Heretaunga Plains Urban Development Strategy 2015-2045

Review of Base Demographic and Economic Growth Trends and Projections Since 2009

March 2016

Report Prepared by
Sean Bevin, Consulting Economic Analyst
Economic Solutions Ltd, Napier
Email: sean.bevin@economicsolutions.co.nz

For

Napier City Council/Hastings District Council/Hawke's Bay Regional Council

Contents

Executive Summary

1. This report provides the results of a review that has been undertaken of the demographic, economic and sector floorspace and land uptake projections (for the period 2015-2045) prepared in 2009 for the purposes of the formulation of the new HPUDS (Heretaunga Plains Urban Development) Strategy, which is intended to assist and guide Councils in the management of future urban development in the area.

2. The matters therefore addressed in the report include demographic and economic trends impacting the Heretaunga Plains area (the Study Area) since 2009 and their scale and impact in comparison to the projections prepared in that year; the wider Hawke's Bay (including the full Napier-Hastings area) demographic and economic outlook for the next 30 years as a context for the more focused Study Area growth projections; reviewed and updated household and population projections for the Study Area; industrial and commercial sector growth forecasts pertaining to the Napier-Hastings area; and forecast floorspace demand growth and associated land uptake requirements for the industrial, commercial and residential sectors, over the forecast period.

3. The review process undertaken in the process of preparing this report has involved analysis of relevant Statistics New Zealand Census, annual population estimates and population/household projection figures; analysis of other SNZ regional and local GDP, industry employment, building consent and tourism data; review of relevant Central and Local Government policy and economic documentation; discussions with local Councils on future housing development intentions; analysis of information provided by local valuation companies and a review of a range of reports concerning economic trends in the Hawke's Bay area.

4. A summary of the main findings of each chapter of the report is provided at the beginning of the chapter.

5. The key findings of the overall report analysis are as follows:
   - Significant population and household growth for the Study Area since 2009 and noticeably above the levels projected in the HPUDS analysis that year, driven by demographic and social change factors and underpinned by positive although limited economic and employment growth rates.
   - A generally positive regional and local demographic and economic growth environment facing the Study Area over the 30-year projection/forecast period.
   - The total number of households in the Study Area is projected to increase by 10,610 or 15% over 2015-2045, based on Statistics NZ's latest 'Halfway Medium to High' household growth projection scenario for the combined Napier-Hastings Districts. The estimated land requirement associated with the latest household growth projection is in the range 200-330 hectares.
   - The total population of the Study Area is projected to increase by 16,455 or 12.5% over 2015-2045, on the basis of the projected growth in total households over the period.
   - Forecast industrial and commercial sector GDP growth of an annual average 2% over 2015-2045 expected to generate total sector employment gains of 5,000 and 14,000 respectively for the forecast period or approximately 35% up on the respective 2015 sector employment totals.

- Forecast industrial sector floorspace growth for Napier-Hastings over 2015-2045 of 900,000m^2 with an associated total land impact of 225ha. Forecast commercial sector floorspace growth for Hapier-Hastings over 2015-2045 of 700,000m^2 with an associated total land impact of 110ha.

1- Introduction

1.1 The Heretaunga Plains Urban Development Strategy (HPUDS) was initially developed during 2009/early 2010 and formally adopted by the participating Councils (Napier City, Hastings District and Hawke's Bay Regional Councils) in mid 2010. HPUDS provides an overarching strategic context and framework for the management by the Councils of future urban growth on the key Heretaunga Plains rural production resource in the Napier-Hastings area. The Strategy relates to the long-term 2015-2045 time-frame.

1.2 The current HPUDS is based on demographic and economic information available for the Study Area as of 2009 when work on formulation of the Strategy was initially progressed. Relevant historical trend information up to that point, the latest available Statistics New Zealand demographic projections at that time and other demographic/economic outlook information were used in the process of preparing future growth projections for the Study Area, for the 2015-2045 period.

1.3 HPUDS provides amongst other things that the Strategy be reviewed every five years and after the results of the latest national (2013) Census have become available (2013-2015). Accordingly, this report provides an analysis of the key demographic and economic trends that have occurred within the HPUDS Study Area since 2009. In addition, the report provides an evaluation of the implications of the trends in relation to both the base demographic and economic assumptions underpinning the current Strategy document and the demographic and economic projections contained in it. Further, in light of the results of the evaluation, the report updates where necessary the key projections and forecasts in the document as well as other indicators requested by the Councils.

1.4 The specific matters that have been requested for consideration in this update report are therefore as follows:

i) Trends in the main demographic and economic growth indicators pertaining to the Heretaunga Plains Study Area (hereafter termed the 'Study Area' in the report) area over the past six years, a comparison of relevant trends with the 2009 based projections and the main influences on the demographic and economic trends that have occurred over the past six years;

ii) An updated assessment of the overall demographic and economic outlook for the Heretaunga Plains area for the 2015-2045 period, the associated key growth factors and influences including economic and business trends and Central Government policy impacts, and the impact of the assessment on the current demographic, economic and employment growth projections and forecasts for the area;

iii) An updated analysis of projected household and population growth for the Study Area for the period 2015-2045;

iv) An updated analysis of forecast commercial and industrial sector growth relating to the Study Area for the 2015-2045 period; and

v) An estimation of the additional building floor-space demand and linked land requirement associated with the projected household and commercial/industrial growth in the Study Area over the planning period.

2- Methodology

2.1 The main points to note in terms of the approach used for the analysis in relation to the matters identified in Section 1.4 above, are as follows:

2.1.1 The 'Study Area' for the analysis comprises the Heretaunga Plains component of the combined Napier-Hastings Local Government districts. This includes the main Napier and Hastings urban areas (the latter also including Havelock North and Clive) as well as fringe rural and coastal settlements. On a Census Area Unit (CAU) basis, the Study Area fully or almost fully excludes the CAUs of Tutira, Puketitiri, Whanawhana, Sherenden-Puketapu and Tangoio, and partly excludes the CAUs of Maraekakaho, Poukawa and Waimarama.

2.1.2 For the purposes of this demographic and economic review of HPUDS, the Project Brief specifies that projection results need not be provided at the CAU level, as they were for the 2009 HPUDS analysis. However, a CAU based approach is nevertheless still necessary for the purpose of developing the projections for the broader housing/locality categories within the Hastings District component of the Study Area, as requested by the Hastings District Council in particular. The CAU level also forms the 'bottom-up' approach taken to preparing the necessary projections for the full Napier City area.

2.1.3 In respect of Hastings District, the broader housing categories for the District into which the CAUs for the District have been grouped are as indicated in **Appendix 1**. The broader categories are Hastings Plains (this area includes new 'greenfields' housing growth areas), Hastings Rural, Hastings Urban, Flaxmere, Havelock North and Havelock North Lifestyle. Following discussion with the Napier City Council, it was decided to provide projection figures at the total City level only, given the overall compactness of the City and the wide extent of servicing in the area at the present time.

2.1.4 It is further noted that parts of the analysis provided in the report have been undertaken at either the combined full Napier-Hastings Districts or wider Hawke's Bay region level, where considered appropriate in light of available information or for explanatory purposes.

2.1.5 As noted earlier, the overall study period for the analysis comprises the 2009-2015 period for the assessment of historical trends since the Strategy was first formulated and the 2015-2045 interval for the review and updating of the earlier demographic and economic projections. It is further noted that the same Census intervals as used for the initial formulation of HPUDS, have been adopted for this review report. This is despite the fact that as a result of the major Christchurch earthquakes and associated cancellation of the 2011 Census, a new five-year Census time-frame beginning with the 2013 Census has now been implemented by Central Government.

2.1.6 Consistent with the urban development focus of the study, the broad sectors covered in the report include the residential, industrial and commercial sectors. The demographic aspect of the analysis is particularly relevant to the residential sector, whilst the economic analysis is closely linked to the industrial and commercial sectors.

2.1.7 The specific approaches used for the analysis of historical trends and preparation of growth forecasts and projections, are indicated in the main body of the report.

2.1.8 The broad information sources used for the purposes of the report include:

- Relevant urban growth information provided by the HPUDS Councils.
- Statistics New Zealand (SNZ) population and household estimates and projections, as well as regional GDP, industry employment and building consent data.

