FINAL REPORT NO. 370

Estimating the population at-risk of homelessness in small areas

Authored by

Deborah Batterham, Launch Housing/Swinburne University of Technology
Christian A. Nygaard, Swinburne University of Technology
Margaret Reynolds, Swinburne University of Technology
Jacqueline de Vries, University of Tasmania

Publication Date November 2021 DOI 10.18408/ahuri5123501



Title

Estimating the population at-risk of homelessness in small areas

Authors

Deborah Batterham, Launch Housing/Swinburne University of Technology

Christian A. Nygaard, Swinburne University of Technology Margaret Reynolds, Swinburne University of Technology Jacqueline de Vries, University of Tasmania

ISBN

978-1-922498-37-3

Key words

Homelessness, risk, small area estimation, geography, prevention.

Series

AHURI Final Report

Number

370

ISSN

1834-7223

Publisher

Australian Housing and Urban Research Institute Limited Melbourne, Australia

DOI

10.18408/ahuri51235 01

Format

PDF, online only

URL

https://www.ahuri.edu.au/research/final-reports/370

Recommended citation

 Batterham, D., Nygaard, C., Reynolds, M. and de Vries, J. (2021)
 Estimating the population at-risk of homelessness in small areas, AHURI Final Report No. 370, Australian
 Housing and Urban Research Institute Limited,
 Melbourne, https://www.ahuri.edu.au/research/finalreports/370, doi: 10.18408/ahuri5123501.

AHURI

AHURI is a national independent research network with an expert not-for-profit research management company, AHURI Limited, at its centre.

AHURI's mission is to deliver high quality research that influences policy development and practice change to improve the housing and urban environments of all Australians.

Using high quality, independent evidence and through active, managed engagement, AHURI works to inform the policies and practices of governments and the housing and urban development industries, and stimulate debate in the broader Australian community.

AHURI undertakes evidence-based policy development on a range of priority policy topics that are of interest to our audience groups, including housing and labour markets, urban growth and renewal, planning and infrastructure development, housing supply and affordability, homelessness, economic productivity, and social cohesion and wellbeing.

Acknowledgements

This material was produced with funding from the Australian Government and state and territory governments. AHURI Limited gratefully acknowledges the financial and other support it has received from these governments, without which this work would not have been possible.

AHURI Limited also gratefully acknowledges the contributions, both financial and in-kind, of its university research partners who have helped make the completion of this material possible.

This paper uses unit record data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, which is funded by the Australian Government Department of Social Services (DSS) and managed by the Melbourne Institute of Applied Economic and Social Research. The findings and views reported in this paper, however, are those of the authors and should not be attributed to either DSS or the Melbourne Institute.

The authors would like to thank Professor Timo Schmid (University of Bamberg) and Sylvia Harmening (Freie Universitaet Berlin) for methodological advice on the production of Small Area Estimates. Any errors in execution or interpretation are solely those of the authors.

Disclaimer

The opinions in this report reflect the views of the authors and do not necessarily reflect those of AHURI Limited, its Board, its funding organisations or Inquiry Panel members. No responsibility is accepted by AHURI Limited, its Board or funders for the accuracy or omission of any statement, opinion, advice or information in this publication.

AHURI journal

AHURI Final Report journal series is a refereed series presenting the results of original research to a diverse readership of policy-makers, researchers and practitioners.

Peer review statement

An objective assessment of reports published in the AHURI journal series by carefully selected experts in the field ensures that material published is of the highest quality. The AHURI journal series employs a double-blind peer review of the full report, where anonymity is strictly observed between authors and referees.

Copyright

 $\ensuremath{\textcircled{\sc 0}}$ Australian Housing and Urban Research Institute Limited 2021

This work is licensed under a Creative Commons Attribution-NonCommercial 4.0 International License, see <u>http://creativecommons.org/licenses/by-nc/4.0/</u>.



Contents

List of tables	
List of figures	iii
Acronyms and abbreviations used in this report	iv
Executive summary	1
1. Introduction	7
1.1 Why this research was conducted	7
1.2 Prevention and risk – two interconnected concepts	9
1.3 Australian homelessness policy and prevention	10
1.4 Summary and structure of the report	11
2. Data sources, spatial units and operationalisation of risk	12
2.1 Small area spatial units	13
2.2 Data sources	13
2.2.1 Household Income and Labour Dynamics in Australia (HILDA) survey	13
2.2.2 Census of Population and Housing	14
2.3 Identifying those at-risk of homelessness	14
2.3.1 Conceptualising homelessness risk	14
2.3.2 Operationalising homelessness risk	16
2.3.3 Limitations	20
3. Small Area Estimation technique	22
3.1 Unit-level model	24
3.2 Area-level model	27
4. Homelessness risk in Australia	31
4.1 National estimates of the population at-risk of homelessness	32
4.2 Characteristics of the national population at-risk	34
4.3 State and territory incidence of homelessness risk	36
4.4 The characteristics of those at-risk within each state and territory	38
4.5 SA3 level consistency and comparison across estimation methods	42
4.6 Mapping the incidence of homelessness risk, SA2 and SA3	43
4.7 Confidence and reliability of estimates	48
4.8 Mapping the numbers of people at-risk	51
4.9 Policy development implications	55
5. Policy development options	57
5.1 SAEs and prevention policy	57
5.2 Primary prevention opportunities for state, territory and local governments	58
5.3 Primary prevention opportunities for the Australian government	60
5.4 Future research	61
5.5 Improved data access and coverage	61
5.6 Final remarks	62
References	64
Appendix 1: Detailed SAE modelling results	70
Appendix 2: HILDA sampling coverage	73
Appendix 3: SAE data tables	74

List of tables

Table 1: Descriptive statistics, individual risk factors for responding persons, HILDA survey, waves 16 and 17	
Table 2: HILDA waves 16 and 17 initial incidence of risk factors, counts and per cent	20
Table 3: Descriptive statistics for variables used in the unit-based (probit) models	26
Table 4: Definition of variables used in the unit-based (probit) model	26
Table 5: Descriptive statistics, area-level (FH) model	29
Table 6: Definition of variables used in area-level (FH) model	30
Table 7: Aggregated SAEs, Australia, 2016	33
Table 8: Demographic profile of the estimated population aged 15 years and over at-risk of homelessness in 2016 (HILDA) Australia	35
Table 9: Unit-level SAE's aggregated to the state and territory level: rates and point estimates with confidence intervals, 2016	37
Table 10: Area-level SAE's aggregated to the state or territory level: rates and point estimates with confidence intervals, 2016.	37
Table 11: Pearson correlations between direct estimates, unit-based estimates and Area-based estimates at the SA3 level, 2016	43
Table A1: Unit-based (probit) results using HILDA 2016 data	70
Table A2: Area-based (FH) model results using HILDA 2016 and Census 2016 data	71
Table A3: The variable names and definitions contained in Table A4 and Table A5	74
Table A4: SA2 level estimates	75
Table A5: SA3 level estimates	113

List of figures

Figure 1: The research approach to producing small area estimates of homelessness risk	23
Figure 2: Unit-level SAE process	25
Figure 3: Area-level (FH) SAE process	29
Figure 4: Key characteristics of the population at-risk of homelessness compared to general population*	36
Figure 5: Characteristics of the at-risk population by state and territory (unit-based, probit estimates)	38
Figure 6: Risk of homelessness (rate per 10,000 people), comparing unit-level (probit – map A) and area- level (Fay-Herriot – map B) estimates, national overview, SA3s	44
Figure 7: Risk of homelessness (rate per 10,000 people), unit-level (probit) estimates, capital city SA2s	46
Figure 8: Confidence interval ranges, unit-level (probit) estimates: percentage points and +/- variations in point estimates, Australia, SA3s	48
Figure 9: Confidence interval ranges, unit-level (probit) estimates: percentage points and +/- variations in point estimates, capital city SA2s	49
Figure 10: Confidence interval ranges, area-level (FH) estimates: percentage points and +/- variations in point estimates, Australia, SA3s	51
Figure 11: Point estimates: persons* at-risk of homelessness, comparing unit-level (probit – map A) and area-level (FH—map B) estimates, national overview, SA3s	52
Figure 12: Point estimates, persons* at-risk of homelessness, unit-level (probit) model, capital city SA2s	53
Figure A1: FH SAE estimate comparison with direct estimates (HILDA)	72
Figure A2: HILDA national sampling coverage, SA2 level (2016)	73

Acronyms and abbreviations used in this report

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHURI	Australian Housing and Urban Research Institute Limited
AIHW	Australian Institute of Health and Welfare
ASGS	Australian Statistical Geography Standard
ATR	At-risk of homelessness indicator
CC/RoS	Capital City or Rest of State
CDF	Cumulative Distribution Function
FH	Fay-Herriot model
GCCSA	Greater Capital City Statistical Area
HILDA	Household Income and Labour Dynamics in Australia
LGBTI	People who are lesbian, gay, bisexual, transgender or intersex
NFP	Not for profit
NHHA	National Housing and Homelessness Agreement
NSW	New South Wales
NT	Northern Territory
QLD	Queensland
SA	South Australia
SA2	Statistical Area level 2
SA3	Statistical Area level 3
SAE	Small Area Estimation
SHS	Specialist Homelessness Services
SHSC	Specialist Homelessness Services Collection
SIH	Survey of Income and Housing
SND	Standard Normal Distribution
TAS	Tasmania
VIC	Victoria
WA	Western Australia

Executive summary

Key points

- Successful primary prevention of homelessness requires a detailed understanding of the incidence and profile of the at-risk population, at the national, local and regional (or small area) levels.
- This research produces Small Area Estimates (SAE) of the population at-risk of homelessness in Australia. The incidence of homelessness risk is measured as a rate per 10,000 residents at Statistical Area level 2 (SA2) and Statistical Area level 3 (SA3) level.
- A person is considered at-risk of homelessness if residing in rental housing and experiencing at least two of the following: low-income; vulnerability to discrimination; low social resources and supports; needing support to access or maintain a living situation; and a tight housing market context. By definition, a person residing in owner-occupied housing is not considered at-risk.
- This research combines data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, waves 16 and 17, and the 2016 Census of Population and Housing. In an attempt to deal with significant data limitations, two model-based SAE methods are employed: a unit-level and an area-level approach.
- The unit-level approach utilises HILDA responding person characteristics and Census data. The area-level approach combines direct SA3-level homelessness risk and variance estimates from HILDA and SA3-level Census data. Both approaches utilise regression models to generate SAE of homelessness risk.

- Findings suggest that at a national level, the estimated rate of risk per 10,000 persons (across all tenures combined) ranges between 846.9 per 10,000 (8.5% of the total population aged 15 years and over) and 1,165 per 10,000 (11.7%). This range equates to between 1.5 and 2 million Australians at-risk of homelessness—all of whom reside in rental housing.
- The highest rates of risk (per 10,000 persons) are found in remote areas and in selected areas of capital cities. The greatest *number* of people atrisk are living in greater capital cities on the eastern coast of Australia, in both central and suburban locations.
- The two different methods used to produce the small-area estimates do not generate a consistent picture of homelessness risk in Australia in all areas, with greater variability in remote parts of the country.
- The profile of those at-risk suggests primary prevention policies require policy and service responses at national and state and territory levels that are beyond the usual scope of homelessness policy.
- Homelessness risk SAEs provide policy makers, not-for-profit (NFP) service providers and funders with quantified estimates of demand (need) for different types of services. They also provide locational information to maximise and monitor the benefits of investment in spatial and aspatial homelessness prevention initiatives.
- Aspatial primary prevention policies include: increasing income support payments; improving the incomes of the lowest paid; and enhancing coordination on homelessness prevention across all levels of government.
- Spatial primary prevention policies include: increasing the supply of rental housing affordable to those on the lowest incomes; ensuring access to health and disability supports for those on low incomes; increasing school engagement and retention; and enhancing support to Indigenous Australians in remote communities.

The overall incidence of homelessness cannot be reduced by responding to those experiencing homelessness alone. Upstream interventions are required to prevent homelessness from occurring in the first place. Such interventions must target those at-risk of homelessness, and so an understanding of the population at-risk of homelessness is required. Yet, little is known about the population at-risk of homelessness in Australia (apart from Batterham 2021), including the geographical distribution of this population.

The overarching policy issue guiding this project is therefore: how can homelessness be prevented more effectively based on a detailed understanding of the distribution of the population at-risk of homelessness across small areas in Australia?

Existing research demonstrates that area-level disadvantage (Vinson, Rawsthorne et al. 2017), homelessness (Parkinson, Batterham et al. 2019) and rental stress (Hulse, Reynolds et al. 2019; Hulse, Reynolds et al. 2014; Rahman and Harding 2014), all vary significantly across space. The incidence of homelessness risk and the characteristics of those affected are also likely to vary spatially. Without a nuanced understanding of spatial differences and characteristics associated with these differences, identification of service need (demand) and location of different services may be undermined.

Two research questions address the policy issue:

- **RQ1:** What is the incidence of homelessness risk in small areas across Australia, including within states, territories and capital cities?
- **RQ2:** What is the profile of those at-risk and what are the geographical differences in the profile of this population in small areas across Australia and within states, territories and capital cities?

Both the number and profile of the population at-risk of homelessness can be used to guide the focus of preventative policies and assess their effectiveness (Batterham 2021). The quantification of social and economic phenomena is key to the development of many social policies and strategies. SAEs of homelessness risk provide policy makers, not-for-profit service providers and funders with quantified estimates of demand/need for different types of services by area to maximise the efficiency of preventative policy initiatives.

Key findings

Producing an estimate of homelessness risk in Australia

No official source of homelessness risk data exists in Australia. This research, therefore, employed Small Area Estimation (SAE) techniques to generate homelessness risk indicators at two (small scale) Census geographies, SA2 and SA3. The estimates of homelessness risk are produced utilising data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, and the 2016 Census of Population and Household. SAE methods combine survey data (i.e. HILDA) and additional data (i.e. Census) with better sampling or geographic coverage to produce model-based predictions of homelessness risk. Both unit-level and area-level models were used in estimation. The variation in the predicted rates of homelessness risk, in part, reflect underlying data availability considerations.

Our results show that 'behind' the number of people experiencing homelessness, is a much larger number of Australians who are at-risk. The results in this research estimate the population at-risk of homelessness at the national level and are expressed as a rate of risk per 10,000 persons (total population, all tenures combined) to range between 846.9 and 1,165 per 10,000 people, or some 8.5 to 11.7 per cent of the total population aged 15 years and over.

Spatial distribution and characteristics of the at-risk of homelessness population

The rate of homelessness risk at SA2 and SA3 level varies considerably. At the SA2 level the rate of homelessness risk ranges from 87.3 (Gelorup-Stratham, WA) to 5,040 (Aurukun, QLD) per 10,000; and 206.9 (Nillumbik-Kinglake, VIC) to 3,366.4 (East Arnhem, NT) per 10,000 at the SA3 level. More generally, the highest rates of risk are in the Northern Territory (NT), followed by Queensland (QLD) and South Australia (SA). The lowest rates of risk are in the Australian Capital Territory (ACT) followed by Victoria (VIC).

At finer spatial levels the highest rates of risk are typically found in remote areas and select areas in capital cities. However, the greatest *numbers* of people at-risk are located in capital cities on the eastern coast of Australia. These high numbers extend well beyond inner city areas and into the suburbs.

Areas with moderate/average rates of risk in capital cities, such as the outer west in Melbourne, or substantial segments of the eastern 10 kilometre ring of Perth, can still have high numbers of people at-risk, due to their larger population size.

Analyses at finer spatial scales reveal distinct nuances within and between states and territories. In several states, including QLD, New South Wales (NSW), Western Australia (WA), and SA, high rates of homelessness risk are spread across greater capital cities and regional areas. In the NT, however, risk is highly concentrated in remote areas, whereas in VIC, risk is concentrated in inner Melbourne.

Importantly, SAEs are estimates and as such, a product of the availability and quality (detail and sampling coverage) of the data. Data considerations affect both the point estimates and the variability of those point estimates, per SAE method. Testing for consistency across the different SAEs suggests the precision of estimates and consistency across the two approaches is greatest in capital cities, although there are exceptions. The precision of estimates (the confidence intervals around the estimates) is poorer in remote and sparsely populated areas. Many of the areas with the highest predicted homelessness rates also have large confidence intervals.

Compared to the national population, those at-risk are more likely to be female, Indigenous, and be living in a lone person or lone parent household. They are more likely to identify as lesbian, gay or bisexual, and report fair or poor health. They are more likely to be low-income, unemployed or outside the labour force, and in receipt of income support payments. Those at-risk have lower levels of educational attainment, are more likely to report difficulty paying bills and rent on time, and are more likely to experience rental stress and a range of indicators of material deprivation such as skipping meals and being unable to heat their home.

Policy development options

The sheer number of people at-risk of homelessness—between 1.5 million and 2 million people aged 15 years and over—demands a stronger focus on primary prevention of homelessness in Australia. While we do not know how many people transition from risk into actual homelessness, results from the General Social Survey (Australian Bureau of Statistics 2020) suggest that transition rates could be high, with some 11 per cent of the population aged 15 years and over having experienced homelessness in their lifetime.

Successful prevention requires a detailed understanding of the incidence of homelessness risk in the population, and the profile of those at-risk, at the national as well as local levels. The findings in this report suggest that primary prevention initiatives require both spatial and aspatial approaches, some of which sit beyond the usual scope of *homelessness* policy and sit across all levels of government.

Both spatial and aspatial policy delivery and monitoring can be enhanced by SAE of homelessness risk that provide quantified estimates of need for different types of services and areas to maximising the benefit of investment in homelessness primary prevention initiatives.

Increasing income support and earnings for the low paid

The majority of those at-risk of homelessness are in low-income households. The significance of low-income is highlighted by the higher rates of rental stress as well as material deprivation experienced by those at-risk in terms of skipping meals and being unable to heat their homes.

Given that many are in receipt of income support payments (both for those who are unemployed and those outside the labour force), an increase in the rate of these payments could make substantial impact in reducing the risk of homelessness. Around a quarter of the at-risk population are in paid employment suggesting a need to increase the rates of pay or income stability among this group: A substantial increase in income would help to boost purchasing power in the private rental market for this group, with the COVID-19 and Job Keeper supplements effectively bolstering incomes during the pandemic to address some of these issues (Pawson, Martin et al. 2021; Verdouw, Yanotti et al. 2020). This is important given the well documented shortage of rental housing affordable to those in the lowest income quintile (Hulse, Reynolds et al. 2019) and particularly those on income support payments (Anglicare Australia 2021; Department of Health and Human Services (VIC) 2021).

Increasing the supply of rental housing affordable to those on low-incomes

By definition, those at-risk of homelessness in this study are residing in the rental sector (private rental and social housing). The lack of affordable rental housing for low-income households—be it private rental (Hulse, Reynolds et al. 2019) or social housing (Lawson, Pawson et al. 2018)—intersects with the low-incomes of those at-risk amplifying the multiple and intersecting forms of disadvantage they experience. These shortages are cumulative and have evolved over the last two decades (Burke, Nygaard et al. 2020). There is a need for greater provision of rental housing that is specifically targeted to those on low-incomes and/or those at-risk of homelessness. Scaling up the provision of social and affordable housing options (with income tied requirements) provides one possibility for achieving this. SAEs of the population at-risk of homelessness can provide valuable estimates of local demand, which are critical for planning for affordable housing at the local level.

Our results highlighted much higher rates of rental stress and many forms of material deprivation among those at-risk, suggesting opportunities for enhancing existing secondary prevention initiatives. Specifically private rental access programs that provide ongoing rent subsidies for people at imminent risk of homelessness, as well as the payment of rent arrears and advocacy with landlords. Such services could be targeted to areas with larger numbers of people at-risk of homelessness.

Ensuring access to health and disability supports for those on low-incomes

Those at-risk are likely to report living with a disability and fair or poor health. This is consistent with existing research, which documents the role of poor physical and mental health in precipitating homelessness as well as the substantial health impacts of homelessness (Johnson and Chamberlain 2011; Min Park, Fertig et al. 2011). There is a clear role for state and territory governments to ensure access to health and disability supports across areas, especially for those on low-incomes. These findings also highlight the importance of national safety net schemes such as Medicare, the Pharmaceutical Benefit Scheme (PBS) and the National Disability Insurance Scheme (NDIS).

Focus on education, school engagement and retention

Those at-risk have lower levels of educational attainment and many of those at-risk have children living with them. Given what is known about intergenerational transmission of poverty, homelessness, and low educational attainment (Cobb-Clark 2019; Cobb-Clark and Zhu 2015), state and territory government investments supporting educational engagement for disadvantaged students could pay off in-terms of reducing future risk of homelessness. Additional supports for further education and training for adults with low educational attainment may also be required. SAEs can be used to enhance and expand preventative services based at educational facilities.

Targeted support for remote Indigenous communities

Indigenous Australians are overrepresented in the at-risk population, especially in remote areas, and are also overrepresented in the homelessness population. Targeted support for this group, developed in consultation with the communities themselves, is warranted. Given known issues with the standard and quantum of housing in remote Indigenous communities, our SAEs of homelessness risk could inform a revamped National Partnership on Remote Housing and/or state level strategies on remote Indigenous housing.

Improving data access and coverage

Combining survey data with Census, and other administrative data with detailed population coverage provides an important (and lower cost) way of producing a range of policy-relevant statistics at finer spatial scales. However, the quality of SAE production is dependent on the sampling frame and sampling uncertainties, and the quality and accessibility of auxiliary data from other data sources. For the purposes of this project, it is clear that the low-sampling (or no sampling) in remote and sparsely populated areas generates systematic variability in the quality of the estimates that can be produced. However, the production of SAEs is also restricted by the availability of Census data. Firstly, through restrictions on the cross-tabulations that can be conducted when using the Australian Bureau of Statistics' (ABS) TableBuilder product. Secondly, through restrictions (exacerbated by the COVID-19 pandemic) of accessing the 5 per cent unit record file from the Census. Altering the sampling properties of large-scale surveys may not always be feasible. However, improving access to Census products will also assist in the production of SAEs. Similarly, altering rules around perturbation and confidentiality measures can assist in improving precision of SAE techniques.

The study

The data developed for this research provides policy makers and service providers with a base-level understanding of the at-risk population's spatial distribution and preliminary information about the varying profile of those at-risk. This information can be used to aid in the development of primary prevention initiatives, aid in tailoring them to local environments, and provide metrics that may be used to assess the effectiveness of primary prevention initiatives.

We employ Batterham's (2019a) definition of homelessness risk and operationalise it using a nationally representative household panel survey (HILDA) for 2016. To provide estimates of homelessness risk in small areas (SA2 and SA3) across Australia, we employ Small Area Estimation (SAE) techniques. SAE is a method for generating area-based statistics or indicators where direct measurement is not feasible or where the precision of direct estimates is limited because of small sample sizes. SAE utilises auxiliary data to improve the precision of the estimates that can be derived directly from the survey itself (Pfeffermann 2013).

Two methods for producing SAEs are applied: a unit-level and an area-level approach. Using two SAE methods enables us to compare results and provide some assessment of the relative strengths and weaknesses of the two approaches. The unit-level approach uses HILDA Survey data matched to the data and category availability in the Census to predict risk indicators. We then estimate risk of homelessness at the small-area level using the results of this modelling in combination with customised cross tabulations from the Census. In the area-level approach, we generate SA3-level direct estimates of homelessness risk, and variance of risk, in HILDA and then develop a model to predict these direct estimates using area-level data from the Census based on the Fay-Herriot (FH) method. We report both a rate of homelessness risk per 10,000 persons and the estimated number of persons at-risk across small areas. Confidence intervals for these estimates are provided at the national, state and territory, and small area level.

1. Introduction

- Successful prevention requires a detailed understanding of the incidence of risk in the population, and the profile of those at-risk, at local and regional levels, technically referred to as small area levels. In this project, Census geographies SA2 and SA3 are considered small areas.
- This research produces small area estimates of the at-risk of homelessness population in Australia to assist policy makers and stakeholders to develop homelessness prevention strategies.
- This research draws on Household Income and Labour Dynamics in Australia (HILDA) survey data and 2016 Census of Population and Housing data and employs two methods of Small Area Estimation (SAE): a unit-based and an area-based approach.

1.1 Why this research was conducted

Homelessness is a surprisingly common experience in the Australian population (see footnote 1 for definition of homelessness in Australia). More than 116,000 Australians, or 50 in every 10,000 people, experience homelessness on any given night (Australian Bureau of Statistics 2018b). On any given day, 66,100 people are supported by a specialist homelessness service, while between July 2011 and July 2020, some 1.3 million people received assistance from specialist homelessness services (SHS) (Australian Institute of Health and Welfare 2020). Other data suggests that 7 per cent of Australians (approximately 1.5 million people) experienced homelessness over the 10 years to 2010 (ABS 2015)¹.

Homelessness is traumatic and has significant and wide-ranging impacts on those who experience it. People struggle to meet their basic needs of food, shelter and safety (Commonwealth of Australia 2008) and to maintain relationships with family, friends and their community (Goodman, Saxe et al. 1991). Homelessness can make it

¹ Homelessness can be defined in various ways. In Australia most definitions are broad by international standards and include more than those sleeping rough or staying in short term accommodation such as shelters and refuges. The ABS define homelessness as lacking one or more of the Anglo-European elements of home: privacy, stability, a sense of security, safety, and control over living space. Specifically, they consider a person to be homelessness when a person is living in a dwelling that: is inadequate; or has no tenure, or their initial tenure is short and not extendable; or does not allow them to have control of and access to space for social relations, and; the person does not have alternative suitable accommodation. This definition is used to produce area-based estimates of homelessness from the Census of Population and Housing.

difficult to maintain or find employment and participate in education and training (Mavromas, King et al. 2011). It can bring about significant physical and mental health issues (Beer, Baker et al. 2011; Chamberlain, Johnson et al. 2007; Mallett, Bentley et al. 2011; Westmore and Mallett 2011), which persist long after the period of homelessness is resolved. An experience of homelessness also has significant negative effects on children's development and education (Buckner 2008; Kirkman, Keys et al. 2010; Kolar 2019).

Homelessness also has high costs to the broader community and governments. People experiencing or at-risk of homelessness have been shown to have higher use of health, justice, and other welfare services both in Australia (Flatau, Zaretzky et al. 2008; MacKenzie, Flatau et al. 2016; Zaretzky and Flatau 2013) and internationally (Gaetz 2012; Pleace, Baptista et al. 2013). An Australian study that examined potential offsets related to health and justice services, welfare and taxation forgone, and eviction rates from public tenancies (Zaretzky and Flatau 2013; Zaretzky, Flatau et al. 2013), estimated the annual cost offset of addressing homelessness at \$29,450 per client per year. Preventing homelessness has the potential to reduce government expenditure across a range of social policy areas.

The overall incidence of homelessness cannot be reduced by responding to those experiencing homelessness alone. Upstream interventions are required to prevent homelessness from occurring in the first place. Such interventions must be targeted to those at-risk of homelessness, hence an understanding of the population at-risk of homelessness is required.

Yet little is known about the population at-risk of homelessness in Australia (apart from Batterham 2021), including the geographic distribution of this population. Successful prevention requires a detailed understanding of the incidence of risk in the population, and the profile of those at-risk, at local and regional levels, technically referred to as small area levels.

Existing research demonstrates that area-level disadvantage (Vinson, Rawsthorne et al. 2017), homelessness (Parkinson, Batterham et al. 2019) and rental stress (Hulse, Reynolds et al. 2019; Hulse, Reynolds et al. 2014; Rahman and Harding 2014), all vary significantly across space. The incidence of homelessness risk and the characteristics of those affected are also likely to vary spatially. Indeed, preliminary research by Batterham (2021) suggests that this is the case. Without a nuanced understanding of these spatial differences and the dynamics underlying them, attempts at primary prevention may be undermined.

Based on these considerations, the overarching policy question guiding the project is: how can homelessness be prevented more effectively based on a detailed understanding of the distribution of the population at-risk of homelessness across small areas in Australia?

Two research questions will address this policy issue:

- **RQ1:** What is the incidence of homelessness risk in small areas across in Australia, including within states, territories and capital cities?
- **RQ2:** What are the geographical differences in the profile of the population at-risk of homelessness in small areas across Australia and within states, territories and capital cities?

