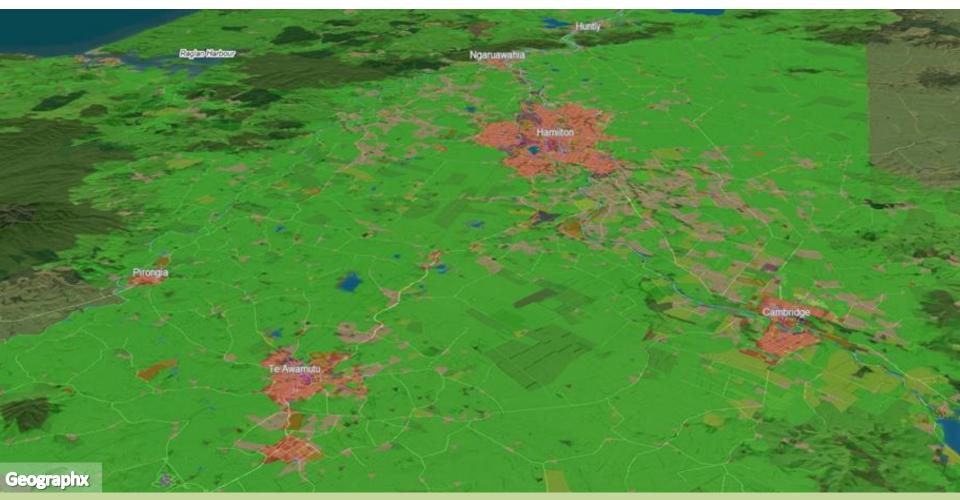
## **Waikato Projections**



## Agenda

- 1. Overview
- 2. Future Proof & regional projections
- 3. Your requirements
- 4. Next steps -> Working Group

# **Use of Projections**

- LTPs, RPS, Regional/District Plans
- Transport planning (RLTP, RPTP, NZTA funding)
- Infrastructure and Asset Management Plans
- Non-statutory strategic planning (Waikato Plan, Future Proof, Sea Change, Econ Development)

at the (inter)-regional, district/city, local level

## **Other drivers**

- » Better Local Government
- > Business Growth Agenda

Healthy environment Strong economy Vibrant communities Shared and common evidence-base to ensure consistency in planning and decision-making



## **Population Projections for the Waikato Region**

- NIDEA, University of Waikato
  - Population (by age/gender)
  - Households
  - Labour force
- From 2013 to 2063
- By TA and CAU

Projections are <u>not</u> predictions. All projections are wrong... NZ Population Clock **4,730,776** 

as at Wednesday, 10 Nov 2016 at 09:04:21



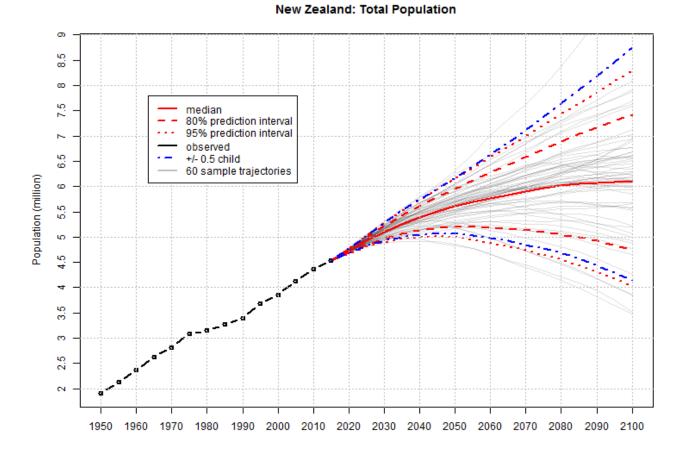


Healthy environment

Strong economy

# **UN Population Projections for NZ**

Un Department of Social and Economic Affairs, 2015, http://esa.un.org/unpd/wpp/Graphs/