Specific information sources are also referred to in the main body of the report where appropriate.

3- Demographic and Economic Trends Since 2009

Key Findings

- HPUDS Study Area population growth over 2009-2015 of 5,500 or 4.4%, is higher than projected in 2009 and driven by both natural population increase and net internal migration gain.
- 65+ population growth of 24% over the same period.
- 3,063 or 6.3% increase in household numbers to 51,455 in 2015. The 2009 based projection for total households in 2015 was 50,910.
- Further fall in household occupancy for the HPUDS Area, from 2.60 in 2009 to 2.55 in 2015, as predicted in 2009.
- A 3.4% increase in the number of single-parent families and 7.7% increase in sole-parent households.
- Positive regional economic growth generally since 2009 and improving steadily since 2013.
- The primary production and manufacturing sectors continue to provide the key economic underpinning for the overall performance of the Hawke's Bay economy.
- Approximate 1-1.5% annual average increase in total employment in Hawke's Bay over the past 15 years.
- Wide range of positive economic developments in the Napier-Hastings area since 2009.

Population

3.1 Over the 2009-2015 period, SNZ demographic estimates indicate that the total resident population of the combined Napier-Hastings local authority districts increased from 132,600 to 138,300 that is, a gain of 5,700 or 4.3%. This comprised a natural population increase (births minus deaths) of 4,594 and a total net migration gain of 1,106. The latter comprised a net overseas migration loss of 2,066 but a net internal migration gain from other parts of New Zealand of 3,172. At the same time, the total population of the full Hawke's Bay Region increased by 5,500 or 3.6%. The total population of the Hawke's Bay region excluding the Napier-Hastings area fell by 200 or 0.9% over the period.

3.2 Over the same interval, the estimated 0-14 Napier-Hastings population increased slightly by 0.7% to a level of 21% of the total population, compared to 22% in 2009, whilst the traditional 15-64 working-age population increased by 1% to a level of 61% of the total population (compared to 63% in 2009). The 65+ population increased significantly (24%) from a level of 15% of the total population in 2009 to 18% in 2015. At the same time, the median age of the Napier resident population increased from 40.2 years (Hastings 38 years) in 2009 to 41.7 years (Hastings 39.7 years) in 2015.

3.3 Ethnic group based population gains across the Napier-Hastings area during 2009-2015 are the Maori population 1,586 or 5.9%, Pacific Peoples 849 or 14.6%, the Asian population 1,119 or 25.6%, Middle East/South America/African nationalities 58 or 10%, and 'European and Other' people 2,088 or 2.2%. Last year, the European/Other population in Napier-Hastings accounted for 70% of the total population, compared to 72% in 2009; the Maori population accounted for 21% of the total population last year, compared to 20% in 2009.

3.4 On the basis of past Census results, the population of the Study Area accounts for approximately 95% of the combined Napier-Hastings local authority district population. Given this, over the 2009-2015 period, the estimated population for the area has increased from a figure of 125,900 to 131,400 last year, that is, a gain of 5,500 or 4.4%. The latest 2015 population estimate compares with the projection for 2015 made in 2009 of 130,320. Thus, actual population growth in the area over the past six years has been significantly higher than projected.

3.5 **Table 1** below indicates the population trends within the HPUDS Study Area for the 2009-2015 period. Population growth over the period within the Hastings District component of the Study Area occurred most noticeably in the Hastings Urban, Hastings Plains and Havelock North areas. Napier City's total population also increased significantly overall.

Table 1: HPUDS Study Area Estimated Internal Population Change 2009-2015

HPUDS Area	2009	2015	# Change 09-15	% Change 09-15
Hastings Plains	12,467	13,237	770	6.2%
Hastings Rural	2,350	2,497	147	6.3%
Hastings Urban	30,189	31,384	1,195	4.0%
Flaxmere	9,953	9,951	-2	0.0%
Havelock North	11,159	11,836	677	6.1%
Havelock North Lifestyle	1,882	2,095	213	11.3%
Napier City	57,900	60,400	2,500	4.3%
Total HPUDS Study Area	**125,900**	**131,400**	**5,500**	**4.4%**

Households

3.6 **Appendix 2** provides CAU household growth numbers for the HPUDS area for the 2006-2015 period.

3.7 Over the 2009-2015 period, SNZ figures indicate that the total number of households in the combined Napier-Hastings Districts increased from 50,814 to 53,740 that is, a gain of 2,926 or almost 6%.

3.8 For the Study Area as a whole, the total number of households increased from an estimated 48,392 to 51,455, representing a gain of 3,063 or 6.3%. The 2009 based total household projection for the Study Area in 2015 was 50,910, thus actual household growth in the area has been noticeably above the level projected six years ago. Approximately 67% of all new dwellings consented in the full Napier-Hastings area over the 2009-2015 period relate to the 2009-2012 period.

3.9 **Table 2** below indicates the distribution within the HPUDS area of this gain. The leading Hastings District areas for household change during the period were Hastings Urban, Hastings Plains and Havelock North. The overall number of Napier households also increased significantly.

3.10 On the basis of the results in Tables 1 and 2, average household occupancy (average number of persons per household) in the Study Area has fallen slightly from 2.60 in 2009, to 2.55 persons per household in 2015. This is the result of further demographic and social changes in the community such as the ageing population, and family and household changes.

Table 2: HPUDS Study Area Estimated Internal Household Change 2009-2015

HPUDS Area	2009	2015	# Change 09-15	% Change 09-15
Hastings Plains	4,381	4,720	339	7.7%
Hastings Rural	884	960	76	8.6%
Hastings Urban	11,703	12,290	587	5.0%
Flaxmere	2,936	3,010	74	2.5%
Havelock North	4,418	4,745	327	7.4%
Havelock North Lifestyle	735	830	95	12.9%
Napier City	23,335	24,900	1,565	6.7%
Total HPUDS Study Area	**48,392**	**51,455**	**3,063**	**6.3%**

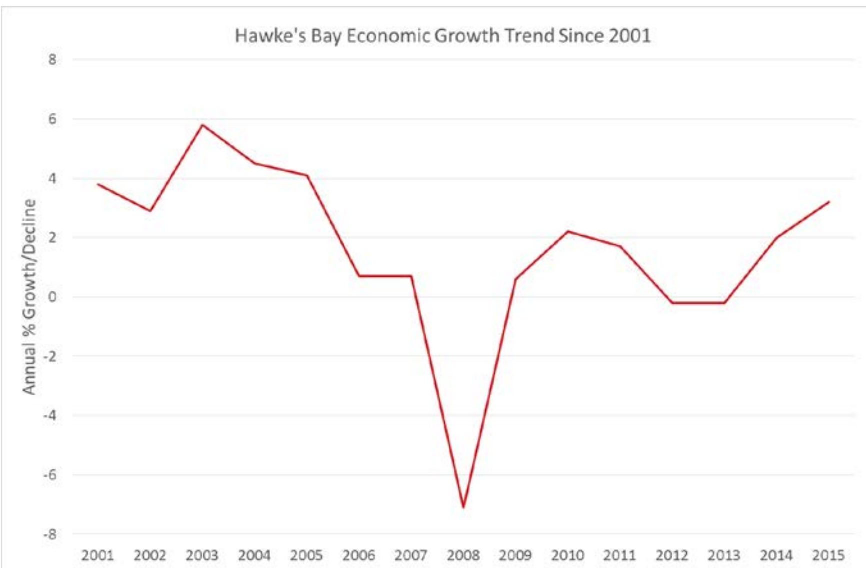
3.11 At the same time, the following main family and household profile changes have occurred at the wider Hawke's Bay Region level:

- The number of 'couple without children' families has risen by 5.4%, to 43% of total families.
- The number of 'Two-Parent' families has risen slightly by 1%, to 35% of all families.
- The number of 'One-Parent' families has risen by 3.4%, to 22% of all families.
- The number of 'One-Person' households has risen by 7.7%, to account for 27% of all households.