Both the number and profile of the population at-risk of homelessness can be used to guide the focus of preventative policies and assess their effectiveness (Batterham 2021). The quantification of social and economic phenomena at local levels is key to the development of many social policies and strategies (such as place-based strategies). SAEs of the population at-risk of homelessness provide policy makers, NFP service providers and funders with quantified estimates of need for services and the areas where it is most needed to maximise the effectiveness primary preventative initiatives

Understanding the geography of homelessness risk at the small area level, both its incidence and the profile of that population, enables tailoring of prevention initiatives to local environments.

1.2 Prevention and risk – two interconnected concepts

Prevention, especially primary prevention, relies on understanding and addressing risk of homelessness in the broader population (Edgar, Harrison et al. 2007). The importance of understanding the population at-risk of homelessness lies in its critical role in informing and guiding primary prevention policies.

Academic and policy work has outlined numerous frameworks for understanding prevention (e.g. Apicello 2010). Some have distinguished between prevention and early intervention (Pawson 2007); universal, selected and indicated prevention (Shinn, Baumohl et al. 2001); and, borrowing from the health sciences, primary, secondary and tertiary prevention (Busch-Geertsema and Fitzpatrick 2008; Culhane, Metraux et al. 2011; Gaetz and Dej 2017; Parsell and Marston 2012). In this research, we draw on Gaetz and Dej's (2017) definition of, and framework for, homeless prevention.

Gaetz and Dej (2017) define homeless prevention as:

... policies, practices, and interventions that reduce the likelihood that someone will experience homelessness. It also means providing those who have been homeless with the necessary resources and supports to stabilize their housing, enhance integration and social inclusion, and ultimately reduce the risk of the recurrence of homelessness (p 35).

They draw on the public health model of prevention, which distinguishes between primary, secondary and tertiary prevention, with these three types of prevention existing on a continuum of proximity to actual homelessness.

Primary prevention involves universal programs or interventions for whole communities as well as targeted interventions for at-risk groups. These interventions address the broader contextual factors that make homelessness more likely such as poverty, family violence and child abuse, discrimination and inequality, lack of affordable rental housing, low social security payments, chronic ill health and disability, addiction, and gaps in the social safety net. Recent examples of policies aimed at preventing homelessness have occurred during the COVID-19 pandemic where additional supplements were given to those who were unemployed and receiving income support payments. A number of states and territories also placed moratoriums on evictions from rental properties. Such interventions aim to reduce the risk of homelessness among key target groups and the population in general and 'strengthen protective factors' (Gaetz and Dej 2017: 36), increase access to supports and improve housing stability. This is done to reduce the number of people who ever become homeless in the first place. Because of its focus on communities and the general population, primary prevention initiatives will benefit those at-risk as well as some people who may have never experienced homelessness without such interventions.

Secondary prevention is targeted to those at imminent risk of homelessness or those who have only just become homeless and could also be referred to as early intervention. Secondary prevention interventions aim to stabilise a person's housing situation or to rapidly rehouse those that have lost their housing. Much of the work done by the SHS sector for those at-risk of homelessness falls under the banner of secondary prevention or early intervention. For example, work to identify people at imminent risk of homelessness (Department of Communities (WA) 2020; Department of Human Services (VIC) 2010; NSW Government 2019), preventing exits into homelessness from institutions, supporting at-risk tenancies in the private rental market and in social housing as well as ongoing tenancy support programs.

Tertiary prevention aims to reduce the recurrence of homelessness. This means providing long-term housing solutions and the necessary supports for that housing to be maintained. For example, by providing permanent supportive housing to people experiencing chronic homelessness or social housing for other cohorts in the homeless population.²

² Gaetz and Dej (2017) are also clear about what prevention is not. They argue that whilst someone is in a state of homelessness, interventions cannot be said to be preventing that homelessness. It is not the provision of crisis responses and material aid, providing supports for alcohol and other drugs and mental health for people currently experiencing homelessness, or expanding existing crisis accommodation and refuge options. While critical and valuable interventions these are not part of the spectrum of prevention activities.

Primary prevention, implementation and evaluation strategies cannot be effectively developed or implemented without knowledge of the population at-risk at national and local levels. The data developed for this research provides policy makers and service providers with a base-level understanding of the at-risk population's spatial distribution and preliminary information about the varying profile of those at-risk.

1.3 Australian homelessness policy and prevention

This section provides a brief overview of homelessness prevention policy in Australia.

For more than 50 years, SHS in Australia have been funded through multi-year joint Australian, state and territory government agreements. The most recent iteration of this agreement commenced in 2018 and is valid for five years — the National Housing and Homelessness Agreement (NHHA) (Commonwealth of Australia 2017). The NHHA requires each state and territory to develop a homelessness strategy that outlines how it will address and reduce homelessness. Services are then provided by non-government organisations who are contracted by state and territory governments.

Funding for services includes the provision of short and medium-term accommodation (including crisis accommodation, family violence and youth refuges and transitional housing) as well as support in the form of case management. The NHHA also funds social housing and other housing related programs in each state and territory.

The NHHA aims to prevent and address homelessness and improve access to affordable, safe and sustainable housing across the housing spectrum (Australian Institute of Health and Welfare 2020). The NHHA also outlines three key policy reform areas to be addressed within each state and territory homelessness strategy:

- achieving better outcomes for people
- · early intervention and prevention
- evidence-based service and program design.

Early intervention and prevention is a key reform area in the NHHA. It was also one of three key strategies in The Road Home (2008)—Australia's first national policy framework for homelessness. Prevention of homelessness is a key focus in most state and territory homelessness strategies (see for example Department of Communities (WA) 2020; Department of Human Services (VIC) 2010; Government of SA 2019; NSW Government 2019) and in homelessness policy internationally (Department for Communities and Local Government (England) 2012; Parsell and Marston 2012; United States Interagency Council on Homelessness 2010).

However, despite its importance in reducing overall homelessness, most of the work undertaken in Australia under the banner of prevention is early intervention. The area with perhaps the most success has been youth homelessness where early intervention efforts, such as the long running program Reconnect, have worked to prevent or quickly address youth homelessness (Mission Australia 2016). However, these efforts have largely fallen under the purview of youth policy rather than homelessness policy more broadly. Generally, SHSs remain largely focussed on crisis responses once someone becomes homeless (Spinney, Beer et al. 2020). SHSs are funded to work with both those experiencing and those at-risk of homelessness, However, the 'definition' of 'at-risk' proposed for use in SHS in Australia (Australian Institute of Health and Welfare 2013:8-9) is simply a list of 19 risk factors that varies from staying in a boarding house, to experiencing financial stress.

Recently there have been significant calls to reorient the homelessness services system (which comprises mainstream agencies as well as SHS) away from crisis responses toward a focus on prevention and early intervention (e.g. Spinney, Beer et al. 2020). However, it is uncertain how prevention can be successful when it remains unclear how risk of homelessness should be defined and who precisely should be considered at-risk.

In summary, despite the focus on prevention in numerous policy documents at multiple levels of government, progress toward prevention has stalled due to the significant gap in knowledge about the population at-risk of homelessness. This research project provides policy makers and service providers with base-level data on the incidence of homelessness risk, spatial distribution of the at-risk population, and profiles of personal characteristics associated with homelessness risk.

1.4 Summary and structure of the report

The report proceeds as follows. In the next chapter (Chapter 2) we describe the data sources and spatial units used in this report. We also provide a brief overview of different approaches to understanding risk of homelessness in the Australian and international literature, describe the definition of homelessness risk used in the present study, and describe how we operationalise risk of homelessness in HILDA.

Chapter 3 provides a detailed explanation of our approach to Small Area Estimation (SAE). Here we detail the two approaches used to produce small area estimates in this report, including model specification, as well as the highlighting the various strengths and weakness of these approaches.

In Chapter 4 we present the main empirical results. We compare estimates of the population at-risk at the Australian, state and territory government levels and provide a detailed analysis at the SA3 and SA2 level for greater capital cities. We also provide a detailed profile of the national population at-risk of homelessness and describe variations in the profile of those at-risk between states and territories and smaller areas.

The report concludes with a discussion of the implications for policy on primary prevention and discuss the implications of our empirical approach for the use of small area estimation and the need for improved data collections.

2. Data sources, spatial units and operationalisation of risk

- This research combines data from the Household, Income and Labour Dynamics in Australia (HILDA) survey, waves 16 and 17, and the 2016 Census of Population and Housing to produce Small Area Estimates (SAE).
- We produce Small Area Estimates of the population at-risk of homelessness in Australia at the ABS Census geographies of SA2 and SA3
- There are multiple approaches to understanding risk of homelessness in the literature—the most common being the risk-factor approach and the pathways approach. However, none provide a clear definition of homelessness risk.
- We apply the Batterham (2019a) definition of homelessness risk in the present study, which considers someone at-risk of homelessness if they are residing in rental housing and exhibit at least two of the following: low-income; vulnerability to discrimination; low social resources and supports; needing support to access or maintain a living situation; and a tight housing market context.
- In wave 16 of HILDA (for the year 2016) 2,453 people or 13.9 per cent of responding persons meet the criteria for being at-risk of homelessness. This operationalisation excludes people currently living in owneroccupied housing. This remains an area for further research.

This chapter documents three key components of the research approach: the spatial units chosen to represent 'small areas'; the secondary data sources in which the analyses are based; and, the operationalisation of homelessness risk in secondary data sources. Limitations are also discussed. The final key component of the research approach, our approach to Small Area Estimation, is described in detail in Chapter 3.

2.1 Small area spatial units

'Small areas' in this research are defined using spatial units from the Main Structure of the ABS Australian Statistical Geography Standard (ASGS). Small Area Estimates of the population at-risk of homelessness are produced at the ABS defined spatial scales: SA2 and SA3. SA2s typically have a population ranging from 3,000 to 25,000 persons and can be thought of as analogous to a suburb or small group of related suburbs. SA3s are an aggregation of SA2s and have a population ranging from 30,000 to 130,000. In urban areas, SA3s closely align to an area serviced by a major transport and commercial hub while in regional areas, they represent the areas serviced by regional cities. In outer regional and remote areas SA3s have similar social and economic characteristics and are recognised as having a distinct identity (Australian Bureau of Statistics 2018a).

Certain SA2s and SA3s are excluded from the analysis due to low, and out-of-scope populations. Specifically, those coded: 'other territory'; 'migratory—offshore—shipping'; and 'no usual address'. When reporting results below the state and territory level (i.e. at small areas) SA2s and SA3s with populations below 500 were also excluded.³

2.2 Data sources

To produce Small Area Estimates of the population at-risk of homelessness this study draws on two secondary data sources the HILDA panel survey; and the 2016 ABS Census of Population and Housing. The HILDA Survey is a nationally representative survey sample, but only enables construction of at-risk measures at the national, and to an extent, state and territory level. Census data is available at finer spatial levels, but do not contain detailed information on all risk factors, or the complex intersection between them among individuals. Through the use of two different small area estimation techniques, we combine data from these two sources to estimate risk of homelessness at the small area level.

2.2.1 Household Income and Labour Dynamics in Australia (HILDA) survey

The HILDA Survey is a nationally representative longitudinal household panel survey that has followed a sample of people at annual intervals since 2001. The survey covers a range of topics necessary for identifying homelessness risk including: income; housing; health; social connections and supports; household change and formation; and other background and lifestyle items (Summerfield, Freidin et al. 2016:2). HILDA 2016 samples some 17,694 individuals in 9,750 households across Australia (excluding remote and sparsely populated areas) (Wilkins and Lass 2018). The basic sampling unit is the household, using a multistage stratified approach (Watson and Wooden 2002). Households were randomly sampled within 22–34 dwellings, in 488 collection districts (1996 basis), stratified by state and territory. Watson and Wooden (2002) provide detailed information on the sampling procedures for HILDA.

While all members of the selected households in HILDA are counted through the household questionnaire, only those aged 15 years and over are asked to complete additional questionnaires (person questionnaire and self-completion questionnaire). These people are referred to as 'responding persons' in HILDA. The specific information required to operationalise risk is only collected for responding persons, and so our risk estimates in this study are only available for those aged 15 years and over. The HILDA survey includes a selection of weights that account for sample selection and non-response as well as those that enable generalisation to the national population. The responding person population and scaled sample weights were used in this project. Wave 16 of the HILDA survey was analysed in this research because it includes data collected in 2016—the same year as the most recent release of Census data. Some additional items were taken from wave 17 (2017) as they collected data on substance use and mental health that were not available in wave 16⁴.

³ A small number of SA2s and SA3s have populations below 500. These are typically larger areas without a permanent population (e.g. airports), sparsely populated areas resulting in geographic areas too large to be a meaningful unit, isolated geographic areas (e.g. islands), and areas designed to avoid arbitrary subdivision (www.abs.gov.au). Given the special status or geographically less meaningful nature of these units they have been excluded. In mapping these results the SA2 level output is only mapped for capital cities. Other areas are mapped by SA3.

⁴ Additional waves of HILDA were not used as our main focus was to match with the timing of the Census. Given that the model fit for the unit level models is quite good for this type of model, we don't believe a larger sample size across multiple waves would improve the model fit.

The survey nature of HILDA raises two issues for this research. First, HILDA does provide detail on household or persons location down to SA1 level⁵. However, the sample sizes, even at SA2/SA3 level, are often small, which results in direct estimates of the at-risk population becoming imprecise and subject to considerable variability. Second, HILDA is a nationally representative sample, but households/persons are not sampled across every SA2/SA3. For some areas, therefore, direct estimation of the at-risk of homelessness population is not possible. This is particularly the case in remote and sparsely populated areas, which are excluded from the sampling frame all together. For instance, most of the NT is not sampled, except for Darwin and four smaller urbanised areas (Watson and Wooden 2002). WA, SA and QLD are similarly affected by non-sampling in remote areas. The non-sampling of sparsely populated and remote areas presents a challenge with respect to estimating the at-risk of homelessness population, since the population within more urbanised areas. The estimation of the population at-risk in these areas is, therefore, entirely reliant on the predictive ability of the SAE modelling. Figure A2 in Appendix 2 illustrates the SA2 level sampling coverage of HILDA.

2.2.2 Census of Population and Housing

Due to the spatial limitations of HILDA data, we also draw upon area-level data from the 2016 Census of Population and Housing. Census data was extracted at both the SA2 and SA3 level using the TableBuilder portal, an online tool developed and supported by the ABS to allow users to extract customised tables of Census variables at a range of spatial scales. A suite of data items were extracted including: household income; household type; age; gender; education; country of birth; Indigenous status; labour market engagement and employment; disability; volunteering and care work; and internet access. These variables were then included in the area-based SAE models (see Chapter 3).

There are limits to the number and type of variables that can be combined at smaller spatial scales in TableBuilder. Consequently, customised data were also obtained from the ABS for use in the unit-based SAE approach. Filters were applied to ensure that only those aged 15 years and over were included (matching the HILDA sample); and that overseas visitors were excluded. Further, because some of the data items were sourced from the 'Place of Enumeration' Census count (rather than 'Place of Usual Residence') it was necessary to exclude any visitors to a dwelling and include only those persons who were 'at home' on Census night, reducing the population to 17,994,437 people. Table 4 in section 3.1 lists the variables and definitions of this customised data set.

2.3 Identifying those at-risk of homelessness

2.3.1 Conceptualising homelessness risk

There is a growing body of Australian research on homelessness, including the spatial distribution of homelessness (Parkinson, Batterham et al. 2019; Wood, Batterham et al. 2014; Wood, Batterham et al. 2015). However, the body of work examining the risk of homelessness is comparatively less prolific, both in Australia and internationally.

The prevailing 'consensus' view is that homelessness is caused by the interaction of individual characteristics, behaviours and experiences (such as poverty, substance abuse issues, mental ill health and family violence) and broader structural risk factors (such as housing and labour markets) (Fitzpatrick and Christian 2006; Lee, Tyler et al. 2010; O'Flaherty 2004; Pleace 2000). Yet there remains a lack of clarity about how precisely individual and structural level causes interact to produce risk.

Most commonly, a person is considered at-risk of homelessness if they have one or more characteristics, behaviours or experiences that are overrepresented in the homeless population (Bramley and Fitzpatrick 2017; Fertig and Reingold 2008). For example, having low educational attainment, being an Indigenous Australian, or experiencing family violence (Commonwealth of Australia 2008; Scutella and Johnson 2012). Studies working within this paradigm

⁵ SA1s are the smallest Census spatial unit for which cross-tabulated Census variables are available. They have an average population of 400 persons. <u>https://www.abs.gov.au/websitedbs/D3310114.nsf/home/Australian+Statistical+Geography+Standard+(ASGS)</u>

typically estimate the probability of experiencing homelessness given a particular characteristic, behaviour or experience. Some studies also quantify the impact of housing and labour market conditions in local areas (e.g. Parkinson, Batterham et al. 2019; Wood, Batterham et al. 2015), or the combination of both individual-level and area-level factors (Bramley and Fitzpatrick 2017; Johnson, Tseng et al. 2015). A recent report by Lester and Faulkner (2020) takes a different approach and argues that homelessness risk should be understood as housing stress and examines the characteristics of older women in housing stress to work back to the causes of homelessness risk. This data-driven approach is useful for generating lists of risk factors but does not outline the number and combination of risk factors that would be required for someone to qualify as at-risk of homelessness, nor does it articulate a causal story as to why these individuals should be considered at-risk.

The pathways approach overcomes some of the drawbacks of the risk factor approach by providing more detailed insights into the causal pathways particular cohorts follow into homelessness. Using this approach, particular pathways (including trigger events) are articulated for specific cohorts, with those deemed to be on one of these pathways considered at-risk. This has been a common approach to understanding and addressing youth homelessness in Australia (Mission Australia 2016). However, in some cases pathways have been reduced to trigger events alone, for example, those exiting an institution or women experiencing domestic violence (Commonwealth of Australia 2008). Despite showing promise, the pathways approach has not led to a way to define the population at-risk of homelessness overall.

Two Australian studies have developed indices of relative risk for homelessness (Beer, Baker et al. 2019; D'Souza, Tanton et al. 2013). These studies produce a score, either for individuals or for areas, which indicates higher or lower risk relative to each other. When applied to areas, this approach can give a sense of areas with higher or lower risk of homelessness, however, neither study clearly defines what is meant by risk of homelessness. Further, risk is always relative using this approach and no threshold or cut-off-point has been articulated at which a person is considered to be part of the population at-risk of homelessness.

In contrast, Batterham (2019a; 2021) took a conceptual approach and proposed a definition of homelessness risk that connects the broader causes of homelessness, and the mechanisms through which they act, to the concept of risk. In effect, Batterham argues that the mechanisms that are common to multiple causes of homelessness should be taken to indicate risk of homelessness. She articulated seven types of causes for homelessness: housing markets; labour markets and economic capital; institutional (organisations); health and wellbeing; relationships; past experiences of homelessness; and social stratification and inequalities. Then, after reviewing the international literature on homelessness, identified five key mechanisms through which these broader causes act to bring about homelessness.

These five mechanisms include:

- low-income
- vulnerable to discrimination
- low social resources and supports
- needing support to access or maintain a living situation
- a tight housing market.

Based on how the causes of homelessness intersects to produce risk, Batterham (2019a) argues that a person must have two or more of these five mechanisms to be considered 'at-risk'.

Using HILDA survey data, Batterham (2021) operationalised the first four of these five risk mechanisms—excluding a tight housing market. She estimated that 7.9 per cent of people aged 15 years and over, just under 1.5 million people, were at-risk of homelessness in Australia in 2015. In this report, all five risk mechanisms are operationalised to estimate the population at-risk at national and local levels.

Following Batterham (2021), two additional steps are undertaken in this research to refine the definition of who is at-risk: household composition is considered; and those living in owner-occupied households are excluded. The details of these refinements, as well as the specific operationalisation of each risk mechanism is described in detail in the next section.

In the Australian context, only one previous study has examined the geography of homelessness risk. D'Souza, Tanton et al. (2013) used microsimulation techniques to construct an index of risk of homelessness (with values ranging from 1–5) at Statistical Local Area (SLA) level (2006 Census geography). The current research extends this work in three important ways. First, Batterham's (2019a) definition of 'at-risk' identifies people with a particular intersection of characteristics (two or more) across five key areas, rather than the presence of one particular characteristic. Second, this project obtains finer spatial estimates (SA2, in addition to SA3s) based on more recent data. Third, the project produces an estimate of the rate of homelessness risk, that is, the number of people at-risk of homelessness per head of population. This further enables direct comparison with the distribution of homelessness which is also expressed as a rate.

2.3.2 Operationalising homelessness risk

Below we describe how each of the five key mechanisms outlined in Batterham's (2019a) definition have been operationalised in the present study, along with exclusionary criteria. As mentioned, the specific information required to operationalise risk is only collected for responding persons in HILDA, and so our risk estimates only apply to those aged 15 years and over.

Low-income

Household income information in the 2015–16 ABS Survey of Income and Housing (Basic CURF) was used to define 'low-income' for this study.⁶ Low-income households are defined as those with incomes in the bottom 20 per cent of the equivalised disposable household income distribution of their region (see below), excluding households in the lowest two percentiles unless their main source of income was government pensions and allowances. This broadly follows the ABS approach (Australian Bureau of Statistics 2017), differing only in that households in the lowest two percentiles are included if their main source of income was government benefits. Other households in the bottom two percentiles often have wealth and expenditure characteristics that do not reflect low levels of economic wellbeing (Australian Bureau of Statistics 2017) and are thus excluded. The 2015–16 survey was used, as it aligns best to the 2016 Census.

To account for the variation in household income levels between capital cities and the rest of state areas, lowincome cut-off points were calculated for each of these regions. Namely, for eight greater capital city statistical areas (GCCSAs) and for six balance of state areas, with the ACT and the NT treated as whole GCCSAs due to data availability in the Survey of Income and Housing. These quintile values calculated in the survey were then used in the HILDA data to identify people within low-income households.

Vulnerable to discrimination

This risk mechanism indicates whether a person is vulnerable to discrimination in the housing or labour market. Characteristics that were included in this risk mechanism were: being young (Australian Institute of Health and Welfare 2015; Batterham 2012; Wood, Batterham et al. 2015); being an Indigenous Australian (Australian Bureau of Statistics 2012; Australian Institute of Health and Welfare 2015; Batterham 2012; Wood, Batterham et al. 2015); being a single parent (Australian Institute of Health and Welfare 2015; Batterham 2012); or being on income support payments (Johnson, Tseng et al. 2015; Walsh 2011). Only those who were on income support but did not qualify as low-income were included in this category as low-income is captured separately.

⁶ CURF stands for Confidentialised Unit Record Files.

People who are lesbian, gay, bisexual, transgender or intersex (LGBTI), are argued to experience both discrimination and homelessness at higher rates. However, the research evidence on LGBTI overrepresentation in the homeless population is in its infancy (Durso and Gates 2012; McNair, Andrews et al. 2017; Ray 2006). Discrimination in the Australian labour market has been documented for people from non-English speaking backgrounds (Blair, Dunn et al. 2017), and it seems plausible that they may also experience discrimination in the housing market. Finally, there are multiple definitions of youth or young people. The age range of 15–24 years was selected for this study and is consistent with the AIHW's reporting on young people who access specialist homeless services (Australian Institute of Health and Welfare 2020), and the statistical definition of youth used by the United Nations⁷.

Low social resources and supports

Batterham (2019a) suggested that limited social resources and supports could be due to:

- recent separation from a long-term partner
- death of a spouse or child
- a social network that lacks the capacity to provide material support—specifically financial but ideally also accommodation or childcare
- a very small or non-existent social network that does not provide sufficient emotional support and connection.

To operationalise this concept the four items listed above were created and a person was considered to have low social resources if they were experiencing two or more of these factors.

Experiences of homelessness, as well as longer durations of homelessness, are associated with feelings of isolation and not having someone to lean on (Chigavazira, Johnson et al. 2013; Chigavazira, Johnson et al. 2014; Scutella, Johnson et al. 2012). Further, Johnson and Tseng (2014) found that people experiencing primary homelessness were more likely to report having no friends and having no or limited contact with family. To determine a very small or unsupportive social network, we followed the approach used in (Wilkins and Lass 2018). This approach uses 10 items to assess the quality of a person's social networks. Once half of these items were reverse scored, they were summed and divided by 10. If a person received a score of five or more, they were deemed to have a small or unsupportive social network.

A social network was deemed to lack the capacity to provide material support if a person could not borrow \$2,000 -\$3,000 from a friend or relative or, if they had children, did not receive any assistance with childcare from family friends or neighbours.

Specific items were available in HILDA indicating a recent separation from a long-term partner and the death of a spouse of child.

Needs support to access or maintain a living situation

Batterham (2019a) also argued that the key factors that may lead someone to require support to access or maintain a living situation include:

- having a disability or long-term health condition (including a cognitive disability)
- having a mental health issue
- having problematic drug or alcohol use.

While each of these characteristics or behaviours may also lead to discrimination, for clarity, they have been measured only in this category.

⁷ https://www.un.org/esa/socdev/documents/youth/fact-sheets/youth-definition.pdf

Problematic drug and alcohol use was the most difficult of these to operationalise. As Spooner and Hetherington (2004) note, what constitutes problematic drug use is contestable. Some argue that any illicit use is problematic while others see use that does not have any other negative consequences—apart from being illegal—as unproblematic.

The National Drug Strategy (Commonwealth of Australia, Department of Health, 2017: 10) argues that a range of factors impact on whether the use of substance is harmful to the user, including: the amount used and the frequency of use; the method of consumption; the context of the use; and how these interact with other individual factors such as age and existing health conditions. Because of this, no specific guidelines are available to indicate whether someone's use of a substance can be considered problematic based on frequency and amount of use.

According to the Australian Institute of Health and Welfare (2017) consuming more than four standard drinks on any occasion, and doing this at-least once a month, increases the risk of alcohol related harm. As such, we operationalised problematic alcohol use as usually consuming five to six standard drinks or more when drinking, and drinking more than once a month. Problematic use of illicit substances was operationalised as weekly use—apart from cannabis, which was deemed problematic when used daily.

Items from HILDA waves 16 and 17 were used to operationalise problematic substance use as frequency of use variables were only collected in wave 17.

Specific items were available in HILDA measuring the presence of long-term health conditions, cognitive disability and mental health issues.

Tight private rental market

The fifth mechanism in the Batterham (2019a) definition is a tight rental market. This could mean unaffordable rental housing, low vacancy rates or an undersupply of rental dwellings. We believe it is not just the overall state of the private rental market that is relevant, but in particular, the conditions in the private rental market for low-income households. As such, we operationalised living in an area with a tight rental market using a measure of rental stress: the 30/40 rule (Yates and Gabriel 2006). Consistent with the practice for determining low-income, equivalised disposable household income quintiles were derived separately for each greater capital city and balance of state area and the bottom two per cent of the income distribution was excluded from calculations. Once those households with incomes in the bottom 40 per cent of the income distribution were identified, their weekly rent was divided by their gross household weekly income. Those who were spending more than 30 per cent of this income on rent, and who were in the bottom 40 per cent of the income distribution of their region, were classified as in housing stress.

Table 1 details the number and per cent of observations in HILDA with each of the five risk mechanisms and their component parts.

Table 1: Descriptive statistics, individual risk factors for responding persons, HILDA survey, waves 16 and 17

	HILDA Total obsv = 17,693	
	n	%
1. Low-income		
Individuals in low-income households	2,586	14.6
2. Discrimination characteristics		
Youth	3,017	17.1
Indigenous	532	3.0
Single Parent	1,061	6.0

	HILDA	
	Total obsv =	= 17,693
	n	%
On income support but not included as low-income	3,603	20.4
Non-English speaking background	651	3.7
Lesbian, gay or bisexual	554	3.1
Total: potentially vulnerable to discrimination	7,501	42.4
3. Low social resources and supports		
Death of spouse or child	156	0.9
Does not feel connected or supported	2,169	12.3
Could not borrow money from friends and family or no support with childcare (if have children)	9,769	55.2
Separation or divorce	162	0.9
Total: low social resources and supports (2 or more)	624	3.5
4. Support needed to access or maintain living situation		
Long term condition or disability causing restriction	4,923	27.8
Diagnosed with cognitive disability	430	2.4
Diagnosed with mental health issue	2,976	16.8
Problematic use of alcohol or illicit substances	2,554	14.4
Problematic use of alcohol	2,344	13.3
Daily use of cannabis	260	1.5
Weekly use of other illicit substances	57	0.3
Total: Support needed to access or maintain living situation (1 or more)	7,967	45.0
5. Tight private rental markets		
Number in rental stress using 30/40 rule	1,080	6.1

Source: Author's calculations derived from HILDA survey, waves 16 and 17.

