of supply	< 17 per 1000 connections	2.16 per 1000 connections (51 complaints)	2.65 per 1000 connection (38 complaints)
	Fault Response Times for Urgent call outs	60 minutes median	15 minutes	48 minutes
	Fault Completion Times for Urgent call outs	240 minutes median	37 minutes	108 minutes
	Fault Response Times for Non-Urgent call outs	1 day median	Same day	1 day
Wastewater	Fault Completion Times for Non-Urgent call outs	5 day median	1 day	1 day
	The number of dry weather sewerage overflows from WDC wastewater system	< 5 per 1000 connections	0 per 1000 connections (0 complaints)	0.04 per 1000 connection (1 complaints)
	The total number of complaints received by WDC about the waste water system	< 25 per 1000 connections	0.09 per 1000 connections (1 complaints)	0.38 per 1000 connection (4 complaints)
	Fault Response Times for Sewerage Overflows	60 minutes median	44 minutes	18 minutes
Stormwater	Fault Completion Times for Sewerage Overflows	240 minutes median	149 minutes	145 minutes
	The number of flooding events (affecting habitable floors)	<0.3 per 1000 connections	0	0
	The number of complaints received by WDC about the stormwater system	<4 per 1000 connections	0 per 1000 connections (0 complaints)	0.22 per 1000 connection (3 complaints)
	Median Fault Response Times to attend a flooding event	8 hours	N/A	NA

Number of Service Requests

	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	YTD
Wtr enquiry	31	62	63	45	82	84	78	72	59	70	80	60	786
New connect.	14	19	13	16	25	21	13	9	13	9	13	15	180
Safety	3	6	7	4	5	5	12	10	9	9	10	11	91
Toby repair	12	12	13	14	20	21	28	33	20	13	8	20	214
Major wtr leak	21	15	14	19	24	18	15	10	16	22	20	15	209
Minor wtr leak	42	87	78	56	76	83	80	83	63	55	61	58	822
No water	9	20	26	23	38	18	15	23	24	13	21	30	260
Wtr quality	25	7	6	4	19	14	12	12	13	37	20	15	221
Wtr quantity	9	13	9	6	9	11	9	3	9	21	25	17	141
SW block	4	6	2	6	5	13	18	7	5	2	3	2	73
SW drain	5	2	1	5	15	27	21	11	7	4	6	3	107
SW property flood	10	2	2		2	25	39	26	10	9	9	18	152
WW odour	3	2	1	2		10	14	11	2	5	4		54
WW overflow	9	17	20	14	10	26	25	10	14	14	14	11	184
WW p/station	31	50	44	38	41	39	33	36	50	73	38	43	516

Comments

- High level of performance against Mandatory Performance Measures.
- Of the water service requests received, 18 were due to water invoices sent to Ngaruawahia residents in September.
- The overflow service requests are all cleared within prescribed timeframes.
- The WTP's are generally performing well and complying with the NZDWS.
- WWTP Investigations and plant improvements are ongoing in an effort to improve compliance levels:
 - The Matangi WWTP is hydraulically overloaded.
 - The capacity of the textile media pods at Tauwhare Pa WWTP has recently been increased. The plant is currently meeting the consent conditions.
 - The Te Kauwhata WWTP has not been complying with its consent conditions. The current loads are exceeding the plant capacity.
- Two Promapp processes reviewed – No changes required

DWS Event – compliance measure transgression requiring the Drinking Water Assessor to be notified, transgression is not the same as non-compliant

RC Event – breach of resource consent condition that requires WRC to be notified, this is not necessarily a measure of overall compliance for the year and excludes WWTP laboratory results outside of consent conditions

WAIKATO DISTRICT ALLIANCE DASHBOARD - October 2017

ZERO HARM AUDITS COMPLETED

Month: **Oct**

ZH Audit Month

TARGET >23

Traffic Mgmt Month

TARGET >20

Safety Behaviour Month

TARGET >30

Worked Hours

Env score: 10 | TTM Standard: 68%

Monthly tally of Safety metrics

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
MTI	0	3	1	0	0	0	0	0	0	0	0	0
LTI	0	0	0	0	0	0	0	0	0	0	0	0
Near miss	2	6	3	3	0	0	0	0	0	0	0	0
FAI	0	0	0	0	0	0	0	0	0	0	0	0
SBC	14	15	18	11	0	0	0	0	0	0	0	0
CoPTTM	20	16	13	25	0	0	0	0	0	0	0	0
TMP/CAR	112	142	137	146	0	0	0	0	0	0	0	0
% audits	17.9	11.3	9.5	17.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Worked Hrs	15892	19371	19466	23054	0	0	0	0	0	0	0	0

SERVICE REQUEST MANAGEMENT

Response time

YTD: 1.65
LTD: 1.65
Target: <5

Top 5 CRM Types

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Roads Urgent	56	21	34	41	0	0	0	0	0	0	0	0
Roads Routine	37	60	55	52	0	0	0	0	0	0	0	0
Emergency	12	5	4	5	0	0	0	0	0	0	0	0
Road Assessment	118	132	113	117	0	0	0	0	0	0	0	0
Drainage	42	43	44	37	0	0	0	0	0	0	0	0
Total	345	375	352	343	0	0	0	0	0	0	0	0

NETWORK INDICATORS

	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	YTD
Litter collected (tn)	12	10	12	14	-	-	-	-	-	-	-	-	47
Edge marker post(ea)	22	9	14	37	-	-	-	-	-	-	-	-	82
Sign renewals (ea)	26	34	59	37	-	-	-	-	-	-	-	-	156
Potholes filled (ea)	552	602	139	803	-	-	-	-	-	-	-	-	2,096
Edgebreak repair (m2)	431	609	3	101	-	-	-	-	-	-	-	-	1,144
Unsealed grading (km)	127	159	98	144	-	-	-	-	-	-	-	-	528
Watertable clean (km)	2.0	24.6	1.1	5.2	-	-	-	-	-	-	-	-	32.9
Vegetation mowing (km's)	-	-	492	537	-	-	-	-	-	-	-	-	1,029
Sweeping (tn)	19	40	38	11	-	-	-	-	-	-	-	-	107

PAVEMENT REHABILITATION WORKS - STATUS

Site name	Options	Testing	Design	Construct	Complete
WHANGARATA RD					
BRIGHT RD					
TAUWHARE RD					
MANGAPIKO VALLEY RD					
HETHERINGTON RD					
RIDGE RD					
WAIKARETU VALLEY RD					
FALLS RD					
FALLS RD					
FALLS RD					
WAINGARD RD					
WHANGARATA RD					
KOPUKU RD					
TAHUNA RD					
HAKARIMATA RD					
ORINI RD					
MERCER FERRY RD					
WAIKARETU VALLEY RD					
RAY WRIGHT RD (3138)					
HIGHWAY 22 (930)					
MUNRO RD					
HELENSLEE RD					
KOPUKU RD (55)					
KEITH RD (93)					

FINANCIAL SUMMARY YEAR TO DATE

Rehabilitation 2017 - 18

Sealing 17-18

Subsidised Maintenance

Unsubsidised Maintenance

Subsidised Renewals

Unsubsidised Renewals

KEY PERFORMANCE INDICATORS

- Zero Harm Trends** ● No first aid injuries during the month, a number of near misses related to driver inattention.
- Customer** ● The average response time to Customer Requests has improved slightly to 1.6 days YTD.
- Financial** ● Actual costs slightly lower than Forecast YTD. Capital programme slightly ahead of plan in Resurfacing and on target for Rehabs. Operating costs are below forecast YTD.
- Team** ● Nothing to report
- Risk** ● No new operational risks identified this month.
- Quality** ● Quality Co-ordinator commenced 1 November. Induction and training underway to enable planned Quality programme for the year.
- Bright Ideas/Innovation** ● 1 new bright idea added and being reviewed this month.

Key

MTI - Medical Treatment Injury
 Near miss - Event that could have the potential to cause harm
 FAI - First Aid Injury
 SBC - Safety Behavioural Conversation

TMP/CAR - Number of TMP/Corridor Access Requests Received

Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	13 November 2017
Prepared by	Wayne Furlong Asset Management Team Leader
Chief Executive Approved	Y
Reference #	INF2017
Report Title	Te Awa/Horotiu Cycle Bridge Crossing Increase Approved Contract Sum - Contract 15/288

I. EXECUTIVE SUMMARY

Emmetts Civil Construction Ltd (Emmetts), were awarded the Design and Construct (D&C) contract in May/June 2016 for the Horotiu Cycle Bridge Crossing. The tender price, based on the Principals Requirements (ie the bridge design parameters), was \$1,877,500. Council approved a budget of \$1,972,500, which was inclusive of 5% contingency.

Under the D&C tender process, the final price is determined after the design and a Guaranteed Maximum Price (GMP) was agreed upon for the construction of the bridge. The GMP effectively forms the approved Contract Sum. The new GMP was approved at \$2,461,969 (refer resolution INF1705/07) on the 25th May, 2017.

As the construction progressed a number of variations were negotiated and agreed to by all parties. The variations have added a further \$405,389 to the contract sum and the revised contract sum to be approved is now \$2,867,358.

Te Awa Trust as per the Memorandum of Understanding (MOU) with Council have taken financial risk for cost overruns associated with the Te Awa RiverRide projects and therefore will fund the additional costs incurred.

2. RECOMMENDATION

THAT the report from the General Manager Service Delivery be received;

AND THAT the approved Contract Sum for Contract 15/288 be increased from \$2,461,969 to \$2,867,358.

3. BACKGROUND

The purpose of this report is to outline the rationale for the increased Guaranteed Maximum Price (GMP) as it relates to the design and construction of the Horotiu Cycle Bridge, a key component of the Te Awa RiverRide.

In 2016, Waikato District Council took over the role of Principal to the contract from the Te Awa Trust for the Te Awa RiverRide projects between Ngaruawahia and Hototui. The 2 projects were:

1. The construction for the new walking and cycling bridge across the Waikato river.
2. Construction of the remaining section of footpath between the Ngaruawahia golf course and Horotiu Bridge Road.

An MoU was signed between Waikato District Council and Te Awa for the transfer of the project Principal role. As part of that agreement, Te Awa accepted the project financial risk. Emmetts Civil Construction Ltd (Emmetts) were awarded the Design and Construct (D&C) contract in May/June 2016. Council approved a Contract Sum of \$1,972,500, which was inclusive of 5% contingency.

Under the D&C tender process, the final price is determined after the design and a Guaranteed Maximum Price (GMP) is agreed upon for the construction of the bridge. After the design was finalised, the GMP price increased to \$2,461,969. Council approved the revised GMP (refer resolution INF1705/07) on the 25th May, 2017.

Further additions have been made to the project at Te Awa's request, after the revised GMP was approved in March. The discussions around these additions were a work in progress until they were finalised in October. These increased costs were substantially as a result of the additional architectural and design elements of the bridge and the approaches. The purpose of this report is to request an increase of the contract value to meet those variations. As per the MoU between Council and the Te Awa Trust, the Trust will fully cover the additional costs.

4. DISCUSSION

4.1 DESIGN CHANGE FINANCIAL IMPACTS

The agreed variations are outlined in the table below. These variations were discussed at weekly project meetings with all parties aware of the necessary contract changes /additions and of the value added to the final outcome. As holders of the project finances, Te Awa are in agreement with all the additions.

CONTRACT ITEM	COST (ex GST)	% COMPLETE
Supply and Install Sheet Piling to abutments as per CI 001	\$10,000.00	100
Decorative Resin Coating to Bridge Deck as per CI 002	\$58,689.00	80
Decorative Resin Coating to Bridge Approaches as per CI 002	\$12,922.00	10
Bridge Lighting Supply and Installation Stages 1 and 2 as per CI 003	\$68,957.00	100
Bridge Lightning Protection System as per CI 004	\$4,800.00	100
Bollards, Bridge Signage and Street Furniture from AE Tilley incl. install as per CI 005	\$15,210.00	100
Bridge Lighting and Switch Board Installation Stage 3 as per CI 006	\$7,780.00	100
Bridge Approach Works as per CI 007	\$171,931.00	80
Specific Foundation construction for WEL Solar/Turbine masts as per CI 008 *	\$5,100.00	100
Contingency	\$50,000	0
TOTAL	\$405,389.00	

5. CONSIDERATION

5.1 FINANCIAL

As a result of the extra work the revised contract sum is now estimated to be:

Approved GMP (25 May, 2017)	\$2,461,969.00
Value of Variations	\$405,389.00
Revised GMP	\$2,867,358.00

Based on the MOU, the Te Awa Trust will fund the shortfall in funding borne by any cost overruns. Note that neither the NZ Transport Agency or Council has set aside any further funds for the variation as outlined above.

5.2 LEGAL

The MOU has been reviewed by Council's Legal Counsel and all comments resolved and signed by both parties.

5.3 STRATEGY, PLANS, POLICY AND PARTNERSHIP ALIGNMENT

This project directly aligns with Council's objectives for improving pedestrian and cycling facilities within the district. It is part of a broader project strategy for forming a complete link between Ngaruawahia and Cambridge.

5.4 ASSESSMENT OF SIGNIFICANCE AND ENGAGEMENT

The significance is assessed as medium. The engagement with key project stakeholders is shared amongst the District Council, Te Awa and Regional Council. The project has significant community benefits associated with it.

6. CONSULTATION

The following stakeholders have been/or will be consulted:

Planned	In Progress	Complete	
		Y	Internal
		Y	Community Boards/Community Committees
		Y	Waikato-Tainui/Local iwi (provide evidence / description of engagement and response)
		Y	Households
		Y	Business
		Y	Other Please Specify

7. CONCLUSION

That the approved Contract Sum for Contract No: 15/288 – Te Awa/Horotiu Cycle Bridge Crossing is increased from \$2,461,969 to \$2,867,358. This is based on the understanding that Te Awa Trust is responsible for funding the shortfall.

8. ATTACHMENTS

N/A

Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	10 November 2017
Prepared by	Paul Harrison Road Corridor Engineer
Chief Executive Approved	Y
DWS Document Set #	INF2017
Report Title	Approval of Proposed Te Kauwhata Community Committee/Developer's Road Name List

I. EXECUTIVE SUMMARY

This report seeks the Committee's approval of the proposed road name list prepared by the Developer Mr Todd and Mrs Bev McIntosh at:

Property No 1003262
Assessment 04390/313.00
Legal LOT 19 DP 34798 BLK XV MARAMARUA S D
Property Address 25 Swan Road TE KAUWHATA
SUB 0120/17

This report recommends the Committee considers the name options presented and resolves to approve a list of names for road naming purposes in the Te Kauwhata area.

2. RECOMMENDATION

THAT the report from the **General Manager Service Delivery** be received;

AND THAT the Committee resolves that the November 2017 "Approved Road Name List" for the above property is restricted to the following one name submitted:

Murray Ward Drive

3. BACKGROUND

A list of suggested Road Names suitable for posting within the Te Kauwhata area has been prepared by the Te Kauwhata Community Committee.

Staff have now reviewed the list and excluded duplications and names with sound similarity issues.

Checked for duplications of existing names in Hamilton City, Waipa District Council, South Auckland Council, and West Auckland Council. In these cases, the road title will not be duplicated. Staff consider adopting an alternative road title and requiring considerable travel distance between name duplications will assist emergency services to distinguish them.

In the case of Te Kauwhata, no duplications of existing South Auckland, Hamilton City Council or Waikato District names remain on the recommended name list.

The edited list has been checked against Google and Intramap mapping and other approved road name lists.

In the case of Te Kauwhata, the historical residency theme has provided a useful distinction to the names chosen for listing.

This report is submitted in accordance with section 2.1 of the Road Naming policy.

4. DISCUSSION AND ANALYSIS OF OPTIONS

4.1 DISCUSSION

The following table provides a list of recommended themed names, background to the name choice, an indication of any potential duplication or sound similarity issues, and nominates any included road titles.

4.2 OPTIONS

The following themed table lists the potential road names staff recommend as unsuitable to be excluded from the approved list. Due to duplication, sound similarity and proximity in neighbouring Councils.

These were part of the initial list submitted to Council.

ID	Name	Background	Location of duplicate or similar sounding name in NZ	✓ if include in draft list	Classification exclusions and notes
Notable Themes – Historical residential family names:					
I. I	Murray Ward Drive	<p>Murray Ward is synonymous with Te Kauwhata.</p> <p>Married Evelyn Geck 1963, whom the Geck family farmed for over 100 years in Te Kauwhata.</p> <p>Ward family farm is on Swan Road which this development adjoins, and the roads in the Swan Rd subdivision are being built using metal from Wards Quarry on their farm.</p> <p>Wards have also supplied metal for numerous Roads around Te Kauwhata.</p> <p>On October 27th 2017 a commemoration to celebrate Murray's life was held at the Waikare Golf Clubrooms attended by family and friends, work colleges and local Te Kauwhata residents.</p> <p>We discussed with the family, naming a road after Murray, which was positively and affectionately received.</p> <p>Everyone thought that was a great idea.</p>	None	✓	<p>Murray has recently passed on and as a token of respect that we hold him in and all the help and advice during the early stages of our subdivision, we would like to name Road A after him Murray Ward Drive.</p> <p>We Enclose Evelyn Wards contact Phone number 021779317 along with Peter Ward phone number 021953980</p> <p>If you require during the application process, or you can contact us Todd & Bev McIntosh 0274205214</p>

5. CONSIDERATION

5.1 FINANCIAL

All costs are being met by developers.

5.2 LEGAL

Nil

5.3 STRATEGY, PLANS, POLICY AND PARTNERSHIP ALIGNMENT

Community Board consultation around private road naming has been undertaken in accordance with Council policy and standard operating procedures.

5.4 ASSESSMENT OF SIGNIFICANCE AND ENGAGEMENT POLICY AND OF EXTERNAL STAKEHOLDERS

Highest levels of engagement	Inform	Consult	Involve	Collaborate	Empower
	<input type="checkbox"/>	✓ <input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
This matter is not considered to be significant in terms of Council's significance policy.					

Planned	In Progress	Complete	
		Yes	Internal
		Yes	Community Boards/Community Committees
No			Waikato-Tainui/Local iwi
No			Households
No			Business
Yes			Adjoining TLA's.

6. CONCLUSION

The Committee should now be able to confirm an "Approved 2017 Te Kauwhata Street Name List" to satisfy the current requests for a new road name from the developers.

7. ATTACHMENTS

Nil.

Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	19 November 2017
Prepared by	Vishal Ramduny Planning & Strategy Manager
Chief Executive Approved	Y
Reference #	INF2017
Report Title	North Waikato Integrated Growth Management Programme Business Case – In Principle Approval

I. EXECUTIVE SUMMARY

The purpose of the North Waikato Integrated Growth Management Programme Business Case (“Programme Business Case”) is to identify a sustainable and affordable way to manage population growth in the northern Waikato in order to cater for future urban growth over the next 30 years. The Programme Business Case has been developed concurrently with the *Future Proof¹ Strategy* and Auckland Council’s *Supporting Growth - Delivering Transport Networks²* (previously Transport for Urban Growth). Both these strategies recognise the need for strategic integrated planning to successfully manage growth-related issues on a sub-regional and regional basis.

The Programme Business Case provides the basis for partners (Waikato District Council, New Zealand Transport Agency, Waikato Regional Council, Auckland Council, Auckland Transport and Hamilton City Council) as well as other key infrastructure service providers (such as Watercare, Department of Health, Department of Education and New Zealand Police) to work together in supporting growth based on an agreed land use plan for the Northern Waikato (the part of the district that is expected to experience the biggest growth pressure over the next 30 years due to its location with respect to Auckland).

The Programme Business Case is not only a unique document, due to the involvement of a number of partners and stakeholders, but focusses on integrating land use planning with planning for roading infrastructure, three waters infrastructure and social infrastructure.

The Programme Business Case has been workshopped with Waikato District Council elected representatives (more recently at a workshop held on 1 November 2017) at which councillors indicated their general support for the integrated land use and infrastructure planning being advocated for.

¹ Future Proof is a growth and infrastructure planning partnership between Waikato District Council, Hamilton City Council, Waipa District Council, Waikato Regional Council, New Zealand Transport Agency and Tangata Whenua.

² Auckland Transport (AT), Auckland Council, and the NZ Transport Agency (NZTA) are working together to develop transport networks to support Auckland’s new housing and business areas over the next 30 years.

The outputs of the business case will be used to inform upcoming the Long Term Plan (LTP) of the Council as well as be used by NZTA in advocating to government for transport investment funding to support the growth in the Northern Waikato.

It should be noted that the business will remain in draft form as it will need to also be approved by the NZTA Board in March 2018.

2. RECOMMENDATION

THAT the report from the General Manager Service Delivery be received;

AND THAT the Infrastructure Committee recommends to Council that the North Waikato Integrated Growth Management Programme Business Case be approved in principle on the understanding that it will be used to inform the development of upcoming long term plans of the Council.

3. BACKGROUND

3.1 Business Case Drivers

- To have a holistic look at growth in north Waikato so we can have confidence that we can support that growth from an infrastructure perspective. This would enable all key infrastructure and service providers to proactively plan and provide for growth in the part of the district that expected to have the biggest growth pressure over the next 30 years. The business case therefore provides a gateway to investment in support of growth in our main towns in the northern Waikato.
- A key driver has been the work undertaken through the joint Auckland/Waikato workshops to address cross-boundary issues. This provided a basis for various partners to come together and work collaboratively on how to manage growth in the southern Auckland/northern Waikato sub-region.
- The business case also considers the connections between the key northern towns alongside the Waikato Expressway and will help Council in achieving its stated goal of building connected communities. Other service or infrastructure providers have a role to play in helping us achieve successful growing communities and this is recognised in the business case.

3.2. Outputs

The outputs from the PBC include the following:

- A high level plan which confirms the preferred land use pattern and supporting infrastructure for a key growth area of our district. This provides a basis for Council to do master planning for its key northern towns adjacent to the Waikato Expressway and to build connected and complete communities;
- A plan which delivers outcomes but maintains flexibility & agility;
- Confidence that the preferred land use pattern is robust, deliverable and affordable;
- Support from partners which provides a stronger likelihood of attracting investment and supporting Council's objectives, especially when advocating for government funding;
- Opportunity to work with developer community to ensure north Waikato grows successfully; and

- The preferred land use pattern will feed into the District Plan Review, FutureProof Growth Strategy Review, and inform respective and upcoming long term plans, the Regional Land Transport Plan (RLTP) and the National Land Transport Plan (NLTP).

3.2. The Programmes Considered

The programme options considered in the PBC included a range of infrastructure and non-infrastructure alternatives. Programmes with short, medium and long-term delivery timeframes were considered. The alternatives considered social infrastructure, parks and recreation, education, medical, emergency service, water, wastewater, roading, public transport, walking and cycling and land use, as well as any other investment with positive outcomes for the community and programme partners.

The alternatives range from continuing the current approach of dispersed development, with a reactive approach, to more proactive planning with focussing growth around existing settlements.

The short listed programmes are outlined below (full programmes are shown in attached PBC).

Programme Option 4 – Limited intervention to increase activity in Tuakau and Huntly. This was short listed as the “Do Minimum” option, as it was agreed by project team members and stakeholders that the current planning (Programme 1A) is not acceptable and will require an increased level of intervention by partner organisations to cater for growth in north Waikato. The evidence confirms that the north Waikato needs to be more connected within towns, within north Waikato and between Auckland.

Programme Option 5B – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern). This programme was shortlisted and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided. This programme is the same as Programme 6B (see below) but with a lower population level in Tuakau, at approximately 11,000.

Programme Option 6B (Supported) – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern) with growth in Tuakau to reach a larger population level (15,000-22,000, depending on feasibility and intensification of land use) with a redeveloped structure plan and/or planning changes (i.e. to reduce land use and footprint size and services for the northern area shared between Tuakau and Pokeno). This programme further supports a land use settlement pattern which sees Pokeno growing to a town of about 12,000-13,000 people, Te Kauwhata to about 8,500-10,000 people and Huntly to about 10,000 to 11,000 (all subject to development feasibility) with the necessary infrastructure (both network and social infrastructure) being provided to support this growth (refer to the Programme Business Case for the full list of proposed programme interventions).

The envisaged growth of these towns is also supported by appropriate employment growth (as per table 12 on page 44 in the business case).

This programme was short-listed supported by all partners and stakeholders due to high level of services provision, localised employment opportunities and amenities that can be provided due to critical mass from population levels and employment. It was also supported due to the lower unit cost for developing additional housing in Tuakau for water and wastewater, its ability for increased employment opportunities, existing social infrastructure

such as schools and access to short term, medium term and potential for long term public transport solutions due to the larger, more focused population growth.

It should be noted that the growth provided for in the preferred option is far higher than that projected by Statistics New Zealand's high growth projection. It provides a basis for Council to conduct master planning for these towns and future proof the towns based on a much higher growth aspiration.

3.1 OPTIONS

There are two options for Council to consider:

Option 1: Approve the draft programme Business Case in principle.

This is the preferred option.

Option 2: Not to approve the draft Programme Business Case in principle. However doing so will be counterproductive as it will negate the solid partnership built with the programme partners and key stakeholders (all of whom have a role to play in either infrastructure or service provision in the north Waikato/south Auckland area). Not approving the business case in principle would also jeopardise the integrated land use and infrastructure planning that has already commenced through this work and threaten the collaborative approach that has been fostered. It will also impede the process that needs to be followed from here where the final draft will go to the NZTA Board in March 2018 for NZTA consideration.

4. CONSIDERATION

4.1 FINANCIAL

The Programme Business Case has been developed at a cost of \$200,000 and has been funded jointly by partners (NZTA - 40%, Waikato District Council – 25%, Waikato Regional Council – 25%, Auckland Transport – 5% and Hamilton City Council – 5%).

The cost of programme interventions (for land use planning, network and social infrastructure) in the business case is indicative and does not imply any funding commitments. An in principle approval means that Council can consider these programme interventions to inform upcoming long term plans. Similarly, programme partners and stakeholders can consider relevant interventions to inform their own long term planning processes.

4.2 STRATEGY, PLANS, POLICY AND PARTNERSHIP ALIGNMENT

The Future Proof Strategy, Waikato Expressway Network Plan and Waikato Regional Policy Statements all identify the need to strategically plan for future urban growth in the north Waikato sub-region due to the influence of Auckland. The Auckland Transport for Urban Growth (TFUG) Programme Business Case has also identified this as a key action for successful implementation.

Additionally, these strategies will be crucial tools in planning for future land use in north Waikato and statutorily anchoring an agreed land use pattern in the Waikato District Plan.

4.3 ASSESSMENT OF SIGNIFICANCE AND ENGAGEMENT POLICY AND OF EXTERNAL STAKEHOLDERS

Highest levels of engagement	Inform	Consult	Involve	Collaborate	Empower
	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Engagement has been held with the Onewhero-Tuakau Community Board, the Pokeno Community Committee, the Te Kauwhata Community Committee, the Meremere Community Committee, the Huntly Community Board, the Franklin Local Board and with Waikato-Tainui. The involvement of key programme partners such as NZTA, the Waikato Regional Council, Auckland Council and Auckland Transport as well as key stakeholders such as Watercare, Ministry of Health, the Ministry of Education and New Zealand Police has ensured buy-in and support of the business case.					

State below which external stakeholders have been engaged with:

Planned	In Progress	Complete	
		√	Internal
		√	Relevant community boards/community committees
		√	Waikato-Tainui/Local iwi
		√	Households
		√	Business

5. CONCLUSION

The Programme Business Case provides the basis for programme partners (Waikato District Council, New Zealand Transport Agency, Waikato Regional Council, Auckland Council and Auckland Transport) as well as other key infrastructure service providers (such as Watercare, Ministry of Health, Ministry of Education and New Zealand Police) to work together in supporting growth based on an agreed land use plan for the northern Waikato.

It provides a holistic look at growth in north Waikato so that key infrastructure and service providers can have the confidence to support the growth from an infrastructure and service perspective for the next 30 years.

6. ATTACHMENTS

- North Waikato Integrated Growth Management Programme Business Case (Draft Revision C – November 2017)



North Waikato Integrated Growth Management

Programme Business Case

Draft Revision C

November 2017

Contents

1.	Introduction	10
1.1	Partners and key stakeholders	11
2.	Programme context.....	12
2.1	Geographic and environmental context	12
2.2	Social context.....	14
2.2.1	Liveability	14
2.3	Economic context	15
2.3.1	Growth locations (urban versus rural).....	16
2.4	Infrastructure context.....	17
2.4.1	Three Waters	17
2.4.2	Transportation.....	17
3.	Strategic assessment.....	20
3.1	3.1 Defining the problems	20
3.2	Benefits	21
3.3	Alignment to existing strategies.....	21
3.4	Uncertainties.....	23
3.5	Problem one.....	23
3.5.1	Social Infrastructure and Services	24
3.5.2	Transport Connectivity.....	25
3.5.3	Implications of the evidence	26
3.6	Problem Two.....	27
3.6.1	Waikato Expressway.....	28
3.6.2	Implications of the evidence	29
4.	Investment objectives	30
5.	Alternatives and options.....	32
5.1	Land Use	32
5.2	Social infrastructure and services	32
5.3	Parks and recreation.....	32
5.4	Education	33

5.5	Medical services and infrastructure.....	33
5.6	Emergency services	33
5.7	Water supply.....	33
5.8	Wastewater	34
5.9	Stormwater.....	34
5.10	Roading	34
5.11	Public Transport.....	35
5.12	Walking and Cycling	35
6.	Programme options development and assessment.....	36
6.1	Programme options development.....	36
6.2	Programme assessment considerations	36
6.3	Programme options assessment	37
6.4	Short list programme options summary.....	39
6.5	Short list programme options assessment.....	40
6.6	Short list assessment findings	40
7.	Recommended programme description and assessment.....	43
7.1	The recommended programme	43
7.1.1	Recommended programme elements	45
7.1.2	New Zealand Transport Agency –Results alignment assessment.....	50
7.2	Programme Risk.....	51
8.	Programme financial case	53
8.1	Indicative cost and programme cash flow	53
8.2	Funding arrangements	53
8.3	Affordability	54
9.	Management case	55
9.1	Planning and delivery overview.....	55
9.2	Integrated planning with clear roles and responsibilities	55
9.3	Programme performance and review.....	56
9.4	Stakeholder engagement and communications plan.....	57
9.5	Next steps	58

Figures

Figure 1 – Context and regional map	2
Figure 2 - Programme Business Case Study Area	12
Figure 3 - Intra and Inter-regional Linkages	13
Figure 4 - North Waikato Employment Figures (Awaroa Ki Tuakau, Onewhero, Whangamarino, Hukanui-Waerenga , Whaingaroa and Huntly Wards Statistics NZ Census data, 2013).....	15
Figure 5 - Waikato Industrial Land over 50 Hectares (Upper North Island Freight Story Shared Evidence Base, 2013)	16
Figure 6 - Existing Road and Rail Network (image courtesy Google Maps).....	18
Figure 7 - Progress on Waikato Expressway	19
Figure 8 - Social Infrastructure available to the North Waikato	25
Figure 9 - Map of the road connections off SH1 in the Bombay Hills to Longswamp section.....	26
Figure 10 - Estimated Future Traffic Flows resulting from the three short listed Programmes (Flow Transport Assessment – Appendix G)	40
Figure 11 - North Waikato Population and Employment levels over the three decade period of the Programme Business Case	44
Figure 12: Recommended Programme, Short Term (indicatively Years 1 – 3)	46
Figure 13: Recommended Programmes, Short to Medium Term (indicatively Years 4 – 10).....	47
Figure 14: Recommended Programme, Medium Term (Indicatively Years 11 – 20).....	48
Figure 15: Recommended Programme, Long Term (Indicatively Years 20-30).....	49

Tables

Table 1 - North Waikato population projected for recommended programme	6
Table 2 - North Waikato employment projected for recommended programme	6
Table 3 - Indicative Programme Costs	7
Table 4 - Waikato District and NZ Population growth rates over the last ten years (information sourced from Statistics NZ historical population estimates).....	14
Table 5 - Current and projected population levels – Future Proof Settlement Pattern	20
Table 6 - Current and projected employment projection figures	20
Table 7 - Strategic Alignment	21
Table 8 - ART and WRTM Forecast Traffic Flows	27
Table 9 - Long list to short list of programme options	37
Table 10 - Short list programme options assessment summary	42
Table 11 - North Waikato population projected for recommended programme (Option 6B) – Future Proof Settlement Pattern	43
Table 12 - Current and projected employment projection figures	44
Table 13 - Population and Employment at Approximately 2025	47
Table 14 - Population and Employment for North Waikato in the Medium Term	48
Table 15 - Summary of identified key risks.....	51
Table 16 - Indicative Programme Costs	53
Table 17 - Delivery Organisation Responsibilities	56
Table 18 - Recommended Performance Measures	56

Appendices

Appendix A – Population projections.....	61
Appendix B – Summary of public transport bus services available in the North Waikato.....	62
Appendix C - Existing Social Infrastructure in the North Waikato	63

Appendix D - Strategic alignment	65
Appendix E - Uncertainty log	68
Appendix F - Recommended programme	70
Appendix G – Transport Assessment.....	81
Appendix H - Investment logic map.....	82
Appendix I – Public Transport options.....	84
Appendix J - Descriptions of towns and rural North Waikato	85
Appendix K – Programme descriptions and long list assessment.....	87

DRAFT

Executive summary

Introduction

The purpose of this programme business case is to identify the best way to manage population growth sustainably in the North Waikato to cater for future urban growth over the next 30 years. The North Waikato Integrated Growth Management Programme Business Case has been developed concurrently with the Future Proof Strategy 1 and Auckland's Supporting Growth initiatives (previously Transport for Urban Growth) recognising the need for strategic integrated planning to successfully manage the issues.

A key objective of the Programme Business Case is to provide the programme partners, key stakeholders and the community with information about how to manage growth in the North Waikato and provide positive outcomes now and into the future for these communities. Some key areas to be addressed include:

- Reducing the likelihood of more disconnected communities with limited local services or access to services in neighbouring towns
- Reducing the capital and operating costs of new homes for the councils, home owners and service providers
- Reduce local transport movements along key freight routes in the region as a result of local services, amenity, schools and employment
- Provide a clear direction for growth in residential and employment areas within the North Waikato to encourage development in the preferred areas to achieve positives outcomes
- Reduce the proportion of rural and un-serviced developments within North Waikato in the next three decades
- Negative social outcomes for families from increased travel time to access work, services and everyday activities
- An increasing number of rural developments that does not support families and access to critical services such as education and medical
- Increasing population and employment in established communities in the North Waikato to support their long term viability and prosperity
- Maintain and attract young families and within the North Waikato to support a wide range of services, diversity and mix of demographics

Context

The Programme Business Case focuses on land use and supporting infrastructure in the North Waikato from the south of Huntly through to the Auckland boundary near Pokeno and Tuakau. This area is experiencing significant growth, which has increased in the last 5 years. The majority of growth over the past 10 years has occurred in rural and rural residential zones, and in Pokeno, which is 15 years ahead of projected development. The Programme Business Case recognises this development pattern has exacerbated a number of problems including access to services, employment and amenities for the community. The North Waikato connects Auckland to areas to the south, and decisions regarding land use and infrastructure have a strong influence on the effectiveness and efficiency of those connections.

State Highway 1 and the North Island Main Trunk Line form the main transport corridors with State Highway 1 includes the Waikato expressway connecting Bombay Hills to Longswamp. The towns currently sit around

¹ Sub-regional Growth Strategy for Hamilton City, Waikato and Waipa districts

the current State Highway 1 infrastructure and therefore become a key connector for local movements as well as regional and national movements. State Highway 2 is also a key transport corridor to the north.



Figure 1 – Context and regional map

Current situation

The North Waikato is experiencing high population growth and this is expected to continue more rapidly than previous predictions due to faster than expected housing demand in Te Kauwhata and Pokeno. The majority of this growth has occurred in the past 5 years in these towns with additional growth across the North Waikato over the past decade in unserviced / rural residential dwellings.

This growth is expected to continue due to already approved District Plan changes and a number of private plan changes that are being proposed by developers. This increasing growth is also expected to cause capacity issues on infrastructure, services and investment pressures. Without proactive infrastructure and

land use planning there is a risk that addressing capacity issues will be more costly and potentially underfunded.

The main issues for this area (described in the problem statements below) are, unplanned growth causing communities to become increasingly disconnected from essential services and employment and unaddressed increasing growth demands. This is contrary to the Future Proof vision of compact urban areas around existing townships, where people can work, live and play. It is resulting in the transport network becoming inefficient and unsafe and has the potential to limit the North Waikato's ability to develop and accommodate the upper North Island's growth.

Problem statements and key considerations

Two problem statements were developed and agreed with stakeholders that reflect the key areas to address through future investment. These problem statements are:

Problem 1: Ad hoc responses to growth pressure is creating communities disconnected from services, amenities and employment (60%)

Problem 2: Current and future demand on the transport network is impacting on safety, commercial activity and service reliability (40%)

These problems are strongly linked to each other, in that the current ad-hoc approach to planning for growth carries a high risk that nationally, regionally and locally significant transport outcomes will not be achieved.

The last comprehensive review of growth and land use for the northern part of the North Waikato was undertaken in 2007 (Franklin District Growth Strategy) when this area was part of Franklin District. The 2009 Future Proof Strategy, a joint sub-regional growth strategy which now covers this area and includes Hamilton city and the Waikato and Waipa districts, was developed prior to the administrative boundary changes. Therefore, there is a gap in our land use and infrastructure planning. Whilst there have been structure plans developed for the towns of Tuakau and Pokeno, the work has been isolated to a town level. Strategic issues such as the location of key services, social infrastructure (i.e. education and health) and infrastructure (3 Waters and transport infrastructure and services) as well as linkages to neighbouring towns and connections to Auckland and Hamilton, were not considered in detail as part of these structure planning processes.

The Waikato District and in particular the North Waikato area has been experiencing significant growth, which has increased in the last 5 years, with the majority of growth over the past 10 years occurring in rural and rural residential zones. For example, growth in residential levels in Pokeno are 15 years ahead of projections at the time the Structure Plan was approved. This has resulted in other services and infrastructure not being provided and a need to access employment, services and amenities in other locations, often in the Auckland region.

The high weighting (60%) to Problem 1 reflects the stakeholders acknowledgement of the need for strategic integrated planning before other issues and problems can be dealt with.

Transport was also identified by the stakeholders as a specific problem in its own right, primarily to acknowledge State Highway 1 being a consideration in regards to growth in the North Waikato area, and needing to identify any need for upgrading to meet the transport demand in the North Waikato area. The strong link between North Waikato and the Auckland labour market means that transport is directly affected as growth occurs. Current problems related to safety and efficiency (queuing) of State Highway 1 are likely to get worse without remedial action. Additionally, the local network is not providing the expected level of service as it is no longer fit for purpose. This is due to both higher demand and limited public transport, leading to a lack of other choices to travel. This is currently causing safety and efficiency issues, which will

be exacerbated by the projected growth. These issues have the potential to have significant adverse impacts on local, regional and national productivity.

Benefits

The potential benefits of successfully investing to address these problems were identified by the programme stakeholders through a series of workshops. The investment benefits are:

Benefit 1: Efficient use of resources (10%)

Benefit 2: Improved economic performance (30%)

Benefit 3: Improved community wellbeing and resilience (40%)

Benefit 4: Improved network performance (20%)

Investment objectives

The investment objectives were developed with the programme partners and stakeholders. They guide decision making on where resource and funding are committed, and clearly articulate what the outcomes of investment should be. The Investment Objectives are:

- 1 Improve North Waikato's liveability through increased access to, from and within the future urban areas, including to services and amenities, employment areas, town centres
- 2 Enhance Waikato's connectivity through increased effectiveness, efficiency and safety of the multi modal transport network to, from and within the future urban areas
- 3 Improved national and regional economic growth and performance of the Auckland and Waikato regions by improving interregional connections and connections within the Waikato region
- 4 Deliver on the Future Proof principles and provide infrastructure as they relate to the North Waikato region and are consistent with development patterns set by the Future Urban Land Supply Strategy

Other assessment criteria included strategic alignment, risk levels, achievability, economic (benefit-cost ratio), social impacts and technical feasibility. During the development of the programme business case it was agreed that it was critical to identify a programme that increased funding for infrastructure as well as reduce unit costs per new household for the programme partners to ensure the sustainable development of North Waikato.

Programme options development and assessment

The programme options were developed and assessed with stakeholders. The programme options included a range of infrastructure and non-infrastructure alternatives. Programmes with short, medium and long-term delivery timeframes were considered. The alternatives considered social infrastructure, parks and recreation, education, medical, emergency service, water, wastewater, roading, public transport, walking and cycling and land use as well as any other investment with positive outcomes for the community and programme partners.

The long list development of options looked at a number of key factors including:

- Population levels locally and across North Waikato and potential for cost effective growth
- Employment levels locally and distance and access to employment within Waikato and Auckland regions as well as opportunity for increases in localised employment
- Provision of infrastructure including transport, 3 waters and sport and recreation
- Community expectations and acceptability of type of community and available services

Programme 3 was not shortlisted but is the likely outcome for the North Waikato should the recommended option or one of the shortlisted options not be achieved. This would result in continued lack of services and infrastructure across North Waikato as well as the likely need for the following:

- New schools in areas not planned or too remote with limited educational provision due to small school sizes and facilities
- Reactive health services due to dispersment of the population
- 6 laning of the Waikato Expressway due to increased traffic volumes as there are limited employment opportunities locally, lack of services and amenities and a need to travel by car to meet daily needs
- Increased cost to ratepayers and the community as a result of
- Overcrowding of schools or continued use of temporary facilities as growth exceeds expectations or plans

A number of programmes were developed and assessed with project partners and key stakeholders. These ranged from continue current approach of dispersed development, reactive approach to more proactive planning with focusing growth around existing settlements. The short listed programmes are outlined below.

Programme Option 4 – Limited intervention to increase activity in Tuakau and Huntly. This was short-listed as the “do-minimum” option as it was agreed by project team members and stakeholders that the current planning (Programme 1A) is not acceptable and will require an increased level of intervention by partner organisations to cater for growth in North Waikato. The evidence confirms that the North Waikato needs to be more connected within towns, within North Waikato and between Auckland.

Programme Option 5B – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern). This programme was shortlisted and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided. This programme is the same as 6B but with a lower population level in Tuakau, approximately 11,000.

Programme Option 6B – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern). It allows for growth in Tuakau to reach a larger population level than previously considered (15, 000 -20,000, depending on feasibility and intensification of land use) with a redeveloped structure plan and/or planning changes (i.e. to reduce land use and footprint size and services for the northern area shared between Tuakau and Pokeno). Whilst services, social infrastructure and amenities would be provided across the North Waikato it recognised that Huntly currently provides a high proportion of employment and services for the southern area and Tuakau in the northern area. This programme was short-listed and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided due to critical mass from population levels and employment. It was also supported due to the lower unit cost for water and wastewater, its ability for increased employment opportunities, existing social infrastructure such as schools, when developing additional housing in Tuakau.

All of the shortlisted programme options include non-infrastructure activities such as developer contributions and future planning with social service providers. The difference in the programmes is the level of investment, where it will be invested and when.

Recommended programme

The recommended programme is Programme Option 6B. This programme focuses on future growth around existing towns of Tuakau, Pokeno, Te Kauwhata and Huntly with higher intensity development in Tuakau than previously planned. This requires proactive planning and response to cater for the increased population

in the medium to long term for Tuakau with a projection of 15,000 - 20,000 residents. There will be shared services for Tuakau and Pokeno to cater for the north of North Waikato, and a higher level of services in Huntly to cater for the south of North Waikato and localised services in Te Kauwhata. This is aimed at increasing the level of self-contained movements within the towns and within the North Waikato.

Implementing the recommended programme will consist of planning infrastructure activities in the three waters, land use, public transport, walking and cycling, roading, social, parks and recreation, education, medical and emergency services areas. Other mechanisms would also be required to be undertaken to support future growth planning, including more accurate developer contributions, communication with stakeholders and the community on the strategy for the area.

The programme will provide a projected population and employment shown in the tables below. These projections are for approximately 50,000 residents within the towns with approximately 17,700 employment opportunities, which reflects the aim to achieve a job per household in the longer term. This level of employment is estimated on being approximately 1 job per 2.5 people and reflects a good level of employment self-sufficiency for each of the town. Should there be limited growth in employment as the population levels increase the programme partners will need to discuss interventions such as economic development for the towns, reducing the level of growth in residential dwellings until there are more localised employment opportunities. The risk of needing to undertake these interventions should be significantly reduced with pro-active planning, especially in regard to providing sufficient zoning for land which generates employment and working with the community to localise services and employment where practicable.

Table 1 - North Waikato population projected for recommended programme

Town	2016	2025	2035	2045
Tuakau	4,639	9,402	10,252	22,072
Pokeno	2,132	7,868	12,399	12,762
Meremere*	564	708	734	711
Te Kauwhata (including Lakeside Housing Infrastructure Fund)	1,769	8,991	9,421	10,898
Huntly	7,491	8,764	10,174	10,490

* Meremere is not expected to be able to increase its residential population due to unsuitable ground conditions and other land constraints.

Table 2 - North Waikato employment projected for recommended programme

Town	2016	2025	2035	2045
Tuakau	1,432	3,761	4,101	8,829
Pokeno	524	3,147	4,960	5,105
Meremere**	13	283	294	284
Te Kauwhata	455	3,596	3,768	4,359
Huntly	2,259	3,506	4,070	4,196

** Meremere have approximately 70 hectares of land that is zoned for commercial and industrial purposes and could have a significantly higher level of employment than predicted depending on the type of use.

Assessment – Social infrastructure, services and amenities

The recommended programme has a strong alignment with a number of policies for the –sub-region, including the key regional land use planning strategy Future Proof. The recommended programme will provide a wide range of benefits for the current and future communities of the North Waikato including but not limited to:

- Decreasing costs of infrastructure due to densification of development
- Increased accessibility and connection to communities with a range of services, social infrastructure and amenities
- Increased local employment, decreasing the need to leave North Waikato for work
- Provide greater certainty for planning and development of social infrastructure, health services and schools

Assessment profile (Transport – New Zealand Transport Agency)

Results alignment assessment

The assessment of strategic fit based on the NZ Transport Agency's draft Investment Assessment framework, including alignment to national and regional strategy is High based on the Programme Business Case taking into consideration:

- Improvements to whole of network, long-term local, regional and national planning in response to significant changes in actual and predicted transport demand and their drivers of change in population and employment growth.

The recommended programme outcomes include:

- Easing of congestion in future (particularly on State Highway 1 Waikato Expressway and the Auckland Southern Motorway);
- Optimising levels of service, operation and management of transport networks (State Highways, local, public transport but also other infrastructure required to support growth);
- Improvement in journey time reliability, which is likely to worsen as growth occurs.

Indicative programme and costs

The Programmes indicative costs are as follows:

Table 3 - Indicative Programme Costs

	Years 1 - 3	Years 4 - 10	Years 11 - 20	Years 21 - 30
Community	\$15,100,000	\$1,500,000	TBC	TBC
Parks and Recreation	\$2,150,000	\$100,000	TBC	TBC
Education	TBC	TBC	TBC	TBC
3 Waters	\$51,435,000	\$28,360,000	\$3,000,000	\$2,000,000
Public Transport ²	\$1,000,000	TBC	TBC	TBC
Transport, roading, walking and cycling	\$19,750,000	\$37,500,000	\$30,000,000	\$47,500,000 (TBC)

² Indicative figures from NW PT network review

	Years 1 - 3	Years 4 - 10	Years 11 - 20	Years 21 - 30
Medical	TBC	TBC	TBC	TBC
Emergency Services	TBC	TBC	TBC	TBC
Land use planning *	\$2,200,000	\$370,000	TBC	TBC

* Note: WDC recognise the importance of early and considered timing for planning and is seeking additional funds through the LTP process as well as investigating other funding sources and investment partners

Next steps

The following are key areas for further investigation and activities to deliver the programme:

Consideration of effects beyond the North Waikato

Understanding the impacts of recent growth in North Waikato and future growth across the upper North Island of New Zealand is complex. Whilst growth in the North Waikato has the potential to shift growth away from South Auckland and North Hamilton it is difficult to confirm and estimate. Growth in the North Waikato will provide housing for people that may otherwise not be able to access due to supply pressures and if the growth is well managed there will be local employment opportunities. Any growth across Auckland and the Waikato will result in the need for infrastructure provision across these regions for a variety of areas including schools, social infrastructure and 3 waters. The primary cross boundary effect is for transport infrastructure and services such as medical, emergency and sporting. The growth proposed as part of the Recommended Programme for North Waikato is only to be promoted if there is a high level of local infrastructure/services and employment provision to offset the transport infrastructure/services provision.

