

BEFORE THE AUCKLAND UNITARY PLAN INDEPENDENT HEARINGS PANEL

IN THE MATTER of the Resource Management Act 1991
and the Local Government (Auckland
Transitional Provisions) Act 2010

AND

IN THE MATTER of Topic 016 RUB North/West and Topic
017 RUB South

AND

IN THE MATTER of the submissions and further submissions
set out in the Parties and Issues Report

**STATEMENT OF EVIDENCE OF DAWNE LYNETTE MACKAY,
ON BEHALF OF AUCKLAND COUNCIL**

(FUTURE URBAN LAND SUPPLY STRATEGY)

14 OCTOBER 2014

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1. SUMMARY

- 1.1 The Future Urban Land Supply Strategy (**FULSS**) focuses exclusively on approximately 11,000 hectares of land in Auckland's North, North-west and South which has been zoned as Future Urban. This represents a significant resource for accommodating urban growth over the next 30 years. Through high level planning work undertaken this land is estimated to have additional capacity for approximately 105,000 dwellings and 51,000 jobs.
- 1.2 Currently, this land is largely rural. To support urban development of the land will require the delivery of major infrastructure projects; many of which require significant budgets and timeframes for planning, consenting and building.
- 1.3 The FULSS has been developed under the Local Government Act 2002 (**LGA 2002**), to complement the Resource Management methods and provisions of the Proposed Auckland Unitary Plan (**PAUP**). It will provide certainty for the community, including developers, on when council is programming land use planning (structure plans and plan changes) and infrastructure planning and delivery. There is also some flexibility for amendments to the strategy based on a comprehensive monitoring programme.
- 1.4 The government has recognised the need for longer term planning of infrastructure through the requirements for all councils to develop 30 year infrastructure strategies as part of their long-term planning. Auckland Council's (**Council**) first 30-year Infrastructure Strategy was adopted as part of its Long-term Plan 2015-2025. Through this work the cost of infrastructure to service greenfield growth has been identified as a major challenge. The FULSS will enable council to better understand and manage the timing and delivery of required infrastructure. The evidence in the strategy will inform future long-term plans.

2. INTRODUCTION

- 2.1 My name is Dawne Lynette Mackay. I am the Manager of the Growth and Infrastructure Strategy Team at Council. I have been in this position since June 2015. Prior to this I was a Principal Specialist with the Transport and Infrastructure Strategy Unit at the Council.
- 2.2 I have a Bachelor of Planning and a Bachelor of Architecture, both from the University of Auckland. I have 23 years of experience in resource management planning and I

am a full member of the New Zealand Planning Institute. Full details of my qualifications and relevant experience are set out in **Attachment A** to my evidence.

- 2.3 I am providing evidence on behalf of the Council in relation to Topic 016 RUB North/West and Topic 017 RUB South (**Topic 016/017**). My evidence focuses on an overview of the FULSS, which will help to inform the implementation of the Rural Urban Boundary (**RUB**).

3. CODE OF CONDUCT

- 3.1 I confirm that I have read the Code of Conduct for Expert Witnesses contained in the Environment Court Practice Note 2014 and that I agree to comply with it. I confirm that I have considered all the material facts that I am aware of that might alter or detract from the opinions that I express, and that this evidence is within my area of expertise, except where I state that I am relying on the evidence of another person.

4. SCOPE

- 4.1 My evidence focuses on the draft FULSS and will address the following matters:
- (a) The purpose and scope of the FULSS;
 - (b) The statutory framework within which the FULSS was developed, including its relationship to other policy documents (Auckland 30-year Infrastructure Strategy and the Thirty Year New Zealand Infrastructure Plan 2015); and
 - (c) The process undertaken to develop the FULSS.
- 4.2 My evidence also provides an overview of how the Council intends to proactively manage the planning and development of the Future Urban Zone (**FUZ**), to get this land ready for development, through the FULSS.

5. PURPOSE OF THE FUTURE URBAN LAND SUPPLY STRATEGY

- 5.1 The concept of the FULSS was introduced by Michael Tucker in his Topic 013 RPS Urban Growth (**Topic 013**) evidence¹, and in his supplementary evidence², where he stated that a “land release programme” such as the FULSS is intended to “provide a level of certainty to the wider community (ie the public, infrastructure providers, iwi, the development sector, central government, land owners and the Council) about the

¹ Evidence Michael Tucker 24 November 2014 at 10.7

² Supplementary evidence Michael Tucker 30 January 2015.

timing of growth in the FUZ.”³ This does not preclude the lodgement of private plan changes for rezoning, but signals to developers and landowners whether or not funding for the necessary bulk infrastructure will likely be available at a particular time.

5.2 Since this evidence was presented, a draft FULSS has been developed and consulted on through a Special Consultative Procedure under the LGA 2002. This evidence provides an overview of how the Council intends to proactively manage the planning and development of the FUZ through the FULSS.

5.3 The FULSS identifies a programme designed to enable phased urban development of the FUZ land within the RUB. It is intended to signal when land will become “development-ready”, by indicating the phasing of where and when structure planning, rezoning and bulk infrastructure projects will occur. It does not include FUZ areas outside the RUB, such as that in some rural and coastal settlements, nor does it address the timing of development in brownfield areas.

The draft FULSS indicates that the strategy will:

- *Help to inform Auckland Council infrastructure planning and management of its infrastructure funding priorities and sequencing*
- *Help to inform central government, such as the Ministry of Education, with medium to long-term projections, locations and investment decisions*
- *Help to inform private sector infrastructure providers with forward planning and investment decisions.*

5.4 A copy of the draft FULSS, which as I discuss later in my evidence was notified for public consultation in July 2015, is included with my evidence as **Attachment B**. The draft FULSS is structured so as to provide:

- (a) Background information;
- (b) A programme for the sequencing of the Future Urban Areas;
- (c) Information about the cost and scale of the infrastructure network for the Future Urban Zone land;
- (d) Information about monitoring and review;
- (e) An appendix with a brief overview of the areas considered; and
- (f) An appendix setting out the principles applied to underpin sequencing decisions.

³ Ibid at 3.1

- 5.5 The development of greenfield land for urban activities requires the provision of bulk infrastructure which demands significant funding, programming and planning by infrastructure providers.
- 5.6 Servicing FUZ land to make it development-ready is best done on a scale that results in the most cost-effective delivery of bulk infrastructure to ensure that economies of scale are optimised. As public funds are limited, it is not possible, efficient or cost effective for bulk infrastructure to be provided in a piecemeal fashion over the whole of the FUZ area at the same time.
- 5.7 The sequenced programme within the FULSS provides the appropriate level of detail and certainty to infrastructure providers to enable them to develop the most cost-effective infrastructure development programmes. The New Zealand Transport Agency (**NZTA**), Auckland Transport (**AT**) and Watercare Services Ltd (**Watercare**), among other providers, have been involved in the development of the draft FULSS and support the sequencing of areas set out in the draft Strategy.

6. THE STATUTORY CONTEXT

- 6.1 The FULSS has been developed under the LGA 2002 and will complement resource management methods and provisions in the PAUP. In particular, the FULSS provides information on where and when land is programmed to be development-ready. This provides an indication of timing needed for structure planning initiated by the Council and plan change processes under the Resource Management Act 1991 (**RMA**), in conjunction with the delivery of bulk infrastructure projects. The FULSS is not the mechanism to confirm the RUB, this will be addressed through decisions on the PAUP.
- 6.2 All local authorities are empowered by the LGA 2002, with the purpose of local government being set out in the LGA 2002 s10. Of particular relevance to the FULSS, is the purpose of local government in s10(b):

“(b) to meet the current and future needs of communities for good-quality local infrastructure, local public services, and performance of regulatory functions in a way that is most cost-effective for households and businesses.”

“Good quality”, in relation to infrastructure is:

(a) efficient; and

(b) effective; and

(c) appropriate to present and anticipated future circumstances.”

- 6.2 The core services to be considered by councils are set out in s11A of the LGA 2002 and include network infrastructure, public transport services, waste collection and disposal, libraries, museums, reserves and other recreational and community facilities.
- 6.3 Thus, the Council is required to undertake a number of planning and budgetary functions that sit outside, but logically operate alongside, the RMA. The FULSS is a non-RMA strategy that will ensure that as land in the FUZ is structure planned and rezoned, bulk infrastructure is in place at the same time to enable urban development to take place.
- 6.4 The FULSS focuses on the future urban areas located in the:
- North: Warkworth, Wainui and Silverdale-Dairy Flat
 - North-west: Whenuapai, Redhills, Kumeu-Huapai and Riverhead
 - South: Puhinui, Takanini Opaheke-Drury, Paerata and Pukekohe.
- 6.5 This is an area of approximately 11,000 hectares. As a comparison this equates to approximately one and a half times the physical area of urban Hamilton. The scale of this area, and its 30 year time horizon, indicates there is a need for Council to clearly articulate when and where new FUZ areas within the RUB will be development-ready.
- 6.6 A programme for aligning and managing the FUZ areas for urban development is set out in the draft FULSS. This not only meets the requirements of the LGA 2002 but demonstrates good resource management practice, by enabling the efficient use of the land resource.
- 6.7 Under the RMA, the FULSS contributes to meeting the objectives and policies of the Proposed Unitary Plan's Regional Policy Statement sections B2.1 and 2.3. In particular, B2.3 policy 4 as amended by the Council's evidence for Topic 013 seeks to ensure that structure planning and rezoning of future urban land follows an agreed programme. It is also a method identified in the Regional Policy Statement.

Specific Local Government Requirements for Auckland

- 6.8 The Council was formed under the Local Government (Auckland Council) Act 2009 (**LGACA 2009**). The legislation specifically required the Council to develop a spatial plan *"to contribute to Auckland's social, economic, environmental and cultural well-being through a comprehensive and effective long-term (20- to 30-year) strategy for*

Auckland's growth and development."⁴ The spatial plan that has been developed is the Auckland Plan.

- 6.9 The key aspects of the Auckland Plan, and the Development Strategy encompassed within it, have been discussed in Chloe Trenouth's evidence for Topic 013 and for this Topic 016/017.
- 6.10 In particular, s79 of the Local Government (Auckland Council Act) 2009 (**LGACA**) required the spatial plan to show "*how growth may be sequenced and how infrastructure may be provided*"⁵. The draft FULSS provides further detail on aspects of the Development Strategy by setting out a sequenced programme for enabling development of FUZ land inside the RUB. It is Council's proposed programme to indicate where and when growth will be accommodated.
- 6.11 The draft FULSS has been developed under the LGA 2002 to provide clear direction on timing and sequencing of new growth areas within the RUB. It will assist in the forward planning and provision of infrastructure and public services that are efficient, effective and appropriate⁶ to present and future circumstances.