Exclusionary criteria

We followed Batterham (2021) and excluded those living in owner-occupied housing from the risk measure. There is evidence to suggest that for some, owner-occupation is precarious and some exiting the tenure do not return (Ong, Wood et al. 2015; Wood, Smith et al. 2013). Indeed Ong, Wood et al. (2015: 2,992) note that 'unfavourable biographical events' such as separation or death of a spouse, unemployment, disability or long-term health problems were important for understanding those who lost home ownership who were subsequently dependent on housing assistance. These are important aspects of the at-risk definition. However, in most cases home ownership (whether outright or with a mortgage) provides a level of insurance (Stone, Sharam et al. 2015) that may slow (Wiesel 2014) or prevent a transition into homelessness. Once someone exits home ownership, perhaps following a separation or divorce, they are then eligible to be considered at-risk.

Dwelling tenure, including owner-occupation, is applied to all members of a household residing in a dwelling. This means, for example, that young people living in the parental home would be classed as residing in an owner -occupied household (if their parents owned the dwelling) and so excluded from being at-risk of homelessness.

Accounting for household composition

Relationships between people in a household can provide a buffer against individual-level risk (Bramley and Fitzpatrick 2017; Johnson, Tseng et al. 2015). For example, if one adult in a couple family household qualifies as at-risk of homelessness, but their partner does not, they should be thought of as having a lower level of risk than someone in a lone person household or a single parent. The relationships within multi-adult households may provide some level of protection.

To account for household composition all responding persons were grouped according to household type, which was simplified into four main categories: couple households, single parent households, lone person households (including group households) and extended family households. If either lone persons or single parents qualified as at-risk by having two or more of the five risk components, they retained their risk status. If responding persons in a couple household or extended family grouping were deemed at-risk of homelessness, they only retained their at-risk status if another member of their household was also deemed at-risk of homelessness.

Initially, 5,795 responding persons were identified as at-risk of homelessness. This was reduced to 2,850 after those living in owner-occupied housing were excluded from the sample. It was then reduced further to 2,453 responding persons at-risk of homelessness after accounting for household composition.

Table 2 provides a summary of the number of people at-risk of homelessness as well as the number of risk mechanisms present among those considered at-risk. The percentage of those considered at-risk is calculated from the total number of responding persons in wave 16 of HILDA (n=17,693), while the percentage of persons with different numbers of risk mechanisms is calculated from the number of responding persons deemed at-risk of homelessness.

Table 2: HILDA waves 16 and 17 initial incidence of risk factors, counts and per cent

Incidence of risk factors	Count	Per cent
Number of those at-risk with two or more of the five mechanisms after accounting for household composition	2,453	13.9 ⁸
Number of those at-risk with 2 risk mechanisms	1,420	57.9 ⁹
Number of those at-risk with 3 risk mechanisms	806	32.9
Number of those at-risk with 4 risk mechanisms	217	8.9
Number of those at-risk with all five risk mechanisms	10	0.4

Source: HILDA survey, waves 16 and 17.

2.3.3 Limitations

While we endeavoured to make our research approach and operationalisation of homelessness risk as rigorous as possible, some limitations persisted.

Those living in owner-occupied housing were excluded from the risk definition¹⁰. As discussed, while owner-occupation provides a level of insurance against homelessness, this is unlikely to be the case in instances of family violence (including child and elder abuse). There is a conceptual issue as to how we might understand the connection between family violence and homelessness. Using the definition of homelessness developed by the ABS, someone experiencing family violence is not considered homeless until they leave the family home.

⁸ This percentage calculated from the total number of responding persons in wave 16 of HILDA (n = 17,693)

⁹ Percentages for the at-risk group are calculated from the total population of those at-risk in HILDA (n = 2,453)

¹⁰ We were unable to identify and exclude households who lived in rental housing but owned an investment property. While these people could be identified in the HILDA survey, they could not be identified within Census data and so for consistency reasons were kept in. We assume that these households are unlikely to qualify as low-income.

However, others have argued that experiences of violence and abuse in the home constitutes a form of homelessness in and of itself (Batterham 2019b) regardless of a person's housing situation. The estimates of risk presented in this report do not include family violence in their conceptualisation. Depending on whether one considered family violence a form of homelessness, this could be considered a limitation of the present work.

- The overall definition of risk and to an extent, our operationalisation, does not include any ranking or priority to
 the five risk mechanisms. This is despite existing international research highlighting the importance of poverty
 (specifically low-income) in precipitating homelessness (e.g. Bramley and Fitzpatrick). More research is definitely
 needed in relation to this and was also noted by Batterham (2019a). However, our operationalisation of the
 'tight housing market' mechanism is based on the 30/40 rule for housing affordability and so includes household
 income and provides additional weight to the role of low-income in homelessness (albeit at the 40th rather than
 20th percentile).
- A drawback of the HILDA survey is that it does not include items measuring experiences of homelessness hampering efforts to assess transitions between risk and homelessness and the factors driving these transitions.
- Because we relied on the detailed information available for only responding persons in HILDA, our estimates of the at-risk population are only for those aged 15 years and over. More work is needed to examine how children can be included in estimates of homelessness risk.

The next chapter details our approach to small area estimation which is used to convert the measure of homelessness risk developed in HILDA into estimates of risk at the small area level.

3. Small Area Estimation technique

- Small Area Estimation methods combine survey data and auxiliary data from additional data sources (such as Census or administrative data) to improve the precision of indicators derived from the survey data. This technique is used by many statistical agencies to produce area-level statistical information.
- There are a number of SAE techniques. These can broadly be categorised as unit-level and area-level models. Unit-level models make use of unit records, such as person or household records in both survey and auxiliary data. Area-level models, on the other hand, only require area-level auxiliary data.
- Many statistical agencies make Census and area-level data available through their web-portals but place greater restrictions on unit-record data. As a result, area-level models are frequently used in applied research.

In Australia, there is no official definition of homelessness risk, nor is information collected specifically for the purpose of identifying the population at-risk of homelessness. As discussed, Batterham (2019a) provides a conceptual approach to defining someone at-risk of homelessness. As described in Chapter 2, this definition can be operationalised in HILDA to produce a direct estimate of homelessness risk in Australia.

Each respondent in the HILDA survey data can be coded as either 'at-risk' or 'not at-risk' of homelessness, giving a binary variable [0,1]. At the national and state level, an at-risk measure can then be generated by simply aggregating the number of respondents that are identified as at-risk for each area and applying the supplied population weights. This indicator can be generated using only the data from the HILDA survey. At finer spatial scales, however, the precision and coverage of HILDA-based estimates become more unreliable due to small sample sizes and incomplete spatial coverage.

For instance, the HILDA sampling frame excludes those living in sparsely populated and remote areas (see Appendix 2 for a visual depiction of the areas sampled in HILDA in 2016). As a result, much of central and remote Australia was not sampled. From a policy and recognition perspective, these are also parts of Australia that are of particular interest and importance to Indigenous communities.

At the same time, the at-risk indicator cannot be established using only Census or other administrative data sources due to a lack of detailed respondent information, even though these data sets are available for small areas. Therefore, to provide estimates of homelessness risk in small areas across Australia (RQ1) the research employs Small Area Estimation techniques.

SAE is concerned with generating area-based statistics or indicators where direct measurement is not feasible (for instance due to lack of geographic coverage), or where the precision of direct estimates is limited because of small sample sizes. SAE is based on combining information from survey-based data (such as HILDA), with information from Census or administrative data to produce precise and reliable estimates of proportions or means at finer spatial scales. Auxiliary data can be used to model, estimate and predict the risk of homelessness for individuals themselves or for areas as a whole.

SAE models can be broadly divided into unit and area-based models (Tzavidis et al. 2018). Unit-level models are based on unit record observations, such as individuals or households, in both survey and auxiliary data. Area-level models only require area-level auxiliary data, for instance the proportion or number of people in an area with a particular socio-economic characteristic that is assumed to correlate with the statistics to be estimated. In many countries, Australia included, area-level data is more accessible than unit-record data. Hence area-level models have become popular in applied research. A frequently used area-level model is the Fay-Herriot (FH) model. This report draws on both the unit-level and area-level approach.

The primary benefit of employing two approaches is to serve as a form of robustness testing. Each approach can draw on particular strengths that are traded off against weaknesses in other aspects. Comparing the outcomes thus enables the researchers to critically assess the precision of the different SAEs.

A secondary benefit is around data requirements and the need to produce evidence-based policy in Australia. Academic, policy and private sector researchers are reliant on good quality data to produce evidence. While comprehensive, collecting detailed economic and social data through the Census is costly. Survey data, on the other hand, suffers from lack of local coverage. The two SAE techniques also serve to inform data collection in Australia, outside the Census, to enable high quality local level data.

The following diagram provides a high-level summary of the two approaches to SAE used in this report.



Figure 1: The research approach to producing small area estimates of homelessness risk

Source: Authors.

3.1 Unit-level model

To produce SA2/SA3 level estimates using a unit-level model, the risk of homelessness indicator for each individual (at-risk=1, not at-risk=0) is regressed on a series of socio-economic indicators (auxiliary variables) using a discrete choice model (probit).¹¹ Predictor (auxiliary) variables are also drawn from HILDA but constructed to match as closely as possible, equivalent categories in 2016 Census data. Variables tested include country of birth, housing tenure, household income, disability, Indigenous status, volunteer and caring work and more.

A series of probit models were run to determine the model that explained the most variance in our risk indicator (in our case pseudo $r^2 = 0.3443$) with the least number of variables (a parsimonious model). Probit models belong to a class of parametric regressions models. Probit coefficients measure the change a given explanatory variable has on the cumulative normal probability outcome of the at-risk measure. That is, the effect of the independent variable on the z-value of the at-risk measure.¹² The sum of probit coefficients for a given set of characteristics can thus be converted into a probability of being at-risk for *all* people with the same characteristics.

The final model (Equation 1) contained seven key predictor variables (for detailed results see Appendix 1).

$$Pr(ATR_i = 1|X_i) = \Phi(X_i^T\beta)$$
 (Equation 1),

Where *Pr* is the probability that individual *i* is at-risk (*ATR*) of homelessness (yes=1) or not (no=0), X^{T} is a vector of variables used to model *ATR* (usual hours worked, labour force status, household type, disability, low-income, Indigenous status, number of children ever had), Φ is the cumulative distribution function (CDF) of the standard normal distribution,¹³ and β are the coefficients (effects) to be estimated (and subsequently summed).

To overcome the small sample limitations at SA2/SA3 levels in HILDA, a request for customised data from the 2016 Census was obtained from the ABS. This customised data request provided the number of people (*p*) in each SA2/SA3 (*k*) with each possible combination of our seven predictor variables from the final probit model. This produced a table with 128 columns (*j*). For each column a probability (of individual homelessness risk) was calculated based on the relevant combination of the seven predictor variables (*ij*). Each probability was then weighted by the corresponding population share in each SA2/SA3 (p_{jk}/p_k). The weighted probabilities were then summed for each SA2/SA3 to produce the SA2/SA3 homelessness risk measure. The per cent of the population with each of the combinations of characteristics is also used to describe variations in the profile of those at-risk in different regions (states and territories, greater capital cities and small areas) across Australia.

The unit-level model process is set out in Figure 2 below. To produce the at-risk SAE estimates, the coefficients from the probit regressions are summed for each combination of the explanatory variables. In all, this gives 128 combinations (*j*). Each sum can then be converted into a probability of at-risk ranking $0-1.^{14}$ For instance, Combination 1= 0.30...combination 2= 0.04...combination *j*=0.07. Each combination (*j*) is then multiplied by the corresponding SA2/SA3 level population proportion (*pjk*). For instance, if the proportion of people with combination 1=0.25...combination 2=0.35...combination *j*=0.40, then the risk of homelessness for this spatial unit is: (0.30*0.25)+(0.04*0.35)+(0.07*0.40)=0.117 or a rate of 1,170 per 10,000 people.

¹¹ Probit models are used in regression where the dependent variables have two discrete outcomes – someone is at-risk (=1), or someone is not at-risk (=0). Probit models estimate the probability that someone falls into one or the other of the two categories as a function of a set of characteristics.

¹² Z-values (or standardised values) describes an observed outcome relative to a mean, in terms of units of standard deviations. Z-values are related to the standard normal distribution (SND), bell shaped and symmetrical distribution with mean zero and standard deviation of one. Under the SND assumptions, 65 per cent of observations lie within 1 standard deviation of the mean, 95 per cent lie within 2 standard deviations.

¹³ The cumulative distribution function (CDF) of the SND describes the probability that the estimated Z -value takes a value less than or equal to its observation. Z-values are frequently used in hypothesis testing when comparing means and proportions, or in this case the probability that the effect of an explanatory variable (and the sum of the effects of the explanatory variables) is equal to zero.

¹⁴ The NORMDIST function in excel was used for this.

Figure 2: Unit-level SAE process



Source: Adapted from Martinez Jr (2019).

The unit-level (probit) approach is entirely model driven and uses the characteristics of those at-risk in the HILDA sample to impute levels of homelessness risk in small areas based on those characteristics. A key strength of this approach is the use of Census data, which has excellent coverage of population characteristics at the small-area level right across Australia. A drawback with this model is that neither the direct (individual) estimate, nor the model itself contains specific spatial variables. While this highlights the effect of personal characteristics and their association with homelessness risk, it does not control for (potentially) unobserved spatial variation in the importance (effect) of the personal characteristics. A particular characteristic is assumed to have the same effect in Sydney as it does in Alice Springs.

In the calculation of unit-level SAE confidence intervals of the SAEs two conventions are followed. Where estimates are aggregated to national or regional levels, the 95 per cent confidence interval (CI) around a particular homelessness risk estimates is calculated as

 $CI = ATR \pm 1.96 * \sqrt{ATR * (1 - ATR)/N}$, where *N* is the HILDA sample size at national or state and territory levels. When confidence intervals are calculated at SA2/SA3 level the regression derived 95 per cent Cl for each of the 7 predictors are used to calculate the upper and lower Cl limits. In terms of Figure 2, β is the regression derived upper and lower (95%) range of the coefficients, rather than the central estimate of the coefficient.

Table 3 below provides descriptive statistics for the predictor variables used to estimate Equation 1. Each of the predictor variables are measured as 1 or 0, the mean in Table 3, therefore, provides the proportion of respondents in the HILDA sample with each of the characteristics. Table 4 provides the definitions of each of the dichotomous variables used in the unit-based (probit) models as well as the relevant population for each measure.

Table 3: Descriptive statistics for variables used in the unit-based (probit) models

Variable	N	Mean	Standard deviation
At-risk of homelessness	17,693	0.139	0.346
Housing tenure (renting, living rent free or in life tenure scheme)	17,693	0.340	0.474
Usual hours worked<35/week	17,693	0.589	0.492
Unemployed/not in the labour force	17,693	0.376	0.484
Household type (one parent, group, lone or multi-fam household)	17,693	0.298	0.458
Disability present	17,693	0.038	0.192
Low household income	17,693	0.309	0.462
Indigenous	17,693	0.030	0.171
Number of children ever had 5+	17,693	0.040	0.196

Source: Authors calculations, HILDA survey waves 16 and 17.

Table 4: Definition of variables used in the unit-based (probit) model

Variable	Population	1 (= has these characteristics)	0 (= has these characteristics)
Housing tenure	All persons aged 15 years and over not classified as visitors on Census night	 Lives in a dwelling that is: Rented Being occupied rent-free Being occupied under a life tenure scheme 	 Lives in a dwelling that is owned outright Owned with a mortgage Being purchased under a shared equity scheme Other tenure type Not stated, Not applicable
Usual hours worked <35/wk	All persons aged 15 years and over not classified as visitors on Census night and classed as in the labour force.	• 34 hours or less per week	35 hours or more per weekNot statedNot applicable
Unemployed/not in the labour force	All persons aged 15 years and over not classified as visitors on Census night	Unemployed, looking for full-time or part-time workNot in the labour force	Employed, worked full-time, part-time or away from workNot stated, not applicable
Household type (one parent, group, lone or multi-fam household)	All persons aged 15 years and over not classified as visitors on Census night	 One parent family Group household Multi-family households (all types of two and three or more family h'holds) Lone person household 	 One family household: Other family, Couple family with children, Couple family with no children Other non-classifiable household Not applicable
Disability present	All persons aged 15 years and over not classified as visitors on Census night	Has need for assistance with core activities	Does not have need for assistance with core activities, Not stated
Low household income	All persons aged 15 years and over not classified as visitors on Census night	• Living in a household with less than \$1250 weekly gross household income.	 All other values, \$1250 and above, Partial income stated, All incomes not stated, Not applicable, Negative income, Nil income

Variable	Population	1 (= has these characteristics)	0 (= has these characteristics)
Indigenous	All persons aged 15 years and over not classified as visitors on Census night	AboriginalTorres Strait IslanderBoth Aboriginal and Torres Strait Islander	Non-IndigenousNot stated
Number of children ever had 5+	All women aged 15 years and over not classified as visitors on Census night	• Five or more children	Four or fewer children, including 0Not stated, not applicable

Note: 'not stated' and 'not applicable' were included in the 0 category for our predictor variables to enable the creation of dichotomous predictors. The inclusion of a third category would have added an enormous number of additional columns to our table producing the weighted probabilities, as each possible combination of variables and their options had to be generated. Source: ABS 2016 Census of Population and Housing.

3.2 Area-level model¹⁵

Unlike the unit-level model, area-level models only require area-level auxiliary data (Pfeffermann 2013, Halbmeier, Kreutzmann et al. 2019). For many Census indicators, SA2/SA3 level data is readily available from TableBuilder.¹⁶ Area-level models can then be produced by combining area-level calculations of homelessness risk and variance from HILDA with SA2/SA3 level Census data.

The SA2/SA3 level direct estimate from HILDA was calculated by dividing the number of respondents with two or more risk factors over the relevant SA2/SA3 level sample size. The rescaled cross-sectional responding person population weight was used to ensure the sample was representative of the national population. As noted earlier, small sample sizes at SA2/SA3 level make these direct estimates subject to sampling variability and imprecision.

To estimate the area-level model we use Halbmeier, Kreutzmann et al. (2019)'s 'fayherriot' command in Stata. This command implements the Fay-Herriot model (Fay and Herriot 1979). 'fayherriot' is used to produce an empirical best linear unbiased predictor (EBLUP) of the SA2/SA3 level at-risk measure based on a linear combination of the area-level direct estimator and a regression-synthetic component. By drawing on both the observed (as measured in HILDA) at-risk information, the variance of the at-risk measure, and the regression model information, the precision of direct estimates is improved.

The FH model consists of two elements: a sampling model and a linking model. In the following explanation the general FH-model is set out. In our estimation the FH-model is run with arcsine transformation to account for the dependent variable ranging between 0 and 1.

The direct at-risk of homelessness measure is subject to sampling variability. The sampling model therefore assumes that the observed direct measure consists of a true value and an error component:

$$A\widehat{TR}_{SAk} = ATR_{SAk} + e_{SAk}$$
 (Equation 2)

where is the direct at-risk measure calculated from HILDA at SA2/SA3 level (where k is an index of SA at level 2 or 3) adjusted for sample weight,¹⁷ ATR_{SAk} is the true at-risk of homelessness indicator at SA2/SA3 level, and e_{SAk} is the deviation of the observe at-risk measure from its true value (the sampling error component with mean zero and variance $\sigma_{e_{SAk}}^2$).

¹⁵ The description of the FH model draws heavily on Halbmeier, Kreutzmann et al. (2019).

Restrictions on cross tabulations introduced in 2020 necessitated the ABS customised data request to estimate the unit-level model.
 The rescaled cross-section responding person population weight was used. This population weight is rescaled to sum to the number of responding persons in the relevant wave.

In the linking model $ATR_{_{SAk}}$ is explained by a set of area-specific covariates (variables), X^{T} , regression parameters, β , and a random effect, $u_{_{SAk}}$ (that is normally (identically and independently) distributed):

$$ATR_{SAk} = X_{SAk}^T \beta + u_{SAk}$$
 (Equation 3)

The FH combines these two elements, in a linear mixed model form (Halbmeier, Kreutzmann et al. 2019). As such, it combines information from the direct estimate (HILDA) and a predictive estimate (regression model):

$$\widehat{ATR}_{SAk} = X_{SAk}^{T}\beta + u_{SAk} + e_{SAk} \quad \text{(Equation 4)}$$

The FH empirical best linear unbiased predictor (EBLUP) of the at-risk of homelessness is then given by the linear combination of the estimated regression coefficients and the estimated random effect. In practice the FH SAE estimate is a weighted average of the direct at-risk measure and the synthetic at-risk estimator generated by the regression model. Each component is weighted by the ratio of the random error to the random error plus sampling error.¹⁸ The weight of the direct at-risk measure in the FH estimate decreases with the sampling error variance. That is, the less precise the direct estimate is (assumed to be), the less its weight in the final (combined) at-risk estimate. The 'fayherriot' command enables prediction of homelessness risk also for SA3s without any observations in HILDA. In these cases, the SAEs are entirely model-based (that is, the result of predicting an outcome from the model).

In estimating the FH at-risk measure, the report uses the arcsine transformation of the direct (weighted) at-risk measure. This transformation is particularly suitable for proportions that are bounded [0,1] (Halbmeier, Kreutzmann et al. 2019). The variance component (\hat{u}_{sak}) can then be approximated by 1/(4xEffective Sample). Following Lohr (2010), the effective sample is estimated by dividing the SA2/SA3 level HILDA sample size by the design effect. That is, the design effect provides a measure of how well the variance of a sample design, such as HILDA's multistage stratification, compares to the variance that would be obtained under a simple random sample.

The accuracy of the at-risk measure depends on the HILDA sample size and the effect of the sampling design (Watson and Wooden 2002). To estimate the design effect for HILDA, a wave 16 survey design (sampling plan) was created using SPSS' complex sample function based on stratification (xhhstrat), clustering (xxhraid, randomised original area id), and the responding person's population weight (hhwtrp). Design effects (and effective samples) were then produced at a range of spatial levels of aggregation. A common method of smoothing sampling variability is to use design effects calculated at higher levels of aggregation. In estimation, however, greater precision was achieved using the design effect from the corresponding SA2/SA3 level.

The area-level model process is set out in Figure 3 below.

Unlike the unit-level model, the area-level (FH model) makes use of information from both the direct estimates (HILDA), which also are adjusted for the survey design effect, and the regression model components. A key strength of this approach is that with and without the inclusion of specific spatial variables, some spatial information is retained (and used). The FH model produces SAEs that are the weighted average of the direct estimates (which implicitly includes spatial information) and the model estimates. As per the model description in Appendix 1, the estimated area-level model also includes a greater capital city dummy that captures additional unobserved spatial heterogeneity.

¹⁸ The weighted FH estimates are: $\widehat{ATR}_{Sak}^{FH} = \hat{\gamma}_{Sak} \widehat{ATR}_{Sak} + (1 - \hat{\gamma}_{Sak}) (X_{Sak}^T \hat{\beta})$, where $\hat{\gamma}_{Sak} = \hat{\sigma}_u^2 / (\hat{\sigma}_u^2 + \hat{\sigma}_{\varepsilon_{Sak}}^2)$ is the weight.

Figure 3: Area-level (FH) SAE process



Source: Adapted from Martinez Jr (2019).

In the calculation of area-level SAE confidence intervals, two conventions are again followed. Where estimates are aggregated to national or regional levels, the 95 per cent confidence interval around a particular homelessness risk estimates are calculated as: $ATR \pm 1.96 * \sqrt{(ATR * (1 - ATR))/N}$, where N is the HILDA sample size (national and state or territory). When confidence intervals are calculated at SA3 level the software produced confidence intervals are reported ($CI = ATR \pm 1.96 * SE_g$), where SE is the standard error of the coefficient estimate.

Table 5 provides key descriptive statistics for the predictor variables used to estimate Equation 4. Unlike the variables used for the unit-level model, most of the predictor variables range from 0-1 (rather than binary values). Each of the variables are calculated as the proportion of the population aged 15 years and over (see Table 6 for more information). Variable descriptions are provided in Table 6. Of note is the difference in typical sample sizes between capital and non-capital city SA3s.

Table 5: Descriptive statistics, area-level (FH) model

Variable	Obs	Mean	St Dev	Min	Max
Never married	292	0.345	0.064	0.215	0.660
Year of arrival before 1945	292	0.003	0.003	0.000	0.021
Not in the labour force	292	0.357	0.066	0.174	0.565
Population volunteering	292	0.219	0.053	0.095	0.397
Total number of children 1 or 3	292	0.292	0.032	0.125	0.339
Private rental tenure	292	0.251	0.084	0.077	0.605
Group household	292	0.040	0.034	0.009	0.264
Manufacturing employment	292	0.067	0.029	0.012	0.189
Accommodation and hospitality employment	292	0.074	0.023	0.034	0.259
Ln^ Family weekly income, median	292	7.446	0.248	6.972	8.128
Capital city (1=yes)	292	0.589	0.493	0.000	1.000
SA3 sample sizes (population weighted)	292	58.83	41.54	1.438	209.0
Capital city sample size	172	68.52	46.55	2.67	209.0
Non-capital city sample size	120	44.94	27.85	1.44	124.6

Note: \land Ln is the natural log.

Source: Authors' calculation from Table Builder, ABS 2016 Census of Population and Housing.

Table 6: Definition of variables used in area-level (FH) model

Variable	Population	Definition
Never married	Place of usual residence (PoU) basis. Aged 15+	Proportion of population never married (registered marital status).
Year of arrival before 1945	Place of usual residence (PoU) basis. Aged 15+	Proportion of population born overseas arriving in Australia before 1945.^ \ensuremath{N}
Not in the labour force	Place of usual residence (PoU) basis. Aged 15+	Proportion of population not in the labour force.
Population volunteering	Place of usual residence (PoU) basis. Aged 15+	Proportion of population volunteering in group or or organisation.
Total number of children 1 or 3	Place of usual residence (PoU) basis. Aged 15+	Proportion of female population with 1 OR 3 children.^
Private rental tenure	Place of Enumeration (PoE) basis	Proportion of population in private rental tenure.
Group household	Place of Enumeration (PoE) basis	Proportion of population in a group household composition.
Manufacturing employment	Place of usual residence (PoU) basis. Aged 15+	Proportion of employed population employed in manufacturing employment.
Accommodation and hospitality employment	Place of usual residence (PoU) basis. Aged 15+	Proportion of employed population employed in accommodation/hospitality employment.
Ln Family weekly income, median	Place of usual residence (PoU) basis. Aged 15+	Median total family income. Natural log.
Capital city (1=yes)		SA3 lies within greater capital city (Sydney, Melbourne, Brisbane, Adelaide, Perth, Hobart, Darwin, Canberra).
SA3 sample size		Number of HILDA observations per SA3. Weighted by responding person

Note: ^ Alternative measurements were tested and found significant, but the listed definition resulted in better model fit. Source: TableBuilder, ABS 2016 Census of Population and Housing.

Detailed modelling results for both the unit-level and area-level models are reported in Appendix 1.

The next chapter presents our estimation of the national population at-risk of homelessness using HILDA data, and provides incidence measures at the state, territory and small area levels. A profile of those at-risk of homelessness is also provided at the national level, with components of the unit-level estimations used to describe differences in profiles at the state, territory and greater capital city and balance of state levels.

4. Homelessness risk in Australia

- The incidence of homelessness risk is expressed as a rate per 10,000 persons (total population, all tenures combined). The estimated rate of risk per 10,000 persons ranges between 846.9 per 10,000 (8.5% of the total population aged 15 years and over) and 1,165 per 10,000 (11.7%).
- Those at-risk are more likely than the national population to be female, Indigenous, and be living in a lone person or lone parent household. They are more likely to identify as lesbian, gay or bisexual, and report fair or poor health. They are more likely to be low-income, unemployed or outside the labour force, and in receipt of income support payments. Those at-risk have lower levels of educational attainment, are more likely to report difficulty paying bills and rent on time, and are more likely to experience a range of indicators of material deprivation such as skipping meals and being unable to heat their home.
- The highest rate of risk is in the Northern Territory followed by Queensland and South Australia. The lowest rates of risk are in Australian Capital Territory followed by Victoria.
- In many states (Queensland, New South Wales, Western Australia, South Australia) high rates are spread across greater capital city and rest of state areas, however, risk is highly concentrated in remote areas in the Northern Territory and in inner Melbourne in Victoria.
- While the highest rates of risk can be found in remote areas and select areas
 of capital cities, the greatest number of people at-risk are located in capital
 cities on the eastern coast of Australia. These high numbers extend well
 beyond inner city areas and into the suburbs of most capital cities.
- Areas with moderate/average rates of risk in capital cities, such as the outer west in Melbourne, or substantial segments of the eastern 10km ring of Perth, still can have higher concentrations of people at-risk, due to their larger population size.
- The precision of the estimates varies across methods with the smallest confidence interval for HILDA and the largest for the area-based approach. These confidence intervals are larger (indicating decreased precision and reliability) in remote parts of Australia (and some capital cities).