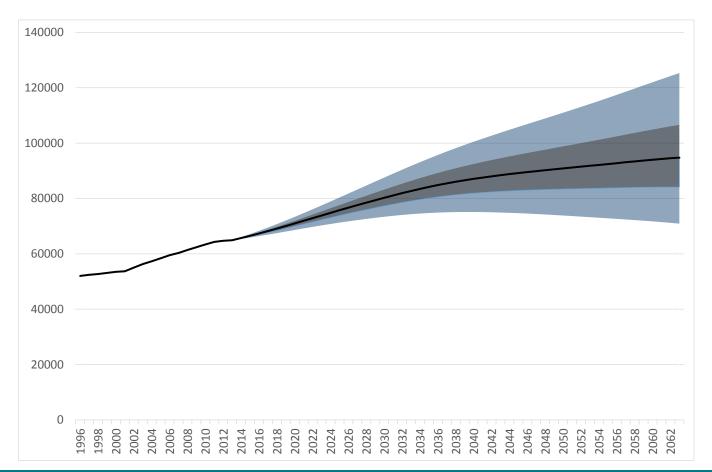




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# Probabilistic population projections for Waikato District

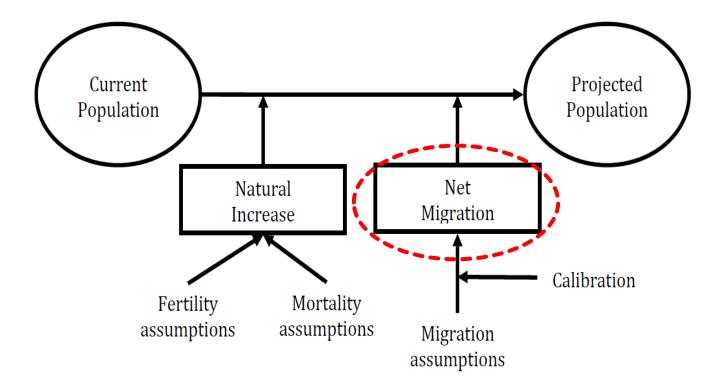


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# Waikato Population Model (NIDEA)



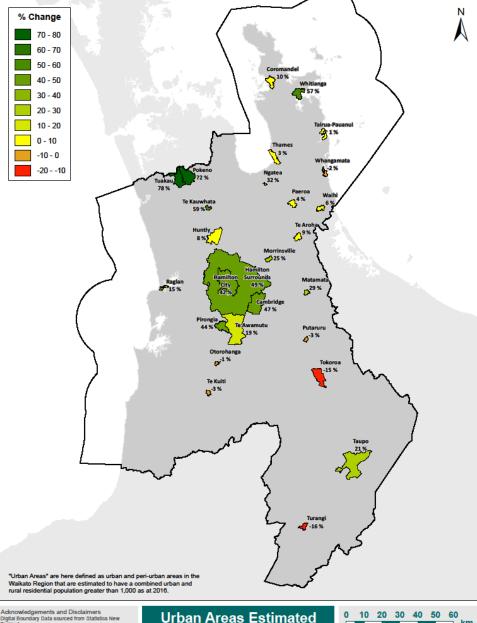


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## Population (estimated resident pop)

## **Urban Areas** Change 1996-2016 (%)



**Resident Population** 

% Change

1996-2016

n km

Waikato

ontract fort or otherwise

Scale at A3

= 1.1000000

Created by: DGL

Date: 8/11/2016

Version: FINAL

Job No.: 32049 File: 3209 Percent C

Digital Boundary Data sourced from Statistics New

Urban Areas data derived by Walkato Regional Council from Statistics New Zealand Urban Area, Census Area Unit and Meshblock data, 2016.

CC-Ry Land Information New Zealand. This product uses lata sourced from Landcare Research under CC-BY, http://creativecommons.org/licenses/by/3.0/nz/