Funding the delivery of core services, including infrastructure – the LTP

- 6.12 Under s93 of the LGA 2002 councils are required to develop and adopt a Long-term Plan (**LTP**) – a 10 year budget. The LTP sets out how and when the council will fund infrastructure projects, core services and other functions. It is reviewable every three years.
- 6.13 While development contributions can be collected to fund some of the core services (outlined above), there are other large infrastructure items and networks that the Council must still fund through borrowing and rates. These include some roads, stormwater management systems, open space, community facilities and libraries. In areas of substantial growth, new schools, social and medical services and hospitals may need to be funded and provided by Central Government.
- 6.14 It is not financially viable to fund and provide these services in all areas across the region at the same time, and it is not economically efficient to provide bulk infrastructure if all areas are rezoned at once or smaller areas are rezoned on a first in first served basis. It is more efficient and cost effective to focus on particular areas of a scale which recognises the sub-regional nature of the infrastructure projects that will

⁴ Local Government (Auckland Council) Act 2009, at s79 (2).

⁵ Ibid at s79(4)(b)

⁶ LGA 2002 at s10(2).

be needed to service new urban areas. Generally, there are also efficiencies delivered by starting from the existing urban edge and moving progressively out. This not only enables new development to be integrated with the existing urban form, but it provides the greatest gains in terms of capitalising on and extending existing infrastructure.

- 6.15 While the FULSS is a 30 year programme, the greatest certainty about funding for the first 10 years sits within the current LTP. The FULSS provides an indication for subsequent decades of the most likely planning and infrastructure programming for particular areas, but these can be reviewed in much the same way that the longer term infrastructure planning can be reviewed at each 3 yearly review of the LTP. This ensures that the FULSS is flexible to respond to changing growth demand, and funding decisions, including proposals for alternative funding.
- 6.16 The evidence of Douglas Fairgray⁷ indicates that “*The FUZ is not intended to function on its own.*” and that in his view “*the FUZ and RUB and FULSS are each very important influences on urban growth processes; and that in combination these mechanisms will have a critical role in achieving Auckland’s growth objectives.*”
- 6.17 The FULSS is based on the RUB providing a definitive line through decisions on the PAUP for the 30-year extent of urban growth, with the FUZ enabling and facilitating growth rather than restricting it⁸. The FULSS provides a clear indication to landowners, developers, infrastructure providers and local communities about the timing of urbanisation within the RUB, and enables the proposed development to be planned and integrated with infrastructure construction and financial planning programmes, such as the Council’s LTP. However, it enables flexibility in programming where and when land will be development-ready with regular monitoring, as part of a wider monitoring programme, underpinning any amendments to the programme sequencing.

7. THE 30 YEAR INFRASTRUCTURE STRATEGY

- 7.1 Following amendments to the LGA 2002 in 2014, all councils are now required to develop an Infrastructure Strategy as part of their LTP process. The Infrastructure

⁷ Evidence Douglas Fairgray 13 March 2015

⁸ Evidence Douglas Fairgray 13 March 2015

Strategy sits with council's financial strategy. As required by a new section, s101B *Infrastructure Strategy*⁹, Council's 30 Year Infrastructure Strategy:

- Identifies significant infrastructure issues for the 30 year timeframe covered by the strategy (including the renewal or replacement of assets, the potential increases or decreases in levels of service and maintain or improve public health and environmental specifications. Mitigating any adverse effects on them);
- Identifies options and implications for managing those issues;
- Responds to growth or decline in the demand for services from those assets; and
- Ensures that infrastructure assets are resilient to natural hazards, by identifying and managing those risks and providing finances for those risks.

7.2 The requirement for the Council to manage its infrastructure assets for the next 30 years¹⁰ and to respond to growing (or declining) “*demand for the services reliant on those assets*”¹¹ means that forward planning by the Council will ensure that existing and proposed urban areas are appropriately serviced by infrastructure within appropriate timeframes.

7.3 This forward planning includes growth planning exercises and monitoring to ascertain what the capital and operating costs will be as areas intensify or grow.

7.4 The Infrastructure Strategy must also indicate its projected capital and operating expenditure¹² for major infrastructure projects for “at least 30 consecutive financial years”¹³. The infrastructure assets that need to be accounted for are:

“(a) *existing or proposed assets to be used to provide services by or on behalf of the local authority in relation to the following groups of activities:*

- *(i)water supply:*
- *(ii)sewerage and the treatment and disposal of sewage:*
- *(iii)stormwater drainage:*
- *(iv)flood protection and control works:*
- *(v)the provision of roads and footpaths; and*

*(b) any other assets that the local authority, in its discretion, wishes to include in the strategy.”*¹⁴

⁹ LGA 2002 s101B

¹⁰ LGA 2002 s101B(1).

¹¹ LGA 2002 s101B(3)(b).

¹² LGA 2002 s101B(4).

¹³ LGA 2002 101B(1).

¹⁴ LGA s101B(6).

- 7.5 As outlined above, the Council's 10-year funding tool programme is the LTP. This provides the greatest certainty for funding in the first three years of the LTP, with funding for subsequent years being proposed only. As the LTP is reviewed every three years, budgets can be confirmed, reprioritised, reduced or increased on an on-going three-yearly basis.
- 7.6 The Council's 30-year Infrastructure Strategy was developed in conjunction with infrastructure providers and underwent consultation as part of the LTP 2015 consultation, under the Special Consultative Procedure set out in s83 of the LGA 2002.
- 7.7 The Council's 30 Year Infrastructure Strategy includes eight pages (Pages 71-78) on likely future infrastructure needs for FUZ areas. The LTP was adopted by the Council on 25 June 2015 and contains sufficient information on future infrastructure projects to enable the FULSS to be implemented to support the first stages of Auckland's greenfield growth.
- 7.8 However, the Infrastructure Strategy also identifies that the *"real opportunity that this strategy presents is providing robust and consistent processes around future projects; those projects which have not yet been identified or made it to the drawing board"*¹⁵. This is then discussed further in section 6.8 of the Infrastructure Strategy, where providing infrastructure for greenfields areas is identified as the major challenge for Auckland over the next 30 years. *"Providing infrastructure for new communities in a way that aligns with growth locations and capacities required, delivers on urban form, sustainability and resilience outcomes and is affordable will require collaborative processes to understand what we need to deliver, where and when."*¹⁶ The Infrastructure Strategy then sets out, for each of the major FUZ areas (North, North-west and South) the issues by infrastructure type, the principal options for managing those issues and the processes and decisions that will need to be made. The FULSS is listed as a mechanism that will assist with decision making.
- 7.9 While the LTP and the 30 Year Infrastructure Strategy are required by the LGA 2002, the FULSS is not explicitly required by legislation. However, it fulfils some of the responsibilities that the LGA 2002 requires of councils and provides alignment between growth planning processes and the strategic planning for the infrastructure needed to service growth.

¹⁵ Auckland 30-year Infrastructure Strategy, 2015, Page 39

¹⁶ Auckland 30-year Infrastructure Strategy, 2015, Page 71

7.10 As 30-year strategic documents, the 30 Year Infrastructure Strategy and the FULSS will complement each other to meet the growth needs projected by the Auckland Plan Development Strategy – also with a 30-year horizon. They are the implementation tools for managing growth across Auckland and, in particular, will ensure that new development within the RUB occurs in an efficient and cost-effective manner.

8.0 THE NATIONAL CONTEXT: RELATIONSHIP OF THE FULSS TO THE THIRTY YEAR NEW ZEALAND INFRASTRUCTURE PLAN 2015

8.1 Central Government has just released its third national infrastructure plan which seeks to ensure that "*New Zealand's infrastructure is resilient and co-ordinated infrastructure and contributes to a strong economy and high living standards.*"¹⁷

8.2 Initiatives such as the Draft FULSS are seen as having a key role in achieving the vision in The Thirty Year National Infrastructure Plan 2015 (**NIP**). It is used as an example of the necessary co-ordination and prioritisation of land use planning and infrastructure delivery to meet future population growth, in a way that contributes to high living standards and economic growth – the main objectives of the NIP.

8.3 The FULSS is referred to in five sections of the NIP (Refer to **Attachment C**). In the first instance it is in the section called *Focus on Auckland*¹⁸, which highlights the challenges, opportunities and costs that will arise from the population growth expected in Auckland. The FULSS is one of seven initiatives listed:

*"The Future Urban Land Supply Strategy currently under development that will take a 30-year view of future urban land and allow coordination of infrastructure."*¹⁹

8.4 The NIP then provides examples of actions that will assist in understanding and decision-making pertaining to infrastructure demands for future housing and other land uses. For example, the FULSS is recognised as a tool to:

- "maintain a pipeline of development capacity across Auckland";²⁰
- enable the sequencing of structure planning and live zoning of future urban areas to then support the provision of housing, employment, community facilities, open space and infrastructure;²¹

¹⁷ The Thirty Year New Zealand Infrastructure Plan 2015, National infrastructure Advisory Board at Page 4.

¹⁸ Ibid at Page 41

¹⁹ Ibid

²⁰ Ibid at Page 55

- integrate planning and infrastructure delivery through collaboration with infrastructure providers²², over the long term to ensure there is adequate investment in high-growth communities;²³
- ensure that business and industrial land which provide employment are encompassed in the integrated land-use planning and freight transportation network planning; and
- co-ordinate the PAUP with RMA reforms, the Auckland Transport Alignment Programme and other national land transport work programmes for greater land-use and infrastructure planning integration.

8.5 For Auckland specifically, the FULSS is also seen as a tool to achieve the NIP's vision of Auckland becoming less congested by ensuring that *"transport projects are planned in a way that is integrated with land use planning (Auckland Council)"*.²⁴

8.6 The FULSS is also embedded in the Action Plan response framework found in Appendix 1: Action Plan of the NIP, under the heading *"Cross-Cutting Initiatives"*.²⁵

"The Future Urban Land Supply Strategy is being developed in order to maintain a pipeline of development capacity across Auckland. It will sequence structure planning and live zoning of the future urban areas to achieve the best outcomes for the provision of housing, employment, community facilities, open space and infrastructure, including transport. The strategy is being developed as a collaborative project including involvement by infrastructure providers recognising the importance of aligning infrastructure delivery with planning. The Strategy will be complete by October 2015 with implementation following."