This chapter addresses RQ1 and RQ2 by documenting the incidence of risk of homelessness across Australia for persons 15 years and over at the small area level and explores geographical variations in the profile of those at-risk. By definition (see section 2.3), people residing in owner-occupied housing are not considered at-risk. The regression and modelling output for the unit and area-level models is presented in Appendix 1.

The chapter follows a higher level of spatial aggregation to lower level of aggregation structure. We begin by presenting estimates of the national population at-risk of homelessness using the responding person population weights in HILDA. These weights also enable us to generate a detailed profile of this population at the national level.

Next, we provide a broad national level comparison of the at-risk of homelessness estimates, comparing the directly estimated (from HILDA) at-risk rates to the rates generated on the basis of the two estimation methods. Similarly, the direct estimate and model-based at-risk rates are compared for states and territories. Detailed SA2 and SA3 level model output is presented in Appendix 3.

At each level (national, state or territory, SA3), we report the profile of those at-risk of homelessness and describe geographical variations in this profile.

In reporting the incidence of homelessness risk in small areas, we use a rate per 10,000 persons (total population 15 years and over, combined across all tenures. See footnote 19 for detail). The rate measure gives a sense of homelessness risk in an area after accounting for total population size. It is calculated by dividing the number of persons at-risk in an area by that areas' total population and multiplying it by 10,000.¹⁹ This measure can be used to identify areas with a higher rate of people at-risk of homelessness per head of population and can also be compared with the homelessness estimates produced by the ABS. We then translate the homelessness risk estimates into estimates of number of people at-risk for each geography.

4.1 National estimates of the population at-risk of homelessness

We begin by reporting national level estimates of homelessness risk for two reasons. Firstly, these national estimates are the first time all five elements of the Batterham (2019a) risk definition have been operationalised to date in Australia and are themselves an important finding. Secondly, aggregating our SAEs up to the national level and comparing them with the national estimate from HILDA provides an important point of comparison and a robustness check on our SAEs.

¹⁹ Note that while the risk measure excludes those living in owner-occupied housing, the denominator used to calculate the rate of risk per 10,000 persons includes people living in all tenures, not just those renting. This was done to follow the convention in homelessness reporting used by the ABS. This approach also smooths the impact of varying rates of home ownership. In a hypothetical area with 100 people, 99 may be living in owner-occupied housing while one person is renting. That one person may be at-risk of homelessness. We could report that as 100 per cent of renters in this area are at-risk, or we could report that 1 per cent of the total population at-risk. We have chosen the latter.

Application of the cross-sectional responding person population weights in HILDA enables us to generalise to the national (total) Australian population aged 15 years and over. This analysis suggests that 11.7 per cent of the population aged 15 years and over qualified as at-risk of homelessness in 2016. This equates to 2,227,607 people [Cl 95: 2,137,939; 2,317,280] spread across 1,360,643 households (13.9% of households).

Table 7 compares this direct (national) estimate from HILDA to the unit-based and area-based methods of small area estimation. Here, the Small Area Estimates are aggregated up to the national level for the rate per 10,000 persons and the number of people at-risk of homelessness based on the population base in each area (point estimates). The unit-level (probit) results were produced at both SA2 and SA3 levels. All SA2s are nested within SA3s and should, in principle, produce identical outcomes. The minor variation in the output is the result of perturbation that is used by the ABS to maintain confidentiality.

Estimate	Sample size (number of spatial units)	Population base ^{&}	Rate of risk per 10,000 persons	Lower Cl	Upper Cl	Point estimate	Lower Cl	Upper Cl
HILDA using population weights [^]	1 (national)	19,119,468	1,165.1	1,118.2	1,212.0	2,227,607	2,137,939	2,317,280
Probit (SA2)#	2,161	17,994,437	853.9	813.0	894.8	1,536,545	1,462,948	1,610,142
Probit (SA3)#	332	17,994,437	846.9	806.2	887.6	1,523,949	1,450,712	1,597,186
Fay-Herriot SA3 [!]	332	18,990,928	1,038.2	993.6	1,082.8	1,971,638	1,886,939	2,056,338

Table 7: Aggregated SAEs, Australia, 2016

Note: CI = confidence interval. CIs calculated on a consistent sample size assumption. Sample size based on HILDA sample. 95CI= ATR+/-1.96* SQRT[(ATR*(1-ATR)/17,693)].

^ Indicates weighted population totals derived from HILDA 16 (19,119,468). Population base includes all Australians aged 15 and over, across all tenures.

! The FH estimates are based on the population counts (15 years and over, across all tenures) provided by TableBuilder.

The Probit estimates are based on custom data obtained from the ABS (aged 15 and over, across all tenures). Probit estimates are based on the unit-level model, FH estimates are based on the area-level model. The FH estimates produce SA3 level at-risk measures also in areas where HILDA does not have any observations. As a result, the population bases also differ. The HILDA (direct) estimates are based on weighing the HILDA sample by their corresponding population weights.

Source: Author's calculations derived from ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17

When aggregated to the national level, both the unit and area-level methods produce results that are lower than the direct estimates. In both cases the estimated national at-risk measures are statistically different from the direct estimate (p<0.00, two-tailed).²⁰ The two model-based estimates are, however, also different from each other, with the unit-level results significantly lower than the area-based estimates (p<0.00, two-tailed). This raises two issues.

First, based on the comparison of direct estimates to model estimates (both unit and area-level basis), the estimates derived directly from HILDA potentially overestimate the incidence of homelessness risk. This may be a result of the design effect and the national weights attached to individuals, particularly in remote and sparsely populated areas. The use of SAE methodologies can thus assist in improving our understanding of the overall incidence of homelessness risk.

²⁰ Based on two-tailed test for population proportions.

Second, alternative homelessness risk estimates are sensitive to the method used, and as a consequence of data availability. As discussed in Chapter 3, the unit-level estimates attempt to overcome the small sample size issue in HILDA by drawing on the strengths of the Census. However, the model (equation 1) is inherently aspatial and does not include spatial variables that may capture unobserved spatial variations. Moreover, limitations in how Census variables can be combined also results in loss of some population characteristics that may further bias the results. When comparing the distribution of characteristics of the populations contained in the customised ABS data to national level characteristics derived from TableBuilder, there are some critical differences that suggest that the unit-level estimates are downward biased.²¹

The area-level models, on the other hand, draws on both model predictions and direct estimates that (where relevant) also embody spatial variations differences. However, the area-level estimates also remain more sensitive to the HILDA sampling frame and under-sampling in remote and sparsely populated areas.

The rates reported in Table 7 can also be translated into estimates of the number of people at-risk. Columns 7–9 report the estimated number of people at-risk of homelessness, as well as upper and lower estimates corresponding to the 95 per cent confidence intervals in column 5–6. In line with the rates themselves, the two model-based estimates generate somewhat lower estimates of the total number of people at-risk of homelessness.²²

4.2 Characteristics of the national population at-risk

In addition to knowing how many people are at-risk of homelessness and where they are, it is also important to understand who they are, and their characteristics. This information may be useful in focussing primary prevention efforts towards particular cohorts, as well as measuring the impact of any such initiatives through consistent monitoring over time.

The Table below uses the responding person population weights in HILDA to produce a profile of the population at-risk of homelessness and compares it to the national population aged 15 years and over. While some of the differences between those at-risk and the national population (including those at-risk) are a result of how risk was operationalised (e.g. low-income and marital status), the range of indicators reported here paint a picture of a population experiencing multiple and intersecting forms of disadvantage.

Table 8 reveals that those at-risk are more likely than the national population to be female, Indigenous, and living in a lone person or lone parent household. They are more likely to identify as lesbian, gay or bisexual and report fair or poor health. They are more likely to be low-income, unemployed or outside the labour force and in receipt of income support payments. Those at-risk have lower levels of educational attainment, are more likely to report difficulty paying bills and rent on time, and are more likely to experience a range of indicators of material deprivation such as skipping meals and being unable to heat their home. They are also far more likely to be in rental stress.

²¹ In the customised dataset obtained from the ABS the number of private renters is under-counted (relative to the regular Census output). The reason for this is that our variables include household level data which are (only) counted at the dwelling's place of enumeration. A consistent dataset can therefore only be produced based on respondents at home on Census night. Since more private renters were not at home on Census night than owner-occupiers, private renters are under-represented. Based on the operationalisation of homelessness risk (see Section 2.3) this results in private renters being under-represented and consequently a smaller number of estimated individuals at-risk. The research team decided against a general scaling of the results as the distribution of low-income households and household type (including lone person, group households, lone parents and multi-family households) in the private renter set.

²² We have chosen to present the numbers estimates as a function of the population bases used in the modelling (see note to Table 7). Readers may choose to apply the rates to the same population base, but given the systematic variation in the population compositions (see footnote 17), we have opted here for using the relevant population bases.

	Population weighted HILDA sample characteristics	% of the 2016 at- risk population ²³	% of the Australian population 2016 ²⁴
Female	1,227,514	55.1	50.9
Mean age	43.4^	-	45.2^
Indigenous	209,411	9.4	2.4
Married/de facto	626,297	28.1	57.5
Self-assessed health rated as fair or poor*	658,894	29.6	15.2
Lone person household	750,915	33.7	17.0
One parent with children	441,972	19.8	6.1
Couple with children	343,050	15.4	42.2
Couple without children	356,882	16.0	25.6
Has children in their care	599,832	26.9	30.9
Lesbian, gay or bisexual	146,163	6.6	2.8
Bachelor degree or higher	286,861	12.9	26.8
Year 11 and below	880,658	39.5	25.7
Employed full-time	378,679	17.0	41.6
Employed part-time	443,793	19.9	20.5
Unemployed	158,125	7.1	3.6
Not in labour force	1,243,974	55.8	34.2
Receiving income-support payments	1,596,707	71.7	30.0
Low-income	1,007,719	45.2	13.1
Could not pay bills on time	438,682	24.0	10.6
Asked for financial help from friends and family	491,037	27.0	10.7
Was unable to heat home	179,210	9.9	2.7
Went without meals	2,22,141	12.2	3.3
Asked for help from welfare/community organisations	273,989	15.0	3.3
In social housing	470,863	21.1	3.4
Receives DSP	400,067	18.0	4.7
Rental stress (30/40rule)	908,979	40.8	5.1

Table 8: Demographic profile of the estimated population aged 15 years and over at-risk of homelessness in 2016 (HILDA) Australia

Note: ^ mean years, not a per cent or count.

Source: Author's calculations using HILDA waves 16 and 17.

²³ Number of observations: 2,453; population size: 2,227,507.

²⁴ Estimates produced using population weights for all responding persons in HILDA. Population size = 19,119,468. Note population size varies for some questions, such as the material deprivation set.

The variables used to predict the at-risk indicators can also be used to further explore the characteristics of the population that are associated with higher/lower rates of risk. An important caveat here is that the primary purpose of the modelling exercise was to generate a well-specified model. As such, variable selection was not driven by theory or attempts to test causal relationships. Therefore, they do not necessarily tell us much about why certain characteristics are associated with a higher risk of homelessness. Similarly, the at-risk measure itself relies on individuals having at least two risk factors present. Variable selection therefore also does not say anything about particular risk factors and/or combinations of risk factors.

Figure 4 compares these (unit-based model) characteristics for the at-risk population to the same characteristics for the population as a whole. Nationally, 70.4 per cent of those at-risk live in households with less than \$1,250 weekly gross household income compared with 27.9 per cent of the national population aged 15 years and over. The majority of those at-risk (67.7%) are living in a household type comprising one-parent families, group households, multi-family households or lone person households (compared with 29.1% nationally). The majority (57.1%) are either unemployed or not in the labour force (compared with 37.2%). Further, 12.5 per cent had a disability with a core need for assistance compared with 5.7 per cent of the national population, 7.9 per cent were Indigenous and 4.4 per cent had five or more children.



Figure 4: Key characteristics of the population at-risk of homelessness compared to general population*

* Persons aged 15 years and over, enumerated at home on Census night.

Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17.

4.3 State and territory incidence of homelessness risk

The distribution of risk varies across geographic scales. Table 9 and Table 10 report the homelessness risk estimates and corresponding person numbers at state and territory levels. Homelessness risk varies across each of the states and territories. However, for most of the states/territories the confidence intervals of the estimates include the national average. The exemption here is the NT, where homelessness risk is significantly greater than national homelessness risk.

The NT has the highest rate of its population (aged over 15 years) at-risk of homelessness of all the states and territories, with an estimated risk of 1,384.3 per 10,000 persons. Notably, apart from the NT, where the effects of non-sampling in remote and sparsely populated areas is most evident, the variation from the national average is moderate. The confidence interval for the at-risk measure based on the unit-level estimates in the NT is consistently higher than the national average. Moreover, there is no overlap in the confidence interval for the NT and the national average (and its confidence interval). For the area-based estimates QLD, Tasmania (TAS) and the NT all have somewhat higher rate of homelessness risk (p<0.05).

When translating the rate of risk into number of people, differences in totals first and foremost reflect differences in population sizes. Consequently, the greatest numbers of people at-risk of homelessness are estimated to be in NSW, VIC and QLD, the three most populous states. The NT, which has the highest rate, on a number of people basis has the second lowest number of people at-risk. Only the ACT has a lower number of estimated people at-risk.

Table 9: Unit-level SAE's aggregated to the state and territory level: rates and point estimates with confidence intervals, 2016

	Number	Rate per			Population Point		
State or Territory	of SA3s	10,000	Lower CI	Upper Cl	estimate	Lower CI	Upper Cl
NSW	89	842.5	760.4	924.6	488,285	440,718	535,851
VIC	66	770.7	687.0	854.4	354,718	316,193	393,243
QLD	82	968.7	872.1	1,065.3	345,135	310,709	379,560
SA	28	951.5	826.0	1,077.0	124,067	107,703	140,431
WA	34	749.5	627.9	871.2	140,170	117,421	162,919
TAS	15	980.5	767.7	1193.3	38,197	29,906	46,488
NT	9	1,384.3	1,137.1	1,631.5	22,888	18,801	26,975
ACT	9	719.4	522.7	916.0	21,864	15,886	27,842
Australia	332	853.9	812.4	894.1	1,536,545	1,462,948	1,610,142

Note: CI = confidence interval. CIs calculated on a consistent sample size assumption. Sample size based on HILDA sample at state level (SL). 95CI= ATR+/- 1.96* SQRT[(ATR*(1-ATR)/N)]. The denominator in rate calculation is based on all Australians aged 15 and over, across all tenures.

Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17.

Table 10: Area-level SAE's aggregated to the state or territory level: rates and point estimates with confidence intervals, 2016.

State or Territory	Number of SA3s	Rate per 10,000	Lower CI	Upper Cl	Point estimate	Lower Cl	Upper Cl
NSW	89	999.5	910.9	1,088.1	607,867	553,967	661,766
VIC	66	926.1	835.1	1,017.0	448,118	404,094	492,143
QLD	82	1,196.2	1,090.2	1,302.2	451,999	411,942	492,056
SA	28	1,206.1	1,066.8	1,345.4	166,562	147,325	185,799
WA	34	879.0	748.2	1,009.8	175,080	149,025	201,134
TAS	15	1,446.3	1,194.6	1,698.0	605,780	50,036	71,124
NT	9	1,888.9	1,608.8	2,169.0	33,432	28,474	38,390
ACT	9	870.2	655.6	1,084.7	28,009	21,103	34,915
Australia	332	1,038.2	993.6	1,082.8	1,971,647	1,886,934	2,056,360

Note: CI = confidence interval. CIs calculated on a consistent sample size assumption. Sample size based on HILDA sample at state level (SL). 95CI= ATR+/- 1.96* SQRT[(ATR*(1-ATR)/SL)]. The denominator in rate calculation is based on all Australians aged 15 and over, across all tenures.

Source: Author's calculations derived from: ABS 2016 Census of Population and housing, and HILDA survey, waves 16 and 17.

4.4 The characteristics of those at-risk within each state and territory

The profile of those at-risk in NSW, VIC, QLD and WA are quite similar, with the greatest variation being for Indigenous status. In VIC, 2.18 per cent of those at-risk are Indigenous while around 10 per cent of those at-risk in QLD, WA and TAS are Indigenous (see Figure 5).

Except for Indigenous status, TAS and SA have similar profiles for their at-risk populations. With labour force status and disability featuring more strongly than other states. The majority of those in both these states are in low-income households (82.46% and 79.31% respectively).

Those at-risk in the territories have quite different profiles to the states. In the NT, the majority of those at-risk are Indigenous (62.9%) and are unemployed or outside the labour force (63.5%). A smaller proportion of the at-risk population are working less than 35 hours per week (15.5%) and a lower proportion of those at-risk are in low-income households (52.7%). The ACT has a lower proportion of persons at-risk who are unemployed or outside the labour force (49.2%) and who are Indigenous (4.2%) than the NT. However, they have a higher proportion of their at-risk population working 35 hours or less (26.9%) and living in low-income households (62.5%). These differences in profile are summarised in Figure 5 below.



Figure 5: Characteristics of the at-risk population by state and territory (unit-based, probit estimates)

Note: The comparative statistics in Figure 5 are based on the population at-risk, rather than all Australians. By definition (see Section 2.3) the population at-risk is based on people aged 15 and over in rental housing.

Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17.

For most states and territories there is little variation in the proportion at-risk between Greater Capital City and Rest of State areas. For example, 8.11 per cent of those in Greater Sydney are at-risk of homelessness compared with 9.1 per cent of those in rest of state areas. The NT is the exception with a far greater per cent at-risk in rest of state areas (23.8%) compared with Greater Darwin (7.8%).

Northern Territory

The SA3s in the NT with the highest estimated rate of homelessness risk are all situated in the Rest of NT area.²⁵ These include:

•	East Arnhem	3,366 per 10,000
•	Daly-Tiwi-west Arnhem	3,265 per 10,000
•	Barkly	2,793 per 10,000
•	Katherine	2,218 per 10,000
•	Alice Springs	1,688 per 10,000

Those at-risk in the rest of the NT are highly likely to be Indigenous (85.4%), be unemployed or outside the labour force (72.1%) to be in a one parent family, group household, multi-family household or lone person household (70.5%).

The highest risk SA2 within Greater Darwin is Moulden (within Palmerston SA3) with 1,637 per 10,000 persons estimated to be at-risk of homelessness. Most commonly, those at-risk in Moulden are in one parent families, multi-family households, group or lone person households (74.6%). The majority are also unemployed or outside the labour force (74%) and have household incomes below \$1,250 per week (73.8%). Many of those at-risk (43.2%) in this SA2 are Indigenous.

Queensland

The SA3s with the highest rate of homelessness risk in QLD are:

•	Far North (Rest of QLD)	2,327 per 10,000
•	Southport (Rest of QLD)	1,358 per 10,000
•	Cairns—South (Rest of QLD)	1,364 per 10,000
•	Caboolture (Greater Brisbane)	1,369 per 10,000
•	Brisbane Inner (Greater Brisbane)	1,361 per 10,000
•	Beenleigh (Greater Brisbane)	1,338 per 10,000

The majority of those at-risk in these six SA3s are low-income (70.1%) in households that are one parent families, multi-family households, group households or lone person households (69.8%) and are unemployed or outside the labour force (56.9%). It is worth noting that while 20.6 per cent of those at-risk across these six SA3s were Indigenous, 84.9 per cent of those in Far North were Indigenous.

Within Greater Brisbane, the SA2s with the highest rate of homelessness risk are: Logan Central (2,110 per 10,000 persons); Woodridge (2,099 per 10,000) and Kingston (1,662 per 10,000) all within the SA3 of Springwood—Kingston. The SA2 of Inala—Richlands (in the SA3 of Forest Lake—Oxley) has the next highest rate of homelessness risk (2,004 per 10,000), followed by Leichhardt - One Mile (1,929 per 10,000) and Riverview (1,834 per 10,000) both within the SA3 of Ipswich Inner.

²⁵ Rate calculations use the total population aged 15 and over across all tenures as the denominator (see footnote 19 for details)

Victoria

In VIC, those SA3s with the highest rate of homelessness risk can all be found within Greater Melbourne.

•	Melbourne City (Greater Melbourne)	1,634 per 10,000
•	Yarra (Greater Melbourne)	1,251 per 10,000
•	Maribyrnong (Greater Melbourne)	1,187 per 10,000
•	Port Phillip (Greater Melbourne)	1,144 per 10,000
•	Stonnington-West (Greater Melbourne)	1,138 per 10,000
•	Brunswick—Coburg (Greater Melbourne)	1,070 per 10,000
•	Darebin—North (Greater Melbourne)	1,064 per 10,000

The majority of those at-risk in these SA3s were in one-parent families, multi-family households, group households or lone person households (74.4%), living in low-income households (62.5%), with many unemployed or outside the labour force (47.4%).

Those SA2s with the highest rate of homelessness risk within Greater Melbourne are: Carlton (2,258 per 10,000); Melbourne (1,975 per 10,000); Flemington (1,969 per 10,000); North Melbourne (1,736 per 10,000); Clayton (1,680 per 10,000); Collingwood (1,675 per 10,000) and Footscray (1,673 per 10,000).

New South Wales

The SA3s with the highest rate of homelessness risk in NSW are:

•	Sydney Inner City (Greater Sydney)	1,330 per 10,000
•	Bourke—Cobar—Coonamble (Rest of NSW)	1,286 per 10,000
•	Moree—Narrabri (Rest of NSW)	1,172 per 10,000
•	Mount Druitt (Greater Sydney)	1,138 per 10,000
•	Fairfield (Greater Sydney)	1,097 per 10,000

The majority of those at-risk in these SA3s are in one-parent families, multi-family households, group households or lone person households (68.8%), have low-income (63.7%) and are unemployed and looking for work or outside the labour force (60.5%).

Within Greater Sydney, the SA2s with the highest rate of homelessness risk include: Warwick Farm (2,108 per 10,000); Fairfield (2,002 per 10,000)); Ashcroft - Busby - Miller (1,822 per 10,000); Bidwill—Hebersham—Emerton (1,767 per 10,000)); and Riverwood (1,756 per 10,000).

Western Australia

The SA3s with the highest rate of homelessness risk in WA are:

Kimberley (Rest of WA)	2,072 per 10,000
Belmont—Victoria Park (Greater Perth)	1,131 per 10,000
Perth City (Greater Perth)	979 per 10,000
East Pilbara (Rest of WA)	976 per 10,000
	Kimberley (Rest of WA) Belmont—Victoria Park (Greater Perth) Perth City (Greater Perth) East Pilbara (Rest of WA)

In the Kimberley SA3 the majority of those at-risk in this SA3 are Indigenous (77.1%), are unemployed or outside the labour force (68.8%) and live in low-income households (64.0%).

Across these three remaining top four SA3s, 66.9 per cent of those at-risk are in one-parent families, multi-family households, group households or lone person households, while 61.9 per cent are in low-income households and 47.7 per cent are unemployed or outside the labour force. Only 9.9 per cent of those atOrisk in these four SA3s are Indigenous.

Within Greater Perth, the SA2s with the highest rate of homelessness risk are Mandurah (within Mandurah SA3) (1,859 per 10,000) and Bentley—Wilson—St James (within Canning SA3) (1,640). Across both SA2s, those at-risk are most likely to be low-income (74.5%), in one-parent families, multi-family households, group households or lone person households (73.6%), and unemployed or outside the labour force (65.1%).

South Australia

The SA3s with the greatest risk of homelessness in SA are:

•	Adelaide City (Greater Adelaide)	1,496 per 10,000
•	Playford (Greater Adelaide)	1,415 per 10,000
•	Outback—North and East (Rest of SA)	1,379 per 10,000
•	Port Adelaide—West (Greater Adelaide)	1,265 per 10,000
•	Port Adelaide—East (Greater Adelaide)	1,257 per 10,000

Of those four SA3s within Greater Adelaide mentioned above, those at-risk are most commonly in low-income households (79.5%), in one-parent families, multi-family households, group households or lone person households (71.4%) and unemployed or outside the labour force (67.5%). Only 5.5 per cent are Indigenous.

Within Outback—North and East, 51.9 per cent of those at-risk are Indigenous, and the majority are in one-parent families, multi-family households, group households or lone person households (67.5%), in low-income households (66.9%), and unemployed and outside the labour force (64.5%).

Within Greater Adelaide, the SA2s with the highest rate of homelessness are Elizabeth, Smithfield—Elizabeth North and Davoren Park (within Playford SA3), Christie Downs and Hackham West - Huntfield Heights (within Onkaparinga SA3), The Parks (within Port Adelaide SA3) and Adelaide SA2 (within Adelaide City SA3).

ACT

The North Canberra SA3 has the highest rate of risk (1,047 per 10,000) in the ACT. 76.8 per cent of those at-risk in this SA3 are in one-parent families, multi-family households, group households or lone person households, while 61.3 per cent are in low-income households.

The highest risk SA2 in the ACT is Reid (1722 per 10,000) within North Canberra SA3, followed by Belconnen (in the Belconnen SA3, 1,470 per 10,000), and Turner (1,457 per 10,000), Dickson (1,399 per 10,000) and Braddon (1,359 per 10,000), the last three of which are all within the North Canberra SA3.

Tasmania

The SA3s with the highest rate of homelessness risk in TAS are:

•	Hobart - North West (Greater Hobart)	1,292 per 10,000
•	Brighton (Greater Hobart)	1,260 per 10,000
•	Launceston (Rest of TAS)	1,183 per 10,000
•	Hobart Inner (Greater Hobart)	1,108 per 10,000
•	Burnie—Ulverstone (Rest of TAS)	1,105 per 10,000
•	Devonport (Rest of TAS)	1,050 per 10,000

Those at-risk in these six SA3s are highly likely to be in low-income households (82.5%), in one-parent families, multi-family households, group households or lone person households (72.6%) and unemployed or outside the labour force (63.7%).

Within greater Hobart, Bridgewater—Gagebrook SA2 (within the SA3 of Brighton) has the highest rate of homelessness risk (2,313 per 10,000). Other SA2s with a high rate of homelessness within Greater Hobart include: Rokeby (Hobart North East) (1,691 per 10,000), Glenorchy (Hobart North East) (1,659 per 10,000), Hobart (Hobart Inner) (1,592 per 10,000) and Mornington—Warrane (Hobart North East) (1,592 per 10,000).

4.5 SA3 level consistency and comparison across estimation methods

Table 11 tests how well the SA3 level estimates correlate overall and for greater capital cities and balance of state areas. Correlations range from -1 to +1 and provide a measure of how closely the different SA3-level results relate to each other. For instance, a correlation of 1 implies that the area with the highest at-risk rate using the direct estimates from HILDA also has the highest at-risk rate using either the unit or area-level based estimates; the second highest (direct estimate) has the second highest rate also in the unit or area-level estimations; and so on.

The correlation coefficient in column two shows that the relation between the direct estimates (HILDA) and the unit-level (probit) estimates is very low (*r*=0.16); the correlation between the area-level (FH) estimates and the direct estimates (HILDA) overall is low-moderate (*r*=0.46). The difference in the correlations between the different model-based estimates and the direct (HILDA) estimates reflect the methodological differences discussed in Chapter 3 (unit level is entirely model driven; area-level combines direct, and regression based estimates).

The correlation between the two model-based estimates is moderate-high (*r*=0.71, column 2), showing a degree of consistency between the two different approaches. As discussed in Chapter 3, the sampling coverage of HILDA is particularly poor in remote and sparsely populated areas. When correlating the SAEs for unit-level and area-level results by capital city the correlation remains similar. However, the unit-level estimates are more highly correlated with the direct estimates in greater capital city areas than balance of state areas. Indeed, the unit-level SA3s are not correlated with direct estimates at all in balance of state areas. The area-level estimates show a similar level of correlation with the direct estimates (HILDA) in both capital cities and rest of state.

Correlations are likely higher in greater capital cities because HILDA sample sizes are larger here. As a result, the HILDA direct estimates become more precise, and both models do a better job of estimating at-risk. Outside capital cities HILDA direct estimates are poor, in part because of small sample sizes. The FH results still retain a higher degree of correlation because they include a weighted element of the direct HILDA estimates. The higher correlation between the two SAE methods within capital cities also has a bearing on later presentation of the detailed results. As noted in Appendix 1, SA2 level estimates are only produced using the unit-level method due to non-normality (violation of model assumptions) in the two error terms when estimating the FH-models at SA2 level. The higher correlation within capital cities also increases our confidence in the representativeness of the SA2 level results within capital cities.