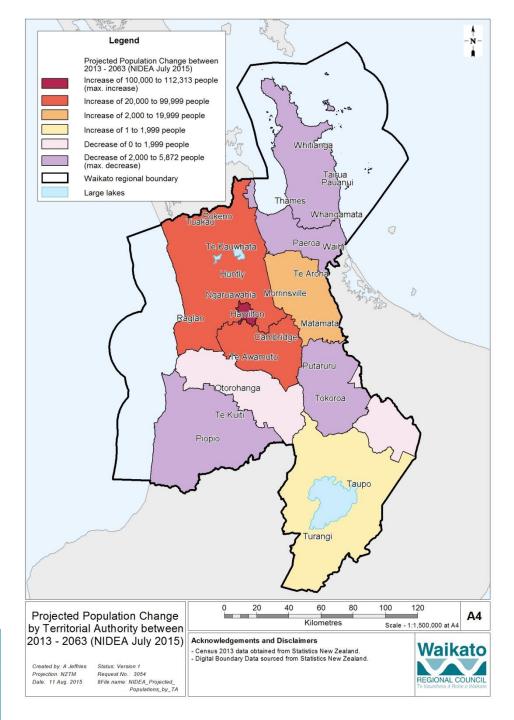
A3 Map.mxd DISCLAIMER: While Walkalo Regional Council has exercised all reasonable skill and care in controlling the contents of this information, Walkato Regional Council accepts no liability howsoever, for any loss, damage, injury expense (whether direct, indirect or consequential) arising out of the provision of this information or its use by you.



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Projected population changes in the districts, by 2063

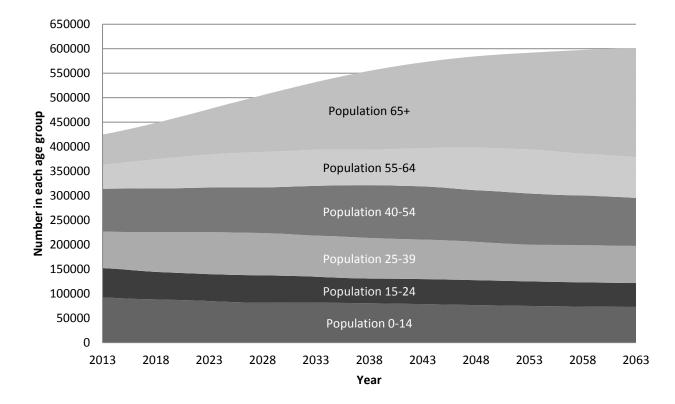
Continuing regional growth, but significant variations across the region



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# Key issues – ageing and depopulation



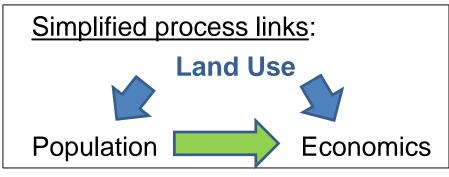
#### Waikato population projections 2013 to 2063, by age group



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# Projections 2013-2063

- Projections of: Land Use, Population, Economics
- Waikato region, TAs (11) and CAUs (201)
- Land Use Waikato Regional Council (WISE/Alchemists Ltd)
  - Land use (25 urban and rural land use classes; 100mx100m)
- Population NIDEA, University of Waikato
  - Population (by age/gender)
  - Households
  - Labour force
- Economic Market Economics Ltd
  - Employment
  - Value-added





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# Process for developing land use, population and economic projections for the Waikato Region

WISE Zoning / Infrastructure update Work Stream **Population Work Stream** Economics Work Stream (Market Economics) (NIDEA - UoW) (Waikato Regional Council) Identify major roading =1c(location/\$) Interim Other Economic additions for 2013, population 2021, 2041 from NZTA projections data projections (exports and data **Identify other** capital significant 'aspirations' projections) Economic for development 1c (location location/ **Futures** /\$) extent Model **€**=1d= Add significant (EFM) Whole new Zoning from Review operative plans STEP 1 of Waikato (WOW) 1b location/ **Population** location/ extent Model extent Outputs used to .2 a update sector formatted into GIS files to economics in WISE import into WISE 1f **Output Land Modelling of** Regression Use by CAU future years 2b **Output Land** 2b CAU Use by CAU future years Modelling WISE Economic of Model **Projections** Population 2b (updated by CAU zones, roads, **Constrained Gross** STEP 2 FINAL population, **Output for future years** Population economics) **Projections by TA** 2d 2e 2c **FINAL FINAL Economics Projections** Population - employment, gross output, value added Projections by CAU by 1 digit ANZSIC by TA and CAU Alchemists