Long Term Plans

The relevant programme partners are currently developing their Long Term Plans. Projects outlined in the Recommended Programme are currently being developed or consulted with the local communities.

Stakeholder and Communication Plan

The programme business case has been a partnership by a number of stakeholders to gain a greater insight into the problems, constraints, investment needs and drivers, and opportunities for the North Waikato.

A Stakeholder and Communications Plan will be developed which aligns with Future Proof, Waikato District Council and the NZ Transport Agency's consultation and engagement strategies, as well as meeting the RMA Part 2 requirements.

The Plan will be prepared to address the specific details for each stakeholder, including key contact person and approach for engagement.

Working group

The working group details will be developed and will include appropriate members and terms of reference. The process through which the Working Group will address cross-boundary funding of projects will be set down at this point also.

Indicative / Detailed Business Case – SH1 Bombay Hills to Longswamp

Involves an upgrade of SH1 through the North Waikato to improve the standard of the highway to a similar level as the new sections of the Waikato Expressway as well as the Southern Motorway improvements that are currently being investigated. Scope to be confirmed by the NZ Transport Agency.

Strategic Case – Public transport connections between Waikato and Auckland

The appropriate / improved public transport connections between North Waikato and Auckland are still to be determined. A strategic case will be the most appropriate place to identify this, and the potential approach (i.e. staging of the public transport improvements) that would be most appropriate.

DRAFT

Part A – The Strategic Case

1. Introduction

This programme business case is being developed as a collaborative and integrated planning approach by the programme partners. The Auckland Supporting Growth project has considered implications for growth within the Auckland Council boundary but no work has been extended to consider the implications of that growth on the Waikato region. Similarly, limited integrated planning work has been done to consider growth within the North Waikato itself. The programme partners have identified the need for integrated planning and this Programme Business Case begins such a process.

The purpose of this Programme Business Case is to:

- take a holistic approach to planning for growth in the North Waikato so programme partners can have confidence that growth can be supported from an infrastructure perspective;
- provide an integrated approach to planning for growth which contributes to the programme partners' high level strategic objectives;
- identify appropriate infrastructure to accommodate growth in a timely manner and understand how future growth will be accommodated;
- consider interrelationships between towns and the connections between them;
- understand the role other service or infrastructure providers have in helping achieve successful growing communities; and
- ensure the social and economic sustainability of the North Waikato sub-region.

This programme business case will provide:

- a description of the problems and benefits experienced in the North Waikato;
- a high level plan which confirms the preferred land use pattern to build communities with the right supporting infrastructure and services. This includes specifically identifying where the population growth should be focused to create communities of a scale that can be self-sustaining in terms of services provided / employment and also in terms of funding that infrastructure;
- a plan to deliver the identified outcomes we want but that maintains flexibility and agility;
- confidence that the preferred land use pattern is robust, deliverable and affordable
- support from partners – stronger likelihood of attracting investment;
- clarity on next steps and timings – policy changes, projects, monitoring frameworks;
- a programme which can be used to work with the developer community to ensure North Waikato grows successfully;
- a recommended programme that will inform the respective long term plans, State Highway Investment Programme and Regional Land Transport Plans; and
- a preferred land use pattern that will feed into the Waikato District Plan Review, Future Proof Growth Strategy Update and inform respective long term plans.

1.1 Partners and key stakeholders

This programme business case has been developed as a collaborative exercise between a number of programme partners, these being:

- Waikato District Council
- Waikato Regional Council
- the New Zealand Transport Agency
- Auckland Transport
- Hamilton City Council
- Auckland Council

There has been involvement or engagement, to varying degrees from a number of other stakeholders including:

- Iwi (it is recognised that involvement with Iwi has been limited and programme partners are commencing further consultation at the time of reporting)
- Ministry of Transport
- The North Waikato community
- KiwiRail
- WaterCare
- Ministry of Education
- District health boards
- Emergency services providers

2. Programme context

The scope for this Programme Business Case is the area shown in Figure 2 below, including the State Highway 1 corridor connecting up to the Bombay Hills, in the Auckland region. The Programme Business Case recognises the significant influences of growth in the local area as well as Auckland, Hamilton and the Upper North Island.



Figure 2 - Programme Business Case Study Area

2.1 Geographic and environmental context

The North Waikato is part of the Waikato district and is located in the North Island of New Zealand between Auckland and Hamilton. For the purposes of this Programme Business Case the North Waikato is defined as being the area within the Waikato District boundary, the Auckland Council boundary to the north, the south

side of Huntly and the urban and rural areas approximately 20 kilometres to the east and west of State Highway 1, as shown in Figure 2 above. The North Waikato is an increasingly important area within the upper North Island due to a number of factors, including:

- Proximity to the growing Auckland region
- Location between three major cities (Auckland, Hamilton and Tauranga) which are responsible for approximately half the country's economic activity
- Location of the connection between State Highway 1 and 2, the North Island Main Trunk Line and connections to major freight and commercial centres



Figure 3 - Intra and Inter-regional Linkages

The North Waikato consists of rural areas, small towns and well-established communities alongside the central Waikato River and State Highway 1 with a mixture of urban residential, rural-residential and rural land uses. The planned urban centres are in Pokeno, Huntly, Tuakau and Te Kauwhata, which are surrounded by some of the most productive agricultural areas in New Zealand.

2.2 Social context

The towns and majority of the population in the North Waikato are located along State Highway 1 and State Highway 2. In comparison to the New Zealand's over-all rates of growth, the Waikato district has experienced high growth over an extended period, as shown below in Table 4.

Table 4 - Waikato District and NZ Population growth rates over the last ten years (information sourced from Statistics NZ historical population estimates)

Year	Waikato population	% Change	NZ population	% Change
2007	60,600		4,223,800	
2010	63,300	4.46	4,350,700	3
2013	66,500	5.06	4,442,000	2.1
2016	71,200	7	4,693,000	5.7

The growth of Auckland and Hamilton, coupled with the high land and house prices in both of these cities and the comparatively lower median land and house prices within the Waikato district, is one of the 'push' and 'pull' factors related to growth in North Waikato, coupled with others such as desire for a change in lifestyle. The growth in population has been underestimated for some time in both the Auckland and Waikato regions, especially in 'hotspots' such as Pokeno which can have very large percentage changes in population in a short period of time. Poor or reactionary planning has also been exacerbated by the change in council boundary earlier this decade.

Looking to the future, the Waikato district population is expected to grow to approximately 73,900 by 2023 and to 104,500 people by 2046 (Waikato District Council Model National Institute for Demographic and Economic Analysis)³.

2.2.1 Liveability

According to the Waikato Perception Study, having a good overall quality of life in the Waikato district has a score of 79.8, also a score of 78 for having availability to primary schools. There are lower positive scores for availability of secondary schools 56.9, cultural facilities 59.1, recreational facilities 55.9, and tertiary education 51.1. There is a contrast in safety in the community in daytime and night-time with a score of 79.8 and 63.3 respectively⁴.

A recent household travel survey (Waikato Regional Council, July 2016) showed that the primary transport challenge for the North Waikato community is the lack of services, amenities, social infrastructure and community facilities. This results in residents needing to travel longer distances for employment, education, health services, shopping and recreational activities. Due to the lack of frequent public transport services (the current services are listed in Appendix C) in some of the towns in North Waikato, and the significant distances being travelled for daily services, there is increasing car dependency for the North Waikato communities. This has also resulted in locals commuting along the state highways, increasing the demand on strategic routes and conflicting with major freight movements and connectivity between the North Waikato towns being very limited.

³ See Appendix A for an explanation of the use of this model for population projections

⁴ Note that anything between 70 and 100 indicates satisfaction, 40-60, a neutral position, and less than 40 indicates unhappiness or dissatisfaction.

2.3 Economic context

Most of the productive land within the Waikato district is currently utilised for agricultural purposes. Accordingly, in 2013, the agriculture, forestry and fishing industry sector was the most common employer in the North Waikato.

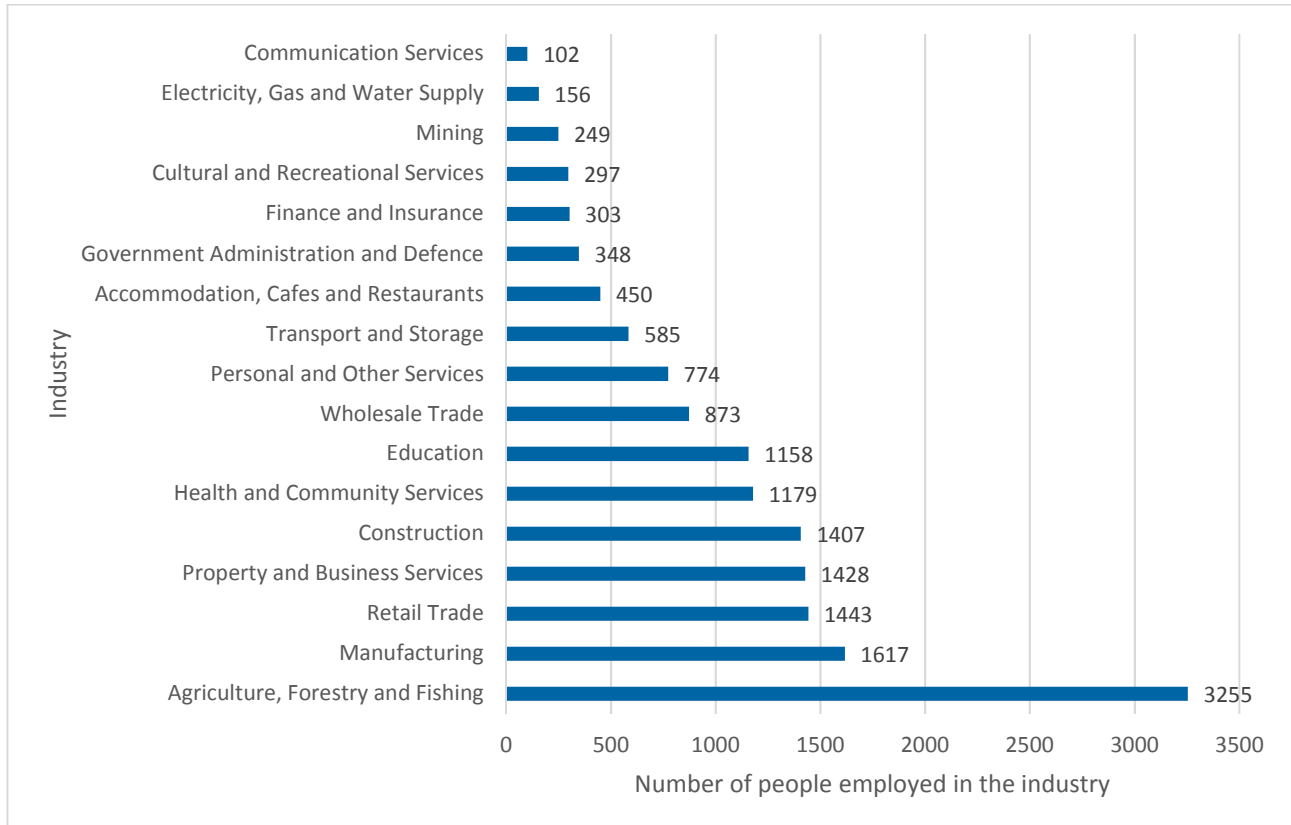


Figure 4 - North Waikato Employment Figures (Awaroa Ki Tuakau, Onewhero, Whangamarino, Hukanui-Waerenga, Whaingaroa and Huntly Wards Statistics NZ Census data, 2013)

Despite the strong comparative dominance, the number of people employed in the agriculture, forestry and fishing industries in the Waikato District has been declining since 2002, which may also be an indicator of a change in land use.

Manufacturing and other industrial services have been increasing across the Waikato. The 2013 Upper North Island Freight Story evidence base has set out an expectation of growth across all industry sectors. This is anticipated to create demand for at least 535 hectares of additional industrial land across the Waikato over the next 40 years.

In 2013, when the Upper North Island Freight Story was published, approximately 805 hectares of industrially zoned land had been created for as to allow for market flexibility. Several of these areas in the North Waikato as shown below in Figure 5



Figure 5 - Waikato Industrial Land over 50 Hectares (Upper North Island Freight Story Shared Evidence Base, 2013)

There are also considerable opportunities to increase tourism as a key employment and economic enabler due to the proximity to major tourism activities in the Auckland and Waikato regions. Councils, iwi, and the business and education sectors have released a joint annual implementation plan focusing freight, growth in key industries including tourism (Waikato Economic Development Strategy Implementation Plan, 2015).

2.3.1 Growth locations (urban versus rural)

Residential and commercial growth in the North Waikato is expected to increase significantly over the next 30 to 50 years due to rapid population growth in the upper North Island. Waikato District Council's monitoring data indicates that current growth rates in some of the area within North Waikato, such as Pokeno, being four times higher than was planned in 2010 with demand for residential property in particular outstripping supply. Demand is forecast to outstrip the current supply of land within the next 10 years; approximately 15 years ahead of forecast.

Since 2005, there has been an additional 3655 lots created in the North Waikato area. Approximately 66% of these have been in urban zoned land (including service zones), and 7% in rural-residential zones. 27% of new lots have been in the rural, coastal or pa zones. At 66% of all lots, the percentage of urban growth is falling short of the Future Proof target of 80% of all growth in the Waikato District occurring in urban areas, emphasising the need to look at land use strategies and planning, as targets are not being met.

Waikato District Council has developed structure plans for the towns of Pokeno, Tuakau and Te Kauwhata. However, this planning work has only considered land supply for housing and commercial areas within each town individually. Due to the current size of the towns, many services are not provided locally such as medical centres, hospitals, libraries, intermediate, secondary schools and retail facilities. The services

provided in each town are shown in the map in Section 3.5.1 below. As the towns grow, it is likely that more services will be needed locally or consideration may need to be given to providing services in different ways.

The current structure plans show the extent and location of urban growth areas however they do not include supporting services and infrastructure that would also be required as development occurs.

2.4 Infrastructure context

2.4.1 Three Waters

In 2015 the Future Proof partners (Waikato Regional Council, Hamilton City Council, Waipa District Council and Waikato District Council) commissioned work to consider the future water needs for the sub-region. The work (a series of business cases for water services) concluded that demand for quality communal water resources were projected to increase as people and industry move to the region. It also concluded that the ability to provide water resources to meet that demand is unlikely to remain sustainable.

The Waikato Regional Council administers consents for the take of water. The Waikato River is the Waikato Region's largest water body. Domestic water supplies for both urban and rural communities are the largest consumptive water-use sector in the Waikato catchment. The largest individual abstraction is Auckland Council's Waikato River take at Tuakau. Demand for water from the Waikato River is likely to increase in the future as Auckland grows and demand is increased. Allocation within the Waikato catchment is at or near capacity and future access to water resources is likely to impact on land use development plans.

2.4.2 Transportation

The National Freight Demands Study undertaken in 2014 suggests that freight demands are projected to increase by 58% for road and 51% for rail over the next 30 years with the biggest increase in Auckland. In addition both Waikato and Bay of Plenty regions are projected to see significant growth. The efficient movement of freight through the upper North Island has been acknowledged to be critical to New Zealand's economic success, with State Highway 1 through the North Waikato identified by the upper North Island freight partners as a nationally significant route, connecting to State Highway 29, which is the preferred route for traffic between Auckland and Tauranga (Upper North Island Freight Study, 2013). This not only confirms the amount of commercial activity in this area but also highlights the importance of the further demand that will be placed on the land transport system. Currently heavy commercial vehicles make up around 11-13% of road traffic.

Figure 6 below shows the existing transport network within the North Waikato including State Highways 1 and 2, the North Island Main Trunk rail line and key local roads. The figure highlights that the road network between Pokeno and Huntly is very sparse, and the area relies to a significant extent on State Highway 1 (Waikato Expressway) to travel north (Auckland) or south (Huntly and Hamilton) to access employment, and health and essential services,, with little secondary road network.

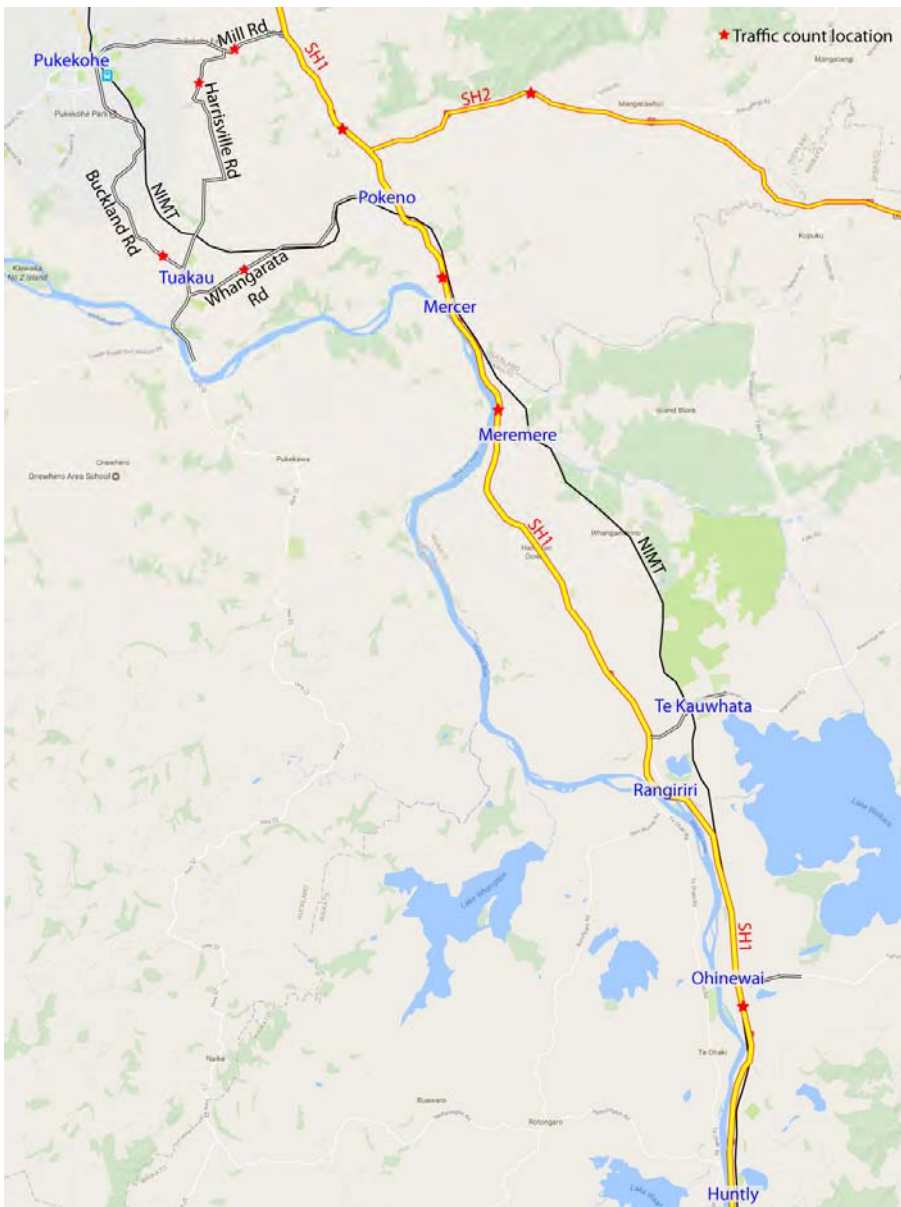


Figure 6 - Existing Road and Rail Network (image courtesy Google Maps)

2.4.2.1 Local Roads

The existing road network was established and developed to cater for what has long been a largely peripheral rural area serving farming operations, scattered villages and rural service towns. The road network therefore comprises a mixture of collector and local access standard roads. However, due to the southward expansion of Auckland this area is rapidly urbanising with new industrial, business and residential development occurring around the existing fabric of villages and towns. Consequently, the existing local road network is no longer fit for purpose, as it carries a transport task that is increasingly urban in nature.

2.4.2.2 Waikato Expressway

The Waikato Expressway is currently being improved as it is considered a Road of National Significance. The map below shows the current status of the Waikato Expressway. The Longswamp section is considered to be the last section of the Waikato Expressway – in the north, not yet upgraded. However, as part of a

National Speed Management Programme, there has been consideration of increasing the speed limit of some, higher standard inter-urban routes around New Zealand from 100 to 110 kph.

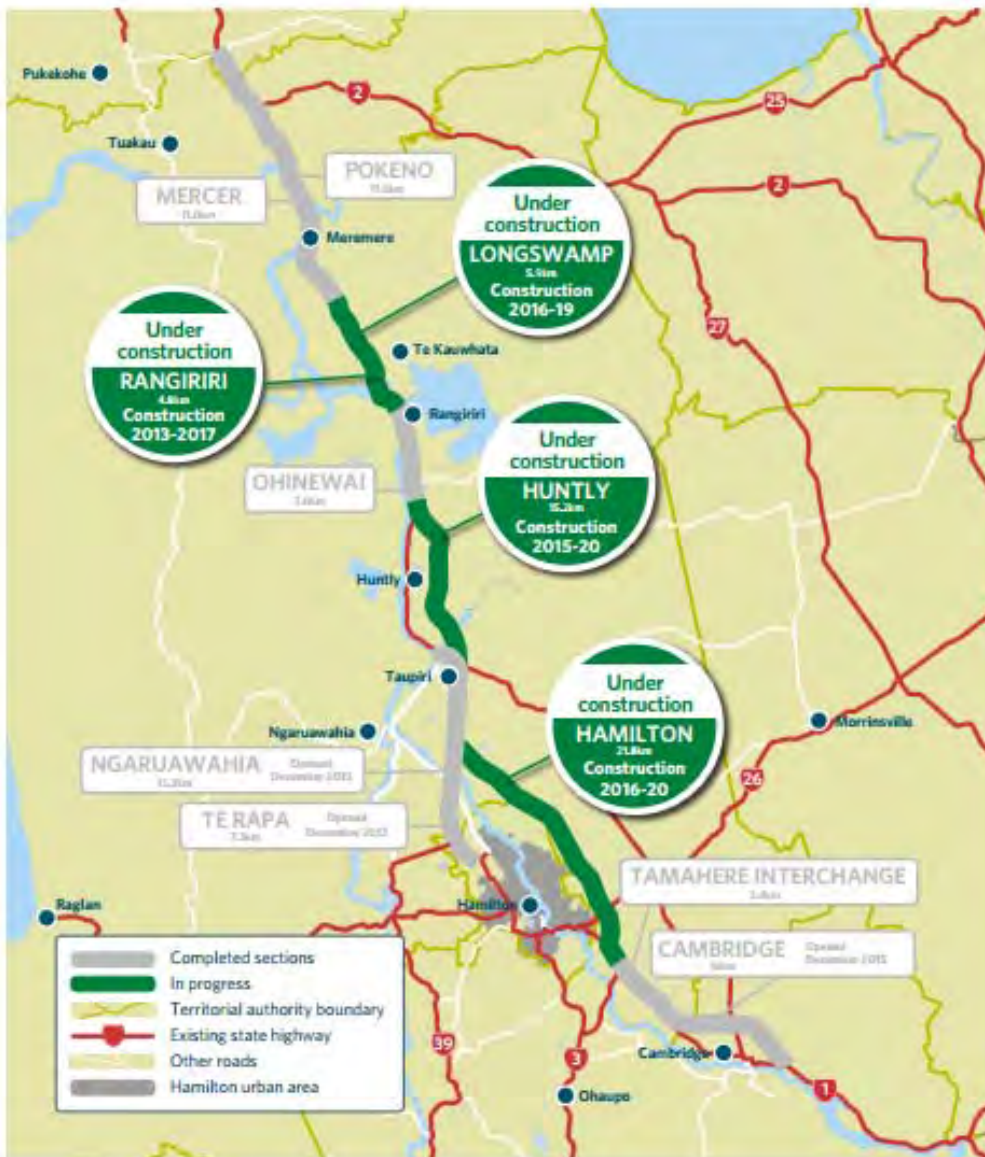


Figure 7 - Progress on Waikato Expressway

2.4.2.3 State Highway 2

State Highway 2 is identified as a significant regional connector linking Auckland, the Waikato and the Bay of Plenty regions, connecting through and between significant tourist destinations including the Coromandel Peninsula and the Kangerahake Gorge. As such, it is seen as an important tourist route (in contrast to State Highway 1/State Highway 29 including the Waikato Expressway which is seen as a strategic freight route), where safety and environmental values / attractions need to be prioritised in any maintenance or upgrades to the route.

3. Strategic assessment

The following section provides a strategic assessment following further evidence collection and analysis, which reconfirmed and refined the strategic case problems and benefits.

3.1 Defining the problems

A facilitated Investment Logic Mapping exercise took place in October, 2016 with representatives from NZ Transport Agency, Waikato District Council, and Waikato Regional Council.

The Investment Logic Map is attached in Appendix H. The group identified the following two problems and relative importance weightings:

Problem 1 – Ad hoc responses to growth pressure is creating communities disconnected from services, amenities and employment (60%)

Problem 2 – Current and future demand on the transport network is impacting on safety, commercial activity and service reliability (40%)

These problems are current issues that are expected to be exacerbated by growth, which is forecast to increase, if appropriate services, amenities, employment opportunities and transport options. This growth is shown in Table 5 below. Evidence supporting these problems is shown is provided in Sections 3.5 and 3.6.

Table 5 - Current and projected population levels – Future Proof Settlement Pattern

Town	2016	2025	2035	2045
Tuakau	4,639	9,402	10,252	22,072
Pokeno	2,132	7,868	12,399	12,762
Meremere*	564	708	734	711
Te Kauwhata (including Lakeside Housing Infrastructure Fund)	1,769	8,991	9,421	10,898
Huntly	7,491	8,764	10,174	10,490

* Meremere is not expected to be able to increase its residential population due to unsuitable ground conditions and other land constraints.

Table 6 - Current and projected employment projection figures

Town	2016	2025	2035	2045
Tuakau	1,432	3,761	4,101	8,829
Pokeno	524	3,147	4,960	5,105
Meremere**	13	283	294	284
Te Kauwhata	455	3,596	3,768	4,359
Huntly	2,259	3,506	4,070	4,196

** Meremere have approximately 70 hectares of land that is zoned for commercial and industrial purposes and could have a significantly higher level of employment than predicted depending on the type of use.

3.2 Benefits

During the Investment Logic Mapping process (attached in Appendix H) the following significant benefits of successfully investing to address these problems were identified:

Benefit 1: Efficient use of resources (10%)

Benefit 2: Improved economic performance (30%)

Benefit 3: Improved community wellbeing and resilience (40%)

Benefit 4: Improved network performance (20%)

These benefits reflect the importance of need for good land use and infrastructure planning particularly in terms of:

- building confidence that there is a plan to respond to the demand for land, which avoids continuing urban sprawl outside of agreed plans;
- investment certainty - what investment is needed and when to support growth with clear linkages back to why, how and where, which in turn will give investors' confidence around value for money;
- certainty for developers - growth is managed in line with partner / stakeholder and investor expectations; and
- ensuring residential and commercial growth occurs successfully – not just in terms of numbers but also having access to supporting services and infrastructure which allows people to work, live and play.

The potential benefits clearly indicate that a joint approach across partners is needed as the problems and benefits do not just sit with one organisation.

3.3 Alignment to existing strategies

Table 7 below confirms that investment addressing growth in the North Waikato is well aligned with high-level strategic direction of Central Government, as well as the regional, sub-regional and district level strategic plans. A more detailed assessment can be found in Appendix D.

Table 7 - Strategic Alignment

Document name	Issues, priorities or requirements	How the Programme Business Case aligns
National documents		
Government Policy Statement on land transport (GPS) 2015 Draft Government Policy Statements on land transport (2018)	The 2015 GPS has three key priorities – economic growth and productivity, improving road safety and value for money. The next GPS continues on the three priorities of the 2015 GPS as well as others including supporting intermodal connections, regional development, and use	Supports growth in the regions, road safety and caters for future urban growth
National Policy Statement on Urban	Requires Waikato District provide between 15-20% more developable land (i.e. land with sufficient infrastructure support) than	Provides a high-level plan identifying how the North Waikato's infrastructure

Document name	Issues, priorities or requirements	How the Programme Business Case aligns
Development Capacity (NPS-UDC)	the projected demand anticipated over the next 30 years.	requirements for growth can be met can be met
Regional / Sub-regional documents		
Future Proof Strategy	A comprehensive growth strategy for the sub-region that takes a long-term view to managing land use and infrastructure.	The Programme Business Case is informed by the Future Proof strategy and its recommendations will feed into the final Future Proof settlement patterns.
Auckland Transport Alignment Project (ATAP)	Provides a direction for the development of Auckland's transport system over the next 30 years. Acknowledges the importance an integrated transport system, which crosses the regional boundaries.	The Programme Business Case will contribute to the integration and planning for improved connectivity and integration between the Auckland and Waikato regions
Supporting Growth or Transport for Urban Growth (TfUG)	Its purpose is to deliver some of the key priorities set out in ATAP. It covers urban growth areas, and targets transport interventions to best accommodate that growth.	This Programme Business Case is a direct result of recommendations from Supporting Growth – it is aimed at providing co-ordinated management of the two region's growth challenges.
Waikato Regional Policy Statement	Promotes a collaborative approach requiring integrated management of natural resources and built environment in the Waikato. Acknowledges the importance of an agreed settlement and development pattern.	The Programme Business Case promotes an agreed settlement pattern and integrated management to achieve it.
Waikato Regional Land Transport Plan	Sets out the region's intentions for the development of the land transport system over the next 30 years. Priorities include the growth in freight, tourism and people movements and the importance of co-ordinating land use and transport planning.	The Programme Business Case is aimed at managing land use and transport planning in a co-ordinated manner to accommodate anticipated growth.
Waikato Regional Public Transport Plan	A recent review of this Plan identified a need to investigate public transport provision in the northern part of the region to accommodate growth. The Plan also requires a 'business case approach to be taken to the investigation.	The Programme Business Case includes consideration of public transport services and options and utilises the business case approach.
Waikato Expressway Network Plan	Ties the funding of the Waikato Expressway to land use planning and avoiding ribbon development. Objectives include enhancing growth and productivity, and improving journey reliability and safety.	The Programme Business Case has a number of similar objectives and as part of the assessment undertaken considers how the potential land use patterns will impact or give effect to objectives for the Waikato Expressway.

Document name	Issues, priorities or requirements	How the Programme Business Case aligns
District level documents		
Waikato District Economic Development Roadmap	Sets out the Waikato District's goals for economic growth and how their desired outcomes can be achieved. Key goals include increasing Waikato's international connectedness and encouraging economic links with Auckland and the wider region.	Inter and intra-regional connectivity, growth and economic performance development are key objectives for the Programme Business Case.
Waikato District Plan	Currently under review, the Waikato District Plan will enable future growth through zoning and plan provisions.	The recommendations of the Programme Business Case will feed into the District Plan and will be a Programme Business Case delivery mechanism

3.4 Uncertainties

This section of the Programme Business Case identifies uncertainties, which need to be taken into account when developing the options and programmes. Uncertainties are matters which that the study may not be in a position to resolve, but must be considered within the context of the study. These are captured in an 'uncertainty' log which is attached in Appendix F.

The key uncertainties include:

- demand and / or supply of housing in the North Waikato or the regions of Auckland and Waikato;
- the extent to which different social infrastructure providers are able to co-ordinate and integrate their infrastructure provision;
- the stakeholder's ability to fund the recommended programme which will impact or delay the delivery of the interventions;
- the rate and location of population, employment and economic growth;
- how, when and whether passenger rail can or will be extended into the North Waikato; and
- North Waikato resident's uptake of alternate modes of transport.

3.5 Problem one

Ad hoc responses to growth pressure is creating communities disconnected from services, amenities and employment (60%)

North Waikato is experiencing rapid growth and this is expected to continue quicker than previous predictions due to faster than expected construction of residential housing in Te Kauwhata and Pokeno. Statistics NZ states that the Waikato District is projected to grow by 2.3%, faster than the national average of 2.1%. This growth is expected to continue due to already approved District Plan changes, funding from the Housing Infrastructure Fund, and a number of private plan changes that are being proposed by developers and demand for housing within the wider geographic area.

Waikato District Council data has identified that nearly 35% of all new lots in the North Waikato have been created in land zoned as rural, rural-residential or out of an urban zone This indicates a significant

development trend of dispersed country living. Dispersed development affects the ability to provide infrastructure and services efficiently, as only limited services can be provided, or infrastructure development comes at a very high cost. Further, dispersed development requires people to travel further and often to reach the services they need. In addition the Future Proof strategy contains a growth target of 80% of growth within the urban limits of towns and villages, which is not being achieved.

In areas where structure plans have been developed, i.e. Pokeno, Tuakau and Te Kauwhata, the North Waikato is projected through the Future Proof process to grow quicker than originally set out in the Structure Plans. Pokeno is expecting to increase in population by 460% from 2,132 in 2016 to 11,954 in 2045. This significantly distorts the Waikato growth projections originally set out in the Structure Plans and increases the gap between employment and population size.

3.5.1 Social Infrastructure and Services

The North Waikato straddles different administrative areas for the provision of infrastructure services required to accommodate this growth. These can be broadly summarised as Auckland and the Waikato, which results in a number of agencies providing for the growing needs of the area. For example, Waikato District Council Waikato Regional Council and Auckland Council, or Waikato and Counties Manukau District Health Boards. This means that there are multiple stakeholders who not only have different strategic drivers, but only somewhat overlapping objectives.

As a result, provision of social infrastructure and services varies considerably throughout the North Waikato, with the services available in some of the rapidly growing towns of the North Waikato (such as Pokeno) being inadequate to support the population living there. The range of services currently available in the key towns or areas in and around the North Waikato are shown in Figure 8 below, with further detail available in Appendix C. As well as the social infrastructure being delivered by multiple stakeholders, these effects are also due to a number of other reasons, including low population levels in towns, growth occurring faster than new infrastructure and services can be provided and uncertainty about the level of services and infrastructure required in the future. Some critical services, amenities and employment opportunities are provided in adjacent towns such as Pukekohe for those living in the North Waikato, see figure 8 below. C. Waikato District Council have commenced studies in recent years to better inform and plan for new facilities and will be consulting with the community through the 2018-21 LTP process.

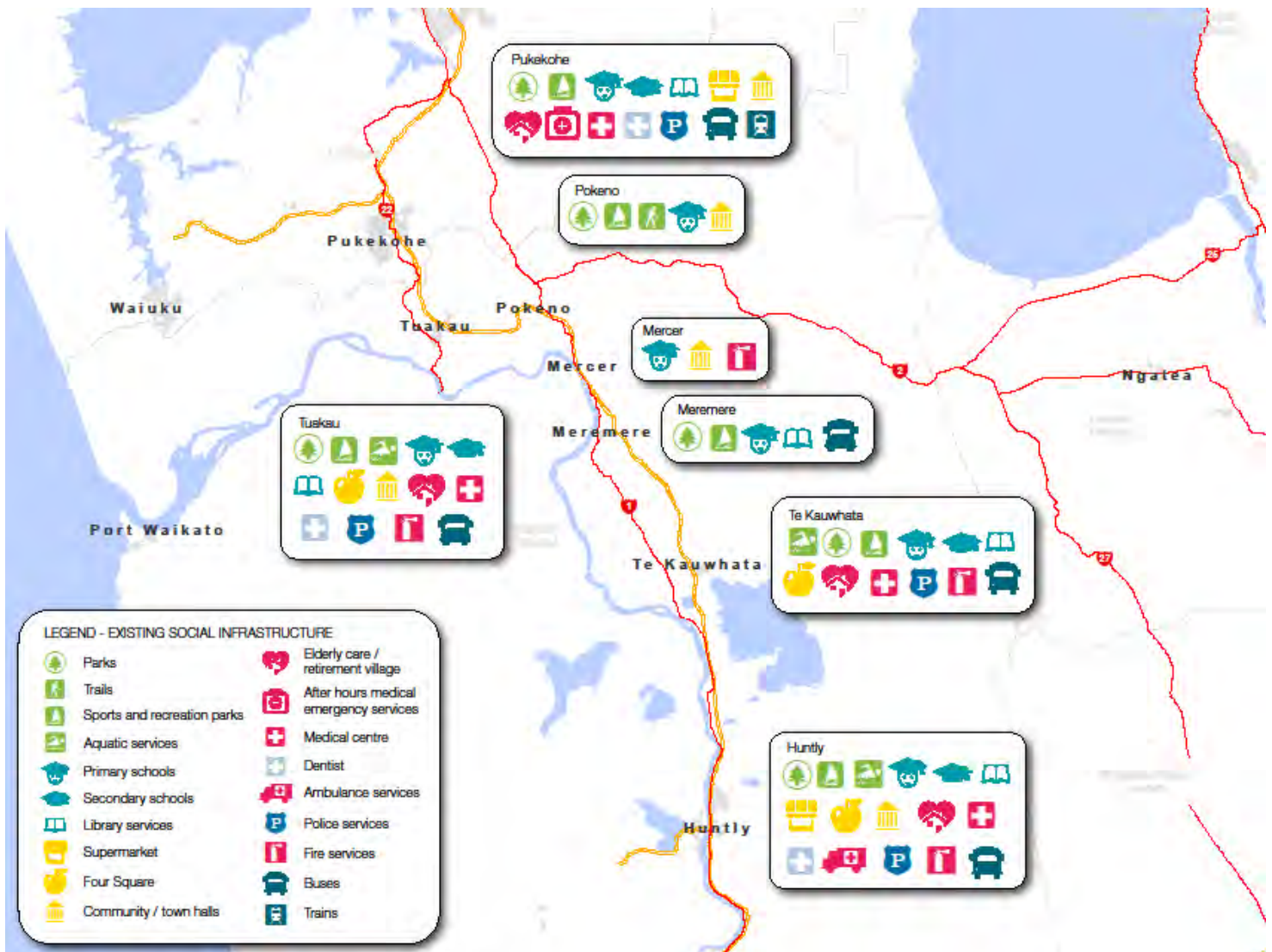


Figure 8 - Social Infrastructure available to the North Waikato

3.5.2 Transport Connectivity

Transport connectivity for communities in the North Waikato are heavily reliant on State Highway 1 / Waikato Expressway to access employment, services and amenities. Figure 9 below shows the access points along State Highway 1 / the Waikato Expressway between Bombay Hills and Longswamp (near Te Kauwhata). Without provision of localised amenities, employment, social infrastructure and services, reliance (per household but possibly not total volume) on State Highway 1 / Waikato Expressway will increase, as the North Waikato growth continues. This issue is strongly linked to Problem 2, which is discussed in Section 3.6 below.



Figure 9 - Map of the road connections off SH1 in the Bombay Hills to Longswamp section

3.5.3 Implications of the evidence

These growth projections and identified development trends have led to recognition of the need for a proactive and coordinated response to growth planning. The provision of infrastructure and services in the area is not being undertaken consistently, and in an integrated manner. This results in North Waikato residents' needs being inadequately met, barriers to movement and growth and people unable to meet their day to day needs. Continued dispersal of the residential form will only create more of the status quo and continue to exacerbate challenges for future funding of infrastructure.

Moreover, the ad-hoc nature of development is resulting in Waikato District Council not benefiting fully from developer contributions while adding additional strain on community infrastructure and services.

Programme Partners have identified commonalities in the development of the Waikato Plan and agree that a number of actions in that plan will be required to address these problems: These include:

- Priority One Actions:
 - Collaborate on a Regional Development Strategy (including “identifying development opportunities and growth areas”)
 - Identify the regional priorities for service and technical infrastructure (stocktake of waters, transport, social infrastructure –local and central government infrastructure and services)

- Identify how Central Government Services can be provided to match community needs
- Central Government Partnerships and Collaboration (focus on a stocktake of existing services provided by central government and then identifying collaboration opportunities (phase 2))
- Work collaboratively to develop and encourage enduring partnerships that enable Iwi/Maori aspirations to be achieved
- Priority Two Actions:
 - Development of Community Plans
 - Collaboration with Future Proof

3.6 Problem Two

Current and future demand on the transport network is impacting on safety, commercial activity and service reliability (40%)

Travel demand has been steadily increasing in the upper North Island and across New Zealand because of economic and population growth. This growth is particularly high in areas located near Auckland growing urban areas such as South Auckland. Whilst population levels comparative to Auckland and Hamilton are not high in the North Waikato, the proportional increase has been relatively high. This growth is the result of increasing house prices across the Auckland and Waikato regions, proximity to major urban centres, approved structure plans and zonings that enable rapid supply of housing and a high demand for housing.

The disparate approach taken to planning for the North Waikato outlined in Problem One strongly links and contributes to the transport problems of the North Waikato, as the ad-hoc responses are creating communities disconnected from services, amenities and employment and increasing the need to travel. Without an integrated approach to the provision of infrastructure, increasing people's ability to work, live and play locally, (addressing problem one), the increasing population will put increasing pressure on the transport network.

Both the ART and WRTM provide forecast traffic flows for key North Waikato road links. These forecasts are documented in Table 8. These show the increasing traffic flow for State Highway 1 in North Waikato. Note, this does not include analysis of the currently approved Waikato Expressway improvements (i.e. Huntly Bypass).

Table 8 - ART and WRTM Forecast Traffic Flows

Road	Section	Daily Traffic Flows		
		Existing	2041 WRTM	2046 ART
SH1	North of Razorback Road	40,400	47,700	44,500
SH1	Pokeno to Mercer	24,200	35,300	40,700
SH1	Mercer to Meremere	22,600	36,200	n/a
SH1	Ohinewai to Huntly	21,700	31,500	n/a
SH2	Mangatawhiri	15,600	10,300	n/a
Buckland Road	North of Geraghtys Road	6,690	11,700	10,800
Whangarata Road	East of Bollard Road	3,610	14,000	3,800

Harrisville Road	North of Logan Road	3,960	n/a	12,000
Mill Road	East of Harrisville Road	15,600	n/a	31,500

It should be acknowledged that the modelled flows reflect the fairly modest land use changes. Even so, the forecast increases in traffic flows along parts of State Highway 1 seem surprisingly low. The maximum rate of growth (between Mercer and Meremere is around 2.5% per year, while the lowest (north of Razorback Road) is under 1%.

An example of growth, at 3% per year between now and 2041 (the WRTM forecast year), would lead to the following forecast daily flows:

- The daily flows on the section of SH1 north of Razorback Road (i.e. north of SH2) would be around 70,000 vehicles/day, two way. This would be at or over the capacity of a four lane road (depending on the directional split and the profile of traffic over the day); and
- south of SH2, factoring the maximum existing flow of 24,200 vpd would give a forecast flow of around 42,500 vpd, two way. This would be within the capacity of a four-lane road.

In terms of the forecast flows on the local roads within North Waikato, these depend to a greater degree on the level of local land use change included within the models:

- a significant increase in flows is forecast along Whangarata Road, according to the WRTM;
- a significant increase in flows is forecast along Harrisville Road, according to the ART model;
- a reasonable (but not substantial) increase is forecast along Buckland Road, according to both models; and
- a doubling of flow to over 30,000 vehicles/day is forecast along Mill Road, according to the ART model. There are passing lanes along parts of this route, but the sections of road with one lane per direction can be expected to be very congested at this level of flow.

3.6.1 Waikato Expressway

The Waikato Expressway in this part of North Waikato (from Bombay Hills to Longswamp) does not meet the current design standards adopted for the Roads of National Significance from both a safety and efficiency standard:

- current level of service is D – speeds begin to decline and density increasing more quickly. Freedom is seriously limited and drivers experience discomfort;
- KiwiRap Collective Risk – part Medium and part low-medium;
- KiwiRap Personal Risk – low; and
- KiwiRap Star Rating – majority 4 star but part 3 star.

Whilst these facts on the surface do not indicate significant problems currently, this part of the Waikato Expressway is inconsistent with SH1 both up and downstream.

Future traffic volumes are expected to be approximately 38,000 in 2041 (WRTM 2015 Model) compared to the current 24,000 (approx. vehicles per day 2015 Traffic Data Booklet). In the shorter term, traffic modelling indicates that completion of the Waikato Expressway in 2020 will result in a transfer of approximately 3,000 vehicles per day from parallel routes (SH2, 27, 39, 1B). This additional traffic will be drawn onto the Bombay to Longswamp section that will have a materially lower design standard than the adjacent Southern Motorway, connected to the north, and remaining Waikato Expressway to the south.

The Waikato Expressway Network Plan recognises land use pressures in the North Waikato. The customer experience of the Waikato Expressway, and the level of service provided in terms of the One Network Road Classification, may not be consistent along the entirety of the corridor without appropriate intervention.

3.6.1.1 Local roads

From the Crash Analysis outlined in Appendix A of the Transport Assessment of Short Listed Options, Mill Road has been identified as having a safety concern at the T-junction of Mill Road and Harrisville Road (priority controlled by a stop sign) with thirteen crashes identified on Mill Road between 2012 and 2016.

3.6.2 Implications of the evidence

The national and local factors contributing to growth are resulting in increased volumes of travel, especially on State Highway 1. This will continue to have deteriorating impacts on safety for road users, and contribute to continually reducing levels of service and travel time reliability without improvements to the current network.

In particular, the safety and efficiency of the Waikato Expressway on the Bombay to Longswamp section is likely to worsen as development continues to occur in the North Waikato. The trend for more housing within the North Waikato unsupported by services, amenities and employment opportunities will lead to a need to consider increasing the capacity of State Highway 1 as the volume of traffic will increase significantly as people need to travel greater distances in their daily activities.

4. Investment objectives

The investment objectives for this Programme Business Case relate specifically to the four problems and benefit areas identified and were developed with stakeholders and key relevant NZ Transport Agency staff.

Key performance indicators (KPIs) have been developed for each of these Investment objectives. The KPIs are used to set targets for what the programme options should achieve.

Investment objective 1: Improve North Waikato's liveability through increased access to, from and within the future urban areas, including to services and amenities, employment areas, and town centres

KPI 1.1	Increased access and proximity to services and amenities, employment areas, town centres, and public transport network
KPI 1.2	Improve spatial coverage of walking and cycling paths

Investment objective 2: Enhance Waikato's connectivity through increased effectiveness and efficiency of the multi modal transport network to, from and within the future urban areas

KPI 2.1	Increased effectiveness of the transport network to, from and within the greenfield growth areas for all modes (Measure—travel time reliability between key destinations such as towns within the North Waikato and nearby major destinations such as Pukekohe, Hamilton and Te Rapa)
KPI 2.2	Increased efficiency of the transport network to and within the greenfield growth areas (Measure—average travel time between key destinations such as towns within the North Waikato and nearby major destinations such as Pukekohe, Hamilton and Te Rapa)
KPI 2.2	Death and Serious Injury crashes (Measure— total in North Waikato) (Measure— per vehicle kilometres travelled in North Waikato)

Investment objective 3: Improved national and regional economic growth and performance of the Auckland and Waikato regions by improving interregional connections and connections within the Waikato region

KPI 3.1	Increased effectiveness of the transport network, through the North Waikato (inter-regional movements) (Measure—travel time reliability between key freight destinations such as Hamilton, Tauranga and Auckland)
KPI 3.2	Increased efficiency of the transport network, through the North Waikato (inter-regional movements) (Measure—travel time reliability between Hamilton, Tauranga and Auckland)
KPI 3.3	Increased (maintained) performance of inter and intraregional connections (across mode)

Investment objective 4: Deliver on the Future Proof principles and provide infrastructure as required for the North Waikato region and are consistent with development patterns set by Future Proof

KPI 4.1	Plan and deliver social infrastructure for communities
KPI 4.2	Transport enables land to be developed in line with the development patterns in the Future Proof Strategy

Part B – Developing the programme

5. Alternatives and options

The programme partners and a large number of officers from these organisations were involved in providing input into the alternatives development with specific options identified, developed and considered for the Programme Business Case. Key to developing the programmes was undertaking a review of partners' plans, strategies and testing these with stakeholders. This approach identified more than 200 possible options within the alternative areas outlined below. These were then assessed for their effectiveness in addressing the problems being experienced.