Economic Changes

3.12 **Figure 1** tracks the trend in real economic/GDP growth for the Hawke's Bay region since Year 2000. As the graph indicates, growth peaked in the region in the year ending March 2003. Growth then weakened over the following four years, with the year ending March 2008 recording a significant economic decline. However, the following 2009 year recorded a return to positive economic growth. Since then, growth has primarily been positive with the last two years seeing a steady improvement in regional economic activity. Overall total real GDP growth of approximately 10% has occurred in the region since 2009. This compares with population growth in the Study Area of 4.4% and household growth of 6.1%.

Figure 1



3.13 Figure 1 also indicates the considerably fluctuating pattern of economic growth that has occurred in Hawke's Bay over the longer-term period. This is reflective of the major rural production and exporting orientation of the region and the area's consequent significant exposure to external vagaries such as climatic factors, international market conditions, trends in overseas commodity prices, domestic market conditions and Central Government economic policy responses. Along with the rest of New Zealand, Hawke's Bay has been impacted since around 2007-2008 by the major global and financial economic downturn and its lingering economic effects. International commodity prices overall have increased in $NZ terms since 2009, although they have more recently been trending downwards since early 2013. Pastoral farming prices have risen significantly since later in 2012 whilst horticultural prices generally have lifted a little over the past three years. Forest product prices have also risen a little over the past few years.

3.14 National wine export receipts have increased by 20% since 2012. Pipfruit receipts have increased by 65%. Fresh and processed vegetable export receipts have increased marginally overall.

3.15 Information provided by Statistics New Zealand indicates that over the period since Year 2000, the primary production and manufacturing sectors have continued to account for in the range 30-40% of total Hawke's Bay GDP and remain the key underpinning sectors for the regional economy. At the same time, the primary sector has grown at an average annual rate of close to 5% whilst the manufacturing sector has recorded slight economic decline. However, the total industrial sector (manufacturing, utility services, construction and transport/storage) has grown at an average annual rate of close to 2%. Business sectors that have grown significantly over the period include tourism/hospitality services, wholesaling/retailing and professional/business services. The total commercial-services sector, which includes both private and public enterprises, has grown at an average annual rate of close to 6% since 2000.

3.16 Since 2009, an annual average 57,000m^2 (GFA or Gross Floor Area) of new industrial and commercial floorspace has been consented for the full Napier-Hastings area. This compares with the figure for the preceding seven years of 76,000m^2. Whilst the figure for the last seven years is down noticeably on the pre-2009 period, nevertheless, significant levels of new industrial and commercial building activity have still been consented in the area since 2009.

3.17 It is noted that since 2009, the Hastings District has accounted for 67% of consented total new commercial/services sector floorspace across Napier-Hastings and 69% of new industrial sector floorspace. Within the Hastings District, Hastings Plains has accounted for 29% of new commercial/ services floorspace, Hastings Urban 51% and Havelock North 12%. Within the District, Hastings Plains has accounted for 68% of total new industrial floorspace consented, Flaxmere 16% and Hastings Urban 11%.

3.18 An analysis of the annual results for three different employment measures in Hawke's Bay (quarterly household labour-force survey, business demography and filled jobs) indicates total employment in the region increasing over the period since Year 2000 at an average annual rate in the range 1-1.3%. Since 2009, total employment in the region has been relatively stable overall. The leading private sector employers in the region are primary production, manufacturing and processing, business services and wholesaling-retailing. Total employment (as measured by the SNZ annual business demography surveys) in the Napier-Hastings local authority district area has increased at an average annual rate of 1.2% since year 2000 and has also risen by 1.3% overall during the past three years.

3.19 Some other key regional-level economic changes to note for the period since 2009 include as follows:

- The number of consented new commercial-industrial buildings has increased overall by 22%.
- Whilst the number of consented new rural buildings has fallen overall since 2009, nevertheless new building activity in this sector has steadily recovered over the past two years.
- Total visitor night-stays in the region have increased from an annual level in 2009 of 3.5 million to 3.9 million last year. Total visitor spending in the region has increased from $536 million to $691 million, representing a gain of $155 million or almost 30%.
- The volume of international trade handled by the Port of Napier has increased overall by 40%, with export tonnages increasing by 36% and import tonnages by 67%.
- Positive developments at the Hawke's Bay Airport facility.
- Further roading and other infrastructural and utility service developments.
- New industry developments (e.g. water bottling, grape-growing, pip-fruit, horticulture, manufacturing, visitor accommodation and servicing, and retailing).

3.20 Those parts (CAUs) of the Study Area that have experienced significant industry employment gains since 2000 include Whakatu (62% gain), Bridge Pa area (160%), Hastings Central (8%), Woolwich industrial area (69%), Camberley including the regional hospital facility (145%), Flaxmere CAUs (124%), Havelock North area (60%), Bay View (87%), Poraiti area (41%), Awatoto (96%), Ahuriri (73%), Onekawa West (12%), Greenmeadows (69%) and Taradale (22%). The parts of the Study Area recording significant overall employment loss during the period include the Twyford, Karamu, Brookvale, Meeanee, Westshore, Marewa and Napier Hill CAUs.

3.21 Since 2009, the highest employment gains have been recorded for the Whakatu, Pakowhai, Woolwich and Ahuriri CAUs, whilst the Haumoana, Brookvale, Poukawa, Parkvale, Hastings Central, Flaxmere area, Meeanee, Westshore, Onekawa West, Onekawa South and Nelson Park (including much of the Napier CBD area) CAUs have recorded the highest employment losses.

4- Demographic and Economic Growth Outlook 2015-2045

Key Findings

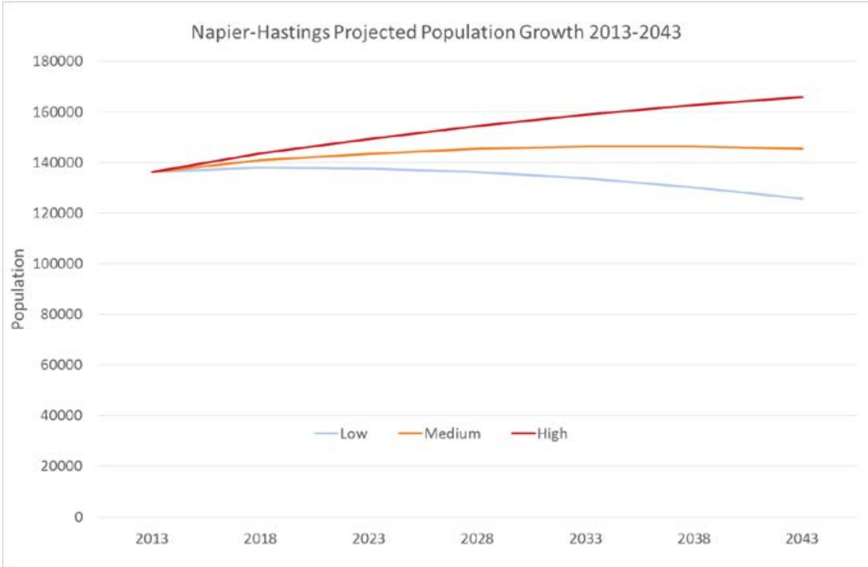
- This section provides the wider Napier-Hastings TLA districts and Hawke's Bay region long-term growth context for the HPUDS Study Area.
- The combined Napier-Hastings population growing, at a minimum, at the Statistics NZ Medium or 'middle of the road' projection scenario. With this scenario, the population increases to year 2033 but then starts to fall from that point.
- Projected noticeable falls in the 0-14 and 15-64 populations but a strong increase in the 65+ population.
- Projected household growth under all SNZ projection scenarios until 2033 and further growth after that with the Medium and High projection scenarios.
- Continuing gradual fall in average household occupancy.
- 33% increase in single-person households under the Medium projection.
- Forecast 1.5% annual average GDP growth for the wider HB area over 2015-2045.
- Wide range of positive economic developments, including primary industry growth and infrastructural upgrading, that underpin this growth outlook are indicated in this section.
- Employment forecast to grow at an average annual rate of 1-1.5%.

