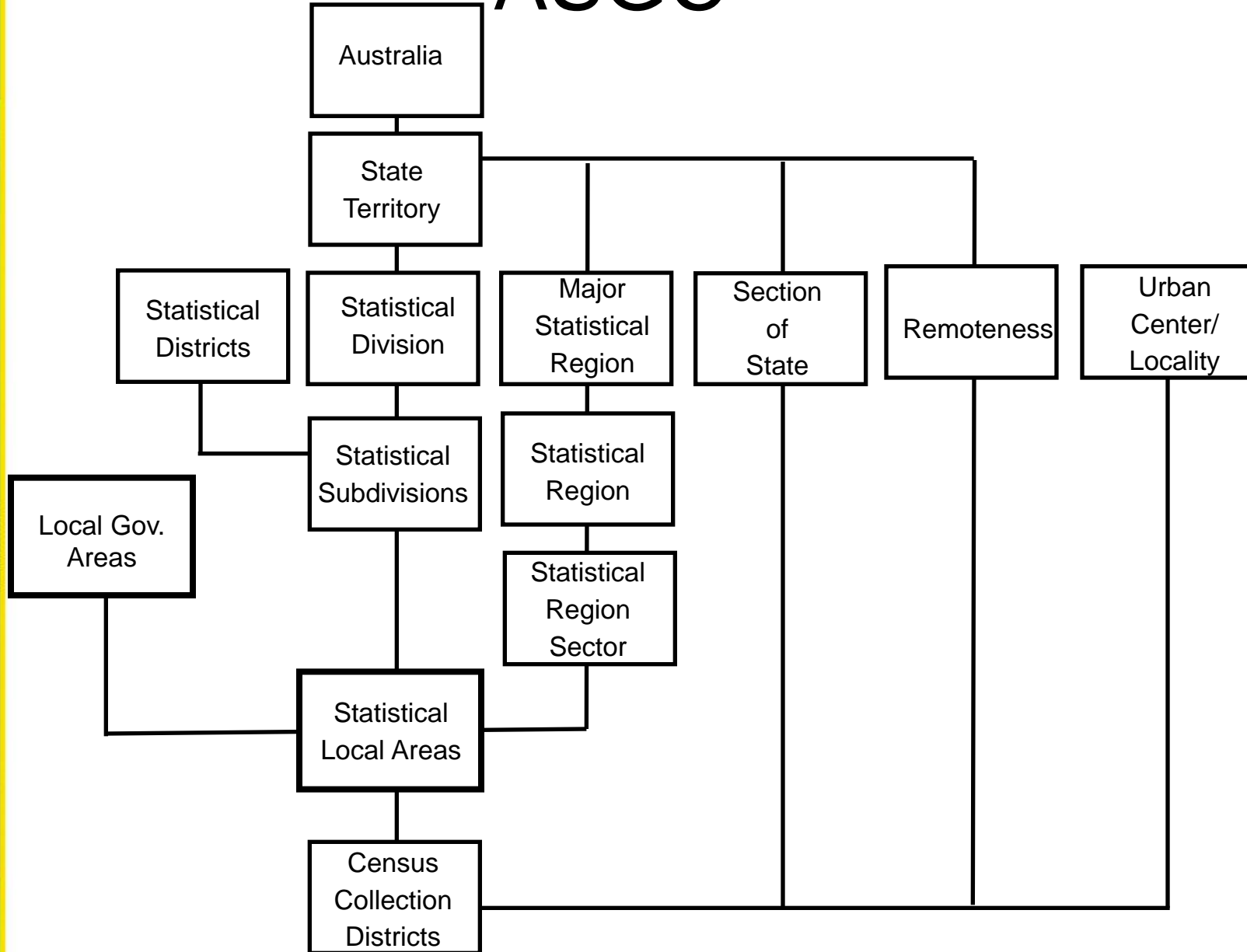


Implementing the Australian Statistical Geography Standard (ASGS)

This presentation

- Overview of ASGS
- ASGS Implementation
 - Issues
 - Strategies
- The ASGS into the future

ASGC



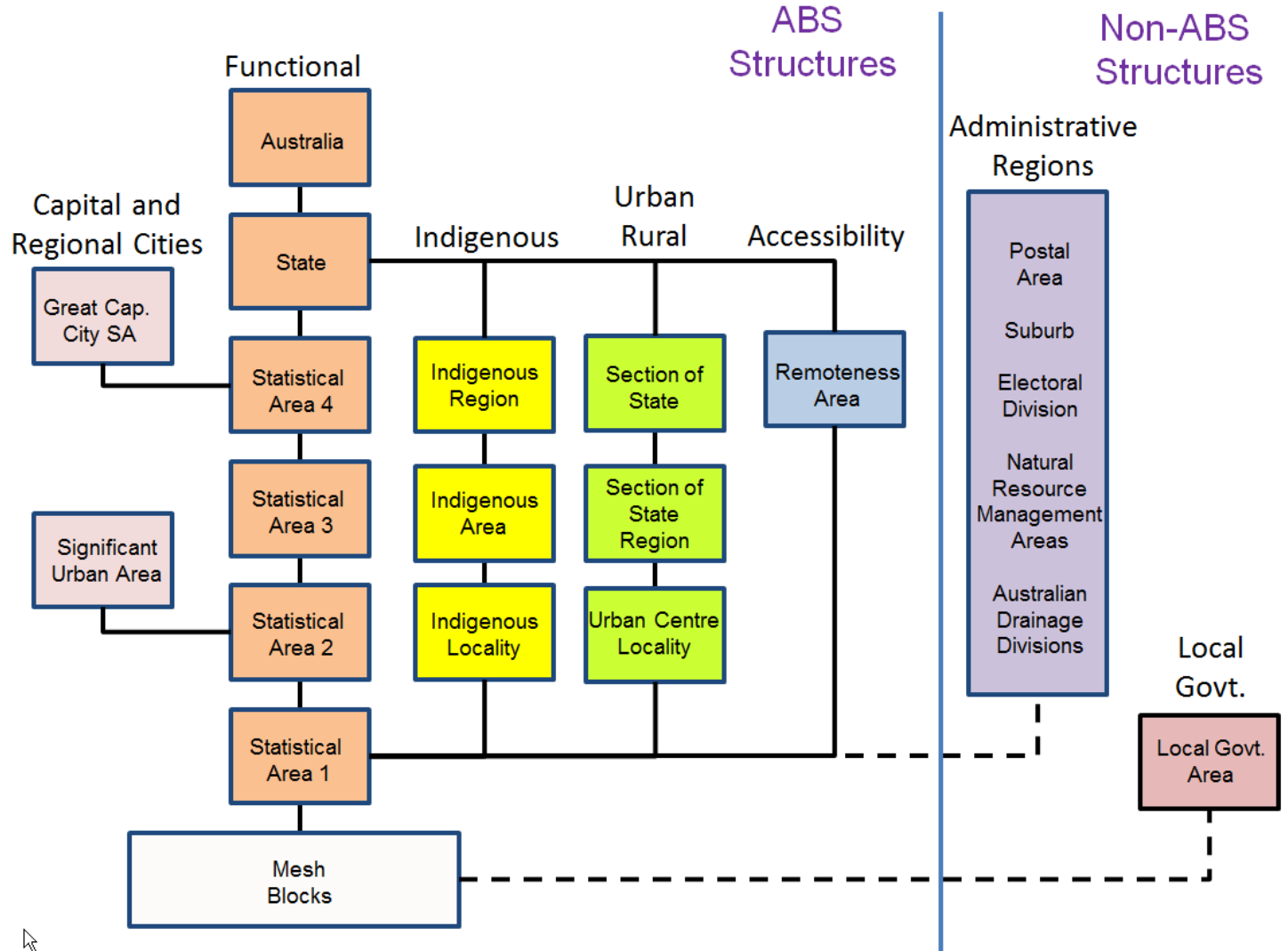
Why change?