5.1 Land Use

To develop land use patterns which provide connected, well-serviced communities in the North Waikato will take considerable time and effort by the Waikato District Council and their partner organisations. This will require economic development strategies and similar studies with outcomes including focusing on existing towns and protecting their town centres, social services and soils. The Future Proof strategy targets 80% of Waikato District growth occurring in an urban environment, which needs to be achieved in the identified areas of growth. Partnerships with developers may help improve planning outcomes so that they align with council. Land use changes will need to plan for and facilitate the increase in localised employment opportunities and services. This includes ensuring that there is sufficient commercial land zoned to facilitate employment growth where it is desired. It is also important to leverage off the existing opportunities for each town. For example, there is appetite to grow Tuakau due to its' proximity to Pukekohe's services, amenities and employment opportunities, and Meremere may be able to focus on industrial growth because of the activities locating in the area.

5.2 Social infrastructure and services

It was agreed that the growth, which contributes to improved community wellbeing and connectivity within the North Waikato, would only be able to occur with a significant increase in the quantum and quality of social infrastructure and services. There is an emphasis on providing services which are cohesive with its function, its surrounding demographic and accessibility to the community. This includes considering service placement for services within the community as well as its location to other services such as a hall near a sports field, and providing services which may not need a permanent physical presence e.g. mobile libraries and e books with readers.

5.3 Parks and recreation

Parks and recreational areas need to be multi-use and accessible to the community. The locations would need to be near schools and halls where it is cohesive or shared with other services. Incorporating these requirements will promote well-connected communities, and reduce pressure on the transport network. Aging infrastructure will need to be upgraded to meet the needs of the community. Considerations include involving developers to plan social infrastructure with council through regulation or other means.

5.4 Education

Schools are an important component of resilient and well-connected communities and accordingly need to be flexible to provide for the changing town demographics. Options to be considered include expanding on existing schools or providing schools in key locations and providing more transport to those schools. Considerations include public transport provided by Ministry of Education and Waikato Regional Council.

It should be noted that The Ministry of Education has been working with Pokeno School to plan their site to cater for projected growth from development in the Pokeno area. Information provided by Waikato District Council around the timing, size and scale of development in Tuakau will be used to consider the potential effects on the local schools as well as any schools in the wider area, which may be indirectly affected. The Ministry will work with local schools to ensure they have plans in place to allow them to cater for growth when it occurs. The Ministry of Education is presently gathering demographic information regarding future growth in the Te Kauwhata area. This information will be used to consider the effects on the wider schooling network and what planning responses will be required to meet projected long-term growth. The Ministry will work with Waikato District Council regarding its structure planning and residential development proposals / timing in order to coordinate planning proposals. Wider sector and community consultation will subsequently follow as the response options to the growth are developed.

5.5 Medical services and infrastructure

The North Waikato does not have a hospital or easily accessible specialist services. There are medical centres in Tuakau, Pukekohe, Te Kauwhata and Huntly but residents are required to travel to either Hamilton or Middlemore hospital for services not provided at medical centres, which does not promote safe road use, nor does it reduce the number of trips out of the area. As population demographics change, and the population ages, access to medical infrastructure will be of increasing importance, and an important element of a resilient community. There is an emphasis on coordinating with St Johns, the District Health Boards and community public transport to provide transport that is more reliable to Hospital and specialists as well as medical centres. To increase accessibility for medical services there are options including more accident and emergency centres, a new secondary level hospital servicing the sub-region, public-private partnerships between the District Health Boards and businesses, and use of new technology such as virtual GP services.

5.6 Emergency services

There are problems with response times due to the emergency response boundaries covering the old Franklin region; therefore, North Waikato is serviced by two regions. This causes lag responses to emergencies or limited use of services by local residents. Lack of reliable emergency services do not promote the North Waikato as an attractive and safe area for development. There needs to be better communication between the Waikato and Auckland emergency response teams. There is consideration of integrating services in the old Franklin region with Auckland cohesively. Another alternative is to co-locate emergency services within the North Waikato in an urban centre.

5.7 Water supply

Water supply availability in the North Waikato is generally good, although the infrastructure will need to be upgraded to meet the demands resulting from population growth. This can be achieved through minor upgrades as required. There is an increasing trend of extreme weather and droughts in the Waikato. Because of this, there is a focus on both conserving water, and water quality which will also help provide

quality drinking water. Policies encouraging or requiring developers to use low impact water design and other options including providing rain gardens, grey water reuse and roof water tanks for watering gardens will also preserve fresh water supply.

5.8 Wastewater

There are no constraints for wastewater in North Waikato after additional capacity becomes available through an upgrade of the Tuakau wastewater treatment plant in 2019/2020 being undertaken by WaterCare. It is noted that wastewater treatment upgrades will need to happen in Te Kauwhata after consent expires and to support further growth. The 50 year strategy for the Huntly wastewater plant also identifies the need to increase the plant capacity by at least 20% to accommodate anticipated growth. Wastewater infrastructure will need to be built as part of development as growth occurs across North Waikato.

5.9 Stormwater

There are no significant flooding issues associated with any of the towns within the Programme Business Case and stormwater will be addressed at a local development level. There may be longer term considerations associated with addressing climate change and natural hazards risk.

5.10 Roading

The key issues relating to private vehicle trips to/from the townships in the North Waikato include:

- Pokeno, Huntly and Te Kauwhata all have very good access to the State Highway network, for trips north to Auckland and south to Hamilton (although it is acknowledged that there are capacity issues at the Pokeno interchanges to/from State Highway 1). In the case of Pokeno, there is also currently good access to State Highway 2;
- the Te Kauwhata interchange has just been completed, and it can be assumed to have reasonable capacity;
- connections to Huntly are confined to north and south of Huntly. If significant further growth was envisaged for Huntly in one or more of the Programmes, then an additional interchange could be perceived as being worthy of consideration – but the additional growth expectations for Huntly in Programmes 5B and 6B are not significant;
- the additional growth anticipated at Pokeno, with all short listed programmes, is likely to lead to a need to consider capacity issues of the interchanges and connections to the State Highways;
- Tuakau is (relatively) remote from the State Highway network, and the current connections are rural roads. A number of injury accidents have occurred in recent years, with many of these resulting from loss of control. Significant increases in population in this area would therefore require some form of improved roading connection, to Pukekohe (and the future Expressway) and to Pokeno (with access to State Highway 1). Improved access could also be provided from Tuakau to State Highway 1 at Bombay although this may offer predominantly short term benefit, until the Pukekohe Expressway is provided;
- the above point highlights that the function of local roads may change, with through traffic (and the provision of reliable public transport) becoming more important over time; and
- the road network in the North Waikato area is unusually dependent on State Highway 1, which is used for both long distance trips (between Auckland and Hamilton) and local trips (between Pokeno and Huntly, Te Kauwhata and Huntly, etc). There would appear to be merit in considering the development of a secondary road network – indeed this may become essential, if, as suggested at Section 2.4.22 above, the Waikato Expressway is upgraded to a motorway, with further restrictions on access (and a higher speed limit). However, the secondary network will presumably be less attractive than State

Highway 1, which provides a high speed, high capacity route, with high quality interchanges serving Pokeno, Te Kauwhata and at Huntly (following the completion of the Huntly Bypass).

On the other hand, there may be merit in considering the provision of a new route connecting State Highway 1, south of Pokeno, with the Pukekohe Expressway (identified in Auckland's Supporting Growth), passing between (and including connections to) Pokeno and Tuakau. Such a concept would appear to be consistent with the fact that 47% of trips from North Waikato are destined for Auckland compared with 16% destined for Pukekohe (noting that these proportions may change over time).

5.11 Public Transport

Roading and public transport components, should be seen as a package, rather than viewed as serving one or the other transport mode. For example, an improved road link will assist some of the public transport concepts. A recent North Waikato Public Transport Review has identified that "improving public transport is key for the connectivity and growth of these (North Waikato) towns".

In terms of issues relating to the provision of public transport in the North Waikato, the primary issue is the relatively low and dispersed nature of the population throughout the area. As a result, provision of public transport which is effective and provides for the needs of the community requires careful planning and co-ordination to complement existing community transport services and improve outcomes and efficiency. There is a need to better understand the public transport needs of the North Waikato before any decisions or long term investments are made. Further discussion of the potential public transport options available to potentially be considered are included in Appendix I

5.12 Walking and Cycling

Walking and cycling is something that will have increased demand and need in the shorter term for movements within towns. Residents of the area will expect more options to walk and cycle as the towns become increasingly urbanised, and there are more opportunities to work, live, and play in the area. Walking and cycling can accommodate demand for shorter trips, reducing demand for journey by private vehicles. As public transport uptake increases, walking is also likely to, as walking is an important part of the door-to-door journey for public transport users. Provision for active modes needs to consider new cycle facilities between Pokeno, Tuakau and Pukekohe as well as connections to public transport, town centres, trails and river edges to meet demand. The Waikato District Trail Strategy acknowledges these needs, and will set out to accommodate them where possible.

6. Programme options development and assessment

6.1 Programme options development

A set of programme options were initially developed by the project team compiling sets of alternatives in differing areas of focus. These ranged from 'Business as Usual' through to no growth in North Waikato, limited intervention to increase activity in Tuakau and Huntly, to rezoning land for services and amenities in Tuakau and Pokeno.

In addition to the investment objectives, the programmes were developed with the following other factors or outcomes:

- provide improved access (i.e. public transport services) for residents in North Waikato without access to private vehicles
- achieve more localised employment opportunities, such as an aim for one job per household average or one per 2.5 people to achieve Work, Live, Play objectives
- provide a wide range of services and amenities across North Waikato
- identify areas for development that are value for money for the provision of infrastructure as well as long term operation including identifying where capacity exists for current infrastructure
- 80% of the growth in the Waikato District occurring in urban areas, as per the Future Proof strategy for the Waikato District
- provide safe and liveable communities for all; and
- increased developer contributions per dwelling to sufficiently fund cost of new infrastructure and services required for successful communities.

During development of the programmes the programme partners identified a range of principles that framed the development of the programme options. These included but were not limited to:

- improved travel planning for communities and understanding of travel connections for new residents and businesses;
- provide services and infrastructure with an understanding of what the community is likely to need in decades to come;
- the programme will need to evolve with input from the community over time;
- community led design of the towns as they grow;
- significantly improved public transport and reduced dependency on cars; and
- high levels of community engagement and communication.

6.2 Programme assessment considerations

Prior to undertaking the assessments it was critical for the programme partners and stakeholders to have a clear understanding of the towns within North Waikato, their function, constraints and opportunities. The description and issues facing Tuakau, Pokeno, Meremere, Huntly, Te Kauwhata and the wider rural area that informed the programme assessment have been attached in Appendix J.

6.3 Programme options assessment

The long list development of options looked at a number of key factors including:

- Population levels locally and across North Waikato and potential for cost effective growth
- Employment levels locally and distance and access to employment within Waikato and Auckland regions as well as opportunity for increases in localised employment
- Provision of infrastructure including transport, 3 waters and sport and recreation
- Community expectations and acceptability of type of community and available services

Programme 3 shown below and detailed in Appendix K is the likely outcome for the North Waikato should the recommended option or one of the shortlisted options not be achieved. This would result in continued lack of services and infrastructure across North Waikato as well as the likely need for the following:

- New schools in areas not planned or too remote with limited educational provision due to small school sizes and facilities
- Reactive health services due to dispersment of the population
- 6 laning of the Waikato Expressway due to increased traffic volumes as there are limited employment opportunities locally, lack of services and amenities and a need to travel by car to meet daily needs
- Increased cost to ratepayers and the community as a result of
- Overcrowding of schools or continued use of temporary facilities as growth exceeds expectations or plans

Stakeholders reviewed the long list of eleven programme options and identified those that were to be short-listed. This process resulted in the short list shown in Table 9.

Table 9 - Long list to short list of programme options

No.	Description	Short list	Comment
1A	Low level intervention - Growth in Pokeno, then Te Kauwhata	× Not short listed	This was considered not acceptable and recognised the need for increased levels of intervention by partner organisations
1B	Low level intervention - Growth in Tuakau with reactive response	× Not short listed	This was considered not acceptable and recognised the need for increased levels of intervention by partner organisations
2	No growth in North Waikato, activities in Auckland	× Not short listed	This was considered unlikely to either be achieved and that growth in North Waikato was to be promoted but also manager effectively
3	Growth in Pokeno, then in Te Kauwhata and un-serviced developments	× Not short listed	This was considered unacceptable and did not meet the Future Proof principles of increasing dwellings within urban (serviced) growth nodes,

No.	Description	Short list	Comment
			and will exacerbate social issues and disconnectedness with communities
4	Limited intervention (fewer social infrastructure facilities provided and localised employment opportunities) to increase activity in Tuakau (pop. 10,000, emp. 2,600) and Huntly (pop. 8,300, emp. 3,300)	► Short Listed	This option was short-listed as the “Do Minimum’ option but was not preferred by any of the partner organisations as it does not encourage ‘work, live, play’ in the North Waikato,
5A	Proactive planning, services and amenities for Tuakau (northern) and Huntly (southern)	× Not short listed	This programme was not short-listed as it was recommended that Pokeno and Tuakau should share the provision of services for the northern area. Otherwise the problem of limited services and amenities to support Pokeno will continue.
5B	Proactive planning, services and amenities for Tuakau and Pokeno (collective pop of 20,000 to 25,000) (emp. 3,500 and 3,500) in the north and Huntly (emp. 4,000) in the south	► Short Listed	This programme was short-listed and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided
5C	Proactive planning, services and amenities for Huntly (southern) and Pokeno (northern) which would require rezoning and other changes to provide services, and amenities such as schools and sportsgrounds	× Not short listed	This programme was not short-listed due to the cost associated with provision of infrastructure and unfeasibility of the option due to geographic and access constraints to further development in Pokeno to the east of State Highway 1
6A	Growth in Tuakau to reach a larger population level (15,000 -20,000) with the same structure plan with additional growth on the outer areas and services for the northern area shared between Tuakau and Pokeno	× Not short listed	This programme was not short-listed due to the impact of growth on the surrounding area of Tuakau as high value arable land
6B	Proactive planning and response with increased population in the medium to long term for Tuakau (pop 15-20K), shared services for Tuakau and	► Short listed	This programme was short-listed and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided

No.	Description	Short list	Comment
	Pokeno (emp. 8,000 and 3,500 each) for the north and services in Huntly for the south (emp. 4,000).		due to critical mass from population levels and employment
6C	Growth in Tuakau to reach a larger population level (15, 000 -20,000) with a redeveloped structure plan and/or planning changes (i.e. to reduce land use and footprint size, services for the northern area provided for primarily in Tuakau	× Not short listed	This programme was not short-listed as it was recommended that Pokeno and Tuakau should share the provision of services for the northern area

6.4 Short list programme options summary

All of the shortlisted programme options include non-infrastructure activities such as developer contributions and future planning with social service providers. The difference in the programmes is the level of investment, where it will be invested and when.

Programme Option 4 – Limited intervention to increase activity in Tuakau and Huntly. This was short-listed as the “Do Minimum” option as it was agreed by project team members and stakeholders that the current planning (Programme 1A) is not acceptable as it continues current fragmented land development in the Waikato and will require an increased level of intervention by partner organisations to cater for growth in North Waikato. The programme interventions are disconnected, do not build on one another to promote ‘work, live’ play in the North Waikato, does not adequately consider the increasing connection between the North Waikato and Auckland. The evidence confirms that the North Waikato needs to be more connected within towns, within North Waikato and between Auckland.

Programme Option 5B – Proactive planning, services and amenities for Tuakau and Pokeno (northern) and Huntly (southern). This programme was shortlisted and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided. This programme is the same as 6B but with a lower population level in Tuakau, approximately 11,000.

Programme Option 6B – Proactive planning, services and amenities for Tuakau and Pokeno (northern) and Huntly (southern) with growth in Tuakau to reach a larger population level (15,000-20,000, depending on feasibility and intensification of land use) with a redeveloped structure plan and planning changes (i.e. to reduce land use and footprint size and services for the northern area shared between Tuakau and Pokeno) for the five towns accommodating the bulk of the North Waikato’s growth. This programme was short-listed and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided due to critical mass from population levels and employment. It was also supported due to the lower unit cost for developing additional housing in Tuakau for water and wastewater, its ability for increased employment opportunities, existing social infrastructure such as schools and access to potential for long term development of a passenger rail service to Auckland due to the larger, more focused population growth.

As part of the development and assessment of the Programme Options, estimated traffic forecasts resulting from three different land use scenarios have been developed. These forecasts provide better context to understand the level of transport infrastructure that will be required to accommodate North Waikato's growth

Road	Section	Daily Traffic Flows				
		Existing	2041 WRTM /2046 ART Forecasts	2045 Programme 4 Estimate	2045 Programme 5B Estimate	2045 Programme 6B Estimate
SH1	Pokeno to Mercer	24,200	35,000 – 41,000	38,000	37,000	41,000
Buckland Road	North of Geraghtys Road	6,690	10,000 – 11,000	18,000	16,000	23,000
Whangarata Road	East of Bollard Road	3,610	4,000 – 14,000	11,000	10,000	13,000
Harrisville Road	North of Logan Road	3,960	12,000	9,000	8,000	14,000

Figure 10 - Estimated Future Traffic Flows resulting from the three short listed Programmes (Flow Transport Assessment – Appendix G)

6.5 Short list programme options assessment

This section outlines the process used to assess programme short list. It provides an assessment against each of the long list and then more detailed assessments of how short listed programme options performs against the following criteria:

Assessment criteria 1: Assessment against project investment objectives.

Assessment criteria 2: Assessment against strategic fit, effectiveness, significant risks, benefit and cost appraisal.

Assessment criteria 3: Assessment against dependencies, interdependencies, indicative cost, indicative timeframes, feasibility, affordability, economy, environmental, social.

Detailed descriptions and assessment of the programme options are contained in Appendix K).

6.6 Short list assessment findings

The short list assessment is shown in Table 10, overleaf, and highlights the need for an improvement on the current situation and approach for North Waikato. In addition to the assessments against the criteria outlined above it is important to note the following:

- there are dependencies and interventions required to implement the shortlist programmes 5B and 6B. There is unknown acceptance from Public and Stakeholders which will be confirmed through the Long Term Planning process by the relevant councils. The manually derived transport forecasts for Programmes 4, 5B and 6B are surprisingly similar. The potential increase in flows due to the greater

land use proposed within Programmes 5B and 6B (Recommended Programme) can be expected to be offset by the greater proportions of local trips;

- the short list assessments were undertaken with various representatives from the programme partners and stakeholders. In particular, there was considerable engagement and input through Waikato District Council due to the complexity and number of activities that either are directly their responsibility or have interdependencies with other programme partners, i.e. public transport with Waikato Regional Council; and Auckland Transport; and
- the programmes developed for services, employment, land use and infrastructure highlight that there is no perfect programme and that each has positives, risk, dependencies and differing outcomes. The programmes were developed and assessed with the recognition that growth presents a range of challenges, the programme partners' aim for a balance of outcomes from investment.

DRAFT

Table 10 - Short list programme options assessment summary

Programme Option		Investment Criteria 1									Investment Criteria 2				Investment Criteria 3			Summary	
		IO #1 - Intra regional			IO #2 - Multi modal	IO #3- Inter regional		IO #4 - Strategy alignment											
		Access to town centres (amenities)	Access to services and communities	Access to employment areas	Enhance efficiency and effectiveness through multi modal transport	Strengthen performance of the connection between Auckland and Waikato	Improve connections to and from Auckland and Waikato	Plan and delivered social infrastructure for communities	Meets the Future Proof principles by providing growth at urban nodes with access to services	Transport enables land to be developed in line with the development patterns in the Future Urban Land Supply Strategy									
		KPI1.1	KPI1.2	KPI1.3	KPI2.1	KPI3.1	KPI3.2	KPI4.1	KPI4.2	KPI4.3	Strategic Fit	Effectiveness	Risk	BCA	Inter dependencies	Indicative cost and timeframe	Feasibility		Affordability
Programme Option 4	Do Minimum - Limited intervention to increase activity in Tuakau and Huntly	Score	-	---	---	--	---	---	-	+	-	High	Low	Low	Medium	Medium	Medium	Medium	This programme option will result in continued disconnection for communities from services, employment and amenities. Maintained as the Do Minimum option.
		Measure	Limited outcomes on focusing growth in town centres and increasing services and amenity levels	Limited opportunity to influence growth in desired locations, adhoc growth may still be experienced	Limited opportunity to support additional local employment	Insufficient changes in multi-modal transport usage for the short to medium term	Will not meet growth demands, this may increase capacity on the State Highways due to lack of local routes between trip destinations	Limited intervention to address transportation issues, little change expected to result	Limited intervention may not meet what is required for the growth that occurs	Limited increase in growth in urban nodes to the north	Limited intervention may not efficiently lead developers to desired areas		Does not sufficiently address issues	Low risk of non-delivery	Lower cost solution causing increased BCA result	Requires services and amenities to be provided in adjoining areas	Lower initial cost as lower provision of services and infrastructure	Programme can be delivered, similar to Business as Usual	
Programme Option 5B	Growth in Tuakau and Pokeno to reach collective population level (20-25K)	Score	++	++	++	++	++	+	++	++	High		High	Medium	Low	Medium	Medium/High	Medium	
Programme Option 6B	Proactive planning and response with increased population in the medium to long term for Tuakau (15-20k total population) - Shared services in Tuakau and Pokeno for north, services in Huntly for south	Score	++	++	++	+++	++	+++	+++	++	++	High	Medium/High	Low/Medium	High	High	Medium/High	High	This programme option will provide increased levels of localised services, employment and amenities and optimises development opportunities in Tuakau and long term sustainable outcomes.
		Measure	Population growth focused in existing town centres with increased services	Increased access to services with focused growth to strengthen existing communities in the north	Centralised growth may help provide additional local employment	High level of PT services and improved walking and cycling will improve modal shift and reduce car dependency	Provides alternative access to and from the region and lessens need to use the State Highway	Opportunity to improve connections by having planned growth	Opportunity to improve social infrastructure in urban growth centres in the north	Increased growth in urban nodes with access to services in the north	Growth in line with Future Urban Land Supply Strategy	Addresses key problems	Medium risk of non-delivery	Significant investment with limited benefits	Investment in some connections in Auckland South in the longer term	Cost per household for infrastructure is not maximised	Programme will require medium levels of commitment and resources from programme partners	Will require investment in short - medium term but will be sustainable in longer term	
		Measure	Population growth focused in existing town centres with increased services	Access to services in the north and south with focused growth to strengthen existing communities in the north	Centralised growth may help provide additional local employment	High level of PT services and improved walking and cycling will improve modal shift and reduce car dependency	Provides alternative access to and from the region and lessens need to use the State Highway	Opportunity to improve connections by having planned growth	Opportunity to improve social infrastructure in urban growth centres in the north and south	Increased growth in urban nodes with access to services in the north and south	Growth in line with Future Urban Land Supply Strategy	Addresses key problems	Medium to High risk of non-delivery if limited support for higher density in Tuakau	Increased benefits in comparison to Option 5B lead to increased BCA result	Investment in key connections in Auckland South in the longer term	The cost per household for services and infrastructure should reduce in the longer term	Programme will require high levels of commitment and resources from programme partners	Will require higher investment in short - medium term but will be sustainable in longer term	

7. Recommended programme description and assessment

7.1 The recommended programme

The recommended programme is Programme Option 6B. This programme focuses on future growth around existing towns of Tuakau, Pokeno, Te Kauwhata and Huntly with high intensity development around Tuakau. This requires proactive planning and response with increased population in the medium to long term for Tuakau with a projection of 15,000 - 20,000 residents. There will be shared services for Tuakau and Pokeno to cater for the north of North Waikato, and Huntly is to continue to be the primary service town for the southern area within the North Waikato providing some of the essential services for the Te Kauwhata community. This is aimed at increasing the level of self-contained movements within the towns and within the North Waikato.

Implementing the recommended programme will consist of planning infrastructure activities in the three waters, land use, public transport, walking and cycling, roading, social, parks and recreation, education, medical and emergency services areas. There will also be planning to be undertaken to zone and enable residential and / or commercial growth to the identified levels in the growth nodes of Huntly, Pokeno, Tuakau, Te Kauwhata and Meremere. Growth in Tuakau will need to be carefully considered and will likely require high levels of urban planning to minimise impact from growth on the surrounding productive land. Collaboration between the programme partners, other infrastructure providers and potentially commercial developers will be crucial to the integrated and successful delivery of infrastructure and services to support the anticipated growth. Enforcing other non-infrastructure activities including more accurate developer contributions, facilitating commercial growth communication with stakeholders and the community on the strategy for the region will also be required.

The programme will enable projected population and employment levels as shown in the tables below. These projections are for approximately 50,000 residents within the towns with approximately 17,700 employment opportunities, which reflects the aim to achieve a job per household (approximately 2.5 people per household) in the longer term. The populations for the towns are an 'upper limit' based on the density of development, developable and serviceable land in these towns. The proposed 20,000 residential levels in Tuakau may not be achievable; however, a population between 15,000 and 20,000 for Tuakau with the right level of supporting infrastructure would result in better outcomes for the North Waikato community.

Table 11 - North Waikato population projected for recommended programme (Option 6B) – Future Proof Settlement Pattern

Town	2016	2025	2035	2045
Tuakau	4,639	9,402	10,252	22,072
Pokeno	2,132	7,868	12,399	12,762
Meremere*	564	708	734	711
Te Kauwhata (including Lakeside Housing Infrastructure Fund)	1,769	8,991	9,421	10,898
Huntly	7,491	8,764	10,174	10,490

* Meremere is not expected to be able to increase its residential population due to unsuitable ground conditions and other land constraints.

Table 12 - Current and projected employment projection figures

Town	2016	2025	2035	2045
Tuakau	1,432	3,761	4,101	8,829
Pokeno	524	3,147	4,960	5,105
Meremere**	13	283	294	284
Te Kauwhata	455	3,596	3,768	4,359
Huntly	2,259	3,506	4,070	4,196

** Meremere have approximately 70 hectares of land that is zoned for commercial and industrial purposes and could have a significantly higher level of employment than predicted depending on the type of use.

Figure 11 below shows the relative levels of growth in population levels and employment over the development periods.

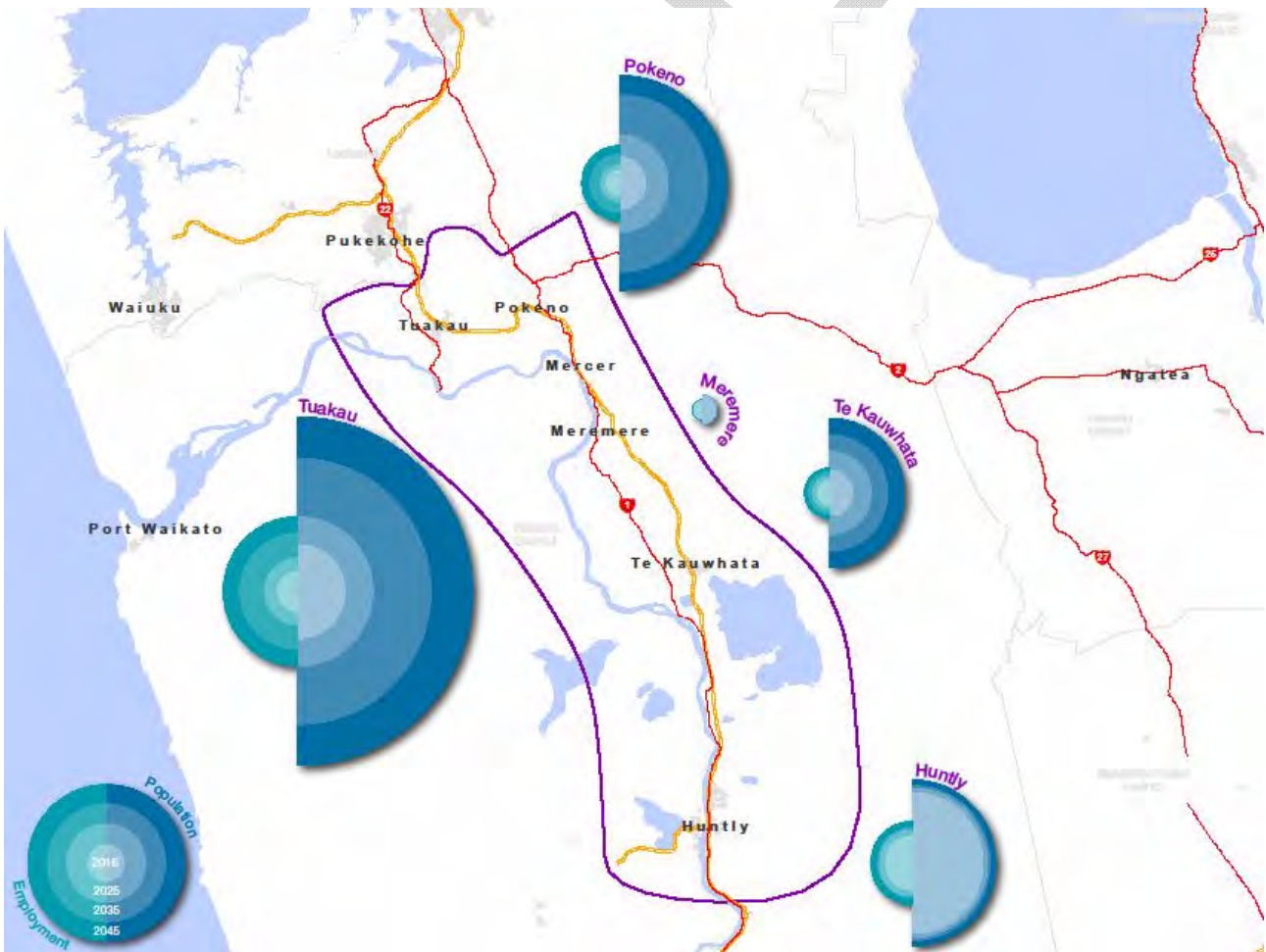


Figure 11 - North Waikato Population and Employment levels over the three decade period of the Programme Business Case

7.1.1 Recommended programme elements

The following maps set out the recommended programme for the next 30 years. The maps provide an overview of the interventions to be planned, developed and implemented over the next 30 years as the population increases, with more detail available in Appendix E. The recommended programme only includes interventions which are directly attributable or required as a result of growth in the North Waikato.

Some of the interventions identified in the recommended programme are interventions outside North Waikato (i.e. park n ride services at Pukekohe) but are important to the long-term development of the area, and need to be considered to promote joined up planning between the North Waikato and Auckland. These Auckland located elements are consistent with the recommended programme in the Transport for Urban Growth Programme Business Case.

The following four projects are not contained within the recommended programme as they are not projects directly attributable to the anticipated growth in the North Waikato. However, they are important to acknowledge as they will also support future growth in the North Waikato:

- NZ Transport Agency - Completion of the Huntly Bypass section of the new Waikato Expressway (in construction) (within 1- years)
- NZ Transport Agency – Development of a Detailed Business Case and pre-implementation works to support the construction of the Bombay – Longswamp section of the Waikato Expressway (\$2-5M) (within 1-3 years)
- NZ Transport Agency - Construction of the Bombay – Longswamp section of SH1(within 4 – 10 years)
- Watercare - Pukekohe wastewater treatment upgrade –includes servicing of Te Kauwhata (\$120M, recouped through development contributions) (within 1-5 years)

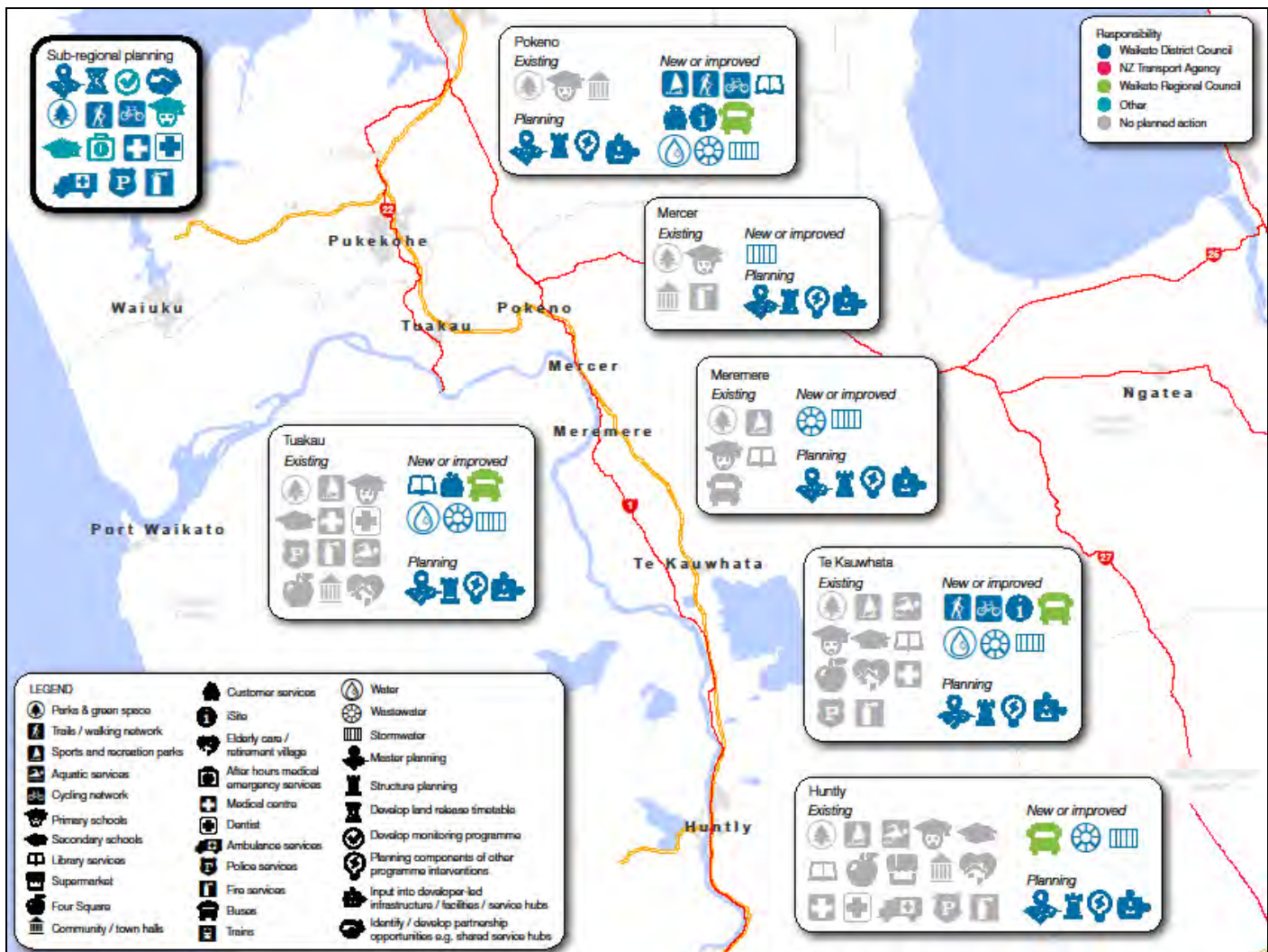


Figure 12: Recommended Programme, Short Term (indicatively Years 1 – 3)

The interventions shown in the figure above are those that have generally been planned in recent years to address the growing demand for services and infrastructure in the North Waikato. It should be noted that some of the investments during this period are needed to address current shortfalls in infrastructure and services.

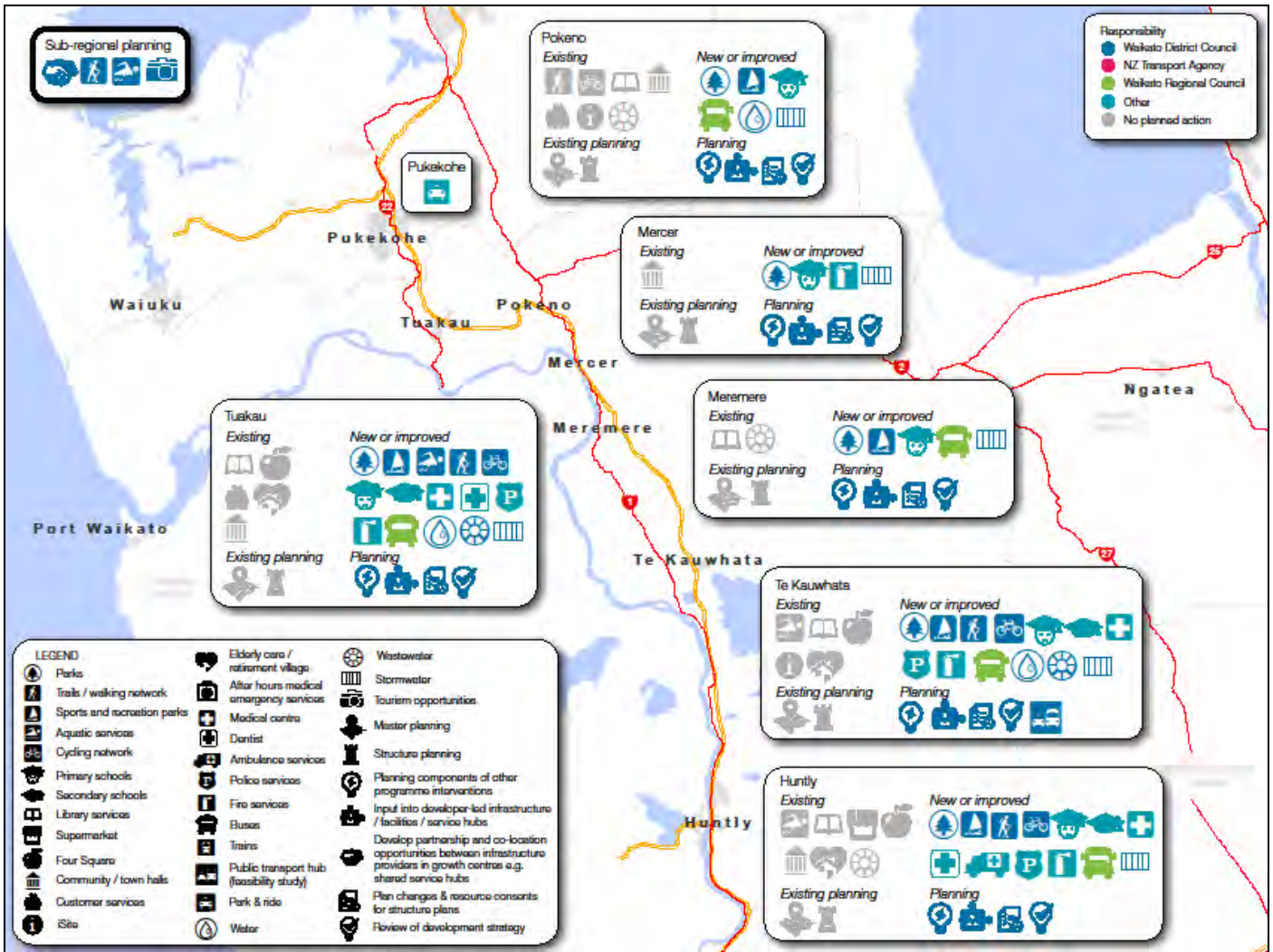


Figure 13: Recommended Programmes, Short to Medium Term (indicatively Years 4 – 10)

The interventions shown above related to the level of residential growth and employment, the years shown are indicative of the population projections for North Waikato. It should be noted that some of the investments during this period are needed to address current shortfalls in infrastructure and services.

Table 13 - Population and Employment at Approximately 2025

Town	Population at approximately 2025	Employment at Approximately 2035
Tuakau	9,402	3,761
Pokeno	7,868	3,147
Meremere	708	283
Te Kauwhata	8,991	3,596
Huntly	8,764	3,506

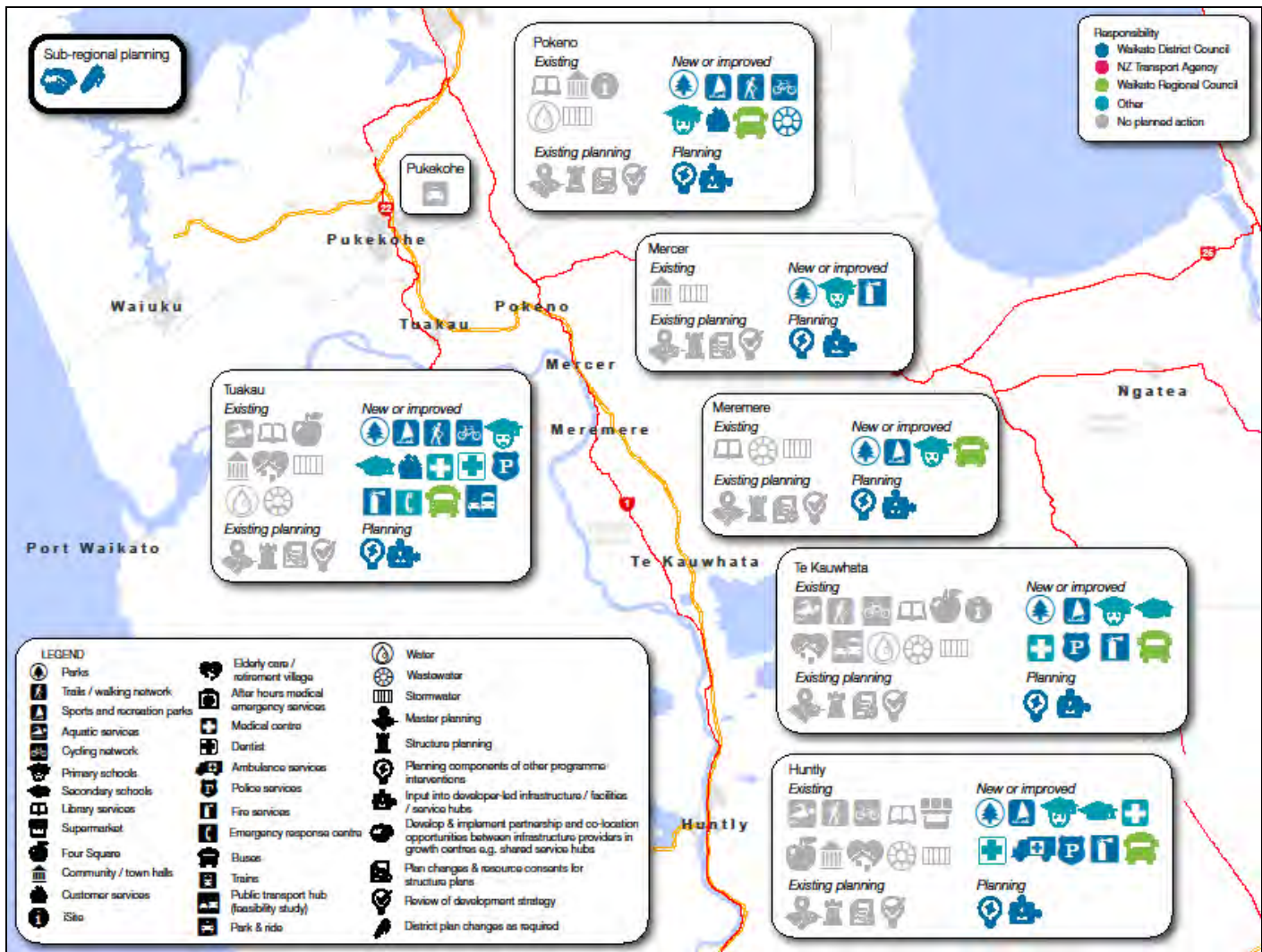


Figure 14: Recommended Programme, Medium Term (Indicatively Years 11 – 20)

The interventions shown above related to the level of residential growth and employment, the years shown are indicative of the population projections for North Waikato. During this period it is expected that Te Kauwhata, Huntly and Pokeno will near their development potential. Whilst population and employment levels will stabilise there will be a need for the development and improvement of services and amenities.

Table 14 - Population and Employment for North Waikato in the Medium Term

Town	Population at approximately 2035	Employment at Approximately 2035
Tuakau	10,252	4,101
Pokeno	12,399	4,960
Meremere	734	294
Te Kauwhata	9,421	3,768
Huntly	10,174	4,070

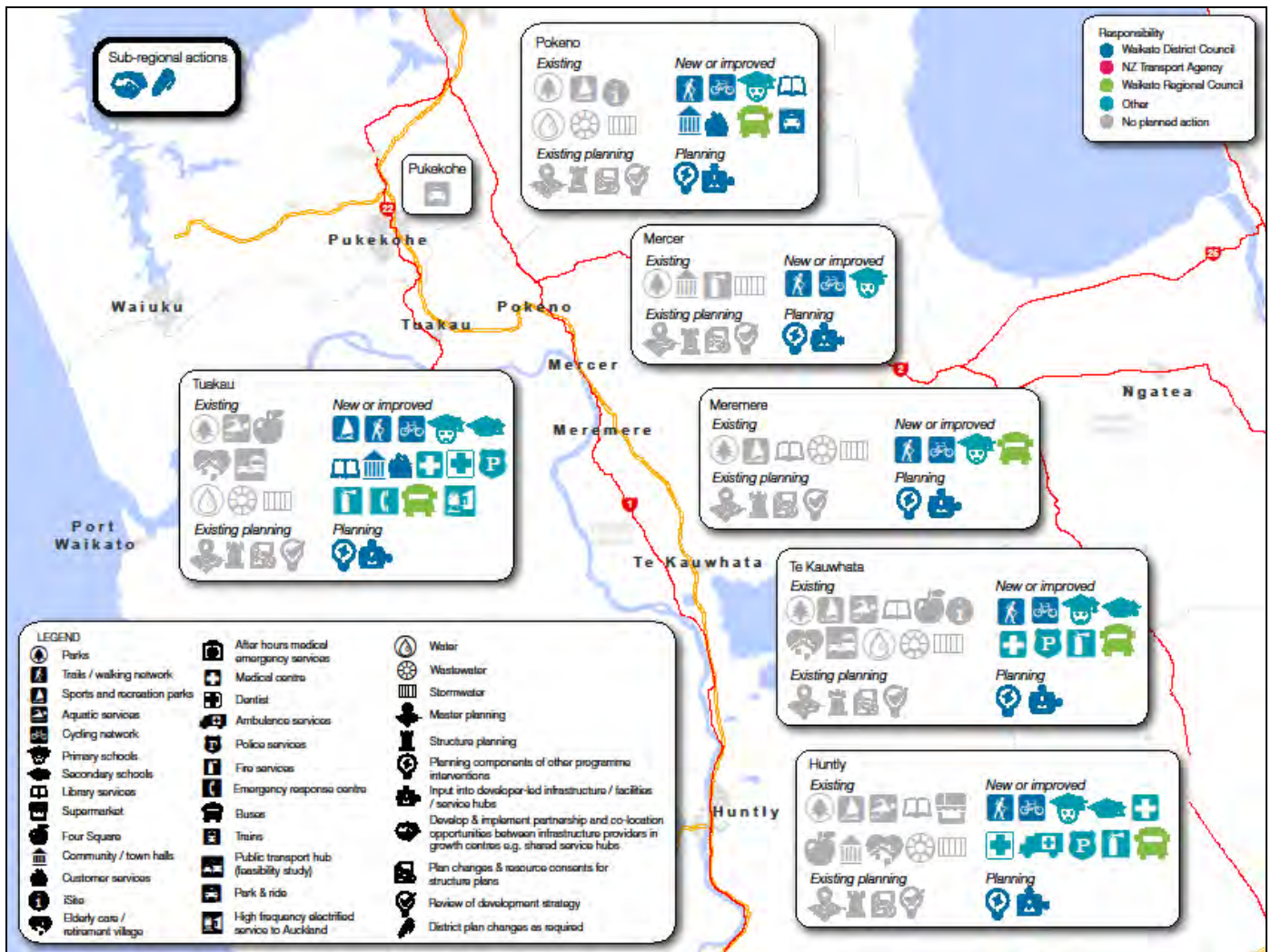


Figure 15: Recommended Programme, Long Term (Indicatively Years 20-30)

The interventions shown above related to the level of residential growth and employment, the years shown are indicative of the population projections for North Waikato. There is expected to be considerable growth during this period in Tuakau as it has good infrastructure and will be able to accommodate the growth within a similar footprint to the current situation. Achieving this increased level of growth may need to be accommodated through increases in density and will be subject to long term community planning.

