

People move out of Auckland, where do they go?

*Estimating internal migration using
linked administrative data*

Bridget Snodgrass
Population Insights

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Disclaimer

Access to the data presented was managed by Stats NZ under strict microdata access protocols and in accordance with the security and confidentiality provisions of the Statistics Act 1975. Our findings are not Official Statistics. The opinions, findings, recommendations, and conclusions expressed are the those of the researchers, not Stats NZ.

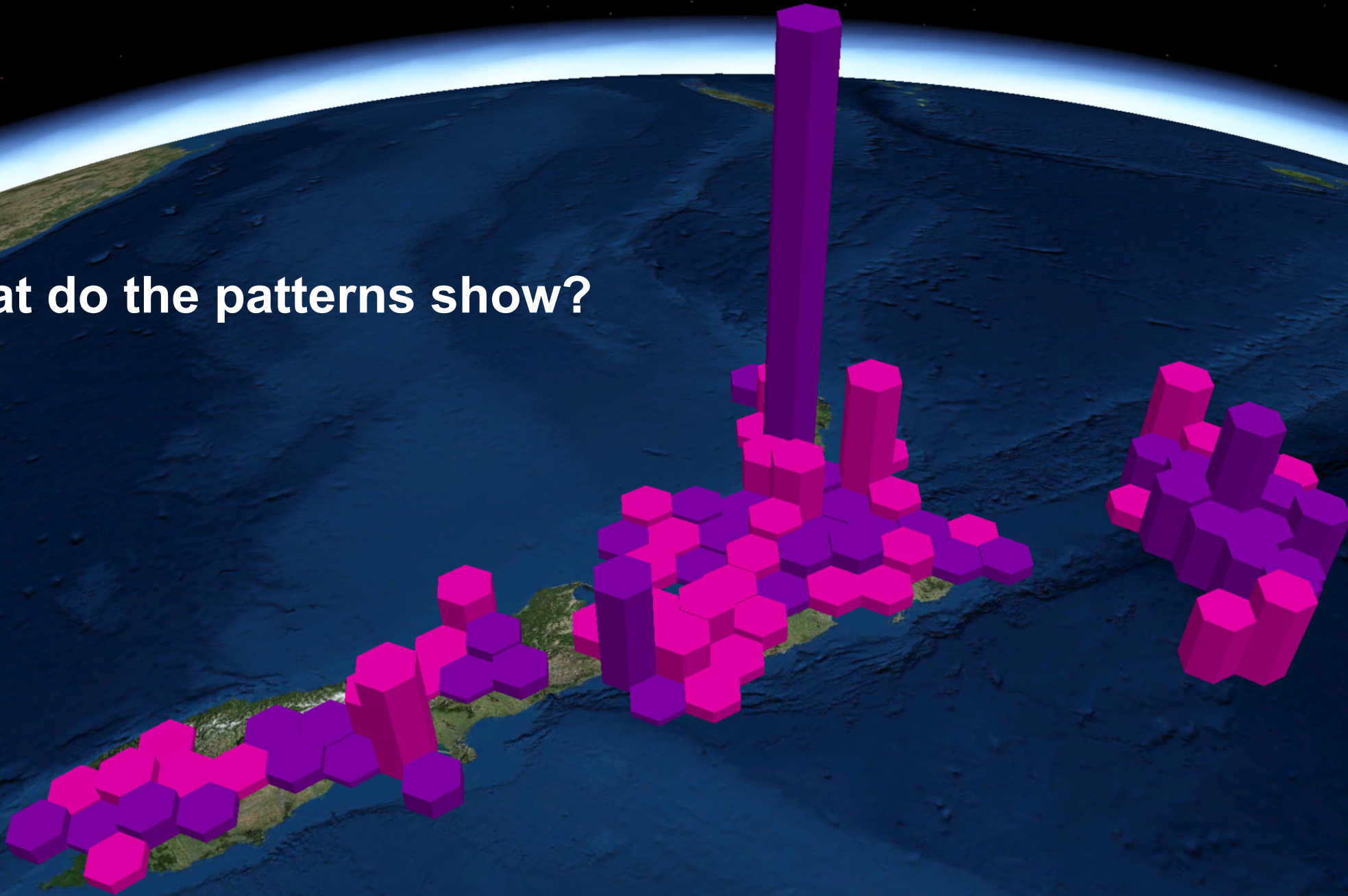
The integrated address sources

- Address notifications by:
 - Primary health enrolments and national health index
 - Tax registrations
 - Working age benefits and superannuation
 - Primary and secondary school rolls
 - Accident compensation claims
- 2013 census addresses for origin location