- Unstable
- Inconsistent units
- Often not meaningful
 - Administrative rather than functional
- Not optimised for data output
- Need to incorporate Mesh Blocks
- Not a complete framework

Why change now?

- Technological and data developments
 - Wide adoption of GIS
 - G-NAF
 - Address coding
 - Imagery availability
- Mesh Blocks
- Census year

ASGS



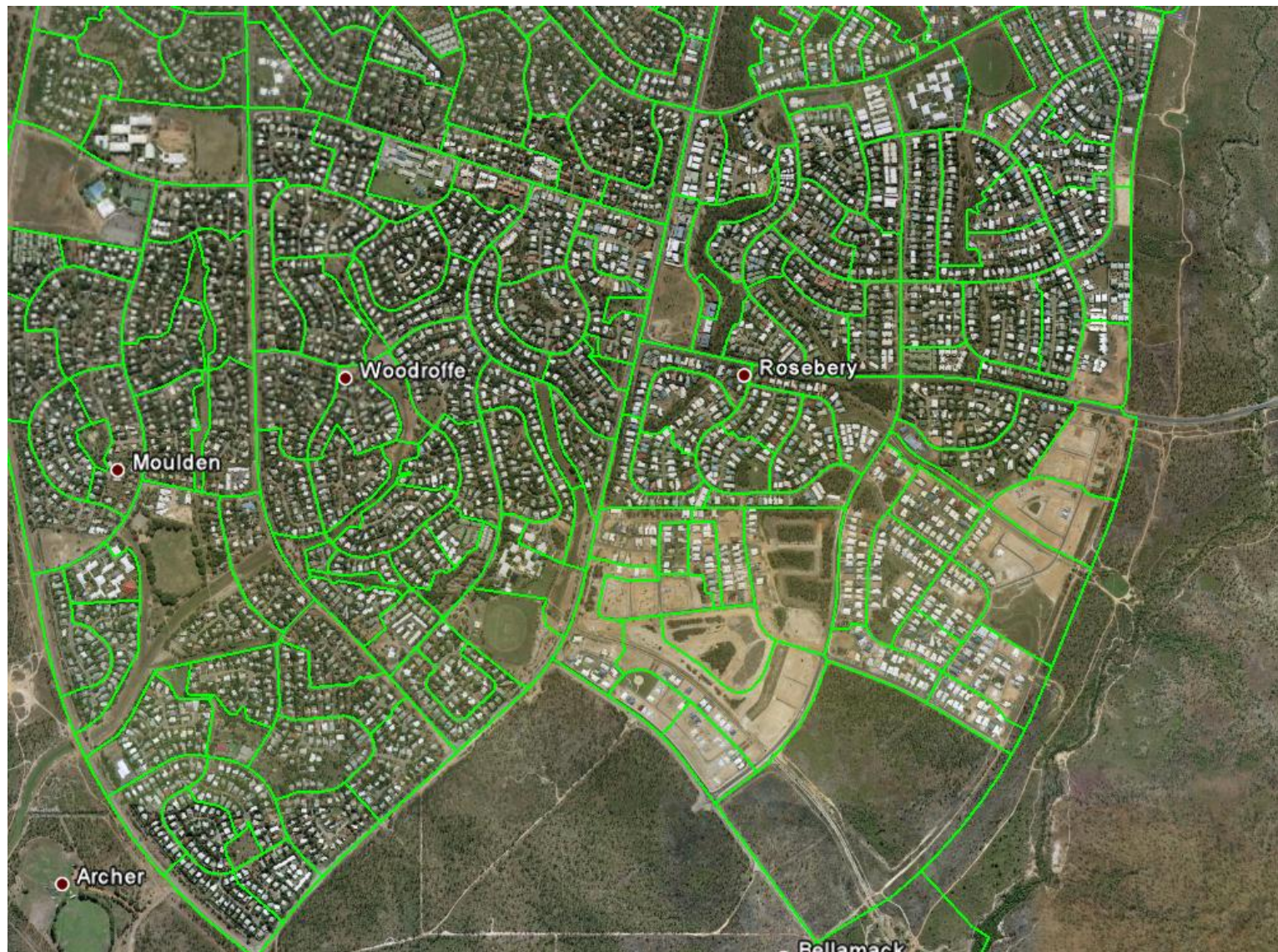
What does the ASGS bring?

- Stability over time
 - No change to ABS structures between Censuses (5-yearly)
 - Areas designed for minimum change at all levels
- Reflects real settlement patterns and relationships
- Optimised at all levels for data release

Mesh Blocks

- Smallest region defined
- 347,627 MBs
- Building block
- Reflect land use
- If populated: generally 30 – 60 dwellings
- Limited data availability

