Overview – DTPLI Demographic Research

- Within a planning & infrastructure department

- Responsible for population and household projections:
  - Bi-annual high-level for state budget and review
  - Comprehensive projections for state and local areas

- Provide timely and accurate advice to policy- and decision-makers

- Contribute to a range of strategy and planning products (e.g. Plan Melbourne)
Providing projections which are as accurate and useful as possible, therefore concentrating on:

- Fundamental forecasting factors;
- Model design and maintenance;
- Including, measuring and communicating complexity and uncertainty.
1. NOM levels and absorption rates – longer term:
   - growing economy + continuing labour/skills shortage = increasing permanent and temporary migration
   - to calculate based on a rate, or to assume a stepped increase over time?
2. NOM detail - categories and age structures, e.g.

- How to cover future changes in migration mix (temp/perm, business/students) and possible impacts on age/sex structure of NOM?
3. NIM to Victoria – short- to medium-term assumptions?
4. TFR & ASFRs – constant, decreasing?

- Short-term decrease vs long-term plateau?
- Determined in aggregate or by ASFR?
5. Regional migration – calculating rates?

- ABS constant amount – advantage is consistency
- DTPLI rates method – responsive to regional changes over time
6. Regional population decreases – will identity and community prevent towns from ‘disappearing’?

Fundamental forecasting factors

Average annual population loss
former Victorian LGAs (1951-91), SLAs (1991-2001) and SA2s (2001-11)

- 0% to 0.5%
- More than 0.5%

Source: ABS Censuses
7. Integrating the housing unit, cohort component and household formation methods at SA2 level:

- long term trends/cycles in household size;
- recent changes in migration profiles;
- influence of dwelling mix on household formation and location;
- …and formalising all that in our models.
8. Household types and dwellings:

- occupancy rates in apartments during and post-boom;
- propensity for families to adapt to higher-density;
- school-ages in established suburbs;
- impacts of affordability on household formation.
Model design and maintenance

- Improved vertical and horizontal consistency of assumptions throughout model suite.
- More user-friendly interface.
- Improved documentation and training.
Complexity and uncertainty

- Spatial unit selection
- Sensitivity testing
- One series, many series, ranges
- Currency vs consistency (adjust or re-work to include latest actuals)
Demographic Research Priorities

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Symposium on New Ideas and Challenges for Demographic Research in Australia

ANU, Canberra

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