Town	Population at approximately 2035	Employment at Approximately 2035
Tuakau	22,072	8,829
Pokeno	12,762	5,105
Meremere	711	284
Te Kauwhata	10,898	4,359
Huntly	10,490	4,196

Recommended programme assessment

The recommended programme has a strong alignment with the objectives of the Government Policy Statement on Land Transport and a number of policies for the Waikato region, including the key regional land use planning strategy Future Proof. The recommended programme will provide a wide range of benefits for the current and future communities of the North Waikato including but not limited to:

- decreasing costs of infrastructure due to densification of development;
- increased accessibility and connection to communities with a range of services, social infrastructure and amenities; and
- increased local employment, decreasing the need to leave North Waikato for work.

The importance for social infrastructure to be provided proactively with growth, while maintaining the community identity has been received from the local community boards: Onewhero-Tuakau Community Board, Pokeno Community Committee, Te Kauwhata Community Committee.

There has been support for the recommended programme to:

- grow Tuakau to a town of between 15,000-20,000 people acknowledging the importance of the strategic location of Tuakau with regards to Pokeno and Pukekohe in particular;
- provide an integrated approach of different parties (councils and agencies) working together to ensure integrated land use and infrastructure planning in the North Waikato;
- have Waikato District Council provide a spatial framework for developers rather than being reactive;
- protect arable soil around Tuakau and understand that the best way to grow the town is to intensify;
- ensure that social infrastructure and community services are in line with the development and not after the growth has occurred to ensure that it creates an attractive place to live;
- provide employment opportunities to ensure that people in North Waikato do not have to travel long distances for employment;
- provide effective planning for Tuakau which encourages growth and investment;
- look at upgrading roading connections in particular Pokeno, Whangarata and Buckland Roads; and
- have better public transport to support existing needs and the future needs.

There are concerns in regards to the effect of intensification possibly leading to an unattractive urban environment. Good urban design is required and it has been identified that the District Plan Review is key to this process. There is an opportunity to use this process to hold any plan changes until the review is completed.

7.1.2 New Zealand Transport Agency –Results alignment assessment

When evaluating strategies, programmes, packages and projects, the Government Policy Statement (2015) and the Draft Government Policy Statement (2018) both require local government and the New Zealand Transport Agency to consider a number of matters including a rating assessment against the Investment Assessment Framework. To give effect to the draft GPS, a new Investment Assessment Framework has been drafted, which requires rating strategies, programmes, packages, projects and other activities against the results alignment assessment and Cost Benefit Appraisal. Due to the multi-faceted nature of this programme business case a BCR has not been calculated. As part of the LTP processes for council's they will need to prepare relevant assessments. For local roading improvements or public transport investment BCRs and other information will need to be provided to NZTA before funding can be confirmed. The SH1 upgrade between Bombay Hills and Longswamp will have a detailed economic assessment as part of the Detailed Business Case.

7.1.2.1 Results alignment assessment

Results alignment assessment – an assessment aimed at strengthening the links to the GPS, providing an increased customer focus as an outcome, providing a focus on integration and providing a new ‘very high’ rating option for nationally strategic investments, cost-benefit appraisal and programming support – to assess the urgency and whether there is a need to prioritise addressing the problem.

The Results Alignment assessment is High as the Programme Business Case takes into consideration the improvements to whole of network, long term local, regional and national planning. These are all in response to significant changes in actual and predicted transport demand and their drivers of change in population and employment growth.

The recommended programme outcomes include:

- easing of congestion in future (particularly on State Highway 1 Waikato Expressway and the Auckland Southern Motorway);
- optimising levels of service, operation and management of transport networks (State Highways, local, public transport but also other infrastructure required to support growth);
- improvement in journey time reliability, which is likely to worsen as growth occurs;
- decreasing costs of infrastructure due to densification of development;
- increased accessibility and connection to communities;
- increased local employment, decreasing the need to leave north Waikato for work; and
- a reduction in the number of deaths and serious injuries as transport choices increase, and the transport networks are optimised.

7.1.2.2 Cost benefit appraisal

No funding from the National Land Transport Fund is sought as a direct result of this Programme Business Case. Waikato Regional Council and Waikato District Council will be seeking funding through their Long Term Plans and the NZ Transport Agency projects specified in the recommended programme have already had their funding approved.

As no funding is being sought from the National Land Transport Fund for the recommended programme detailed in this Programme Business Case, the cost-benefit assessment has not been calculated. Where funding is still sought, the cost-benefit assessment will be developed as Waikato District and Regional Council's develop their long term plans.

7.2 Programme Risk

As with any investment programme, particularly over a longer time period, there are risks and uncertainties that need to be considered. Some can be reduced during the development of the recommended programme activities, others are inherent, and some will be need to be managed as the programme is implemented.

The specific risks identified at this stage are outlined in Table 15 below.

Table 15 - Summary of identified key risks

Risk Area	Description	Treatment Strategy
Societal	Growth of residential development continues in an ad-hoc way due to private plan changes and approvals provided by programme partners resulting	Continued collaboration with programme partners through a range of venues including Future Proof and other forums

Risk Area	Description	Treatment Strategy
	in continued disconnection of communities from essential services	
Stakeholder	The programme requires investment and co-ordination between stakeholders and other partners to deliver the programme efficiently	Governance structure established which engages with key stakeholders such as Ministry of Education. Communications strategy and plan developed to ensure early engagement and liaison with stakeholders and partners
Operational	Impacts to utility operations as a result of the upgrades and improvements	Prepare detailed traffic management plans, water shutdown and contingencies plans for the programmed improvements to minimise impacts to residents and visitors as the infrastructure is developed
Financial	Costs are difficult to accurately confirm due to the nature of the improvements and the long term nature of the programme	Undertake enabling activities and Business cases as early as possible following consultation
Environmental and social responsibility	The North Waikato has areas of natural and cultural significance and any of the planned work could have an adverse effect on the environment	Planning and implementation will need to use high levels of design and construction focus on reducing actual and potential adverse impacts. Early engagement with affected parties is essential.
Reputational	There would be considerable reputational risk to the partners and the impact on the local and regional economies if the infrastructure does not adequately support the increasing population and the traffic demands of the region	Commence planning for long term outcomes and reduction in risk of failure. Engage early with the affected parties and co-ordinate strongly across the programme partners to reduce risk of inadequate support
Cultural	Programme interventions don't fully consider cultural implications	Clear and open consultation and engagement with local iwi
Statutory requirements	Local Government Act and Resource Management Act requirements	High level land use planning requirements have been built into the Recommended Programme. Statutory processes including consultation should be in line with the Local Government Act and Resource Management Act Part 2 requirements and take place per the requirements of the individual programme interventions

8. Programme financial case

8.1 Indicative cost and programme cash flow

The programmes known indicative costs are as follows:

Table 16 - Indicative Programme Costs

	Years 1 - 3	Years 4 - 10	Years 11 - 20	Years 21 - 30
Community	\$15,100,000	\$1,500,000	TBC	TBC
Parks and Recreation	\$2,150,000	\$100,000	TBC	TBC
Education	TBC	TBC	TBC	TBC
3 Waters	\$51,435,000	\$28,360,000	\$3,000,000	\$2,000,000
Public Transport ⁵	\$1,000,000	TBC	TBC	TBC
Transport, roading, walking and cycling	19,750,000	37,500,000	30,000,000	47,500,000 (TBC)
Medical	TBC	TBC	TBC	TBC
Emergency Services	TBC	TBC	TBC	TBC
Land use planning *	\$2,200,000	\$370,000	TBC	TBC
Community	\$15,100,000	\$1,500,000	TBC	TBC

* WDC recognise the importance of early and considered timing for planning and is seeking additional funds through the LTP process as well as investigating other funding sources and investment partners

Note that the above costs are for implementation of the recommended programme as it currently stands, and where information is available. The costs do not include maintenance and operations which will need to be identified as the individual interventions are developed.

8.2 Funding arrangements

The programme is comprised of elements which are the responsibility of either the programme partners or key stakeholders. Waikato District Council has responsibility for the largest number of programme interventions, all of which will have their funding established through the Waikato District Long Term Plan (LTP). A number of local transport and three water interventions relating to Te Kauwhata are anticipated to be funded through the national Housing Infrastructure Fund interest free loan scheme, which will be incorporated into the LTP funding arrangements.

The Waikato District Long Term Plan (2018-2028) is currently under development, and anticipated to be open to the public for consultation in March 2018. The Plan will allocate funding for the first 10 years of capital expenditure required to achieve their recommended programme interventions. It is anticipated to be adopted by Council by June 2019.

⁵ Indicative figures from NW PT network review

The NZ Transport Agency will contribute funding to the road, walking, cycling and public transport elements of the recommended programme through the National Land Transport Fund (NLTF). The state highway related interventions will be entirely funded by the NLTF, and the rate of funding assistance from the NLTF towards the Waikato District and Waikato Regional Council's transport related programme interventions will be determined through the National Land Transport Programme (NLTP). The NLTP is currently being developed, and will confirm the transport activities in this Programme Business Case which are prioritised for funding between 2018 and 2021 by June 2018.

The education, medical and emergency service recommended programme interventions will be funded separately by the Ministry of Education, Counties Manukau and Waikato District Health Board and emergency service providers respectively. These stakeholders will confirm the funding arrangements for their infrastructure and service plans as their plans become more defined. Where there is opportunity for collaboration and / or joint services, cost-sharing with other funding partners will be investigated.

The funding programmes of all of the partners and stakeholders responsible for the programme implementation will need revision, and cost sharing agreements to be put in place as shared opportunities for service provision emerges and more accurate cost estimates are confirmed through future business cases stages for the different projects.

8.3 Affordability

The programme is being scheduled through the Long Term Plans of Waikato District and Regional Councils where possible as this sets out staging and associated funding scheme (including a loan from the HIF) to ensure the affordability of the work of over the next 10 years.

Those elements of the work which are to be funded through the NLTF will need to have their affordability coming through the inclusion of the individual components of the programme in the 2018-2021 NLTP.

Beyond these two funding periods, the affordability of the programme cannot be confirmed at this point. The recommended programme covers a 30 year time period, and the affordability of the different aspects of later components of the recommended programme will need to be developed as part of the future business case and work package development.

Part C – Delivering and monitoring the programme

9. Management case

The following is a high level outline identifying the short term priorities and progression following the programme Business Case.

9.1 Planning and delivery overview

The planning and delivery during the first three years of the programme are set out in the future development of the identified growth areas of the North Waikato – the towns of Tuakau, Pokeno, Meremere, Te Kauwhata and Huntly. In particular, masterplans to guide the development of the identified growth and accommodate the recommended programme interventions will need to be established to achieve the integrated delivery of the programme. As such, there is a relatively high planning and land use element of the work in the first three years.

Establishing strong co-ordination and engagement between the delivery and programme partners will be critical during this period, as precincts, co-location and partnership opportunities are identified and built into the master planning process. Establishing these relationships and processes to provide a co-ordinated approach to the delivery of the recommended programme will be crucial to supporting growth in the North Waikato over the life of the programme. Noting that the bulk of the recommended programme is the responsibility of the Waikato District Council, it is recommended that Waikato District Council staff take responsibility for co-ordination between the various programmes.

The physical infrastructure programme set out for the years 2018-2021 will be focused on improving levels of service or addressing service gaps where growth is already occurring. Beyond this point, the recommended programme will need to be flexible and open to review between the programme delivery partners, in response to the levels and patterns of growth.

9.2 Integrated planning with clear roles and responsibilities

The delivery of the recommended programme relies on each of the delivery partners taking responsibility for their elements of the programme and working with the other partners and stakeholders to integrate the programme delivery. The delivery partner's high level responsibilities are shown in Table 15. A new working group with representatives from the delivery organisations will be developed under the umbrella organisation of Future Proof. The purpose of the working group will be the promotion of collaboration between projects, both cross-sector and cross boundaries, identifying opportunities for shared engagement on projects, reporting on programme progress and measures and to regularly review the recommended programme content and its timeframes. The group will potentially be responsible for updating the recommended programme to ensure it is directly addressing and planning for the growth needs of the North Waikato.

The working group members will report back to the senior management in their respective organisations, identifying where conversations at mayoral, or chief executive level are required to successfully co-ordinate and deliver the programme across the organisations and region. This approach enables the flexible use of

existing communication avenues such as Waikato Mayoral Forum to develop opportunities and reach consensus on how the programme elements can be integrated and managed and delivered as effectively as possible across territorial authority boundaries and organisations.

Table 17 - Delivery Organisation Responsibilities

Delivery Organisation	Responsible for
Waikato District Council	Community facilities upgrade and development, local road interventions three waters infrastructure, parks and recreation, walking, cycling and land use planning interventions
Waikato Regional Council	Public transport (buses and community transport),
Auckland Council	Land use planning in Auckland
Auckland Transport	Passenger rail services and infrastructure
NZ Transport Agency	State highway upgrades and development
Counties Manukau District Health Board	Medical service provision and improvements in Pokeno and Tuakau and further north into the Auckland region
Waikato District Health Board	Medical service provision and improvements in Meremere, Te Kauwhata and Huntly and further south into the Waikato region
Ministry of Education	Increased capacity and numbers of school facilities
Emergency service Providers including Fire and Emergency NZ and NZ Police	Improved and increased fire, ambulance and police services

A recommended next step from the Programme Business Case is the development of the working group details including appropriate members and terms of reference. The process through which the working group will address cross-boundary funding of projects should be set down at this point also.

9.3 Programme performance and review

Understanding what is being achieved by the Programme Business Case Partners will help to guide the scope of future projects, and identify what is still required and where to support growth in the North Waikato.

This section provides an overview of how the delivery of the Programme Business Case could be monitored, how the benefits are measured and by whom. It is likely that further measures beyond those set out below will be agreed, or appropriate proxies will replace some of the recommended measures.

Table 18 - Recommended Performance Measures

Measure	Responsibility
Bus and community travel use from patronage data	Waikato Regional Council
Journey to work and school distance from Census data	Waikato District Council

Measure	Responsibility
Location, type and rate of growth from resource consent and rates data	Waikato District Council
Liveability perceptions from the Waikato Perception Study	Waikato District Council
Employment statistics from MBIE annual economic activity reports	Waikato District Council
Levels of service and numbers of walking and cycling facilities	Waikato District Council
Number of new community facilities and parks or recreation facilities	Waikato District Council
Number of new primary schools and secondary schools with increased capacity	Waikato District Council
Level of service, capacity and proximity of medical and emergency services available	Waikato District Council
Travel time reliability – using most up to data collection sources	NZ Transport Agency
Average travel time - using most up to data collection sources	NZ Transport Agency
Number of crashes –using CAS data	NZ Transport Agency

9.4 Stakeholder engagement and communications plan

The first ten years of the programme relating to the Waikato District's responsibilities will be consulted on as part of the consultation strategies associated with the 2018-2028 Waikato District Council draft Long Term Plan Process. The Waikato Regional Council's public transport related component of the recommended programme has its own specific consultation plan around it which is currently underway, or will be undertaken as part of their Long Term Plan consultation strategy. These processes will align the organisation's consultation and engagement approaches and meet the RMA Part 2 Requirements.

The elements which are the responsibility of the NZ Transport Agency will also have consultation undertaken in a way which aligns with the NZ Transport Agency's consultation and engagement strategies, as well as meeting the RMA Part 2 requirements.

The North Waikato Working Group will collaborate to develop visual resources to assist to deliver the key messages of the Programme Business Case. These resources and the collaborative process can be built on to align and deliver the future stakeholder engagement work that will be required for later activities set out in the recommended programme.

A number of stakeholders have been outlined below as important to the delivery of the programme.

Important stakeholders:

- Waikato District Council
- Waikato Regional Council
- New Zealand Transport Agency
- Auckland Transport

- Hamilton City Council
- Auckland Council

Other key stakeholders:

- Waikato Tainui
- Ngā Karu Atua o te Waka
- Hauraki Iwi (detail to be confirmed as also tangata whenua for the subject area)
- Ministry of Transport
- The North Waikato community
- KiwiRail
- WaterCare
- Ministry of Education
- District Health Boards
- Emergency services
- National Road Carriers

9.5 Next steps

The following are key areas for further investigation and activities to deliver the programme:

Consideration of effects beyond the North Waikato

Understanding the impacts of recent growth in North Waikato and future growth across the upper north island of New Zealand is complex. Whilst growth in the North Waikato has the potential to shift growth away from South Auckland and North Hamilton it is difficult to confirm and estimate. Growth in the North Waikato will provide housing for people that may be otherwise not be able to access due to supply pressures and if the growth is well managed there will be local employment opportunities. Any growth across Auckland and the Waikato will result in the need for infrastructure provision across these regions for a variety of areas including schools, social infrastructure and 3 waters. The primary cross boundary effect is for transport infrastructure and services. The growth proposed as part of the recommended programme for North Waikato is only to be promoted if there is a high level of local infrastructure/services and employment provision to offset the transport infrastructure/services provision.

Long Term Plans

The relevant programme partners are currently developing their Long Term Plans. Projects outlined in the recommended programme are currently being developed or under consultation n with the local communities.

Stakeholder and Communication Plan

The Programme Business Case has been in partnership by number of stakeholders to gain a greater insight into the problems, constraints, investment needs and drivers, and opportunities for the North Waikato.

A Stakeholder and Communications Plan will be developed which aligns with Future Proof, Waikato District Council and the NZ Transport Agency's consultation and engagement strategies, as well as meeting the RMA Part 2 requirements.

The plan will be prepared to address the specific details for each stakeholder, including key contact person and approach for engagement.

Working Group

The working group details including the appropriate members, and terms of reference will need to be developed. The process through which the Working Group will address cross-boundary funding of projects will be set down at this point also.

Indicative / Detailed Business Case – SH1 Bombay Hills to Longswamp

Involves an upgrade of SH1 through the North Waikato to improve the standard of the highway to a similar level as the new sections of the Waikato Expressway as well as the Southern Motorway improvements that are currently being investigated. Scope to be confirmed by the NZ Transport Agency.

Strategic Case – Public Transport Connections between Waikato and Auckland

The appropriate/ improved public transport connections between North Waikato and Auckland are still to be determined. A strategic case will be most appropriate place to identify this, and the potential approach (i.e. staging of the public transport improvements) that would be most appropriate.

Appendices

Appendix A – Population projections

Where possible, this Programme Business Case has used the population projections forecast by the National Institute of Demographic and Economic Analysis (NIDEA) and Future Proof to inform the content of this document. Below is an extract from the Waikato Plan with information relating to Waikato District Council's predicted growth between 2016 and 2045.

The population projections are based on Statistics NZ's revised Estimated Usually Resident Populations (EURPs) derived from the 2013 Census data. NIDEA and Future Proof have then applied a combination of age and gender specific assumptions for the three principal demographic drivers (birth, death and migration rates) to the current base population to project future populations.

Using these NIDEA / Future Proof projections provides consistency between Future Proof documents and planning and this Programme Business Case.

Waikato District Council Growth 2016 – 2045

Period	Population and Household Demand based on University of Waikato (UoW) Projections			Household Supply (total capacity of cells)		Strategic Overview and Infrastructure Needs for Growth Areas	Certainty			
Decade 1: Year 1 – 10 2016-2025	Area	Number of Households 2016	Household Growth 2016-2025		Area	Supply	Tuakau: LTP Funding is committed for stormwater reticulation extensions, wastewater pump station upgrades, wastewater reticulation extensions, water supply reticulation extensions and collector roads as per the Structure plan. Pokeno: LTP Funding is committed for neighbourhood parks, reserves, sports ground and walkway. Stormwater reticulation extensions and upgrades, wastewater pump station upgrades and water supply reservoir extension. Various roading intersection upgrades and Pokeno Bridge. Te Kauwhata: Funding is committed to in the LTP for Rooding, 3 waters and Parks as per the Structure Plan. Council has also applied for the Housing Infrastructure Fund to support the additional 1500 households in the proposed Lakeside Development. Huntly: Funding is committed to reservoir extensions. Ngaruawahia: Will be part developer-funded i.e. localised infrastructure. Council is investigating options for improved road connectivity and bulk infrastructure upgrades. Funding is currently committed to water reticulation upgrades. Raglan: Funding has been set aside for collector roads within the Lorenzen Bay area. Rangitahi Peninsula is 100% developer funded. Funding is committed to water supply upgrades and Wainui Road Bridge investigation.			
			UoW Low	UoW Medium						
	Tuakau*	1636	817	839				Tuakau* Stage 1	1202	
	Pokeno	757	750	1110				Pokeno** Stage 1	1200	
	Te Kauwhata	684	353	369				Te Kauwhata	2579	
	Huntly	2687	333	412				Huntly	300	
	Ngaruawahia	1838	147	152				Ngaruawahia Stage 1	163	
	Raglan	1336	371	386				Raglan	200	
	Urban Total	8938	2771	3269				URBAN TOTAL	5644	
	Taupiri	187	54	58				Taupiri Stage 1	183	
	Horotiu	319	73	113				Horotiu Stage 1	102	
	Gordonton	370	41	55				Te Kowhai Stage 1	129	
	Matangi	816	102	119				Rest of District	2387 - 2881	
	Tamahere-Tauwhare	2097	284	343						
	Whatawhata	958	186	228						
	Te Kowhai	606	78	90						
	Hamilton Urban Area*** within WDC Total	5354	817	1004						
	Rest of District	10601	1774	2136						
	District Total	24893	5362	6408						
	Area	Population 2016	Population Growth 2016-2025					Area	Supply Deficit or Carry Over	
			UoW Low	UoW Medium					UoW Low	UoW Medium
	Tuakau*	4639	1683	1758				Tuakau* Stage 1	385	363
	Pokeno	2132	1801	2736				Pokeno** Stage 1	450	90
	Te Kauwhata	1769	731	774				Te Kauwhata	2226	2210
Huntly	7491	313	523	Huntly	-33	-112				
Ngaruawahia	5424	2	28	Ngaruawahia Stage 1	16	11				
Raglan	3115	591	632	Raglan	-171	-186				
Urban Total	24570	5121	6451	URBAN TOTAL	2873	2375				
Taupiri	472	93	104	Taupiri Stage 1	129	125				
Horotiu	850	121	220	Horotiu Stage 1	29	-11				
Gordonton	1211	35	80	Te Kowhai Stage 1	51	39				
Matangi	2326	106	154							
Tamahere-Tauwhare	6150	342	514							
Whatawhata	2786	312	430							
Te Kowhai	1623	78	111							
Hamilton Urban Area*** within WDC Total	15417	1087	1612							
				Summary: Most areas have sufficient capacity for the decade in either a UoW Low or Medium growth scenario. In both scenarios, there would be insufficient capacity in Huntly. The insufficient capacity in Raglan will be met by supply in neighbouring CAU Te Uku which is where the Rangitahi Peninsula is located.						

Rest of District	29899	2746	3755
District Total	69886	8954	11817

Decade 2:
Year 11-20
2026-2035

Area	Household Growth 2026-2035	
	UoW Low	UoW Medium
Tuakau*	755	909
Pokeno	1360	1945
Te Kauwhata	248	255
Huntly	333	247
Ngaruawahia	133	130
Raglan	167	122
Urban Total	2996	3608
Taupiri	33	39
Horotiu	76	121
Gordonton	-10	12
Matangi	67	75
Tamahere-Tauwhare	176	260
Whatawhata	119	157
Te Kowhai	51	77
Hamilton Urban Area*** within WDC Total	512	740
Rest of District	1194	1776
District Total	4702	6124

Area	Population Growth 2026-2035	
	UoW Low	UoW Medium
Tuakau*	1571	1962
Pokeno	3309	4806
Te Kauwhata	484	505
Huntly	496	296
Ngaruawahia	123	124
Raglan	203	114
Urban Total	6185	7808
Taupiri	52	66
Horotiu	143	250
Gordonton	-80	-13
Matangi	69	91
Tamahere-Tauwhare	193	415
Whatawhata	185	283
Te Kowhai	51	114
Hamilton Urban Area*** within WDC Total	613	1206
Rest of District	1794	3334
District Total	8593	12348

Area	Supply	
	UoW Low	UoW Medium
Tuakau Stage 1 Carry Over	385	363
Tuakau* Stage 2	340	340
Tuakau Total	725	703
Pokeno Stage 1 Carry Over	450	90
Pokeno Stage 2	1000	1000
Pokeno Total	1450	1090
Te Kauwhata Carry Over	2226	2210
Te Kauwhata	172	172
Te Kauwhata Total	2398	2382
Huntly Carry Over	-33	-112
Huntly	676	676
Huntly Total	643	564
Ngaruawahia Stage 1 Carry Over	16	11
Ngaruawahia Stage 2	306	306
Ngaruawahia Total	322	317
Raglan Carry Over	-171	-186
Raglan	300	300
Raglan Total	129	114
URBAN TOTAL	5667	5169
Taupiri Stage 1 Carry Over	129	125
Taupiri Stage 2	102	102
Taupiri Total	231	227
Horotiu Stage 1 Carry Over	29	-11
Horotiu Stage 2	-	-
Horotiu Total	29	-11
Te Kowhai Stage 1 Carry Over	51	39
Te Kowhai Stage 2	9	9
Te Kowhai Total	60	48

Area	Supply Deficit or Carry Over	
	UoW Low	UoW Medium
Tuakau Total	-30	-206
Pokeno Total	90	-855
Te Kauwhata Total	2150	2127
Huntly Total	310	316
Ngaruawahia Total	190	187

LESS CERTAIN

Demand is less certain. Infrastructure planning is in place for some cells (Te Kauwhata) and not in place for others (Tuakau Stage 2) at this stage but is to be addressed in LTP 2018-2028. Cell sequencing and capacity subject to review. New growth cells (i.e. Pokeno Stage 2) informed by a high level concept plan, further work is still to be completed.

NOTES:

Future zoning in the villages within the Hamilton peripheral area will be done through a Structure Plan/Concept Plan (i.e. Te Kowhai). More detailed planning for these will be done at an appropriate time with Hamilton City Council and the NPS on Urban Development Capacity Project.

Raglan Total	-38	-8
URBAN TOTAL	2672	1561
Taupiri Total	198	189
Horotiu Total	-47	-131
Te Kowhai Total	9	-28

Summary:

Most areas have sufficient capacity for the decade in either a UoW Low or Medium growth scenario. In both scenarios, there would be insufficient capacity in Tuakau in which case some land in decade three would be brought forward, likewise for Pokeno under the UoW Medium scenario. The insufficient capacity in Raglan will be met by supply in neighbouring CAU Te Uku which is where the Rangitahi Peninsula is located.

**Decade 3:
Year 21-30
2036-2045**

Area	Household Growth 2036-2045	
	UoW Low	UoW Medium
Tuakau*	485	823
Pokeno	1222	991
Te Kauwhata	75	48
Huntly	57	67
Ngaruawahia	60	62
Raglan	-35	-82
Urban Total	1863	1909
Taupiri	12	9
Horotiu	61	84
Gordonton	-76	-53
Matangi	83	126
Tamahere-Tauwhare	260	446
Whatawhata	134	218
Te Kowhai	78	133
Hamilton Urban Area*** within WDC Total	551	962
Rest of District	829	2104
District Total	3243	4975

Area	Population Growth 2036-2045	
	UoW Low	UoW Medium
Tuakau*	954	1788
Pokeno	2879	2280
Te Kauwhata	108	45
Huntly	-39	-15
Ngaruawahia	32	39
Raglan	-155	-250
Urban Total	3779	3888
Taupiri	13	6
Horotiu	119	168

Area	Supply	
	UoW Low	UoW Medium
Tuakau Stages 1 & 2 Carry Over	-30	-206
Tuakau* Stage 3	4728	4728
Tuakau Total	4698	4522
Pokeno Stages 1 & 2 Carry Over	90	-855
Pokeno Stage 3	1000	1000
Pokeno Total	1090	145
Te Kauwhata Carry Over	2150	2127
Te Kauwhata	591	591
Te Kauwhata Total	2741	2718
Huntly Carry Over	310	316
Huntly	-	-
Huntly Total	310	316
Ngaruawahia Stages 1 & 2 Carry Over	190	187
Ngaruawahia Stage 3	683	683
Ngaruawahia Total	873	870
Raglan Carry Over	-38	-8
Raglan	200	200
Raglan Total	162	192
URBAN TOTAL	9874	8763
Taupiri Stages 1 & 2 Carry Over	198	189
Taupiri Stage 3	-	-
Taupiri Total	198	189
Horotiu Stages 1 & 2 Carry	-47	-131

UNCERTAIN

Demand is less certain. Not all zoning is in place. Infrastructure planning is not yet in place but to be addressed as part of LTP reviews once zoning has been confirmed. Cell sequencing and capacity subject to review. New growth cells (e.g. Pokeno Stage 3) is based on a high-level concept plan. The Northern Waikato Business Case preferred option shows Tuakau reaching a population of 15,000 – 20,000 people by 2046. To reflect the growth an additional 3600 households has been added onto the existing structure plan projections.

NOTES:

Future zoning in the villages within the Hamilton peripheral area will be done through a Structure Plan/Concept Plan (i.e. Te Kowhai). More detailed planning for these will be done at an appropriate time with Hamilton City Council and the NPS on Urban Development Capacity Project.

Gordonton	-243	-182
Matangi	153	261
Tamahere-Tauwhare	522	998
Whatawhata	271	485
Te Kowhai	144	274
Hamilton Urban Area*** within WDC Total	978	2010
Rest of District	1341	4496
District Total	6099	10394

Over		
Horotiu Stage 3	-	-
Horotiu Total	-47	-131
Te Kowhai Stages 1 & 2 Carry Over	9	-28
Te Kowhai Stage 3	62	62
Te Kowhai Total	71	34

Area	Supply Deficit or Carry Over	
	UoW Low	UoW Medium
Tuakau Total	4213	3699
Pokeno Total	-132	-846
Te Kauwhata Total	2666	2671
Huntly Total	253	249
Ngaruawahia Total	813	808
Raglan Total	197	273
URBAN TOTAL	8010	6854
Taupiri Total	187	180
Horotiu Total	-108	-215
Te Kowhai Total	-7	-100

Summary:

Most areas have sufficient capacity for the decade in either a UoW Low or Medium growth scenario. In both scenarios, there would be insufficient capacity in Pokeno which would be addressed when a Structure Plan is completed. With regards to Horotiu this Village will be a large industrial hub so careful consideration needs to be taken when deciding where the residential demand is located.

Assumptions:

- Most of the district's growth is Greenfield development with an assumption of 12 household units per hectare.
- Approximately 80% of growth will be in Pokeno, Tuakau, Te Kauwhata, Huntly, Ngaruawahia, Raglan and the rural villages.
- Household and Population figures are based on Census Area Units (CAU's).
- Any residual supply will be carried forward into the next decade.
- Future zoning in the villages within the Hamilton urban area will be identified as part of a Structure Plan/Concept Plan process in conjunction with the NPS Urban Development Capacity project work. More detailed planning for these will be done at an appropriate time.
- Council has submitted an application to the Housing Infrastructure Fund to support the Lakeside Development of 1500 additional households in Te Kauwhata. If unsuccessful the timing of the Lakeside development may be delayed.
- The Northern Waikato Business case has been factored into the supply column for Tuakau in decade three (additional 3600 households) to show councils ambition to grow Tuakau to 15,000 - 20,000 by 2046. Further work is being done to investigate how this may be achieved. The projections for Pokeno, Te Kauwhata and Huntly in the Business case have also been considered and accommodated.

* The Tuakau figure is the total of four CAU's Tuakau, Buckland South, Redoubt and Opuawhanga. Majority of the growth in Tuakau falls outside the Tuakau CAU and into the surrounding CAU's. Not all of the growth in these CAU's will form part of Tuakau some of it will be in the rural areas but an assumption could be made that about 80% of those CAU's growth will be urban.

** Pokeno Stage 1 refers to the structure plan made operative in 2010.

*** Hamilton urban area includes the following CAU's: Gordonton, Te Kowhai, Whatawhata, Horotiu, Tamahere-Tauwhare, Matangi, and Taupiri. Rural only CAU areas defined by STATS NZ have been excluded. <http://www.stats.govt.nz/methods/classifications-and-standards/classification-related-stats-standards/urban-area.aspx>.

Appendix B – Summary of public transport bus services available in the North Waikato

Waikato Regional Council services (BUSIT)

Waikato Regional Council services (BUSIT) include:

- A fortnightly bus service operates between Hamilton and Pukekohe via Ngaruawahia, Huntly, Te Kauwhata, Meremere, Pokeno and Tuakau;
- Hamilton to Huntly, with services operating approximately half hourly during the commuter peaks and hourly through the day. This service operates between 6am and 9pm on weekdays and between 8am and 6pm at weekends; and
- An internal service operates within Huntly twice a day on weekdays.

Auckland Transport public transport services

Auckland Transport services include:

- A Papakura to Pukekohe bus service extends through to Tuakau for one morning and one evening service each weekday; and
- There is one off-peak return trip between Tuakau and Pukekohe each Wednesday and Thursday. The Thursday service extends to Port Waikato.

Appendix C - Existing Social Infrastructure in the North Waikato

Towns	Medical Centres and emergency services	Hospital	Primary education	Secondary education	Sports and Recreation	Libraries	Retirement homes	Supermarkets / generalist food stores	Public transport
Pokeno	Tuakau, Pukekohe for family health, after hours medical emergency service and dentists Mercer Volunteer Fire Brigade	Auckland Middlemore	Pokeno - 1 primary centre	Tuakau secondary school	Pokeno - sports clubs and recreational venues: there are 12 hectares of dedicated sports parks reserves and wetlands, some of which are still being developed. There are also walkways yet to be developed	Tuakau and Pukekohe	Pukekohe	Nearest supermarket is in Pukekohe	Train at Pukekohe
Tuakau	Tuakau - medical centre and dentist Pukekohe - for family health, after hours medical emergency service Tuakau Volunteer Fire Brigade	Auckland Middlemore 40 km	Tuakau - 2 primary schools	Tuakau secondary school	Tuakau - Tuakau Domain and Dr John Lightbody Reserve (soccer, rugby, cricket, swimming(pool at end of life)	Tuakau and Pukekohe	Tuakau - elderly care and retirement village Pukekohe - retirement village	Local Four Square, nearest supermarket is in Pukekohe	Train at Pukekohe Tuakau - contracted bus services between Pukekohe and Tuakau (2 trips per day)

Meremere	Te Kauwhata (14.5km) or Tuakau (20km) - medical centre and healthcare facilities	Auckland - Middlemore OR Hamilton - Waikato Hospital	Meremere - 1 primary school	Tuakau, Te Kauwhata or Huntly for secondary school	Meremere - sports clubs and venues with an emphasis on motor sports due to the nearby Hampton Downs Motorsport Park and the Meremere Drag way.	Meremere	Te Kauwhata or Tuakau - elderly care facilities and rest home	Nearest supermarket is in Pukekohe or Huntly	Meremere - fortnightly bus service between Hamilton and Tuakau, via Meremere
Te Kauwhata	Te Kauwhata - medical centre OR Huntly Pukekohe for after-hours emergency service Te Kauwhata Volunteer Fire Brigade	Auckland - Middlemore OR Hamilton - Waikato Hospital	Te Kauwhata - 1 primary school	Te Kauwhata secondary school	Te Kauwhata including golf, rugby, netball, squash, cricket, tennis, swimming, bowling, community fitness centre	Te Kauwhata	Te Kauwhata - retirement village with elderly care	Local Four Square, nearest supermarket is in Huntly	Te Kauwhata - fortnightly bus service between Hamilton and Tuakau.
Huntly	Huntly - three medical centres and one dentist Hamilton for after-hours emergency services Huntly Volunteer Fire Brigade	Hamilton - Waikato hospital	Huntly - 7 primary schools	Huntly college Huntly - Maori immersion school from primary to end of secondary	Huntly - Huntly Domain, Huntly West Sports Complex (Soccer, Rugby, gymnastics, netball, cricket, swimming – heated pool, bowling,	Huntly	Huntly - Elderly care and hospital	Local Countdown and Four Square.	Huntly - scheduled bus services between Huntly and Hamilton via Ngaruawahia daily (Northern Connector) Huntly internal bus service on weekdays

Appendix D - Strategic alignment

Strategy	Strategy description and the alignment of the Programme Business Case
National	
<p>Government Policy Statement on land transport (GPS) 2015</p> <p>Draft Government Policy Statements on land transport (2018)</p>	<p>The GPS sets out the Government's high-level strategic direction for investment in the land transport network and priorities over the next ten years. The 2015 GPS has three key priorities – economic growth and productivity, improving road safety and value for money. These priorities are supported by objectives including matters such as demand, transport choice, resilience, safety, environmental effects, delivery and cost efficiency.</p> <p>The next GPS has been released as a draft and continues on the three priorities of the 2015 GPS - economic growth and productivity, improving road safety and value for money. A further five strategic priorities have been identified including:</p> <ul style="list-style-type: none"> supporting economic growth in the regions enhancing resilience supporting intermodal connections providing clarity around expectations for the treatment of environmental impacts using technology and innovation to improve benefits and achieve outcomes <p>The development of this Programme Business Case to cater for future urban growth by the integrated planning of transport, land use is well aligned to the three key GPS priorities, as well as giving effect to the five further strategic priorities identified in the Draft GPS</p>
<p>National Policy Statement on Urban Development Capacity (NPS-UDC)</p>	<p>The NPS-UDC came into effect on the 1st of December 2016. It has different requirements of councils, dependent on the levels of growth anticipated in the district. As Waikato District has been identified as high growth area, it is required to provide between 15-20% more developable land (i.e. land with sufficient infrastructure support) than the projected demand anticipated over the next 30 years.</p> <p>Part of the purpose of this Programme Business Case is to identify the projected demand, provide a high-level plan identifying how the North Waikato's infrastructure requirements can be met to accommodate this growth, which will inform the Waikato District Plan and assist in giving effect to the NPS-UDC.</p>
Regional / Sub-regional	
<p>Future Proof Strategy</p>	<p>The Future Proof Strategy is a sub-regional growth strategy that covers Hamilton City, Waikato and Waipa districts. Its purpose is to provide a comprehensive growth strategy for the sub-region that takes a long term view of land use and infrastructure. The Strategy has been reviewed by Waikato, Hamilton and Waipa District Councils in conjunction with Waikato Regional Council and the NZ Transport Agency to identify the long-term settlement patterns for these districts (2017). It is expected that this Programme Business Case will be aligned with and inform the final FutureProof settlement patterns.</p>
<p>Auckland Transport Alignment Project (ATAP)</p>	<p>ATAP is a joint project involving Auckland Council, Ministry of Transport, Auckland Transport, the NZ Transport Agency, and other central government agencies. It sets out to provide a direction for the development of Auckland's transport system over the next 30 years. The project acknowledges the importance of the high volume freight transports between Auckland, Hamilton and Tauranga through the North Waikato and the need to accommodate southward growth by the development of an</p>

Strategy	Strategy description and the alignment of the Programme Business Case
	integrated transport system, which crosses the regional boundaries. An identified project of interest to the North Waikato is 'Improved connections to the Waikato'
Supporting Growth	<p>Supporting Growth, formerly known as Transport for Urban Growth (TfUG) is a project between Auckland Transport, Auckland Council and the NZ Transport Agency developed to deliver some of the key priorities set out in ATAP. It covers urban growth areas identified by Auckland Council, and targets transport interventions to best accommodate that growth.</p> <p>The project was reported to the Transport Agency Board in October 2016. One of the recommendations from this project was a Programme Business Case to support integrated growth and infrastructure planning in North Waikato. This would assist in the co-ordinated management of the two region's growth challenges.</p>
Waikato Regional Policy Statement	The Waikato Regional Policy Statement sets out the Waikato region's key natural and physical resources issues, and how they should be managed and responded to throughout the region. The Waikato Regional Policy Statement promotes a collaborative approach requiring integrated management of natural resources and the built environment, which acknowledges the importance of an agreed settlement pattern and development, which is sustainable, affordable and planned. As such, the Programme Business Case is well aligned with the high-level aims of the Waikato Policy Statement.
Waikato Regional Land Transport Plan	This Plan sets out the region's intentions for the development of the land transport system over the next 30 years. It identifies transport issues and priorities aligned to those identified in this Programme Business Case including the growth in freight, tourism and people movements and the importance of co-ordinating, managing and planning land use change for efficient and effective transport networks and services. Delivering on this Programme Business Case will contribute to the delivery of the Regional Land Transport Plan's overall aims.
Waikato Regional Public Transport Plan	The review of the Waikato Regional Public Transport Plan in 2014/15 identified a need to investigate public transport provision in the northern part of the region, and in particular, Tuakau and Pokeno as significant growth is anticipated in these areas over the next 10-20 years. The Plan also requires that a 'business case approach is taken, which aligns with the method and public transport review component of this Programme Business Case.
Waikato Expressway Network Plan	This Plan Ties the funding of the Waikato Expressway to land use planning and avoiding ribbon development. Objectives include enhancing inter-regional and national economic growth and productivity, improving journey reliability and safety, focusing freight movements onto State Highway 1, and providing local network operations and opportunities within the major urban areas bypassed by the Waikato Expressway. The Programme Business Case has a number of similar objectives and as part of the assessment undertaken considers how the potential land use patterns will impact or give effect to objectives for the Waikato Expressway.
District	
Waikato District Economic Development Roadmap	This document sets out the Waikato District Councils goals for economic growth and how the desired outcomes will be achieved. Key goals include increasing Waikato's international connectedness and encouraging economic links with Auckland and the wider region. The Programme Business Case objectives align and will contribute to these goals.
Waikato District Plan	The Waikato District Plan is undergoing review. Waikato District Council intends to notify a proposed Waikato District Plan in 2018. The district plan review will enable

Strategy	Strategy description and the alignment of the Programme Business Case
	future growth through zoning and plan provisions, and will be a mechanism through which the objectives of this Programme Business Case will be delivered.
Tuakau Structure Plan	The Tuakau Structure Plan was published in 2014 by Waikato District Council to guide development of Tuakau, and has been given effect to the Waikato District. The Plan provides an approach of carefully staged and integrated infrastructure provision to accommodate growth. This approach aligns with the direction of the Programme Business Case, and will continue to be given effect to.

Appendix E - Uncertainty log

Area of uncertainty	Uncertainty	Degree of uncertainty	Impact on programme	Comment
Factors affecting demand				
Population and Economic Growth	Ability to predict the growth in population levels or economic activity in the North Waikato and surrounding regions	Some uncertainty	High	Higher growth requires earlier response and lower growth requires slower delivery of infrastructure and services. . Slower population growth may mean some of the programme elements may not be required or will be required later than anticipated
Industrial growth	Ability to predict the location and scale of industrial growth in the North Waikato and surrounding regions	Some uncertainty	Medium	The location and type of industrial growth is currently unknown. The amount of industrial growth will affect the number of employment opportunities, and will affect what infrastructure provision is required and where
Technological advances	Enhanced travel information and driverless vehicles and on-line meetings could affect how people travel and their demand for travel	High uncertainty	Low	Technological advances can reduce the need to travel, the way people work and how they meet their needs. These changes may mean that some of the currently required infrastructure changes or is no longer required The rate of any new technology adoption is difficult to estimate
Factors affecting supply				
Rail as a public transport option in the Waikato	Rail is one of the options that could be considered to improve transport connections between the Waikato and Auckland over the medium to long-term.	High uncertainty	Medium	The Business Case recommends a strategic case to consider transport connections between the two regions. If rail further south were to be provided, additional funding and infrastructure would be required to support it.
Policy	The statutory powers of local authorities to promote change	Low uncertainty	High	Land use and other policy changes i.e. district plan rules and infrastructure provision policies are critical to the successful delivery of the programme

Area of uncertainty	Uncertainty	Degree of uncertainty	Impact on programme	Comment
Policy	The ability of the different infrastructure providers to co-ordinate their investment	Medium uncertainty	Low to medium	Some infrastructure or service providers may not have the resources or capacity to integrate their infrastructure provision into the programme set out in this programme
Financial	Ability to fund maintenance and operations for new infrastructure either major or minor	Low uncertainty	Negligible	Funding for Maintenance and operations is considered to be available and at sufficient levels
	Ability to fund a major infrastructure project	Some uncertainty	High	Restricts likelihood of major infrastructure interventions or delays implementation timeframe
Factors affecting cost				
Lack of certainty and detail around some elements of the recommended programme	Given the relatively high-level nature of the Programme Business Case analysis there is an inherent lack of certainty and detail around particular projects, specific interventions, and their associated costs and benefits.			The lack of certainty is appropriate in some respects, as the programme needs to be regularly re-assessed by the partners. The uncertainty can be reduced and eliminated as a result of detailed investigations which will need to be carried out as part of the necessary investigations into elements of the recommended programme as it progresses (i.e. Indicative and Detailed Business Cases).
Future capital costs	Difficulty of forecasting future capital costs, particularly in the medium to long term.	Near certain	Medium	Once confirmed, the Waikato District and Regional Council's Long Term Plans and the National Land Transport Programme will provide more confidence in investment into all but the education, emergency and medical services and facilities in the short term.