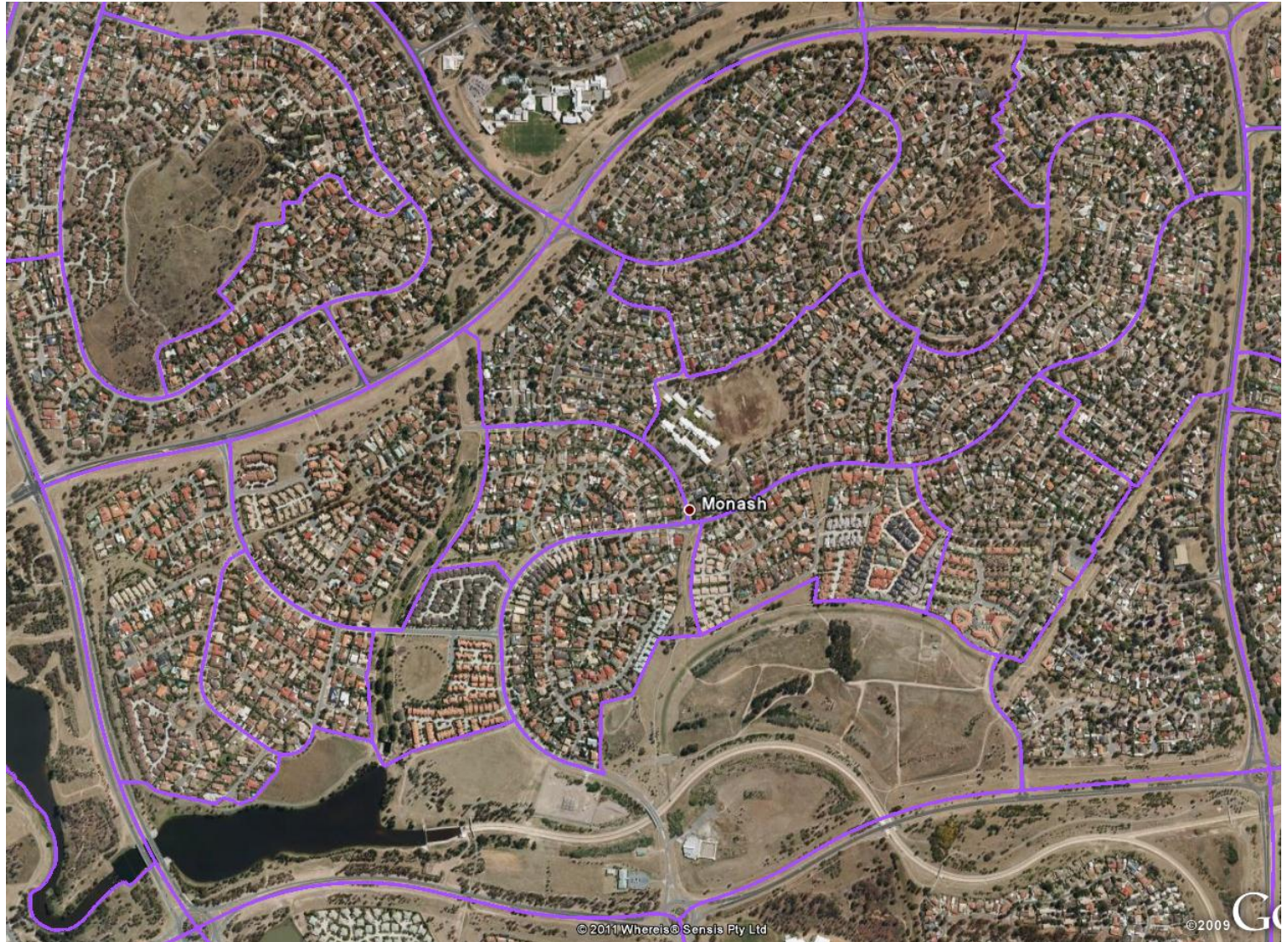
Mesh Blocks: Palmerston



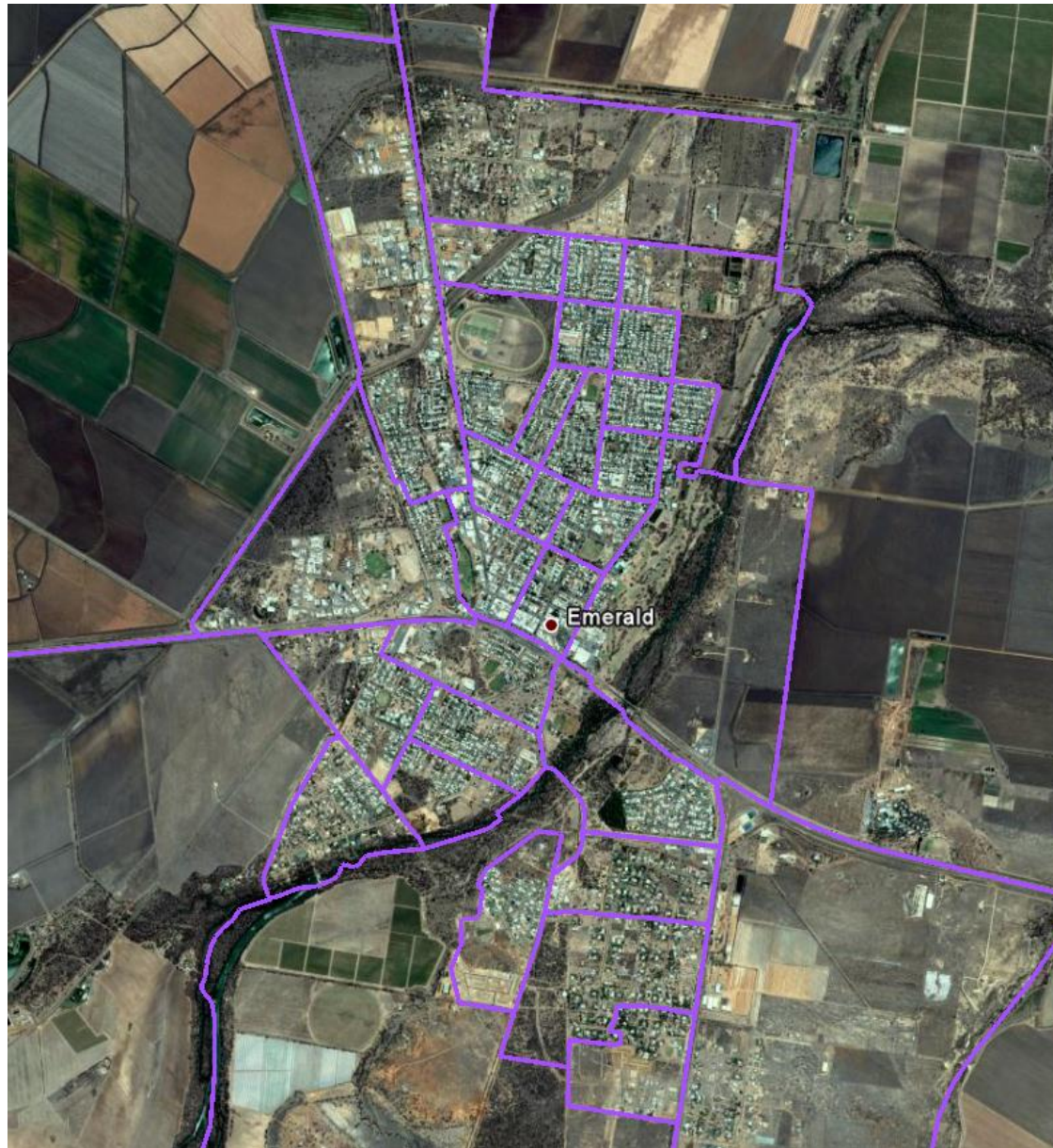
SA1s

- Census output
- 54,805 SA1s
- Average population 400
- Optimal range 200 - 800
- Similar characteristics
- Internally connected
- Reflect wherever possible localities and suburbs