Table 11: Pearson correlations between direct estimates, unit-based estimates and Area-based estimates at the SA3 level, 2016

	Direct estimate	Unit-based (probit)	Area-based (FH)
Direct estimate	1.00***		
Unit-based (probit)	0.16***	1.00***	
Area-based (FH)	0.46***	0.71***	1.00***
Greater capital cities only			
Direct estimate	1.00***		
Unit-based (probit)	0.38***	1.00***	
Area-based (FH)	0.72***	0.68***	1.00***
Balance of state areas only			
Direct estimate	1.00***		
Unit-based (probit)	-0.02	1.00	
Area-based (FH)	0.30***	0.70***	1.00***

Note: */**/*** is statistically significant at 0.1/0.05/0.01 level.

Source: Author's calculations derived from ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17.

This section now turns to mapping the incidence of homelessness risk across small areas in Australia. Tables detailing the estimated rates of homelessness risk for SA2s and SA3s are presented in Appendix 3 [separate excel file]. The following maps compare and contrast the estimates by location, highlighting areas with higher and lower rates of homelessness risk.

4.6 Mapping the incidence of homelessness risk, SA2 and SA3

The maps showing Australia as a whole are based on SA3-level estimates. Capital city maps present the results at an SA2 level. The maps group areas together using five categories. Specifically, the middle 50 per cent of the distribution reflects a moderate or average level of risk (shaded in apricot). The next 20 per cent of the distribution reflects areas with either moderately high (light blue) or moderately low (light green) rate of at-risk, while the next 5 per cent show areas with the highest rate of those at-risk (dark blue) or the lowest at-risk rate (dark green). The range of the at-risk rates for each category is reported in the legends of the figures below.

On this basis, Figure 6, maps A and B, show the risk of homelessness (per 10,000 people) by SA3, based on the unit and area-level estimates, respectively.

Figure 6: Risk of homelessness (rate per 10,000 people), comparing unit-level (probit – map A) and area-level (Fay-Herriot – map B) estimates, national overview, SA3s





Note: Maps exclude SA3s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'. Insufficient data includes SA3s with population < 500.

Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17; ABS digital spatial boundaries.

Map B: Risk of homelessness (rate per 10,000 people), area-level (FH) SA3 estimates



Note: Maps exclude SA3s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'. Insufficient data includes SA3s with population < 500.

Figure 6, map A, shows that the rate of homelessness risk is particularly high in remote and sparsely populated areas of the NT, SA and, to a lesser extent, QLD (measures of estimate precision are shown in Section 4.7). In these areas the at-risk of homelessness rate ranges from 1,333 to 3,400 people per 10,000 residents. From a modelling perspective, the higher rate of homelessness risk in the NT is, in part, driven by the greater proportion of Indigenous residents.

Of those SA3s with the highest rate of homelessness risk, four out of the top five are found in the NT: East Arnhem (3,366 per 10,000), Daly—Tiwi—West Arnhem (3,265 per 10,000 persons), Barkly (2,793 per 10,000 persons) and Katherine (2,218 per 10,000 persons). Far North in QLD also makes the top five with a rate of homelessness risk at 2,327 per 10,000 persons.

QLD has a further four SA3s with some of the highest proportions at-risk in the country: Caboolture (1,369 per 10,000); Cairns—South (1,364 per 10,000); Brisbane Inner (1,361 per 10,000) and Southport (1,358 per 10,000).

SA has three SA3s with particularly high rates of homelessness: Adelaide City (1,496 per 10,000); Playford (1,415 per 10,000) and Outback - North and East (1,379 per 10,000). In WA, Kimberley has a rate of homelessness risk of 2,073 per 10,000, while in VIC, Melbourne City has a rate of 1,634 per 10,000 persons at-risk of homelessness.

Finally, when comparing Figure 6, map A and map B, it is evident that both modelling methods predict a higher rate of homelessness risk in central and remote areas of Australia. While there are some differences in these areas, the overall correlation between the unit-level and area-level models remains largely the same for capital and balance of state homelessness risk rates alike (Table 11).

Figure 7, maps A and B, zoom in to SA2 level for the capital cities. These maps highlight some important insights about the risk of homelessness in Australia.

First, there are concentrations of areas where the rate of homelessness risk is high and very high throughout each of the cities. That is, the risk of homelessness is not geographically confined to particular parts (such as inner or outer parts) of any of the cities.

Second, and as a result, areas with (very) high and (very) low risk are sometimes located close to each other. From a policy perspective, this suggests that many local governments will have areas of both high and low risk within their jurisdiction.

Third, very low rate areas, tend to be located away from the inner CBD areas of each of the cities. Thus, while there is evidence of growing suburbanisation of low-income households (Randolph and Tice 2014), it is also clear that suburbs tend to have lower rates of homelessness risk. This contrast is likely a function of higher rates of home ownership in suburbs than in inner city areas.



Figure 7: Risk of homelessness (rate per 10,000 people), unit-level (probit) estimates, capital city SA2s Figure 7A: Sydney and Melbourne SA2s

Note: Maps exclude SA2s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'. Insufficient data includes SA3s with population < 500.



Figure 7B: Brisbane, Perth, Adelaide and Hobart SA2s

Note: Maps exclude SA2s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'. Insufficient data includes SA3s with population < 500.

4.7 Confidence and reliability of estimates

A key issue in making inference from the above estimates is how precise they are. The confidence intervals in Section 4.1 (national) and 4.3 (state or territory) already demonstrate that precision varies. This is even more so at SA2 and SA3 level.

To assist in visualising the precision of our estimates, the confidence intervals for both sets of Small Area Estimates are presented below in map form. Those areas with the largest confidence interval are shaded in brown; those with a moderate confidence interval are shaded orange, while those areas with a small confidence are shaded cream. For clarity, the range of the confidence interval (in percentage points) and corresponding range of persons per 10,000 is also shown in the legend. Population number point estimates and confidence intervals for both unit-based and area-based results are reported for each small area in Appendix 3 (Excel file).

By way of example, the SA3 of Far North in QLD, one of the SA3s with the largest confidence intervals, has a point estimate of 2,327 per 10,000 persons at-risk of homelessness. The confidence interval is +/- 572 per 10,000 persons, or it ranges from 1,755 per 10,000 to 3,001 per 10,000.

Figure 8 and Figure 9 show the areas with the largest confidence intervals using the unit-based approach. Those areas for which we have less precise estimates are clustered in the northern most parts of Australia. This broad pattern suggests that those areas with the highest point estimates of risk also have the largest confidence intervals and should be considered least reliable. Importantly, these are also the areas where HILDA has the poorest sampling outcome (from the perspective of the analysis in this report). Figure 10 reports confidence intervals for the area-level results at the SA3 level only, and shows a broadly similar pattern.



Figure 8: Confidence interval ranges, unit-level (probit) estimates: percentage points and +/- variations in point estimates, Australia, SA3s

Note: Maps exclude SA3s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'; Insufficient data includes SA3s with population < 500.

Figure 9: Confidence interval ranges, unit-level (probit) estimates: percentage points and +/- variations in point estimates, capital city SA2s

Figure 9A: Sydney and Melbourne, SA2s



Note: Maps exclude SA2s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'; Insufficient data includes SA3s with population < 500.



Figure 9B: Brisbane, Adelaide, Perth and Hobart, SA2s

Note: Maps exclude SA2s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'; Insufficient data includes SA3s with population < 500.

Figure 10 repeats the mapping of the confidence interval range based on the area-level model (FH model). The comparison scale used for the area-level model differs from that of the unit-level model given the wider confidence intervals produced using this method. Nevertheless, a similar pattern emerges, the precision of the estimated homelessness risk is poorer in remote and sparsely populated areas, and in particular areas where, in the case of the area-level model, the predicted homelessness risk is entirely based on the model's predictive ability. These are the areas where there is no direct estimate available from HILDA due to non-sampling.

Figure 10: Confidence interval ranges, area-level (FH) estimates: percentage points and +/- variations in point estimates, Australia, SA3s



Note: Maps exclude SA3s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and, 'No Usual Address'; Insufficient data includes SA3s with population < 500.

Source: Author's calculations derived from: ABS 2016 Census of Population and housing, and HILDA survey, waves 16 and 17; ABS digital spatial boundaries.

4.8 Mapping the numbers of people at-risk

Finally, in this section we translate the at-risk rates into population numbers at SA3/SA2 level. We first report the number at-risk per SA3 in a national map and zoom into capital cities to examine numbers per SA2. Invariably, the numbers of people at-risk in each area is a function of the rate and the number of resident people. The categorisation of the map legend follows the structure used for examining rates of homelessness risk.

Figure 11 and Figure 12 reveal that the greatest number of people at-risk of homelessness can be found in greater capital city areas, with some areas in regional NSW and along the coast in QLD also having high numbers. In contrast to the rate maps, the number of people at-risk in the NT is comparatively low, which highlights the importance of considering the rate of homelessness risk together with the number of people at-risk.

Figure 11: Point estimates: persons* at-risk of homelessness, comparing unit-level (probit – map A) and arealevel (FH—map B) estimates, national overview, SA3s

Figure 11A: Unit-level point estimates, SA3s



Notes: * 'Persons' are aged 15 and over and reside in a rental property. Maps exclude SA3s coded: 'Other Territory'; 'Migratory - Offshore -Shipping'; and 'No Usual Address'. Insufficient data includes SA3s with population < 500 Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17; ABS digital

Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 1/; ABS digital spatial boundaries

Figure 11B: Area-level point estimates, SA3s



Notes: * 'Persons' are aged 15 and over and reside in a rental property. Maps exclude SA3s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and 'No Usual Address'. Insufficient data includes SA3s with population < 500. Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17; ABS digital spatial boundaries. The number of people at-risk adds further insight on understanding the at-risk population. As with the geographic distribution of the rate of homelessness risk (Section 4.6), there are concentrations of high and low numbers of people at-risk across the capital city areas. In addition, the numbers map highlights that areas with moderate risk levels, such as the outer west in Melbourne (Figure 12A), or substantial segments of the eastern 10 kilometre ring of Perth (Figure 12B), can still have higher concentrations of people at-risk due to their larger population size.

In general, this pattern is replicated throughout the capital cities, with the number of blue (high and very high) areas increasing relative to the rate maps in Section 4.6.

Figure 12: Point estimates, persons* at-risk of homelessness, unit-level (probit) model, capital city SA2s

Figure 12A: Sydney and Melbourne SA2s



Notes: *'Persons' are aged 15 and over and reside in a rental property. Maps exclude SA2s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and 'No Usual Address'. Insufficient data includes SA3s with population < 500.



Figure 12B: Brisbane, Adelaide, Perth and Hobart SA2s

Notes: *'Persons' are aged 15 and over and reside in a rental property. Maps exclude SA2s coded: 'Other Territory'; 'Migratory - Offshore - Shipping'; and 'No Usual Address'. Insufficient data includes SA3s with population < 500. Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17; ABS digital spatial boundaries.

Within Greater Sydney, higher numbers at-risk of homelessness are evident in the city centre with corridors of high and moderately high risk extending to the west and south of the city. In Melbourne, high numbers of persons at-risk are evident in the central city area, in the middle north and inner west with a corridor extending through the south eastern suburbs. A corridor of moderately high numbers of people at-risk is also evident through the inner, middle and outer west of Melbourne and into the northern suburbs.

In Brisbane, the highest numbers of those at-risk can be found in outer suburban locations with patches of moderately high risk emanating from the central city area. In Adelaide, many of those at-risk are concentrated in the central city area with areas of moderately high risk extending to the south and north east of the city. In Perth, areas with higher numbers of people at-risk are evident in the central city area and in the inner north and inner south east of the city. Moderately high numbers of people at-risk are also concentrated around the central city areas with some extensions to the south, north and eastern suburbs. In contrast, Hobart does not have any areas with high numbers at-risk. However, it does have a cluster of moderately high risk in its city centre, with pockets extending into the north-western suburbs.

4.9 Policy development implications

The results in this chapter show that a large number of Australians are at-risk of experiencing homelessness. The estimates suggest that somewhere between 1.5 and 2 million Australians, aged 15 and above, *may* come to experience homelessness. By definition (see Section 2.3), these estimates apply to Australians currently living in rental housing. The sheer number of people at-risk of homelessness—be it 1.5 million or just over 2 million—makes a strong case for a focus on primary prevention of homelessness in Australia.

Targeted prevention is made difficult, however, by a lack of detailed information on where those at-risk live, and their characteristics. This information can assist in developing prevention strategies at both national and local levels. The small area estimates generated by this research provides policy makers with a base level of information around the characteristics of people and areas associated with homelessness risk.

Recent research suggests that those at-risk are more likely than other private renters to change address between waves in HILDA. However, they tend to move short distances and are not highly *geographically* mobile (Batterham 2020). While some targeted polices towards individuals is valuable, area-based interventions remain relevant for this group.

The results highlight several implications for policy:

- There is a distinction between the rate of homelessness risk and the magnitude (number of people at-risk) of the policy challenge. SAEs provide evidence on—and distinguish between—both of these aspects.
- Many areas with an estimated high rate of homelessness risk (and thus share of people at-risk) —such as parts
 of the NT—have comparatively small populations. As such, the number of people at-risk, in comparative terms,
 small. Nevertheless, because of the higher share, more people will be living alongside other people who are
 at-risk.
- Conversely, many capital city areas have low or moderate rates of homelessness risk. However, due to the much larger number of people in these areas, this translates into a much larger number of people at-risk and potentially a more substantial commitment of resources.
- The policy challenge is two-fold. Firstly, addressing the factors that put an individual at-risk of homelessness, in particular localities. This requires policies that target individuals and groups at particular risk. Secondly, just because the rate of homelessness risk is low, this does not mean that the magnitude of the issue necessarily is small. This requires policy awareness and agenda-setting also in some areas where the risk of homelessness otherwise is moderate or low. Specific policy and service areas are discussed in greater detail in Chapter 5.
- The focus in this analysis has been on the risk of homelessness among Australians that are renters (private, social, community housing). In part, this constitutes a partial analysis and should not reduce or detract from known risk factors in the owner-occupied sector, such as loss of a partner in old age, household break-ups or domestic violence.

Key characteristics of those at-risk did not vary much spatially apart from Indigenous status. However, the profile remains useful and suggests prevention and interventions policies should also target key areas at the national level, largely policy areas beyond the usual scope of homelessness policy.

- Many of those at-risk of homelessness are in receipt of income support payments (both for those who are unemployed and those outside the labour force). An increase in the rate of these payments could make substantial impact in reducing the risk of homelessness. A substantial increase in these payments would help to boost purchasing power in the private rental market for this group.
- Those at-risk were more likely to report living with a disability and fair or poor health. This is consistent with existing research that documents the role of poor physical and mental health in precipitating homelessness, as well as the substantial health impacts of homelessness (e.g. Johnson and Chamberlain 2011; Min Park, Fertig et al. 2011). There is a clear role for state and territory governments in ensuring access to supports across areas, especially for those on low-incomes.
- Indigenous Australians are overrepresented in the at-risk of homelessness population—especially in remote areas. They are also overrepresented in the homelessness population. The reasons for the heightened at-risk in the Indigenous population is only partially captured in this research. For instance, many Indigenous Australians have lower incomes. Given these factors are controlled for separately in the analysis, it is likely that homelessness risk in the Indigenous population also reflects behavioural determinants such as racism and discrimination.

The different methods used to produce the Small Area Estimates do not generate a consistent picture of homelessness risk in Australia in all areas. However, precision is greater in capital cities where sample sizes are generally larger.

- When using the estimated rates, policy makers, researchers and service providers should carefully consider the different outcomes and the degree of consistency/variability for particular areas of interest.
- When assessing whether an area should be considered to have low or high homelessness risk, care should be taken to compare an areas' position across both model-based outcomes.

5. Policy development options

The overall incidence of homelessness cannot be reduced by responding to those experiencing homelessness alone. Upstream interventions are required to prevent homelessness from occurring in the first place. Such interventions must be targeted to those at-risk of homelessness, and so an understanding of the population at-risk of homelessness is required.

This project addresses the overall policy issue: how can homelessness be prevented more effectively based on a detailed understanding of the distribution of the population at-risk of homelessness across small areas in Australia?

In this chapter we discuss how a detailed understanding of the distribution of the population at-risk of homelessness across small areas in Australia can be instrumental in homelessness primary prevention. The first section focuses on how SAE can support policy planning and service delivery. The second section focuses on the national, state, and local government area level primary prevention opportunities. The policy prevention perspectives are reflective of the distribution of responsibilities across these levels and their interaction with specific at-risk factors.

5.1 SAEs and prevention policy

From the analysis in this report it is clear that risk of homelessness, much like homelessness itself, is a complex social, economic and spatial phenomenon. In practice, this means that no single policy or initiative will solve the challenges associated with homelessness risk. In practice, social policies are rarely delivered in a coordinated manner across multiple departments or organisations and are also guided by institutional and organisational structures. There are exceptions, particularly around youth homelessness, where place-based (or collective impact approaches) have been adopted and have also shown promise in reducing the transition of young people at-risk into homelessness (MacKenzie 2018). Similarly, housing first approaches provide a more holistic model of addressing complex social challenges. Place-based approaches require identifying the relevant population and connecting this population to appropriate supports.

Considerable data are already produced at small area levels through the Census and are used for local and statewide policy planning and service delivery. The production of SAEs for other social and economic phenomena is of particular interest to researchers and planners for improved allocation of services, as well as the basis for more dynamic systems' modelling of social processes. A summary of how SAEs can be used to support planning and delivery of a range of social services and housing policy is provided below.

First, numerous social services are delivered through partnership models that are funded through grants or needs-based assessments. To obtain grants or funding, social problems need to be quantified. SAEs provide two forms of quantification for development of local prevention policies and responses:

• In some cases, a precise number of potential service users (demand) will be required. For instance, a service provider may tender for funding intended to prevent homelessness. Both the tendering institution and the service provider will want to identify how many people form part of the potential client group. Quantification can thus be critical to obtaining funding in the first instance.

- In other cases, it is the relative magnitude of an issue that matters in a local population. For instance, in developing local strategies or allocation of funds to particular issues, what matters is how big the issue of homelessness risk is, relative to other issues in an area. A rate measure here can be instrumental in fixing attention to specific social risks, and also in the ranking of issues relative to each other.
- The results in Chapter 4 also show that some areas with (very) high rates of homelessness risk are located next to areas with (very) low rates. The combination of estimated homelessness risk rate, and numbers at SA2-level in capital cities, can thus also improve understanding of equitable spatial housing opportunity across metropolitan areas, and within local government areas.

Second, the location of services is instrumental in the efficacy of service delivery. For instance, an increase in distance of welfare services is often associated with a decrease in service uptake (e.g. Allard, Tolman et al. 2003). Evidence on the spatial distribution and location of potential service users is therefore key to planning and targeting services and enabling uptake of service use to ensure efficacy of public and not-for-profit investment. Additional profiling and mapping of risk factors can further contribute to the locational decision of specific services.

Third, local and state governments, as well as NFP service providers and funders (including philanthropic) are concerned with evidencing and tracing impacts or policy efficacy. SAEs quantify local populations of those at-risk of homelessness and so provide a basis for developing evidence informed 'success' indicators and criteria for monitoring service delivery and impact.

In summary, quantification of social and economic phenomena is key to the development of many social policies and strategies. SAEs of homelessness risk provide policy makers, NFP service providers and funders with quantified area-based estimates of need to assist in maximising the efficiency preventative initiatives, by reducing the distance between potential service users and location of service provision.

In the next section, we detail a range of policy options for primary prevention of homelessness for different levels of government. Targeting and monitoring of policy impact—whether the policy initiative is spatial or aspatial in nature—is enhanced through SAE of homelessness risk.

5.2 Primary prevention opportunities for state, territory and local governments

Many state, territory and local government policies and services have a specific spatial dimension such as administrative boundaries, spatial location of specific services. Our findings suggest numerous opportunities for state, territory and local governments to enact primary homelessness primary prevention initiatives that often have a spatial dimension.

Increasing the supply of rental housing affordable to those on low-incomes

There is a well-documented shortage of affordable private rental for low-income households (Anglicare Australia 2021; Hulse, Reynolds et al. 2019) and social housing options (Lawson, Pawson et al. 2018). By definition (see Section 2.3), all those at-risk of homelessness in this study will be residing in these tenures. To address risk factors, but also maximise any risk-reducing effect of income increases, an increase in availability of rental housing options for low-income households is required. The ongoing COVID-19 environment has resulted in some reductions in rental levels (particularly for apartment style dwellings in central city locations (National Housing Finance Investment Corporation 2020). However, it seems unlikely that these changes will be permanent. Firstly, the current overall housing shortage is a cumulative effect that has evolved over the last two decades (Burke, Nygaard et al. 2020); secondly, at the very least some migration will resume in the medium term.²⁶ Addressing the housing availability

²⁶ The halt to migration as a consequence of COVID-19 has resulted in a decline in rents in segments of the private rental markets, particularly central and CBD parts of capital cities (NHFIC 2020).

and cost aspect of homelessness risk will—in an environment of a housing shortage—require provision of housing options that also are specifically linked to those on low-incomes and/or those at-risk of homelessness. Scaling up the provision of social and affordable housing options (with income tied requirements) provide one option for achieving this.

States and territories have strategies to increase the supply of social and affordable housing. In the case of the Social and Affordable Housing Fund in NSW (NSW 2019), proposals for tenders were required to demonstrate local need or demand for affordable housing. The geographical distribution of the at-risk population is a highly valuable metric in planning affordable rental housing in such schemes.

Further, there is ongoing monitoring of the supply of affordable private rental housing in other states (see Department of Health and Human Services (VIC), 2021). The distribution of those at-risk could be combined with this supply data to inform where new affordable rental supply is most needed. In VIC for example, our SAEs suggest that this is in a number of middle and inner suburbs of Greater Melbourne. Future research could explore the detailed demographic profile of those at-risk in each SA3 to tailor further policy interventions.

The profile of those at-risk also suggests opportunities for enhancing existing secondary prevention initiatives. This includes private rental access programs that provide ongoing rent subsidies for people at imminent risk of homelessness, as well as the payment of rent arrears and advocacy with landlords. Given the proportion of those at-risk accessing existing material aid services, such agencies could provide initial engagement and refer on to, or have co-located, secondary prevention housing services. Such services could be targeted to areas with larger numbers of people at-risk of homelessness.

As housing policy sits across all three levels of government in Australia , there is an important role for cooperation to increase the supply of affordable housing for this population.

Targeted support for Indigenous communities

Being Indigenous is associated with greater homelessness risk—with the majority at-risk in remote areas being Indigenous. Indigenous persons are also much more likely to experience actual homelessness. This heightened risk is incorporated in Batterham's (2019a) definition. In modelling homelessness risk an effect remains after controlling for socio-economic variation so it is unlikely that the heightened risk of being Indigenous merely reflects systematic differences in socio-economic characteristics. While Indigenous status may capture some unobserved socio-economic characteristic that are correlated with homelessness risk, we believe that Indigenous status is associated with higher risk of homelessness due to discriminatory practices and the ongoing legacy of colonialism in Australia. It is essential that targeted support for Indigenous communities is developed in consultation with those communities.

While our SAEs in remote areas show greater variability, it is noteworthy that a number of regional and remote areas in the NT, WA, QLD and SA have high rates of homelessness risk. A large proportion of those at-risk in these areas are Indigenous. These areas also have some of the highest rates of homelessness in the country and would benefit from targeted support. Given known issues with the standard and quantum of housing in remote Indigenous communities, our SAEs of homelessness risk could inform a revamped National Partnership on Remote Housing and/or state level strategies on remote Indigenous housing.

Health and disability

Those at-risk are more likely to report living with a disability and fair or poor health. This is consistent with existing research which documents the role of poor physical and mental health in precipitating homelessness as well as the substantial health impacts of homelessness (e.g. Johnson and Chamberlain 2011; Min Park, Fertig et al. 2011). There is a clear role for state and territory governments to ensure access to health and disability supports across areas, especially for those on low-incomes. SAEs can be used to enhance and expand services in areas with higher demand from those at-risk. These findings also highlight the importance of national safety net schemes such as Medicare, the pharmaceutical benefit scheme (PBS) and the national disability insurance scheme (NDIS).

Education

The detailed national profile produced in HILDA highlights that those at-risk have lower levels of educational attainment and many of those at-risk have children living with them. Given what is known about intergenerational transmission of poverty, homelessness, and low educational attainment (Cobb-Clark 2019; Cobb-Clark and Zhu 2015), state and territory government investment in educational engagement for disadvantaged students could pay off in-terms of reducing future risk of homelessness. This is consistent with the existing work of the Reconnect program, which aims to stabilise family relationships (where appropriate) and keep young people connected to education and employment (Mission Australia 2016). Additional supports for further education and training for adults with low educational attainment may also be required. SAEs can be used to enhance and expand preventative services based at educational facilities.

5.3 Primary prevention opportunities for the Australian government

Many national policies are less spatial in nature or targeting. Nevertheless, quantification at small-area levels provide critical information for monitoring impacts of policies and particularly in understanding differences in the efficacy of national policies across different population groups and areas.

Increasing incomes and coordinating efforts across all levels of government

In terms of national levers for primary prevention of homelessness risk, key priority areas include: increasing the levels of income support payments; increasing labour market earnings for the lowest paid; and playing a coordinating role in primary prevention policy.

The majority of those at-risk of homelessness are in low-income households. The significance of low-income is highlighted by the higher rates of rental stress and material deprivation experienced by those at-risk, such as skipping meals and being unable to heat their homes. Low-income is associated with both federal level and state level policies, such as the level at which benefits and social security payments are set; but, also the functioning of labour markets and industrial relations policy (typically an issue for states except for VIC), such as low pay, reduced working hours or insecure employment. An increase in income levels would reduce the risk of homelessness across the population, by improving the ability of individuals to obtain housing and maintain tenancies.

Given that many are in receipt of income support payments (both for those who are unemployed and those outside the labour force), an increase in the rate of these payments could make substantial impact in reducing the risk of homelessness. Around a quarter of the at-risk population are in paid employment suggesting a need to increase the rates of pay or income stability among this group. A substantial increase in income levels would help to boost purchasing power in the private rental market and reduce rental stress, as seen with Australian Government supplements during the pandemic (Pawson, Martin et al. 2021; Verdouw, Yanotti et al. 2020).

There is also a need for all levels of government to work together on homelessness primary prevention. The Australian Government is best positioned to play a coordinating role through the development of a national housing and homelessness policy.

The capacity to operationalise a definition of homelessness risk in HILDA provides important opportunities to monitor the size and profile of the national population at-risk of homelessness over time. This information will be useful in evaluating the impacts of primary prevention initiatives at the national level. Comparing differences in profile to those experiencing homelessness and those at-risk can suggest particular cohorts in need of targeted interventions to mitigate the risks they face.

5.4 Future research

The work presented in this report opens a space for further research on homelessness risk in Australia, which is essential to further developing evidence-based prevention policies.

Preliminary work on mobility among those at-risk (Batterham 2020) indicates this group are no more geographically mobile than those not at-risk but renting privately. Spatially informed prevention policies are clearly relevant.

More work is needed to understand why those at-risk transition into homelessness and how these reasons may vary for different groups within the population at-risk. It also seems likely that the drivers of transitions into and out of homelessness may vary between areas due to location-specific factors. For example, existing research suggests that local private rental market conditions have an impact on homeless exits (Johnson, Scutella et al. 2019) – with people more likely to exit homelessness in areas with lower rents. Other research suggests that rent levels have an impact on entries into homelessness, but only in greater capital city areas (Batterham 2020).

The definition of risk used is in its infancy and more work is needed to refine and improve its utility. Most existing risk mechanisms are weighted equally in the definition and work is needed to understand the relative priority of different risk mechanisms, not just on transitions into or out of homelessness, but in terms of the duration and complexity of homelessness. Our operationalisation of the 'tight housing market' criteria as experiencing rental stress has meant that income is prioritised as a risk mechanism. How and why other mechanisms should be weighted remains a question to be addressed in future empirical work.

