**Projections for the Waikato Region**

**Meeting Notes**

## Wednesday 29th March 2017, 1.00 – 3.00pm

## Waikato Regional Council, Waikato Room

**Objectives**

1. Timeline of 2018 Census projection work – council needs and deadlines for deliverables.
2. Household modelling – options for including households in WISE model.

**Attendants**

Beat Huser (WRC- Chair), Greg Carstens (HCC), Nathan Dalgety (HCC), David Totman (Waipa DC), Anton Marais (WDC), Scott Summerfield (TCDC), Dawn Inglis (RATA – WRTM Project Manager), Te Hao Apaapa-Timu (SWDC), Derek Phyn (WRC), Craig Briggs (WRC), Tony Fenton (Alchemists Ltd), Michael Cameron (by Phone, from 2.10pm)(NIDEA).

**Apologies**

Donna Tracey (Waikato DC), Vishal Ramduny (Waikato DC), Gary Knighton (Waipa DC), Nick Carroll (TDC), Hadley Tattle (TDC), Sue Mavor (Taupo DC), Michelle Staines-Hawthorne (MPDC), Charan Mischewski (HDC), Niall Baker ((MPDC), Jenni Vernon (Waikato DC), Greg Morton (WRC), Joanne Gread (Waitomo DC), Cathy O’Callaghan (Waitomo DC), Alan Moss (SWDC), Susan Henderson (HCC), Michelle White (HCC/FP), Hanna Berndt (WDHB), James Bevan (NZTA), Ken Tremaine (FP/Waikato Plan), Garry McDonald (Market Economics).

**Background**

The following documents were circulated prior to meeting (available from shared site, see at end):

1. Minute from previous meeting (10th December 2016)
2. Timeline for projections process to support 2021 LTP process

**Feedback on Action points from previous meeting**

**Comparison NIDEA and latest** [**SNZ TA Projections**](http://www.stats.govt.nz/browse_for_stats/population/estimates_and_projections/ta-pop-projections-2013-43-update.aspx)

***Action:*** *Beat/Tony to work with Michael (NIDEA) to develop and circulate a max 2-pager to include some pertinent key facts and messages to assist consistent communication with Councillors and Executive staff.*

Michael Cameron has provided a draft two pager summary for councils. This will be sent out to all councils with these minutes. Any feedback/questions are welcome and will be used to create a final version of this summary.

**New Action:** Feedback on draft to Beat by 20 April.

**Absentee ratepayers**

***Action:*** *Tony to contact Sharon Fitzpatrick (Senior Data Management Analyst, WRC).*

*Further Comments:*

* Not easy to assess robustly due to range of living/use arrangements – what is specific need for understanding absentee rate payers for TA’s?
* Do TA’s want to estimate them now or be able to project them into future?
* If projecting into future there is risk in using simplified assumptions – “estimate households and dwellings then by inference Dwellings – Households = vacant dwellings (i.e. ‘absentee ratepayers’)” – if vacant dwellings are based on census night then is it reasonable to assume they stay the same? – If not what drives how they could vary and how to model this. Would this be robust?

This is only an issue for one or two TA’s (e.g. TCDC), and it is recommended to take this issue out of the overall projection working group scope.

**Rating unit**

***Action:*** *Tony/Derek to contact Sharon F (WRC).*

*Further Comments:*

* Apart from dwellings (occupied and unoccupied) modelling any calculation of rating units needs to consider any vacant land – empty residential sections/industrial estates under development. Any dwellings estimates are probably not good indication of total rating units
* If the assumption that ‘the ratio of commercial/industrial rating units to dwellings stays constant’ is used in any projections this may not hold over time for vacant land component, as it is released in big areas for development of vacant lots.
* The work being undertaken for Future Proof on Business floor area demand /supply and residential supply might be useful for this modelling.
* Would be interesting to identify the range of assumptions that TA’s are using currently to estimate ‘rating units’ for current LTP.
* (see notes/discussion that occurs with Data needs ‘Matrix table’ below)

**Other Actions from the last meeting relating to Households/dwellings and other spatial processing are covered in next section as they were discussed at this meeting in detail.**

**Agenda items**

# Timeline of 2018 Census and follow on projection work

A timeline was prepared to show what steps are required to undertake updates to modelling processes (WISE, new population model, new economic model, households) and when input data might be available from 2018 census.