Demographic

4.1 This section establishes the anticipated broader demographic and economic outlook for the Napier-Hastings/Hawke's Bay areas, for the long-term planning period 2015-2045. The individual factors that are addressed in the analysis include population, households, economic growth, industry growth and employment. Future growth over the forecast period for the demographic factors is based on both historical growth since 2009 in comparison to projected growth for that period, SNZ 2013 Census results and annual estimates, and SNZ 2013 Census period based projections. The outlook for the economic factors is essentially based on the underlying long-term historical growth in various key indicators, along with other future economic growth and development considerations in the wider region. In the latter respect, it is further noted that whilst the analysis in this section on the demographic factors relates more specifically to the Napier-Hastings area, the economic analysis is primarily orientated to the wider Hawke's Bay region level.

4.2 **Figure 2** indicates SNZ's 2013 Census year based population projections for the combined Napier and Hastings local authority districts, for the period 2013-2043. As per usual, three different projection scenarios are provided catering for different long-term population growth possibilities for the area. The scenarios are a Low or least optimistic projection, Medium or 'middle of the road' projection and High or optimistic projection. These scenarios incorporate different assumptions about future trends in key population growth influences such as fertility rates, life expectancy and net migration. Under the Low scenario, the Napier-Hastings population increases to 2018 but then falls steadily from that point. Under the Medium scenario, the area's population increases until 2033, stabilises over the following five-year period but then falls over the 2038-2043 period. Under the High scenario, the area's population continues to increase steadily during the whole projection period.

Figure 2



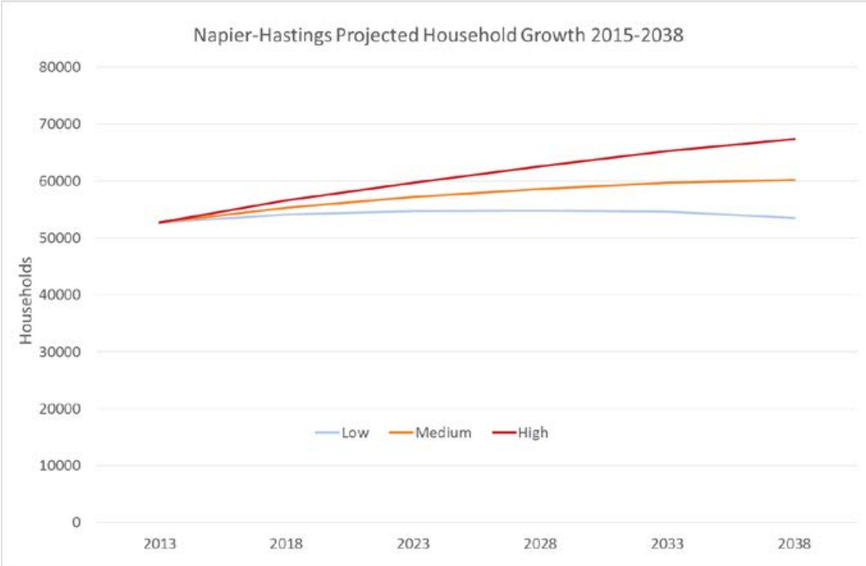
4.3 Recent SNZ population projections and annual population estimates indicate a population growth track for the combined Napier-Hastings area that at a minimum reflects the Medium growth projection. This projection sees the area's population increasing by 8,260 or 6% over 2015-2033 before then declining over 2033-2043 by 1,000 or 0.7%. The demographic changes underlying this trend over the period include falling fertility rates (with Hastings having higher levels of fertility than Napier), gradually increasing levels of life expectancy, and overall net migration gains for both districts over 2013-2018 followed by net migration loss from Hastings District over the rest of the projection period and net migration balance for Napier. It is noted that the Department's population projections only extend at this stage to year 2043 whilst its household growth projections only extend to year 2038.

4.4 With the Medium growth projection, the Napier-Hastings 0-14 population is projected to fall overall by 3,420 or 12% over 2015-2043. The 15-64 population is projected to fall by 8,580 or 10% (this should be noted in the context of future labour resource availability in the area). The 65+ population is projected to increase strongly by 19,580 or 81%.

4.5 At the same time, the Maori, Asian and Pacific Peoples ethnic group populations are all projected to increase significantly during the period, with the 'European and Other' population falling slightly.

4.6 **Figure 3** indicates SNZ's 2013 Census year based household projections for the combined Napier and Hastings local authority districts, for the period 2013-2038. The Department's household projections are closely linked to its population projections and assumptions underlying these. With all three projection scenarios, household growth continues until 2033. However, household decline then occurs under the Low projection over the subsequent five-year period whilst household growth continues during this period with the Medium and High projections. Under the Medium projection, total household growth of 7,500 or 14% is projected for the area. Under the High projection, total household growth of 14,700 or 28% is projected. Under a 'Halfway Medium to High' projection scenario, total household growth of 11,100 or 21% is projected for the combined Napier-Hastings area over the 2013-2038 period. A comparison of the 2013 Census year total households result for the area with earlier SNZ household growth projections infers that household growth across Napier-Hastings in more recent years has been tracking above the Medium growth projection for the area.

Figure 3



4.7 Under the Medium projection, average household occupancy for the combined full Napier-Hastings territorial local authority districts (the HPUDS Study Area is smaller than the combined districts) is projected to fall from a level of 2.56 persons per household in 2013 to 2.43, by 2038.

4.8 Other projected (Medium projection) family and household changes in Napier-Hastings for the 2015-2038 period include as follows:

- The number of ‘couple without children’ families is projected to increase by 25%, with ‘two-parent’ and ‘one-parent’ families decreasing numerically by 7.3% and 3.5% respectively.
- The number of family based households is projected to increase by around 5%, with other multi-person households falling in number by almost 14%.
- The number of single-person households is projected to increase by a third.

Economic

4.9 The Hawke’s Bay economy has grown in real terms since 2000 at a long-term average annual rate of approximately 1.5%. Assuming a continuation of this level of annual growth over the 2015-2045 period and an external regional economic environment broadly similar to that prevailing over the past 15 years, real GDP at the end of the period could be expected to be some 55% above the 2015 figure. However, the extent to which this assumed level of growth is achieved or in fact exceeded will depend on the presence and impact in the region of ‘accommodating’ domestic and international economic conditions, trends and policies. It is noted that the latest NZ Institute of Economic Research ‘Consensus Forecasts’ (December 2015) are indicating annual average real GDP growth nationally in the range 2.2-2.7% for the March years 2016-2019. In addition, the latest (December 2015) Ministry of Primary Industries ‘Situation and Outlook for (New Zealand’s) Primary Industries (SOPI) report forecasts further significant growth in total primary industry export returns for the next two years, particularly 2016/17. Total meat and wool, forestry and horticultural returns are forecast to increase by 16%, 23% and 24% respectively between 2015 and 2017.

4.10 From a broad sectoral perspective, total GDP growth in the Napier-Hastings industrial and commercial sectors during the 2015-2045 period, in the range 35-80%, is forecast assuming compounding annual average growth over the period in the range 1-2% (The comparable growth figure for the 2009-2015 period was approximately 1.5%).

4.11 Potentially important influences to note in relation to future economic growth in Hawke's Bay over the long-term forecast period include as follows:

- Further primary production sector growth and development. Within pastoral farming, these include, for example, new industry possibilities such as marbled grass-fed beef meat production, and goats-milk production and added value processing. Within horticulture, they include further growth and expansion in the important regional pipfruit industry (the Ministry of Primary Industries is currently forecasting an approximate 17% lift in total national export production volumes between 2015 and 2017 and 27% lift in total export receipts), wine industry (forecast 6% increase in national export production and associated 15% increase in total export returns) fresh and processed vegetables (forecast 32% increase in total national fresh and process vegetable export returns) and forestry (MPI is presently indicating a total plantation resource for the region of approximately 132,000 hectares of which 99% is radiata pine. Total roundwood removals in 2013 are estimated at 2.5 milllion cubic metres and this level is forecast to increase to a sustainable annual regional yield of around 3.1 million cubic metres after 2018).
- The flow-on regional impacts of the above rural production trends in terms of rural servicing industries, regional processing (e.g. the new Delegats wine-making facility currently being constructed near Hastings) and manufacturing, and seasonal and permanent employment and training.
- The major new Ruataniwha Water Storage Scheme proposed for the Central Hawke's Bay District and its flow-on regional impacts in terms of new land-uses, associated servicing industries, new manufacturing and processing industry possibilities, and Port of Napier and related transport implications.
- Further transportation/roading upgrades in the region, for example, the new Whakatu Arterial road, further upgrading of the Pakowhai-Expressway-Port of Napier link, ongoing developments at the Port of Napier, possible future use of the Napier-Gisborne railway link and future facility and air services developments at the Hawke's Bay Airport.
- Further manufacturing sector developments over time, for example, increased value-added processing and specialised manufacturing orientated to both regional primary sector requirements, and national and international market requirements.
- Further growth and development of the important regional tourism industry-events, cruise ships, wine and related tourism, other tourism 'product', visitor amenities and visitor services.
- Further growth and development at the Eastern Institute of Technology. Over 2010-2014, total EFTS numbers at the Institute (including its Hawke's Bay and Gisborne Campuses) have increased by approximately 40%.
- Important external economic influences such as Central Government restructuring and expenditure changes relating to, for example, transport, health, education/training, welfare/ social assistance and business/regional development, housing access issues in major population centres, immigration/migrant impacts and international market conditions.