As mentioned in the section on limitations, experiences of interpersonal violence were not included in the risk definition. There is ongoing debate about whether experiences of violence and abuse themselves constitute a form of homelessness or whether they merely place people at-risk of homelessness. Future research is needed to explore how experiences of violence and abuse might be included in the risk definition and the consequences of doing so. Relatedly, more research is needed exploring the dynamics of transitions into homelessness from home ownership—especially when that transition involves violence and abuse.

A consequence of the detailed data items required to operationalise risk in HILDA is that those under 15 years of age have not been included in our estimates of the at-risk population. One option is to include any children in at-risk households as also at-risk. However, this seems likely to produce an underestimate with certain cohorts of young people at particular risk. Specifically, youth identifying as sexually and gender diverse, as well as those experiencing violence in the home. Detailed work is needed in this area.

Much of this future work requires detailed longitudinal data. Specifically, it requires an indicator of homelessness in longitudinal surveys such as HILDA and the resurrection of a data collection such as Journeys Home (a longitudinal survey of people experiencing or vulnerable to homelessness).

5.5 Improved data access and coverage

The Census provides an invaluable resource for social and economic research in Australia. At the same time, it is impractical to significantly expand the collection of Census data. Survey data, such as HILDA, the Survey of Income and Housing and the General Social Survey are based on sampling to nationally representative standards. This leaves a gap in detailed social and economic data provision at small area levels. SAE techniques, such as those applied in this research, provide a solution to this gap. However, as highlighted by our results, the quality of SAE production remains dependent on the sampling frame and sampling uncertainties, as well as the quality and accessibility of auxiliary data from other data sources.

With respect to sampling in HILDA it is clear that areas that are of particular interest to homelessness primary prevention—such as remote and sparsely populated areas—are under-represented or not sampled at all (see Figure A2 in Appendix 2). Therefore, the production of SAEs in these areas becomes overly reliant on the ability of the model component of SAE technique to predict variables of interest (i.e. homelessness risk). The direct incorporation of spatial heterogeneity (representative of these areas) is reduced and/or the lower sample sizes in non-capital city areas are subject to greater variability and uncertainty. Sampling variability goes somewhat beyond the pure technical or methodological aspects of SAE production. Under-sampled areas are also areas that are of particular interest/value for targeting policies to 'closing the gap'. There is, therefore, an important ethical dimension to ensuring survey sample design reflects the presence, needs and rights of remote Indigenous communities.

Throughout this report, the key source of auxiliary (non-HILDA) data is the Census. However, the ability to fully utilise Census data is restricted by access constraints. In the first instance, the value of TableBuilder for the production of SAE is severely limited by restrictions on cross-tabulating some variables of interest (e.g. income and housing tenure). Obtaining custom data from the ABS is, in and of itself, straight forward, but comes at an additional cost that inhibits model refinement or adaptation. In the second instance, access to the 5 per cent unit record sample is unnecessarily restrictive and during COVID-19 significantly curtailed by the requirement to undertake specific face-to-face training (suspended during 2020) before accessing the data.

Finally, any work on the dynamics of risk and transitions into homelessness requires longitudinal or panel data. That includes those at-risk of homelessness and also those experiencing homelessness. Including an indicator of homelessness in HILDA would help with some of this work. However, the detailed understanding of homelessness made possible with Journeys Home is also critical.

5.6 Final remarks

This report offers the first full operationalisation of the Batterham (2019a) definition of homelessness risk and provides a national enumeration and profile of the population at-risk in Australia. The report also established the incidence of homelessness risk in small areas across Australia; and explored geographical differences in the profile of this population in small areas. Understanding the quantum, location and profile of those at-risk of homelessness can enable more nuanced development of primary prevention initiatives. This information can be used to measure impact and also to guide the spatial allocation of resources – in particular affordable rental housing, homeless secondary prevention interventions and health and disability services.

Two SAE techniques were used to develop estimates of the rate of homelessness risk (per 10,000 persons) and the number of people at-risk within each SA2/SA3. The different techniques used bring different strengths and weaknesses to the research. As discussed above, improving sampling coverage and/or access to existing Census data would enable researchers to improve small area estimates of homelessness risk.

To conclude, it is worthwhile to reiterate some of the methodological issues that remain in estimating homelessness risk in small areas across Australia. Poor coverage in remote areas of Australia in the HILDA survey has a flow-on effect to the reliability and precision of SAEs. While the unit-level approach enables us to predict risk at small areas, the model itself is aspatial. That is, the model assumes that the characteristics that predict being at-risk of homelessness do so in urban as well as regional and remote areas, and this may not be the case. It is conceivable that people's characteristics intersect with area-level factors in varying ways geographically. Indeed, Parkinson, Batterham et al. (2019) found that the relationship between rates of homelessness and area-based factors (including regional demographic profiles) changed across area types, with unique circumstances in remote areas. It seems plausible that this could be the same for risk of homelessness. This is an issue for small area estimation using the unit-level approach employed here. Alternative forms of unit-level approaches—such as those based on the 5 per cent Census sample—may potentially overcome this issue.

The area-level approach addresses this issue in part by combining direct estimates (at SA3 level) in HILDA (although subject to small sample issues) with regression synthetic estimates. The area-level model, in addition, includes an indicator for capital cities. Other spatial indicators were not found significant. However, the direct estimates these models draw on remain (to varying degrees) reliant on the sampling frame and variability of HILDA. This sampling frame is known to exclude remote and very remote parts of Australia, which limits the reliability of our estimates in these areas.

Confidence intervals indicate that our estimates from both approaches are less reliable in remote areas of Australia, particularly the northern remote areas. In essence, this suggests that our estimates for remote parts of Australia should be used with caution.

Notwithstanding issues around sampling, data availability and access, the results in this report demonstrate that a large number of Australians (1.5–2.0 million) are at-risk of homelessness. By definition, the at-risk population in this study lives in rental housing. The number, spatial distribution, and profile of those at-risk has enabled the identification of policy development options for the focus of primary prevention policy in Australia. Additional research is needed in a variety of areas to further explore risk and test and refine the definition of homelessness risk used in this study.

References

Allard, S., Tolman, R. and Rosen, D. (2003) 'Proximity to Service Providers and Service Utilization Among Welfare Recipients: The Interaction of Place and Race', *Journal of Policy Analysis and Management*, vol. 22, no. 4: 599–613.

Anglicare Australia (2021) Rental Affordability Snapshot, Anglicare Australia, Canberra.

- Apicello, J. (2010) 'A Paradigm Shift in Housing and Homeless Services: Applying the Population and High-Risk Framework to Preventing Homelessness', *The Open Health Services and Policy Journal*, vol. 30: 41–52.
- Australian Bureau of Statistics (2012) Census of Population and Housing: Estimating Homelessness, Cat. No. 2049.0, ABS, Canberra.
- Australian Bureau of Statistics (2015) General Social Survey: Summary Results, Australia, 2014, Cat. No 4159.0 [Online], ABS, Canberra, <u>http://www.abs.gov.au/ausstats/abs@.nsf/mf/4159.0</u>, accessed 16 August 2016.
- Australian Bureau of Statistics (2017) Household Expenditure Survey and Survey of Income and Housing, User Guide, Australia, 2015–16, Cat. No. 6503.0, ABS, Canberra, <u>https://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6503.0</u> Glossary12015-16?OpenDocument, accessed 3 June 2020.
- Australian Bureau of Statistics (2018a) Australian Statistical Geography Standard (ASGS), ABS, Canberra. Available at: https://www.abs.gov.au/websitedbs/d3310114.nsf/home/australian+statistical+geography+standard+(asgs).
- Australian Bureau of Statistics (2018b) Census of Population and Housing: Estimating homelessness, 2016, Cat. No 2049.0 [Online], ABS, <u>http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/2049.0Main+Features12016?OpenDocument</u>, accessed 3 June 2018.
- Australian Bureau of Statistics (2020) General Social Survey, Summary Results, Australia, 2019, Table 12, ABS, Canberra, https://www.abs.gov.au/statistics/people/people-and-communities/general-social-survey-summary-results-australia/ 2019#social-experiences, accessed 27 April 2021.
- Australian Institute of Health and Welfare (2013) Specialist Homelessness Services Collection Manual, Cat. No. HOU 268, AIHW, Canberra, http://www.aihw.gov.au/WorkArea/DownloadAsset.aspx?id=60129543495, accessed.6 June 2020
- Australian Institute of Health and Welfare (2015) Specialist Homelessness Services 2014–2015, Cat. No. WEB 99 [Online], AIHW, Canberra, <u>http://www.aihw.gov.au/homelessness/specialist-homelessness-services-2014-15/#toc</u>, accessed 12 March 2016.
- Australian Institute of Health and Welfare (2017) National Drug Strategy Household Survey 2016: detailed findings, Cat. No: PHE 214. <u>https://www.aihw.gov.au/reports/illicit-use-of-drugs/2016-ndshs-detailed/summary</u>, accessed 15 May 2020.
- Australian Institute of Health and Welfare (2020) Specialist Homelessness Services 2019–2020, Cat. No: HOU 322, AIHW, Canberra, https://www.aihw.gov.au/reports/homelessness-services/specialist-homelessness-services-annual-report/ contents/clients-services-and-outcomes, accessed 12 June 2020.
- Batterham, D. (2012) 'The Structural Drivers of Homelessness: Exploring the Relationships Between Housing Market, Labour Market, Demographics, Service Availability and Homelessness in Victoria', *Sixth Australasian Housing Researchers' Conference*, University of Adelaide.
- Batterham, D. (2019a) 'Defining "At-risk of Homelessness": Re-connecting Causes, Mechanisms and Risk', *Housing, Theory and Society*, vol. 36, no. 1: 1–24, doi:10.1080/14036096.2017.1408678.

- Batterham, D. (2019b) 'Homelessness as Capability Deprivation: A Conceptual Model', *Housing Theory and Society*, vol. 36, no. 3: 274–297.
- Batterham, D. (2020) Clarifying the relationship between homelessness and private rental markets in Australia: Capabilities, Risk, Mobility and Geography, PhD Thesis, Swinburne University of Technology.
- Batterham, D. (2021) 'Who is At -risk of Homelessness? Enumerating and Profiling the Population to Inform Prevention', *European Journal of Homelessness*, vol. 15, no. 1: 59–83.
- Beer, A., Baker, E., Lester, L. and Lyrian, D. (2019) 'The Relative Risk of Homelessness among Persons with a Disability: New Methods and Policy Insights', *International Journal of Environmental Research and Public Health*, vol. 16, no. 22: 4304-,4316 doi:10.3390/ijerph16224304.
- Beer, A., Baker, E., Mallett, S., Batterham, D., Pate, A. and Lester, L. (2011) Addressing Homelessness Amongst Persons with a Disability: Identifying and Enacting Best Practice, A FaHCSIA National Homelessness Research Project, The University of Adelaide, Hanover Welfare Services, Melbourne Citymission, The University of Melbourne, Australia.
- Blair, K., Dunn, K., Kamp, A. and Alam, O. (2017) *Challenging Racism Project 2015-16 National Survey Report,* Western Sydney University, Sydney.
- Bramley, G. and Fitzpatrick, S. (2017) 'Homelessness in the UK: Who is Most at-risk?', *Housing Studies*, vol. 33, no. 1: 96–116, doi:10.1080/02673037.2017.1344957.
- Buckner, J. C. (2008) 'Understanding the Impact of Homelessness on Children: Challenges and Future Research Directions', American Behavioral Scientist, vol. 51, no. 6: 721–736, doi:10.1177/0002764207311984.
- Burke, T., Nygaard, C. and Ralston, L. (2020) Australian home ownership: past reflections, future directions, AHURI Final Report No. 328, Australian Housing and Urban Research Institute Limited, Melbourne, <u>http://www.ahuri.edu.au/</u> <u>research/final-reports/328</u>, doi:10.18408/ahuri-5119801.
- Busch-Geertsema, V. and Fitzpatrick, S. (2008) 'Effective Homelessness Prevention? Explaining Reductions in Homelessness in Germany and England', *European Journal of Homelessness*, vol. 2: 69–95.
- Chamberlain, C., Johnson, G. and Theobald, J. (2007) *Homelessness in Melbourne: Confronting the Challenge*, Centre for Applied Social Research, RMIT University, Melbourne.
- Chigavazira, A., Johnson, G., Moschion, J., Scutella, R., Tseng, Y. and Wooden, M. (2013) *Journeys Home research report No. 2, Wave 1 and 2 findings,* Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Chigavazira, A., Johnson, G., Moschion, J., Scutella, R., Tseng, Y. and Wooden, M. (2014) *Journeys Home Research Report No. 5, Findings from Waves 1 to 5: Special Topics,* Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Cobb-Clark, D. A. (2019) Intergenerational Transmission of Disadvantage in Australia: Life Course Centre Working Paper Series, 2019, Institute for Social Science Research, The University of Queensland, Queensland.
- Cobb-Clark, D. A. and Zhu, A. (2015) Childhood Homelessness and Adult Employment: The Role of Education, Incarceration, and Welfare Receipt, Melbourne Institute Working Paper, No. 18/15, Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Commonwealth of Australia (2008) The Road Home: A National Approach to Reducing Homelessness, Commonwealth of Australia, Canberra.
- Commonwealth of Australia (2017) A New National Housing and Homelessness Agreement, Federal Budget Fact Sheet 1.7 [Online], Commonwealth of Australia, Canberra, <u>http://www.budget.gov.au/2017-18/content/glossies/factsheets/</u> <u>download/FS_17_Housing_Affordability.pdf</u>, accessed 19 July 2017.
- Commonwealth of Australia (Department of Health) (2017) *National Drug Strategy 2017-2026, Publications Number:* 11814, Commonwealth of Australia (Department of Health), Canberra, available at: <u>https://www.health.gov.au/sites/</u> <u>default/files/national-drug-strategy-2017-2026_1.pdf</u>.
- Culhane, D., Metraux, S. and Byrne, T. (2011) 'A Prevention-Centered Approach to Homelessness Assistance: A Paradigm Shift?', *Housing Policy Debate*, vol. 21, no. 2: 295–315, doi:10.1080/10511482.2010.536246.
- D'Souza, G., Tanton, R., Abello, A., Mohanty, I. and Thurecht, L. (2013) *Geographical Analysis of the Risk of Homelessness,* NATSEM, University of Canberra, Canberra.

- Department for Communities and Local Government (England) (2012) *Making Every Contact Count: A Joint Approach to Preventing Homelessness*, Department for Communities and Local Government London, U.K., <u>https://www.gov.uk/</u> <u>government/publications/making-every-contact-count-a-joint-approach-to-preventing-homelessness</u>, accessed 12 August 2016.
- Department of Communities (WA) (2020) All paths lead to a home: Western Australia's 10 year Strategy on Homelessness, 2020-2030, Government of Western Australia, Perth.
- Department of Health and Human Services (VIC) (2021) Rental Report: December quarter 2020, Department of Health and Human Services, Melbourne, https://www.dhhs.vic.gov.au/publications/rental-report, accessed 15 October 2021.
- Department of Human Services (VIC) (2010) A Better Place: Victorian Homelessness 2020 Strategy New Directions to Reduce Homelessness in Victoria, Victorian Government Department of Human Services, Melbourne.
- Durso, L. E. and Gates, G. J. (2012) Serving Our Youth: Findings from a National Survey of Services Providers Working with Lesbian, Gay, Bisexual and Transgender Youth Who Are Homeless or At-risk of Becoming Homeless, Williams Institute, UCLA with True Colors Fund and The Palette Fund, Los Angeles, available at <u>http://escholarshi:org/uc/ item/80x75033</u>.
- Edgar, W., Harrison, M., Watson, and Busch-Geertsema, V. (2007) *Measurement of Homelessness at European Union Level*, European Commission, Employment Social Affairs and Equal Opportunities DG, Brussels.
- Fay, R. and Herriot, R. (1979) 'Estimates of income for small places: An application of James–Stein procedures to census data', *Journal of the American Statistical Association*, vol. 74: 269-277.
- Fertig, A. R. and Reingold, D. A. (2008) 'Homelessness Amoung At-risk Families: A Study of 20 American Cities', *The Social Service Review*, vol. 82, no. 3: 485–510.
- Fitzpatrick, S. and Christian, J. (2006) 'Comparing Homelessness Research in the US and Britain', *International Journal of Housing Policy*, vol. 6, no. 3: 313–333.
- Flatau, P., Zaretzky, K., Brady, M., Haigh, Y. and Martin, R. (2008) The cost-effectiveness of homelessness programs: a first assessment, AHURI Final Report No. 119, Australian Housing and Urban Research Institute Limited, Melbourne, <u>https://www.ahuri.edu.au/research/final-reports/119</u>.
- Gaetz, S. (2012) The Real Cost of Homelessness: Can We Save Money by Doing the Right Thing?, Canadian Homelessness Research Network Press, Toronto.
- Gaetz, S. and Dej, E. (2017) A New Direction: A Framework for Homelessness Prevention, COH Research Report No. 15, Canadian Observatory on Homelessness Press, Toronto.
- Goodman, L., Saxe, L. and Harvey, M. (1991) 'Homelessness as Psychological Trauma Broadening Perspectives', American Psychologist, vol. 46, no. 11: 1219–1225.
- Government of South Australia (2019) Our Housing Future 2020-2030, Government of South Australia, Adelaide.
- Halbmeier, C., Kreutzmann, A.K., Schmid, T. and Schröder, C. (2019) 'The fayherriot command for estimating small-area indicators', *The Stata Journal*, vol. 19, no. 3: 626–644, doi:10.1177/1536867X19874238.
- Hulse, K., Reynolds, M., Nygaard, C., Parkinson, S. and Yates, J. (2019) The supply of affordable private rental housing in Australian cities: short-term and longer-term changes, AHURI Final Report No. 323, Australian Housing and Urban Research Institute Limited, Melbourne, <u>http://www.ahuri.edu.au/research/final-reports/323</u>, doi: 10.18408/ahuri5120101.
- Hulse, K., Reynolds, M. and Yates, J. (2014) Changes in the Supply of Affordable Housing in the Private Rental Sector for Lower Income Households, 2006–11, AHURI Final Report No. 235, Australian Housing and Urban Research Institute, Melbourne. <u>https://www.ahuri.edu.au/research/final-reports/235</u>.

Johnson, G. and Chamberlain, C. (2011) 'Are the Homeless Mentally III?', Australian Journal Of Social Issues, vol. 46, no. 1: 29–48.

- Johnson, G. and Tseng, Y. (2014) Social Networks and Social Support, in A. Chigavazira, G. Johnson, J. Moschion, R. Scutella, Y., Tseng and M. Wooden (eds), *Journeys Home Research Report No. 5, Findings from Waves 1 to 5: Special Topics*, Melbourne Institute of Applied Economic and Social Research, Melbourne, 37–52.
- Johnson, G., Tseng, Y., Scutella, R. and Wood, G. (2015) *How do Structural Factors and Individual Characteristics Interact to Effect Homelessness: A Provisional Analytical Framework*, AHURI Positioning Paper 161, Australian Housing and Urban Research Institute, Melbourne, <u>https://www.ahuri.edu.au/research/final-reports/248</u>.

- Johnson, G., Scutella, R., Tseng, Y. P. and Wood, G. (2019) 'How do housing and labour markets affect individual homelessness?', *Housing Studies*, vol. 34, no. 7: 1089–1116, doi:10.1080/02673037.2018.1520819.
- Kirkman, M., Keys, D., Bodzak, D. and Turner, A. (2010) 'Are We Moving Again This Week? Children's Experiences of Homelessness in Victoria, Australia', Social Science and Medicine, vol. 70, no. 7: 994-1001, doi:10.1016/j. socscimed.2009.12.004.
- Kolar, V. (2019) Evaluation Report, 'No Child Misses Out': Education Pathways Program, Launch Housing, Melbourne.
- Lawson, J., Pawson, H., Troy, L., van den Nouwelant, R. and Hamilton, C. (2018) Social housing as infrastructure: an investment pathway, AHURI Final Report 306, Australian Housing and Urban Research Institute Limited, Melbourne. <u>https://www.ahuri.edu.au/research/final-reports/306</u> doi: 10.18408/ahuri-5314301
- Lee, B. A., Tyler, K. A. and Wright, J. D. (2010) 'The New Homelessness Revisited', *Annual Review of Sociology*, vol. 36, no. 1: 501-521, doi:10.1146/annurev-soc-070308-115940.
- Lester, L. and Faulkner, D. (2020) At-risk: Understanding the population size and demographics of older women at-risk of homelessness in Australia, Social Ventures Australia, Sydney.
- Lohr, S. (2010) Sampling: design and analysis, Brooks/Cole, Cengage Learning, Boston, MA.
- MacKenzie, D. (2018) Interim report: The Geelong Project 2016–2017, Swinburne University and Barwon Child Youth and Family Services, Melbourne, apo.org.au/node/133006
- MacKenzie, D., Flatau,P:, Steen, A. and Thielking, M. (2016) The cost of youth homelessness in Australia, research briefing, Swinburne University, Melbourne, available at: https://apo.org.au/node/63479.
- Mallett, S., Bentley, R., Baker, E., Mason, K., Keys, D., Kolar, V. and Krnjacki, L. (2011) *Precarious Housing and Health Inequalities: What are the Links?*, Hanover Welfare Services, University of Melbourne, University of Adelaide, Melbourne Citymission, Australia.
- Martinez Jr, A. (2019) 'Small area estimation and big data', *International Workshop on SDG Disaggregation*, 28-29 January, available at <u>https://unstats.un.org/sdgs/files/meetings/sdg-inter-workshop-jan-2019/Session%207.a_ADB_Small%20</u> <u>Area%20Estimation%20-%20jan29.pdf.</u>
- Mavromas, K., King, D., Macaitis, K., Mallett, S. and Deb, B. (2011) *Finding Work: Homelessness and Unemployment,* National Institute of Labour Studies, Flinders University, Adelaide.
- McNair, R., Andrews, C., Parkinson, S. and Dempsey, D. (2017) GALFA LGBTI Homelessness Research Project Stage 1 Report: LGBTI Homelessness: Preliminary findings on risks, service needs and use, University of Melbourne, Swinburne University of Technology, Melbourne, <u>http://www.lgbtihomeless.com/.accessed</u> 9 June 2020.
- Min Park, J., Fertig, A. R. and Metraux, S. (2011) 'Changes in Maternal Health and Health Behaviors as a Function of Homelessness', Social Service Review, vol. 85, no. 4: 565–585, doi:10.1086/663636.
- Mission Australia (2016) Reconnect evaluation 2016, Mission Australia, Sydney, available at: <u>https://www.missionaustralia.</u> <u>com.au/publications/research/homelessness-research</u>.
- National Housing Finance Investment Corporation (2020) State of the nation's housing National Housing Finance Investment Corporation, Sydney.
- NSW Government (2019) NSW Homelessness Strategy 2018–2023, NSW Government, Sydney, available at: <u>https://www.facs.nsw.gov.au/download?file=590515</u>.
- O'Flaherty, B. (2004) 'Wrong Person and Wrong Place: For Homelessness, the Conjunction is what Matters', *Journal of Housing Economics*, vol. 13, no. 1: 1–15, doi:10.1016/j.jhe.2003.12.001.
- Ong, R., Wood, G. and Colic-Peisker, V. (2015) 'Housing older Australians: Loss of Homeownership and Pathways into Housing Assistance', *Urban Studies*, vol. 52, no. 16: 2979–3000, doi: 10.1177/0042098014550955.
- Parkinson, S., Batterham, D., Reynolds, M. and Wood, G. (2019) The Changing Geography of Homelessness: A Spatial Analysis from 2001 to 2016, AHURI Final Report No. 313, Australian Housing and Urban Research Institute Limited, Melbourne. <u>https://www.ahuri.edu.au/research/final-reports/313</u>, doi: 10.18408/ahuri-5119601.
- Parsell, C. and Marston, G. (2012) 'Beyond the At-risk Individual: Housing and the Eradication of Poverty to Prevent Homelessness', *Australian Journal Of Public Administration*, vol. 71, no. 1: 33–44, doi:10.1111/j.1467-8500.2012.00758.x.
- Pawson, H. (2007) 'Local authority homelessness prevention in england: Empowering consumers or denying rights?', Housing. Studies., vol. 22, no. 6: 867–883, doi:10.1080/02673030701387572.
- Pawson, H., Martin, C., Sisson, A., Thompson, S., Fitzpatrick, S. and Marsh, A. (2021) COVID-19: Rental housing and homelessness impacts – an initial analysis'; ACOSS/UNSW Poverty and Inequality Partnership Report No. 7, ACOSS/UNSW, Sydney, <u>http://povertyandinequality.acoss.org.au/wp-content/uploads/2021/02/COVID19_Rental-housing-and-homelessness-impacts_report-1.pdf</u>, accessed 27 April 2021.
- Pfeffermann, D. (2013) 'New Important Developments in Small Area Estimation', Statistical Science, vol. 28, no. 1: 40-68.
- Pleace, N. (2000) 'The New Consensus, the Old Consensus and the Provision of Services for People Sleeping Rough', Housing Studies, vol. 15, no. 4: 581–594, doi:10.1080/02673030050081113.
- Pleace, N., Baptista, I., Benjaminsen, L. and Busch-Geertsema, V. (2013) The Costs of Homelessness in Europe, An Assessment of the Current Evidence Base, EOH Comparative Studies on Homelessness, European Observatory on Homelessness, Brussels, available at: <u>https://www.feantsaresearch.org/download/feantsa-studies_03_web8038170339305812402.pdf</u>.
- Rahman, A. and Harding, A. (2014) 'Spatial analysis of housing stress estimation in Australia with statistical validation', Australasian Journal of Regional Studies, vol. 20, no. 3: 452–486.
- Ray, N. (2006) Lesbian, Gay, Bisexual and Transgender Youth: An Epidemic of Homelessness, National Gay and Lesbian Task Force Policy Institute and the National Coalition for the Homeless, New York.
- Scutella, R. and Johnson, G. (2012) Locating and Designing 'Journeys Home': A Literature Review, Melbourne Institute Working Paper Series, Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Scutella, R., Johnson, G., Moschion, J., Tseng, Y. and Wooden, M. (2012) *Journeys Home Research Report No. 1, Wave 1 Findings*, Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Shinn, M., Baumohl, J. and Hopper, K. (2001) 'The Prevention of Homelessness Revisited', *Analyses of Social Issues and Public Policy*, vol. 1, no. 1: 95–127, doi:10.1111/1530-2415.00006.
- Spinney, A., Beer, A., MacKenzie, D., McNelis, S., Meltzer, A., Muir, K., Peters, A. and valentine, k. (2020) Ending homelessness in Australia: A redesigned homelessness service system, AHURI Final Report No. 347, Australian Housing and Urban Research Institute Limited, Melbourne, <u>https://www.ahuri.edu.au/research/final-reports/347</u>, doi:10.18408/ahuri5119001.
- Spooner, C. and Hetherington, K. (2004) Social Determinants of Drug Use, Technical Report Number 228, National Drug and Alcohol Research Centre, University of New South Wales, Sydney.
- Stone, W., Sharam, A., Wiesel, I., Ralston, L., Markkanen, S. and James, A. (2015) Accessing and Sustaining Private Rental Tenancies: Critical Life Events, Housing Shocks and Insurances, AHURI Final Report No. 259, Australian Housing and Urban Research Institute Limited, Melbourne, <u>https://www.ahuri.edu.au/research/final-reports/259</u>.
- Summerfield, M., Freidin, S., Hahn, M., La, N., Li, N., Macalalad, N., O'Shea, M., Watson, N., Wilkins, R. and Wooden, M. (2016) *HILDA User Manual–Release 15*, Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Tzavidis, N., Zhang, L., Luna Hernandez, A., Schmid, T. and Rojas-Perilla, N. (2018) 'From start to finish: a framework for the production of small area official statistics', *Journal of the Royal Statistical Society. Series A: Statistics in Society,* vol.181, no.4: 927–979. doi:10.1111/rssa.12364.
- United States Interagency Council on Homelessness (2010) Opening Doors: Federal Strategic Plan to Prevent and End Homelessness, United States Interagency Council on Homelessness, Washington, D.C., <u>https://www.usich.gov/opening-doors</u>, accessed 12 August 2016.
- Verdouw, J., Yanotti, M., De Vries, J., Flanagan, K. and Ben Haman, O. (2020) *Pathways to regional recovery from COVID-19*, AHURI Discussion Paper, Australian Housing and Urban Research Institute Limited, Melbourne, <u>https://</u> <u>www.ahuri.edu.au/research/covid-19/pathways-to-regional-recovery-from-covid-19</u>, doi:10.18408/ahuri4126501.
- Vinson, T., Rawsthorne, M., Beavisand, A. and Ericson, M. (2017) *Dropping off the edge 2015: Persistent communal disadvantage in Australia, Jesuit Social Services and Catholic Social Services Australia, available at: <u>https://dote.org.au/findings/full-report/</u>.*
- Walsh, T. (2011) Homelessness and the Law, The Federation Press, Annandale.