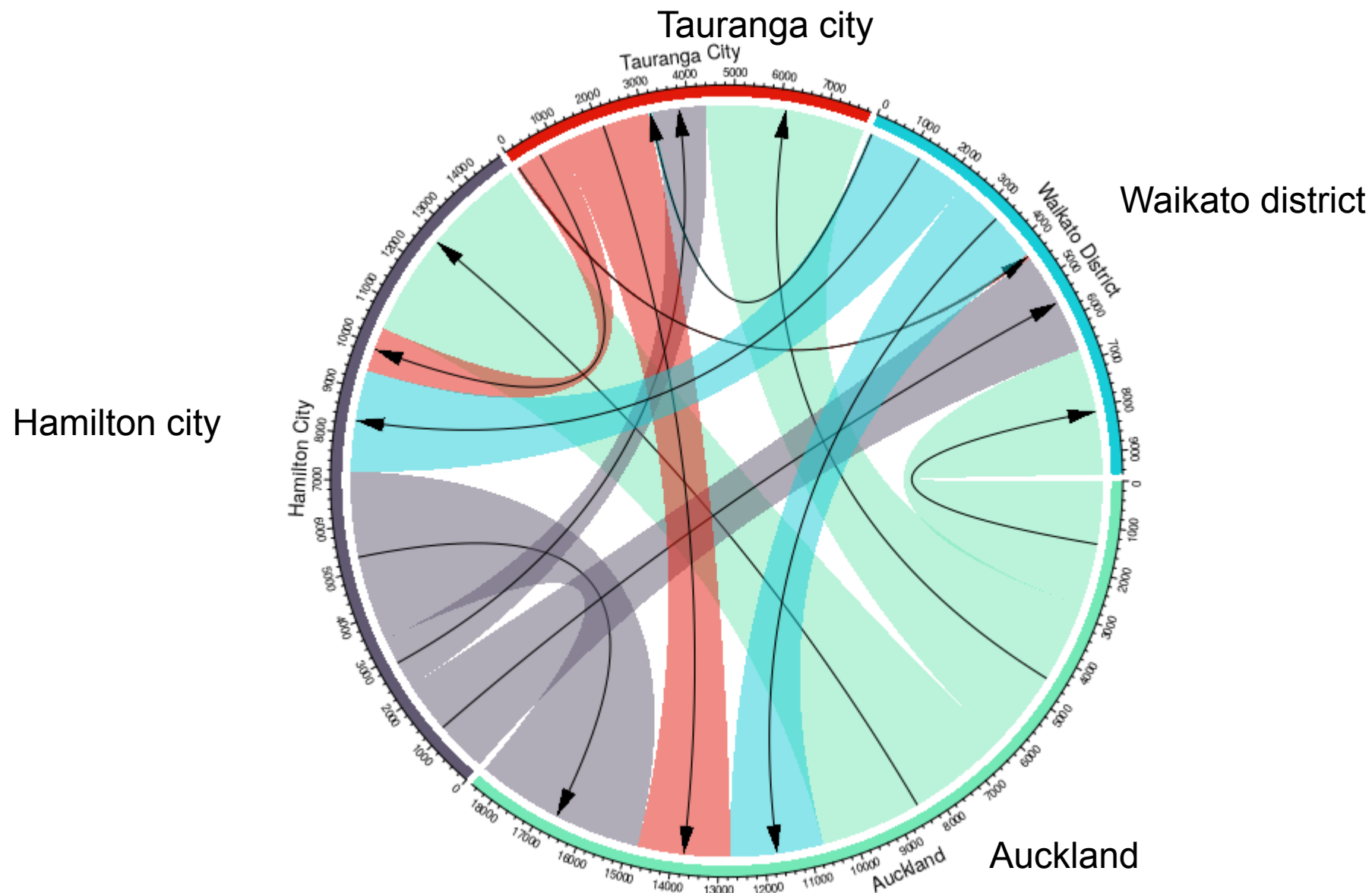
How we develop the dataset

- 1. address_notification_full
- 2. Rules to refine address list
- 3. Select notifications dated in reference period
- 4. Rules for removing notifications not associated with internal movements of NZ usual residents
- 5. derive movements by meshblock of origin/destination
- 6. Link to datasets containing demographic information, aggregate and output.