8.7 The NIP recognises the FULSS as an important strategy that will ensure that growth in Auckland is accommodated and planned in an integrated manner with the provision of the necessary infrastructure to support growth. It is seen as a key contributor to the longer term national objectives of improving the standard of living and economic growth.

²¹ Ibid

²² Ibid

²³ Ibid at Page 61

²⁴ Ibid at Page 58

²⁵ Ibid at Page 78.

9. PROCESS OF DEVELOPING THE FULSS

9.1 The process of developing the FULSS was set out by Michael Tucker in his Topic 013 Evidence.²⁶ It was then expanded upon in his Supplementary Evidence on 30 January 2015.²⁷

9.2 During 2015, the draft FULSS has been prepared following a series of workshops with internal and external infrastructure providers, elected members and staff, including from the Housing Project Office.

9.3 The following four principles guided the prioritisation of areas:

1. Optimise the outcomes from investment
2. Supply land on time
3. Support uplifting Maori social and economic well-being
4. Create good quality places

The expanded set of principles is contained in Appendix 2 of the draft FULSS in **Attachment B**. The prioritisation was influenced by the ability to deliver bulk infrastructure in different areas of the RUB according to existing and proposed infrastructure investment programmes, and the location of approved SHAs and areas subject to recent plan changes.

9.4 In order to be able to weigh up the various geographical areas against these principles, and at the same time understand the bulk infrastructure requirements and potential timing of projects, high level conceptual planning of each geographic area was undertaken.

9.5 Broad residential and business land uses, and areas of natural hazards or protection (such as Significant Ecological Areas and Outstanding Natural Landscapes) were identified. High level transport networks (Sub-Regional Area Programmes in Joshua Arbury's and Auckland Transport's evidence) were applied and integrated with an estimated number of town centres needed to service the new growth areas.

²⁶ Evidence Michael Tucker 24 November 2014, at 10.7.

²⁷ Supplementary Evidence Michael Tucker 30 January at 2.3, 2.4, 2.5

- 9.10 The potential yields of dwellings and employment numbers from each area within the RUB were then estimated. These estimates allowed an understanding of the sufficiency of the area provided within the RUB to meet the 30-year projections. They also allowed an understanding of the infrastructure that might be needed to service these areas in future. This high level work was explained to the Panel by Michael Tucker in his supplementary evidence on 30 January 2015. The yields are set out in the table below in 9.14.
- 9.11 It is noted that the draft FULSS has been completed since the 2015 LTP was adopted by the Council, but during its development the FULSS, particularly the first 10 years, was informed by infrastructure programmes and budgets identified in the LTP .
- 9.12 In addition to this, the approval of a number of SHAs under the Housing Accords and Special Housing Act 2013 (**HASHA**) has influenced the sequencing in the FULSS. Broadly speaking, the SHAs are expected to start fast-track rezoning of land for urban uses and deliver substantial housing supply in the first half of Decade One (2012-2016). It is anticipated that developers are now building homes in SHAs capable of a final yield of over 25,600 dwellings over 10-15 years²⁸.
- 9.13 Infrastructure providers have estimated broad project costs and timeframes for providing the necessary bulk infrastructure to support the areas earmarked for development. It should be noted that some types of infrastructure delivery, such as a water supply network, require significant lead-in times.

²⁸ Auckland Housing Accord Third Report for Accord Year 2, October 2014-June 2015, Auckland Council p31

9.14 The table below summarises the estimated yields for these areas:

Place	Residential Land (Gross Ha)	Additional housing capacity provided (dwellings)	Additional Population	Business Land (Gross Ha)	Additional employment capacity (EC -Jobs)
Takanini	470	4,500	11,100	0	600
Opaheke-Drury-Karaka	1,960	20,200	50,600	190	9,910
Paerata	580	6,900	17,100	50	2,560
Pukekohe	720	7,600	19,100	240	7,550
Kumeu-Huapai	830	8,600	21,500	100	3,620
Riverhead	70	600	1,600	0	0
Whenuapai	1,440	13,300	33,300	300	9,740
Redhills	600	7,100	17,800	0	0
Silverdale-Dairy Flat	1,670	22,700	56,600	330	12,970
Wainui	650	7,300	18,300	0	150
Warkworth	600	6,500	16,100	110	4,040
Total	9,590	105,300	263,100	1,320	51,140

Notes:

1. These figures are estimates of expected development in the future urban zone. They represent the higher end of the range.
2. Hectares and jobs have been rounded to the nearest 10 units.
3. Dwellings and Population have been rounded to the nearest 100 units.
4. Population figures are based on an average of 2.5 people per household across the future urban zone.
5. The centres proposed include both local and town centres.

9.15 Once the draft FULSS was prepared, the Council followed the process outlined by Mr Tucker in s5.1 and 5.2 of his supplementary evidence. The process followed is set out below:

7 July - the draft FULSS was endorsed by the Auckland Development Committee of Council for public consultation.

17 July - the draft FULSS was publicly notified, in accordance with the requirements of the Special Consultative Procedure, set out in s83 of the LGA 2002.

3, 5, 10 and 11 August - publicly advertised "Have Your Say" events were held in Warkworth, Drury, Dairy Flat and Kumeu, where a delegated deliberations panel was present to hear comments on the draft Strategy. At these events roundtable discussions took place, notes were recorded and key points relayed back to the wider audience.

17 July to 17 August - Feedback was received from and culminated in responses from around 228 parties.

- 9.16 Consultation with the community at large, mana whenua, developers, land owners and Local Boards has all been undertaken, in line with the Special Consultative Procedure set out in s83 of the LGA 2002.
- 9.17 Feedback was invited and received by a variety of means, such as at the “Have Your Say” events, through the “Shape Auckland” website and on-line form, by email and mailed in forms.
- 9.18 Overall, there was general support for this type of land development programming. However, there was a variety of comments pertaining to the proposed sequencing of the geographical areas, with many requests for particular areas to be brought forward in the sequencing programme.
- 9.19 Council staff will now present the findings to the delegated elected member panel which will then make recommendations to the Auckland Development Committee. It is anticipated that the amended Strategy will be considered for adoption by the Committee on 12 November 2015.

10 MONITORING

- 10.1 It is important that the FULSS is responsive to changing population growth demands, market conditions, and infrastructure delivery. To ensure responsiveness and the ability to deliver land for development at the right time and in the right locations, a monitoring programme will be used as part of a wider monitoring framework.
- 10.2 A critical aspect of ensuring that adequate development-ready land is available is the active monitoring of growth trends and the uptake of land that has been made available. This requires monitoring of development both inside and outside the 2010 Metropolitan Urban Area (**MUA**) to ensure there is a ready supply of development opportunities to meet demand and shifts in the market.
- 10.3 The Annual Monitoring Report of the Auckland Plan’s Development Strategy will cover a comprehensive set of key indicators, including measures of the development capacity (dwellings and business land) of both existing urban land and future urban land across Auckland.

10.4 Monitoring will track the process of delivering land for new communities in six steps:

1. Future Urban land zoned by operative plan
2. Structure plans completed
3. Land rezoned for urban uses
4. Land serviced with bulk infrastructure
5. Subdivision activity
6. New dwellings consented

10.5 This analysis will include the areas (hectares) identified for future development in the north, north-west and south; the development capacity (potential dwellings and employment); and the years of unconstrained development capacity. The PAUP seeks sufficient unconstrained development capacity to accommodate a minimum of 5 years of residential and business growth at any one time.²⁹

10.6 The monitoring report will include supporting commentary to provide context and detail to the charts and quantitative reporting.

10.7 Progress will be measured against the anticipated growth patterns and targets identified by the Auckland Plan Development Strategy, as well as the indicative time frames for structure planning and bulk service delivery set out in this document.

10.8 Areas of monitoring focus across the region will include:

- Patterns and composition of population change and growth
- The balance of growth inside and outside the 2010 MUL
- Key bulk infrastructure delivery and funding availability
- Any change in strategic direction and/or priorities

10.9 These areas of monitoring focus will be tracked over time to understand the contribution of the FULSS to the objectives of the Auckland Plan's Development Strategy. This may trigger a review process to ensure the FULSS is responsive and keeps pace with the changing development context and trends over the medium term.

10.10 The reporting timeframe will be from July to June, consistent with both the Auckland Plan Development Strategy monitoring report and the Auckland Plan Annual Implementation Update.

²⁹ PAUP RPS B2.3 Policy 1 as proposed amended in the evidence of Chloe Trenouth for Topic 013

11. CONCLUSION

- 11.1 The Draft FULSS sets out the Council's programme for future planning and infrastructure provision in Future Urban zoned land within the proposed RUB. It is based on assessment of the best information that is available to the Council, at this time. While it seeks to provide certainty about the future of the land, it is also a flexible document with the ability to be changed as funding programmes and sources are confirmed at each three yearly review of the LTP. It is also able to be amended in line with decisions made on changes to the RUB.
- 11.2 The FULSS also has the flexibility to respond to other methods of funding bulk infrastructure, should they be proposed by Central Government or the private sector. There is value in the FULSS sitting outside the PAUP processes to enable it to respond to changes in the pace of growth, to other non-RMA issues and to alternative funding drivers.
- 11.3 I am of the view that the FULSS is the most appropriate mechanism to provide a comprehensive approach to aligning land use and infrastructure provision and enabling efficient and effective urban development within the Future Urban Zone.

Dawne Mackay

14 October 2015

ATTACHMENT A

Career Summary

June 2015 – current	Manager Growth and Infrastructure Strategy, Auckland Council
2014 – June 2015	Principal Specialist, Growth and Infrastructure Strategy, Auckland Council
2010 –2014	Principal Strategic Planner, Auckland Council (including 6 months in 2014 as Acting Team Leader Spatial Strategy)
2008-2010	Strategic Policy Analyst, Regional Policy Development, Auckland Regional Council
2006-2008	Senior Environmental Planner Hastings District Council
2005-2006	Team Leader Growth and Urban Living Projects, Auckland City Council
2000-2005	Senior Planner, Auckland City Council
1996-2000	Planner/Senior Planner, Manukau City Council
1993-1996	Environmental Planning Officer, Manukau City Council
1992-1993	Assistant Planner, Auckland City Council

Qualifications

1992	Bachelor of Planning University of Auckland
1980	Bachelor of Architecture University of Auckland

Affiliations

Full membership of the New Zealand Planning Institute

Auckland Council

Draft Future Urban Land Supply Strategy

1. Background

Auckland is projected to grow by one million people over the next 30 years. This means around 400,000 new dwellings and 277,000 additional jobs will be needed. The Auckland Plan provides the Council's strategic direction on how this growth will be accommodated. As part of a quality compact approach to growth, the Plan anticipates that up to 70 per cent of new dwellings will be built within the existing urban area and up to 40 per cent outside of this.