SA1s: Monash



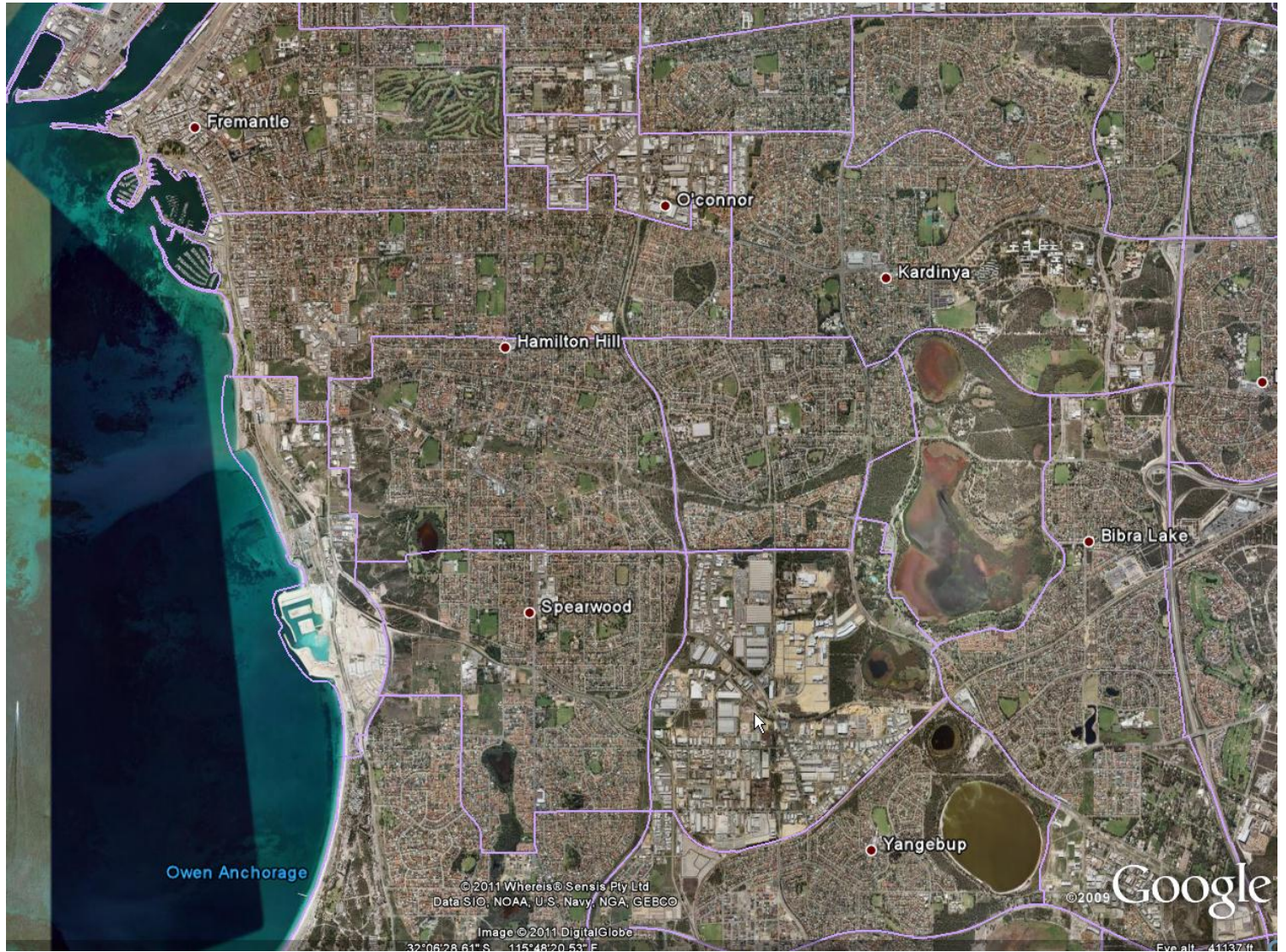
SA1s: Emerald



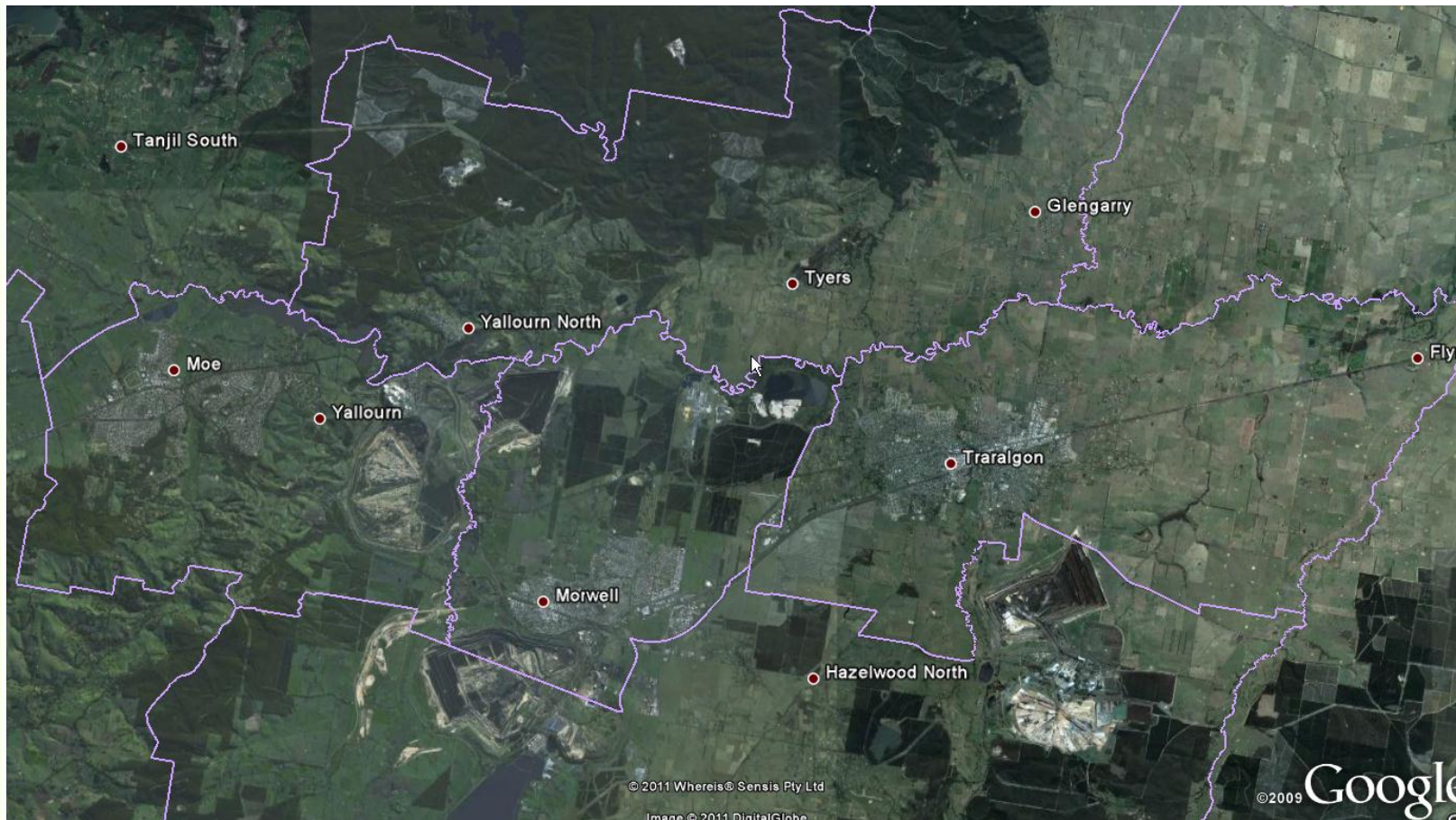
SA2s

- Optimised for demographic data (ERP)
- Non-Census data available
- 2,214 SA2s
- Functional area in regional Aust.
- Based on gazetted suburb/locality
- Average population 10,000
- Optimal range 3,000 - 25,000