What do the patterns show?

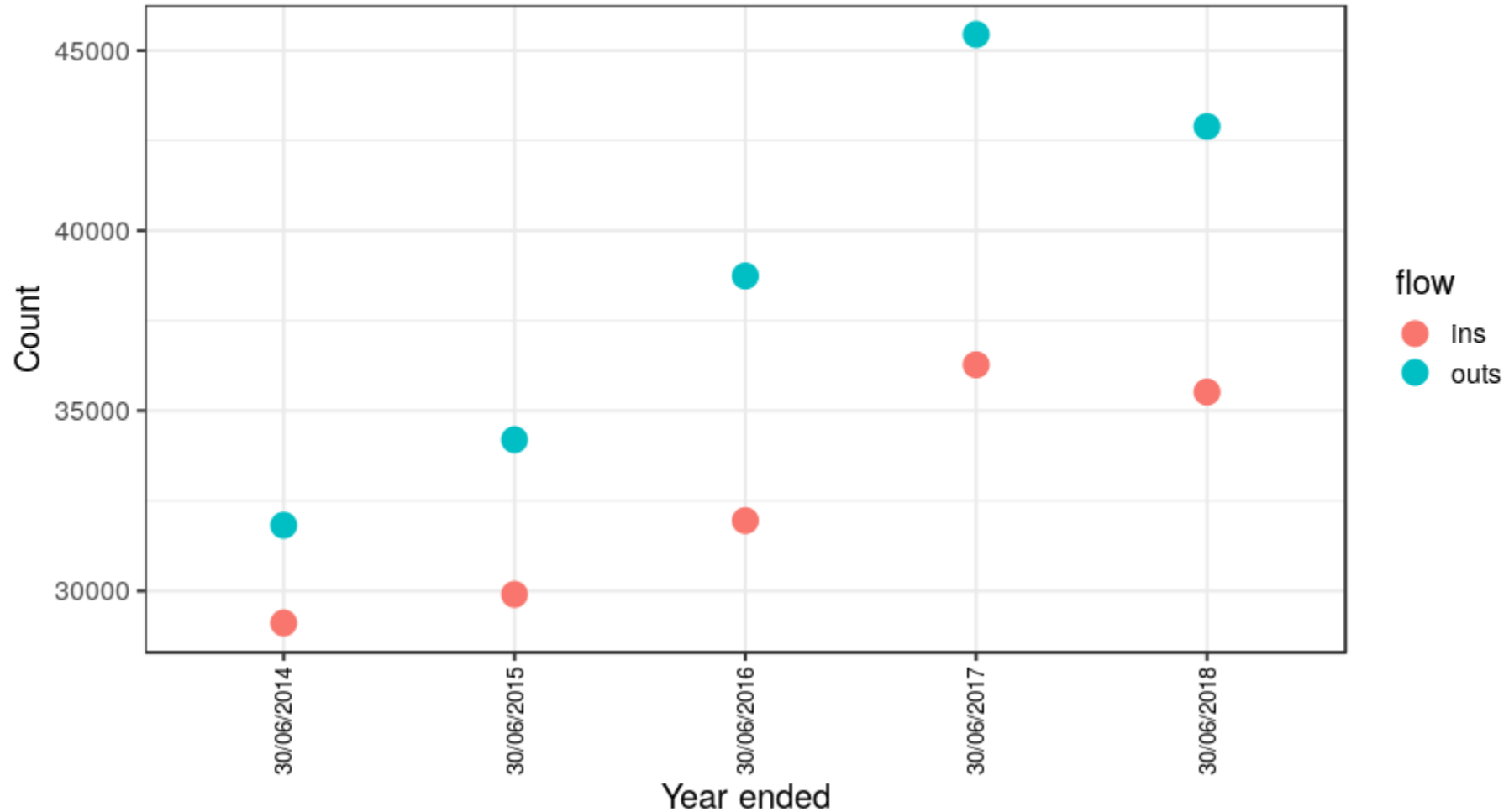


Flows between Auckland and larger neighbours