0

REGIONAL COUNCIL

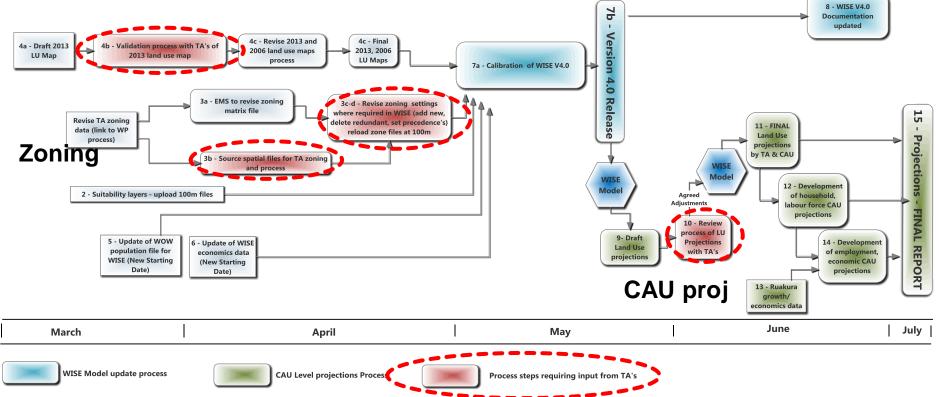
Te Kaunihera & Rohe o Waikato

Work stream process for creating updated population and economic data for WISE, WRTM, and FP

Strong economy

## 2015 Update of WISE – Input from TAs

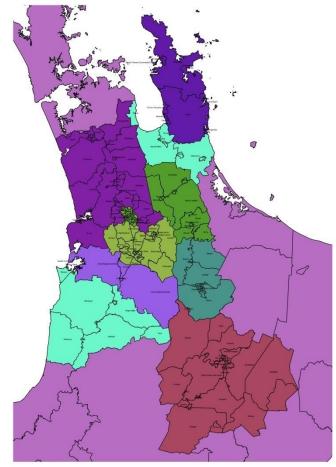
Land Use





# **Projections – Some Caveats**

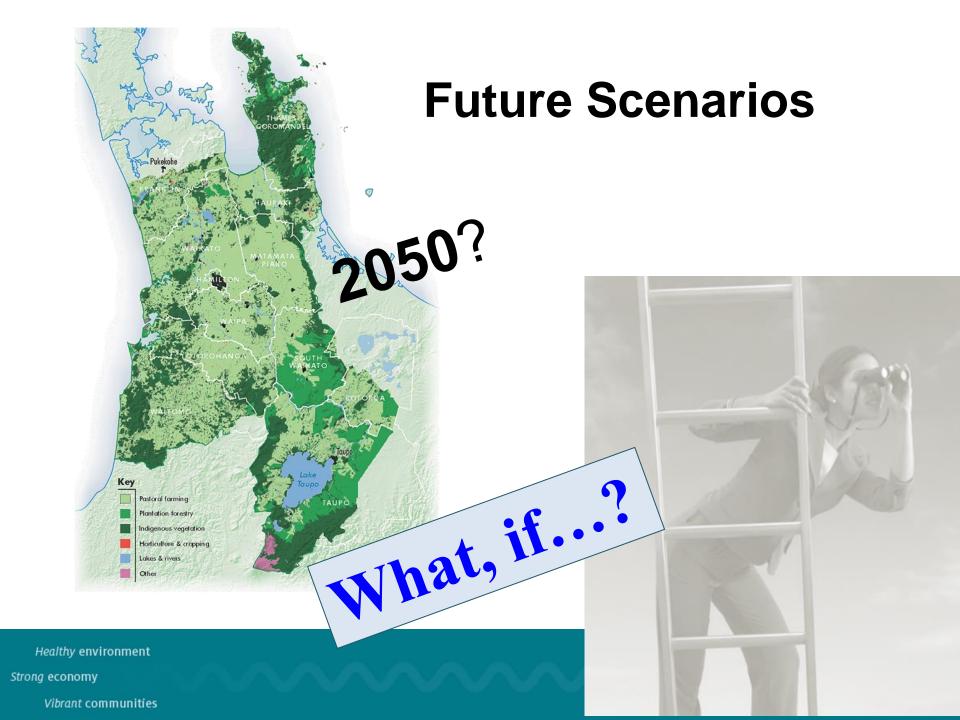
- Not forecasts or predictions
- Models are not reality
- Uncertainty
- Models cannot mind read