4.12 **Employment Growth**

On the basis of historical trends in different employment indicators for the region, annual average total employment growth in the range 1-1.5% is conservatively forecast at the present time for Hawke's Bay, for the long-term forecast period. This covers the primary production, secondary industry, commercial services and public/community services sectors. Given this growth forecast and taking into account gradually improving labour productivity over the forecast period, Statistics New Zealand Household Labour-Force Survey based employment in the region is estimated to be approximately 35% above last year's total employment level of approximately 76,000 by the end of the forecast period.

Given the historical industry employment profile of the region and the factors mentioned in section 4.11 above, it is anticipated that the regional employment contribution of the primary production and related processing sector will strengthen over the forecast period. The wide range of manufacturing and construction, transport/storage/ distribution and business services linked to the primary sector should also benefit from the sector's future growth in the region. The construction sector including the various trades should also benefit from the projected increased population and households in the region. Given the strong seasonality of tourism to the Hawke's Bay region, it is anticipated that annual employment in this sector will grow only gradually over the forecast period. The regional employment contribution of the relatively large public and community services sector (Government, health, education/training and social assistance) will be closely linked to overall population growth in the region during the forecast period and also population growth within population segments such as the school-age, working-age and 65+ population.

5- Updated Household Growth and Population Projections 2015-2045

Key Findings

- Projected new household growth across the HPUDS Study Area of 10,610 or 21% over 2015-2045, under a Statistics NZ 'Halfway Medium to High' household growth projection scenario.
- On the basis of latest Council information, new residential 'greenfields' subdivisions are expected to account for 40% of total new household formation over the projection period, 'infill housing' 55% and rural/lifestyle housing 5%.
- Hastings District will account for approximately 60% of total new household formation in the HPUDS area over 2015-2045 and Napier City the balance of 40%.
- 'Hastings Plains' area accounts for 32% of total Hastings area new household formation and 'Hastings Urban' 39%.
- Projected total population growth for the Study Area of 16,455 or 12.5% over 2015-2045.
- Study Area average household occupancy falls from 2.55 to 2.38 over the projection period.

5.1 This section presents the reviewed and updated household growth and population projections for the Study Area, for the period 2015-2045. The projections take into account the general underlying trends indicated in the analyses provided in Sections 3 and 4 of the report. They also take into account the timing of anticipated new residential sub-division developments and associated total housing capacities, over the planning period. In the Napier City case these include future housing developments impacting the Poraiti, Meeanee and Greenmeadows CAUs in particular. In the Hastings District case, future housing developments include those impacting the Karamu, Frimley, Irongate, Twyford, Bridge Pa, Brookvale, Longlands South and Havelock North Hills CAUs. Consultation was undertaken with planning staff of both the Napier and Hastings Councils regarding proposed localities and timing for new 'greenfields' housing development and associated dwelling capacities. It is noted that the proposed scale of new housing arising in discussion with Council officers has subsequently been adjusted in a few cases in order to meet the overall housing formation totals for the projection period. The potential timing and scale of the new housing development is indicated in **Table 3** below.

5.2 Poraiti includes the existing and potential 'Parklands', 'Mission Heights' and 'Park Island' residential developments. The Meeanee area includes the existing and potential 'Te Awa Estates', 'Riverbend' and 'The Loop' developments. The Greenmeadows area includes potentially part of the 'Park Island' residential development. In the Hastings District, the existing and potential housing developments include Twyford CAU ('Lyndhurst Extension'), Brookvale CAU ('Arataki Extension'), Karamu CAU ('Northwood' and Howard St), Frimley CAU ('Lyndhurst' Stage 1 and 2), Irongate CAU ('Kaiapo Rd and 'Irongate York', Bridge Pa CAU (Part 'Irongate York'), Longlands South CAU (Copeland/Murdoch Rds and Middle Rd/Iona) and Havelock Hills CAU.

5.3 The results in the table indicate a potential total of some 4,220 dwellings being accommodated within the proposed new residential sub-divisions over the forecast period, with Napier City accounting for 57% of these and Hastings District the balance of 43%. This assumes that all of the new housing capacity in the sub-divisions is fully utilised. On the basis of the figures in the table, most of the new housing development will occur during the 2015-2036 period.

5.4 **Table 4** on page 17 indicates a total increase in households/dwellings over the projection period of 10,610. Thus, new 'greenfields' residential sub-divisions will account for, on the basis of the updated projections, 40% of the projected total new household formation in the Study Area over the 2015-2045 period. Rural residential/Lifestyle dwellings (in the 'Hastings Rural' and 'Havelock North Lifestyle' sectors) are projected to account for approximately 5% of total new household formation and 'Infill/Other' the balance of 55%. It is understood that the current HPUDS Strategy document specifies a desired long-term settlement pattern for the the future, of housing intensification/infill 60%, greenfield housing 35% and rural residential housing 5%.

Table 3: Proposed New 'Greenfield' Housing Developments In Napier-Hastings 2015-2045

Census Area Unit	Estimated New Residential Sub Division Dwellings						Total
	2015-2021	2021-2026	2026-2031	2031-2036	2036-2041	2041-2045	2015-2045
Napier City							
Poraiti	290	140	95	120	40	50	**735**
Meeanee	135	225	505	330	195	205	**1,595**
Greenmeadows	0	30	25	20	5	5	**85**
Total	***425***	***395***	***625***	***470***	***240***	***260***	***2,415***
Hastings District							
Twyford	0	160	70	0	0	0	**230**
Brookvale	0	110	60	0	0	0	**170**
Karamu	50	50	0	20	60	0	**180**
Frimley	260	90	0	0	0	0	**350**
Irongate	0	0	185	195	0	25	**405**
Bridge Pa	0	0	0	0	0	20	**20**
Longlands South	170	0	0	0	40	90	**300**
Havelock Hills	0	75	25	25	25	0	**150**
Total	***480***	***485***	***340***	***240***	***125***	***135***	***1,805***
GRAND TOTAL	**905**	**880**	**965**	**710**	**365**	**395**	**4,220**

5.5 **Appendix 3** provides the detailed projections for the Study Area at the CAU level. It is again noted that the table provides the projections on the former Census (June) year time intervals, for consistency with the approach used for the initial HPUDS projections prepared in 2009. It is further noted that the projections have been developed for the two districts separately from the ground up and then brought together to constitute the Study Area totals.

5.6 The projections for both areas are based on Statistics NZ's 'Half-Way Medium to High' household growth projection for the 2013-2038 period, for both the Napier and Hastings territorial local authority districts. This projection was incorporated in the initial HPUDS demographic analysis undertaken in 2009 for the Napier City household growth projections, consistent with the Napier City Council's infrastructural/planning approach at that time. It is noted that this approach continues to be used by the Napier City Council. In the Hastings case, Statistics New Zealand's Medium projections were used in the 2009 analysis as a guide for preparing the future household growth projections for the District.