Increasing net outflow from Auckland

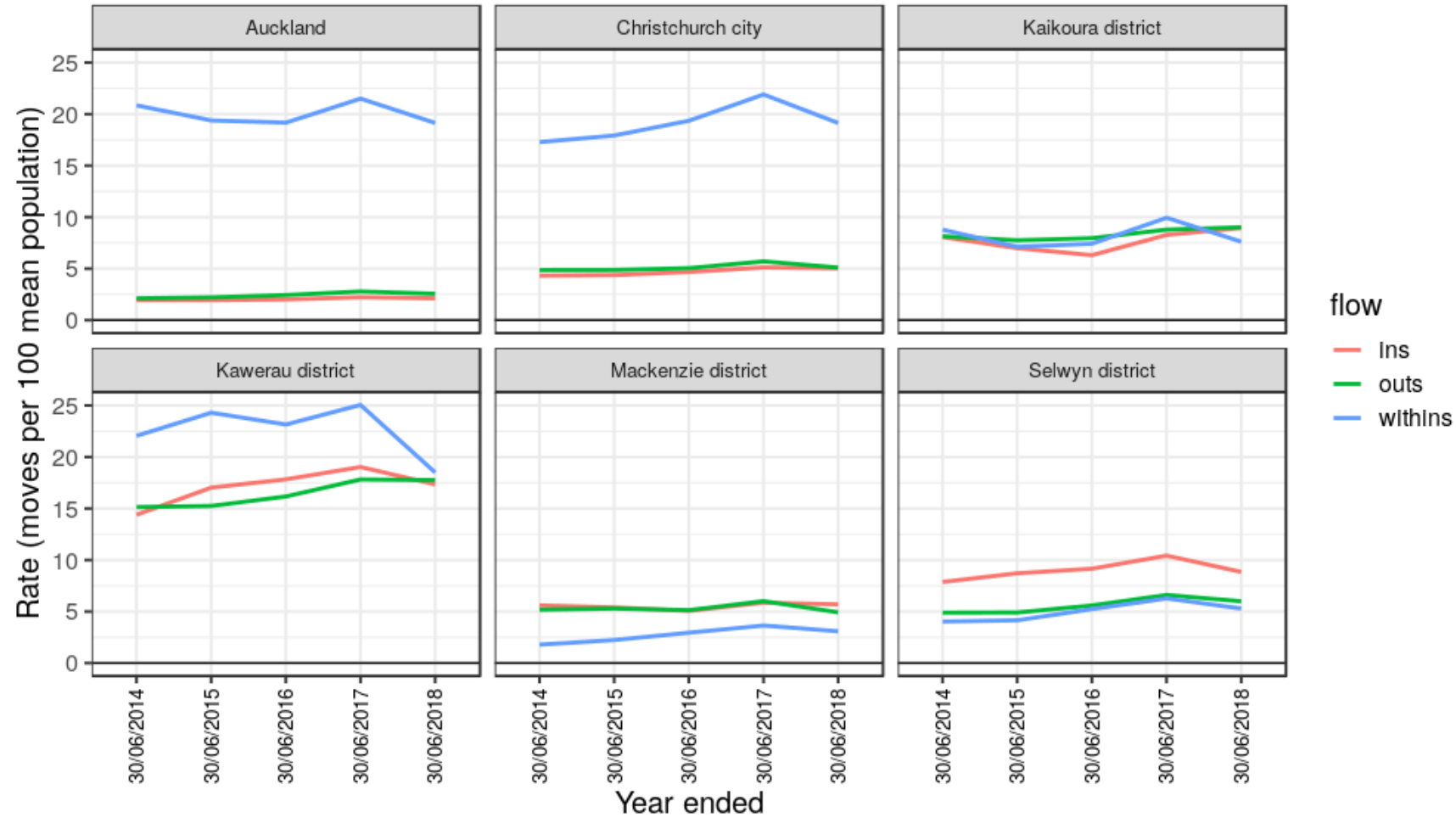
Annual internal migration flows for Auckland, years ended June 2014–2018