Limited knowledge – ongoing improvement

Healthy environment Strong economy Vibrant communities





## Waikato in 2050 – Three Different Futures (what/ifs?) (based on WISE Prototype)

## 1-Dairy Expansion

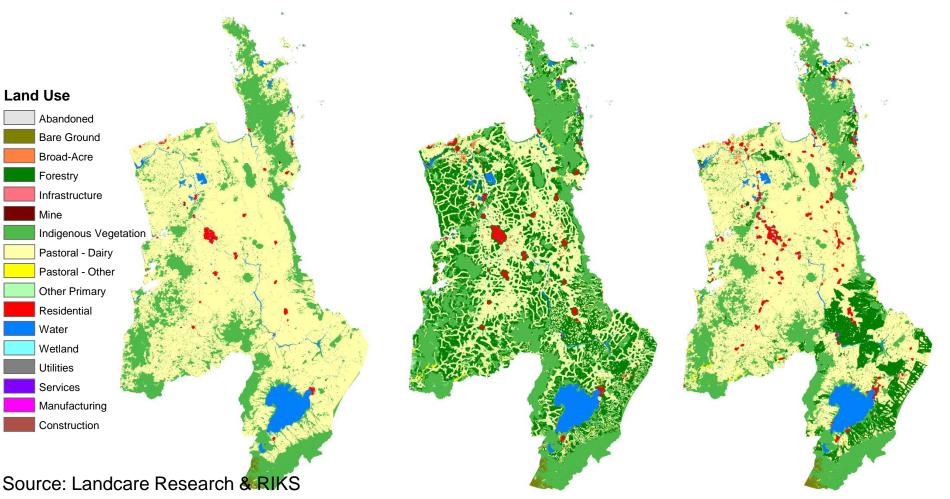
Land for dairying increases ~4% annually

#### 2-Diversification

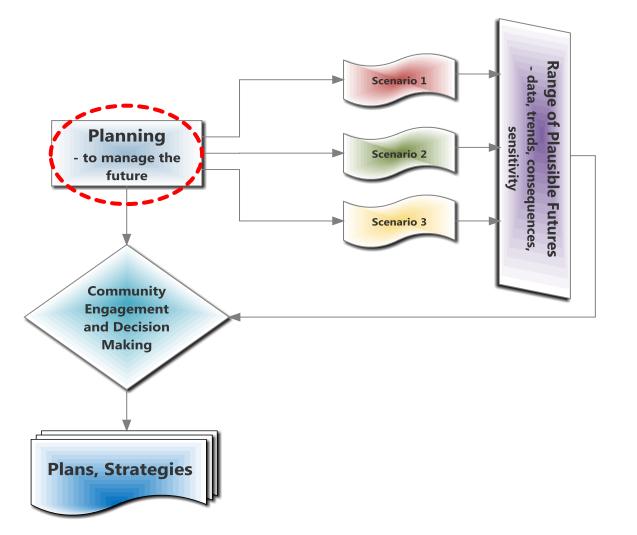
Demand for non-dairy primary production land increases

## 3-Village Life

Residential land increases 7-fold



## Use of projections/WISE Model for Scenarios



Waikato

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# Thank you

## Data files and documents available from:

- <u>ftp://Projections:CRiZSjCR@pubftp.waikatoregion.govt.nz</u>
- (follow instructions in email of meeting invite, access expires <u>9 Dec 2016</u>)

#### Data:

- 1) TA and CAU Land Use projections
- 2) TA population projections (pop, households, labour force) CAU by Nov 2016
- 3) TA and CAU Economic projections (value added, employment) End Dec 2016

#### **Reports:**

- Population, family and household, and labour force projections for the Waikato region, 2013-2063 (2015 update): <u>http://www.waikatoregion.govt.nz/TR201528/</u>
- 2) Land Use, Demographic and Economic Projections for the Waikato Region, 2013 to 2061' (methodology, process and March 2016 data): <a href="http://www.waikatoregion.govt.nz/tr201603/">www.waikatoregion.govt.nz/tr201603/</a>

## WISE Model:

- 1) YouTube video: <a href="https://www.youtube.com/watch?v=RgEABCz1Rrl">https://www.youtube.com/watch?v=RgEABCz1Rrl</a>
- 2) Website: <a href="http://www.creatingfutures.org.nz/">http://www.creatingfutures.org.nz/</a>

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