Appendix F - Recommended programme

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
Community facilities (libraries, halls, iSite and Waikato District Council customer services)	Provide WDC customer and library services in Pokeno (\$7.5M) Increase capacity at Tuakau library and provide upgraded WDC customer services (Northern Facilities Study) (\$2.5M) New iSite(s) in Pokeno, Rangiriri and / or Te Kauwhata (Part of Northern facilities study) (\$3M)	Te Kauwhata library extension (\$1.5M) Identify and implement partnership opportunities such as co-location of community facilities together e.g. libraries and halls or sport facilities together or the development of community service hubs	Provide upgraded WDC customer services in Tuakau / Pokeno (Northern Facilities Study) Develop and implement partnership opportunities with Ministry of Education e.g. co-location of sports facilities and schools	Increase WDC customer service, halls and library capacity in Tuakau / Pokeno Continue to develop opportunities for community service hubs and co-location with partners such as Ministry of Education and emergency service providers (i.e. community hubs with police drop in centres and libraries)
Parks and recreation	Identify future park and green space requirements for the anticipated population growth levels and stages. Align with minimum requirements set out in the Parks Strategy. Identify their potential locations and size to be incorporated	Review trails infrastructure and strategy to ensure it is adequate for the population's needs and considers any tourism opportunities (\$50K) Develop aquatic strategy (\$50K) Upgrade Tuakau pool. Work with Sport	Continue to establish or expand parks as per the Structure Plans to accommodate the population growth Implement the co-location, co-funding or partnership opportunities with Ministry of Education / Auckland Council and / or other community	Continue to establish or expand sports and recreation parks in Tuakau as per the Structure Plan to accommodate the population growth. Continue to use and develop partnerships for efficient or co-delivery of community

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	<p>into the town Structure Plans</p> <p>Munro Sports Park in Pokeno developed. (\$1.5M)</p> <p>Tuakau Neighbourhood park development (\$1.2M)</p> <p>Develop the potential for shared park and recreation facilities with education facilities (MoE) and Auckland Council (\$50K)</p>	<p>Waikato and Auckland Council to identify whether this is an opportunity to provide / upgrade to a cross-boundary aquatic facility</p> <p>Establish or expand parks as per the Structure Plans lay-out to accommodate the population growth. (developer led)</p> <p>Provide additional 50ha of sports and recreation park in Tuakau (could be a co-location opportunity with the planned expansion of Tuakau School)</p> <p>Identify partnership opportunities such as co-location or staged provision of schools, halls with recreation or sports facilities</p>	<p>facilities or service providers.</p>	<p>services / educational facilities</p>
Education	<p>Planning for increased numbers and capacity of primary schools in areas of growth</p>	<p>Increase capacity of Tuakau and Te Kauwhata Secondary Schools</p>	<p>Increase number and/or capacity of primary schools in towns as required</p>	<p>Increase number and/or capacity of primary schools in towns as required</p>

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	<p>Planning for increased capacity of secondary schools at existing locations</p> <p>Establish information and growth planning sharing with Ministry of Education</p> <p>Identify partnership opportunities especially for Tuakau and Pokeno and Te Kauwhata co-locating with community or sports / recreation facilities</p>	<p>Increase number or capacity of primary schools in Tuakau and Te Kauwhata</p> <p>Increase number and/or capacity of primary schools in other towns as required</p> <p>Increase capacity of secondary schools in other towns as required</p> <p>Identify partnership opportunities such as co-location or staged provision of schools and sports / recreation facilities to accommodate the stages of growth and the community's needs.</p>	<p>Increase capacity of secondary schools as required</p> <p>Continue to use partnerships for existing and new opportunities for co-funding and co-location of services such as schools and community or recreation facilities to create activity hubs, or protect land for future education needs</p>	<p>Increase capacity of secondary schools as required</p> <p>Identify new opportunities or build on existing co-located services to add efficiencies of service provision or create service hubs</p>
Medical	<p>Counties Manakau DHB to assess feasibility of a secondary hospital to service south Auckland / North Waikato. Likely to be located in either Drury or Pokeno</p> <p>Waikato DHB to investigate the potential for an</p>	<p>Improve existing medical services</p> <p>Develop and implement the opportunities for co-location of medical services and other community or retail services</p>	<p>Higher levels of service and function existing and new medical services</p> <p>Continue to work and information share with the DHBs to understand growth impacts ensure there are sufficient medical facilities to</p>	<p>Higher levels of service and function existing and new medical services</p> <p>Continue to build on the relationships with the DHB to develop new opportunities for co-location of services / service hubs /</p>

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	<p>accident and medical facility to service the area between Huntly and Pokeno</p> <p>Establish information sharing and planning with Counties Manukau and Waikato DHBs to share the North Waikato growth aspirations and tracking to ensure alignment between the DHB service provision and the sub-region's growth</p> <p>Identify partnership opportunities for co-location, or service hubs such as provision of medical, community or retail services together - particularly in Tuakau and Pokeno</p> <p>Work with the DHBs to understand their aspirations for remote management of health through the use of technology and how this will impact the services provided</p>		<p>support the increased population</p> <p>Build on the information sharing and relationships with the DHB to develop new opportunities for co-location of services and cross-boundary (with Counties Manukau DHB) sharing of services or service hubs</p>	<p>improved efficiency of services etc</p>

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	within the North Waikato			
Emergency services	Discussions and planning with New Zealand Police and other emergency service providers to share Council's growth aspiration in order to ensure appropriate response as far as service provision by the emergency service providers are concerned.	<p>Improve existing fire services</p> <p>Improve existing police services</p> <p>Improve existing ambulance response</p> <p>Work with emergency service providers (both Waikato and Auckland) to identify potential co-location and shared services and creation of community hubs</p>	<p>Higher levels of service and function existing and new fire services</p> <p>Higher levels of service and function existing and new police offices</p> <p>Higher levels of service and function existing and new ambulance response</p> <p>Combined emergency response centre in Tuakau</p> <p>Work with the emergency service providers to deliver new / upgrade emergency services as community hubs / co-located with Council services, school facilities, retail development etc.</p>	<p>Higher levels of service and function existing and new fire services</p> <p>Higher levels of service and function existing and new police offices</p> <p>Higher levels of service and function existing and new ambulance response</p> <p>Continue to work with emergency service providers to deliver / and take advantage of technology improvements to deliver emergency services, develop community hubs, co-locate council services, community facilities etc</p>
Water	<p>Tuakau – Provide mains upgrades budgeted for 2017/18 and 2018/19 (\$3.3M)</p> <p>Pokeno – Trunk mains Developer led (\$600k)</p>	<p>Tuakau – New reservoir and bulk water main (\$5.7M)</p> <p>Pokeno – New reservoir and bulk main (\$2.3M)</p>		

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	Te Kauwhata – water treatment plant upgrade, reservoir/trunk main (\$12.3M HIF)	Te Kauwhata – water main upgrades (\$2M)		
Wastewater	<p>Pokeno – Pump station B upgrade (\$1.8M)</p> <p>Contribution to new Pump station/rising main for Whangarata Industrial zone (2017/18 but likely to be constructed 2018/19)(\$275k)</p> <p>Pokeno –contributions will be required to developers for extensions (currently \$350k but likely to increase - allow \$1M)</p> <p>Te Kauwhata – Trunk main to Huntly \$12.5M (HIF)</p> <p>Huntly – Wastewater treatment plant upgrade construction \$15.5M (HIF)</p> <p>Meremere to Tuakau via existing Pokeno Waster water pump station (Option 2), (primarily for consent</p>	<p>Tuakau - Interceptor pump station and rising main upgrade (\$2M)</p> <p>Te Kauwhata pump station upgrade (Mahi St) \$(460k)</p>	Pokeno Market Rd pump station and rising main upgrade (\$3M)	

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	compliance and overflow reduction purposes) (\$1.96M)			
Stormwater	Updated Catchment Management Plans/flood modelling for all towns (\$500 - 700k) Implementing Catchment Management Plans (\$1.5M)	Implementing Catchment Management Plans (\$1.9M)		
Roading Indicative as at 19/11/2017	Provide upgrades to local infrastructure as required (\$2.5M) Harrisville Rd bridges replacement (\$5M) Geraghtys road bridge (\$1.5M) Munro Rd and bridge (\$1.5M) Travers Rd and intersection with Wayside (\$3.5M) Planning for –Pokeno / Whangarata / Bucklands Road upgrade (\$0.5M) SH1 improvements to alignment to enabled	Upgrade of Waikato District Council section of Buckland Road to a high standard (\$7M) Provide upgrades to local infrastructure as required (\$5M) 2 Collector Rds for Tuakau (\$10M) South collector for a subdivision in Te Kauwhata (\$1.5M) Te Kauwhata Rd upgrade (\$1.5M – Housing Infrastructure Fund) Waerenga village improvements (\$0.5M)	Upgrade rail overbridge between Pokeno and Tuakau to HPMV standard (\$3M) Provide new and improved connection from Pokeno to Tuakau and Pukekohe (\$10M) Provide upgrades to local infrastructure as required including Pokeno east-west link (\$5M) Te Kauwhata Road deviation and rail crossing / grade separated (\$4M)	Tuakau Bridge replacement (\$25M) Provide upgrades to local infrastructure as required (\$10M)

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	<p>increased speed limit to 110kph within North Waikato (Cost yet to be determined)</p> <p>Waikato expressway and connections - consider new or upgraded connections to accommodate economic growth or meet required Levels of Service</p>	<p>Te Kauwhata interchange roundabout (\$2.5M)</p> <p>Upgrade Pokeno / Whangarata Rd (between Pokeno and Tuakau) (\$10M)</p>		
Public transport	<p>Provide increased bus services as per North Waikato Public Transport Review (servicing Huntly, Rangiriri, Te Kauwhata, Mercer, Tuakau and Pokeno)</p> <ul style="list-style-type: none"> - Pokeno – Tuakau - Pukekohe - Huntly – towns between- Pukekohe - Te Kauwhata – towns between – Hamilton - Hamilton – Huntly – Pokeno –Papakura <p>(\$1M)</p>	<p>Provide increased bus trips as required to service new growth areas, and improve connectivity between key settlements within North Waikato</p> <p>Feasibility study into a Public Transport hub for Te Kauwhata</p>	<p>Provide increased bus trips as required to service new growth areas, and improve connectivity between key settlements within North Waikato</p> <p>Feasibility study into a Public Transport hub for Tuakau</p>	<p>Provide increased bus trips as required</p> <p>Potential for high frequency electrified service between Tuakau and Auckland region if demand is justified and downstream investments have occurred</p> <p>Park and Ride in Pokeno with bus trips to Pukekohe/Papakura (\$10M)</p>

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	Develop community transport within Huntly to Pukekohe area			
Walking and cycling	<p>Plan walking and cycling facilities (\$0.25M)</p> <p>Pokeno walking and cycling network development (\$1M)</p> <p>Te Kauwhata walking and cycling network (600K)</p>	<p>Upgrade walking and cycling facilities in Tuakau town centre and around schools (\$1M)</p> <p>Upgrade walking and cycling facilities in Huntly town centre and around schools (to tie in with the timing of the SH1 revocation process) (\$1M)</p> <p>Te Kauwhata walking and cycling network (\$1.3M)</p>	Walking and cycling connections between Pokeno and Tuakau (\$0.75M)	Provide walking and cycling facilities as required, improve networks around schools and centres (\$2.5M)
<p>Land use planning</p> <p>Note: WDC recognise the importance of early and considered timing for planning and is seeking additional funds through the LTP process as well as investigating</p>	<p>Council lead and co-ordinated Master planning (with partners and other infrastructure providers) for Tuakau, Pokeno, Te Kauwhata and Huntly. This will identify infrastructure, service and development partnerships and prioritise actions. (minimum of \$250,000 plus staff time)</p>	<p>Plan changes and resource consents to give effect to the 4 Structure Plans - Council initiated and led (\$80,000 per plan change and staff time)</p> <p>Information sharing and facilitation for the co-location of services, facilities and infrastructure (between emergency service</p>	Information sharing and facilitation for the co-location of services, facilities and infrastructure (between emergency service providers, Auckland Council and Transport, Ministry of Education, Sport Waikato DHBs and Waikato District Council. (staff time)	<p>Planning for key infrastructure and facilities (funded as staff time or as part of specific infrastructure projects). This includes:</p> <ul style="list-style-type: none"> - Identification / designation and protection of strategic corridors, community assets

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
<p>other funding sources and investment partners</p>	<p>Development of detailed Structure Plans to give effect to master planning. Requires consideration of development capacity, potential for intensification, residential and commercial zoning demand and requirements. (\$200-300K per town plus staff time)</p> <p>Establish and prioritise land release timetable (Staff time)</p> <p>Develop monitoring programme in partnership with Future Proof (Staff time)</p> <p>Planning for key infrastructure and facilities (funded as part of specific infrastructure projects detailed earlier in the table). This includes:</p> <ul style="list-style-type: none"> - Precinct or hub planning - Identification / designation and protection of 	<p>providers, Auckland Council and Transport, Ministry of Education, Sport Waikato DHBs and Waikato District Council. (staff time)</p> <p>Planning for key infrastructure and facilities (funded as part of specific infrastructure projects detailed earlier in the table). This includes:</p> <ul style="list-style-type: none"> - Precinct or hub planning - Identification / designation and protection of strategic corridors, community assets including parks and reserves Any required resource consents - purchasing land - Enabling temporary land uses on key corridors - Monitoring and review 	<p>Planning for key infrastructure and facilities (funded as staff time or as part of specific infrastructure projects). This includes:</p> <ul style="list-style-type: none"> - Identification / designation and protection of strategic corridors, community assets including parks and reserves - Any required plan changes or resource consents - Land purchase - Enabling temporary land uses on key corridors - Monitoring and review <p>Council led district plan review and re zoning (if required to enable growth)</p> <p>Facilitation and consideration of any developer led investment (staff time)</p>	<p>including parks and reserves</p> <ul style="list-style-type: none"> - Any required plan changes or resource consents - Land purchase - Enabling temporary land uses on key corridors - Monitoring and review <p>Council led plan review and re zoning as required</p> <p>Facilitation and consideration of any developer led investment (staff time)</p>

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
<p>Text colour indicates who has primary responsibility for the intervention Blue = Waikato District Council Green = Waikato Regional Council Red = NZ Transport Agency Black = Other</p>				
	<p>strategic corridors, community assets including parks and reserves</p> <ul style="list-style-type: none"> - Enabling temporary land uses on key corridors <p>Facilitation and consideration of any developer led investment (staff time)</p>	<p>Review Waikato District Development Strategy \$50K</p> <p>Facilitation of any developer led investment (staff time)</p>		

Appendix G – Transport Assessment

**North Waikato Integrated Growth
Management Programme Business Case
Transport Assessment of Short Listed
Options
October 2017**

Project: North Waikato Integrated Growth Management Programme
Business Case

Title: Transport Assessment of Short Listed Options

Document Reference: P:\NZTA\138 North Waikato Programme Business Case\4.0
Reporting\R1D171031 nwaikato.doc

Prepared by: Michael Jongeneel and Sandy Mills

Reviewed by: Ian Clark

Revisions:

Date	Status	Reference	Approved by	Initials
17 May 2017	A	R1A170517	Not approved – incomplete draft	
1 June 2017	B	R1B170601	I Clark	
16 July 2017	C	R1C170716	I Clark	
31 October 2017	D	R1D171031	I Clark	

The drawings, information and data recorded in this document (the information) are the property of Flow Transportation Specialists Ltd. This document and the information are solely for the use of the authorised recipient and this document may not be used, copied or reproduced in whole or part for any purpose other than that for which it was supplied by Flow Transportation Specialists Ltd. Flow Transportation Specialists Ltd makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.

EXECUTIVE SUMMARY

Flow Transportation Specialists Ltd have been commissioned by the New Zealand Transport Agency (Transport Agency), to provide transport planning inputs to the Programme Business Case (PBC) being developed for the North Waikato area. This report is intended to be read in conjunction with the North Waikato Integrated Growth Management PBC.

The Programme Options

The programme options included a range of infrastructure and non-infrastructure alternatives. Programmes with short, medium and long-term delivery timeframes were considered. The alternatives considered social infrastructure, parks and recreation, education, medical, emergency service, water, wastewater, roading, public transport, walking and cycling and land use, as well as any other investment with positive outcomes for the community and programme partners. The alternatives range from continuing the current approach of dispersed development, with a reactive approach, to more proactive planning with focussing growth around existing settlements. The short listed programmes are outlined below.

Programme Option 4 – Limited intervention to increase activity in Tuakau and Huntly. This was short listed as the “Do Minimum” option, as it was agreed by project team members and stakeholders that the current planning (Programme 1A) is not acceptable and will require an increased level of intervention by partner organisations to cater for growth in North Waikato. The evidence confirms that the North Waikato needs to be more connected within towns, within North Waikato and between Auckland.

Programme Option 5B – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern). This programme was shortlisted and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided. This programme is the same as Programme 6B (see below) but with a lower population level in Tuakau, at approximately 11,000.

Programme Option 6B – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern) with growth in Tuakau to reach a larger population level (15,000-20,000, depending on feasibility and intensification of land use) with a redeveloped structure plan and/or planning changes (i.e. to reduce land use and footprint size and services for the northern area shared between Tuakau and Pokeno). This programme was short-listed and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided due to critical mass from population levels and employment. It was also supported due to the lower unit cost for developing additional housing in Tuakau for water and wastewater, its ability for increased employment opportunities, existing social infrastructure such as schools and access to potential for long term development of a passenger rail service to Auckland due to the larger, more focused population growth.

All of the shortlisted programme options include non-infrastructure activities such as developer contributions and future planning with social service providers. The difference in the programmes is the level of investment, where it will be invested and when.

The assumed population and employment totals for the three Programmes are set out in Table ES1. (It should be noted that there is a level of uncertainty around these forecasts).

Table ES1: Existing and Forecast Land Use assumptions for the Short Listed Programmes

	Population				Employment			
	2016	2025	2035	2045	2016	2025	2035	2045
Programme 4	18,600	24,650	33,500	38,475	6,700	7,575	9,300	11,400
Programme 5B	18,600	26,000	35,100	41,150	6,700	9,200	11,600	15,250
Programme 6B	18,600	27,625	41,750	51,700	6,700	10,275	15,350	19,750

The overall employment to population ratio under Programme 4 is anticipated to reduce from the existing figure of 0.36, to 0.30 in 2045.

Programme 5B includes an overall increase in population (between Programmes 4 and 5B) of about 2,700 people. However, greater local employment is proposed, in all centres, with Programme 5B, with the overall employment to population ratio anticipated to remain constant from the existing figure of 0.36, to 0.37 in 2045.

Programme 6B includes an overall increase in population (between Programmes 5B and 6B) of about 10,500 people, with greater population and local employment primarily in Tuakau. The overall employment to population ratio under Programme 6B is anticipated to increase slightly from the existing figure of 0.36, to 0.38 in 2045.

Transport Assessment

This report summarises the existing transport environment, plus the future likely transport environment, taking into account future committed transport projects, and projects that are currently identified but not yet committed, including road and public transport projects identified for South Auckland (see below). The report then identifies a range of issues that will affect consideration of possible additional investment in transport in North Waikato.

The Future Do Minimum Scenario

This report has noted the transport investment that is currently taking place, or is committed within the North Waikato:

- ◆ In terms of roading, the committed improvements relate primarily to the completion of the Waikato Expressway, between Auckland and Hamilton
- ◆ In terms of public transport, this report has identified the draft North Waikato Public Transport Review. That review identifies the short term public transport interventions within North Waikato to support the delivery of this Programme Business Case, and it is to be expected that this investment (or investment to a similar level) takes place within the Do Minimum scenario.

This report has also noted the significant work that has been carried out by the “Transport for Future Urban Growth” project, now known as the “Supporting Growth” project. This relates to the Auckland region, but there are several as yet uncommitted projects (meaning that they do not yet form part of the Future Do Minimum scenario) which will affect South Auckland as far south as Pukekohe.

A particular uncertainty at the current time relates to the future for passenger rail, south of Pukekohe. Until now this has been assumed to be a long term project, but the new Labour led coalition is known to be interested in investing in a rapid rail network linking Auckland, Hamilton and Tauranga.

Travel patterns will change in response to land use changes and investment in transport. Locally, Pukekohe is expected to become a more significant destination, while the significant development within South Auckland, and the expected improvements of rail as far south as Pukekohe, are likely to increase trips to/from the north. Land use change in Hamilton will also affect the future distribution, particularly for the southern half of the North Waikato area.

Assessment

It is noted that the demand for travel should not be assumed to be static, but it will be affected by, for example, the land use mix, and by investment (of for example in travel planning and in high speed broadband) which will reduce the need to travel. It is to be expected that greater proportions of trips will stay within the North Waikato area in the future, as the range of local opportunities increases.

The report has included a manual assessment of the effects of the three shortlisted programmes on daily traffic flows (i.e. these estimates have not been informed by separate transport model runs of the three programmes). These estimates assume that the effects of increasing population will be offset by significant increases in local services and amenities (as reflected in the ratios of employment to population, noted above). As a result, Programme 5B is predicted to lead to slightly lower daily traffic flows than Programme 4, due to more people expected to make shorter trips (ie travelling within towns, with less people travelling between towns). However, Programme 6B is predicted to lead to slightly higher traffic flows (than Programme 4), due to the higher population, particularly within Tuakau, but also within Huntly.

It is too early to say with certainty that particular transport projects (identified within Section 6 of this report) may be required for one Programme and not another. That said, it is clearly likely that Programme 6B, which include the greatest land use within North Waikato, particularly around Tuakau, is likely to lead to a greater demand for transport investment – in some form.

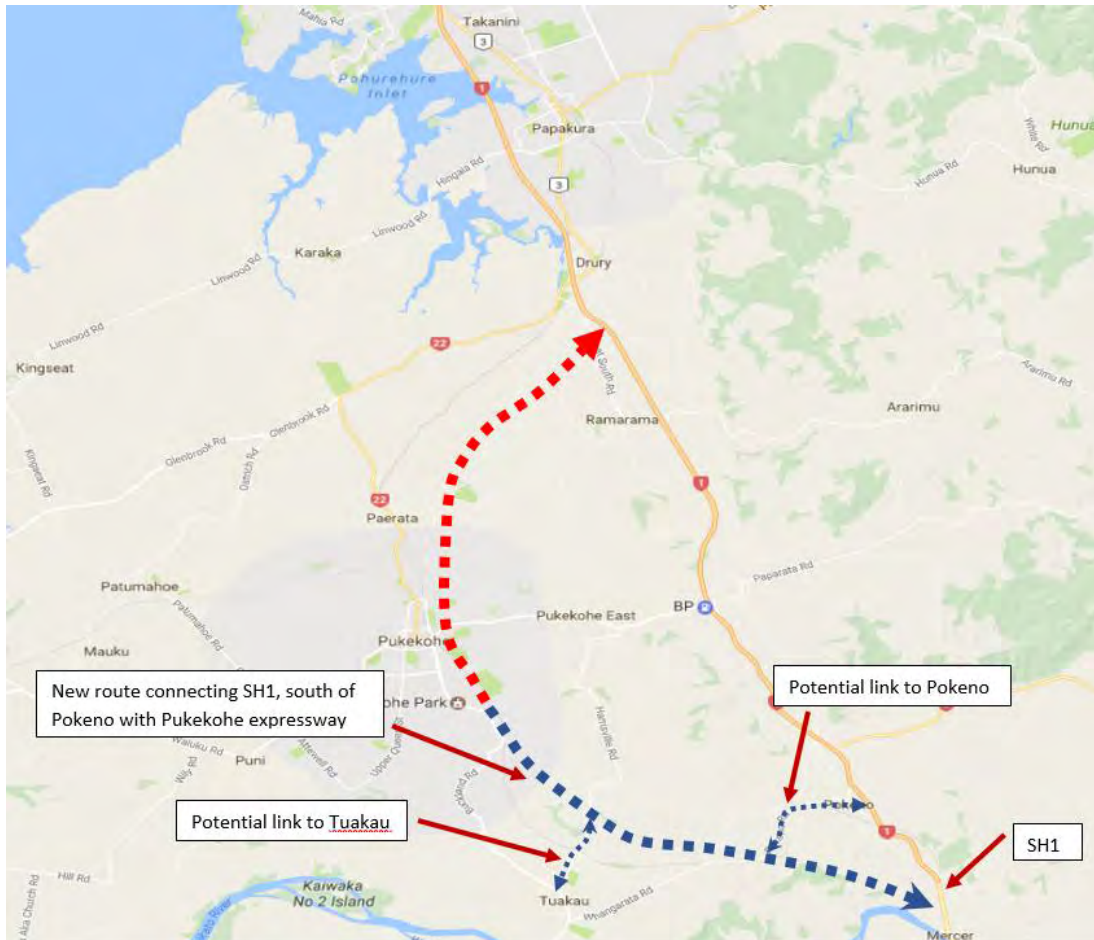
This report indicates that the following transport projects are likely to be required:

- ◆ Improvements to public transport will be essential, in order to improve accessibility. As noted above, the draft North Waikato Public Transport Review identifies some short term public transport interventions within North Waikato. Further improvements will also be required in due course, primarily to improve public transport accessibility between North Waikato and the Auckland region, including Pukekohe in particular
- ◆ It would appear that a bus based public transport system would be adequate to serve North Waikato. Any extension of passenger rail, south of Pukekohe, is likely to depend firstly on investment in rail further to the north, within the Auckland region, and secondly on the wider

assessment of the potential costs and benefits of passenger rail between Auckland, Hamilton and Tauranga. However, the higher population anticipated at Tuakau, with Programme 6B, may assist the justification of rail south from Pukekohe to Tuakau

- ◆ Improvements to the road network between Tuakau and both Pukekohe and Pokeno are likely to be required in order to improve the accessibility and safety of trips to/from Tuakau. Under Programmes 4 and 5B, it appears that a two lane road should be sufficient for Buckland Road (between Tuakau and Pukekohe), but four laning, possibly with public transport priority, is more likely to be required with Programme 6B
- ◆ Improvements to Mill Road (between Pukekohe and would also appear to be required, with all Programmes, between Pukekohe and the SH1 Bombay Interchange. This will be required, to a significant degree, due to the expected growth in Pukekohe, but the need will be increased by the proposed development around and Tuakau, with Programme 6B
- ◆ Improvements to the capacity of the SH1 Pokeno interchanges will be required, with all Programmes
- ◆ The need for the above roading projects may be superseded if the concept shown in Figure ES1 overleaf, or similar, is progressed. This link would extend from SH1, south of Pokeno, to connect into the proposed Pukekohe Expressway (if that concept is progressed), with local connections to Pokeno and Tuakau. Such a link would reduce traffic flows on SH1 between south of Pokeno and the Bombay interchange, and also along Mill Road and Buckland Road. In addition to the road accessibility benefits it would provide connections to the improved rail services as these extend progressively south from Papakura to Pukekohe. Such a concept would be more likely to be justifiable with the greater levels of population anticipated around Pokeno and Tuakau with Programme 6B
- ◆ This report has noted that parts of the North Waikato rely, to a significant degree, on State Highway 1, and the development of a secondary road network between Pokeno and Huntly would appear to be very desirable, in order to remove local trips (including walking and cycling trips) from the Expressway. In particular, a local connection between Te Kauwhata and Huntly would appear to be worth considering, with all Programmes.

Figure ES1: Possible new Roothing Connection from SH1 south of Pokeno (shown indicatively in blue) to Future Pukekohe Expressway (shown indicatively in red)¹



¹ The dotted red and blue lines in Figure 9 should be taken as “very indicative”. Clearly, if either or both concepts are progressed, they would need to take into account, and minimise the effects on a wide range of potential environmental, physical and land use (etc) factors

The likely need for these projects, with each of the short listed Programmes, is summarised in Table ES2.

Table ES2: Transport Investment required for Short Listed Programmes

	Programme 4	Programme 5B	Programme 6B
Improved Public Transport ²	Required	Required	Required
Additional public transport improvements ³	Required, due to relative lack of local services/employment	Further improvements probably required, but less so than with Programme 4, due to greater local services and employment with Programme 5B	As Programme 5B, but additional investment likely to be required to serve additional population in Tuakau in particular
Passenger Rail Services south of Pukekohe	Possible, but the justification and timing will primarily depend on wider considerations to north and south	Possible, but the justification and timing will primarily depend on wider considerations to north and south	More probable, for the section between Pukekohe and Tuakau. However, the justification and timing will still primarily depend on wider considerations
Improved roading connection between Tuakau and Pokeno	Required, due to likely need for trips to travel between Tuakau and Pokeno	Desirable (but with greater proportions of trips expected to be within Tuakau and Pokeno)	Required, due to greater people living and working at Tuakau
Improved roading connection between Tuakau and Pukekohe	Required, due to likely need for trips to travel between Tuakau and Pukekohe	Desirable (but with greater proportions of trips expected to be within Tuakau and Pukekohe)	Required, due to greater people living and working at Tuakau
Improvements to Mill Road (Pukekohe to Bombay)	Required – primarily due to growth in Pukekohe	Required – primarily due to growth in Pukekohe	Required – due to growth in Tuakau as well as Pukekohe
Improvements to SH1 Pokeno Interchange	Required	Required	Required
New road link between SH1 (south of Pokeno) and proposed Pukekohe Expressway	Less likely to be justified	Less likely to be justified	More likely to be justified, and it will reduce the need for the above four roading projects

² As currently envisaged in draft North Waikato Public Transport Review

³ For example, to provide bus connections to rail services to the north

Table ES2: Transport Investment required for Short Listed Programmes

	Programme 4	Programme 5B	Programme 6B
Provision of secondary road network between Pokeno and Huntly	Required	Required	Required
Improved walking/cycling connections within towns	Required	Greater connections likely to be required	Greater connections likely to be required, particularly within Tuakau
Improved walking/cycling connections between towns	Greater connections likely to be required	Required	Required, especially between Tuakau and both Pokeno and Pukekohe

The high level evaluation of the transport effects of the short listed land use programmes is summarised in Table ES3.

Table ES3: Transport Evaluation of Short Listed Programmes

	Programme 4 (P4)	Programme 5B (P5B)	Programme 6B (P6B)
Journey distance to work	Poor (i.e. a high proportion of long distance trips)	Better than P4	Better than P5B
Trips by other Modes	Poor (i.e. predominantly car based trips)	Better than P4	Better than P5B
Travel time (reliability)	Base for comparison	Similar to P4	Similar to P4, assuming transport investment
Travel time delay	Base for comparison	Similar to P4	Similar to P4, assuming transport investment
Deaths and serious injuries	Base for comparison	Similar to P4	Better than P4 and P5B, assuming transport investment
Crashes/vehicle kilometres travelled	Base for comparison	Similar to P4	Better than P4 and P5B, assuming transport investment

CONTENTS

1	INTRODUCTION	10
2	TRANSPORT MODELLING	10
3	EXISTING SITUATION	10
3.1	Existing Transport Networks	10
3.2	Existing Traffic Flows	12
3.3	Freight	13
3.4	Public Transport	13
3.5	Crash Analysis.....	14
3.5.1	Local Road Crashes.....	14
3.5.2	SH1 Crashes.....	15
3.6	Existing Travel Patterns.....	16
3.6.1	North Waikato Travel Survey.....	16
3.6.2	Modelled Travel Patterns.....	18
3.6.3	Comparison	18
3.7	Community Attitudes to Existing Travel Issues.....	19
4	LAND USE FORECASTS.....	20
4.1	Previous Land Use Forecasts.....	20
4.2	The Short Listed Programmes.....	21
4.2.1	Programme 4.....	22
4.2.2	Programme 5B.....	23
4.2.3	Programme 6B.....	24
5	TRANSPORT NETWORK CHANGES.....	25
5.1	Improvements to State Highway 1: Southern Motorway.....	25
5.2	Improvements to State Highway 1: Waikato Expressway	25
5.3	Transport for Future Urban Growth	27
5.4	Public Transport	29
6	CONSIDERATIONS FOR TRANSPORT INVESTMENT IN NORTH WAIKATO	30
6.1	Public Transport	30
6.2	Roading.....	32
6.3	Walking and Cycling	36
7	FUTURE TRANSPORT CONDITIONS.....	36
7.1	Modelled Traffic Forecasts.....	36
7.2	Manually Derived Traffic Forecasts.....	38
7.3	Freight	39
7.4	Public Transport	39
8	ASSESSMENT OF PROGRAMMES.....	40
8.1	Key Performance Measures	40
8.2	Effects beyond North Waikato.....	41
8.3	Transport Investment.....	41
8.4	Benefit 1: Improve North Waikato’s Liveability.....	42

8.4.1 KPI 1.1 Increased access and proximity to services and amenities, employment areas, town centres and public transport network	42
8.5 Benefit 2: Improved Network Performance.....	43
8.5.1 KPI 2.1: Increased Effectiveness of the transport network to, from and within the greenfield growth areas, for all modes	43
8.5.2 KPI 2.2: Increased Efficiency of the transport network to and within the greenfield growth areas, for all modes	43
8.5.3 KPI 2.3: Reduction in Accidents.....	43
8.6 Summary of Option Assessment	44

APPENDICES

APPENDIX A CRASH ANALYSIS

APPENDIX B DERIVATION OF FORECAST TRAFFIC FLOW ESTIMATES

1 INTRODUCTION

Flow Transportation Specialists Ltd have been commissioned by the New Zealand Transport Agency (Transport Agency), to provide transport planning inputs to the Programme Business Case (PBC) being developed for the North Waikato area. This report is intended to be read in conjunction with the North Waikato Integrated Growth Management PBC, and the investment objectives set out in the PBC are as follows:

- ◆ Improve North Waikato's liveability through increased access to, from and within urban growth areas, including to services and amenities, employment areas, town centres
- ◆ Enhance Waikato's connectivity through increased effectiveness and efficiency of the multi modal transport network to, from and within urban areas
- ◆ Improved national and regional economic growth and performance of the Auckland and Waikato regions by improving interregional connections and connections within the Waikato region
- ◆ Deliver on the Future Proof principles and provide infrastructure as required for the North Waikato region and are consistent with development patterns set by Future Proof.

2 TRANSPORT MODELLING

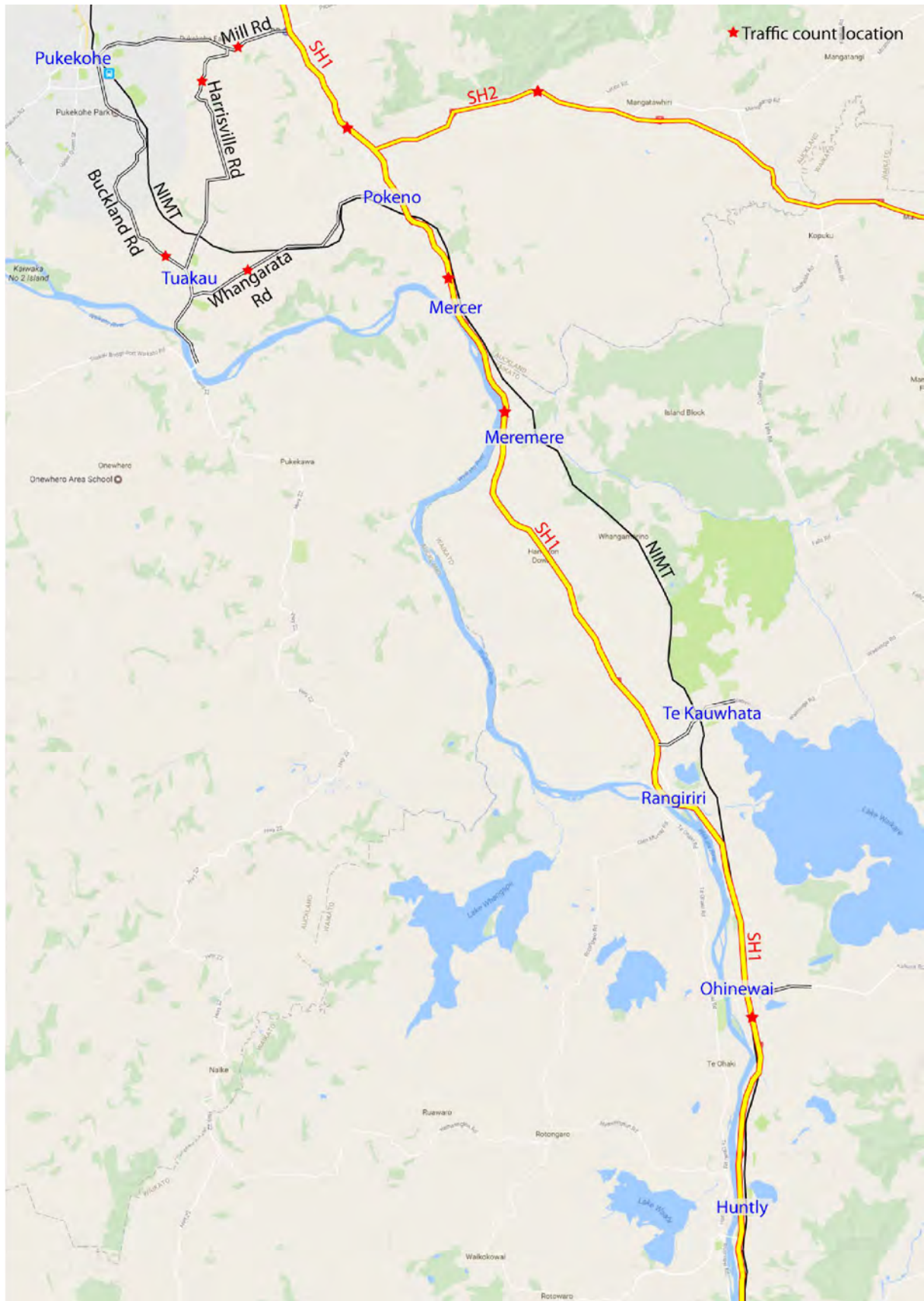
This assessment has made use of two regional transport models: the Auckland Regional Transport (ART) model and the Waikato Regional Transport Model (WRTM). However, the study area is located on the edge of both of these models (particularly the ART model), and neither of them include the land uses now anticipated for the North Waikato area. Therefore, while limited information has been taken from both models, the assessment later in the report is primarily based on professional judgement and by analysis of existing and expected trip making, rather than modelling analysis.

3 EXISTING SITUATION

3.1 Existing Transport Networks

Figure 1 overleaf shows the existing transport network within the study area, including State Highways 1 and 2 (SH1 and SH2) and key local roads. It also shows the North Island Main Trunk (NIMT) rail line. This Figure highlights that the road network between Pokeno and Huntly is very sparse, and the area relies to a significant extent on State Highway 1, with little secondary road network.

Figure 1: Existing Road and Rail Network (image courtesy Google Maps)



3.2 Existing Traffic Flows

Traffic flow data for each of the count locations shown starred in Figure 1 is shown in Table 1 below. Both current and recent historic count data is shown, to illustrate the level of growth that these roads have experienced in recent years.

State Highway data has been obtained from the Transport Agency’s State Highway AADT Data Booklet for 2011-2015 and the TMS website. Data for Mill Road has been taken from Auckland Transport’s tube count database, and information for other sites has been taken from Waikato District Council’s traffic count database.

Table 1: Existing Daily Traffic Flows and Growth

Road	Section	Annual Average Daily Traffic (AADT)			
		2011	2015	Annual Growth	Heavy Vehicles
SH1	North of Razorback Road	34,200	40,400	+5%	11%
SH1	SH2 to Pokeno	21,400	25,200	+4%	n/a
SH1	Pokeno to Mercer	20,900	24,200	+3%	13%
SH1	Mercer to Meremere	18,600	22,600	+4%	12%
SH1	Ohinewai to Huntly	18,300	21,700	+4%	12%
SH2	Mangatawhiri	13,300	15,600	+4%	12%
Buckland Road	North of Geraghtys Road	6,330 (in 2008)	6,690 (in 2016)	+1%	7%
Whangarata Road	East of Bollard Road	3,240	3,610	+3%	12%
Harrisville Road	North of Logan Road	3,510	3,960 (in 2016)	+3%	12%
Mill Road	East of Harrisville Road	13,100	15,600 (in 2016)	+4%	11%

It is noted that the rate of growth on SH1 in particular has been quite high in recent years, at up to 5% per year (over the five year period), with the highest growth rate being on SH1 north of Pokeno. In fact a higher growth rate occurred between 2014 and 2015, and a rate of around 10% was observed, again on SH1, north of Pokeno.

In terms of traffic conditions, the above flows do not indicate any current, significant capacity issues within the North Waikato area itself⁴. The maximum observed flow of around 40,000 vehicles/day, two way, on SH1 is comfortably within the capacity of a four lane road, while the maximum flow of over 15,000 vehicles/day on the local roads is also within the capacity of a two lane road. However, it is apparent that conditions deteriorate as one heads north, into South Auckland, with congestion occurring regularly on Auckland’s Southern Motorway, from south of Drury.

Table 2 overleaf presents directional, peak hour traffic flows for the same locations as above, where available.

⁴ The potential for future issues is assessed within Section 7 below

Table 2: Existing Peak Hour Traffic Flows

Road	Section	Morning Peak		Evening Peak	
		Northbound	Southbound	Northbound	Southbound
SH1	North of Razorback Road	2,150	1,270	1,880	2,170
SH1	SH2 to Pokeno	1,160	650	910	1,070
SH1	Pokeno to Mercer	no hourly data available			
SH1	Mercer to Meremere	no hourly data available			
SH1	Ohinewai to Huntly	670	660	750	870
Buckland Road	North of Geraghtys Road	590		680	
Harrisville Road	North of Logan Road	360		380	
		Eastbound	Westbound	Eastbound	Westbound
SH2	Mangatawhiri	380	400	620	510
Whangarata Road	East of Bollard Road	320		310	
Mill Road	East of Harrisville Road	650	780	720	830

Where directional, hourly traffic data is available, traffic flows are relatively balanced, with the following tidal peaks noted:

- ◆ At the northern edge of the study area, the highest flows on SH1 are northbound (toward Auckland) in the morning peak, with similar flows southbound in the evening peak
- ◆ Further south on SH1, between Ohinewai to Huntly, the morning peak flows are quite balanced, with the highest flows on this section being southbound in the evening peak
- ◆ Similarly on SH2 at Mangatawhiri, the morning peak flows are quite balanced, with the highest flows being eastbound in the evening peak
- ◆ There are higher eastbound flows on Mill Road, in both the morning and evening peaks.

3.3 Freight

Table 1 within Section 3.2 above highlighted the high volumes of heavy vehicles on the main roads in the North Waikato, including over 10% on SH1. It is understood that the majority of these trucks are travelling between either the Waikato or Bay of Plenty regions and the Auckland region.

3.4 Public Transport

Within the North Waikato, the Waikato Regional Council operates the following bus services:

- ◆ Hamilton to Huntly, with services operating approximately half hourly during the commuter peaks and hourly through the day. This service operates between 6am and 9pm on weekdays and between 8am and 6pm at weekends

- ◆ A service from Hamilton to Pukekohe via Huntly, Te Kauwhata and Meremere, operating once every two weeks
- ◆ An internal service operates within Huntly twice a day on weekdays.

In addition, Auckland Transport operates the following public transport services between Auckland and the North Waikato:

- ◆ The 398 service between Pukekohe and Tuakau. A daily service, primarily for commuters, operates from Tuakau in the morning and returning from Pukekohe in the evening. In addition, an inter peak service operates four times on Wednesdays, for shopping and other trips
- ◆ The 399 service between Pukekohe and Port Waikato, via Tuakau, operating twice daily on Thursdays only.

From Pukekohe, rail shuttle services connect to onward services at Papakura. The rail shuttles currently operate three times per hour during the commuter peaks, and hourly through the day. There are no existing passenger rail services south from Pukekohe, apart from the “Overlander” between Auckland and Wellington, which runs one train every second day (i.e. a northbound train one day, and a southbound train the next).

In other words, the existing bus and rail timetables provide a very limited number of services within North Waikato, including between Tuakau and Pukekohe, Huntly and Hamilton and Pukekohe and Auckland (as summarised in Figure 2 below). Connectivity between other North Waikato towns is very limited.

Figure 2: Existing North Waikato Bus Services



3.5 Crash Analysis

3.5.1 Local Road Crashes

A review of the crashes on main local roads (i.e. not State Highways) within the study area has been carried out, for the five year period between 2012 to 2016 inclusive.

The analysis indicates a cluster of crashes within the Auckland region section of Buckland Road and Manukau Road and at, and in close proximity to, the intersection of Mill Road and Harrisville Road. Furthermore, a relatively high number of crashes involving pedestrians crossing Manukau Road is highlighted as a possible issue of concern, within the southern part of the Pukekohe township.

A map illustrating the indicative local of minor, serious and fatal crashes within the study area (excluding SH1) is provided in Figure 3 below. It is noted that the location of crashes on this map is provided as indicative only to illustrate potential areas with higher crash rates/risk.

Further details, including commentary on the main contributory factors, are provided at Appendix A.

Figure 3: Indicative location of injury and fatal crashes in study area



3.5.2 SH1 Crashes

In addition to the local road network crash analysis, a review of fatal and serious crashes on SH1 between Mill Road and Hampton Downs has been undertaken from 2012 to 2016 inclusive. (It is noted that there may be limited value in assessing the crash records along SH1 between Hampton Downs and Huntly, due to the significant road works that have been taking place over that period).

Three crashes resulting in fatalities and eight crashes resulting in serious injury have occurred on SH1 within the area selected. One fatal crash involved a pedestrian attempting to cross SH1; the pedestrian may have been “alcohol impaired”. Another pedestrian crash involved a 16-year old pedestrian and resulted in a serious injury.

Two other fatalities occurred within the area selected. One involved a vehicle crashing into a broken down truck and the other involved loss of control due to a suspected sudden illness.

While the crash factors for these 11 fatal and serious injury crashes are varied, and there are no locations that have resulted in more than one serious or fatal crash, two crashes involving pedestrians crossing SH1 may indicate an issue of minimal opportunities for pedestrians to safely cross SH1 in the area.

3.6 Existing Travel Patterns

3.6.1 North Waikato Travel Survey

The following section summarises the results of the North Waikato Household Travel Survey⁵, which was carried out in June and July 2016. In interpreting the results of the survey, it is important to note that the survey was carried out on a small sample of North Waikato households (256, including 75 in Tuakau, 74 in Te Kauwhata and 46 in Pokeno), and that survey respondents were self-selecting.

Figure 4 overleaf illustrates the trip origins and destinations for trips to and from North Waikato households. This figure shows the very strong north-south travel patterns that follow State Highway 1, among survey respondents.

Table 3 goes on to present the trip destinations from North Waikato households, by trip types. It can be seen that there is a very strong relationship between North Waikato households and jobs within the Auckland region, with 70% of work trips to the Auckland region among survey respondents. Other trip types, particularly education and medical trips, are distributed more to the local centres.

⁵Waikato District Council and Waikato Regional Council (August 2016), "North Waikato Household Transport Survey Report – Draft"

Figure 4: Origins and Destinations for Trips, North Waikato Household Transport Survey

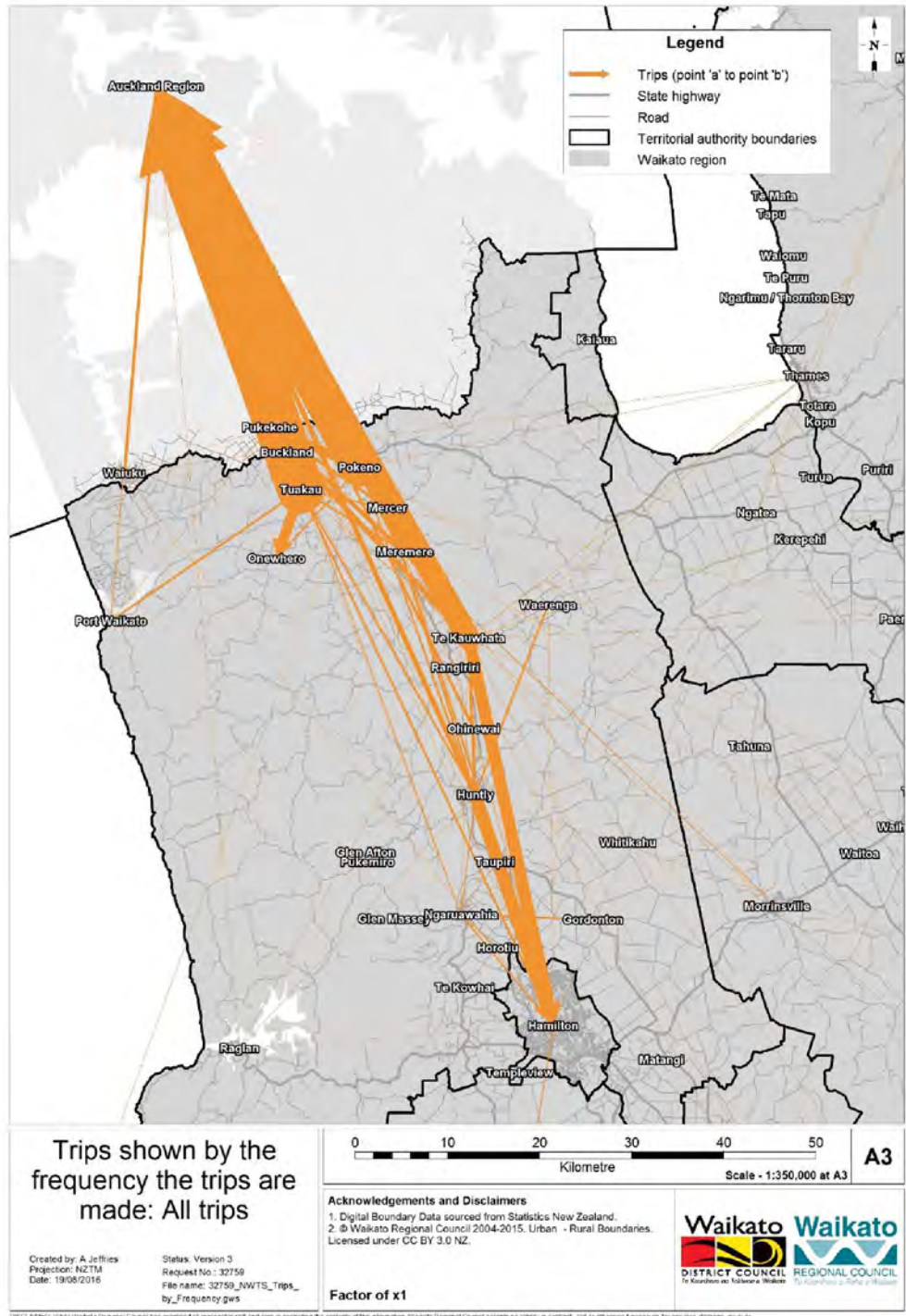


Table 3: Trip Destinations by Trip Type, North Waikato Household Transport Survey

Trip Type	Auckland	Pukekohe	Hamilton	Other Destinations
Work	70%	No data	10%	
Education	37%	No data	12%	14% Tuakau, 14% Onewhero
Shopping	24%	42%	12%	
Medical	37%	32%	14%	
Leisure	28%	36%	11%	12% Tuakau
Other	19%	28%	13%	14% Mercer
All Trips	47%	16%	11%	

3.6.2 Modelled Travel Patterns

The following table presents a summary of trip origins and destinations from the 2013 morning peak WRTM, for trips to and from Pokeno and Tuakau. This 2013 model was based (in part) on Household Interview Surveys that were carried out in 2008, although the WRTM did not extend to the former Franklin area at that time – so the interview surveys also did not cover that area.