The Auckland Plan also stresses the importance of providing a pipeline of land supply. This means providing:

- 20 years forward supply of development capacity at all times
- 7 year average (with a minimum of 5 and a maximum of 10 years) of unconstrained, and 'ready to go' land supply³⁰.

The Proposed Auckland Unitary Plan subsequently identified 11,000 hectares of land for future urbanisation with the potential to accommodate approximately 110,000 dwellings (see Map 1). This represents around one quarter of the new dwellings needed and as such forms an important component of the overall strategy for enabling Auckland's growth. In line with Auckland Plan guidance, the future urban land identified also includes approximately 1,400 hectares for new business land.

This Strategy identifies a programme to sequence this land over 30 years and will assist with the ongoing supply of greenfield land for development³¹. It is a strategic and proactive approach to delivering land that is 'ready to go' in these Future Urban areas (see Figure 1 below). As this land is predominantly rural and has not previously been identified for urbanisation, bulk infrastructure has to be provided. This programme will help to provide greater clarity and certainty to landowners, iwi, developers, infrastructure providers and Council about when Future Urban land will have bulk infrastructure in place and be ready for urban development. The programme will specifically:

- help to inform Auckland Council infrastructure asset planning and management and its infrastructure funding priorities and sequencing. It will feed directly into the Council's future Long-term Plans and the Annual Plans
- help to inform central government, such as the Ministry of Education, with medium to long-term projections, location and investment decisions
- help to inform private sector infrastructure providers with forward planning and investment decisions.

The infrastructure investment required in these areas is of such magnitude that any ad-hoc or out of sequence approach to development will have major funding implications for all providers, affect the ability to coordinate delivery, and is likely to have major implications on the ability to service other areas. This in turn may have significant consequences on the ability to provide sufficient development capacity across the region.

³⁰ Unconstrained land requires operative zoning and bulk services in place.

³¹ This Strategy deals exclusively with greenfield land identified as Future Urban zoned land in the Proposed Auckland Unitary Plan. Changes to the Proposed Auckland Unitary Plan in this regard will be reflected in an updated Strategy.

The analysis done for this Strategy is of sufficient scale and specificity to broadly determine bulk infrastructure requirements. As the diagram below (Figure 1) shows, more detailed planning of these areas through structure planning, and bulk infrastructure planning and build, are two parallel and inter-dependent processes to get land ready for development. This is the approach taken to determine the programme of sequencing and timing. The design, consenting and build of infrastructure of this scale takes time and, together with funding considerations, have been main determinants of the programme.

Structure planning and plan changes (to 'live' zonings) will be done prior to the areas being ready for development and will be undertaken by the Council (or in partnership with others) in line with the programme set out in this Strategy. This is the stage of the process where Local Boards, mana whenua and communities will be involved in the detailed planning of these areas.

The Strategy will be a live document, updated as appropriate as part of an overall monitoring strategy.

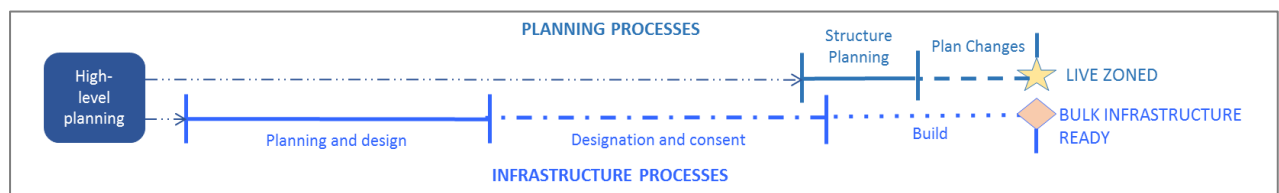
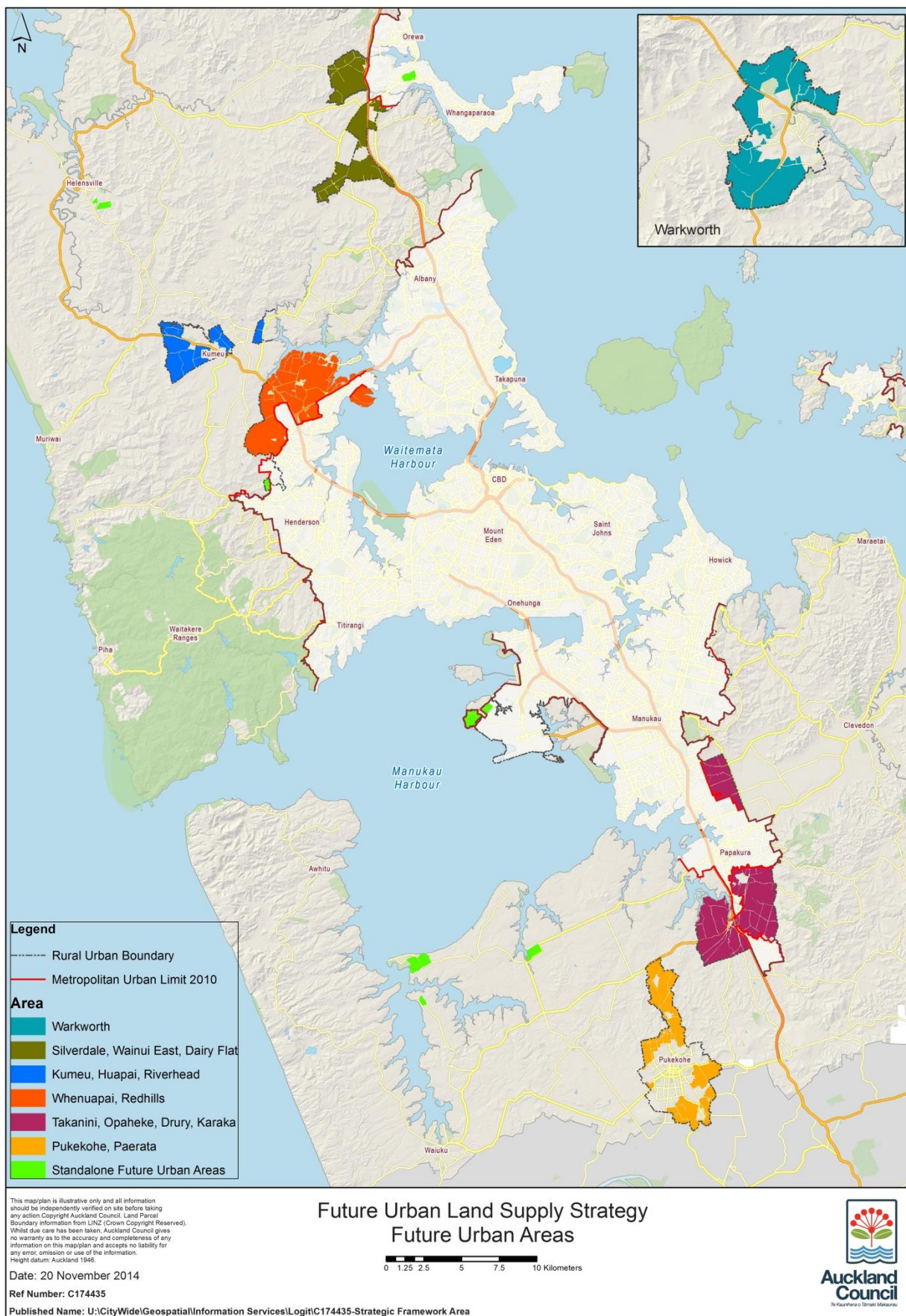


Figure 1 Coordinating planning and infrastructure



Map 1: Location of Future Urban Areas

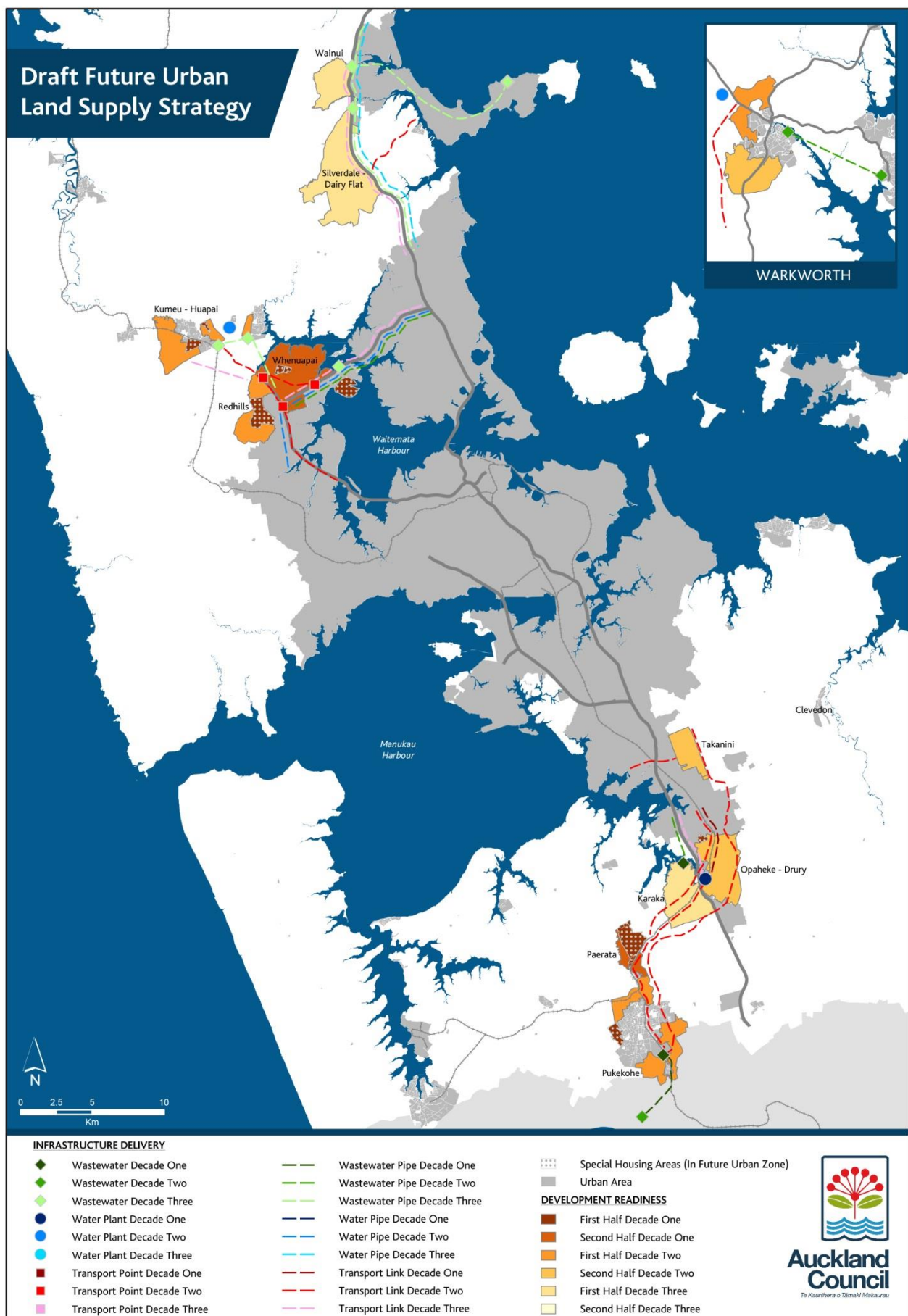
2. The Programme - Sequencing of the Future Urban Areas