Note: excludes moves within Auckland

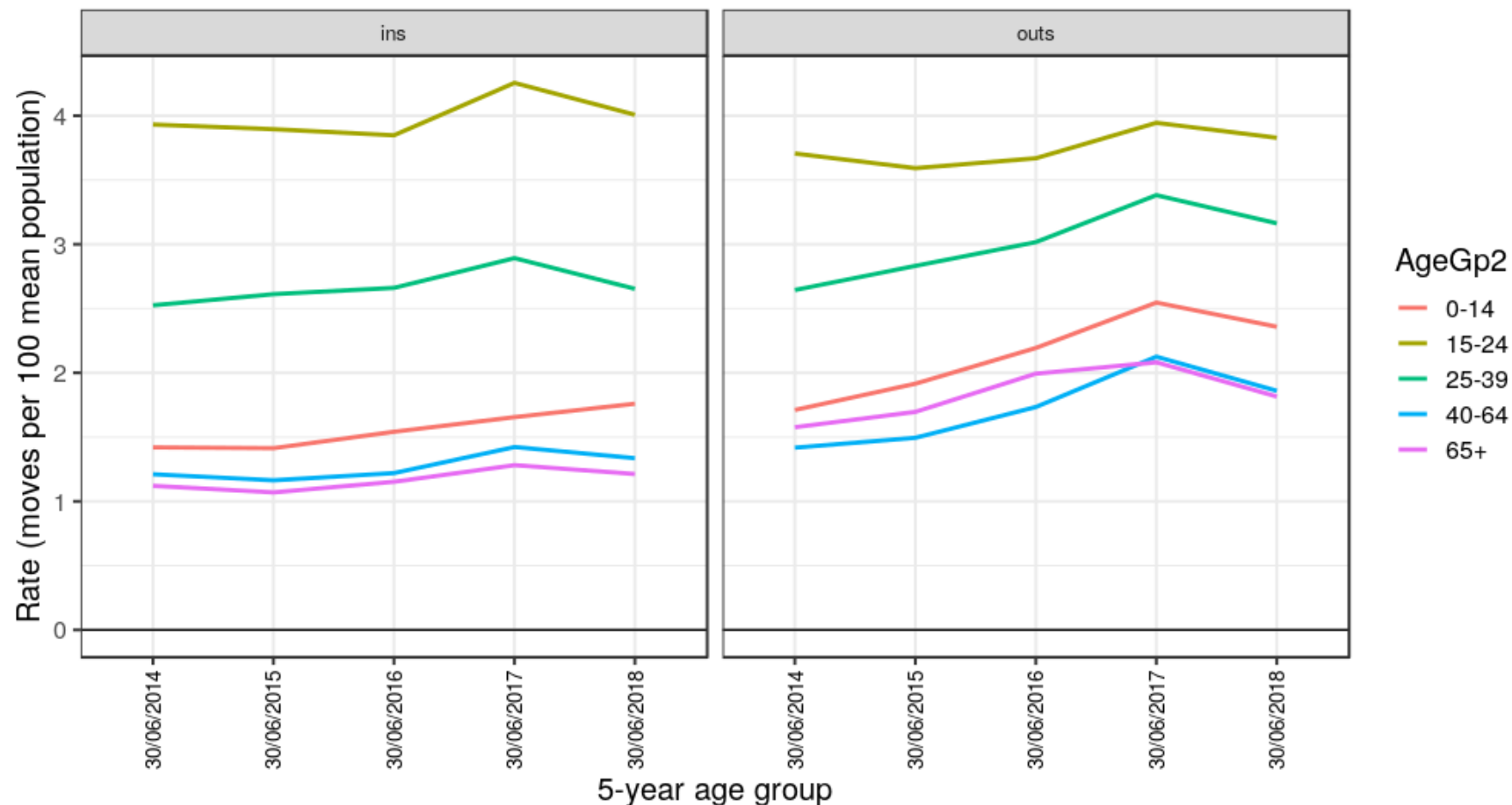
High rate of movement within Auckland

Annual migration rates for selected areas
years ended June 2014–18



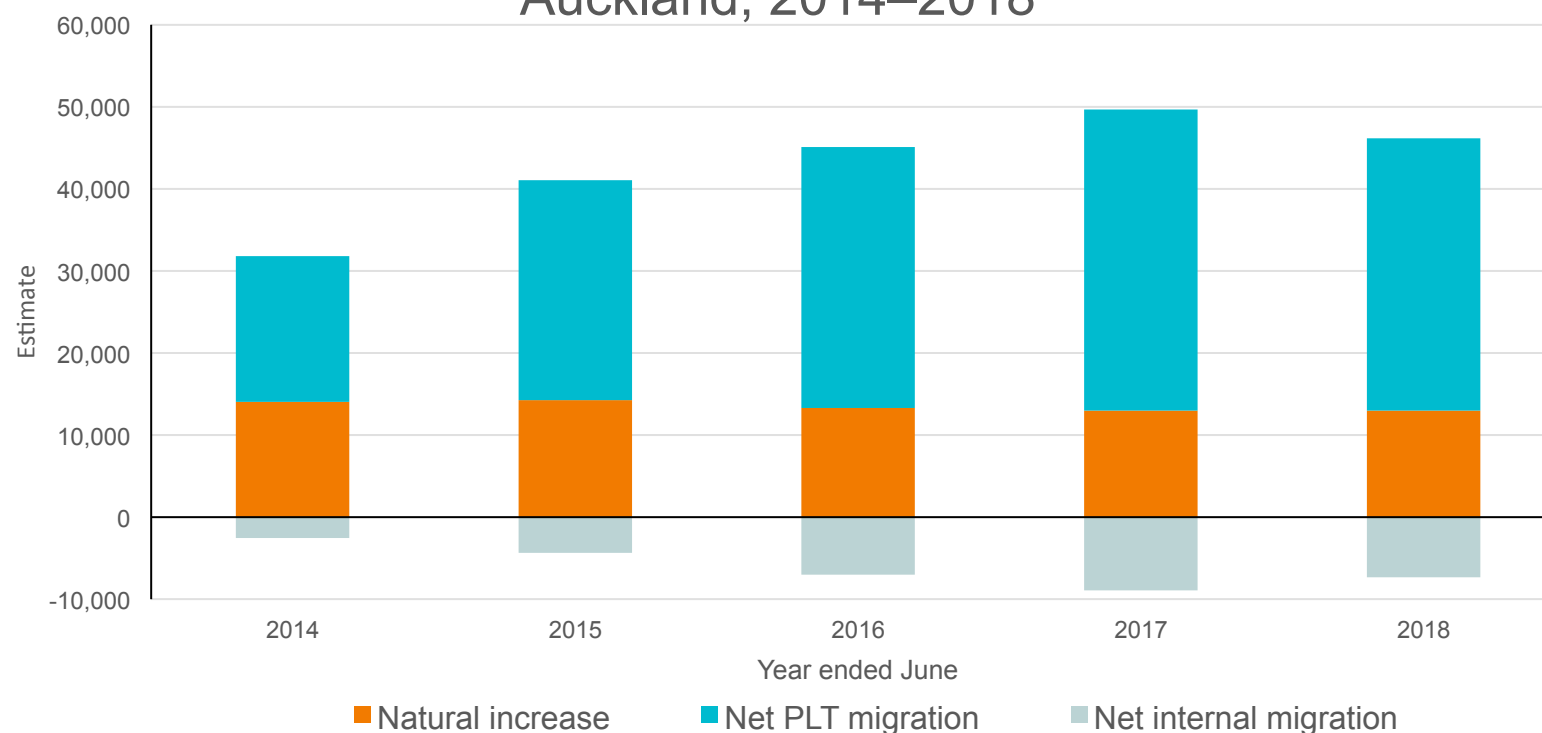
Those moving out of Auckland have older age structure

Annual internal migration rates for Auckland, by age and direction, years ended June 2014–18



Internal migration only one part of Auckland story

Components of population change,
Auckland, 2014–2018



Note: Natural increase by date of registration
 Net PLT migration not adjusted for non response
 Net internal migration experimental only
 Source: Stats NZ

How does this work improve on existing measures?

- A more direct measurement
- Flexibility
- Simple, transparent approach
- Improved ability to capture movements of new migrants
- Measurement of all types of internal migration
 - Population churn

Limitations

- Some population groups are likely to be under-represented by the data; e.g. students
- People use multiple addresses
- Migrant records not linked to an address
- Date of address change differ from movement date
 - Implications for single-year-of-age patterns in university areas
- IDI refresh cycle challenging for production of timely statistics
- We cannot make any guarantees about accuracy yet- but overall patterns appear realistic

How can we improve the quality?

- Census 2018 –
 - Can we use the address 1-year ago question to estimate coverage of admin series?
 - A whole pile of work was done on quality of address information – how can we incorporate what they learned?
- Test the accuracy by practising on the 2013-2018 period – compare with new base ERP
- Building consents – can we use historical data about the relationship to predict admin data before it's available?
- If we can produce a longer time series – can we reliably model rates?

The next steps

- Improve accuracy of the experimental series
 - Pending availability of new Census data/2018-base ERP for benchmarks
- Incorporate into SPE with revision of 2013-base series
- Develop provisional estimation methodology to maintain timeliness of 2018-base SPE
- New international migration measure – how can we identify “provisional migrants” in the IDI?
- Projections of internal migration

Thanks for listening!

Drop us a line

bridget.snodgrass@stats.govt.nz

kirsten.nissen@stats.govt.nz