SA2s: Perth



SA2s: Traralgon Area



SA3s

- Mid-level geography
- Reflect “local regionality”
- 351 SA3s
- Optimal pop range 30,000 – 130,000

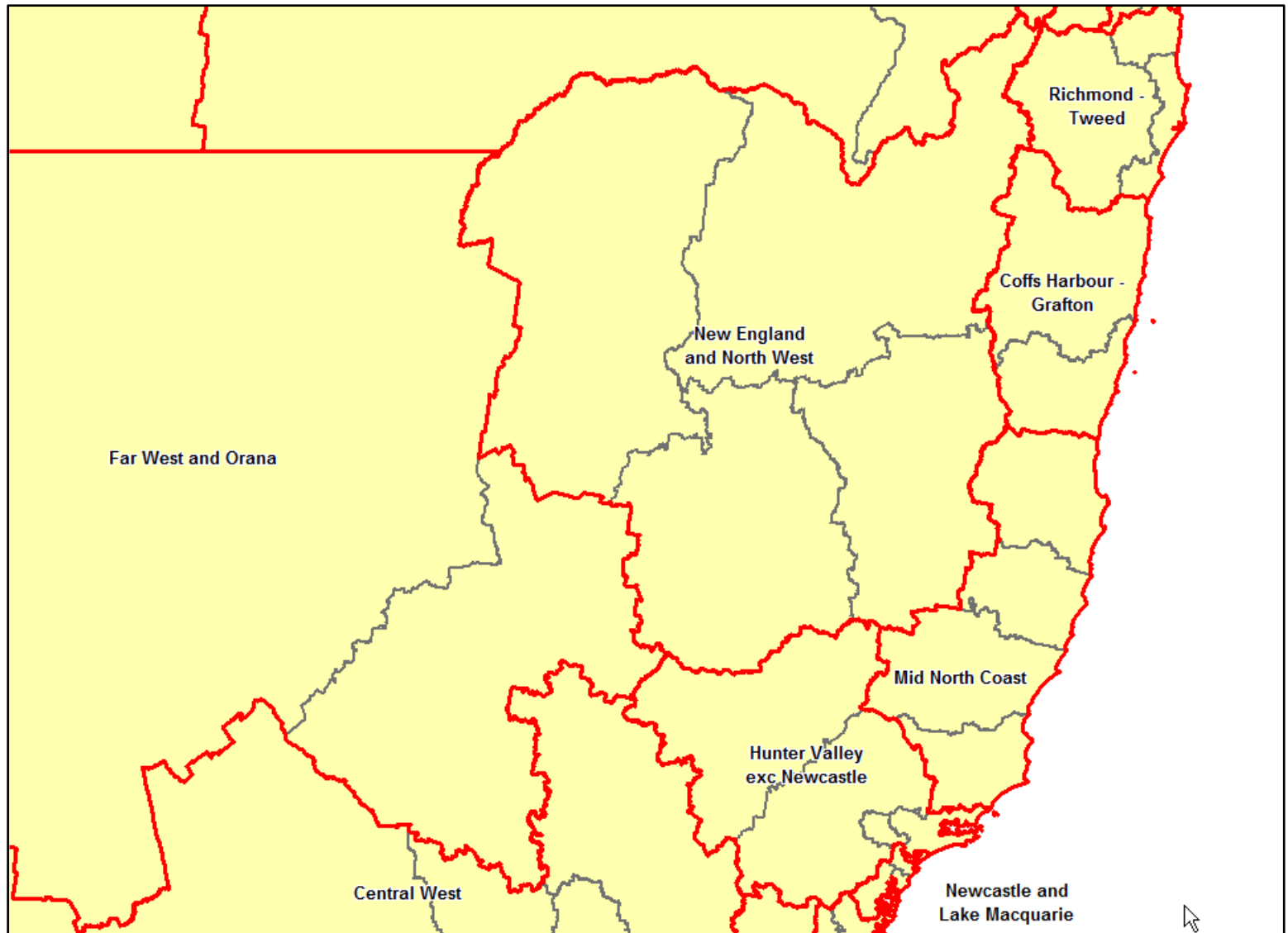
SA4s

- Optimised for Labour Force data
- Other Survey data, 106 SA4s
- Optimal Range 100,000 – 500,000
 - Minimise relative standard errors
- Designed to reflect labour markets
 - Local labour catchments in large cities
 - Regional labour markets outside
 - Based on Journey to Work analysis
- Major city influence removed from regional data