5.7 For the purposes of this updated analysis of projected future household growth in the HPUDs study area, a more consistent approach has been taken by applying the 'Half-Way Medium to High' projection scenario to the total study area. It is considered that this approach is also relatively consistent with the track of actual household growth in the area over the 2009-2015 period versus projected growth in 2009 for the area. In the 2009 analysis, a total of 50,911 households were projected for the study area in 2015. This figure compares with the SNZ 2006 Census based projections of Medium projection (50,790) and High projection (52,670). This update report now estimates a year 2015 household total for the study area of 51,455 which compares with the latest 2013 Census based SNZ projections of Medium projection (51,055 households) and High projection (51,550 households).

5.8 **Table 4** provides the projection results for the broader housing localities within the HPUDS Study Area, for the period 2015-2045.

Table 4: HPUDS Study Area Projected Household Growth 2015-2045

HPUDS Area	Estimated Total Households 2015	Projected Households						Change 2015-2045 #
		2021	2026	2031	2036	2041	2045	
Hastings Plains	4,720	5,115	5,535	5,935	6,220	6,390	6,795	***2,075***
Hastings Rural	960	1,015	1,050	1,080	1,115	1,135	1,155	***195***
Hastings Urban	12,290	13,240	13,755	14,115	14,435	14,710	14,840	***2,550***
Flaxmere	3,010	3,195	3,305	3,405	3,480	3,555	3,575	***565***
Havelock North	4,745	5,025	5,200	5,355	5,490	5,610	5,665	***920***
Havelock North Lifestyle	830	875	895	950	985	1,030	1,035	***205***
Napier City	24,900	26,110	27,060	27,850	28,420	28,710	29,000	***4,100***
Total HPUDS Study Area	**51,455**	**54,575**	**56,800**	**58,690**	**60,145**	**61,140**	**62,065**	***10,610***

5.9 The key points to note from the table are as follows:

- A projected increase in total households in the Study Area of 10,610 or approximately 21%. This compares with the figure of 8,014 or 16% for the 2009 analysis (it should be noted though that the 2009 analysis adopted a Medium or 'middle of the road' growth projection scenario for the Hastings District component of the Study Area).
- Hastings District accounts for approximately 60% of the total new household formation during the projection period and Napier City 40%.
- The cumulative households totals at the end of each Census period for the latest projections and their comparative figures for the 2009 projections (in brackets) are as follows- year 2021 54,575 (53,130); year 2026 56,800 (55,070); year 2031 58,690 (56,660); year 2036 60,145 (57,800); year 2041 61,140 (58,505) and year 2045 62,065 (58,925).
- In the Hastings District case, the Hastings Plains area is projected to account for 32% of total new household formation over the period and Hastings Urban 39%.

5.10 **Table 5** below indicates the internal Study Area projected population growth over 2021-2045 consistent with the household growth projections in Table 4 above. The population projections have been calculated using the above household projections and a projected trend in average household occupancy for the period (the latter taking into account the latest Statistics NZ population and household growth projections for the Napier-Hastings area). The total Study Area population is projected to increase overall by 16,455 or 12.5% over the period (compared with the total household growth projection of 21%). The Hastings District population is projected to increase by 10,445 or 15% and Napier City's by 6,010 or 10%. Overall average household occupancy is projected to fall from 2.55 in 2015 to 2.38 in 2045. The level of population growth over the full projection period relative to total household growth is significantly higher than in the 2009 analysis primarily due to the adoption for the purposes of this updated analysis of the more optimistic 'Halfway Medium to High' growth scenario for the total HPUDs study area.

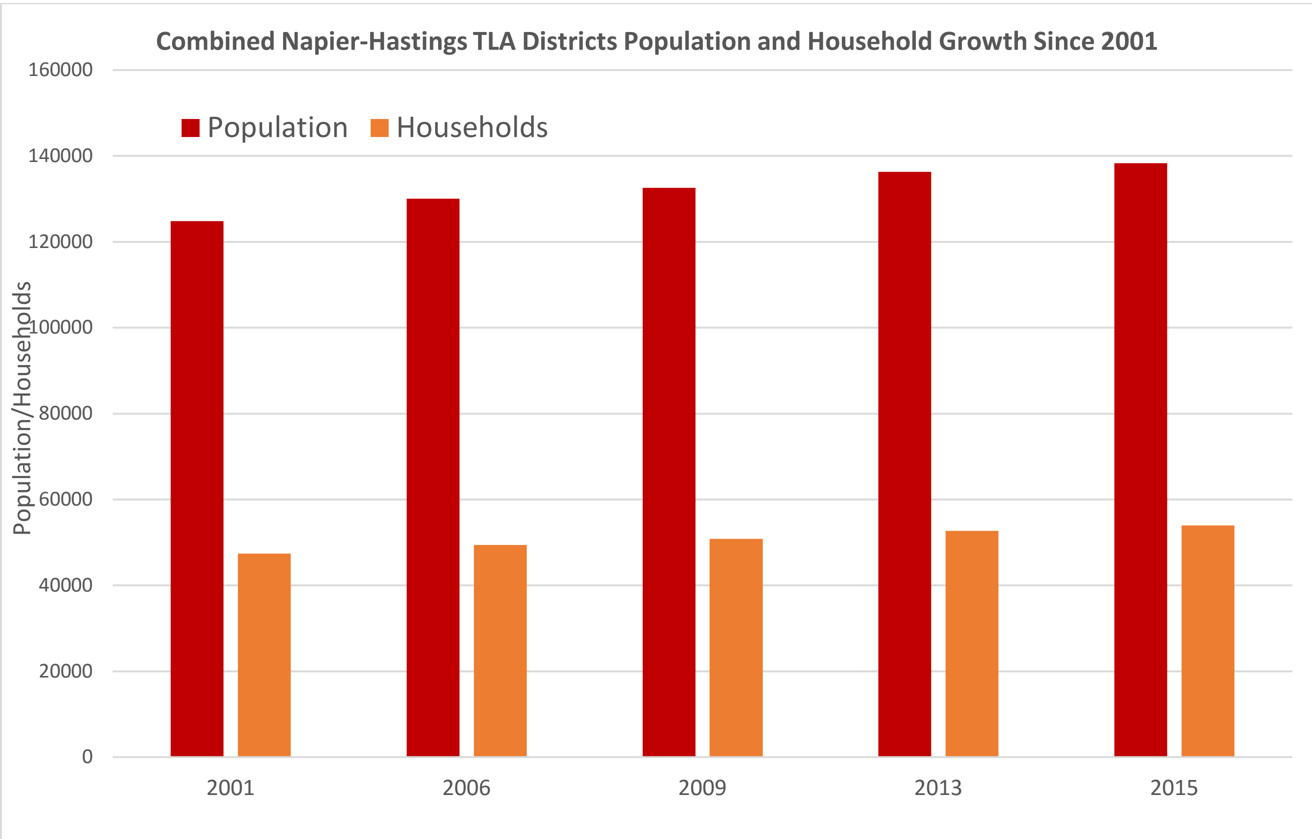
5.11 In terms of the population projections, it is emphasised that they are estimates only based on projected trends in average household occupancy over the next 30 years. To the extent that actual household occupancy rates differ in the future from currently projected levels (due to, for example, the mix of household composition profiles in new housing development areas), the associated population impact could be different from current projections.

Table 5: HPUDS Study Area Projected Internal Population Growth 2015-2045

HPUDS Area	Estimated Population 2009	Estimated Population 2015	Projected Population						Change 2015-2045 #
			2021	2026	2031	2036	2041	2045	
Hastings Plains	12,467	13,237	14,090	15,035	15,895	16,420	16,625	17,420	***4,183***
Hastings Rural	2,350	2,497	2,575	2,615	2,635	2,665	2,655	2,645	***148***
Hastings Urban	30,189	31,384	33,370	34,330	34,880	35,315	35,625	35,575	***4,191***
Flaxmere	9,953	9,951	10,320	10,455	10,545	10,545	10,535	10,355	***404***
Havelock North	11,159	11,836	12,330	12,605	12,825	12,980	13,100	13,060	***1,224***
Havelock North Lifestyle	1,882	2,095	2,170	2,190	2,290	2,340	2,415	2,390	***295***
Napier City	57,900	60,400	62,665	64,405	65,725	66,220	66,320	66,410	***6,010***
Total HPUDS Study Area	**125,900**	**131,400**	**137,520**	**141,635**	**144,795**	**146,485**	**147,275**	**147,855**	***16,455***

5.12 **Figure 4** indicates the trends over 2001-2015 in combined full Napier-Hastings TLA area population and household numbers. During the period, the total population of the area increased by 13,500 or approximately 11%. Meanwhile, the total number of households rose by 6,600 or 14%.