Trip origins and destinations have been grouped together into sub-regional areas.

Table 4: Pokeno and Tuakau Trip Origins and Destinations, 2013 Morning Peak Period, WRTM

Trips to/from	Origin/Destination	
	Pokeno	Tuakau
Pokeno	4%	4%
Tuakau	8%	12%
Pukekohe	18%	30%
North	6%	6%
Auckland	17%	11%
East	6%	3%
South	12%	11%
Sth of Huntly	2%	1%
West	27%	22%

3.6.3 Comparison

The above outputs from the North Waikato Household Travel Survey results are somewhat contradictory to the WRTM, in that:

- ◆ The WRTM suggests that 11% of Tuakau and 17% of Pokeno morning period trips in 2013 were to Auckland, with a surprisingly high proportion heading to the west
- ◆ The household travel survey suggests that 47% of daily trips from North Waikato households are to Auckland in 2016 (and presumably even higher from Tuakau and Pokeno).

It may be that some of the above discrepancy is due to sampling bias within the newer North Waikato survey, or that Auckland is now attracting a greater proportion of North Waikato trips than in 2008 (the date of the Household Interview Survey which informed the development of the WRTM), due to the strength of the Auckland economy. However, North Waikato area is right on the edge of the WRTM and as noted above, the HIS did not include the former Franklin area at the time the model was originally developed. This suggests that there may be a local trip distribution issue to be resolved, within the WRTM, which may need to be addressed for any detailed tests which use the WRTM for projects in this area.

It should also be noted that the above figures relate to the modelled distribution of **existing** trips. These patterns will change in response to land use changes within and beyond North Waikato. In particular, it is to be expected that greater proportions of trips will stay within the North Waikato area, as the range of local opportunities increase. On the other hand, the distribution of longer distance trips will change in response to land use changes and investment in transport. Locally, Pukekohe is expected to become a more significant destination, while the significant development within South Auckland, and the expected improvements to passenger rail as far south as Pukekohe, are likely to increase trips to/from the north. Land use changes in Hamilton will also affect the future distribution, particularly for the southern half of the North Waikato area.

3.7 Community Attitudes to Existing Travel Issues

Waikato Regional Council (and others) are considering improvements to public transport in the North Waikato area, and as noted in Section 3.6 above, household travel surveys were undertaken in July 2016. The main feedback from the community to the surveys was as follows:

- ◆ There is a lack of public transport in the North Waikato area. This was identified by 42% of respondents as being the main transport challenge for their household
- ◆ People in these communities have limited transport choices. 10% of respondents had limited or no access to private cars, due to disabilities or age
- ◆ There is a willingness to use public transport if available. 63% of respondents stated they were likely to use public transport for shopping or leisure purposes, 55% for health services and 48% for work related trips, if public transport was available
- ◆ There is a strong community interest in passenger rail. Rail related issues were identified by 24% of respondents.
- ◆ 58% of persons responding from Pokeno indicated that they would use a bus for travel to Auckland, if it was available
- ◆ Traffic congestion was named as the main transport challenge by 13% of respondents.

4 LAND USE FORECASTS

4.1 Previous Land Use Forecasts

This section presents land use forecasts included within the ART model and the WRTM. It should be noted that:

- ◆ The ART model does not extend further south than Pokeno/Tuakau
- ◆ WRTM is in the process of being updated from a 2006 base year to a 2013 base year. The land use forecasts for 2041 relate to the earlier, 2006 model version
- ◆ The figures in Table 5 are in household numbers, not population numbers.

Table 5: Existing and Forecast Households, ART Model and WRTM

	2006		2013		2041	
	ART	WRTM	ART	WRTM ⁶	ART	WRTM
Tuakau ⁷	1,575	1,435	1,900	1,700	2,550	2,820
Pokeno	425	600	425	425	2,150	1,475
Meremere		150		325		225
Te Kauwhata		450		875		2,675
Rangiriri		600		100		925
Huntly		2,375		2,450		3,350

Table 6: Existing and Forecast Employment, ART Model and WRTM

	2006		2013		2041	
	ART	WRTM	ART	WRTM	ART	WRTM
Tuakau ⁷	825	1,210	1,075	725	1,650	1,950
Pokeno	325	625	350	375	600	975
Meremere		75		175		75
Te Kauwhata		360		700		450
Rangiriri		925		125		1,150
Huntly		2,425		2,025		3,025

⁶ 2013 update to the WRTM base; forecasts not yet available

⁷ Tuakau land use statistics for WRTM include Port Waikato, as Tuakau figures seem low, while Port Waikato figures seem high

The above figures indicate fairly modest growth in the North Waikato area.

The existing and forecast population figures for the key centres within North Waikato, according to the “North Waikato Integrated Growth Management: Strategic Case” report, are set out in Table 7 below. These forecasts reflected the initial “Futureproof” forecasts.

Table 7: Existing and Forecast Population (according to “North Waikato Integrated Growth Management: Strategic Case” report, January 2017)

	2013 Census	Estimated Population in 2042
Tuakau	6,225	11,725
Pokeno	2,125	11,875
Te Kauwhata	1,800	3,025
Huntly	7,500	8,225
Total	17,650	34,850

It should be noted that the figures in Table 7 relate to the existing and forecast population, not households. Therefore the above figures have been converted to households, in Table 8 below, using an assumed number of persons per household of 2.6 persons per household (based on information from the ART and WRTM models).

Table 8: Existing and Forecast Households (according to “North Waikato Integrated Growth Management: Strategic Case” report, January 2017)

	2013 Census	Estimated Population in 2042
Tuakau	2,400	4,500
Pokeno	825	4,575
Te Kauwhata	700	1,150
Huntly	2,875	3,175

The above figures indicate that, generally, a greater level of growth is now anticipated in the North Waikato area, compared with that allowed for in the regional transport models.

4.2 The Short Listed Programmes

The programme options were developed and assessed with stakeholders. The programme options included a range of infrastructure and non-infrastructure alternatives. Programmes with short, medium and long-term delivery timeframes were considered. The alternatives considered social infrastructure, parks and recreation, education, medical, emergency service, water, wastewater, roading, public transport, walking and cycling and land use as well as any other investment with positive outcomes for the community and programme partners. The alternatives also ranged from continuing the current approach of dispersed development, with a reactive approach, to more proactive planning with focussing growth around existing settlements. The short listed programmes are outlined below.

Programme Option 4 – Limited intervention to increase activity in Tuakau and Huntly. This was short listed as the “Do Minimum” option as it was agreed by project team members and stakeholders that the current planning (Programme 1A) is not acceptable and will require an increased level of intervention by partner organisations to cater for growth in North Waikato. The evidence confirms that the North Waikato needs to be more connected within towns, within North Waikato and between Auckland.

Programme Option 5B – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern). This programme was shortlisted and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided. This programme is similar to 6B (below) but it includes a lower population level in Tuakau, at approximately 11,000.

Programme Option 6B – Proactive planning, services and amenities for Tuakau and Pokeno (northern), and Huntly (southern) with growth in Tuakau to reach a larger population level (15,000-20,000, depending on feasibility and intensification of land use) with a redeveloped structure plan and/or planning changes (i.e. to reduce land use and footprint size and services for the northern area shared between Tuakau and Pokeno). This programme was short-listed and is recommended for consideration due to high level of services provision, localised employment opportunities and amenities that can be provided due to critical mass from population levels and employment. It was also supported due to the lower unit cost for developing additional housing in Tuakau for water and wastewater, its ability for increased employment opportunities, existing social infrastructure such as schools and access to potential for long term development of a passenger rail service to Auckland due to the larger, more focused population growth.

All of the shortlisted programme options include non-infrastructure activities such as developer contributions and future planning with social service providers. The difference in the programmes is the level of investment, where it will be invested and when. It needs to be acknowledged that there is a level of uncertainty around the following figures assumed for population and employment.

4.2.1 Programme 4

The assumed population and employment figures for Programme 4 are set out in Table 9.

Table 9: Existing and Forecast Land Use assumptions for Programme 4

	Population				Employment			
	2016	2025	2035	2045	2016	2025	2035	2045
Tuakau	4,650	6,400	8,375	10,150	1,425	1,900	2,275	2,625
Pokeno	2,125	4,875	9,675	11,950	525	625	1,450	2,650
Meremere	575	700	725	700	25	25	50	50
Te Kauwhata	1,775	2,625	4,375	5,300	450	500	675	750
Huntly	7,500	8,025	8,300	8,300	2,250	2,475	2,825	3,325
Total	18,600	24,650	33,500	38,475	6,700	7,575	9,300	11,400

This Programme has been described as “close to the Do Minimum scenario” but it includes a slightly greater level of growth than that identified in Table 7 above (noting that Table 7 did not include Meremere, so the two totals are not quite comparing like for like). Table 7 indicated an increase in population of over 17,000 by 2042, while Table 9 indicates an increase of around 20,000 by 2045.

The following table illustrates the employment to population ratio for each area, as well as for the study area overall.

Table 10: Employment to Population Ratios for Programme 4

	2016	2045
Tuakau	0.31	0.26
Pokeno	0.25	0.22
Meremere	0.04	0.07
Te Kauwhata	0.25	0.14
Huntly	0.30	0.40
Total	0.36	0.30

It should be noted that the overall employment to population ratio under Programme 4 is anticipated to reduce from the existing figure of 0.36, to 0.30 in 2045. If the population numbers are translated to households, then the overall 2045 employment to household ratio will be 0.77. More locally, the proportion of local employment to households is anticipated to fall in Tuakau, Pokeno and Te Kauwhata, but to rise in Meremere and Huntly.

4.2.2 Programme 5B

The assumed population and employment figures for Programme 5B are set out in Table 11.

Table 11: Existing and Forecast Land Use assumptions for Programme 5B

	Population				Employment			
	2016	2025	2035	2045	2016	2025	2035	2045
Tuakau	4,650	6,400	8,375	10,150	1,425	1,900	2,275	3,500
Pokeno	2,125	4,875	9,675	11,950	525	1,200	2,500	3,500
Meremere	575	700	725	700	25	50	100	200
Te Kauwhata	1,775	4,000	6,000	8,000	450	1,000	1,500	2,000
Huntly	7,500	8,025	8,300	8,300	2,250	3,000	3,200	4,000
Total	18,600	26,000	35,100	41,150	6,700	9,200	11,600	15,250

The above table indicates that the only population changes between Programmes 4 and 5B are greater population anticipated with Programme 5B within Te Kauwhata, leading to an overall increase in population (between Programmes 4 and 5B) of about 2,700 people. However, greater local employment is proposed, in all centres, with Programme 5B.

The following table illustrates the employment to population ratio for each area, as well as for the study area overall.

Table 12: Employment to Population Ratios for Programme 5B

	2016	2045
Tuakau	0.31	0.34
Pokeno	0.25	0.29
Meremere	0.04	0.29
Te Kauwhata	0.25	0.25
Huntly	0.30	0.48
Total	0.36	0.37

The overall employment to population ratio under Programme 5B is anticipated to remain fairly constant from the existing figure of 0.36, to 0.37 in 2045 (an employment to household ratio of 0.96). Locally, the proportion of local employment to households is expected to increase in most centres except Te Kauwhata, where it is expected to remain constant.

4.2.3 Programme 6B

The assumed population and employment figures for Programme 6B are set out in Table 13.

Table 13: Existing and Forecast Land Use assumptions for Programme 6B

	Population				Employment			
	2016	2025	2035	2045	2016	2025	2035	2045
Tuakau	4,650	8,000	15,000	20,000	1,425	3,000	6,000	8,000
Pokeno	2,125	4,875	9,675	11,950	525	1,200	2,500	3,500
Meremere	575	700	725	700	25	50	100	200
Te Kauwhata	1,775	4,000	6,000	8,000	450	1,000	1,500	2,000
Huntly	7,500	8,025	8,300	9,000	2,250	3,000	3,200	4,000
Total	18,600	27,625	41,750	51,700	6,700	10,275	15,350	19,750

The above table indicates that the main population changes between Programmes 5B and 6B are greater population proposed within Tuakau, with a small amount of additional population within Huntly in 2045. Thus Programme 6B includes an overall increase in population (between Programmes 5B and 6B) of about 10,500 people. In addition, greater local employment is proposed in Tuakau.

The following table illustrates the employment to population ratio for each area, as well as for the study area overall.

Table 14: Employment to Population Ratios for Programme 6B

	2016	2045
Tuakau	0.31	0.40
Pokeno	0.25	0.29
Meremere	0.04	0.29
Te Kauwhata	0.25	0.25
Huntly	0.30	0.44
Total	0.36	0.38

The overall employment to population ratio under Programme 6B is anticipated to increase slightly from the existing figure of 0.36, to 0.38 in 2045 (an employment to household ratio of 1.00). Locally, the proportion of local employment to households is expected to increase in most centres except Te Kauwhata, where it is expected to remain constant.

5 TRANSPORT NETWORK CHANGES

This section identifies transport investment already under consideration. Most transport studies refer to a “Do Minimum” scenario, which includes those measures that are already committed. This is not quite the case here, as some of the proposals identified are under construction (see Section 5.1 and 5.2) while other proposals are identified, but not yet committed (see Sections 5.3 and 5.4).

5.1 Improvements to State Highway 1: Southern Motorway

As part of the NZTA’s Southern Corridor Improvements project, State Highway 1 through South Auckland is currently being widened to three lanes in each direction between Papakura and Hill Road. This project is currently under construction and is expected to be completed by 2018.

Also, a fourth northbound lane is proposed from Hill Road to Manukau.

5.2 Improvements to State Highway 1: Waikato Expressway

Proposals are also being rolled out to improve the Waikato Expressway, one of the Roads of National Significance (see Figure 4, overleaf).

Figure 5: Progress on Waikato Expressway⁸



⁸ Source: <http://www.nzta.govt.nz/assets/projects/longswamp/20170401-longswamp-newsletter.pdf>, dated April 2017

The sections of relevance to North Waikato are as follows:

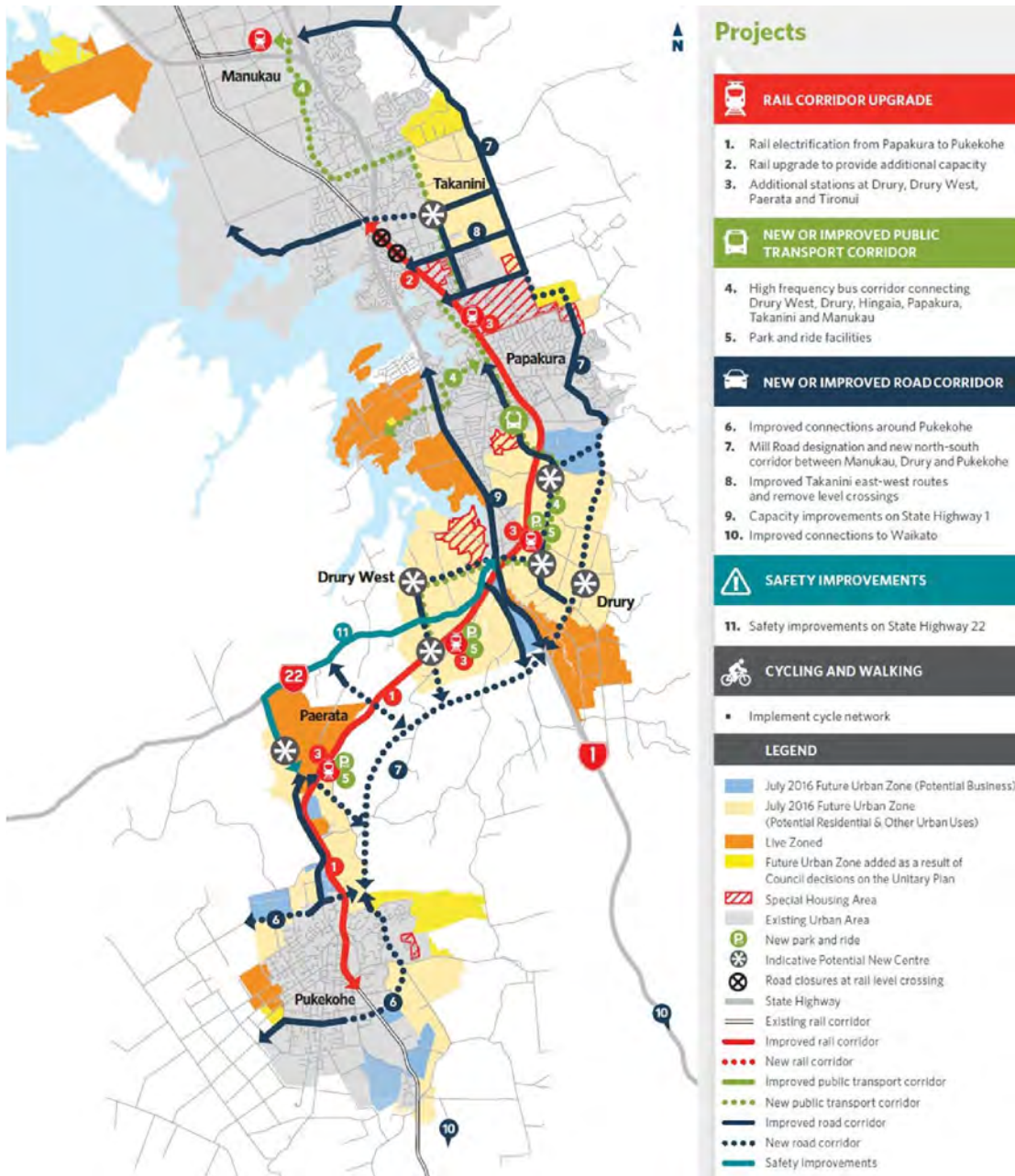
- ◆ The Longswamp section of the Waikato Expressway will link the already completed Mercer section (just south of the Hampton Downs Interchange) to the Rangiriri section to the south. This project involves the upgrading of 5.9km of SH1 to full expressway standard. Construction is underway
- ◆ The Rangiriri section continues south from the Longswamp section, and will include the provision of two interchanges, serving Te Kauwhata and Rangiriri. Construction is newly complete
- ◆ The Huntly section will provide an off line bypass, to the east of Huntly. There is a tie in interchange to the north of Huntly, and to the south. The bypass will tie into the (completed) Ngaruawahia Section, at the Gordonton Road interchange at Taupiri. Construction of this project is also underway.

We are aware that there are suggestions of increasing the speed limit of some of the higher standard inter-urban routes around New Zealand, from 100 to 110 kph. If this is to be considered for the Waikato Expressway, it would lead to a need to upgrade the section of SH1 between Hampton Downs and Pokeno in particular. Such improvements would include easing the alignment (to increase the design speed), the elimination of all right turns across the main carriageway from minor roads, elimination of private accesses, and provision for pedestrians and cyclists, in order to convert the route from “Expressway” to “Motorway” standard. This would require the development of a secondary road network, to accommodate the minor road and private access movements, and to provide for pedestrians and cyclists.

5.3 Transport for Future Urban Growth

The North Waikato sits immediately south of the area considered by the southern area of the “Transport for Future Urban Growth” (TFUG) project, now known as the “Supporting Growth” project. The recommended network for South Auckland, as a result of that TFUG study, is shown below in Figure 6.

Figure 6: Auckland’s Transport for Future Urban Growth: Southern Area⁹



The projects of particular relevance to the North Waikato area (and the likely timing, based on the recommendations of the Auckland Transport Alignment Project, or ATAP) are as follows:

- ◆ The development of a new north south corridor between Manukau, Drury and Pukekohe (item 7, with the southern part from Drury to Pukekohe often termed the “Pukekohe Expressway”). ATAP indicates this to be a “medium term” project, to be completed in Decade 2

⁹ <https://at.govt.nz/projects-roadworks/supporting-growth-delivering-transport-networks/supporting-growth-in-the-south/>

- ◆ It will be noted that the above concept only extends as far south as Pukekohe, with item 6 also referring to improved connections around Pukekohe. However, item 10 refers to “improved connections to Waikato”
- ◆ Electrification of the southern rail line, from Papakura to Pukekohe (item 1). ATAP indicates this to be an “early priority” project, to be completed in Decade 1
- ◆ Further investment in rail, in the form of additional rail track (s) (item 2) and the removal of level crossings (item 8). ATAP indicates that the provision of a third track is an “early priority” project, between Wiri and Westfield. The provision of a fourth track between Wiri and Westfield is to be completed in Decade 2, and further extension of triple tracking to Papakura and potentially Pukekohe, are to be completed in Decade 3. While the electrification project will improve the quality and speed of services, the provision of additional tracks to the north will provide the “step change” in capacity, allowing an increase in train frequencies, while the third track more generally will allow the separation of passenger from freight trains
- ◆ Additional rail stations at Drury and Drury West (item 3)
- ◆ Widening of SH1 from Papakura to Drury South (item 9). ATAP indicates this to be completed in Decade 1.

5.4 Public Transport

Sections 3.6 and 3.7 above referred to the draft North Waikato public transport review, by Waikato Regional Council (and others), which has considered the need for improvements to public transport in the North Waikato. Indeed, that study concluded that “improving public transport is key for the connectivity and growth of these towns”, and the draft recommendations of the study (i.e. these proposals are not yet committed) are as follows¹⁰:

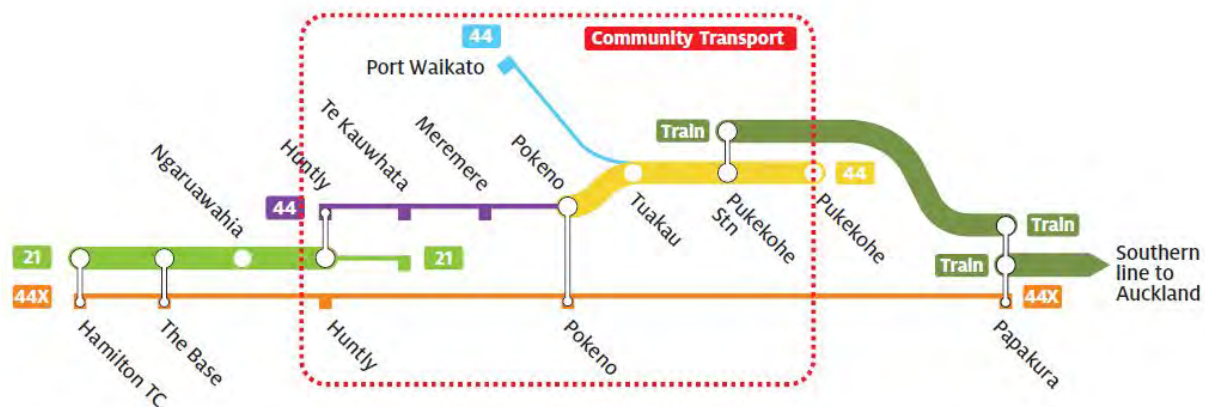
- ◆ Pokeno to Pukekohe, via Tuakau: This service will provide key connections for Pokeno and Tuakau residents to Pukekohe, both in peak and off peak times. This bus would replace the current Auckland Transport service between Tuakau and Pukekohe
- ◆ Huntly to Pukekohe: This would extend an existing Northern Connector bus through to Pukekohe, once a day, in the off peak, Monday to Friday, providing middle of the day connectivity between Huntly, Rangiriri, Te Kauwhata, Merememe, Mercer, Pokeno, Tuakau and Pukekohe
- ◆ Te Kauwhata to Hamilton: this would extend a current Northern Connector bus service to Te Kauwhata, for one return trips in the peak weekdays, providing access for Te Kauwhata residents to Huntly and Hamilton for school, tertiary education and work
- ◆ Hamilton to Papakura: this would be a new route designed to provide fast and direct commuter access between Hamilton and Auckland
- ◆ Port Waikato to Pukekohe: this would either retain the existing once a week Auckland Transport service, or it would replace the timetabled bus with a community transport option

¹⁰ Waikato District Council and Waikato Regional Council (2016 or 2017 (Undated)), “North Waikato Public Transport Review – Draft for Discussion Only”

- ◆ Community Transport: a North Waikato community transport scheme could operate in a similar fashion to the Community Vehicle Trusts in Canterbury. This would general cater for elderly and less mobile residents as well as school groups, sports groups and all members of the community.

These potential services are shown in Figure 7 below.

Figure 7: Potential North Waikato Public Transport Bus Services



Also, as noted in Section 3.7, there is known to be strong community interest in rail, with interest in either extensions of commuter rail services to North Waikato, or improved access to and services at the stations within Auckland.

6 CONSIDERATIONS FOR TRANSPORT INVESTMENT IN NORTH WAIKATO

6.1 Public Transport

The key considerations relating to public transport affecting North Waikato include:

- ◆ The destinations of trips, for people from North Waikato, noting that according to the travel survey, a relatively small proportion of all household trips is currently heading to Pukekohe (16% - see Table 3 above), and a greater proportion is heading to Auckland (47%)
- ◆ The timing of electrification of the southern rail line as far south as Pukekohe and the provision of additional rail tracks, further north¹¹
- ◆ The future of possible further extensions of passenger rail, to Tuakau in the first instance, and potentially on to Hamilton in the longer term
- ◆ The extent to which public transport for the North Waikato should rely on bus rather than rail, given the relatively low, and dispersed population

¹¹ We acknowledge that the concept of battery powered rail services has been put forward recently as a possible option for improving rail services between South Auckland and North Waikato

- ◆ There may be benefit in providing bus priority measures, where general traffic congestion is encountered on a regular basis. For example, if bus services are provided from Pokeno to Papakura rail station, in the short term, then bus shoulder lanes could be considered along SH1, from around Drury to the Papakura interchange
- ◆ Clearly, improvements in local bus services and bus infrastructure (i.e. bus stops/shelters) will be required in the short to medium term, to meet the expected demand, and the current (draft) proposals of the North Waikato Public Transport Review are identified in Section 5.4 above.

If passenger rail services to the North Waikato are unlikely in the short term (and maybe the medium term), then investment in public transport for trips between North Waikato and Auckland could either be:

- ◆ To support trips transferring to rail or bus, at Pukekohe (shown in black in Figure 8)
- ◆ To support trips transferring to rail further north, eg at Drury West. This will be facilitated by the proposed Pukekohe Expressway (a concept referred to in Section 5.3 above), in due course, and could include park and ride (at Drury/Drury West) and/or bus services from Tuakau or Pokeno to Drury/Drury west) (shown in red and blue in Figure 8, for Tuakau and Pokeno, respectively)
- ◆ Until electric rail is provided to future stations at Drury/Drury West, it would appear that “supporting trips transferring to rail further north” will mean Papakura rail station, in the short term (shown in red and blue in Figure 8).

Figure 8: Public Transport Options (assuming rail passenger transport does not extend south of Pukekohe)



6.2 Rooding

The key considerations relating to private vehicle trips to/from the main townships in the North Waikato where growth is anticipated include:

- ◆ Pokeno, Huntly and Te Kauwhata all have very good access to the State Highway network, for trips north to Auckland and south to Hamilton (although it is acknowledged that there are capacity issues at the Pokeno interchanges to/from SH1). In the case of Pokeno, there is also currently good access to SH2 (see Figure 9)

Figure 9: Main (Existing) Roding Connections from Pokeno



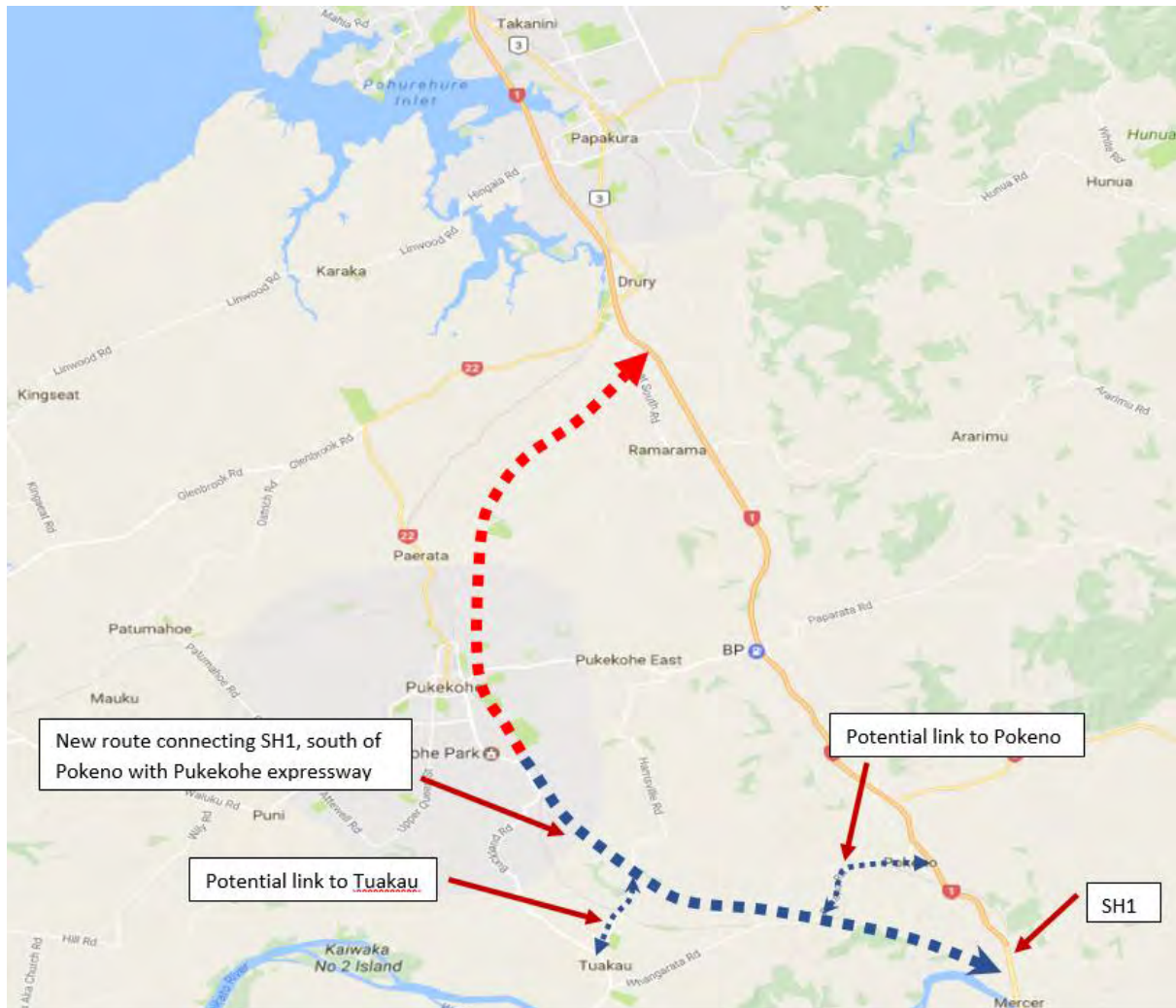
- ◆ The Te Kauwhata interchange has just been completed, and it can be assumed to have reasonable capacity
- ◆ Connections to Huntly are confined to north and south of Huntly. The additional growth expectations for Huntly in Programmes 5B and 6B are not significant, but there will be a need to understand whether the interchanges currently being provided will be sufficient to accommodate the growth, or whether further investment is required
- ◆ The additional growth anticipated at Pokeno, with all short listed programmes, is likely to exacerbate existing capacity issues of the interchanges and connections to the State Highways
- ◆ Tuakau is (relatively) remote from the State Highway network, and the current connections are rural roads. A number of injury accidents have occurred in recent years, with many of these resulting from loss of control. Significant increases in population in this area would therefore require some form of improved roading connection, to Pukekohe (and the future Expressway) or to Pokeno (with access to SH1). Improved access could also be provided from Tuakau to SH1 at Bombay (see Figure 10), although this may offer predominantly short term benefit, until the Pukekohe Expressway is provided
- ◆ The above point highlights that the function of local roads may change, with through traffic (and the provision of reliable public transport) becoming more important over time

Figure 10: Main (Existing) Roding Connections from Tuakau



- ◆ The road network in the North Waikato area is unusually dependant on State Highway 1, which is used for both long distance trips (between Auckland and Hamilton) and local trips (between Pokeno and Huntly, Te Kauwhata and Huntly, etc). There would appear to be merit in considering the development of a secondary road network – indeed this may become essential, if, as suggested at Section 5.2 above, the Waikato Expressway is upgraded to a motorway, with further restrictions on access (and a higher speed limit). However, the secondary network will presumably be less attractive than SH1, which provides a high speed, high capacity route, with high quality interchanges serving Pokeno, Te Kauwhata and at Huntly (following the completion of the Huntly Bypass)
- ◆ On the other hand, there may be merit in considering the provision of a new route connecting SH1, south of Pokeno, with the Pukekohe Expressway, passing between (and including connections to) Pokeno and Tuakau (see Figure 11 – noting that this concept is shown very indicatively, at this stage). Such a concept would appear to be consistent with the fact that, as noted above, 47% of trips from North Waikato are destined for Auckland compared with 16% destined for Pukekohe (noting that these proportions may change over time).

Figure 11: Possible new Roding Connection from SH1 south of Pokeno (shown indicatively in blue) to Future Pukekohe Expressway (shown indicatively in red)¹²



Clearly the roading and public transport components, noted above, should be seen as a package, rather than viewed as serving one or the other transport mode. For example, an improved road link will assist some of the public transport concepts.

¹² The dotted red and blue lines in Figure 9 should be taken as “very indicative”. Clearly, if either or both concepts are progressed, they would need to take into account, and minimise the effects on a wide range of potential environmental, physical and land use (etc) factors

6.3 Walking and Cycling

This report has not yet considered concepts relating to walking and cycling, as these will depend to a certain extent on the actual location of areas to be zoned for additional residential use, and the key connections that will need to be provided to serve those areas. The emphasis of this study is on land use changes which lead to the provision of additional local services. These land use changes will significantly increase the potential for increases in walking and cycling trips, within the North Waikato townships, and investment will be required **within** those townships to improve the likelihood of trips by these modes.

However, while the majority of walking and cycling trips are likely to be short distance trips, within townships, we note that key walking/cycling issues for longer distance trips include:

- ◆ The likely need for future walking/cycling connections at Pokeno, across SH1
- ◆ The likely need for future walking/cycling connections between Pokeno and Tuakau. This may be required to support students in particular, if there is only a high school in Tuakau and not Pokeno
- ◆ The likely need for future connections between Tuakau and Pukekohe and between Huntly and Te Kauwhata
- ◆ The likely need for future walking/cycling connections which remove all active mode trips away from SH1 (either along or across the State Highway). This will change from “very desirable” to “essential” if the State Highway is upgraded from an Expressway to a Motorway.

7 FUTURE TRANSPORT CONDITIONS

Section 3 provided a brief description of the existing transport situation. This section considers how this situation is likely to change as a result of the future land use (identified within Section 4) and transport changes (identified within Sections 5 and 6).

7.1 Modelled Traffic Forecasts

Both the ART and WRTM provide forecast traffic flows for key North Waikato road links (noting that the ART model does not extend right across North Waikato). These forecasts are documented in Table 15.

Table 15: ART and WRTM Base and Forecast Traffic Flows

Road	Section	Existing Daily Traffic Flows			Forecast Daily Traffic Flows	
		Observed (Table 1)	2006 WRTM	2013 ART	2041 WRTM	2046 ART
SH1	N of Pokeno	25,200	26,100	23,100	47,700	44,500
SH1	Pokeno to Mercer	24,200	18,300	22,400	35,300	40,700
SH1	Mercer to Meremere	22,600	18,700	n/a	36,200	n/a
SH1	Ohinewai to Huntly	21,700	14,000	n/a	31,500	n/a
SH2	Mangatawhiri	15,600	9,400	n/a	10,300	n/a
Buckland Rd	N of Geraghtys Road	6,690	7,500	10,100	11,700	10,800
Whangarata Rd	E of Bollard Road	3,610	7,800	1,300	14,000	3,800
Harrisville Rd	N of Logan Road	3,960	n/a	5,800	n/a	12,000
Mill Road	E of Harrisville Road	15,600	n/a	20,800	n/a	31,500

It should be acknowledged that the modelled flows reflect the fairly modest land use changes set out at Tables 5 and 6 (within Section 4). Even so, the forecast increases in traffic flows along parts of SH1 seem surprisingly low. The maximum rate of growth (between Mercer and Meremere is around 2.5% per year, while the lowest (north of Razorback Road) is under 1%.

If growth were to be at, say, 3% per year between now and 2041 (the WRTM forecast year), this would lead to the following forecast daily flows:

- ◆ The daily flows on the section of SH1 north of Razorback Road (i.e. north of SH2) would be around 70,000 vehicles/day, two way. Based on factoring up the existing daily and hourly flows in Tables 1 and 2, this would be at the capacity of a four lane road, with peak directional flows of about 3,800 vehicles/hour
- ◆ On SH1 south of SH2, factoring the maximum existing flow of 24,200 vpd would give a forecast flow of around 42,500 vpd, two way. This would be within the capacity of a four lane road.

In terms of the forecast flows on the local roads within North Waikato, these depend to a greater degree on the level of local land use change included within the models.

- ◆ A significant increase in flows is forecast along Whangarata Road, according to the WRTM
- ◆ A significant increase in flows is forecast along Harrisville Road, according to the ART model
- ◆ A reasonable (but not substantial) increase is forecast along Buckland Road, according to both models
- ◆ According to the WRTM and ART model forecast flows, the above three routes would continue to operate within capacity – noting that these models do not include the level of land use change now anticipated

- ◆ A doubling of flow to over 30,000 vehicles/day is forecast along Mill Road, according to the ART model. There are passing lanes along parts of this route, but the sections of road with one lane per direction can be expected to be very congested at this level of flow.

7.2 Manually Derived Traffic Forecasts

The daily traffic forecasts presented in Section 7.1 above reflect the lower land use projections currently assumed in the ART and WRTM models, as documented in Table 5 and Table 6 (Section 4). These forecasts have been factored to develop estimated traffic volumes along a few key roads, for each of the three short listed land use scenarios. The results of this process are summarised Table 16, and the process used (and the broad assumptions) is documented in Appendix B.

Table 16: Estimated Future Traffic Flows, Do Minimum Land Use Scenario

Road	Section	Daily Traffic Flows				
		Existing	2041 WRTM /2046 ART Forecasts	2045 Programme 4 Estimate	2045 Programme 5B Estimate	2045 Programme 6B Estimate
SH1	Pokeno to Mercer	24,200	35,000 – 41,000	38,000	37,000	41,000
Buckland Road	North of Geraghtys Road	6,690	10,000 – 11,000	18,000	16,000	23,000
Whangarata Road	East of Bollard Road	3,610	4,000 – 14,000	11,000	10,000	13,000
Harrisville Road	North of Logan Road	3,960	12,000	9,000	8,000	14,000

As general observations:

- ◆ The manually derived forecasts for Programmes 4, 5B and 6B are surprisingly similar. The potential increase in flows due to the greater land use proposed within Programmes 5B and 6B can be expected to be offset by the greater proportions of local trips, and the assumption that Programmes 5B and 6B will include a greater level of local services and amenities
- ◆ The significant growth in land use from existing to the future Programme 4 land use is estimated to result in a significant growth in traffic on the three local routes identified
- ◆ Relative to Programme 4, Programme 5B may result in reduced traffic demands on the three local routes, due to the increased local employment in Pokeno and Tuakau under the latter scenario, reducing the need to travel between centres
- ◆ Programme 6B is estimated to result in the highest traffic volumes on the three local routes, due to the large increase in both population and employment in Pokeno and Tuakau in this scenario. In the case of Buckland Road, an estimate of 23,000 vehicles/day with Programme 6B, is likely to mean that this option will be operating at capacity (or over capacity) as a two lane road (with the actual performance depending on the profile of trips throughout the day, the directional split at peak times, and the capacity of any intersections)

- ◆ If one assumes that the capacity of a two lane road may be around 20,000 vehicles/day, this either implies the need for a widened roading connection to Tuakau, or a new connection, or that around 13% of the forecast traffic demand needs to be diverted to other modes (predominantly public transport).

7.3 Freight

Section 3.3 highlighted the high volumes of heavy vehicles currently using the main roads in the North Waikato, including over 10% on SH1. The National Freight Demands Study undertaken in 2014 suggests that freight demands are projected to increase by 58% for road and 51% for rail over the next 30 years. The biggest increase is expected to be in and around Auckland, but the Waikato and Bay of Plenty regions are also expected to see significant growth. This not only confirms the amount of commercial activity in this area, but also highlights further demand that will be placed on the land transport system. However, clearly the relative proportions of increases in freight by road or rail will depend to a significant degree on the levels and types of transport investment.

7.4 Public Transport

The existing public transport journey to work mode shares for Tuakau, Pokeno and Huntly, according to the 2013 Census data, were 2%, 1% and 1%, respectively. These are clearly very low, reflecting the low existing public transport provision.

The above figures compare with centres to the north, according to the 2013 Census, as follows:

- ◆ 3% at Pukekohe, where bus services are provided, and where there is a train connection to Papakura
- ◆ 6% at Papakura, where there are bus services and electric rail services to the north.

Future public transport figures should be viewed in the context of the aspirations of the Auckland Plan, which seeks to double the number of public transport trips between 2012 and 2022, subject to additional funding¹³. Clearly we are aware that North Waikato is outside the area of the Auckland Plan, but the aspirations for the adjacent, large area of population are considered relevant. As a result, we suggest that areas within North Waikato with 'strong' public transport connections (eg between Tuakau and Pukekohe) may be able to achieve 5% journey to work mode share. Areas with 'weaker' connections may be able to reach at least 2%. However, journeys to work are only part of the picture, and the proportions of public transport for other trip purposes (eg educational, retail, etc) will depend on the provision of local schools, shops, and other amenities, as these local services will avoid the need for some trips to be made from one town to another.

It should be stressed that the above figures are **not** intended to imply that mode share targets should be set. Rather, the intention should be to increase the number of trips per household by modes of transport other than the private car.

¹³ Auckland Council (2012), "Auckland Plan", Chapter 10: Strategic Direction 13

8 ASSESSMENT OF PROGRAMMES

8.1 Key Performance Measures

The investment objectives for the North Waikato Integrated Growth Management PBC were outlined in Section 1 of this report. Key Performance Measures (KPIs) are identified in Section 4 of the PBC, and these are set out in Table 17.

Table 17: Key Performance Measures¹⁴

Investment Objective	Key Performance Indicator
1. Improve North Waikato's Liveability	1.1 Increased access and proximity to services and amenities, employment areas, town centres and public transport network
	1.2 Improved spatial coverage of walking and cycling paths
2. Enhance Waikato's connectivity	2.1 Increased effectiveness of the transport network to, from and within the greenfield growth areas for all modes (Measure – travel time reliability between X and Y)
	2.2 Increased efficiency of the transport network to and within the greenfield growth areas (Measure – average travel time between X and Y)
	2.3 Death and Serious Injury Crashes (Measure – total in North Waikato) (Measure – per vehicle kilometres travelled in North Waikato)
3. Improved national and regional economic performance	3.1 Increased effectiveness of the transport network, through the North Waikato (inter-regional movements) (Measure – travel time reliability between X and Y)
	3.2 Increased efficiency of the transport network, through the North Waikato (inter-regional movements) (Measure – travel time reliability between X and Y)
	3.3 Increased (maintained) performance of inter and intraregional connections (across mode)
4. Deliver on Future Proof principles	4.1 Plan and deliver social infrastructure for communities
	4.2 Transport enables land to be developed in line with the development patterns in the Future Proof Strategy

This report has only assessed the transport related KPIs, as identified above for Investment Objectives 2 and 3. No KPIs are identified for Investment Objective 1, and these have been assumed to relate to (1) journey distances to work and (2) the use of travel modes other than the private car.

¹⁴ North Waikato Integrated Growth Management: Programme Business Case (Draft Revision B, 19 July 2017), Section 4

8.2 Effects beyond North Waikato

It is worth noting that transport assessments normally adopt consistent land use assumptions between scenarios, even though, for major transport investment, it is accepted that this will lead to land use changes). In this case, the three programmes include different land use assumptions for North Waikato. In reality, the overall population and employment figures for New Zealand are likely to be very similar, and for the scenario with the greatest land use within North Waikato, this implies a lower population and/or employment elsewhere – with the vast majority of the differences likely to be within the Auckland region. However, the location of the differences is clearly not known, including the extent to which these differences could be local (eg Pukekohe), or further afield (south Auckland generally, or beyond).

8.3 Transport Investment

It is too early to say with certainty that certain transport projects (identified within Section 6) may be required for one Programme and not another. That said, it is clearly likely that Programme 6B, which include the greatest land use within North Waikato, particularly around Tuakau, is likely to lead to a greater demand for transport investment – in some form. It follows then, that the majority of the additional transport investment will be around the Pokeno and Tuakau area, and the following projects appear likely to proceed:

- ◆ Improvements to public transport are essential, in order to improve accessibility. Section 5.4 referred to the draft North Waikato Public Transport Review, which identifies the **short term** public transport interventions to support the delivery of this Programme Business Case. Further improvements will also be required, primarily to improve public transport accessibility between North Waikato and the Auckland region, including Pukekohe
- ◆ It would appear that a bus based public transport system would be adequate to serve North Waikato. Any extension of passenger rail, south of Pukekohe, is likely to depend on investment in rail further to the north, and on the assessment of the potential costs and wider benefits of passenger rail between Hamilton and Auckland. However, the higher population anticipated at Tuakau, with Programme 6B, may assist the justification of rail south from Pukekohe to Tuakau
- ◆ Improvements to the road network between Tuakau and both Pukekohe and Pokeno are likely to be required in order to improve the accessibility and safety of trips to/from Tuakau. Under Programmes 4 and 5B, it appears that a two lane road should be sufficient for Buckland Road, but four laning, possibly with public transport priority, is more likely to be required with Programme 6B
- ◆ Improvements to Mill Road would also appear to be required, between Pukekohe and the SH1 Bombay Interchange
- ◆ Improvements to the capacity of the SH1 Pokeno interchanges would appear to be required with all Programmes

- ◆ The need for the above roading projects may be superseded if the concept shown in Figure 9 (within Section 6.2), or similar, is progressed. Such a link would reduce traffic flows on SH1 between south of Pokeno and the Bombay interchange, and along Mill Road and Buckland Road. It would lead north to Pukekohe, to the proposed Pukekohe Expressway (if this is progressed) and to improved rail services as these extend progressively south from Papakura to Pukekohe. Such a concept would be more likely to be justifiable with the greater levels of population anticipated around Tuakau with Programme 6B
- ◆ This report has noted that parts of the North Waikato rely, to a significant degree, on State Highway 1, and the development of a secondary road network between Pokeno and Huntly would appear to be very desirable. In particular, a local connection between Te Kauwhata and Huntly would appear to be worth considering, with all Programmes.

8.4 Benefit 1: Improve North Waikato's Liveability

8.4.1 KPI 1.1 Increased access and proximity to services and amenities, employment areas, town centres and public transport network

Measure: Journey distance to work.

Programme 4 is expected to include falling ratios of local employment to population in Tuakau, Pokeno and Te Kauwhata (between 2016 and 2045). As a result, this programme is expected to result in an increasing proportion of residents of these towns commuting to adjacent towns and centres for employment, or to the Auckland region, increasing the average distance travelled to work.

The exceptions are Meremere and Huntly, where increased local employment would result in reduced travel distances for residents of these towns. Considering the study area as a whole however, the overall ratio of local employment to population is assumed to decrease under Programme 4 (as noted in Table 10). As a result, this programme scores poorly against this measure.

By comparison, Programmes 5B and 6B would both generally result in increasing ratios of local employment to population, and as a result, reduce average distances travelled to work. Programme 6B performs slightly higher by this measure, due to the additional local employment available in Tuakau, and the fairly close proximity between Tuakau and Pukekohe, this being the main service centre for south Auckland.

Travel by Other Modes

It is considered that the proportions of trips likely to be made by modes of transport other than the private car are likely to be significantly different between the Programmes

Firstly, the proportion of trips by walking and cycling modes depends to a significant degree on the length of trips. Such lengths are likely to be greatest with Programme 4, due to the relative shortage of local employment and presumably local services.