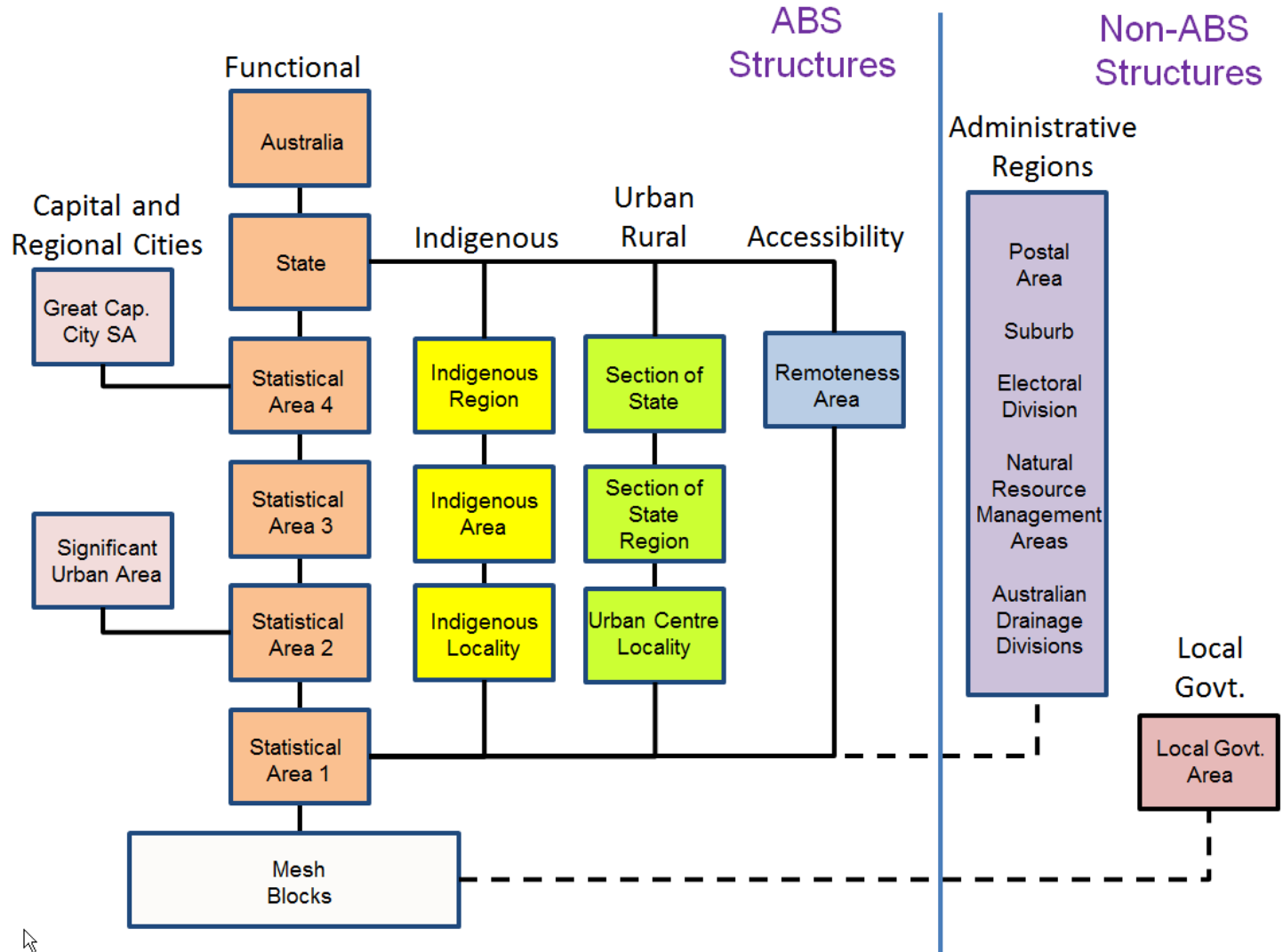
SA4s and SA3s: Melbourne



SA4s and SA3s: NSW



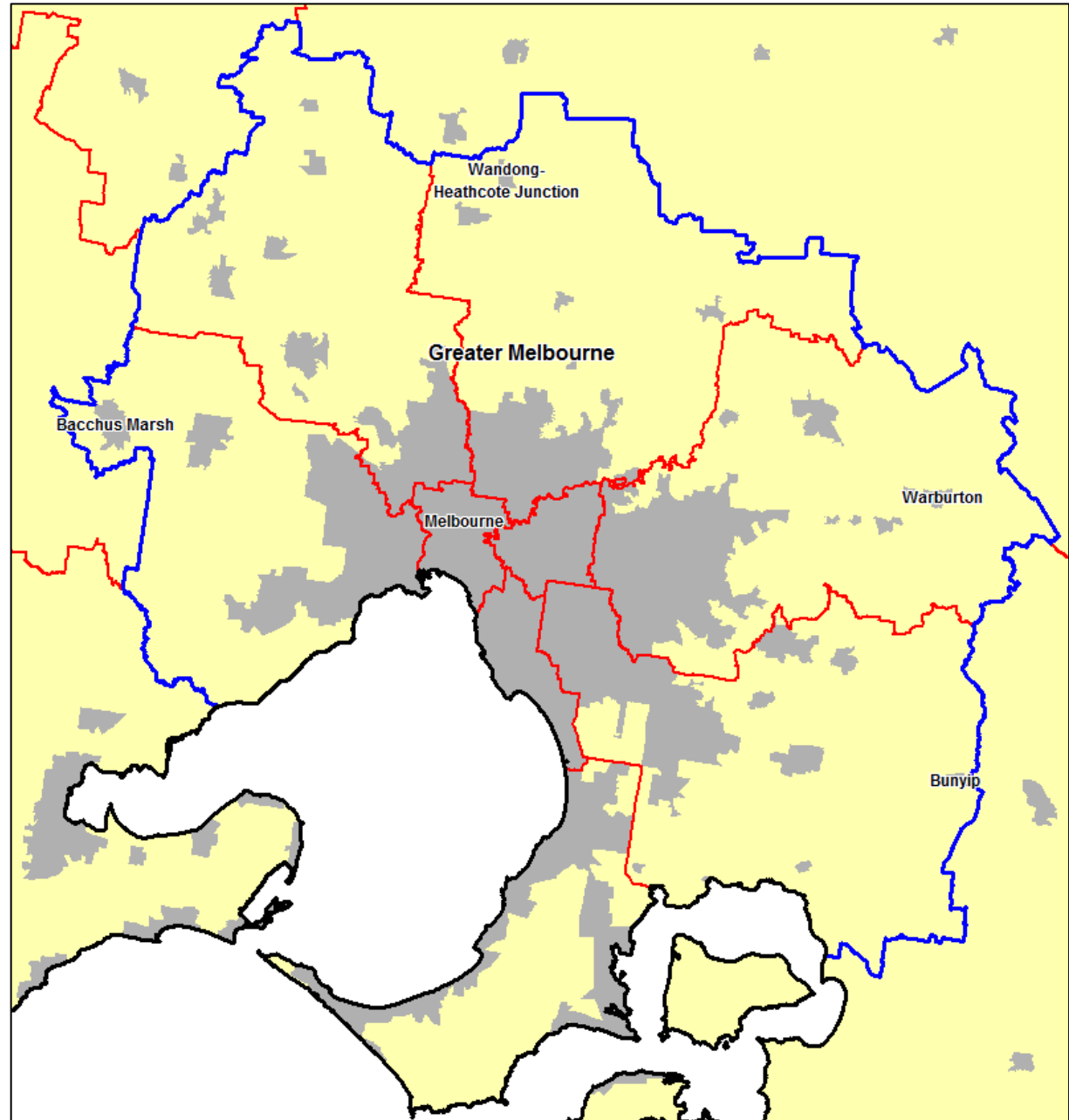
ASGS – other areas



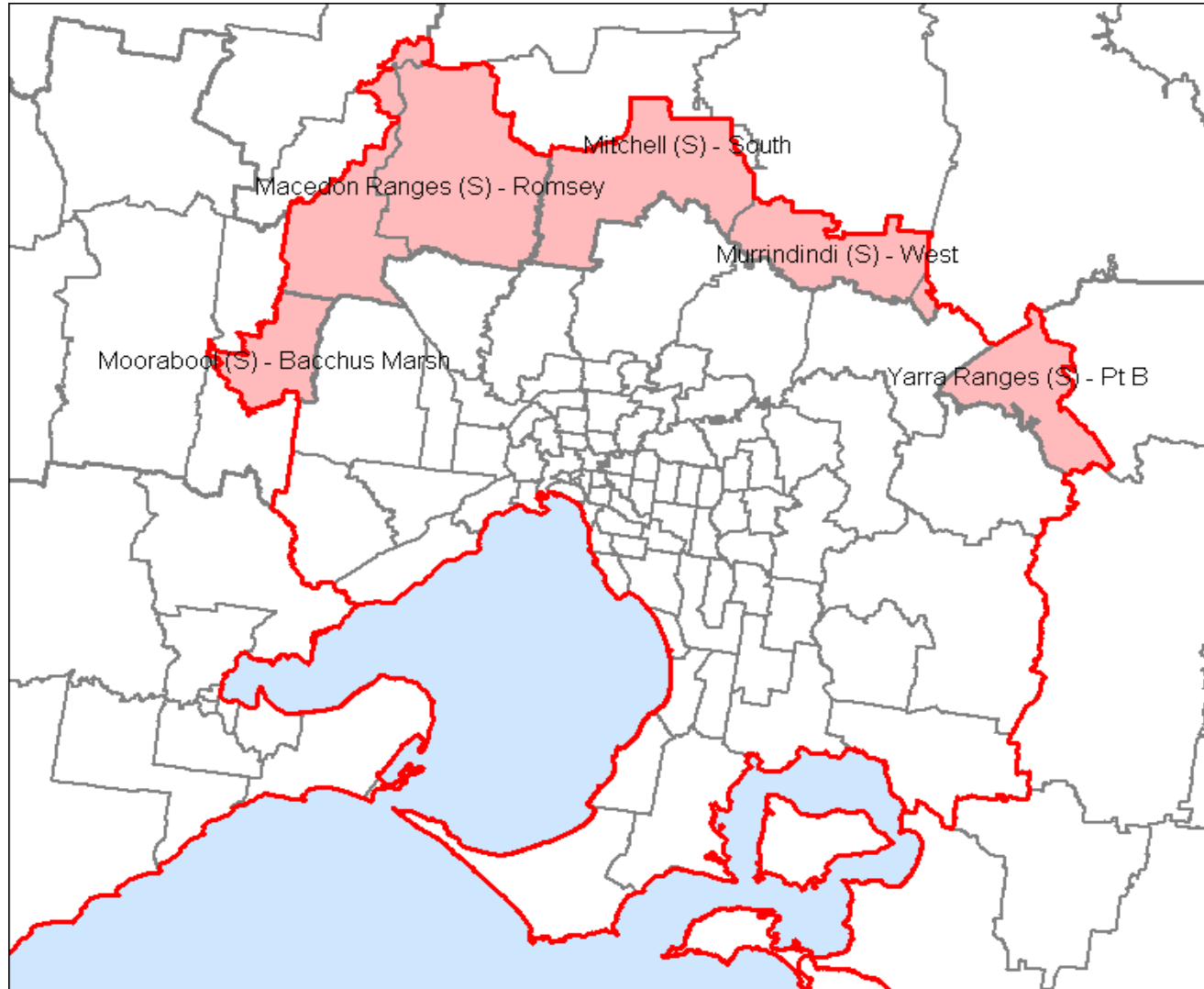
GCCSAs

- Built from whole SA4s
- Define socio-economic extent of cities (JTW analysis)
- Includes regional commuter zone
- Allows comparison with Survey data (also SA4-based)
- More current reflection of Capital Cities than Capital City SDs