- Watson, N. and Wooden, M. (2002) The Household, Income and Labour Dynamics (HILDA) Survey: Wave 1 Methodology, HILDA Project Technical Paper Series, No. 1/02, May 2002, Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Westmore, T. and Mallett, S. (2011) Ageing in What Place: The Experience of Housing Crisis and Homelessness for Older Victorians, Hanover Welfare Services, Melbourne.
- Wiesel, I. (2014) 'Mobilities of Disadvantage: The Housing Pathways of Low-income Australians', Urban Studies, vol. 51, no. 2: 319–334, doi: 10.1177/0042098013489739.
- Wilkins, R. and Lass, I. (2018) The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Waves 1 to 16, Melbourne Institute: Applied Economic and Social Research, University of Melbourne, Melbourne.
- Wood, G., Batterham, D., Cigdem, M. and Mallett, S. (2014) The Spatial Dynamics of Homelessness in Australia 2001-2011, Final Report No. 227, Australian Housing and Urban Research Institute Limited, Melbourne. <u>https://www.ahuri.edu.au/research/final-reports/227</u>.
- Wood, G., Batterham, D., Cigdem, M. and Mallett, S. (2015) The Structural Drivers of Homelessness in Australia 2001-2011, Final Report No. 238, Australian Housing and Urban Research Institute Limited, Melbourne, <u>https://www.ahuri.edu.au/research/final-reports/238</u>.
- Wood, G., Smith, S. J., Ong, R. and Cigdem, M. (2013) The Edges of Home Ownership, AHURI Final Report No. 216, Australian Housing and Urban Research Institute Limited, Melbourne, <u>https://www.ahuri.edu.au/research/final-reports/216</u>.
- Yates, J. and Gabriel, M. (2006) Housing Affordability in Australia, National Research Venture 3: Housing Affordability for Lower Income Australians, Research Paper 3, Australian Housing and Urban Research Institute Limited, Melbourne https://www.ahuri.edu.au/__data/assets/pdf_file/0018/2682/NRV3_Research_Paper_3.pdf.
- Zaretzky, K. and Flatau, : (2013) The cost of homelessness and the net benefit of homelessness programs: a national study, AHURI Final Report No.218, Australian Housing and Urban Research Institute Limited, Melbourne. https://www.ahuri.edu.au/research/final-reports/218.
- Zaretzky, K., Flatau, :, Clear, A., Conroy, E., Burns, L. and Spicer, B. (2013) The cost of homelessness and the net benefit of homelessness programs: a national study, AHURI Final Report No.205, Australian Housing and Urban Research Institute Limited, Melbourne, <u>https://www.ahuri.edu.au/research/final-reports/218</u>.

Appendix 1: Detailed SAE modelling results

Below we report the outcome of estimating Equation 1, our unit-level (probit) model. Table A1 summarises the regression output. The dependent variable was the risk measure as operationalised in HILDA (and detailed in Chapter 2). This model was restricted to those who were renting, occupying a dwelling rent-free or occupying a dwelling under a life tenure scheme²⁷. The psudo-r2 of the model is 0.34.

Table A1: Unit-based (probit) results using HILDA 2016 data

VARIABLES	Coefficient (β)	St Error
Usual hours worked<35/wk	0.589***	0.058
Unemployed/not in the labour force	0.444***	0.057
Household type (one parent, group, lone or multi-fam household)	0.626***	0.053
Disability present	0.836***	0.104
Low household income	1.055***	0.053
Indigenous	0.519***	0.097
Number of children ever had 5+	0.424***	0.112
Constant	-1.688***	0.054
Wald chi2	1308.33***	
Log pseudolikelihood	-2661.9701	
Pseudo R2	0.3443	
Observations	6,017	

Notes: *** p<0.01, ** p<0.05, * p<0.1.

Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17.

The FH estimations are based on the area-level model described in Section 3.2. Based on the model diagnostics, estimates are only presented for SA3 level results. The area-level model was also fitted to SA2 level data, but neither of the error terms in Equation 2 and Equation 3 met the model assumptions. The Moran test for spatial dependence (error lag) was not statistically significant (p=0.77).

²⁷ We also ran a model which included a tenure variable which explained much more of the variance in the risk indicator (pseudo R squared = 0.61). However, as only those who were renting (including those living rent free or occupying a dwelling under a life tenure scheme) could be at-risk according to the definition of risk that we used, we proceeded with the model focussed on this group only. Results that include the tenure indicator are available from the authors on request.

Table A2 below details the regression results and diagnostics for the SA3 level results. The predicted at-risk values obtained from the area-level model is a weighted average of the at-risk proportions estimated directly from the population weighted HILDA sample, and the synthetic at-risk estimator generated by the regression model. Modelling followed a general to specific strategy, with insignificant variables removed sequentially.

Table A2: Area-based (FH) model results using HILDA 2016 and Census 2016 data

	Coefficient (β)	St Error
Never married	1.968***	0.292
Year of arrival before 1945	-7.353**	3.130
Not in the labour force	0.892***	0.211
Population volunteering	0.773***	0.183
Total number of children 1 or 3	1.943**	0.816
Private rental tenure	0.607***	0.150
Group household	-1.855**	0.759
Manufacturing employment	-0.924***	0.282
Accommodation and hospitality employment	-1.031***	0.341
Ln Family weekly income, median	-0.217***	0.069
Capital city (1=yes)	0.059***	0.022
Constant	0.251	0.766
Adj R ²	0.32	
FH R ²	0.53	
Number of SAs	292	
Out of sample SAs	42	
Variance of the random effect $(\hat{\sigma}_u^2)$	0.0047	
Residuals e _{sak}	1.591	0.138
Random effects <i>u</i> _{sAk}	9.827***	0.000

Notes: Clustered standard errors in column 3, *** p<0.01, ** p<0.05, * p<0.1.

 $\hat{\gamma}_{sak} = \hat{\sigma}_{u}^{2} / (\hat{\sigma}_{u}^{2} + \hat{\sigma}_{\varepsilon_{sak}}^{2}) \hat{\gamma}_{sak}^{-1}$ Min (0.039); 5% (0.1143); Median (0.4045); 95% (0.7182); Max (0.9696).

Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17.

HILDA only provides observations on a subset of SA3s in Australia. For the remaining SA3s (42) the at-risk measure is entirely based on the models-driven synthetic at-risk estimator. Overall, the results in Table A2 shows that areas with a greater proportion of residents long established in Australia (arriving before 1945), higher family incomes, greater proportion of group households and greater proportions of residents employed in manufacturing or accommodation/hospitality sectors tend to have lower proportions of people at-risk of homelessness. Conversely, areas with a higher proportion of private rental, capital city SA3s, greater proportion of residents not in the labour force and greater proportion of residents involved in volunteering activities, tend to have higher proportions of people at-risk. Notably, the primary objective of the model is to explain variation in the at-risk measure – there is no suggestion of causality.

Overall the regression model explains some 32 per cent of the variation in the at-risk measure. The improvement in the model fit, as a result of combining the direct estimates with the regression-synthetic estimates, is shown by the FH r-squared. When taking into consideration that some of the variation in the at-risk measure is the result of sampling error, the model fit increases to 53 per cent. Notwithstanding the improvement in model fit there is some model misspecification. The final two rows in Table X report the Shapiro-Wilk tests for normality. The residuals ($e_{s_{Ak}}$) meet the model assumptions requirement, but the random effects error ($u_{s_{Ak}}$) cannot be considered normally, identically and independently distributed.

Together with the sampling error, the variance of the random effect (∂_u^2) determines the weighing of the direct (HILDA) and regression-synthetic predictions. For small sample sizes a larger weight is given to the regression-synthetic prediction. For the model in Table A2 the distribution of this weight ranges from 0.0339 to 0.9696 (see note to Table A2). The impact of the adjustment (weighing) is shown in Figure A3 (panel A), Panel B shows the range of the 95 per cent confidence interval for the at-risk estimate, ordered by HILDA sample size. A ratio of 1 indicates that the direct (HILDA) estimate and the predicted FH estimate are the same. In this case there is considerable variation around this benchmark, although declining with the increase in HILDA sample size. Panel B shows that estimates improve in precision with larger samples.

Figure A1: FH SAE estimate comparison with direct estimates (HILDA)



Source: Author's calculations derived from: ABS 2016 Census of Population and Housing, and HILDA survey, waves 16 and 17.

Appendix 2: HILDA sampling coverage

Figure A2: HILDA national sampling coverage, SA2 level (2016)

Source: HILDA survey wave 16, ABS SA2 digital Census boundaries, 2016.

Appendix 3: SAE data tables

Small Area estimates are provided for each SA2 and SA3 in Table A4 and Table A5 respectively. Table A3 below lists the names and definitions of the variables in that excel sheet.

Please note, both area-level and unit-level approaches produced a proportion of people at-risk in each area. The rate of homelessness risk is calculated by multiplying this proportion by 10,000, while the number at-risk is calculated by multiplying the proportion by the relevant total population in that SA3.

Variable name	Definition
SA2_5DIGITCODE_2016^	The 5 Digit SA2 2016 code from the ASGS
SA2_name	The name of that SA2
SA3_CODE_2016^	The 5 Digit SA3 2016 code from the ASGS
SA3_NAME_2016^	The name of that SA3
Unit-level_Probit_totalpopulation	The total population for each SA2/SA3 used to calculate the number of persons aged 15 years and over at-risk for the unit-level (probit) estimates
Unit-level_probit_RATE	The rate of homelessness risk per 10,000 persons, aged 15 years and over, per SA2/SA3 from the unit-level (probit) estimates
Unit-level_probit_RATE_LowerCl	The lower confidence interval for the rate of homelessness risk per 10,000 persons, aged 15 years and over, per SA2/SA3 from the unit-level (probit) estimates
Unit-level_probit_RATE_UpperCl	The upper confidence interval for the rate of homelessness risk per 10,000 persons, aged 15 years and over, per SA2/SA3 from the unit-level (probit) estimates
Unit-level_probit_number	The number of persons aged 15 years and over at-risk of homelessness per SA2/SA3 based on the unit-level (probit) estimates
Unit-level_probit_number_LowerCl	Number of persons aged 15 years and over at-risk of homelessness per SA2/SA3 based on the lower Cl unit-level (probit) estimates
Unit-level_probit_number_UpperCl	Number of persons aged 15 years and over at-risk of homelessness per SA2/SA3 based on the upper Cl unit-level (probit) estimates
Area-level_FH_totalpopulation	The total population for each SA2/SA3 used to calculate the number of persons aged 15 years and over at-risk for the area-level (FH) estimates
Area-level_FH_RATE	The rate of homelessness risk per 10,000 persons, aged 15 years and over, per SA2/SA3 from the area-level (FH) estimates
Area-level_FH_RATE_LowerCl	The lower confidence interval for the rate of homelessness risk per 10,000 persons, aged 15 years and over, per SA2/SA3 from the area-level (FH) estimates
Area-level_FH_RATE_UpperCl	The upper confidence interval for the rate of homelessness risk per 10,000 persons, aged 15 years and over, per SA2/SA3 from the area-level (FH) estimates
Area-level_FH_number	The number of persons aged 15 years and over at-risk of homelessness per SA2/SA3 based on the area-level (FH) estimates
Area-level_FH_number_LowerCl	Number of persons aged 15 years and over at-risk of homelessness per SA2/SA3 based on the lower CIT area-level (FH) estimates
Area-level_FH_number_UpperCl	Number of persons aged 15 years and over at-risk of homelessness per SA2/SA3 based on the upper CI area-level (FH) estimates

Table A3: The variable names and definitions contained in Table A4 and Table A5

Source: Authors' naming and calculation. Except ^ which are standard ASGS variable naming conventions.

Table A4: SA2 level estimates

				Unit-	level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGH	SA2 nome	Unit-level_Probit_	probit_	RAIE_	RAIE_	probit_	number_	number_
	SAZ_hame			LOWERCI		140	LOWERCI	102
11007	Braidwood	2922	508.6	420.2	020.5	149	123	183
11008	Carabar	6285	888.2	722.0	1105.6	558	454	1050
11009	Queanbeyan	8678	1148.6	948.2	1440.2	997	823	1250
11010	Queanbeyan - East	3749	1183.2	977.2	1487.0	444	366	557
11011	Queanbeyan Region	12559	176.5	146.4	228.1	222	184	286
11012	Queanbeyan West - Jerrabomberra	9213	399.5	329.5	519.4	368	304	478
11013	Bombala	1818	586.3	481.5	734.2	107	88	133
11014	Cooma	5264	1010.0	827.2	1242.8	532	435	654
11015	Cooma Region	2526	314.7	258.4	393.9	79	65	100
11016	Jindabyne - Berridale	5223	588.9	489.5	745.1	308	256	389
11017	Batemans Bay	5941	1200.7	969.5	1492.9	713	576	887
11018	Batemans Bay - South	6631	960.4	780.0	1194.6	637	517	792
11019	Bega - Tathra	6282	928.6	761.2	1141.9	583	478	717
11020	Bega-Eden Hinterland	6723	423.8	346.9	527.4	285	233	355
11021	Broulee - Tomakin	2536	769.0	631.1	948.6	195	160	241
11023	Eden	2480	1256.5	1022.0	1540.9	312	253	382
11024	Eurobodalla Hinterland	2600	600.5	488.6	738.8	156	127	192
11025	Merimbula - Tura Beach	8298	783.9	640.6	975.7	650	532	810
11026	Moruya - Tuross Head	6290	898.1	731.9	1100.6	565	460	692
11027	Narooma - Bermagui	7133	856.3	694.4	1055.7	611	495	753
11028	Avoca Beach - Copacabana	5339	452.3	373.4	574.9	242	199	307
11029	Box Head - MacMasters Beach	8318	396.0	323.4	498.0	329	269	414
11030	Calga - Kulnura	3752	603.5	493.2	765.1	226	185	287
11030	Frina - Green Point	11119	547.7	446.8	686.0	609	497	763
11032	Gosford - Springfield	1/10/0	1/03/	1151.3	17/1 8	2092	1717	2597
11022	Kariong	4720	E10 0	1101.0	602.2	2052	210	200
11024	Kingumbar - Pickatts Vallay	5762	920.7	677.2	1020.7	470	200	520
11034	Nevere	5705	630.7	450.5	1030.7	479	390	2594
11035	Narara	5095	557.9	452.5	705.9	284	231	360
11036	Niagara Park - Lisarow	6079	500.6	410.6	627.1	304	250	381
11037	Point Clare - Koolewong	4848	624.9	510.6	/84.8	303	248	380
11038	Saratoga - Davistown	5291	489.2	398.3	620.9	259	211	329
11039	Ierrigal - North Avoca	10294	528.8	434.7	681.6	544	448	702
11040	Umina - Booker Bay - Patonga	18631	1075.4	876.9	1338.9	2004	1634	2494
11041	Wamberal - Forresters Beach	7151	444.0	364.6	564.2	317	261	403
11042	Woy Woy - Blackwall	11236	1141.7	929.3	1415.0	1283	1044	1590
11043	Wyoming	8898	877.1	710.9	1099.7	780	633	979
11044	Bateau Bay - Killarney Vale	16920	817.4	664.7	1017.9	1383	1125	1722
11045	Blue Haven - San Remo	8086	952.0	767.7	1201.0	770	621	971
11046	Budgewoi - Buff Point - Halekulani	7298	859.6	698.4	1068.7	627	510	780
11047	Chittaway Bay - Tumbi Umbi	11676	541.0	439.8	683.5	632	514	798
11048	Gorokan - Kanwal - Charmhaven	17234	1006.6	815.6	1254.2	1735	1406	2161
11049	Jilliby - Yarramalong	2578	278.7	229.9	347.0	72	59	89
11050	Lake Munmorah - Mannering Park	8488	552.4	450.5	690.4	469	382	586
11051	Ourimbah - Fountaindale	3723	545.8	448.1	686.5	203	167	256
11052	Summerland Point - Gwandalan	4430	623.0	510.8	770.8	276	226	341
11053	The Entrance	11863	1583.5	1289.7	1967.8	1879	1530	2334
11054	Toukley - Norah Head	7840	1134.6	922.0	1404.0	889	723	1101
11055	Tuggerah - Kangy Angy	3996	729.2	595.1	932.5	291	238	373
11056	Warnervale - Wadalba	10946	720.5	582.0	924.0	789	637	1011
11057	Wyong	6730	1361.6	1102.9	1691.0	916	742	1138
11058	Bathurst	18295	1150.5	937.8	1429.7	2105	1716	2616
11059	Bathurst - East	7969	817.9	660.2	1020.7	652	526	813
11060	Bathurst Region	5296	330.6	271.6	412.5	175	144	218
11061	Oberon	3625	653.2	534.3	816.3	237	194	296
11062	Condobolin	4849	1007.2	804 5	1243.6	488	390	603
11063	Cowra	7036	1093.1	885.4	1341 2	769	623	944
		,000	1000.1	555.4		,05	020	544

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGH	SA2 name	Unit-level_Probit_	probit_	RATE_	RAIE_	probit_	number_	number_
11064	Cowra Bogion	4104	595 2	190.9	724.0	245	202	204
11065	Forbos	7572	000 /	700.0	1005.2	672	547	020
11065	Cronfell	2810	603.4	F10.7	765.6	175	144	029
11067		2010	1044 5	940 F	100.0	2/5	£94	1025
11067	Parkes (NSW)	8046	1044.5	649.5	1280.3	101	152	1035
11068		2002	747.2	600.3	920.5	191	153	235
11069	West wyalong	4359	612.9	500.7	/66.1	267	218	334
11070	Litngow	10062	1087.8	884.7	1338.3	1095	890	1347
11071	Lithgow Region	6349	483.9	393.4	599.5	307	250	381
11072	Mudgee	85/6	1015.0	828.6	1267.0	870	/11	1087
11073	Mudgee Region - East	2/1/	879.4	/14./	1089.0	239	194	296
11074	Mudgee Region - West	//41	555.1	451.4	694.2	430	349	537
11076	Blayney	5389	673.1	551.2	835.3	363	297	450
11077	Orange	14518	1216.1	988.3	1505.7	1766	1435	2186
11078	Orange - North	14032	832.5	675.7	1048.2	1168	948	1471
11079	Orange Region	8455	431.8	353.4	542.2	365	299	458
11080	Grafton	14241	1255.6	1018.6	1540.4	1788	1451	2194
11081	Grafton Region	11935	556.7	450.0	689.7	664	537	823
11082	Maclean - Yamba - Iluka	13147	972.3	789.2	1202.5	1278	1038	1581
11083	Bellingen	4315	813.0	664.0	1015.2	351	287	438
11084	Coffs Harbour - North	13350	1359.4	1105.2	1681.5	1815	1475	2245
11085	Coffs Harbour - South	8147	1380.5	1127.0	1702.5	1125	918	1387
11086	Coramba - Nana Glen - Bucca	2878	519.1	421.8	656.2	149	121	189
11087	Dorrigo	2526	752.9	614.3	932.2	190	155	235
11088	Korora - Emerald Beach	6462	570.1	465.0	725.9	368	300	469
11089	Sawtell - Boambee	14853	1068.3	868.3	1321.1	1587	1290	1962
11090	Urunga	3752	846.8	694.9	1046.9	318	261	393
11091	Woolgoolga - Arrawarra	9608	856.0	693.7	1074.7	822	667	1033
11092	Bourke - Brewarrina	2782	1677.2	1299.4	2097.8	467	361	584
11093	Cobar	3315	906.7	734.9	1138.6	301	244	377
11094	Coonamble	3032	1118.2	880.3	1385.5	339	267	420
11095	Nyngan - Warren	3615	926.9	745.9	1154.3	335	270	417
11096	Walgett - Lightning Ridge	4653	1621.4	1269.1	2017.0	754	591	938
11097	Broken Hill	13522	782.3	634.9	962.3	1058	859	1301
11098	Far West	1806	1489.4	1146.4	1881.9	269	207	340
11099	Coonabarabran	5980	917.4	741.0	1128.7	549	443	675
11100	Dubbo - East	7585	1159.3	930.5	1438.0	879	706	1091
11101	Dubbo - South	12575	1126.0	910.2	1406.8	1416	1145	1769
11102	Dubbo - West	6251	1071.5	854.1	1338.4	670	534	837
11103	Dubbo Region	4131	270.8	218.6	343.8	112	90	142
11104	Gilgandra	3271	1054.3	849.3	1292.4	345	278	423
11105	Narromine	4749	961.5	767.4	1190.2	457	364	565
11106	Wellington	6739	979.5	777.2	1210.8	660	524	816
11107	Branxton - Greta - Pokolbin	7363	542.0	442.6	685.5	399	326	505
11108	Cessnock	16692	1156.2	939.4	1428.5	1930	1568	2384
11109	Cessnock Region	5981	337.1	274.4	420.1	202	164	251
11110	Dungog	6875	524.2	426.7	654.3	360	293	450
11111	Kurri Kurri - Abermain	13307	973.1	787.3	1208.2	1295	1048	1608
11112	Singleton	11894	857.4	698.0	1072.2	1020	830	1275
11113	Singleton Region	3680	392.6	318.1	504.4	144	117	186
11114	Maitland	4981	878.9	715.8	1112.1	438	357	554
11115	Maitland - East	20569	1035.4	843.3	1285.8	2130	1735	2645
11116	Maitland - North	5592	349.9	287.3	438.6	196	161	245
11117	Maitland - West	16419	1057.1	858.8	1320.8	1736	1410	2169
11118	Thornton - Millers Forest	7311	421 1	345.3	538.4	308	252	394
11119	Anna Bay	4407	583.4	477.2	736 5	257	232	325
11120	Lemon Tree Passage - Tanilha Ray	5127	885 5	722 5	1098.8	455	371	564
11121	Nelson Bay Peninsula	16480	895.5	731.4	1120.2	1476	1205	1846
		00						

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
		Linit Invel Deskit	Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
CODE 2016	SA2 name	totalpopulation	Probit_ RATE	RAIE_	RAIE_	probit_ number	number_	numper_
11122	Raymond Terrace	10336	1339.7	1086.0	1657.5	1385	1122	1713
11123	Seaham - Woodville	4095	188.2	154.6	238.8	77	63	98
11124	Tea Gardens - Hawks Nest	4165	906.8	736.3	1138.6	378	307	474
11125	Williamtown - Medowie - Karuah	10088	500.8	405.6	639.1	505	409	645
11126	Muswellbrook	8786	1345.0	1089.6	1671.0	1182	957	1/68
11120	Muswellbrook Pagion	2002	620.0	509.4	707.0	196	152	227
11127	Scono	4256	020.5	671.0	1024.1	257	202	
11120	Scone Degion	4330	744.0	606.0	025.0	461	293	
11129	Depte Avendele	19156	744.9	610.9	935.6	1271	1110	1707
11130	Harolay, Kambla Crange	6211	252.0	012.7	940.4	13/1	100	1/0/
11132	Honsley - Kembla Grange	11059	711.0	207.9 E70.4	002.1	223	102	1056
11134	Alkien Derk, Maanwerie Deer	11958	/11.0	250.0	003.1 FF1.2	460	092	
11130	Albion Park - Macquarie Pass	10662	433.9	352.9	551.3	403	376	586
11137		5366	806.7	656.9	1002.0	433	353	538
11138	Klama	6101	666.4	547.4	833.2	407	334	508
11139	Kiama Downs - Minnamurra	4430	332.0	272.4	422.1	147	121	187
11140	Kiama Hinterland - Gerringong	5951	430.0	351.7	548.9	256	209	327
11141	Shellharbour - Flinders	12404	550.0	448.8	699.8	682	55/	868
11142	Shellharbour - Oak Flats	/909	/12.8	582.4	889.2	564	461	/03
11143	Warilla	15911	1330.3	1077.0	1647.2	2117	1/14	2621
11144	Balgownie - Fairy Meadow	16777	1005.0	820.3	1250.7	1686	1376	2098
11145	Corrimal - Tarrawanna - Bellambi	12104	1366.7	1116.4	1679.4	1654	1351	2033
11146	Figtree - Keiraville	16290	791.5	644.8	994.0	1289	1050	1619
11147	Helensburgh	6510	263.4	216.4	337.8	171	141	220
11148	Thirroul - Austinmer - Coalcliff	8374	375.7	310.4	481.7	315	260	403
11150	Woonona - Bulli - Russell Vale	14871	701.7	575.3	866.0	1043	856	1288
11151	Bulahdelah - Stroud	3683	603.1	489.0	748.5	222	180	276
11152	Forster	11382	1145.6	928.5	1413.6	1304	1057	1609
11153	Forster-Tuncurry Region	4623	597.1	486.4	740.3	276	225	342
11154	Tuncurry	5182	1112.1	909.1	1362.6	576	471	706
11155	Kempsey	11255	1190.1	950.9	1460.3	1339	1070	1644
11156	Kempsey Region	7122	712.5	574.5	881.0	507	409	627
11157	Macksville - Scotts Head	3664	906.6	730.5	1129.1	332	268	414
11158	Nambucca Heads	5484	1482.6	1197.4	1817.8	813	657	997
11159	Nambucca Heads Region	5856	654.3	527.4	810.7	383	309	475
11160	South West Rocks	4135	953.8	773.5	1177.6	394	320	487
11162	Laurieton - Bonny Hills	13321	733.2	597.9	906.3	977	796	1207
11163	Port Macquarie - East	21676	976.1	796.3	1218.3	2116	1726	2641
11164	Port Macquarie - West	13777	1181.7	963.8	1461.9	1628	1328	2014
11165	Port Macquarie Region	4087	508.3	412.7	636.1	208	169	260
11166	Wauchope	8368	844.7	685.8	1044.9	707	574	874
11167	Gloucester	3910	968.9	782.0	1196.4	379	306	468
11168	Old Bar - Manning Point - Red Head	8118	774.9	629.3	969.2	629	511	787
11169	Taree	15834	1435.8	1157.0	1760.0	2274	1832	2787
11170	Taree Region	9872	648.4	526.5	803.5	640	520	793
11171	Wingham	4170	892.5	725.3	1101.0	372	302	459
11172	Albury - East	10929	859.4	703.2	1081.7	939	769	1182
11173	Albury - North	7449	1145.4	935.1	1412.9	853	697	1052
11174	Albury - South	8018	1166.5	959.3	1436.6	935	769	1152
11175	Albury Region	8404	483.0	396.4	600.1	406	333	504
11176	Lavington	11155	1440.1	1175.6	1769.4	1606	1311	1974
11177	Нау	2203	888.4	728.8	1095.0	196	161	241
11178	Wentworth - Buronga	4449	911.5	730.8	1123.0	406	325	500
11179	Wentworth-Balranald Region	2688	734.4	594.7	928.9	197	160	250
11180	Corowa	4238	801.1	654.8	992.4	339	278	421
11181	Corowa Region	5079	610.8	500.0	763.3	310	254	388
11182	Deniliquin	5688	960.3	781.9	1184.1	546	445	674
11183	Deniliquin Region	5140	626.9	514.6	776.8	322	264	399