Secondly, the proportion of trips by public transport depends on the services provided, and a greater number of people travelling from the same origin to the same destination is likely to justify an improved level of (public transport) service. In this respect, Programme 6B is most likely to have the “critical mass” to justify the greatest level of public transport, although this will be offset by greater proportions of local/short distance trips, which are more likely to be made by walking and cycling.

8.5 Benefit 2: Improved Network Performance

8.5.1 KPI 2.1: Increased Effectiveness of the transport network to, from and within the greenfield growth areas, for all modes

Measure: Travel time reliability between X and Y

Overall, travel time reliability would likely decrease under all programmes, without additional transport infrastructure to support the additional population, especially for non-localised employment trips. Given the traffic estimates in Section 7, this suggests that Programme 4 and 5B would score better than Programme 6B, as the higher flows (with Programme 6B) would be likely to mean that the future network will operate closer to capacity – with that having reliability implications.

However, as noted above, the concentration of additional land use with Programme 6B in one area, namely Tuakau, suggests that transport investment targeted to that area may resolve the issue. Indeed, the greater population within Tuakau may mean that additional public transport, either between Tuakau and Pukekohe, or between Tuakau and further to the north, may become viable.

8.5.2 KPI 2.2: Increased Efficiency of the transport network to and within the greenfield growth areas, for all modes

Measure: Average travel time between X and Y.

The above comments on travel time reliability also apply to travel times.

8.5.3 KPI 2.3: Reduction in Accidents

Measure: total deaths and serious injuries.

For the reasons outlined in Section **Error! Reference source not found.**, Programme 4 would result in increased travel between centres, as residents of centres will need to seek employment elsewhere. The resulting increase in overall vehicle-kilometres travelled could result in an increase in the number of deaths and serious injuries on the road, all else being equal.

Programme 5B includes a larger number of households in North Waikato, but Section 7 indicates that this may be offset by reduced distances travelled on the road network per household. As a result, Programme 5B will score similarly to Programme 4 in terms of deaths and serious injuries due to road crashes.

Programme 6B is predicted to include a larger number of households in North Waikato than Programme 5B, and Section 7 indicates that this may lead to an increase in high traffic flows than Programmes 4 and 5B. Therefore, Programme 6B **would** score less well than Programmes 4 and 5B in

terms of deaths and serious injuries due to road crashes, **if** no improvements were made to the transport networks, particularly in and around Tuakau. However, as noted in Section 8.3, it is expected that the additional population and employment around Tuakau will lead to transport investment in the area (in roads, public transport and walking/cycling). As a result, Programme 6B is assumed to score well on this category, as it can be assumed that the additional transport investment would include a focus on safety.

Measure: deaths and serious injuries per vehicle-kilometres travelled.

While Programme 6B is expected to lead to greater local trips, due to the improved population to employment ratio, the figures in Section 7.2 indicate that it would result in higher overall vehicle-kilometres travelled than the other Programmes. However, assuming transport investment around Tuakau, the crash rate per vehicle-kilometre travelled would likely remain relatively unchanged, relative to the other Programmes. It may be that certain locations within the road network will operate at or closer to capacity than with the other Programmes, and this may have safety consequences. However, the greater levels of congestion are likely to reduce speeds, thereby reducing the severity of some accidents.

Consequently, all programmes could be assumed to score equally under this measure, at this stage. However, as noted above, it can be assumed that the additional transport investment would include a focus on safety, suggesting that Programme 6B may score better than other programmes

8.6 Summary of Option Assessment

The comments within Sections 8.3 to 8.5 can be summarised as follows:

Table 17: Transport Evaluation of Programmes

	Programme 4 (P4)	Programme 5B (P5B)	Programme 6B (P6B)
Journey distance to work	Poor (i.e. a high proportion of long distance trips)	Better than P4	Better than P5B
Trips by other Modes	Poor (i.e. predominantly car based trips)	Better than P4	Better than P5B
Travel time (reliability)	Base for comparison	Similar to P4	Similar to P4, assuming transport investment
Travel time delay	Base for comparison	Similar to P4	Similar to P4, assuming transport investment
Deaths and serious injuries	Base for comparison	Similar to P4	Better than P4 and P5B, assuming transport investment
Crashes/vehicle kilometres travelled	Base for comparison	Similar to P4	Better than P4 and P5B, assuming transport investment

APPENDIX A

Crash Analysis

The following information was extrapolated from the New Zealand Transport Agency's Crash Analysis System (CAS) on 8 March 2017 for the five-year time period 2012 to 2016 inclusive. CAS provides crash information and data following a crash reported to the New Zealand Police.

Pokeno Road

Of the seven crashes on Pokeno Road reported between 2012 and 2016 (inclusive):

- ◆ Five crashes were loss of control crashes (including one crash identifying alcohol and cell phone use as suspected factors)
- ◆ Six crashes were minor injury crashes
- ◆ One crash was a serious injury crash involving failure to give way at a priority controlled intersection (vehicle at fault turning right from Munro Road on to Pokeno Road).

Crash locations are relatively dispersed and a review of the crashes outlined above does not indicate an inherent safety issue on Pokeno Road.

Whangarata Road

Of the one crash on Whangarata Road reported between 2012 and 2016 (inclusive):

- ◆ One crash was a loss of control crash involving a motorist travelling west turning left in close proximity to Ridge Road. The crash resulted in a minor injury.

A review of the crash outlined above does not indicate an inherent safety issue on Whangarata Road.

Buckland Road (within Waikato boundary)

Of the two crashes on Buckland Road (within the Waikato boundary) reported between 2012 and 2016 (inclusive):

- ◆ Two crashes were failure to give way crashes at the intersection of Buckland Road and George Street. Both crashes were minor injury crashes.

A review of the two crashes at the intersection outlined above indicates different crash factors contributing to the crashes (dazzling sun and misinterpreting intentions of another party). This would suggest that, based on crash factors, there are no inherent safety issues at the intersection.

Buckland Road (within Auckland boundary)

Of the eight crashes on Buckland Road (within the Auckland boundary) reported between 2012 and 2016 (inclusive):

- ◆ Five crashes were loss of control crashes (including two crashes identifying alcohol as a suspected factor)
- ◆ One crash involved a motorist hitting the rear end of a cyclist (cyclist aged 15 travelling on a weekday at 7:45 am)
- ◆ One crash involved a motorist failing to give way when turning right onto Buckland Road from a private driveway

- ◆ One crash involved a motorist hitting a post due to being positioned too far to the left
- ◆ Six crashes resulted in minor injuries
- ◆ Two crashes resulted in serious injuries
 - ◆ One serious injury crash resulted from motorcyclists losing control turning right on a right bend (alcohol noted as suspected crash factor)
 - ◆ One serious injury crash involved a motorist turning right on Buckland Road and colliding with a parked car and a pedestrian. The pedestrian was noted as being 'unnecessarily on the road'

Crash locations are relatively dispersed on this section of Buckland Road and a review of the crashes outlined above does not indicate an inherent safety issue on Buckland Road.

Manukau Road

Of the eleven crashes on Manukau Road (within the Auckland boundary) reported between 2012 and 2016 (inclusive):

- ◆ Five crashes involved pedestrians crossing the road (three crashes indicated a pedestrian crossing 'heedless of traffic', one crash involving a pedestrian failing to use a zebra crossing available in the immediate vicinity and one crash indicating dazzling sun as a crash factor). All five crashes involving pedestrians resulted in minor injuries
- ◆ Two crashes involved cyclists hit by turning vehicles, one motorist failed to give way when turning to non-turning traffic. This crash resulted in a serious injury. The second crash involving a cyclists involved the motorist failing to give way at a driveway. This crash resulted in a minor injury crash.
- ◆ One crash involved a person falling from a vehicle. This resulted in a serious injury crash
- ◆ One crash involved a turning moped being hit by a motorist failing to give way at a priority controlled intersection. This resulted in a minor injury crash
- ◆ One crash involved a motorist hitting the rear end of a motorcyclist. This resulted in a minor injury
- ◆ One crash involved a motorist crashing into a parked vehicle resulting in a minor injury crash.

While crash locations are relatively dispersed on Manukau Road, a review of the crashes outlined above suggests a potential safety issue for pedestrians; specifically, pedestrians crossing Manukau Road (noting that one crash may have been averted should the pedestrian have used the provided zebra crossing available in close proximity). It is further noted that an additional pedestrian crash was reported at the intersection of Stadium Drive and East Street in close proximity to Manukau Road.

Harrisville Road

Of the seven crashes on Harrisville Road reported between 2012 and 2016 (inclusive):

- ◆ Five crashes were loss of control crashes (including two crashes identifying alcohol as a suspected factor, one crash involving motorist illness, one crash involving a motorist slipped foot

on pedal/wrong pedal and one crash involving a motorist losing control when turning right and colliding with another vehicle. All crashes resulted in minor injuries

- ◆ One crash involved a motorist failing to give way at a priority controlled intersection resulting in a minor injury crash
- ◆ One crash involved a motorist hitting a car slowing to turn resulting in a minor injury crash

Reported crashes on Harrisville Road are noted as being in the southern section of the road although a review of the crashes outlined above does not indicate an inherent safety issue on the southern section of Harrisville Road.

Mill Road

Of the thirteen crashes on Mill Road reported between 2012 and 2016 (inclusive):

- ◆ Ten crashes involved vehicles on Mill Road hitting a vehicle turning right or left onto Mill Road. Five of these crashes involved failure to give way at a priority controlled intersection (four of these at the 'T-Junction' intersection of Mill Road and Harrisville Road).
 - ◆ One of the crashes at the intersection of Mill Road and Harrisville Road, cited a crash factor as failure to give way at a priority controlled intersection and resulted in a fatality
 - ◆ One of the crashes at the intersection of Mill Road and Harrisville Road, involved a motorcyclist and cited a crash factor of the motorcyclist hitting the rear of a car turning right into a driveway, resulting in a serious injury crash
 - ◆ The other eight of the crashes outlined above resulted in minor injury and included a range of crash factors including a loss of control crash due to a motorist swerving to avoid an animal and two rear end crashes where a motorist failed to slow.

The four crashes at the T-junction of Mill Road and Harrisville Road (priority controlled by a stop sign), could indicate a safety concern at this intersection although it could be suggested that these crashes are somewhat characteristic of a rural intersection of this nature.

APPENDIX B Derivation of Forecast Traffic Flow Estimates

The estimated traffic volume forecasts presented in Table 16, Section 7.2 have been developed according to the following process:

- ◆ The proportions of local and through vehicles on each route have been estimated, with the following values used:
 - ◆ 80% local/20% through traffic in the case of Buckland Road and Whangarata Road, both of which are strongly associated with Pokeno and Tuakau, but also support some through traffic from Pukekohe to other destinations
 - ◆ 90% local/10% through for Harrisville Road
 - ◆ 11% local Pokeno and Tuakau traffic (based on the 11% of SH1 traffic south of Pokeno that uses the Pokeno ramps, from the WRTM), 18% local Meremere, Te Kauwhata and Huntly traffic (based on the 18% of surveyed southbound vehicles on SH1 south of Pokeno bound for these towns), and 71% for through traffic
- ◆ Existing traffic volumes on each road have been divided into local/through traffic, based on the above proportions
- ◆ Through traffic has been factored up by an estimated 1% per annum linear growth
- ◆ Local traffic has been factored up based on the respective population growth projected for each scenario. Projected local employment for each urban area has been deducted from the local population projection in this process, recognising that local jobs will generally result in fewer non-local work trips.

It is acknowledged that the above process is very simplistic and unlikely to be as accurate as a regional transportation model.

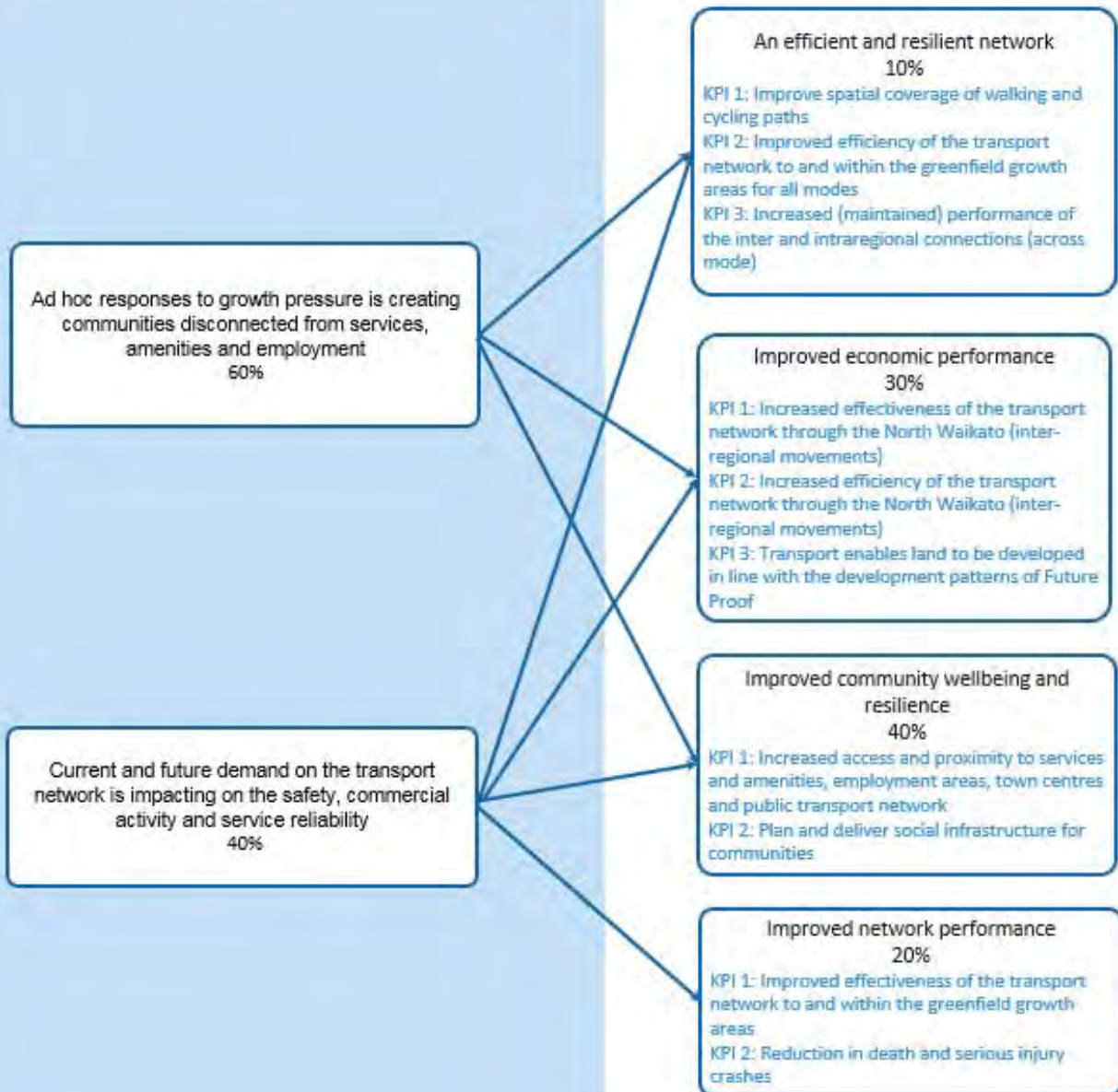
Appendix H - Investment logic map

North Waikato Integrated Growth Management Programme Business Case

INVESTMENT LOGIC MAP

PROBLEM

BENEFIT



Investor: NZ Transport Agency, Waikato District Council, and Waikato Regional Council and partners
 Facilitator: Tim Eldridge
 Accredited Facilitator: No – Registered Business Case Professional

Version no: Draft for review
 Initial Workshop: 27 October 2016
 Last modified by: Tim Eldridge, GHD 20/07/2017
 Template version: Rev 1.0

Appendix I – Public Transport options

The population dispersal of the North Waikato means that any public transport changes or upgrades that need significant lead infrastructure (i.e. the electrification of rail) will be challenging and require detailed planning to support and integrate with the current needs as well as accommodating growth. The possibilities of rail are another important consideration for public transport in North Waikato. At present, the timing of electrification of the southern Auckland rail line as far south as Pukekohe and the provision of additional rail tracks, further north are under consideration, which would provide another public transport option to the North Waikato residents. Battery powered trains, currently being investigated by Auckland Transport, south of Pukekohe could be considered in the longer term and after electrification south to Pukekohe.

Options to support the use of rail include:

- To support trips transferring to rail or bus, at Pukekohe
- To support trips transferring to rail further north, e.g. at Drury West. This will be facilitated by the proposed Pukekohe Expressway, in due course, and could include park and ride, at Drury/Drury West, and/or bus services from Tuakau or Pokeno to Drury/Drury west.

The North Island Main Trunk rail line (classified as inter-regionally significant land transport infrastructure) runs through the North Waikato with its primary function currently being the movement of freight. If passenger rail services further south into the North Waikato are unlikely in the short and medium term (and possibly the longer term), then investment in other forms of public transport for trips to Auckland becomes more important.

Either way, improvements in bus services in the North Waikato are important, as they provide better mode choice, which will become of increasing importance as the population grows and ages (potentially becoming less able). Increased mode choice will also spread demand over more than one mode optimising use of the transport network and road capacity. Options to address this could include increased public transport connections during peak times to Pukekohe and Papakura, where the train stations are. Other options include providing express buses to Auckland and providing electrification or a hybrid train to Pukekohe in the longer term. There are some shorter-term interventions to provide services that can provide daily access to employment and amenities for Te Kauwhata and other towns.

Waikato Regional Council are currently preparing to consult with the public for new bus services with the options to be considered being:

- Bus service between Pokeno/Tuakau and Pukekohe;
- Bus service between Huntly and Pukekohe
- Bus service between Hamilton and Papakura
- Bus service between Te Kauwhata and Hamilton
- North Waikato community transport.

Appendix J - Descriptions of towns and rural North Waikato

Tuakau

- Good proximity to Auckland South employment areas
- Commercial and industrial land supply is good and can accommodate higher proportion of employment per household than Pokeno
- High School has capacity for growth and can service Pokeno and Tuakau with a combined population of up to approximately 30,000 if required (will require some expansion from current footprint)
- Tuakau has the lowest estimated unit cost for development and operation for Waikato District Council due to the proximity of the waste water treatment plant and its existing capacity levels
- Existing train station could be upgraded to meet the needs of extended services from Pukekohe in the medium-long term if demand necessitates and downstream investments have been completed. Auckland Transport advises that for the station to be feasible it would require approximately a density of 17 dwellings per hectare, which is a higher intensity than currently proposed.

Pokeno

- Fastest growing town in North Waikato at present and expected to continue in coming decades
- Provides limited services and amenities
- The existing topographic, geographic and physical constraints in Pokeno should also guide where development occurs beyond what is set out in Stage 1 of the existing structure plan
- Has reasonable employment levels but limited opportunities to match residential growth under current structure plan
- Opportunities to meet services, amenities and employment with potential private plan change to meet the growth of the town
- Good roading connections to Auckland South employment areas and services.

Meremere

- Currently a small town with limited services and amenities
- Development is constrained by ground conditions and water table
- Limited current employment levels
- Some opportunity for employment opportunities.

Te Kauwhata

- Currently a small town with reasonable level of services and amenities
- Two schools for all age groups, the college serves Huntly as well as local areas
- Limited employment levels and or opportunities for further growth in employment
- Water supply, waste water and transport solutions are currently being investigated to accommodate growth

- Major private plan change expected for an additional 1,500 dwelling above approved structure plan, this would reach the natural limit (physical constraints) for further development.

Huntly

- Largest town in North Waikato at present
- Provides a wide range of services and amenities including schools
- Has reasonable employment levels and opportunities for further growth
- Opportunities for redevelopment and growth
- Needs to provide services and employment opportunities for surrounding areas including Te Kauwhata.

Rural areas of North Waikato

There have been a large number (1,249) of rural dwelling developments in the North Waikato in the past decade

The region has some of the highest value and productive agricultural land in New Zealand, particularly around Tuakau and a significant portion of the Waikato district's economy is based on agricultural activity. Where possible, growth should be focused around the existing towns in the North Waikato, with rural residential development discouraged

Appendix K – Programme descriptions and long list assessment

Programme 1A – Growth in Pokeno, then Te Kauwhata (BaU)

Programme 1A Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno and Tuakau library 	<ul style="list-style-type: none"> Maintain existing halls Provide customer services in Pokeno, increase customer service capacity in Tuakau
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required
Medical	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response
Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph Upgrade of Buckland Road Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide upgrades to local infrastructure as required Te Kauwhata interchange roundabout Railway overbridge Te Kauwhata 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required

Programme 1A – Growth in Pokeno, then Te Kauwhata (BaU)

Public transport	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Public transport hub in Tuakau • Public Transport hub in Te Kauwhata • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities
Landuse	<ul style="list-style-type: none"> • Reactive. • Respond to privately initiated plan changes. • Non complying resource consent applications • Risk of ad hoc development and costly litigation. • Opportunity to identify infrastructure, service and development partnerships and prioritise actions. • Establish and prioritise land release timetable • Develop monitoring programme • Identify and protect strategic corridors, community assets including parks and reserves. 	<ul style="list-style-type: none"> • Council lead and initiated plan changes. • Council lead and coordinated Masterplanning (with partners). • Designate for key infrastructure and facilities (Council and partners) • Infrastructure, service and development partnership opportunities/actions implemented. • Monitoring and review • Precinct planning • Identify and protect strategic corridors, community assets including parks and reserves. • Secure land for key future assets/corridors • Enable temporary landuses on key corridors. 	<ul style="list-style-type: none"> • Designation and land purchase for key infrastructure. and facilities • Council lead plan review and re zoning • Monitoring and review • Maintain and protect strategic corridors, community assets including parks and reserves. • Secure land for key future assets/corridors • Enable temporary landuses on key corridors. 	<ul style="list-style-type: none"> • Identify and protect strategic corridors, community assets including parks and reserves.
Walking and cycling	<ul style="list-style-type: none"> • Plan walking and cycling facilities 	<ul style="list-style-type: none"> • Pokeno walking and cycling network 	<ul style="list-style-type: none"> • Te Kauwhata walking and cycling facilities 	<ul style="list-style-type: none"> • Provide walking and cycling facilities as required

Programme 1B – Growth in Tuakau with reactive response

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno and Tuakau library 	<ul style="list-style-type: none"> Maintain existing halls Provide customer services in Pokeno, increase customer service capacity in Tuakau
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required
Medical	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response
Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Pokeno walking and cycling network Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph kph Upgrade of Buckland Road Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide upgrades to local infrastructure as required Public transport hub in Tuakau Te Kauwhata interchange roundabout Public Transport hub in Te Kauwhata Railway overbridge Te Kauwhata 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required

Programme 1B – Growth in Tuakau with reactive response

Public transport	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Public transport hub in Tuakau • Public Transport hub in Te Kauwhata • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> • Plan walking and cycling facilities 	<ul style="list-style-type: none"> • Pokeno walking and cycling network 	<ul style="list-style-type: none"> • Te Kauwhata walking and cycling facilities 	<ul style="list-style-type: none"> • Provide walking and cycling facilities as required
Land use	<ul style="list-style-type: none"> • Residential zoning change as required for growth 	<ul style="list-style-type: none"> • Residential zoning change as required for growth 	<ul style="list-style-type: none"> • Residential zoning change as required for growth 	<ul style="list-style-type: none"> • Residential zoning change as required for growth

Programme 2 – Low growth in north Waikato, activities in Auckland

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno and Tuakau library 	<ul style="list-style-type: none"> Maintain existing halls Provide customer services in Pokeno, increase customer service capacity in Tuakau
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required
Medical	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response
Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Pokeno walking and cycling network Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph kph Upgrade of Buckland Road Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide upgrades to local infrastructure as required Public transport hub in Tuakau Te Kauwhata interchange roundabout Public Transport hub in Te Kauwhata Railway overbridge Te Kauwhata 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required

Programme 2 – Low growth in north Waikato, activities in Auckland

Public transport	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Public transport hub in Tuakau • Public Transport hub in Te Kauwhata • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> • Plan walking and cycling facilities 	<ul style="list-style-type: none"> • Pokeno walking and cycling network 	<ul style="list-style-type: none"> • Te Kauwhata walking and cycling facilities 	<ul style="list-style-type: none"> • Provide walking and cycling facilities as required
Land use	<ul style="list-style-type: none"> • Residential zoning change as required for growth 	<ul style="list-style-type: none"> • Residential zoning change as required for growth 	<ul style="list-style-type: none"> • Residential zoning change as required for growth 	<ul style="list-style-type: none"> • Residential zoning change as required for growth

Programme 3 – Growth in Pokeno then in Te Kauwhata and unserviced developments

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno and Tuakau library 	<ul style="list-style-type: none"> Maintain existing halls Provide customer services in Pokeno, increase customer service capacity in Tuakau
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required
Medical	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services 	<ul style="list-style-type: none"> Maintain existing medical services
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response
Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Pokeno walking and cycling network Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph kph Upgrade of Buckland Road Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide upgrades to local infrastructure as required Public transport hub in Tuakau Te Kauwhata interchange roundabout Public Transport hub in Te Kauwhata Railway overbridge Te Kauwhata 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required

Programme 3 – Growth in Pokeno then in Te Kauwhata and unserviced developments

Public transport	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Public transport hub in Tuakau • Public Transport hub in Te Kauwhata • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> • Plan walking and cycling facilities 	<ul style="list-style-type: none"> • Pokeno walking and cycling network 	<ul style="list-style-type: none"> • Te Kauwhata walking and cycling facilities 	<ul style="list-style-type: none"> • Provide walking and cycling facilities as required
Land use	<ul style="list-style-type: none"> • Residential zoning change as required for growth • Continued growth in country living and unserviced lots higher than agreed FutureProof levels 	<ul style="list-style-type: none"> • Residential zoning change as required for growth • Continued growth in country living and unserviced lots higher than agreed FutureProof levels 	<ul style="list-style-type: none"> • Residential zoning change as required for growth • Continued growth in country living and unserviced lots higher than agreed FutureProof levels 	<ul style="list-style-type: none"> • Residential zoning change as required for growth • Continued growth in country living and unserviced lots higher than agreed FutureProof levels

Programme 4 – Some intervention to increase activity in Tuakau and Huntly

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata Identify partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno and Tuakau library Develop and implement partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Provide customer services in Pokeno, increase customer service capacity in Tuakau Continue to use partnerships for existing and new opportunities
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau Identify partnership opportunities 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Develop and implement partnership opportunities 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Continue to use partnerships for existing and new opportunities
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Identify partnership opportunities especially for Tuakau and Pokeno 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Develop and implement partnership opportunities Propose designations and special purpose zoning Include in masterplanning Consider special purpose education zones (Auckland Council has done this in the AUP). Streamline consent requirements and development planning on school sites so quick response can be achieved and not subject to time and cost delays. <ul style="list-style-type: none"> Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities
Medical	<ul style="list-style-type: none"> Maintain existing medical services Identify partnership opportunities especially for Tuakau and Pokeno Understand growth impacts and support needs Information sharing 	<ul style="list-style-type: none"> Improve existing medical services Develop and implement partnership opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Improve existing fire services Improve existing police services Improve existing ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response
Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required

Programme 4 – Some intervention to increase activity in Tuakau and Huntly

Wastewater	<ul style="list-style-type: none"> • Increase mains capacity as required • Future proof where confident of growth in line with zoning and plan changes. 	<ul style="list-style-type: none"> • Treatment solution for Te Kauwhata • Increase mains capacity as required 	<ul style="list-style-type: none"> • Increase mains capacity as required 	<ul style="list-style-type: none"> • Increase mains capacity as required
Roading	<ul style="list-style-type: none"> • Provide upgrades to local infrastructure as required • Harrisville Rd bridges replacement • Geraghtys road bridge • Waikato expressway and connection to Meremere • Pokeno walking and cycling network • Munro Rd and bridge • Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> • SH1 improvements to alignment to enabled increased speed limit to 110kph kph • Upgrade of Buckland Road – high standard • Waikato expressway and connections • Provide upgrades to local infrastructure as required • W1 and W2 Collector Rds for Tuakau • South collector for JETCO subdivision • Waerenga village improvements • Te Kauwhata Rd upgrade 	<ul style="list-style-type: none"> • Provide upgrades to State Highway 1 as required • Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard • Provide new and improved connection from Pokeno to Tuakau and Pukekohe • Provide upgrades to local infrastructure as required • Public transport hub in Tuakau • Te Kauwhata interchange roundabout • Public Transport hub in Te Kauwhata • Railway overbridge Te Kauwhata 	<ul style="list-style-type: none"> • Provide upgrades to State Highway 1 as required • Tuakau Bridge replacement • Provide upgrades to local infrastructure as required
Public transport	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Public transport hub in Tuakau • Public Transport hub in Te Kauwhata • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> • Plan walking and cycling facilities 	<ul style="list-style-type: none"> • Pokeno walking and cycling network 	<ul style="list-style-type: none"> • Te Kauwhata walking and cycling facilities 	<ul style="list-style-type: none"> • Provide walking and cycling facilities as required
Land use	<ul style="list-style-type: none"> • Reactive. • Respond to privately initiated plan changes. • Non complying resource consent applications • Risk of ad hoc development and costly litigation. 	<ul style="list-style-type: none"> • Council lead and initiated plan changes. • Council lead and co ordinated Masterplanning (with partners). • Opportunity to identify infrastructure, service and development partnerships and prioritise actions. • Establish and prioritise land release timetable • Develop monitoring programme • Identify and protect strategic corridors, community assets including parks and reserves. 	<ul style="list-style-type: none"> • Designate for key infrastructure and facilities (Council and partners) • Infrastructure, service and development partnership opportunities/actions implemented. • Monitoring and review • Precinct planning • Identify and protect strategic corridors, community assets including parks and reserves. • Secure land for key future assets/corridors • Enable temporary landuses on key corridors. 	<ul style="list-style-type: none"> • Identify and protect strategic corridors, community assets including parks and reserves. • Designation and land purchase for key infrastructure. and facilities • Council lead plan review and re zoning • Monitoring and review • Maintian and protect strategic corridors, community assets including parks and reserves. • Secure land for key future assets/corridors • Enable temporary landuses on key corridors.

Programme 5A – Proactive planning, services and amenities for Tuakau and Huntly

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata Identify partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno and Tuakau library Develop and implement partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Provide customer services in Pokeno, increase customer service capacity in Tuakau Continue to use partnerships for existing and new opportunities
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau Identify partnership opportunities Increase capacity of Tuakau secondary school 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Develop and implement partnership opportunities 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Continue to use partnerships for existing and new opportunities
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Identify partnership opportunities especially for Tuakau and Pokeno 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Develop and implement partnership opportunities Propose designations and special purpose zoning Include in masterplanning Consider special purpose education zones (Auckland Council has done this in the AUP). Streamline consent requirements and development planning on school sites so quick response can be achieved and not subject to time and cost delays. <ul style="list-style-type: none"> Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities
Medical	<ul style="list-style-type: none"> Maintain existing medical services Identify partnership opportunities especially for Tuakau and Pokeno Understand growth impacts and support needs Information sharing 	<ul style="list-style-type: none"> Improve existing medical services Develop and implement partnership opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Improve existing fire services Improve existing police services Improve existing ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response
Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required

Programme 5A – Proactive planning, services and amenities for Tuakau and Huntly

Wastewater	<ul style="list-style-type: none"> • Increase mains capacity as required • Future proof where confident of growth in line with zoning and plan changes. 	<ul style="list-style-type: none"> • Treatment solution for Te Kauwhata • Increase mains capacity as required 	<ul style="list-style-type: none"> • Increase mains capacity as required 	<ul style="list-style-type: none"> • Increase mains capacity as required
Roading	<ul style="list-style-type: none"> • Provide upgrades to local infrastructure as required • Harrisville Rd bridges replacement • Geraghtys road bridge • Waikato expressway and connection to Meremere • Pokeno walking and cycling network • Munro Rd and bridge • Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> • SH1 improvements to alignment to enabled increased speed limit to 110kph kph • Upgrade of Buckland Road – high standard • Waikato expressway and connections • Provide upgrades to local infrastructure as required • W1 and W2 Collector Rds for Tuakau • South collector for JETCO subdivision • Waerenga village improvements • Te Kauwhata Rd upgrade 	<ul style="list-style-type: none"> • Provide upgrades to State Highway 1 as required • Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard • Provide new and improved connection from Pokeno to Tuakau and Pukekohe • Provide upgrades to local infrastructure as required • Public transport hub in Tuakau • Te Kauwhata interchange roundabout • Public Transport hub in Te Kauwhata • Railway overbridge Te Kauwhata 	<ul style="list-style-type: none"> • Provide upgrades to State Highway 1 as required • Tuakau Bridge replacement • Provide upgrades to local infrastructure as required
Public transport	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Public transport hub in Tuakau • Public Transport hub in Te Kauwhata • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities 	<ul style="list-style-type: none"> • Provide increased bus trips as required • Trains to be from Papakura and Pukekohe • Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> • Plan walking and cycling facilities 	<ul style="list-style-type: none"> • Pokeno walking and cycling network • Upgrade walking and cycling facilities in Tuakau town centre and around schools 	<ul style="list-style-type: none"> • Te Kauwhata walking and cycling facilities • Upgrade walking and cycling facilities in Huntly town centre and around schools 	<ul style="list-style-type: none"> • Provide walking and cycling facilities as required
Land use	<ul style="list-style-type: none"> • Reactive. • Respond to privately initiated plan changes. • Non complying resource consent applications • Risk of ad hoc development and costly litigation. • Council lead and initiated plan changes. • Council lead and co ordinated Masterplanning (with partners). • Opportunity to identify infrastructure, service and development partnerships and prioritise actions. • Establish and prioritise land release timetable • Develop monitoring programme • Identify and protect strategic corridors, community assets including parks and reserves. 	<ul style="list-style-type: none"> • Designate for key infrastructure and facilities (Council and partners) • Infrastructure, service and development partnership opportunities/actions implemented. • Monitoring and review • Precinct planning • Identify and protect strategic corridors, community assets including parks and reserves. • Secure land for key future assets/corridors • Enable temporary landuses on key corridors. 	<ul style="list-style-type: none"> • Identify and protect strategic corridors, community assets including parks and reserves. • Designation and land purchase for key infrastructure. and facilities • Council lead plan review and re zoning • Monitoring and review • Maintain and protect strategic corridors, community assets including parks and reserves. • Secure land for key future assets/corridors • Enable temporary land uses on key corridors. 	<ul style="list-style-type: none"> • Council lead plan review and re zoning • Monitoring and review • Maintain and protect strategic corridors, community assets including parks and reserves. • Secure land for key future assets/corridors • Enable temporary land uses on key corridors.

Programme 5B – Growth in Tuakau and Pokeno to reach collective pop. level (20-25k)

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata Identify partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno and Tuakau library Develop and implement partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Provide customer services in Pokeno, increase customer service capacity in Tuakau Continue to use partnerships for existing and new opportunities
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau Identify partnership opportunities Increase capacity of Tuakau secondary school 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Develop and implement partnership opportunities 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Continue to use partnerships for existing and new opportunities
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Identify partnership opportunities especially for Tuakau and Pokeno 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Develop and implement partnership opportunities Propose designations and special purpose zoning Include in masterplanning Consider special purpose education zones (Auckland Council has done this in the AUP). Streamline consent requirements and development planning on school sites so quick response can be achieved and not subject to time and cost delays. <ul style="list-style-type: none"> Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities
Medical	<ul style="list-style-type: none"> Maintain existing medical services Identify partnership opportunities especially for Tuakau and Pokeno Understand growth impacts and support needs Information sharing 	<ul style="list-style-type: none"> Improve existing medical services Develop and implement partnership opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Improve existing fire services Improve existing police services Improve existing ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices <ul style="list-style-type: none"> Higher levels of service and function existing and new ambulance response New facilities as required by population levels, combined emergency response centre in Pokeno or Tuakau 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response

Programme 5B – Growth in Tuakau and Pokeno to reach collective pop. level (20-25k)

Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required Future proof where confident of growth in line with zoning and plan changes. 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Pokeno walking and cycling network Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph kph Upgrade of Buckland Road – high standard Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide new and improved connection from Pokeno to Tuakau and Pukekohe Provide upgrades to local infrastructure as required Public transport hub in Tuakau Te Kauwhata interchange roundabout Public Transport hub in Te Kauwhata Railway overbridge Te Kauwhata 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required
Public transport	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Public transport hub in Tuakau Public Transport hub in Te Kauwhata Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> Plan walking and cycling facilities 	<ul style="list-style-type: none"> Pokeno walking and cycling network Upgrade walking and cycling facilities in Tuakau town centre and around schools 	<ul style="list-style-type: none"> Te Kauwhata walking and cycling facilities Upgrade walking and cycling facilities in Huntly town centre and around schools 	<ul style="list-style-type: none"> Provide walking and cycling facilities as required improve networks around schools and centres
Land use	<ul style="list-style-type: none"> Residential zoning change in Tuakau and Pokeno Business and commercial zoning change in Tuakau and Pokeno Council led and initiated plan changes. Council lead and co-ordinated Master planning (with partners). Opportunity to identify infrastructure, service and development partnerships and prioritise actions. Establish and prioritise land release timetable Develop monitoring programme Identify and protect strategic corridors, community assets including parks and reserves. 	<ul style="list-style-type: none"> Designate for key infrastructure and facilities (Council and partners) Infrastructure, service and development partnership opportunities/actions implemented. Monitoring and review Precinct planning Identify and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. 	<ul style="list-style-type: none"> Identify and protect strategic corridors, community assets including parks and reserves. Designation and land purchase for key infrastructure. and facilities Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. 	<ul style="list-style-type: none"> Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors.

Programme 5C – Growth in Tuakau and Pokeno to reach a collective pop. level (20-25k). Pokeno to be rezoned to provide services, and amenities such as schools and sportsgrounds

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata Identify partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Pokeno library Develop and implement partnership opportunities Provide customer services in Pokeno 	<ul style="list-style-type: none"> Maintain existing halls Increase customer service capacity in Tuakau Continue to use partnerships for existing and new opportunities
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Provide additional 25ha of Sports and recreation park in Tuakau Identify partnership opportunities Increase capacity of Tuakau secondary school Provide additional 25ha of Sports and recreation park in Pokeno 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Develop and implement partnership opportunities Grow sports and recreation parks at growth rate at 2.6ha/1000 residents in Pokeno (residential rates to include Tuakau) 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents in Pokeno (residential rates to include Tuakau) Continue to use partnerships for existing and new opportunities
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Identify partnership opportunities especially for Tuakau and Pokeno 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Develop and implement partnership opportunities Propose designations and special purpose zoning Include in masterplanning Consider special purpose education zones (Auckland Council has done this in the AUP). Streamline consent requirements and development planning on school sites so quick response can be achieved and not subject to time and cost delays. Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities
Medical	<ul style="list-style-type: none"> Maintain existing medical services Identify partnership opportunities especially for Tuakau and Pokeno Understand growth impacts and support needs Information sharing 	<ul style="list-style-type: none"> Improve existing medical services Develop and implement partnership opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Improve existing fire services Improve existing police services Improve existing ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices <ul style="list-style-type: none"> Higher levels of service and function existing and new ambulance response New facilities as required by population levels, combined emergency response centre in Pokeno or Tuakau 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response

Programme 5C – Growth in Tuakau and Pokeno to reach a collective pop. level (20-25k). Pokeno to be rezoned to provide services, and amenities such as schools and sportsgrounds

Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required Future proof where confident of growth in line with zoning and plan changes. 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Pokeno walking and cycling network Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph kph Upgrade of Buckland Road – high standard Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade Pokeno interchange off-ramp upgrade Upgrade Whangarata Rd (between Pokeno and Tuakau) 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide new and improved connection from Pokeno to Tuakau and Pukekohe Provide upgrades to local infrastructure as required Public transport hub in Tuakau Te Kauwhata interchange roundabout Public Transport hub in Te Kauwhata Railway overbridge Te Kauwhata Improved roading connection between Pokeno, Tuakau and Pukekohe 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required Park and Ride in Pokeno with bus trips to Pukekohe/Papakura
Public transport	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Public transport hub in Tuakau Public Transport hub in Te Kauwhata Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> Plan walking and cycling facilities 	<ul style="list-style-type: none"> Pokeno walking and cycling network Upgrade walking and cycling facilities in Tuakau town centre and around schools 	<ul style="list-style-type: none"> Te Kauwhata walking and cycling facilities Upgrade walking and cycling facilities in Huntly town centre and around schools 	<ul style="list-style-type: none"> Provide walking and cycling facilities as required improve networks around schools and centres
Land use	<ul style="list-style-type: none"> Residential zoning change in Tuakau and Pokeno Business and commercial zoning change in Tuakau and Pokeno Council led and initiated plan changes. Council lead and co-ordinated Master planning (with partners). Opportunity to identify infrastructure, service and development partnerships and prioritise actions. Establish and prioritise land release timetable Develop monitoring programme Identify and protect strategic corridors, community assets including parks and reserves. 	<ul style="list-style-type: none"> Designate for key infrastructure and facilities (Council and partners) Infrastructure, service and development partnership opportunities/actions implemented. Monitoring and review Precinct planning Identify and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. 	<ul style="list-style-type: none"> Identify and protect strategic corridors, community assets including parks and reserves. Designation and land purchase for key infrastructure. and facilities Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. 	<ul style="list-style-type: none"> Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors.

Programme 6A – Growth in Tuakau to reach a larger population level (15-20k) with the same structure plan with additional growth on the outside

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata Identify partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Tuakau library Develop and implement partnership opportunities Provide customer services in Tuakau 	<ul style="list-style-type: none"> Maintain existing halls Increase customer service capacity in Tuakau Continue to use partnerships for existing and new opportunities
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Identify partnership opportunities Increase capacity of Tuakau secondary school Provide additional 50ha of Sports and recreation park in Tuakau 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Develop and implement partnership opportunities Grow sports and recreation parks at growth rate at 2.6ha/1000 residents in Tuakau and Pokeno (residential rates to include Tuakau) 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents in Tuakau (residential rates to include Tuakau) Continue to use partnerships for existing and new opportunities
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Identify partnership opportunities especially for Tuakau and Pokeno 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required, especially in Tuakau – primary and secondary Increase capacity of secondary schools as required Develop and implement partnership opportunities Propose designations and special purpose zoning Include in masterplanning Consider special purpose education zones (Auckland Council has done this in the AUP). Streamline consent requirements and development planning on school sites so quick response can be achieved and not subject to time and cost delays. Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities
Medical	<ul style="list-style-type: none"> Maintain existing medical services Identify partnership opportunities especially for Tuakau and Pokeno Understand growth impacts and support needs Information sharing 	<ul style="list-style-type: none"> Improve existing medical services Develop and implement partnership opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Improve existing fire services Improve existing police services Improve existing ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response New facilities as required by population levels, combined emergency response centre in Tuakau 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response

Programme 6A – Growth in Tuakau to reach a larger population level (15-20k) with the same structure plan with additional growth on the outside

Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required Future proof where confident of growth in line with zoning and plan changes. 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Pokeno walking and cycling network Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph kph Upgrade of Buckland Road – high standard Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade Pokeno interchange off-ramp upgrade Upgrade Whangarata Rd (between Pokeno and Tuakau) 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide new and improved connection from Pokeno to Tuakau and Pukekohe Provide upgrades to local infrastructure as required Public transport hub in Tuakau Te Kauwhata interchange roundabout Public Transport hub in Te Kauwhata Railway overbridge Te Kauwhata Improved roading connection between Pokeno, Tuakau and Pukekohe 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required Park and Ride in Pokeno with bus trips to Pukekohe/Papakura
Public transport	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Public transport hub and potentially an electrified service from Tuakau Public Transport hub in Te Kauwhata Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required High frequency electrified service from Tuakau Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> Plan walking and cycling facilities 	<ul style="list-style-type: none"> Pokeno walking and cycling network Upgrade walking and cycling facilities in Tuakau town centre and around schools 	<ul style="list-style-type: none"> Te Kauwhata walking and cycling facilities Upgrade walking and cycling facilities in Huntly town centre and around schools 	<ul style="list-style-type: none"> Provide walking and cycling facilities as required improve networks around schools and centres
Land use	<ul style="list-style-type: none"> Residential zoning change in Tuakau and Pokeno Business and commercial zoning change in Tuakau and Pokeno Council led and initiated plan changes. Council lead and co-ordinated Master planning (with partners). Opportunity to identify infrastructure, service and development partnerships and prioritise actions. Establish and prioritise land release timetable Develop monitoring programme Identify and protect strategic corridors, community assets including parks and reserves. 	<ul style="list-style-type: none"> Designate for key infrastructure and facilities (Council and partners) Infrastructure, service and development partnership opportunities/actions implemented. Monitoring and review Precinct planning Identify and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. 	<ul style="list-style-type: none"> Identify and protect strategic corridors, community assets including parks and reserves. Designation and land purchase for key infrastructure. and facilities Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. 	<ul style="list-style-type: none"> Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors.