GCCSA: Greater Melbourne



Greater Melbourne: Changes



SD to GCCSA

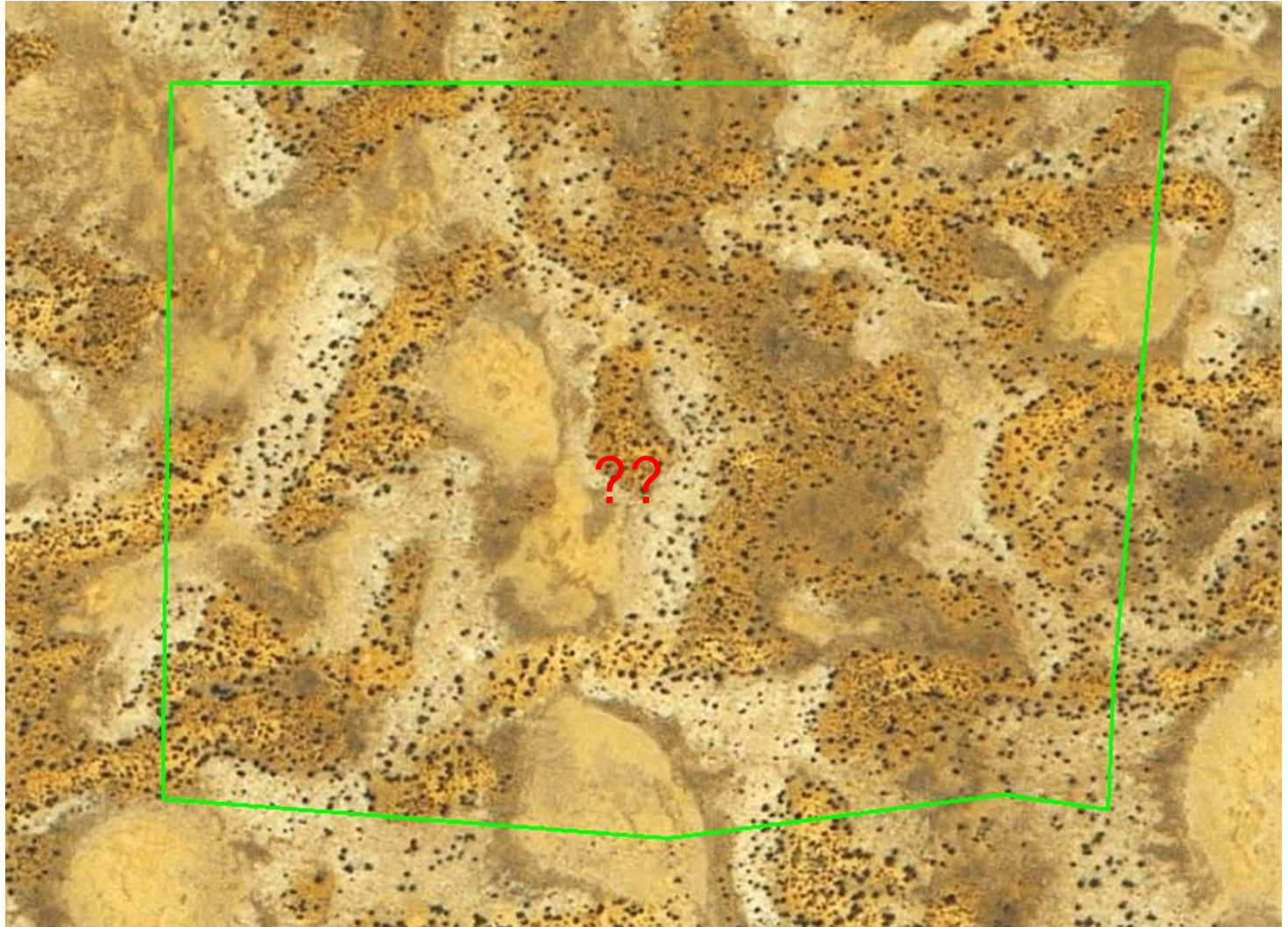
scale of population change

Capital City	Population increase 2001 (pers)	Population increase 2010 (pers)	Population increase 2010 (%)
Sydney	80	80	0.0
Melbourne	50,300	60,700	1.4
Brisbane	51,200	65,300	3.2
Adelaide	46,800	58,200	4.8
Perth	59,100	85,100	5.0
Hobart	1,000	1,100	0.5
Darwin	0	0	-
Canberra	380	350	0.1