The programme of sequencing the future urban areas spans over 30 years from 2012 – 2041. The timeframe is split into three decades and each decade into five year intervals. Distributing the greenfield areas over this timeframe enables them to be proactively planned in an orderly and cost efficient way, ensuring the areas are ‘ready to go’ with the required bulk infrastructure and able to deliver the quality urban outcomes anticipated in the Auckland Plan. The sequencing also accounts for the development capacity needed to accommodate greenfield growth. A suite of principles (Appendix 2) underpins the sequencing rationale.

The following table identifies the sequencing of the future urban areas:

Proposed timing – Development Ready	Area	Decade One – 31,000 to 36,100 dwelling capacity anticipated
Decade One 1st half 2012-2016	SHAs - NorthWest	<p>Special Housing Areas (SHAs) feature strongly in the first decade as the short term response to the immediate housing demand and supply challenge. Investment in these areas is currently planned or underway. These areas are within the Future Urban Areas in the north-west and the south. Some in the south are also outside the Future Urban Areas (e.g., Kingseat, Flat Bush and Hingaia). An anticipated range of 20,000 to 23,000 houses could be delivered in these areas. Later on in the decade, Paerata and Whenuapai will come on stream. Significant planning has already been advanced for these areas largely due to planning work undertaken by the former Councils and recent approval of SHAs. Whenuapai and Paerata have water and wastewater provision and fewer physical constraints than some of the other Future Urban Areas. These two areas could provide a dwelling capacity of between 11,000 and 13,100.</p> <p>Decade Two – 30,000 to 39,700 dwelling capacity anticipated</p> <p>The second decade transitions into a proactive approach, aligning structure planning with infrastructure planning and delivery. In the first half of the decade Pukekohe, Kumeu-Huapai, Riverhead, Redhills, and Warkworth North will come on stream. Pukekohe has recently undergone planning, is relatively free of constraints and apart from wastewater upgrades, the water and wastewater infrastructure is able to support the anticipated level of growth. Investment will be required to improve transport in the area. The remaining areas in the first half of the decade will require further investment in water, wastewater and transport infrastructure – which will need time to be planned and constructed. In the north-west, SH16 is constrained and will require upgrading in the future to service the planned growth. Warkworth's growth is constrained by water and wastewater. However, some growth could occur in the north of Warkworth in the shorter term. The extension of the Ara Tuhono – Puhoi to Wellsford Road of National Significance will be completed to Warkworth by 2022 making this area attractive for development. The second half of the decade will see Opaheke-Drury, Takanini and Warkworth South come on stream. These areas require longer lead in times to plan and construct significant new water, wastewater and transport infrastructure. Takanini requires significant investment in an appropriate stormwater solution prior to any development. The area is also heavily constrained by geotech issues which will require appropriate engineering solutions.</p> <p>Decade Three – 31,600 to 40,800 dwelling capacity anticipated</p> <p>By the third decade, the areas identified in decades one and two will be significantly urbanised (or will be development ready depending on the rate of uptake). The remaining areas of Karaka, Silverdale-Dairy Flat and Wainui will come on stream in the early part of the third decade. These are large rural areas with no urban infrastructure in place. They however have significant potential to deliver quality urban outcomes but all require long lead in times to build water, wastewater and transport infrastructure.</p>
	SHAs - South	
Decade One 2nd half 2017 - 2021	Paerata	
	Whenuapai*	
Decade Two 1st half 2022 - 2026	Pukekohe	
	Kumeu-Huapai	
	Riverhead	
	Redhills	
Decade Two 2nd half 2027 - 2031	Warkworth North	
	Opaheke - Drury	
	Takanini	
Decade Three 1st half 2032 - 2036	Warkworth South	
	Karaka	
	Silverdale-Dairy Flat	
Decade Three 2nd half 2036-2041	Wainui	
	Yet to be determined - new growth areas	

*Limited supply during this period



Map 2: Proposed Regional Sequencing

3. Cost and scale of the infrastructure network for the Future Urban Zone land

The sequencing outlined above will require significant investment in infrastructure. In some cases, this investment will be required well before development of an area begins (to ensure the area is development ready as sequenced). In addition to these bulk infrastructure costs, there will be costs to provide local networks into these areas – i.e. local network costs are not included in costs shown. The table below provides indicative estimates for the bulk infrastructure costs. These are preliminary, estimated figures and must be read as such.

Proposed timing – development ready	Area	Proposed dwelling capacity for each area (approx.)	Dwelling capacity subtotals (approx.)	Bulk infrastructure costs <i>Indicative costs (uninflated prior to any detailed design). Costs will be in the order of:</i>
Decade One 1st half 2012-2016	SHAs - NorthWest	5,200 - 7,000	9,000 - 12,000	\$2.8 Billion Transport - \$1,400m Wastewater - \$450m Water – \$500m Other - \$400m
	SHAs - South	3,800 - 5,000		
Decade One 2nd half 2017 - 2021	Paerata	3,000 - 3,500	11,100 - 13,100	
	Whenuapai	8,100 - 9,600		
Decade Two 1st half 2022 - 2026	Pukekohe	5,600 - 7,600	17,500 - 21,400	
	Kumeu-Huapai Riverhead	6,900 - 8,000		
	Redhills	3,000 - 3,600		
	Warkworth North	1,900 - 2,200		
Decade Two 2nd half 2027 - 2031	Opaheke - Drury	8,000 - 9,500	12,800 - 18,300	
	Takanini	1,100 - 4,500		
	Warkworth South	3,700 - 4,300		
Decade Three 1st half 2032 - 2036	Karaka	6,100 - 10,800	31,600 - 40,800	\$3.8 Billion Transport - \$1,500m Wastewater \$400m Water – \$400m Other - \$1,500m
	Silverdale-Dairy Flat	19,000 - 22,700		
	Wainui	6,500 - 7,300		
Decade Three 2nd half 2036-2041	Yet to be determined – new growth areas	0	0	

Notes

1. During Decade One, SHAs outside the Future Urban land will provide capacity for 11,000 new dwellings.
2. Rural and coastal towns Special Housing Areas are not considered part of the Future Urban Land Supply Strategy areas.
3. Provides indicative costs and high level associated costs and does not represent a comprehensive programme of activities.
4. Includes capital costs only and excludes the cost of developing or servicing local networks.
5. Other major infrastructure costs include storm water, open space, social and community facilities.

Monitoring and Review

The sequencing and timing programme is based on population projections, estimated housing demand and estimated development capacity. None of these factors are static and will change over time. Structure planning of areas will also provide more specificity and result in changes. The programme will therefore be adjusted – over time – taking account of actual growth, demand and uptake – more so with regard to the timing aspect of the programme. Adjustments will also have to consider the ability of infrastructure providers to bring funding programmes forward or push them out as needed (including consideration of alternative funding / delivery mechanisms) and the impact this has on getting the greatest efficiency from their investment. The Strategy will consequently remain a living document.

An annual monitoring programme will enable a snapshot to be prepared, monitoring progress for each of the Future Urban areas identified in this Strategy. This monitoring programme is currently being refined and will include the following:

- rates, patterns and composition of population growth and change
- progress on bulk infrastructure delivery
- rates of uptake and build
- balance of growth inside and outside the 2010 Metropolitan Urban Limit.
- changing development context and trends.