The key question for this process is:

To have projections data (based on 2018 census results) ready for informing the development of your 2021 LTPs (and other needs) **what are the critical timeframes for your processes?**

Discussion:

* The consensus was that the projections data would be required **by February 2020**.
* The issues was discussed that these would need to be draft projections as Statistics NZ are unlikely to have released their number for Household Generation Rates (based on the 2018 census) until Mid 2020 based on their timing of releases from the 2013 census.
* This would necessitate a rerun of the projections in about November 2020 based on the updated Household Generation Rates to provide final data to support the 2021 LTPs

**New Action:** Tony/Beat to seek feedback from Councils not present at this meeting to confirm their stance on this issue. (Updated proposed timeline attached).

# Specific Data needs of TA’s

A table of understood data needs for the TA’s based on previous modelling work, meeting discussions and current work being undertaken was produced (See Table below). This shows Projections that:

* have been produced at TA level (blue shading) by University of Waikato for Population and Households,
* have been produced at a CAU level (orange shading) based on projected land use outputs from WISE
* are have been identified as required by some/all TA’s for future projections (points 1-4 in table)
* are currently being developed under additional analysis by Market Economics (points 5 in table)

The question was asked:

**Are there other parameters you need for your LTP planning?**

There were no further parameters identified at the meeting.

Of those parameters previously identified only ‘Households by Wards/settlement areas” is unable to be projected as the supporting census data is not available at these areas (i.e. their boundaries are not consistent with CAU units).

Dwellings and Rating units could be projected if some generalized assumptions are made (and agreed by TA’s). It was also raised that these parameters are being estimated/projected for current LTP process and it would be good to capture what modelling processes and assumptions were used.

Data needs for Transport Modelling were identify as breakdown to modelling zones for households (types?) and employment projections.

**New Action:** Seek feedback from Councils not present at this meeting to confirm their specific data needs to complete the able table below**.**

Also get input on how parameters such as rating units/Dwellings are being projected for this LTP and what assumptions are being used (current work by MDDC, HDC, TCDC, SWDC and Waitomo(?).



# Households Modelling in WISE

The option to add in additional residential land use types in a future update of the WISE model is being explored. This will be investigated further and reported on as it influences the setup and functioning of any households modeling that might be included into WISE.

At this stage it is seen a feasible to include a Households Model into WISE. The best approach is seen to be an option where the population model would feed into a Households Model, this component would then generate demand for each of the residential land use types and feed this information into the WISE Land Use Change Model (Figure 1).

WISE would then allocate residential land uses based on (TA level) household densities for each residential land use type. Within the Household model it is expected that demand for household generation for each residential land use type would be driven by specific preferences for each household type (i.e couples with children, single person)

**Figure 1: Land Use Modelling using household densities**

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Using an allocation approach as outlined in Figure 2 is seen as more defendable as demand LU types is being driven preferences of particular household types and not just population change.

It was noted that this approach will still have the limitation that is currently present with WISE modelling ( the TA average allocation of residential densities) as household densities will also be allocated based on TA averages. The addition of more residential land use type will help to mitigate this issue (depending on the number and scope of additional residential types). But the addition of a households model alone may not reflect some of the specific behaviours expected by TA’s in some areas as a result of specific socio-economic factors.

**Figure 2: Allocation of Population to Household Types to Land Use Demand**



# Stats NZ review of statistical geographies, including CAU boundaries

Stats has arranged several meetings with interested councils and other parties in the Waikato re their [review of geographical boundaries](http://www.stats.govt.nz/methods/classifications-and-standards/current-classifications-and-standards-review/stat-std-geo-areas-2015-17-review.aspx) (feedback at next meeting?).

# Next Steps

1. Seek feedback from all councils on their timeframe and specific data expectations.
2. Further develop plans for proposed improvements of projections modelling processes and updating WISE model to support needs and expectations.
3. Next meeting scheduled for July/August.

**Access to Shared folder**

* Projection data and documents
* Meeting notes and other material

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| 1. Land Use projection Oct 2016 (data, maps, animations and report) – TAs and CAU
2. Population, Household and Labour force projections Oct 2016 (data and report) – TAs

(CAU level data not yet completed).1. Meeting notes, presentations and other material.

**Access Instructions**: 1. Select **(DO NOT CLICK)** the following link, right click and select “Copy”**ftp://Projections:CRiZSjCR@pubftp.waikatoregion.govt.nz** 2. Right-click on the Start menu on the Taskbar and select "Open Windows Explorer"3. Delete any address already in the Address Bar at the top of the window.   Click in the Address Bar, right click and select “Paste” and then “Enter”.4. The FTP folder will open.5. **TO OPEN A FILE YOU NEED TO TRANSFER IT TO YOUR DESKTOP OR A SYSTEM DRIVE**. If you can't open the folder please contact your Service Desk as FTP sites may be blocked. |