Indigenous Structure

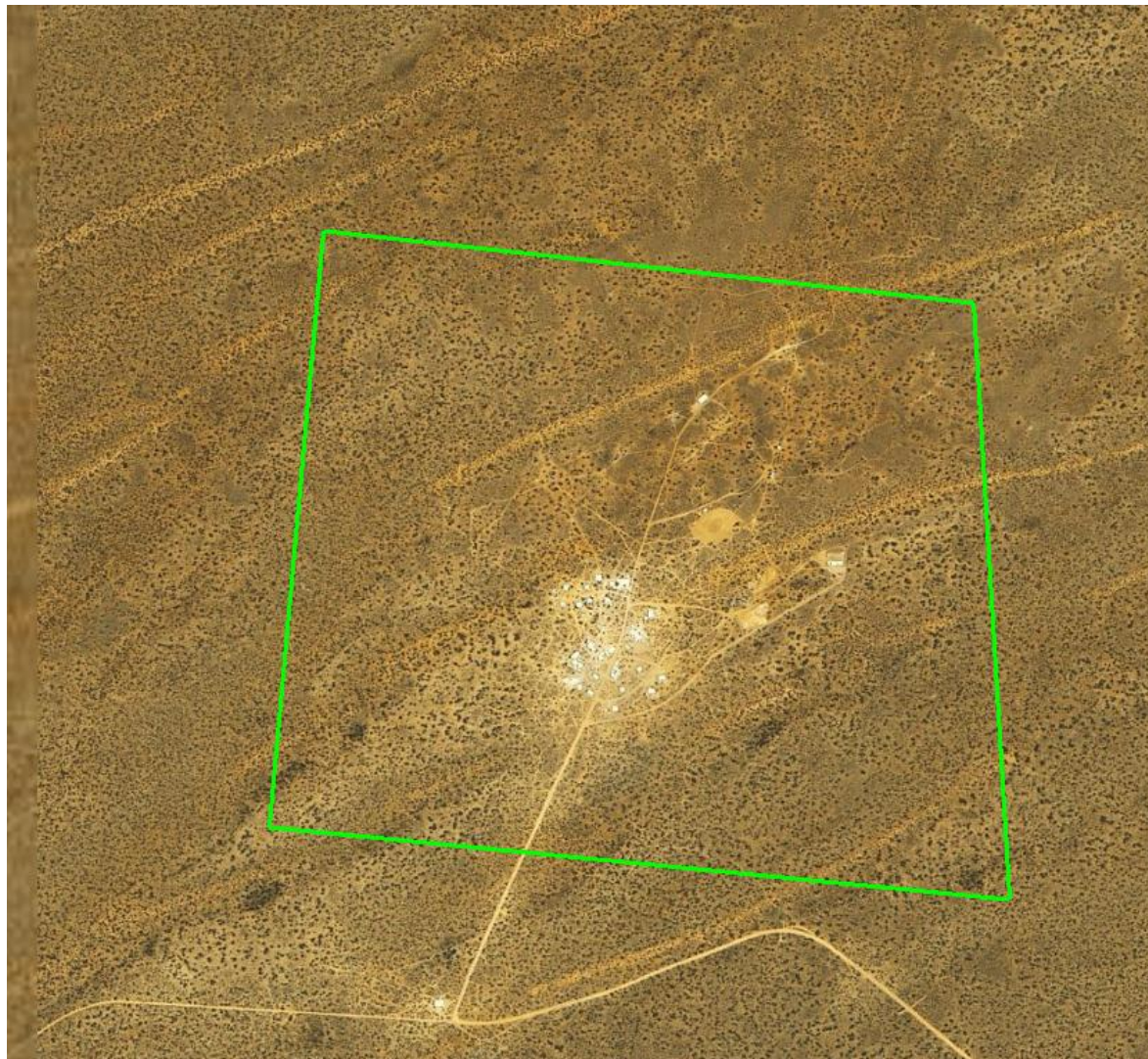
- Integral part of ASGS
- Significant design factor at SA1 level
- Better represents discrete Indigenous communities (SA1s)
 - Addresses some previous issues
- Defines communities of 90+
- Reflect collector workloads
- Published September 2011

Oak Valley, SA - 2006



Oak Valley, SA – 2011

34kms south



Urban Centres and Localities

- SOS and UC/L combined
- New coding structure
- Conceptually similar to the past
- Based on whole SA1s
- Will result in some change
- More UCL's identified in design process
- Rules applied more rigorously

Remoteness

- Conceptually the same
- Based on SA1s
- Some change expected

Remoteness Areas: Sources of change

- Real change
 - changes in urban centres and localities
 - improvements in road network
- Methodological change
 - move to SA1s

ASGS Implementation

Issues

- What data will be available?
- When?
- What geographies?
- How will time series be managed for ABS data
- Legacy Systems
- Legislation

Strategies

- ABS is finalising comprehensive implementation plan
- SMAs responsible for advising clients of changes
- ABS will publish a summary document

Time series strategies

- Data release on parallel geographies (SLA and SA2 for 2011)
- Continued release of data at LGA level
- Re-casting data
 - Re-coding preferable to using correspondences if addresses known
 - Correspondences

Some key collections

Collection	First ASGS data	Last ASGC data
Building Approvals	July 2011 (August 2011)	June 2012 (July 2012)
Business Counts	2007-2011 (December 2011)	2007-2009 (October 2010)
Census	2011 (June 2012)	2011 (June 2012)
Tourist Accommodation	Mar Qtr 2012 (June 2012)	Dec Qtr 2011 (March 2011)
Demography – Regional Pop Growth	2010-11 (July 2012)	2010-11 (July 2012)
Births and Deaths	2011 (Nov 2012)	2011 (Nov 2012)
Labour Force	July 2013 (Aug 2013)	Jun 2013 (July 2013)

Note: Publication release dates in brackets

Correspondences

- New method for building correspondences based on Mesh Blocks
- More accurate method that better identifies where the population is
- ABS will provide to support ASGS implementation
- Publish information paper late this year

Some correspondences - Census

- SA1 and SA2 to all ASGS-supported geographies
- SLA to ASGS 2011
- POA (&or postcode?) to ASGS:
- Suburb and Locality to:
 - SA2, SLA

Census

- SLA and ASGS for 2011
- Time Series on SLA and SA2 for 2001-2006-2011.
- Comparability tables for CD to SA1
- Census Information Paper
 - Census of Population and Housing:
Outcomes from the 2011 Census Output
Geography Discussion Paper
(2911.0.55.003)

Demography

Regional Population Growth (3218.0)

- 2010/11 data on SLA/LGA/SA2 – SA2 and LGA thereafter
- Recast SA2/LGA ERP to 2001
- Recast GCCSA ERP to 1981
- Additional data at SA1 level by request

Legacy systems

- ASGS main structure hierarchy same as ASGC
 - incl 9 and 5 digit SA2 codes
 - incl fully hierarchical and 7 digit SA1 codes

S/T (1 dig)	SA4 (2 dig)	SA3 (2 dig)	SA2 (4 dig)	SA1 (2 dig)
2	212	21205	212051323 21323	21205132330 2132330

Legislation

- ASGC referenced in legislation and regulation
- Letters sent to Attorneys General in each State

Future of the ASGS

- Reviewed every 5 years
- Monitoring changes in settlement patterns
- Designed for minimum change:
 - allowance for growth
 - splits
 - amalgamations
- New Non-ABS structures on a case by case basis

Resources

- www.abs.gov.au/geography
- geography@abs.gov.au
- Publication
 - Manual
 - Boundaries (GIS and PDF)
- Correspondences (in progress)
- Fact Sheets (in progress)
- SMA Information papers
 - Census (2911.0.55.003)
 - Demography (in progress – Aug 2011)

Questions?