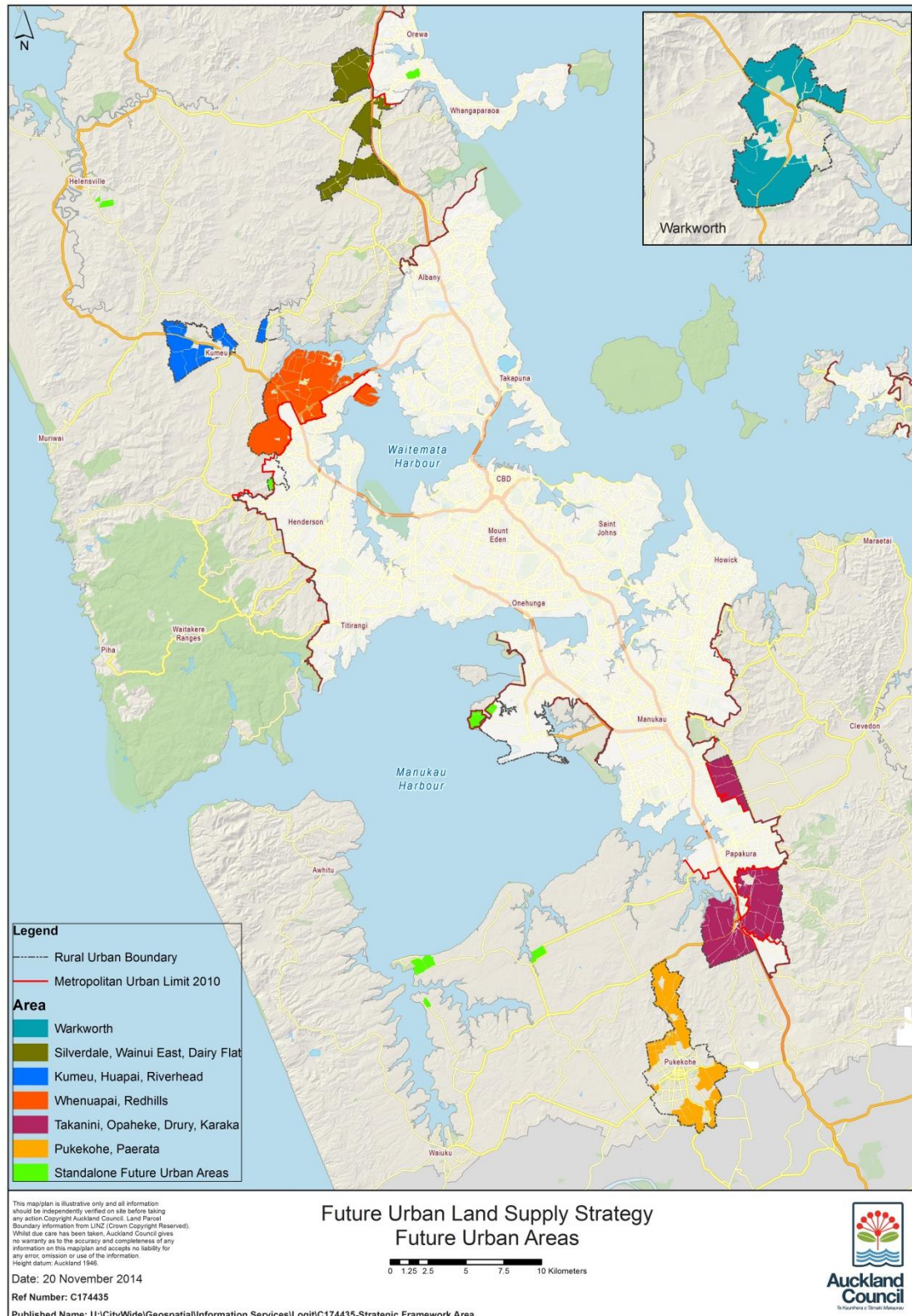
This monitoring will enable an assessment of the overall years of capacity available within the Future Urban areas.

The findings of this monitoring programme, and subsequent adjustments made to the sequencing and timing programme, will be taken into account as part of wider Auckland Plan monitoring, which relates to both existing urban land and Future Urban land across Auckland³². Any amendments required to this Strategy will be done through the Council's Annual Plan and Long-term Plan processes.

³² Auckland Council produces an annual Auckland Plan Annual Implementation and Development Strategy Monitoring Report.

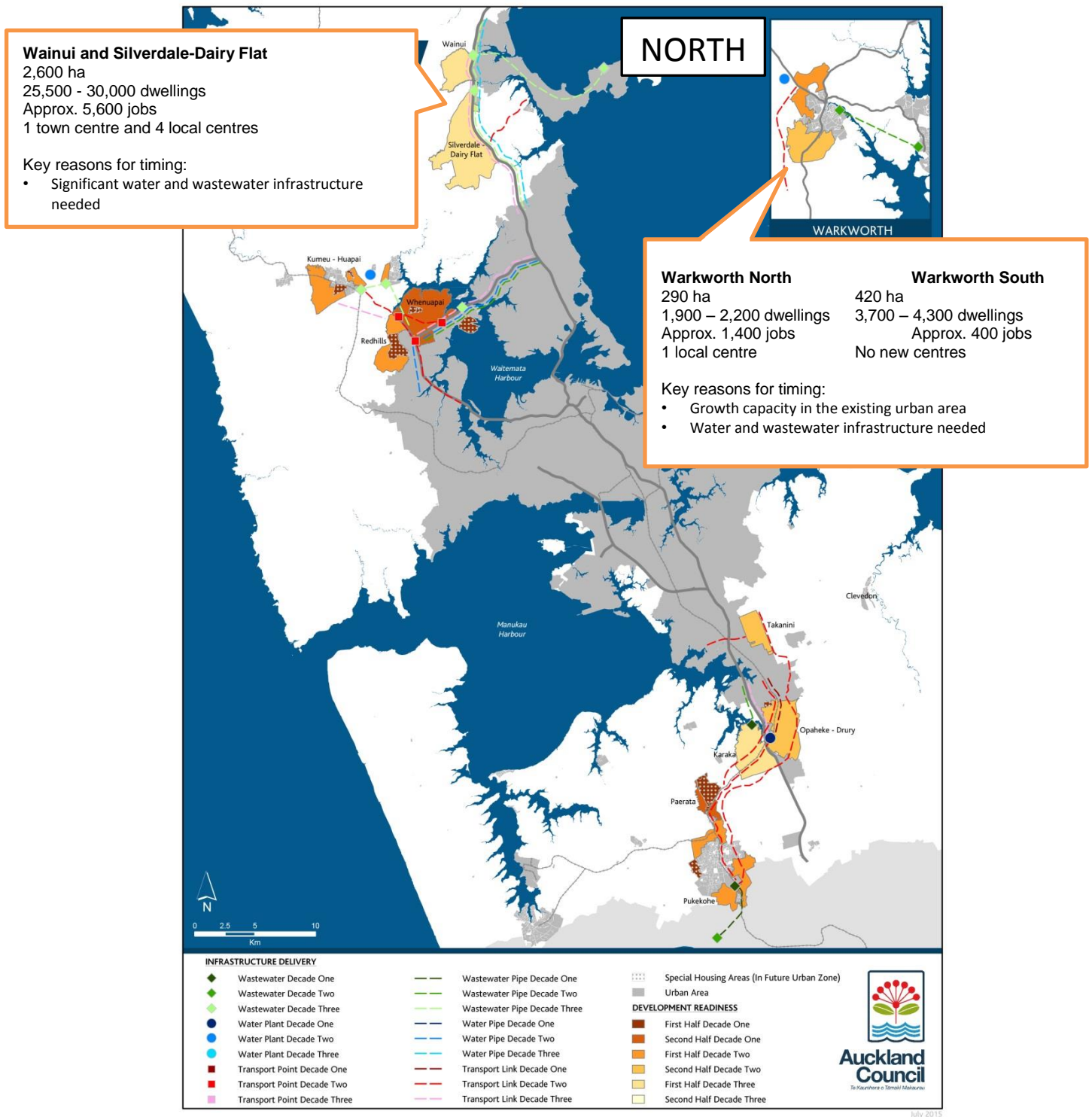
APPENDIX 1 - A Brief Overview of the Areas Considered

The Future Urban zone addressed in this Strategy is predominantly located in three geographic areas: the “North”, the “North-west”; and the “South”. The total area of the Future Urban land is approximately 11,000 hectares.



The North

The North includes the Future Urban areas of Warkworth, Wainui and Silverdale-Dairy Flat. Together they comprise a land area of 3,443 hectares. While some legacy planning has been undertaken for Warkworth and the Silverdale West “triangle”, the majority of the Wainui and Silverdale-Dairy Flat areas have not previously been considered for urban development. The areas are characterised by predominantly rural activities with some countryside living around the Dairy Flat area.



Key considerations for the North

Warkworth

Warkworth's current population is around 3,900 and anticipated to eventually grow to a substantial satellite town of 20,000. Warkworth currently has capacity for an additional 1,800 dwellings through live urban zoning. An additional 715 hectares of Future Urban land has been identified mainly to the north and south of Warkworth in order to meet this growth. However, the existing water and wastewater infrastructure network is unable to service the projected growth anticipated from the Warkworth Future Urban Areas. This means that extensions and upgrades to the network will be required in the second decade. For example, a branch line to the Snells Beach Wastewater Treatment Plant would be needed, which itself would require an upgrade.

Warkworth experiences traffic congestion along State Highway 1, and particularly around the Hill Street intersection during peak periods. Warkworth will, however, have improved access to Auckland once the Ara Tuhono - Puhoi to Wellsford Road of National Significance is completed to Warkworth in 2022.

Employment is a key consideration for Warkworth given its distance from Auckland. It is anticipated that Warkworth will need around 115 hectares of additional business land to provide for local employment opportunities. Small local centres will also be required in the newly established greenfield areas.

The timing of required upgrades to key infrastructure means that Warkworth North can be brought on stream in the first half of Decade Two. This includes leveraging off the completed Puhoi to Warkworth section of the Road of National Significance. This would also provide an opportunity to establish employment areas early on. However, if sequenced any earlier, travel demand issues in the area will be difficult to manage. Once key infrastructure is in place and capacity is being taken up in the newly established areas to the north, Warkworth South can be brought on stream in the second half of Decade Two.