Figure 4



6- Forecast Commercial and Industrial Growth

Key Findings

- Forecast annual average real GDP growth for the broad industrial sector of 2% combined with further annual labour productivity growth, results in a forecast 5,000 total employment gain for the sector over 2015-2045.
- Similar growth forecasts for the commercial sector anticipated to result in an overall employment gain for the period of 14,000 or 34%.
- Forecast additional industrial sector floorspace demand over 2015-2045 of an estimated 900,000m^2, the same level as forecast in 2009.
- Total land requirement associated with the later forecast is in the order of 225 hectares, assuming an average building GFA: site coverage ratio of 40%. This equates to an additional average annual new industrial land requirement across Napier-Hastings of approximately 7.5 hectares (with an estimated 5ha annually for Hastings and 2.5ha for Napier).
- Forecast additional commercial sector floorspace demand over 2015-2045 of an estimated 700,000m^2, the same level as forecast in 2009.
- Total land requirement associated with the 2015 forecast is approximately 110 hectares, assuming an average building GFA: site coverage ratio of 65%. This equates to an additional average annual new commercial land requirement of approximately 4 hectares (with an estimated 2.5ha annually for Hastings and 1.5ha for Napier).
- Additional land requirement associated with the projected new residential sub-division housing in Napier-Hastings over 2015-2045 calculated at in the range approximately 200-330 hectares depending on the range of section or lot sizes associated with the housing.

6.1 This section provides an analysis of forecast industrial and commercial/services growth for the Study Area for the 2015-2045 period and the associated land demand implications of the growth. In the latter regard, the land requirements associated with the projected household formation assessed in the previous section of the report are also considered in this section.

6.2 The specific indicators used for the industrial and commercial growth are real GDP, employment and GFA new building floorspace. The industrial sector is defined for the purposes of the analysis as including the manufacturing, utility services (power/gas/water/drainage/waste services), construction and transport/storage/warehousing industries the location of which could be expected to be primarily in industrial 'zones' of a district. The commercial or services sector is broadly defined to include all those private and public service industries primarily located in CBD (Central Business District) and suburban business areas of a district-examples include wholesaling/retailing, hospitality/tourism, business services and community services (public administration, health, education, welfare, recreation, cultural and household services).

6.3 Since 2000, the Hawke's Bay industrial sector GDP has increased in real terms at an average annual growth rate of approximately 2%. Assuming a continuation of this level of growth over the forecast period, Napier-Hastings sector GDP in 2045 is forecast to be in the order of $1,100 million or approximately 80% above the 2015 level. A real GDP annual average growth rate of 2%, combined with annual average labour productivity growth over the forecast period of 1%, will accordingly generate a total increase in sector employment for the period of approximately 5,000 or 35%.

6.4 Since 2009, Napier-Hastings commercial sector GDP has increased in real terms at an average annual rate of 1.8%. Assuming average annual growth in the range 1.5-2% over the forecast period, sector GDP in 2045 is forecast to be in the range approximately \$1,414 million (up 56%) to \$2,037 million (up 81%) above the 2015 level. A real GDP annual average growth rate of 2%, combined with annual average labour productivity growth over the forecast period of 1%, will accordingly generate a total increase in sector employment for the period of approximately 14,000 or 34%.

6.5 In terms of the increase in the total Napier-Hastings industrial sector GFA floorspace requirement for the 2015-2045 period, a comparative assessment of the total floorspace implication associated with the forecast increase in total employment in the sector (section 6.3 above) over the period and the actual annual levels of new industrial building floorspace consented during 2000-2015, infers an additional industrial sector floorspace demand for the next 30-year period of an estimated 900,000m^2. This is the same figure as forecast in the 2009 HPUDS analysis. On the basis of the Hastings District's overall share of total Napier-Hastings consented new industrial building floorspace GFA since 2009, the Hastings District will account for approximately 70% (630,000m^2) of the additional floorspace demand and Napier City the balance of 30% (270,000m^2). The total land requirement associated with the forecast industrial floorspace demand across Napier-Hastings over the period is in the order of 225 hectares, assuming an average building GFA: site coverage ratio of 40%. This equates to an additional average annual new industrial land requirement of approximately 7.5 hectares (with an estimated 5 hectares annually for Hastings and 2.5ha for Napier). It is noted that a recent specialist local Valuation Company study undertaken for the Hastings District Council indicates an annual uptake/demand level for new industrial land in the Hastings District of 4.1 hectares for the 2009-2015 period.

6.6 In terms of the future demand for commercial sector building floorspace and associated land across the Napier-Hastings area, a comparative assessment of the total floorspace implication associated with the forecast increase in total employment in the sector (section 6.3 above) over the period and the actual annual levels of new commercial building floorspace consented during 2000-2015, infers an additional commercial sector floorspace demand for the next 30-year period of an estimated 700,000m^2. This figure is again the same as forecast in 2009. On the basis of current employment and GFA new building shares for the sector, the Hastings District will account for approximately 60% (420,000m^2) of the additional floorspace demand and Napier City the balance of 40% (280,000m^2). The total land requirement associated with the forecast commercial floorspace demand across Napier-Hastings over the period is in the order of 110 hectares, assuming an average building GFA: site coverage ratio of 65%. This equates to an additional average annual new commercial land requirement of approximately 4 hectares (with an estimated 2.5 hectares annually for Hastings and 1.5ha for Napier).

6.7 In terms of the additional land requirement associated with the projected additional 'greenfields' housing demand only across the HPUDS Study Area over the 2015-2045 period, this has been calculated at in the range 200-330 hectares using the current range of housing floorspace 'footprints' across Napier-Hastings new sub-division areas. The availability for this update report of more detailed base data on average new dwelling 'footprints' and site coverage ratios for different housing developments around the Napier-Hastings area has enabled a more robust analysis of the land requirement associated with the projected new 'greenfield' housing development over the next 30 years.

Appendix 1

Hastings CAUs	Broader Classification
Twyford	Hastings Plains
Karamu	Hastings Plains
Whakatu	Hastings Plains
Clive	Hastings Plains
Haumoana	Hastings Plains
Brookvale	Hastings Plains
Irongate	Hastings Plains
Longlands South	Hastings Plains
Tangoio	Hastings Rural
Eskdale	Hastings Rural
Sherenden-Puketapu	Hastings Rural
Omahu	Hastings Plains
Waiohiki	Hastings Plains
Pakowhai	Hastings Plains
Maraekakaho	Hastings Rural
Bridge Pa	Hastings Plains
Poukawa	Hastings Rural
Pakipaki	Hastings Plains
Waimarama	Hastings Rural
Tutira	Hastings Rural
Puketitiri	Hastings Rural
Whanawhana	Hastings Rural
Mahora	Hastings Urban
St Leonards	Hastings Urban
Frimley	Hastings Urban
Raureka	Hastings Urban
Mayfair	Hastings Urban
Parkvale	Hastings Urban
Hastings Central	Hastings Urban
Akina	Hastings Urban
Woolwich	Hastings Urban
Camberley	Hastings Urban
Kingsley-Chatham	Flaxmere
Lochain	Flaxmere
Flaxmere East	Flaxmere
Anderson Park	Havelock North
Iona	Havelock North
Havelock Hills	Havelock North Lifestyle
Te Mata	Havelock North
Havelock North Central	Havelock North
Te Mata Hills	Havelock North Lifestyle