Programme 6B – Growth in Tuakau to reach a larger population level (15-20k) with a redeveloped structure plan to reduce land use and footprint size

Interest area	1-3 years	4-10 years	11-20 years	21-30 years
Social	<ul style="list-style-type: none"> Maintain existing halls 	<ul style="list-style-type: none"> Maintain existing halls iSite in Pokeno, Rangiriri and Te Kauwhata Identify partnership opportunities 	<ul style="list-style-type: none"> Maintain existing halls Increase capacity at Tuakau library Develop and implement partnership opportunities Provide customer services in Tuakau 	<ul style="list-style-type: none"> Maintain existing halls Increase customer service capacity in Tuakau Continue to use partnerships for existing and new opportunities
Parks and recreation	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Maintain sports and recreation parks 	<ul style="list-style-type: none"> Maintain existing aquatic facilities, upgrade Tuakau pool Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Identify partnership opportunities Increase capacity of Tuakau secondary school Provide additional 50ha of Sports and recreation park in Tuakau 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents Develop and implement partnership opportunities Grow sports and recreation parks at growth rate at 2.6ha/1000 residents in Tuakau and Pokeno (residential rates to include Tuakau) 	<ul style="list-style-type: none"> Maintain existing aquatic facilities Grow parks as per 1.5ha/1000 residents ratio Maintain existing trails Grow sports and recreation parks at growth rate at 2.6ha/1000 residents in Tuakau (residential rates to include Tuakau) Continue to use partnerships for existing and new opportunities
Education	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Identify partnership opportunities especially for Tuakau and Pokeno 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required, especially in Tuakau – primary and secondary Increase capacity of secondary schools as required Develop and implement partnership opportunities Propose designations and special purpose zoning Include in masterplanning Consider special purpose education zones (Auckland Council has done this in the AUP). Streamline consent requirements and development planning on school sites so quick response can be achieved and not subject to time and cost delays. Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities Precinct planning 	<ul style="list-style-type: none"> Increase amount of primary schools in towns as required Increase capacity of secondary schools as required Continue to use partnerships for existing and new opportunities
Medical	<ul style="list-style-type: none"> Maintain existing medical services Identify partnership opportunities especially for Tuakau and Pokeno Understand growth impacts and support needs Information sharing 	<ul style="list-style-type: none"> Improve existing medical services Develop and implement partnership opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities Partnership opportunities Understand growth impacts and support needs Information sharing Precinct planning 	<ul style="list-style-type: none"> Higher levels of service and function existing and new medical services Continue to use partnerships for existing and new opportunities
Emergency services	<ul style="list-style-type: none"> Maintain existing fire services Maintain existing police offices Maintain existing ambulance response 	<ul style="list-style-type: none"> Improve existing fire services Improve existing police services Improve existing ambulance response 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response New facilities as required by population levels, combined emergency response centre in Tuakau 	<ul style="list-style-type: none"> Higher levels of service and function existing and new fire services Higher levels of service and function existing and new police offices Higher levels of service and function existing and new ambulance response

Programme 6B – Growth in Tuakau to reach a larger population level (15-20k) with a redeveloped structure plan to reduce land use and footprint size

Water	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Wastewater	<ul style="list-style-type: none"> Increase mains capacity as required Future proof where confident of growth in line with zoning and plan changes. 	<ul style="list-style-type: none"> Treatment solution for Te Kauwhata Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required 	<ul style="list-style-type: none"> Increase mains capacity as required
Roading	<ul style="list-style-type: none"> Provide upgrades to local infrastructure as required Harrisville Rd bridges replacement Geraghtys road bridge Waikato expressway and connection to Meremere Pokeno walking and cycling network Munro Rd and bridge Travers Rd and intersection with Wayside 	<ul style="list-style-type: none"> SH1 improvements to alignment to enabled increased speed limit to 110kph kph Upgrade of Buckland Road – high standard Waikato expressway and connections Provide upgrades to local infrastructure as required W1 and W2 Collector Rds for Tuakau South collector for JETCO subdivision Waerenga village improvements Te Kauwhata Rd upgrade Pokeno interchange off-ramp upgrade Upgrade Whangarata Rd (between Pokeno and Tuakau) 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Upgrade rail overbridge between Pokeno and Tuakau to HMPV standard Provide new and improved connection from Pokeno to Tuakau and Pukekohe Provide upgrades to local infrastructure as required Public transport hub in Tuakau Te Kauwhata interchange roundabout Public Transport hub in Te Kauwhata Railway overbridge Te Kauwhata Improved roading connection between Pokeno, Tuakau and Pukekohe 	<ul style="list-style-type: none"> Provide upgrades to State Highway 1 as required Tuakau Bridge replacement Provide upgrades to local infrastructure as required Park and Ride in Pokeno with bus trips to Pukekohe/Papakura
Public transport	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required Public transport hub and potentially an electrified service from Tuakau Public Transport hub in Te Kauwhata Trains to be from Papakura and Pukekohe Maintain current Park n ride facilities 	<ul style="list-style-type: none"> Provide increased bus trips as required High frequency electrified service from Tuakau Maintain current Park n ride facilities
Walking and cycling	<ul style="list-style-type: none"> Plan walking and cycling facilities 	<ul style="list-style-type: none"> Pokeno walking and cycling network Upgrade walking and cycling facilities in Tuakau town centre and around schools 	<ul style="list-style-type: none"> Te Kauwhata walking and cycling facilities Upgrade walking and cycling facilities in Huntly town centre and around schools 	<ul style="list-style-type: none"> Provide walking and cycling facilities as required improve networks around schools and centres
Land use	<ul style="list-style-type: none"> Master planning exercise to understand long term development options for Tuakau within existing approved structure plan footprint. Residential zoning change in Tuakau and Pokeno Business and commercial zoning change in Tuakau and Pokeno Council led and initiated plan changes. Council lead and co-ordinated Master planning (with partners). Opportunity to identify infrastructure, service and development partnerships and prioritise actions. Establish and prioritise land release timetable Develop monitoring programme Identify and protect strategic corridors, community assets including parks and reserves. 	<ul style="list-style-type: none"> Designate for key infrastructure and facilities (Council and partners) Infrastructure, service and development partnership opportunities/actions implemented. Monitoring and review Precinct planning Identify and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. <ul style="list-style-type: none"> Protection of social, park and recreation areas, education areas and road corridors 	<ul style="list-style-type: none"> Identify and protect strategic corridors, community assets including parks and reserves. Designation and land purchase for key infrastructure and facilities Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors. <ul style="list-style-type: none"> Protection of social, park and recreation areas, education areas and road corridors 	<ul style="list-style-type: none"> Council lead plan review and re zoning Monitoring and review Maintain and protect strategic corridors, community assets including parks and reserves. Secure land for key future assets/corridors Enable temporary land uses on key corridors.

North Waikato Integrated Growth Management Programme Business Case	Programme 1A	Programme 1B	Programme 2	Programme 3	Programme 4	Programme 5A	Programme 5B	Programme 5C	Programme 6A	Programme 6B	Programme 6C
	Business as Usual - Limited Services: Growth in Pokeno, then Te Kauwhata (BaU)	Business as Usual - Limited Services: Same as 1A plus additional growth in Tuakau	Restricted growth in North Waikato: services employment accessed in South Auckland	Limited Services in North Waikato - Growth in Pokeno and Te Kauwhata plus growth in unserviced developments / rural dwellings	Do Minimum: Limited intervention with Tuakau and Huntly services and employment within North Waikato	Proactive planning, services and amenities for the North Waikato; Tuakau (north) and Huntly (south) as the areas for services and employment	Proactive planning, services and amenities for the North Waikato; shared across Pokeno and Tuakau (north) and Huntly (south) as the areas for services and employment	Proactive planning, services and amenities for the North Waikato; Pokeno (north) and Huntly (south) as the areas for services and employment.	Proactive planning, services and amenities for the North Waikato; Tuakau (north) and Huntly (south) as the areas for services and employment. Growth in Tuakau to reach a larger population level (15-20k)	Proactive planning, services and amenities for the North Waikato; shared across Pokeno and Tuakau (north) and Huntly (south) as the areas for services and employment plus increased population in Tuakau (current footprint to reduce impact on arable lands)	Proactive planning, services and amenities for the North Waikato; Tuakau (north) and Huntly (south) as the areas for services and employment plus increased population in Tuakau (current footprint to reduce impact on arable lands)
Investment Objective 1 - Intra regional	Poor access to services	Poor access to services	Poor access to services	Very poor access for unserviced growth	Varying levels of access and services	Improved access and services	Good access and services	Good access and services	Good access and services	Good access and services	Good access and services
- Access to town centres	--	-	--	---	-	+	++	++	++	++	++
- Access to services and communities	--	-	--	---	---	++	++	++	++	++	++
- Access to employment areas	--	--	--	---	---	+	++	++	++	++	++
Investment Objective 2 - Multi modal	Poor modal choices	Poor modal choices	Poor modal choices	Poor modal choices	Poor modal choices	Improved modal choices	Good modal choices	Good modal choices	Good modal choices	Very good in north, good in south	Very good in north, good in south
- Enhance efficiency and effectiveness through multi modal transport	--	--	---	---	--	+	++	++	++	+++	+++
Investment Objective 3- Inter regional	Increased congestion on key corridors	Increased congestion on key corridors	Some congestion impact	Increased congestion on key corridors	Increased congestion on key corridors	Reduced impact on congestion	Reduced impact on congestion	Reduced impact on congestion	Reduced impact on congestion	Reduced impact on congestion	Reduced impact on congestion
- Strengthen performance of the connection between Auckland and Waikato	---	--	-	---	---	+	++	++	++	++	++
- Improve connections to and from Auckland and Waikato	---	--	-	---	---	+	++	++	++	++	++
Investment Objective 4 - Strategy alignment	Low levels of alignment	Varying levels of alignment	Low levels of alignment	Low levels of alignment	Low levels of alignment	Improved levels of alignment	Improved levels of alignment	Good levels of alignment	Improved levels of alignment	Good levels of alignment	Good levels of alignment
- Plan and delivered social infrastructure for communities	--	---	--	-	-	++	+	++	++	+++	+++
- Meets the Future Proof principles by providing growth at urban nodes with access to services	-	+	-	--	+	++	++	++	+	++	++
- Transport enables land to be developed in line with the development patterns in the Future Urban Land Supply Strategy	-	-	-	-	-	+	++	++	++	++	++

Other Factors											
Effectiveness	Low - Does not address issues	Low - Does not address issues	Low - Does not address issues, continues issues of social dislocation	Low - Does not address issues, creates new issues of social dislocation	Low - Does not sufficiently address issues	Medium - some intervention to address high risk issues	High - addresses key problems	High - if delivered can achieve good outcomes	High - addresses key problems	High - addresses key problems	High - addresses key problems
Risk	Low risk of delivery	Low risk of delivery	Low risk of delivery	Low risk of delivery	Low risk of delivery	Medium risk of delivery	Medium risk of delivery	High risk and high cost	Medium risk of delivery	Medium / High - Demand for higher density in Tuakau	Medium / High - Demand for higher density in Tuakau
Public and Stakeholders	Unacceptable for existing and future community	Unacceptable for existing and future community	Low levels of acceptability for existing and future community	Unknown level of support for large levels of unserviced lots	Likely low levels of public acceptance of limited response to issues	Unknown acceptance for Tuakau or as main services area	Unknown acceptance for Tuakau or as main services area	High cost would be unacceptable relative to other programmes	Unknown acceptance for Tuakau or as main services area	Unknown acceptance levels of density increase for Tuakau or as main services area	Unknown acceptance levels of density increase for Tuakau or as main services area
Inter/dependencies	Low level	Low level	Low level	Medium	Medium	Medium	Medium	Major dependencies and intervention required with land owner	Medium	Major dependencies and intervention required to achieve density levels	Major dependencies and intervention required to achieve density levels
Feasibility	High	High	High	Medium	Medium	Medium	Medium	High level of difficulty to implement	Medium	Low / Medium	Low / Medium
Affordability	High	High	High	Medium - cost to service rural developments	Medium	Medium	Medium	Low	Medium	Medium	Medium
Costs	Low	Low	Low	Medium	Medium	Medium	Medium / high	High	Medium / high	Medium / high	Medium / high
Benefit cost ratio	Medium	Medium	Medium	Medium	Medium	Low / Medium	Low	Very Low	Low	Low / Medium	Low / Medium
Short-listed	No	No	No	No	Yes - Requirement of the business case approach to use a Do Minimum for assessments	No	Yes	No	No	Yes	No

Rev.No.	Author	Reviewer		Approved for Issue		
		Name	Signature	Name	Signature	Date
Draft A	C Kelly	T Eldridge		T Eldridge		24 July 2017
Draft B	C Kelly	T Eldridge		T Eldridge		19 November 2017
Draft C	C Kelly	T Eldridge		T Eldridge		19 November 2017

Note: Approval of the Programme Business Case will be undertaken by the Programme Business Case Partners. Once this is undertaken a document will be prepared with programme partner authorisation and relevant branding for the partner organisations.

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	15 November 2017
Prepared by	Vishal Ramduny, Planning & Strategy Manager Chris Clark, Roothing Manager
Chief Executive Approved	Y
Reference #	INF2017
Report Title	North Waikato Public Transport Review and Options

1. EXECUTIVE SUMMARY

The report presents the findings of the stakeholder/community consultation on the North Waikato Public Transport Review for the Committee's consideration and for it to identify the preferred options for inclusion in any of Council's upcoming long term plans (LTPs).

2. RECOMMENDATION

THAT the report from the **General Manager Service Delivery** be received;

AND THAT the **Committee** recommends to **Council** that the preferred **North Waikato short-term public transport options (as determined through the North Waikato Public Transport Review)** be received and that the associated costs be noted;

AND FURTHER THAT the preferred options be considered in upcoming **Council long term plans**.

3. BACKGROUND

Waikato District Council ("Council"), in partnership with Waikato Regional Council (WRC) and the New Zealand Transport Agency (NZTA), have undertaken a review of public transport provision in the North Waikato area. The aim of the project was to identify short-term public transport options that can be considered as part of both Council's upcoming LTPs. The project is closely linked to the wider North Waikato Integrated Growth Management Programme Business Case (North Waikato PBC) and will help to inform the review of the Regional Public Transport Plan (RPTP) in respect to future public transport provision in the northern Waikato.

4. DISCUSSION

4.1 The Review

The North Waikato Public Transport Review was undertaken in accordance with the principles of NZTA's businesses case approach. The review has identified potential options for consideration. The list of options was informed by a household transport survey and a workshop with community representatives, and would be subject to further consultation with key stakeholders and detailed feasibility assessments if it was agreed to progress further. The initial service improvement concepts are outlined below.

4.2 Potential Network Improvements



Figure 1: NW PT Network Improvement Concepts

The potential network improvements identified in the study are summarised below:

- **Pokeno to Pukekohe** (route 44 as shown in yellow) - Provision of a regular bus service between Pokeno and Pukekohe via Tuakau on weekdays and weekends. Designed to integrate with train services from Pukekohe to Auckland.
- **Huntly to Pukekohe** (route 44 as shown in purple) - Provision of a daily off-peak return service between Huntly and Pukekohe via north Waikato towns Monday to Friday, providing community connectivity and broader access to essential services.
- **Te Kauwhata to Hamilton** (route 21 as shown in green) – Extension of the existing Huntly bus service extended to Te Kauwhata for one return trip during peak periods on weekdays, providing access to employment, education and social opportunities
- **Hamilton, Huntly, Pokeno to Papakura Express Service** (route 44x as shown in orange) – Provision of a weekday commuter bus service intended to provide fast and direct access between Hamilton City, north Waikato towns and Auckland. This service could potentially be supplemented by park and ride facilities at the The Base, Huntly and Pokeno.
- **Port Waikato to Pukekohe** (route 44 as shown in blue) – options include retaining the existing once a week service, or replacing the timetabled bus with a community transport option.

- **Community Transport Initiatives** – this option will investigate the opportunity of community initiated transport solutions to provide improved transport access, particularly in areas where public transport may not be a suitable/cost effective option.

These service options were considered by Council at a workshop in May 2017 and again, after further stakeholder engagement, at another councillor workshop in October 2017.

4.3 North Waikato PT options - Stakeholder and Community feedback

WDC and WRC staff undertook extensive engagement with key stakeholders and local community boards/committees on the north Waikato public transport options. The outcomes of the stakeholder and community engagement are included in Attachment I, and the feedback on the draft options is contained in the attachments. The preferred options and the financial implications are provided below.

5. SUMMARY & FINANCIAL IMPLICATIONS

The cost breakdown for each of the options is as follows:

- A regular bus service between **Pokeno and Pukekohe** (via Tuakau) on weekdays and weekends (WDC annual funding requirement - \$252,500)
- A daily off-peak return service between **Huntly and Pukekohe** via north Waikato towns on weekdays (WDC annual funding requirement - \$42,594)
- A daily peak return service between **Te Kauwhata and Hamilton** on weekdays
- A weekday commuter express bus service between **Hamilton, north Waikato towns and Papakura** (WDC annual funding requirement - \$54,000) – *Note: as a provisional activity for year two of LTP, subject to detailed feasibility assessments and the outcomes of Auckland to Hamilton Transport Connections Strategic Business Case.*

It is also recommended that the Council retain the current Port Waikato to Tuakau bus service until further community engagement work is undertaken to assess the likely impacts of replacing this service with other community-based transport initiatives.

The total cost of the proposed interventions is \$1,009,350.

5.2. Policy & Strategy Alignment

The north Waikato Public Transport Review is linked to the wider North Waikato PBC and will help to inform the review of the RPTP in respect to future public transport provision in the northern Waikato.

5.3. Significance & Engagement

The following stakeholders have been engaged on this project:

Planned	In Progress	Complete	
N/A	N/A	√	Internal (Councillors)
N/A	N/A	√	Community Boards/Community Committees
N/A	N/A	√	Waikato-Tainui/Local iwi
N/A	N/A	√	Households
N/A	N/A	√	Business

A full summary of the discussion and engagement is attached.

6. CONCLUSION

The North Waikato Public Transport Review has been a joint project between Council, WRC and NZTA to identify potential public transport options that may be considered for funding as part of Council's upcoming LTPs. Preferred options have been identified following extensive engagement with key stakeholders and community groups.

7. ATTACHMENTS

- Attachment 1 - Stakeholder and community consultation on draft NW PT options
- Attachment 2 - Staff Assessment of Stakeholder Community Feedback and Recommendations

Attachment I: Stakeholder and community consultation on draft NW PT options

Engagement activity	Date (2017)	Key outcomes/feedback
WDC Councillor workshop	24 May	<ul style="list-style-type: none"> • Draft options were generally well received, and the Council has agreed for staff to undertake further consultation on draft options with local community boards • Some suggestions were made about Huntly to Pukekohe service, incl. bus timetable and a new bus stop at Mercer • There was a general support for Hamilton to Papakura commuter service, particularly the service would help to enhance/compliment future passenger rail service • Need to continue to engage with AT and Central Govt about passenger rail • Need to engage with local community/iwi about the Port Waikato service and community transport option.
WDC Councillor workshop	31 October	<ul style="list-style-type: none"> • Support for the preferred options presented.
Waikato-Tainui	31 October	<ul style="list-style-type: none"> • Preferred options were presented to Waikato-Tainui at a Waikato-Tainui/WDC JMA meeting.
Hamilton PT Joint Committee meeting	2 June	<ul style="list-style-type: none"> • There was general support for the draft NW bus options • There were some general discussions about the Hamilton to Papakura service option, and the following points were noted: <ul style="list-style-type: none"> ○ Integration of ticketing systems (Busit & Hop cards) ○ Investigation of potential park and ride facility at Pokeno (or Mercer) ○ Bus vehicles need to cater for commuter market (WIFI & workbench etc) ○ Need to engage with AT/NZTA to investigate bus priority measures on the southern Motorway (Drury South to Papakura)
Franklin Local Board (incl. Mayor and 3 councillors from WDC)	6 June	<ul style="list-style-type: none"> • The PT options were very well received and they were interested to see the outcomes from community consultation/engagement • There was a quick discussion on the benefits of having a single commuter card for travel across the boundaries. • There was recognition about the importance of bus priority measure on SH1 north of Drury).


Engagement activity	Date (2017)	Key outcomes/feedback
RPTP Development Subcommittee meeting	12 June	<ul style="list-style-type: none"> • There was general support for the draft NW bus options • It was noted that the commuter bus option (Hamilton to Papakura) could be an interim solution until Hamilton to Auckland passenger rail option was considered further. • It was suggested that DHBs and the University of Waikato should be involved as part of the stakeholder engagement process to ensure good alignment across health, education and PT services.
Waikato Rural Transport Forum (with Community Waikato and local community transport providers)	26 June	<ul style="list-style-type: none"> • There was strong support for the investigation of community-based transport solutions to provide improved transport connections between rural communities • It was suggested that there are some existing local community trusts (in Huntly and Pokeno) that would be very interested about community transport scheme.
Iwi feedback	June	<ul style="list-style-type: none"> • An iwi reference group meeting was set up, but cancelled due to no RSVPs. Waikato Tainui provided feedback to Waikato DC that any PT improvements in the North Waikato would be welcomed.
Additional stakeholder feedback – Onewhero-Tuakau Community Board (received from Caroline Conroy)	26 June	<ul style="list-style-type: none"> • Has requested a meeting with Shelley and Andrew to discuss her feedback as follows: • Support hourly service Pokeno-Pukekohe, wants to discuss the route within Tuakau • Suggest Huntly to Pukekohe service should be twice a day, or contracted via a local taxi company for more flexibility. • Hamilton to Papakura service needs a bus lane to be successful, and frequency of more than once a day. Suggest pick-ups to be at Huntly, Rangiriri, Mercer and Bombay. • Suggest Port Waikato service should be a bookable community shuttle solution. • Support community transport options for smaller communities.
Additional stakeholder feedback – Franklin Local Board (received from Andy Baker)	28 June	<ul style="list-style-type: none"> • Support short-term bus services to Pukekohe, followed by rail introduction at a later date. • Mention of electric/hybrid rail as preference from Pukekohe to Auckland

Engagement activity	Date (2017)	Key outcomes/feedback
Engagement with local community boards and community committees – June-October 2017		
Workshop with representative from local community boards	29 June	<ul style="list-style-type: none"> • General support was voiced for all options. • A number of attendees were from the Meremere community and enhanced PT service here would be welcomed. • It was suggested that the Te Kauwhata to Hamilton service could start in Meremere. • It was reiterated that bus priority must be given to the Hamilton to Papakura service, both on the southern motorway, and on the road to Papakura Station. • Ensure that Pokeno to Pukekohe bus services the full Pokeno residential development. • Mention was made of the Huntly to Pukekohe service that enough time was given to passengers in Pukekohe before the return journey and that times coincided with the three AT bus services that loop around Pukekohe. • It was suggested that consultation needs to take place with both Counties Manukau and Waikato DHBs.
Te Kauwhata Community Committee	6 th September	<ul style="list-style-type: none"> • General support for the draft options, particularly the proposed Huntly to Pukekohe and Hamilton to Te Kauwhata bus routes to provide improved PT connections. • It was noted a bus service from Te Kauwhata to Hamilton will be well utilized by school students (a lot of students are currently being driven to Huntly to catch Northern Connector). It was strongly suggested that this service option should include an additional return trip for students to get back to Te Kauwhata. • It was noted that the estimated travel time for the Hamilton to Papakura option (1h 20 min) may not be feasible given the congestions on Southern Motorway and local roads between Drury and Papakura. Councils, AT and NZTA need to look at potential bus lane and priority measures to improve travel time reliability. • It was also suggested that this option could go to Pukekohe, instead of Papakura to avoid congestion on the Southern Motorway.
Meremere Community Committee	14 September	<ul style="list-style-type: none"> • General support was voiced for all options. • It was suggested that the Te Kauwhata to Hamilton service could start in Meremere. • It was reiterated that bus priority must be given to the Hamilton to Papakura service, both

Engagement activity	Date (2017)	Key outcomes/feedback
		on the southern motorway, and on the road to Papakura Station.
Pokeno Community Committee	12 September	<ul style="list-style-type: none"> • The Pokeno direct to Papakura service was more preferred for Pokeno commuters working in Auckland – they queried whether the peak service to Pukekohe needed to be as frequent from Pokeno if the direct service to Papakura was also available. • The Hamilton to Papakura express service needs to be early enough to ensure the residents can catch the 7.07am train from Papakura. • Questions was raised about using AT Hop card on the Pokeno to Pukekohe service, and the convenience of using one single bus card for connecting bus/rail services. • It was suggested that the residents on the other side of the off-ramp (Thames Highway) should also be consulted, they are likely (or would be interested) of using a bus service connecting to Auckland. • Community transport – one of the residents brought up using Go Bus or Cross Country Rentals vans in the middle of the day when they aren't used for school services. • It was agreed that the Community Committee will generate a post on Pokeno Facebook page to gauge feedback from residents about the NW PT options.
Huntly Community Board	19 September	<ul style="list-style-type: none"> • The HCB members were very impressed by the Northern Connector, particularly with the new changes – bus timetables/frequencies, fares, new vehicles and livery/branding. • It was suggested that the local newspapers should include more marketing/Ads to promote the service. • The group was very interested about the new double decker buses for the Northern Connector service. WRC will provide further details to HCB. • Overall the HCB was very supportive with the NW PT options. • There was a strong support for Hamilton to Papakura service. However the group noted that the travel time is going to be a critical factor – need to ensure the service can get to Auckland early enough for work/meetings. The buses would also need to be refitted (wifi, folding table) to cater for commuters.
Onewhero-Tuakau Community Board	2 October	<ul style="list-style-type: none"> • Overall, very supportive of the draft NW options. The group reflected that PT provision is lacking in Tuakau, so any improvement would be well received by the community. • Some CB members commented that Pokeno and Mercer should considered as a future PT

Engagement activity	Date (2017)	Key outcomes/feedback
		<p>hubs, providing multi-modal connections to bus and rai and park and ride.</p> <ul style="list-style-type: none"> • The group was supportive of Hamilton to Papakura option, however it was commented that the travel time between Pokeno and Papakura station is on average about 40-50 min in morning peak. It was suggested that timetable needs to consider the travel time delay from congestion. • There was a general support of community transport option (at a conceptual level), however the group would like to receive further detail/update on future actions. • The group was comfortable with the indicative costing for the options, and considered these were more cost-effective solutions than major roading investment.

Attachment 2 - Staff Assessment of Stakeholder Community Feedback and Recommendations

<h3>PT Options – POKENO TO PUKEKOHE</h3> <h4>Improvement Concepts</h4>	
 <p>Service levels</p> <ul style="list-style-type: none"> • Weekdays - 40-min peak and 2 hourly off-peak – 6am to 8pm • Weekends - 2 hourly all day - 7am to 8pm <p>Estimated cost and funding</p> <ul style="list-style-type: none"> • Total cost - \$546,500 p.a. • WDC contributions - \$252,500 	
Stakeholder/community feedback	Staff assessment and recommendation
<ul style="list-style-type: none"> • Strong support from key stakeholders and community groups about this option, and generally happy with the proposed service levels, particularly with 40min peak and weekend services. • Community feedback indicating that there is strong demand for this service option. • Minor feedback around bus timetable and estimated bus travel time – actual journey time could be longer than what was indicated in the timetable. • Need to consider the provision of PT infrastructure - currently no bus shelters in Tuakau and Pokeno. • Community would like understand more about the fares and ticketing system for this service (ie if the service will use AT or WRC ticketing system). 	<ul style="list-style-type: none"> • This service will provide improved connections for Tuakau and Pokeno residents to Pukekohe, and will replace the current AT service (route 398) • Further discussion with AT is required to work through some of the operational details, including bus/train timetables, fares and ticketing, and contracting requirements. • Based on the community feedback and projected future growth in Tuakau and Pokeno, it is recommended that this bus option (with minor revisions to the timetable) be included in the draft WDC LTP for public consultation.

PT Option – Huntly to Pukekohe

Improvement Concept



Service descriptions

- One daily return trip Monday to Friday, leaving Huntly at 7am and return from Pukekohe at 1.30pm
- Estimated travel time 1.5 hours each way

Estimated cost and funding

- Total Cost – \$90,850 p.a.
- WDC contributions - \$42,594

Stakeholder/community feedback	Staff assessment and recommendation
<ul style="list-style-type: none"> • Support from key stakeholders and community groups. • Some suggestions were made about a new bus stop at Mercer • Some comments were made about the bus timetable/service levels – i.e. whether the timetable would allow enough time in Pukekohe prior to the return trip, and whether it should be a twice a day service connecting with the AT bus services that loop around Pukekohe. 	<ul style="list-style-type: none"> • This service would replace the current fortnightly Hamilton to Pukekohe service (route 44), and provide improved connections for residents Huntly north to Pukekohe • Low cost/risk option (utilising off-peak vehicles from existing fleet) • Based on the community feedback, and staff assessment, it is recommended that this option be included in the draft WDC LTP for public consultation.

PT Option - TE KAUWHATA TO HAMILTON

Improvement Concept



Service descriptions

- One daily return trip Monday to Friday, leaving Te Kauwhata at 7am and return from Hamilton at 5.25pm
- Estimated travel time 1.2 hours each way

Estimated cost and funding

- Total Cost – \$52,000 p.a.
- WDC contributions - \$11,000

Stakeholder/community feedback	Staff assessment and recommendation
<ul style="list-style-type: none"> • General support from key stakeholders and community groups. • Some suggestions about the service could start in Meremere. • Some comments were made about this service could be well utilized by school students (a lot of students are being driven to Huntly to catch Northern Connector services). Therefore it was suggested that this service should include an additional return trip for students to get back to Te Kauwhata. 	<ul style="list-style-type: none"> • Extension of Northern Connector bus service to Te Kauwhata for one peak return trip in weekdays. • Provide access to employment and education • Strong growth projected for Te Kauwhata • Low cost/risk option • Based on the community feedback, and staff assessment, it is recommended that this option be included in the draft WDC LTP for consideration, subject to a capacity assessment of Northern Connector service.

PT Option – Hamilton to Papakura


Improvement Concept



Weekday commuter bus service intended to provide fast and direct access between Hamilton, Huntly, Pokeno and Auckland – potentially supplemented by park & ride sites.

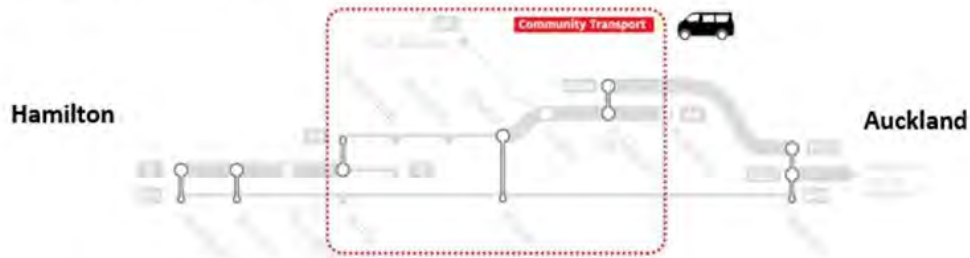
Stakeholder/community feedback	Staff assessment and recommendation
<ul style="list-style-type: none"> • Strong support for the concept and high level of responses from elected members, stakeholders and community groups. Key matters/issues raised include: <ul style="list-style-type: none"> ○ Travel time reliability, particularly the congestion is getting worse on the Southern Motorway between Bombay and Papakura. ○ Bus lanes and priority measures, both on the Southern Motorway and roads to Papakura Station are critical to ensure travel time reliability. ○ Service frequency – general support for at least 2 trips per day on weekdays. ○ Comments were made around potential bus stops and future Park and Ride sites, including Pokeno, Te Kauwhata, Mercer and Meremere. ○ Bus vehicles need to be refitted to include Wifi connections and folding tables to cater for commuters. ○ Integration of fare and ticketing system – one bus card for the whole of journey across bus/rail services. • It was acknowledged that this express bus service could be an interim solution 	<ul style="list-style-type: none"> • A wide range of feedback received on this option. Whilst they were generally supportive of the concept, there was however a number of issues raised, which will require further assessment to test the feasibility of this service. • It should also be noted that further work is being undertaken by cross-boundary partners (incl WDC, WRC, HCC, NZTA, Auckland Transport and Auckland Council) to identify potential option(s) for improving transport connections between Hamilton and Auckland (Transport Connections Strategic Business Case), which could have major implications for this proposed bus option. • Based on the community/stakeholder feedback, and the wider work being undertaken as part of Auckland to Hamilton Transport Connections Strategic Business Case, it is considered prudent that this option be included as a 'provisional activity' in year 2 of the LTP, with implementation dependent on the outcomes of: <ul style="list-style-type: none"> ○ Transport Connections Strategic Business Case, and/or any

Stakeholder/community feedback	Staff assessment and recommendation
<ul style="list-style-type: none"> • until a Hamilton to Auckland passenger rail service is put on (and potentially be replaced by this service) • There was also some suggestions that this service could stop at Pukekohe, instead of Papakura to avoid congestion on the Southern Motorway. This option could also link-in with the Pokeno to Pukekohe bus option to allow more service frequencies. • 	<ul style="list-style-type: none"> ○ passenger rail proposal that was considered by the cross-boundary transport partners ○ Detailed feasibility assessments to address the following matters: <ul style="list-style-type: none"> ▪ Travel time reliably, particularly on the Auckland network ▪ Stopping points on route and future park and ride facilities ▪ Fares/ticketing system – integration with AT Hop system

<h2 style="text-align: center;">PT Option – Port Waikato to Pukekohe</h2>	
<p>Improvement Concept</p>  <p>Existing weekly service</p> <ul style="list-style-type: none"> • Retaining the existing once a week service or consider community transport options • Existing service – approx 900 boardings a year • Contract costs - \$17, 440 p.a. (currently funded by WDC) 	
Stakeholder/community feedback	Staff assessment and recommendation
<ul style="list-style-type: none"> • Limited feedback from the Port Waikato community. • Some support from other community boards for replacing the existing service with an on-demand community shuttle service. 	<ul style="list-style-type: none"> • Due to low level of stakeholder and community responses, it is recommended that this service be retained until further community engagement work is undertaken to understand the potential impact or general desire from the local community.

PT Option – Community Transport

Improvement Concept



Community based transport

- A charitable trust is set up and a basic business plan developed
- The vehicle is operated by local community volunteers
- Passengers will contact the trust (usually by phone) to book travel
- Successfully implemented elsewhere in NZ - requires local champion

Stakeholder/community feedback

- High level support for the community transport concept
- Support WRC to work in partnership with local community trusts and other community service providers, to provide advice, coordination and funding support

Staff assessment and recommendation

- The concept has been well received by the community groups and stakeholders
- It is recommended that this option be considered in the draft WDC LTP, with an aim to develop a business model for supporting community transport initiatives. This work will link to the research project that is being undertaken in Tokora/South Waikato.

Open Meeting

To	Infrastructure Committee
From	Tim Harty General Manager Service Delivery
Date	10 November 2017
Prepared by	Michelle Smart Property Officer
Chief Executive Approved	Y
Reference #	INF2017, 03801/170.03
Report Title	Razorback Road Spring Site

I. EXECUTIVE SUMMARY

The Pokeno Village was originally supplied with water from a bore located on Razorback Road, and from a spring located on part Allotment 116 Suburban Section 1 Parish of Mangatawhiri. The Village is now supplied via a connection to Water Care Services Limited (“Watercare”).

In October 2016, the treatment site including timber tank reservoirs located at 471A Razorback Road, (located approximately 200 metres to the east of the spring site) were by Resolution WDC 1610/03/3/7 declared surplus to Council requirements; a section 40 PWA offer back process is underway.

The Razorback Road bore has been capped; the pump to source water from the spring has been removed, and the Regional Council consents to take water have been surrendered. Council’s Waters Manager has confirmed that the spring site, and associated easements, are now redundant and the land and associated easements are no longer required for the public work purpose for which it was originally acquired.

The Public Works Act 1981 places legal obligations on Council to offer to sell the land back to the former owner/s, or their successor/s, at a price to be established by market valuation.

The land is unable to be put to another non-public work use, until such time as the Public Works Act offer back obligations have been completed.

The first stage of the process requires Council to declare the land, and associated easements, to be no longer required for the purpose for which they were acquired, which then enables the legal processes to commence.

2. RECOMMENDATION

THAT the report from the General Manager Service Delivery be received;

AND THAT part Allotment 116 Suburban Section I Parish of Mangatawhiri contained in Computer Interest Register 43747, and easements created by Proclamation B131440.1, be declared surplus to Council requirements, and Council carries out its offer back obligations under section 40 Public Works Act 1981;

AND FURTHER THAT if the former owner/s, or their successor/s, take up the offer, that the proceeds of sale, less costs (including costs associated with the decommissioning of the site) are to be credited to the Property Proceeds Reserve;

AND FURTHER THAT if the former owner/s, or their successors, do not take up the offer that the land remains in Council ownership pending further decisions about its use.

3. BACKGROUND

In 1982, Franklin County Council acquired a parcel of land (now) described as part Allotment 116 Suburban Section I Parish of Mangatawhiri (now) comprising approximately 462 square metres (subject to survey) as a Public Work (for water supply purposes). Refer Attachment 1: Location Diagram

The Pokeno Village was originally supplied with water from a bore on Razorback Road, and from the spring on this site. Water from the spring was conveyed via underground pipe to the treatment and storage site at 471A Razorback Road, which is located approximately 200 metres to the east of the spring. The pipe network is legally protected by way of registered easements.

The Village is now supplied via a connection to Watercare.

In October 2016, the treatment site including timber tank reservoirs located at 471A Razorback Road were (by Resolution WDC 1610/03/3/7) declared surplus to Council requirements, a section 40 PWA offer back process is underway.

Council's Waters Manager has confirmed that the spring site, and associated easements, are now redundant and the land and associated easements are no longer required for the public work purpose for which it was originally acquired.

The Razorback Road bore has been capped; the pump to source water from the spring has been removed, and the Regional Council consents to take water have been surrendered.

4. DISCUSSION AND ANALYSIS OF OPTIONS

4.1 DISCUSSION

The land that was the old Pokeno water source and treatment site is not required in connection with any other public work, but is not able to be put to another Council purpose, until such time as Council has completed its obligations under section 40 of the Public Works Act 1981 (“PWA”).

Section 40 PWA requires Council to offer to sell the land back to the former owner/s or their successor/s at a price established by market valuation, with the valuation date to be the date that the property is no longer required for the purpose for which it was acquired.

The PWA does provide certain exceptions from the offer back obligations, on the grounds of it being impracticable, unfair or unreasonable to do so.

The first stage of the process requires Council to declare the land and associated easements surplus to requirements, to enable the legal processes to commence. There are no Right of First Refusal obligations in relation to this property.

Even though the water supply site is held in a separate certificate of title (CIR 43747), the land is unable to accommodate a dwelling because of its size and shape. In the event that the former owner/s or their successor/s, does not elect to take up the option to purchase the land for amalgamation with their surrounding landholdings, the land is not able to be sold on the open market (Refer Attachment 2: CIR 43747).

It is therefore a recommendation of this report that in the event the offer back option is not exercised, that the land remain in Council ownership pending further decisions about its use.

4.2 OPTIONS

Option 1: Council can declare the property surplus to the requirement for which it was acquired, which will enable the completion of section 40 PWA offer back obligations.

This option is recommended.

Option 2: Council can decline to declare the property surplus to requirements.

The land will remain in Council ownership until such time as it is declared surplus to Council requirements.

Council remains under an obligation to use the land for a public work and is unable to put the land to another non-public work use until the section 40 PWA obligations have been completed.

This option is not recommended.

5. CONSIDERATION

5.1 FINANCIAL

In the event that the former owner/s or their successor/s elects to take up the offer, the proceeds of sale, less costs, including costs associated with the decommissioning of the site are to be credited to the Property Proceeds Reserve.

5.2 LEGAL

Section 40(1) of the PWA places an obligation upon Council to offer to sell the land back at a price established by market valuation, to the original owner or their successor/s, where that land is no longer required for the purpose for which it was acquired and the land is not required in connection with another public work.

Section 40(2) of the Act provides exceptions, where it would be impracticable, unfair or unreasonable to do so.

5.3 STRATEGY, PLANS, POLICY AND PARTNERSHIP ALIGNMENT

Council's Property Policy provides that land may be disposed of at a price established by valuation, unless otherwise resolved by Council.

5.4 ASSESSMENT OF SIGNIFICANCE AND ENGAGEMENT POLICY AND OF EXTERNAL STAKEHOLDERS

The Significance and Engagement Policy requires Council to take into account the degree of importance and determine the appropriate level of engagement, as assessed by the local authority, of the issue, proposal, decision or matter, in terms of the likely impact on and consequence for:

- (a) The district or region;
- (b) Any persons who are likely to be particularly affected by, or interested in, the issue, proposal, decision or matter;
- (c) The capacity of the local authority to perform its role and the financial and other costs of doing so.

The Policy identifies water as a core service and significant activity of Council.

The Policy provides at Schedule I a list of Waikato District Council's strategic assets, which further identifies the water treatment plants and reticulation network as a whole to be a strategic asset.

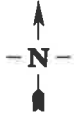
Pokeno is now supplied with water from Watercare. The Waters Manager has confirmed that both the Razorback Road water supply site and the treatment site are no longer required for water supply purposes. The recommendations of this report therefore do not trigger significance and engagement requirements.

6. CONCLUSION

The recommendations of this report, if approved, will allow Council to fulfil its obligations under the Public Works Act 1981 and will allow Council to divest itself of land that is no longer required for the purpose for which it was originally acquired.

7. ATTACHMENTS

- Attachment 1: Location Diagram Razorback Road - Water Supply site
- Attachment 2: Computer Interest Register 43747



Waikato District Council does not warrant the accuracy of information in this publication and any person using or relying upon such information does so on the basis that WDC shall bear no responsibility or liability whatsoever for any errors, faults, defects or omissions in the information



SCALE 1:2156

Cadastre sourced from Land Information
New Zealand under CC-BY
Copyright © Waikato District Council

Projection: New Zealand Transverse Mercator
Datum: New Zealand Geodetic Datum 2000

Print Date: 27/10/2017

A4



**COMPUTER INTEREST REGISTER
UNDER LAND TRANSFER ACT 1952**



Search Copy

R W Muir
Registrar-General
of Land

Identifier 43747
Land Registration District North Auckland
Date Registered 11 June 2002 12:39 pm

Part-Cancelled

Prior References

GN B131440.1

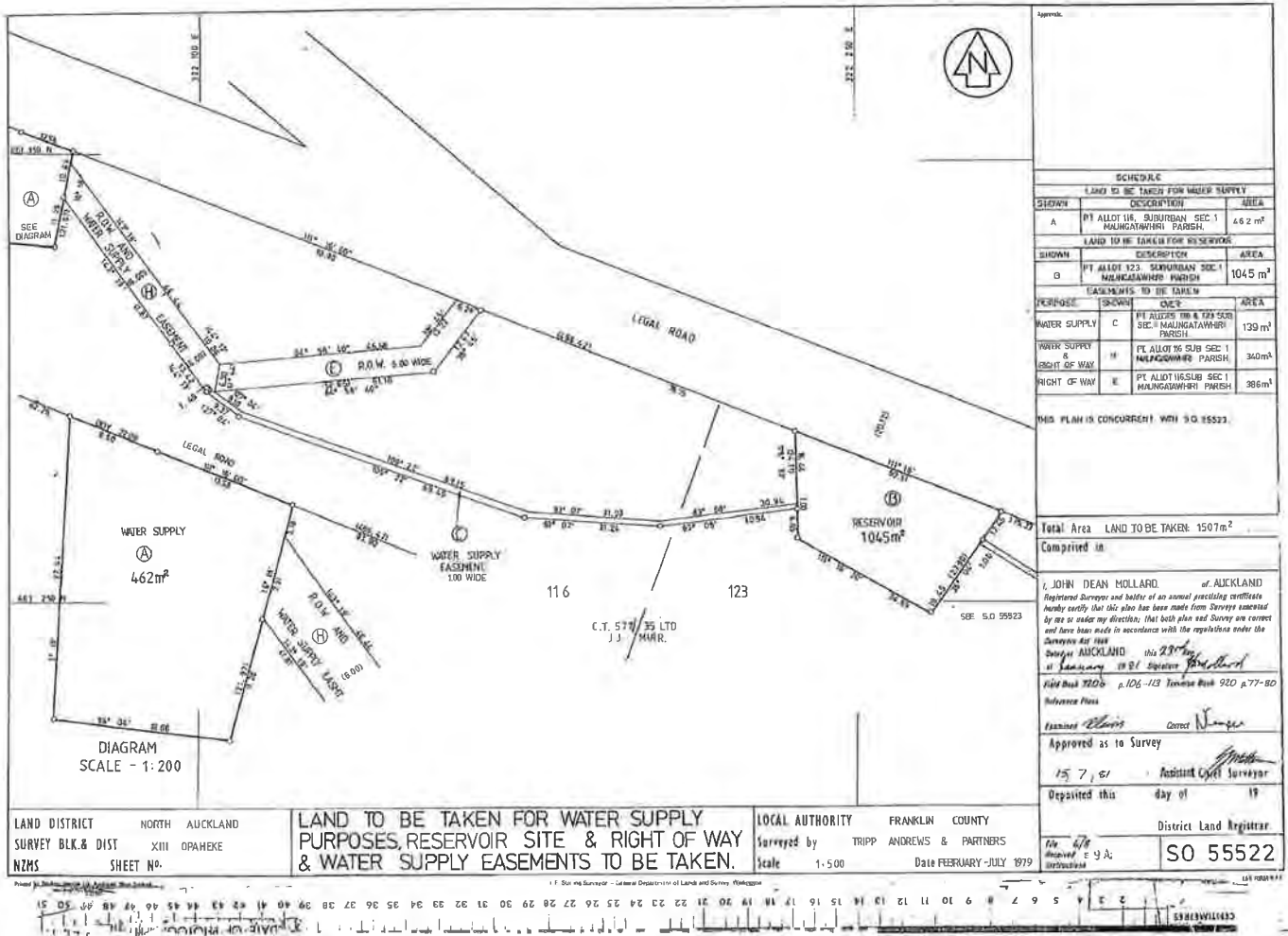
Type Fee Simple
Area 1507 square metres more or less
Legal Description Part Allotment 116 Section 1 and Part
Allotment 123 Parish of Maungatawhiri
Purpose Water Supply

Proprietors

The Franklin District Council

Interests

5249837.1 CT NA138D/834 issued for Lot 1 DP 210625 (1045m2 part Allotment 123 Parish of Maungatawhiri marked B on SO 55522) - 11.6.2002 at 12:39 pm



SCHEDULE		
LAND TO BE TAKEN FOR WATER SUPPLY		
SHOWN	DESCRIPTION	AREA
A	PT ALLOT 118, SUBURBAN SEC. 1 MAUNGATAWHIRI PARISH.	462 m ²
LAND TO BE TAKEN FOR RESERVOIR		
SHOWN	DESCRIPTION	AREA
B	PT ALLOT 123, SUBURBAN SEC. 1 MAUNGATAWHIRI PARISH.	1045 m ²
EASEMENTS TO BE TAKEN		
PERIODIC	SHOWN	AREA
	WATER SUPPLY	C PT ALLOT 118 & 123 SUB SEC. 1 MAUNGATAWHIRI PARISH.
	WATER SUPPLY & RIGHT OF WAY	D PT ALLOT 118 SUB SEC. 1 MAUNGATAWHIRI PARISH.
	RIGHT OF WAY	E PT ALLOT 118 SUB SEC. 1 MAUNGATAWHIRI PARISH.

THIS PLAN IS CONCURRENT WITH S.O. 15523.

Total Area LAND TO BE TAKEN 1507m²
Comprised in

I, JOHN DEAN MOLLARD, of AUCKLAND Registered Surveyor and holder of an annual practicing certificate hereby certify that this plan has been made from surveys conducted by me or under my direction; that both plan and Survey are correct and have been made in accordance with the regulations under the Surveyors Act 1908.

Witness my hand and the Seal of my Office at AUCKLAND this 23rd day of January 1979.

Field Book 1020 p.106-113 Tenon Book 920 p.77-80 Reference Plans

Examined *[Signature]* Correct *[Signature]*

Approved as to Survey

15 7 79 Assistant Civil Surveyor

Deposited this day of 1979

District Land Registrar

LAND DISTRICT NORTH AUCKLAND SURVEY BLK. & DIST XIII OPAHEKE NZMS SHEET No. LAND TO BE TAKEN FOR WATER SUPPLY PURPOSES, RESERVOIR SITE & RIGHT OF WAY & WATER SUPPLY EASEMENTS TO BE TAKEN. LOCAL AUTHORITY FRANKLIN COUNTY Surveyed by TRIPP ANDREWS & PARTNERS Scale 1:500 Date FEBRUARY-JULY 1979



Open Meeting

To	Infrastructure Committee
From	Gavin Ion Chief Executive
Date	13 November 2017
Prepared by	Lynette Wainwright Committee Secretary
Chief Executive Approved	Y
Reference	GOV1318
Report Title	Exclusion of the Public

I. EXECUTIVE SUMMARY

To exclude the public from the whole or part of the proceedings of the meeting to enable the Infrastructure Committee to deliberate and make decisions in private on public excluded items.

2. RECOMMENDATION

THAT the report of the Chief Executive be received;

AND THAT the public be excluded from the meeting to enable the Infrastructure Committee to deliberate and make decisions on the following items of business:

Confirmation of Minutes dated Tuesday 26 September 2017

REPORTS

a. Ad Hoc Land Purchase – Te Kowhai

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: **Ground(s) under section 48(1) for the passing of this resolution is:**

Section 7(2)(a)(b)(ii)(i)(j)

Section 48(1)(3)(d)

b. 2017/18 Inorganic Collection

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: Ground(s) under section 48(1) for the passing of this resolution is:

Section 7(2)(h)(i)(j)

Section 48(1)(3)(d)

c. Water CCO Draft Better Business Case

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: Ground(s) under section 48(1) for the passing of this resolution is:

Section 7(2)(f)(i)(h)

Section 48(1)(3)(d)

d. Rural Monthly Recycling Collection

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: Ground(s) under section 48(1) for the passing of this resolution is:

Section 7(2)(b)(i)(ii)(c)(i)(ii)(j)

Section 48(1)(3)(a)(i)(ii)(b)(i)(ii)(d)

e. Update on Options for Community Facility at Port Waikato and Approval for Further Consultation

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: **Ground(s) under section 48(1) for the passing of this resolution is:**

Section 7(2)(a)(b)(ii)(i)(j)

Section 48(1)(3)(d)

f. Competing Interest in Lots 1-3 DPS81963, Huntly

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: **Ground(s) under section 48(1) for the passing of this resolution is:**

Section 7(2)(a)(b)(ii)(i)(j)

Section 48(1)(3)(a)(d)

g. Update on Huntly i-SITE Investigations

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: **Ground(s) under section 48(1) for the passing of this resolution is:**

Section 7(2)(a)(b)(ii)(i)(j)

Section 48(1)(3)(a)(d)

h. Ngaruawahia Community Facility

This resolution is made in reliance on section 48(1)(a) and 48(2)(a) of the Local Government Official Information and Meetings Act 1987 and the particular interest or interests protected by sections 6 or 7 of that Act which would be prejudiced by the holding of the whole or the relevant part(s) of the proceedings of the meeting in public are as follows:

Reason for passing this resolution to withhold exists under: **Ground(s) under section 48(1) for the passing of this resolution is:**

Section 7(2)(i)(j)

Section 48(1)(3)(d)