Wainui and Silverdale-Dairy Flat

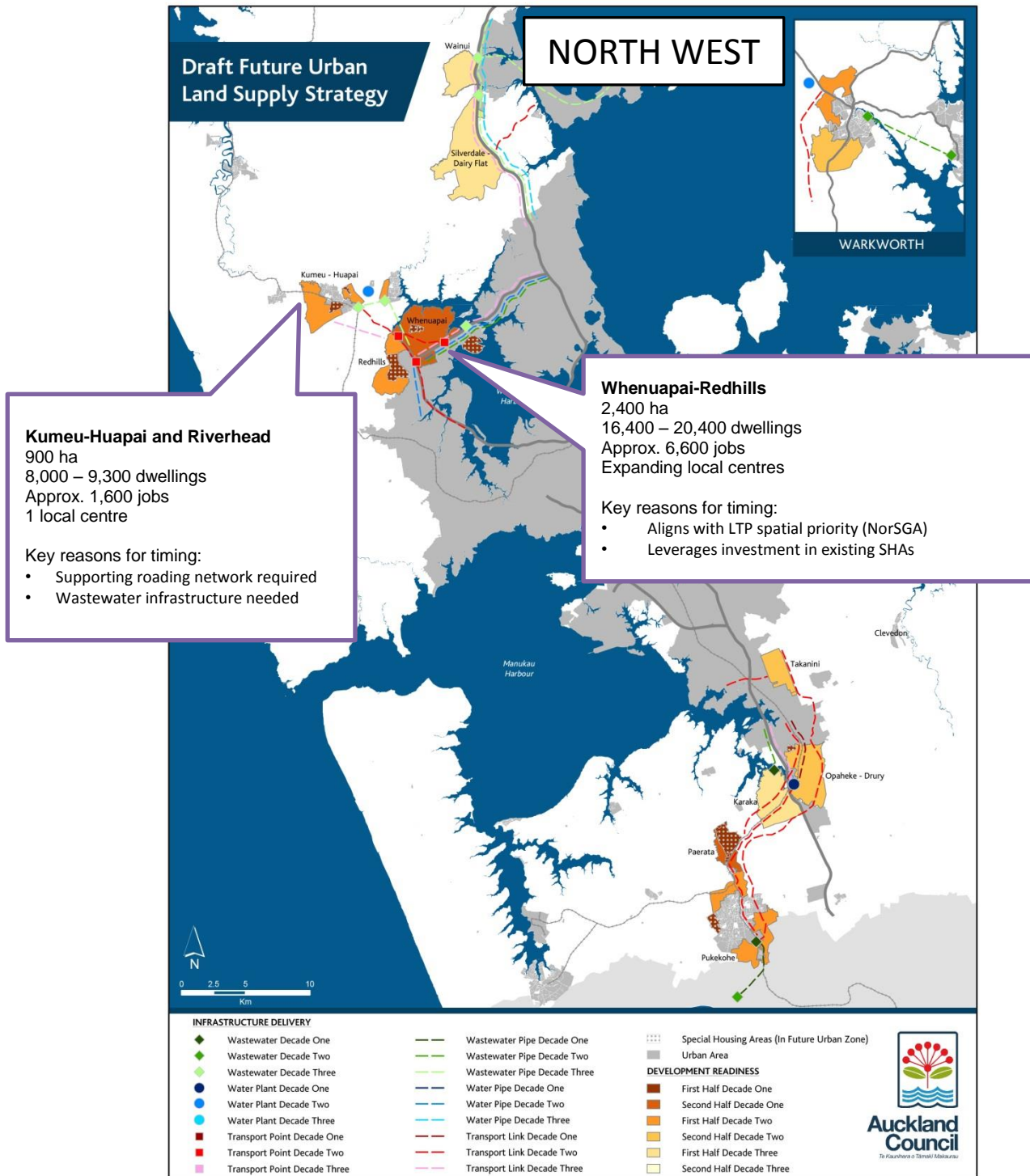
The Wainui and Silverdale-Dairy Flat Future Urban areas have not previously been contemplated for urban development apart from some legacy consideration of the Silverdale West "triangle" for business land. The area is large in scale, comprising a total of around 2,600 ha which provides a significant opportunity to comprehensively design and develop quality urban outcomes for the area, including a new town centre. However, given the rural context of the area, there is currently no bulk water or wastewater infrastructure to service urban development of any scale. To urbanise this land will require projects such as extending the trunk transmission pipeline north from Albany, in conjunction with upgrading existing and constructing new reservoirs and pump stations. This work is dependent on completion of the North Harbour No.2 Watermain project by around 2028. Wastewater projects include a possible connection of this area to the Rosedale Treatment Plant or the Army Bay Treatment Plant, in combination with an upgrade to either of these plants, depending on the final solution. Establishing this water and wastewater network may take up to 20 years, mainly due to the process of design, designation and construction.

Improved access to State Highway 1 will be required and developing a public transport network within and to the area will be important. Significant employment opportunities will be required in this area to assist with managing travel demand and providing local employment opportunities. Provision for land extensive business has been made in this area and will need to be provided early on in the development phase.

The key infrastructure constraints described above, together with the opportunity to achieve quality outcomes of a scale that significantly contributes to housing supply and Auckland Plan outcomes, means that this area can only be brought on stream early on in the Third Decade. There are significant risks to sequencing this area too early. Any earlier development will need to provide individual water and wastewater infrastructure solutions which is likely to significantly reduce the dwelling and employment capacities that can be achieved from this land (lower densities) and compromise good urban form principles. Other implications include transport demand challenges.

The North-west

The North-west includes the Whenuapai, Redhills, Kumeu-Huapai and Riverhead Future Urban areas. These areas comprise a land area of 3,354 hectares and includes five Special Housing Areas (SHAs). Much of the area has been subject to legacy planning, however it remains predominantly rural in nature.



Key considerations for the North-west

Whenuapai-Redhills and Kumeu-Huapai and Riverhead

The Whenuapai and Redhills Future Urban area³³ is characterised by Special Housing Areas and the spatial priority areas identified in the 2015 – 2025 Long-term Plan. As well as having the potential to make a significant contribution to housing supply, Whenuapai also has the potential to deliver on business land aspirations. Planning for this area is significantly more advanced than other greenfield areas. Like Wainui and Silverdale-Dairy Flat, this area is large in scale with around 2,400 hectares of land zoned for Future Urban. It has the potential to leverage off existing infrastructure, including existing centres, making it attractive to develop early.

While this area is attractive to bring on stream early, water and wastewater infrastructure require upgrading to service the projected growth. The planned North Harbour water main project will improve the resilience of the water supply network. The wastewater network is constrained by the capacity of the branch line connecting the area to the Hobsonville Pump Station. This issue will be partially addressed by the Northern Interceptor Stage 1 project, which diverts the flows to the Rosedale Wastewater Treatment Plant and is expected to be completed in 2021. A second stage of this project is planned for completion by 2028, but is not yet funded, and will connect Redhills and Westgate freeing up capacity in Whenuapai.

The Kumeu-Huapai and Riverhead area comprises around 840ha of Future Urban land and leverages off the existing towns. As with Whenuapai-Redhills, this area has undergone extensive legacy planning. However, the Future Urban Zone identifies a much larger area for urban development than was previously contemplated. Minor upgrades are required to the water network and the same wastewater constraints that apply to Whenuapai-Redhills apply to this area.

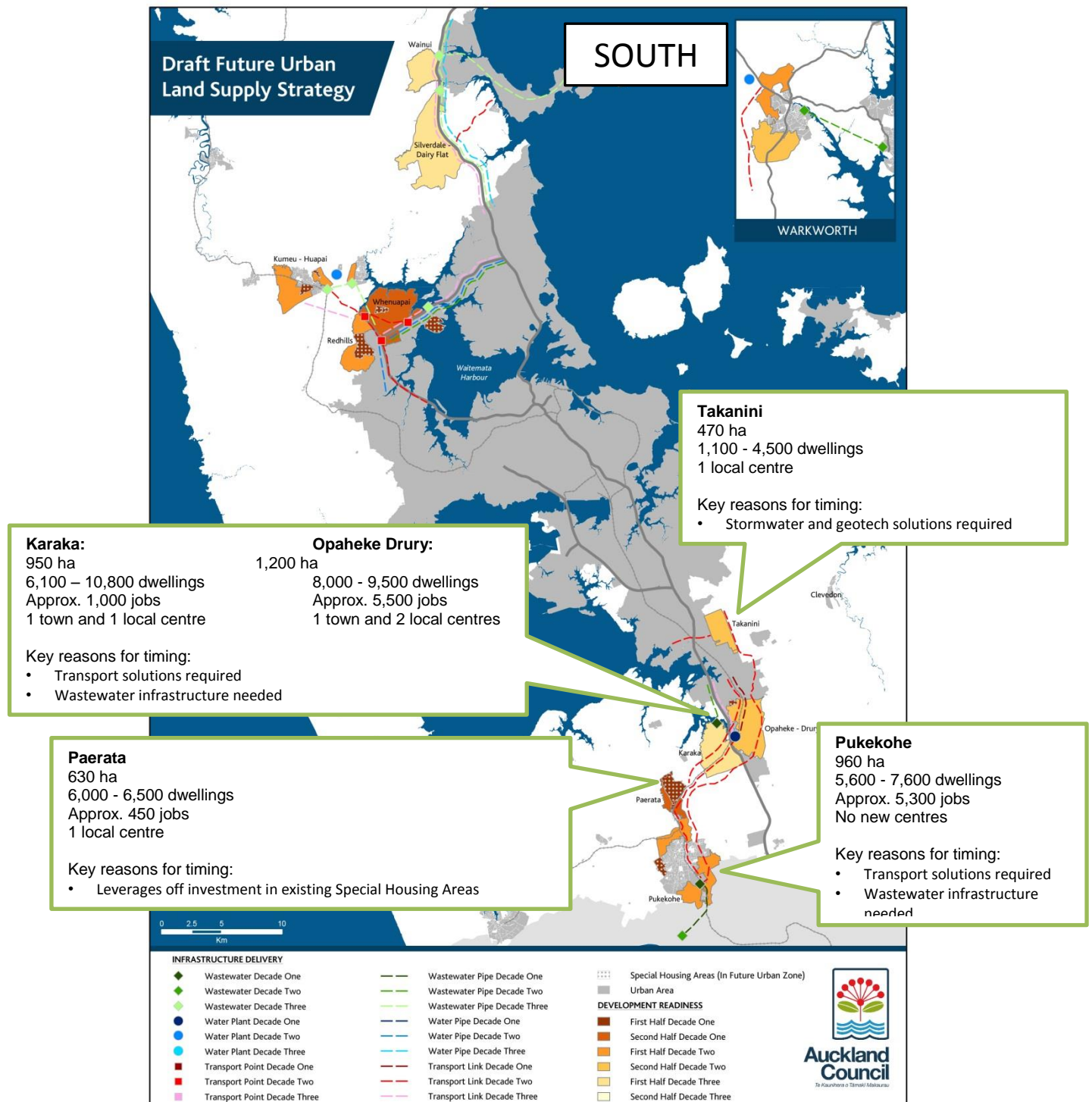
The transport network is a significant constraint for the development of the North-west. State Highway 16 is a regionally significant transport route and already experiences congestion. The local network around Whenuapai has been designed for legacy growth plans, not the Future Urban zone. Kumeu-Huapai has only single road access in and out, limiting options. The area is dominated by private car use and significant public transport investment, such as the north-western busway, will be necessary.

Given the combination of relatively few bulk infrastructure constraints and the desirability to leverage off existing infrastructure, SHAs and Spatial Priorities (LTP), the North-west is sequenced in the latter part of Decade One (Whenuapai) and the early part of Decade Two (remaining areas).

³³ The Whenuapai and Redhills area is part of the Northern Strategic Growth Area (NorSGA)

The South

The South includes Takanini, Opaheke-Drury, Karaka, Pukekohe-Paerata Future Urban areas, comprising a large land area of around 4,300 hectares. The south makes up the largest proportion of Future Urban areas in the region. Of the total area, Takanini, Opaheke-Drury and Karaka comprise 2,689 hectares and Paerata and Pukekohe comprise 1,620 hectares. Pukekohe-Paerata has undergone legacy planning and includes a large 300 hectare Special Housing Area at Wesley. The predominantly large rural area of Opaheke-Drury and Karaka together total 2,200 hectares of Future Urban land.