Appendix 2

HPUDS Study Area Household Growth 2006-2015

Census Area Units	Households June 2006	Households June 2009	Households June 2013	Households June 2015
Hastings District:				
Twyford	409	405	399	410
Karamu	361	443	552	570
Whakatu	301	297	291	300
Clive	591	636	696	715
Haumoana	870	898	936	960
Brookvale	198	203	211	215
Irongate	173	170	166	170
Longlands South	336	351	370	380
Tangoio	13	14	15	15
Eskdale	240	253	271	280
Sherenden-Puketapu	36	38	41	40
Omahu	131	128	125	130
Waiohiki	125	132	141	145
Pakowhai	217	206	192	195
Maraekakaho	168	178	192	195
Bridge Pa	272	270	268	275
Poukawa	192	198	206	210
Pakipaki	237	242	249	255
Waimarama	195	203	214	220
Tutira	0	0	0	0
Puketitiri	0	0	0	0
Whanawhana	0	0	0	0
Mahora	1,407	1,414	1,424	1,465
St Leonards	1,199	1,204	1,210	1,245
Frimley	623	724	859	885
Raureka	1,573	1,598	1,632	1,680
Mayfair	1,567	1,580	1,597	1,640
Parkvale	1,324	1,346	1,376	1,415
Hastings Central	1,349	1,347	1,344	1,380
Akina	1,774	1,806	1,849	1,900
Woolwich	16	15	13	15
Camberley	684	669	648	665
Kingsley-Chatham	838	859	888	915
Lochain	854	853	853	875
Flaxmere East	1,250	1,223	1,188	1,220
Anderson Park	553	554	556	570
Iona	1,173	1,197	1,230	1,265
Havelock Hills	285	323	374	385
Te Mata	1,250	1,364	1,517	1,570
Havelock North Central	1,301	1,302	1,303	1,340
Te Mata Hills	396	414	434	445
Total	***24,481***	***25,057***	***25,830***	***26,555***

Census Area Units	Households June 2006	Households June 2009	Households June 2013	Households June 2015
Napier City:				
Bay View	679	725	786	805
Poraiti	251	450	715	735
Meeanee	437	529	651	665
Awatoto	138	136	134	135
Westshore	495	505	517	530
Ahuriri	511	521	533	545
Onekawa Central	572	583	597	610
Onekawa West	125	128	131	135
Onekawa South	1,630	1,661	1,702	1,745
Marewa	1,939	1,976	2,025	2,075
Maraenui	991	1,010	1,035	1,060
Hospital Hill	1,168	1,190	1,220	1,250
Bluff Hill	1,144	1,166	1,194	1,225
Nelson Park	960	978	1,003	1,025
Mclean Park	991	1,010	1,035	1,060
Tamatea North	1,006	1,025	1,051	1,075
Tamatea South	1,034	1,053	1,079	1,105
Greenmeadows	2,783	2,836	2,906	2,975
Taradale North	2,190	2,231	2,287	2,340
Taradale South	2,186	2,228	2,283	2,340
Pirimai	1,370	1,394	1,431	1,465
Total	***22,600***	***23,335***	***24,315***	***24,900***
Grand Total	**47,081**	**48,392**	**50,145**	**51,455**

Appendix 3

Updated HPUDS Study Area Household Growth Projections 2015-2045 at the Census Area Unit (CAU) Level

Census Area Units	Estimated Households June 2009	Estimated Households June 2015	Projected Households 2021-2045					
			2021	2026	2031	2036	2041	2045
Hastings District:								
Twyford	405	410	415	575	645	645	645	645
Karamu	443	570	620	670	670	690	750	750
Whakatu	296	300	320	330	340	345	355	360
Clive	636	715	760	785	810	825	845	855
Haumoana	898	960	1,020	1,055	1,085	1,110	1,135	1,145
Brookvale	204	215	215	325	385	390	390	390
Irongate	170	170	170	170	355	550	550	685
Longlands South	351	380	550	550	550	550	590	685
Tangoio	14	15	15	15	15	20	20	20
Eskdale	253	280	295	305	315	325	330	335
Sherenden-Puketapu	38	40	40	45	45	45	45	50
Omahu	128	130	140	145	145	150	155	155
Waiohiki	131	145	155	160	165	170	170	175
Pakowhai	206	195	205	215	220	225	230	235
Maraekakaho	178	195	205	215	220	225	230	235
Bridge Pa	270	275	275	275	275	275	275	410
Poukawa	198	210	225	230	235	245	250	250
Pakipaki	242	255	270	280	290	295	300	305
Waimarama	203	220	235	240	250	255	260	265
Tutira	0	0	0	0	0	0	0	0
Puketitiri	0	0	0	0	0	0	0	0
Whanawhana	0	0	0	0	0	0	0	0
Mahora	1,414	1,465	1,555	1,610	1,655	1,695	1,730	1,750
St Leonards	1,204	1,245	1,320	1,365	1,405	1,440	1,470	1,485
Frimley	724	885	1,145	1,235	1,235	1,235	1,235	1,235
Raureka	1,598	1,680	1,780	1,845	1,900	1,945	1,985	2,005
Mayfair	1,579	1,640	1,740	1,800	1,850	1,900	1,940	1,955
Parkvale	1,346	1,415	1,500	1,555	1,600	1,640	1,670	1,690
Hastings Central	1,347	1,380	1,465	1,515	1,560	1,595	1,630	1,645
Akina	1,806	1,900	2,015	2,085	2,145	2,200	2,245	2,260
Woolwich	15	15	15	15	15	15	20	20
Camberley	669	665	705	730	750	770	785	795
Kingsley-Chatham	859	915	970	1,005	1,035	1,060	1,080	1,090
Lochain	853	875	930	960	990	1,010	1,035	1,040
Flaxmere East	1,223	1,220	1,295	1,340	1,380	1,410	1,440	1,445
Anderson Park	554	570	605	625	645	660	675	680
Iona	1,197	1,265	1,340	1,390	1,420	1,465	1,495	1,510
Havelock Hills	323	385	410	425	435	445	455	460
Te Mata	1,364	1,570	1,670	1,725	1,775	1,815	1,855	1,875
Havelock North Central	1,302	1,340	1,410	1,460	1,515	1,550	1,585	1,600
Te Mata Hills	413	445	464	469	515	540	575	575
Total	***25,057***	***26,555***	***28,465***	***29,740***	***30,840***	***31,725***	***32,430***	***33,065***

Census Area Units	Estimated Households June 2009	Estimated Households June 2015	Projected Households 2021-2045					
			2021	2026	2031	2036	2041	2045
Napier City:								
Bay View	725	805	855	890	895	905	910	910
Poraiti	450	735	1,025	1,165	1,260	1,380	1,420	1,470
Meeanee	529	665	800	1,025	1,530	1,860	2,055	2,260
Awatoto	136	135	165	170	180	185	185	185
Westshore	505	530	540	550	555	560	560	560
Ahuriri	520	545	555	565	570	575	575	575
Onekawa Central	583	610	620	635	645	645	645	650
Onekawa West	128	135	155	165	165	170	170	170
Onekawa South	1,661	1,745	1,750	1,760	1,760	1,765	1,770	1,770
Marewa	1,976	2,075	2,100	2,130	2,150	2,160	2,165	2,170
Maraenui	1,010	1,060	1,065	1,070	1,075	1,080	1,080	1,080
Hospital Hill	1,190	1,250	1,340	1,380	1,400	1,415	1,415	1,420
Bluff Hill	1,165	1,225	1,245	1,270	1,300	1,305	1,305	1,310
Nelson Park	978	1,025	1,055	1,090	1,100	1,105	1,110	1,110
Mclean Park	1,010	1,060	1,070	1,120	1,125	1,125	1,130	1,130
Tamatea North	1,025	1,075	1,080	1,080	1,080	1,080	1,085	1,085
Tamatea South	1,053	1,105	1,115	1,120	1,120	1,120	1,125	1,125
Greenmeadows	2,836	2,975	3,100	3,250	3,270	3,290	3295	3,300
Taradale North	2,231	2,340	2,500	2,570	2,590	2,600	2,605	2,610
Taradale South	2,228	2,340	2,500	2,570	2,590	2,600	2,605	2,610
Pirimai	1,396	1,465	1,475	1,485	1,490	1,495	1,500	1,500
Total	***23,335***	***24,900***	***26,110***	***27,060***	***27,850***	***28,420***	***28,710***	***29,000***
Grand Total	**48,392**	**51,455**	**54,575**	**56,800**	**58,690**	**60,145**	**61,140**	**62,065**