Key considerations for the South

Takanini, Opaheke-Drury and Karaka

Takanini and Opaheke are subject to significant flooding risks and Takanini has deep peat soils which significantly impacts on the densities that can be achieved. The potential for flooding in Takanini, in combination with the peat soils, require a tailored stormwater solution to be in place prior to development. This solution is likely to incur significant costs on a per household basis.

With the exception of Takanini, these areas have not previously been planned or proposed for urban development, which means the transport and wastewater networks in particular require significant investment. The bulk water network is generally adequate in these areas, however the local network will have to be developed. The bulk wastewater network is restricted and will require significant investment to address the anticipated growth.

In terms of transport considerations, State Highway 1 is a strategically significant transport corridor connecting the lower North Island to Auckland and key infrastructure such as Auckland Airport and the Port. It is important that development in this area does not further impact on the state highway efficiency. Many of the local network roads reflect their rural location and are inadequate to service the projected growth. There is also a lack of east-west connections in these areas. However, unlike the North, this area is well serviced by a commuter rail service and Karaka has the potential to provide a regionally significant opportunity for quality urban development based around a future rail station.

Given the lack of bulk and local infrastructure in this area, flooding constraints in Opaheke and Takanini, the need to achieve as much yield from this land as possible and quality urban outcomes, the area is sequenced in the second half of Decade Two (Opaheke-Drury and Takanini) and the first half of Decade Three (Karaka).

Paerata and Pukekohe

Paerata includes a 300 hectare Special Housing Area at Wesley which is expected to provide around 3,200 dwellings over the next 25 years. Pukekohe has been subject to comprehensive legacy planning and is expected to provide significant housing and employment opportunities, leveraging off the existing town.

The bulk water network is adequate to service the proposed growth and no significant infrastructure is required. The wastewater network is however constrained and will be further impacted by the proposed growth – it therefore requires significant investment in the bulk network. Current plans are to improve network capacity by diverting wastewater from Paerata and the northern portion of Pukekohe to the Mangere Wastewater Treatment Plant and the southern portion of Pukekohe to the Tuakau Wastewater Treatment Plant.

Pukekohe and Paerata require less stormwater investment compared to Takanini, Opaheke and Drury. However, the transport network has not been designed for the anticipated growth from the Future Urban zone. Significant investment in new roads, road upgrades and public transport is therefore required. The Paerata Special Housing Area is expected to provide a new train station and Pukekohe is on the rail network. Currently electrification ends at Papakura, with a diesel shuttle service being provided to Pukekohe. Future electrification to Pukekohe is proposed in the second decade and would enhance the network and likely improve rail patronage and encourage further growth to the area.

Given the advanced planning that has occurred through the Wesley SHA process and relatively few constraints in the area, Paerata is considered to be the most development ready of all the greenfield area and is therefore sequenced in the second half of Decade One.

For similar reasons, Pukekohe has been sequenced early in the Second Decade as it is considered a good opportunity to provide quality urban development leveraging off Pukekohe's existing infrastructure.

APPENDIX 2 - The Principles applied to underpin sequencing decisions

This Strategy has been underpinned by a suite of principles to assist with understanding which areas will achieve the greatest benefits for Auckland over the short, medium and long term timeframes of the Strategy.

The principles are as follows:

1. Optimise the outcomes from investment
 2. Supply land on time
 3. Support uplifting Maori social and economic wellbeing
 4. Create good quality places.
1. Optimising the outcomes from investment will be achieved by:
 - Selecting areas that are adjacent to the existing metropolitan urban areas because it is often the most cost effective when extending infrastructure networks.
 - Leveraging existing investment in the Auckland Council spatial priority areas and other key projects such as Special Housing Areas where focused investment is currently occurring.
 - Undertaking integrated planning and infrastructure decision making to distribute significant costs of bulk infrastructure projects over time.
 - Encouraging efficient and cost effective infrastructure solutions, investment and delivery.
 2. Providing the supply of land on time will be achieved by:
 - Maintaining a development pipeline with sufficient supply of land to be re-zoned as urban at the right time, e.g. the areas have bulk infrastructure in place and are ready to be developed.
 - Selecting areas that are market attractive will assist with take-up of this land
 - Starting with areas that have fewer known and costly constraints as they are easier to develop and have more reliable development timeframes. Areas with significant constraints (e.g. flooding and geotechnical issues) may, in time, benefit from technology advances, which will improve the yields and development outcomes.
 3. Supporting lifting Maori social and economic wellbeing will be achieved by:
 - Offering support for iwi development aspirations by providing clarity about when land will be bulk-serviced and ready for development.
 4. Creating good quality places will be achieved by:
 - Selecting areas that connect new communities in close proximity to existing social infrastructure and services to provide an opportunity for these areas to leverage off and maximise use of this existing infrastructure.
 - Delivering economies of scale as larger areas can be more readily planned with a full range of land use that a community needs, including a range of dwelling types, jobs and social infrastructure and provide better overall development yield for the required infrastructure investment.

- Safeguarding enough business land to support and balance residential supply. The Auckland Plan requires a minimum of 1,000ha of industrial land with specific requirements, which limits the location and area of this type of land available.

Glossary

Future Urban zone

The Future Urban zone is a zone used to identify rural land earmarked for urban development in the future. This zone will remain in place until a structure plan and concurrent plan change re-zones the land to the appropriate urban zone (e.g. residential or business). Rural activities are able to continue on this land until the urban zone becomes effective.

Greenfield land

Land identified or used for urban development (residential, business or industrial) that has not been previously developed.

Infrastructure

The facilities, services and installations that enable a community to function. Includes activities, structures, facilities and installations for:

- airports
- airport approach surfaces
- water supply and wastewater reticulation (including storage and treatment facilities)
- broadcasting
- defence
- education
- electricity generation, transmission and distribution
- healthcare
- hospitals
- transmission, distribution and storage of gas and liquid fuels
- motorways and roads
- walkways and cycleways
- ports
- public parks
- public institutions
- public transport
- railways
- solid waste disposal
- stormwater
- telecommunication and radio communication
- air quality and meteorological services.

Metropolitan urban area

An area identified on the Planning Maps showing the urban areas of metropolitan Auckland, including Orewa and Whangaparaoa and Waiheke Island. This provides a baseline for

monitoring future urban growth that will be either inside or outside this area (see also Rural Urban Boundary).

Metropolitan Urban Limit 2010

A boundary previously identified in the Regional Policy Statement to delineate the outside edge of metropolitan Auckland as at 2010.

Rural Urban Boundary

The boundary which defines the maximum extent of urban development to 2040 in the form of a permanent rural urban interface. It is defined around the following urban areas:

- metropolitan urban area of Auckland, Orewa and the urban areas of Waiheke Island and Whangaparaoa Peninsula
- the satellite towns of Pukehoke and Warkworth
- rural and coastal towns of Beachlands/Pine Harbour, Helensville, Kumeu-Huapai, Oneroa, Riverhead, Snells Beach/Algies Bay, Waiuku and Wellsford
- serviced villages.

Satellite towns

Towns in the region which function semi-independently from the Auckland metropolitan area, providing a full range of services and employment opportunities to the surrounding rural areas. It applies to the towns of Pukekohe and Warkworth.

Structure Plan

Structure plans establish the spatial development pattern of land use and the transport and services network within a defined area. A detailed examination of the opportunities and constraints relating to the land is required and will ensure the effects of development are addressed in advance of development occurring.

ATTACHMENT C

The Thirty Year New Zealand Infrastructure Plan 2015– Relevant sections

Part 1: The Introduction

Page 4 Welcome from the Minister

“The third Infrastructure Plan reaffirms the Government’s long-term vision, first set out in 2011, that New Zealand’s infrastructure is resilient and coordinated and contributes to a strong economy and high living standards.”

Part 3: The Current State

Page 41 Focus on Auckland Council

“The Future Urban Land Supply Strategy currently under development that will take a 30-year view of future urban land and allow coordination of infrastructure.”

Part 4: The Response

The Future Urban land Supply Strategy is identified as an initiative with relevance to the following infrastructure sectors

Page 55 What does the Action Plan mean for the housing challenges and land use integration?

“Looking ahead to 2045, the focus will be on future understanding of demand and optimising decision- making. Actions to achieve this include:

The Future Urban Land Supply Strategy being developed by Auckland Council in order to maintain a pipeline of development capacity across Auckland. It will sequence structure planning and live zoning of the future urban areas to achieve the best outcomes for the provision of housing, employment, community facilities, open space and infrastructure, including transport. The strategy is being developed as a collaborative project including involvement by infrastructure providers recognising the importance of aligning infrastructure delivery with planning. The Strategy will be complete by October 2015 with implementation following.

A key challenge will be to ensure planning is not totally consumed by the housing situation and that business and industrial land, which are the sources of employment, are integrated in both planning of land use and freight transport networks.

The Future Urban Land Supply and the proposed Auckland Unitary Plan, along with the Resource Management Act reforms, the Auckland Transport Alignment Project and the wider work on the 2018 Government Policy Statement on Land Transport provide the opportunity to coordinate and deliver the long- term integrated planning required across land use and infrastructure provision.

Page 58 What does the Action Plan mean for the transport sector?

- Auckland Council’s Future Urban Land Supply Strategy which will ensure transport

projects are planned in a way that is integrated with land use planning (Auckland Council).

Page 61 What does the Action Plan mean for the three waters sector?

- *“The Future Urban Land Supply Strategy being developed across Auckland, sequencing structure planning and live zoning of the future urban areas to achieve the best outcomes, including housing and infrastructure. It is a collaborative project and will be completed by October 2015. It recognises the importance of aligning infrastructure delivery with planning (Auckland Council).”*

APPENDIX 1: Action Plan

Page 78 “Cross-Cutting Initiatives”:³⁴

“The Future Urban Land Supply Strategy is being developed in order to maintain a pipeline of development capacity across Auckland. It will sequence structure planning and live zoning of the future urban areas to achieve the best outcomes for the provision of housing, employment, community facilities, open space and infrastructure, including transport. The strategy is being developed as a collaborative project including involvement by infrastructure providers recognising the importance of aligning infrastructure delivery with planning. The Strategy will be complete by October 2015 with implementation following.”

³⁴ Ibid at Page 78.