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name	totalpopulation	RATE	LowerCi	UpperCI	number	LowerCi	UpperCi
11184	Moama	4362	656.7	540.6	821.7	286	236	358
11185	locumwal - Finley - Jerilderie	/341	/52.6	617.8	933.9	552	454	686
11186	Armidale	17627	1243.3	1007.5	1546.0	2192	1776	2725
11187	Armidale Region - North	3293	886.9	720.6	1110.2	292	237	366
11188	Armidale Region - South	4517	585.2	473.7	735.6	264	214	332
11189	Walcha	2496	750.7	605.2	942.6	187	151	235
11190	Glen Innes	6775	912.7	742.5	1121.8	618	503	760
11191	Inverell	8689	1282.0	1034.3	1580.9	1114	899	1374
11192	Inverell Region - East	3947	720.4	575.2	913.3	284	227	360
11193	Inverell Region - West	4500	684.7	559.3	848.3	308	252	382
11194	Tenterfield	5177	882.5	713.0	1084.3	457	369	561
11195	Moree	6005	1448.9	1146.1	1795.5	870	688	1078
11196	Moree Region	3784	1149.8	907.0	1465.3	435	343	554
11197	Narrabri	5303	970.0	782.9	1205.5	514	415	639
11198	Narrabri Region	3477	951.7	767.5	1184.1	331	267	412
11199	Gunnedah	6833	1065.5	859.4	1319.2	728	587	901
11200	Gunnedah Region	3110	723.1	585.8	914.6	225	182	284
11201	Quirindi	5826	959.1	771.8	1192.9	559	450	695
11202	Tamworth - East	15253	1074.2	870.4	1338.0	1638	1328	2041
11203	Tamworth - North	11415	1112.7	904.2	1387.2	1270	1032	1584
11204	Tamworth - West	3781	1794 9	1428.3	2214.5	679	540	837
11205	Tamworth Region	13859	550.7	446.3	689.1	763	619	955
11205	Belmont - Bennetts Green	13723	744 1	606.5	923.5	1021	832	1267
11200	Belmont South - Blacksmiths	4504	1152.2	9/1 /	1420.6	519	124	640
11207	Charlestewn - Dudley	10212	796.0	6/1.9	001 1	1441	1175	1707
11208		17042	640.0	E00.6	901.1	1150	11/3	1/3/
11209	Mount Hutton, Windolo	67942	1706.2	1204.0	2080.2	1150	930	1430
11210	Dadhaad	0/64	1/00.5	1304.9	2069.2	110	940	1417
11211	Rednead	2078	444.7	365.0	556.9	119	98	149
11212	Swansea - Caves Beach	9088	/64.4	623.0	946.6	695	566	860
11213	Valentine - Eleebana	9170	248.5	204.0	316.1	228	187	290
11214	Warners Bay - Boolaroo	10337	691.9	565.8	865.7	715	585	895
11215	Bolton Point - Ieralba	6663	1092.0	878.5	1353.9	728	585	902
11216	Bonnells Bay - Silverwater	6620	749.4	607.8	940.6	496	402	623
11217	Edgeworth - Cameron Park	10349	638.9	519.6	804.8	661	538	833
11218	Morisset - Cooranbong	11867	732.5	595.5	916.7	869	707	1088
11219	Toronto - Awaba	10578	929.6	752.6	1151.1	983	796	1218
11220	Wangi Wangi - Rathmines	6862	547.8	449.2	682.2	376	308	468
11221	West Wallsend - Barnsley - Killingworth	4917	464.1	379.1	580.6	228	186	285
11222	Adamstown - Kotara	11824	700.2	574.5	880.8	828	679	1041
11223	Beresfield - Hexham	6475	1034.6	837.5	1283.6	670	542	831
11224	Hamilton - Broadmeadow	9427	1389.9	1137.0	1724.0	1310	1072	1625
11225	Lambton - New Lambton	12568	924.6	757.9	1149.4	1162	952	1445
11226	Maryland - Fletcher - Minmi	9752	535.4	433.2	681.8	522	422	665
11227	Mayfield - Warabrook	11951	1285.3	1052.5	1594.9	1536	1258	1906
11228	Merewether - The Junction	10459	833.4	686.7	1046.2	872	718	1094
11229	Newcastle - Cooks Hill	8827	1369.3	1128.0	1715.1	1209	996	1514
11231	Shortland - Jesmond	9436	1682.6	1361.9	2118.6	1588	1285	1999
11232	Stockton - Fullerton Cove	6008	665.4	543.3	828.3	400	326	498
11233	Wallsend - Elermore Vale	15490	1036.4	845.3	1285.1	1605	1309	1991
11234	Waratah - North Lambton	9597	1373.2	1118.5	1711.8	1318	1073	1643
11235	Wickham - Carrington - Tighes Hill	6311	1268.6	1040.2	1591.1	801	656	1004
11236	Ballina	13925	1315.6	1075 3	1622.1	1832	1497	2259
11237	Ballina Region	12991	644 7	524.7	810.7	838	682	1053
11238	Bangalow	4273	677.2	557 2	854.2	280	238	365
11239	Brunswick Heads - Ocean Shores	6/16	1025.7	Q/Q 7	1280.2	664	5/5	203 207
11240	Byron Bay	0410 7/72	012 0	7/5 2	1160.0	607	540	027
112/1	Evans Head	/+/3	1107 4	060.0	1/61 0	102	201	507
11471	Evansticad	40/1	1101.0	0.606	1401.9	405	222	295

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	SA2 name	Unit-level_Probit_	Probit_	RAIE_	RAIE_	probit_	number_	number_
11242	Lennox Head - Skennars Head	5813	5/9 7	452.1	700.6	320	263	407
11242	Mullumbimby	6139	949.7	777.4	1172.0	582	477	710
11245	Casino	0135	1267.6	1018.6	1569.5	1171	9/1	1//9
11244	Casino Region	5233	635.3	508.3	700.8	3/2	273	130
11245	Geopollabah	10110	1064.4	062.0	1214.4	1076	072	1220
11240	Kyogla	5755	2004.4	724.2	1000.2		417	627
11247	Lismoro	11017	1406 5	11/6 0	1724.7	1676	1267	2055
11240	Lismore Pagian	11917	E02.4	1140.0	725.0	690	1307	2055
11249	Kingscliff - Eingal Hoad	10027	022.0	679.5	1052.0	009	601	1057
11250	Mugwillumbah	6865	1105 /	899.5	1367.7	759	617	1030
11257	Murwillumbah Region	7501	614.6	501.2	766.1	/55	376	575
11252	Pottsville	0813	832.5	678.4	10/3.8	817	666	1024
11253	Tweed Heads	15904	1067.6	960.0	1226.6	1607	1202	21024
11256	Griffith (NSW)	14262	024.7	761.5	1170.1	1222	1096	1692
11250	Griffith Pagion	0/17	745.5	605.2	020.7	702	570	005
11259	Leeton	7589	807.0	659.5	1002.7	612	500	761
11250	Narrandera	//88	890.1	722.9	1002.7	300	324	/01
11259	Tumbarumba	2601	579.7	/22.9	726.8	151	124	189
11261	Tumut	4732	970.7	702.0	11075	/59	375	567
11262	Tumut Region	3561	523.3	427.4	651.8	186	152	232
11263	Cootamundra	5784	869.6	708.0	1070.9	503	410	619
11264	Gundagai	2669	693.3	567.0	867.4	185	151	232
11265		4836	6/9.3	526.5	813.7	31/	255	30/
11265	Temora	5078	799.1	655.0	979.7	406	333	498
11267	Warda Warda - Fast	12111	812.3	663.2	1015.3	984	803	1230
11268	Wagga Wagga - North	3347	740.0	604.7	937.0	248	202	314
11269	Wagga Wagga - South	15602	1067.9	868.8	1327.7	1666	1355	2071
11270	Wagga Wagga - West	9394	1537.1	1256.0	1896.1	1444	1180	1781
11270	Wagga Wagga Region	10876	510.8	125.3	652.4	565	163	710
11272	Berry - Kangaroo Valley	6992	462.2	379.8	580.9	323	266	406
11273	Callala Bay - Currarong	2800	737.1	598.3	925.0	206	168	259
11274	Culburra Beach	3969	789.9	641.9	983.2	314	255	390
11276	Huskisson - Vincentia	3282	763.5	627.1	950.2	251	206	312
11277	North Nowra - Bomaderry	11981	921.1	749.5	1138.5	1104	898	1364
11278	Nowra	15044	1253.6	1014.6	1549.2	1886	1526	2331
11279	St Georges Basin - Frowal Bay	10809	886.8	717.5	1104 5	959	776	1194
11280	Sussex Inlet - Berrara	3532	762.7	622.3	933.9	269	220	330
11281	Tomerong - Wandandian - Woollamia	2612	318.6	261.9	391.8	83	68	102
11282	Ulladulla	11942	856.0	698.9	1060.6	1022	835	1267
11283	Ulladulla Region	3924	513.9	422.2	634.8	202	166	249
11284	Bowral	10242	488.3	399.2	618.3	500	409	633
11285	Hill Top - Colo Vale	4447	355.3	291.1	447.4	158	129	199
11286	Mittagong	7051	672.2	550.6	843.7	474	388	595
11287	Moss Vale - Berrima	7523	774.0	633.7	961.9	582	477	724
11288	Robertson - Fitzroy Falls	2630	380.0	314.5	478.1	100	83	126
11289	Southern Highlands	5147	380.4	314.4	475.4	196	162	245
11290	Baulkham Hills (East)	17330	404.8	335.5	520.5	702	582	902
11291	Baulkham Hills (West) - Bella Vista	15694	309.2	253.3	402.0	485	397	631
11294	Glenhaven	4922	338.7	275.6	434.6	167	136	214
11296	West Pennant Hills	10114	174.6	144.3	226.1	177	146	229
11297	Dural - Kenthurst - Wisemans Ferry	16312	283.9	232.7	365.3	463	380	596
11298	Galston - Laughtondale	4062	323.6	265.9	413.5	131	108	168
11299	Bilpin - Colo - St Albans	2089	333.2	276.3	412.9	70	58	86
11300	Kurrajong Heights - Ebenezer	16707	246.2	201.2	313.8	411	336	524
11301	Pitt Town - McGraths Hill	7934	292.4	239.6	376.9	232	190	299
11302	Rouse Hill - Beaumont Hills	16260	283.7	233.1	376.6	461	379	612
11303	Blacktown (East) - Kings Park	13012	1186.2	970.1	1519.4	1543	1262	1977

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
CODE 2016	SA2 name	Unit-level_Probit_	Probit_	RAIE_	RAIE_	probit_	number_	number_
11304	Blacktown (North) - Marayong	13909	1023.1	829.9	1294.1	1423	1154	1800
11306	Doonside - Woodcroft	17319	936.0	754.2	1180.9	1621	1306	2045
11307	Lalor Park - Kings Langley	19316	754.9	617.2	944.1	1458	1192	1824
11308	Seven Hills - Toongabbie	18589	703.6	574.3	894.8	1308	1068	1663
11309	Glenwood	12097	386.4	314.3	508.4	467	380	615
11310	Parklea - Kellyville Ridge	23243	330.1	271.1	435.2	767	630	1011
11312	Riverstone - Marsden Park	12975	591.8	481.9	762.0	768	625	989
11313	Bidwill - Hebersham - Emerton	13243	1767.8	1415.9	2206.6	2341	1875	2922
11314	Glendenning - Dean Park	6149	594.7	479.8	766.5	366	295	471
11315	Hassall Grove - Plumpton	15526	557.2	450.0	717.8	865	699	1114
11316	Lethbridge Park - Tregear	14685	1616.1	1291 7	2028.2	2373	1897	2978
11317	Mount Druitt - Whalan	16482	1484.9	1196.7	1883.6	2447	1972	3105
11319	Rooty Hill - Minchinbury	16382	585.8	473.4	761.3	960	775	1247
11321	Botany	8294	647.1	532.3	828.9	537	441	688
11322	Mascot - Fastlakes	20019	1076.8	884.1	1379.9	2156	1770	2762
11323	Pagewood - Hillsdale - Dacevville	9035	1275.9	1044.4	1595.5	1153	944	1442
11326	Marrickville	21752	1010.7	830.1	1289.6	2199	1806	2805
11327	Petersham - Stanmore	16735	950.5	785.3	1222.3	1591	1314	2045
11328	Sydenham - Tempe - St Peters	6427	656.0	539.2	856.1	422	347	550
11329	Darlinghurst	10261	1015.3	847.9	1300.9	1042	870	1335
11330	Erskineville - Alexandria	13806	819.9	684.9	1066.0	1132	946	1472
11331	Glebe - Forest Lodge	16955	1502.7	1234.2	1897.7	2548	2093	3218
11332	Newtown - Camperdown - Darlington	21576	1233.9	1013.4	1589.0	2662	2186	3428
11333	Potts Point - Woolloomooloo	19321	1148.0	956.6	1453.4	2218	1848	2808
11334	Pyrmont - Ultimo	19242	1412.7	1154.3	1827.3	2718	2221	3516
11335	Redfern - Chippendale	20297	1621.5	1326.9	2060.1	3291	2693	4181
11336	Surry Hills	14815	1304.1	1080.0	1660.2	1932	1600	2460
11337	Sydney - Haymarket - The Rocks	24911	1361.9	1106.0	1797.2	3393	2755	4477
11338	Waterloo - Beaconsfield	29147	1481.7	1213.7	1886.8	4319	3538	5500
11339	Bondi - Tamarama - Bronte	14829	792.1	661.3	1026.5	1175	981	1522
11340	Bondi Beach - North Bondi	16668	872.7	728.7	1131.1	1455	1215	1885
11341	Bondi Junction - Waverly	13714	805.7	669.3	1036.1	1105	918	1421
11343	Double Bay - Bellevue Hill	20196	608.7	507.6	792.8	1229	1025	1601
11344	Dover Heights	8331	636.3	530.2	816.5	530	442	680
11345	Paddington - Moore Park	12465	801.4	671.5	1032.3	999	837	1287
11346	Rose Bay - Vaucluse - Watsons Bay	9019	448.8	373.5	578.2	405	337	521
11347	Woollahra	6172	568.5	475.6	736.5	351	294	455
11348	Coogee - Clovelly	20240	916.1	763.1	1166.8	1854	1544	2362
11350	Malabar - La Perouse - Chifley	19405	776.6	633.9	966.8	1507	1230	1876
11354	Bass Hill - Georges Hall	16429	1049.3	847.3	1312.9	1724	1392	2157
11355	Chullora	694	630.8	517.8	812.5	44	36	56
11356	Condell Park	8384	753.0	607.7	961.7	631	509	806
11357	Greenacre - Mount Lewis	19114	991.0	801.4	1242.2	1894	1532	2374
11358	Padstow	13257	713.2	582.2	898.3	945	772	1191
11359	Panania - Milperra - Picnic Point	19883	589.9	480.8	741.8	1173	956	1475
11360	Revesby	12736	864.4	705.7	1086.0	1101	899	1383
11361	Yagoona - Birrong	15656	1034.9	838.3	1301.6	1620	1312	2038
11362	Belmore - Belfield	15015	1099.7	896.4	1393.3	1651	1346	2092
11363	Canterbury (South) - Campsie	25135	1260.8	1031.6	1614.6	3169	2593	4058
11364	Kingsgrove (North) - Earlwood	18688	477.6	390.9	609.8	893	731	1140
11366	Punchbowl	15627	1075.7	869.1	1366.6	1681	1358	2136
11367	Roselands	10502	737.9	599.8	936.7	775	630	984
11368	Hurstville	19602	1082.1	881.2	1398.2	2121	1727	2741
11369	Mortdale - Penshurst	19167	760.4	625.4	976.5	1457	1199	1872
11370	Narwee - Beverly Hills	11119	941.1	768.4	1186.0	1046	854	1319
11371	Oatley - Hurstville Grove	9983	371.7	306.4	482.6	371	306	482
11372	Peakhurst - Lugarno	14214	463.4	378.1	583.2	659	537	829

				Unit	level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	SA2 nome	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
11070	SA2_name	totaipopulation	175C 0	LowerCI	OpperCi	number	LowerCI	opperCi
11373	Riverwood	9229	1/50.0	1432.8	21/4.5	1021	1322	2007
113/4	South Hurstville - Blakenurst	19490	724.9	591.4	936.5	1413	1153	1825
11375	Arhcliffe - Bardwell Valley	1/883	976.3	/99.0	1267.8	1/46	1429	2267
11376	Bexley	21144	/49.6	613.4	965.7	1585	1297	2042
11377	Kingsgrove (South) - Bardwell Park	10032	640.6	523.4	815.1	643	525	818
11378	Kogarah	9225	947.4	780.8	1228.9	874	720	1134
11379	Kogarah Bay - Carlton - Allawah	12889	875.7	719.1	1126.2	1129	927	1452
11380	Monterey - Brighton-le-Sands - Kyeemagh	11297	894.3	737.4	1133.2	1010	833	1280
11381	Rockdale - Banksia	16685	950.9	778.9	1237.8	1587	1300	2065
11382	Sans Souci - Ramsgate	12814	690.6	567.5	876.7	885	727	1123
11383	Concord - Mortlake - Cabarita	17294	457.4	380.1	587.3	791	657	1016
11384	Concord West - North Strathfield	20414	962.5	791.1	1253.3	1965	1615	2559
11385	Drummoyne - Rodd Point	14415	548.5	456.8	704.3	791	658	1015
11386	Five Dock - Abbotsford	16249	705.0	584.3	896.1	1145	949	1456
11387	Balmain	12217	698.5	584.4	883.0	853	714	1079
11388	Leichhardt - Annandale	20389	793.4	658.0	1012.1	1618	1342	2064
11389	Lilyfield - Rozelle	10823	686.3	573.4	871.7	743	621	943
11390	Ashfield	20738	1090.3	897.6	1403.7	2261	1861	2911
11391	Burwood - Croydon	20969	1165.3	948.6	1505.6	2444	1989	3157
11392	Canterbury (North) - Ashbury	8367	629.1	518.2	807.1	526	434	675
11393	Croydon Park - Enfield	13805	731.8	601.7	927.6	1010	831	1281
11394	Dulwich Hill - Lewisham	13687	962.2	794.5	1227.4	1317	1087	1680
11395	Haberfield - Summer Hill	10786	695.5	577.5	890.6	750	623	961
11396	Homebush	13135	1152.9	948.4	1494.7	1514	1246	1963
11398	Chatswood (East) - Artarmon	22893	979.8	808.9	1266.4	2243	1852	2899
11399	Chatswood (West) - Lane Cove North	16660	705.4	586.5	912.0	1175	977	1519
11400	Lane Cove - Greenwich	20658	462.7	387.5	596.0	956	801	1231
11401	St Leonards - Naremburn	8482	734.8	617.7	958.2	623	524	813
11402	Willoughby - Castle Cove - Northbridge	18766	341.8	284.7	443.2	641	534	832
11403	Asquith - Mount Colah	13845	267.4	220.9	344.4	370	306	477
11404	Berowra - Brooklyn - Cowan	8730	215.8	179.0	278.6	188	156	243
11406	Normanhurst - Thornleigh - Westleigh	14075	343.9	283.9	436.1	484	400	614
11407	Gordon - Killara	16759	416.0	345.2	5/23	697	578	909
11408	Lindfield - Roseville	17500	371.8	308.4	/81.0	651	5/0	8/3
11400	Pymble	1/300	232.6	103.8	304.2	283	236	370
11/10	Stives	15507	232.0	177.0	201.4	203	230	120
11410	Turromurro	14924	213.0	227.0	201.4	332	270	= 439 E 40
11410	Webreenge (East) Werrewee	14024	207.2	101.1	370.0	201	264	401
11412	Cremerne Commerce	15057	674.0	191.1	974.3	1020	204	1225
11415	Crewe Nect Wevertee	14020	777.0	500.5	074.3 1009 E	1160	000	1555
11414	Crows Nest - waverton	14929		053.0	1008.5	1160	976	1506
11415	Mosman Neutral Day, Kimihilli	22197	006.2	454.5	1105.1	1200	1147	1353
11416	Neutral Bay - Kirribili	15087	906.3	760.3	1105.1	1307	1147	1/58
11417	North Sydney - Lavender Bay	9096	///.2	655.0	1015.1	707	596	923
11418	Balgowlah - Clontart - Seaforth	14672	347.7	289.5	451.1	510	425	662
11419	Manly - Fairlight	17642	709.0	595.2	919.1	1251	1050	1621
11420	Avalon - Palm Beach	9327	309.5	256.8	398.4	289	240	372
11421	Bayview - Elanora Heights	8305	297.5	244.6	379.0	247	203	315
11422	Newport - Bilgola	9947	310.4	259.1	400.9	309	258	399
11423	Warriewood - Mona Vale	18236	371.1	307.5	481.2	677	561	878
11424	Beacon Hill - Narraweena	10625	567.8	467.2	707.7	603	496	752
11425	Cromer	5713	369.0	303.6	470.6	211	173	269
11426	Dee Why - North Curl Curl	19762	870.1	722.3	1117.0	1720	1427	2208
11427	Forestville - Killarney Heights	9479	353.7	291.4	451.5	335	276	428
11428	Frenchs Forest - Belrose	18990	206.7	170.4	270.8	393	324	514
11429	Freshwater - Brookvale	16013	569.9	477.6	733.1	913	765	1174
11430	Manly Vale - Allambie Heights	12467	521.0	432.6	657.1	650	539	819
11431	Narrabeen - Collaroy	19439	534.7	445.3	679.9	1039	866	1322

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	SA2 name	Unit-level_Probit_	probit_	RATE_	RAIE_	probit_	number_	number_
11/132	Terrey Hills - Duffys Forest	2814	215.3	180.6	277.5	61	51	78
11/122	Camdon - Ellic Lano	2014	401.0	220.0	504 F	200	225	
11433	Elderelia Harrington Dark	15212	401.0	320.1	504.5	674	523	950
11434	Mount Appon Currons Hill	10515	440.0	270.6	501.1	074	764	1200
11435		20023	404.5	1000.0	1571.1	1744	1401	1209
11430		15927	1202.0	1000.0	1071.1	1/44	1401	2100
11437	Campbelitown - Woodbine	14147	1088.3	885.1	13/2.4	1540	1252	1942
11438	Claymore - Eagle Vale - Raby	15283	800.9	645.0	1014.7	1224	986	1551
11440	Ingleburh - Dennam Court	15391	/39./	601.2	943.7	1138	925	1452
11441	Leumean - Minto Heights	12734	823.7	671.2	1035.3	1049	855	1318
11442	Macquarie Fleids - Gienfield	1//95	1087.9	880.9	1365.5	1936	1568	2430
11443	Minto - St Andrews	14976	884.3	/16.5	1110.9	1324	1073	1664
11444	Rosemeadow - Glen Alpine	15764	910.1	/35./	1144.4	1435	1160	1804
11445	Bargo	4335	411.3	333.7	521.4	178	145	226
11446	Douglas Park - Appin	7068	260.3	211.9	333.5	184	150	236
11447	Picton - Tahmoor - Buxton	12599	569.8	463.8	717.8	718	584	904
11448	The Oaks - Oakdale	6745	266.3	217.8	339.9	180	147	229
11449	Blackheath - Megalong Valley	4325	826.0	676.6	1019.9	357	293	441
11450	Blaxland - Warrimoo - Lapstone	14381	329.6	270.3	419.1	474	389	603
11452	Katoomba - Leura	10552	1013.2	827.4	1251.2	1069	873	1320
11453	Lawson - Hazelbrook - Linden	8558	450.9	368.9	563.7	386	316	482
11454	Springwood - Winmalee	16626	395.3	324.0	495.5	657	539	824
11455	Wentworth Falls	4785	588.9	479.8	739.1	282	230	354
11457	Cambridge Park	11928	566.3	457.9	722.5	675	546	862
11458	Castlereagh - Cranebrook	17466	654.4	530.9	835.4	1143	927	1459
11459	Emu Plains - Leonay	10947	407.6	332.1	518.6	446	364	568
11460	Glenmore Park - Regentville	15673	390.6	321.5	504.3	612	504	790
11461	Jamisontown - South Penrith	13223	757.0	619.5	953.6	1001	819	1261
11462	Kingswood - Werrington	14726	1168.8	954.1	1462.6	1721	1405	2154
11463	Mulgoa - Luddenham - Orchard Hills	7124	331.4	269.5	434.5	236	192	310
11464	Penrith	10649	1640.4	1342.0	2038.0	1747	1429	2170
11465	Warragamba - Silverdale	3905	265.0	218.0	332.8	103	85	130
11466	Richmond - Clarendon	10898	965.1	787.4	1214.3	1052	858	1323
11467	Windsor - Bligh Park	11692	1063.5	867.5	1328.1	1243	1014	1553
11468	Yarramundi - Londonderry	5867	283.1	230.7	362.7	166	135	213
11469	Erskine Park	5048	309.9	253.8	400.9	156	128	202
11470	St Clair	15275	407.8	330.3	526.7	623	505	805
11473	Homebush Bay - Silverwater	15301	752.4	626.0	979.2	1151	958	1498
11476	Carlingford	21564	534.0	437.8	690.2	1152	944	1488
11477	Ermington - Rydalmere	16536	963.8	788.5	1211.6	1594	1304	2004
11478	Oatlands - Dundas Valley	13953	1037.8	848.5	1298.7	1448	1184	1812
11479	Chester Hill - Sefton	14068	1079.6	873.9	1353.7	1519	1229	1904
11480	Fairfield - East	11872	1259.0	1017.9	1579.0	1495	1208	1875
11481	Granville - Clyde	16158	1135.4	920.9	1454.7	1835	1488	2350
11482	Greystanes - Pemulwuy	19923	439.0	357.5	561.9	875	712	1119
11483	Guildford - South Granville	15316	1312.7	1058.4	1654.7	2010	1621	2534
11484	Guildford West - Merrylands West	15695	1180.9	958.8	1492.4	1853	1505	2342
11485	Merrylands - Holroyd	21736	1291.8	1047.1	1645.4	2808	2276	3576
11489	North Parramatta	17933	1284.9	1057.9	1637.6	2304	1897	2937
11490	North Rocks	6075	223.2	184.5	293.4	136	112	178
11491	Northmead	15614	979.5	811.7	1255.9	1529	1267	1961
11492	Parramatta - Rosehill	23562	1393.1	1150.3	1799.0	3282	2710	4239
11493	Toongabbie - Constitution Hill	17203	760.7	618.5	970.4	1309	1064	1669
11494	Winston Hills	8145	220.8	182.0	286.4	180	148	233
11495	Epping - North Epping	21677	620.2	511.2	804.7	1344	1108	1744
11496	Pennant Hills - Cheltenham	15933	311.3	256.0	401.7	496	408	640
11497	Eastwood - Denistone	20277	733.2	600.5	938.8	1487	1218	1904
11498	Gladesville - Huntleys Point	11364	712.1	591.0	895.1	809	672	1017

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name		RATE	LowerCi	UpperCi	redmun	LowerCi	OpperCi
11499	Hunters Hill - Woolwich	7929	3/8.8	313.6	4/8.1	300	249	3/9
11500	Macquarie Park - Marstield	18374	1112.2	914.3	1421.1	2044	1680	2611
11501	North Ryde - East Ryde	9692	497.1	409.3	626.2	482	397	607
11503	West Ryde - Meadowbank	15/10	1043.8	863.7	1332.5	1640	1357	2093
11504	Ashcroft - Busby - Miller	12709	1822.2	1464.6	2262.3	2316	1861	2875
11505	Austral - Greendale	6981	618.9	500.4	798.2	432	349	557
11506	Cobbitty - Leppington	13152	467.7	381.7	611.1	615	502	804
11509	Bonnyrigg Heights - Bonnyrigg	12501	1020.4	820.1	1283.3	1276	1025	1604
11510	Bossley Park - Abbotsbury	15093	654.7	521.8	842.4	988	788	1271
11511	Cabramatta - Lansvale	19514	1380.4	1118.9	1748.7	2694	2183	3412
11512	Cabramatta West - Mount Pritchard	13160	1051.2	849.2	1320.9	1383	1118	1738
11513	Canley Vale - Canley Heights	16290	1187.4	959.5	1495.5	1934	1563	2436
11514	Edensor Park	7800	694.5	553.8	895.7	542	432	699
11515	Fairfield	13890	2002.6	1610.1	2523.0	2782	2236	3504
11516	Fairfield - West	14773	1159.0	927.2	1480.9	1712	1370	2188
11517	Greenfield Park - Prairiewood	6574	827.1	659.8	1058.8	544	434	696
11518	Horsley Park - Kemps Creek	3559	304.0	244.2	399.4	108	87	142
11519	Smithfield - Wetherill Park	14130	1025.7	824.5	1297.3	1449	1165	1833
11520	St Johns Park - Wakeley	8781	556.8	444.5	716.3	489	390	629
11522	Casula	11946	754.0	610.9	956.2	901	730	1142
11523	Chipping Norton - Moorebank	14082	418.4	340.4	537.3	589	479	757
11524	Holsworthy - Wattle Grove	15476	428.0	352.0	555.9	662	545	860
11529	Gymea - Grays Point	13399	339.4	281.9	433.9	455	378	581
11530	Miranda - Yowie Bay	14259	690.0	568.2	870.5	984	810	1241
11531	Sylvania - Taren Point	12670	435.2	358.0	549.3	551	454	696
11533	Heathcote - Waterfall	5020	312.1	257.3	388.6	157	129	195
11534	Illawong - Alfords Point	8382	129.3	105.5	170.1	108	88	143
11535	Menai - Lucas Heights - Woronora	16417	257.7	210.5	330.3	423	346	542
11536	Oyster Bay - Como - Jannali	15874	298.1	245.5	374.6	473	390	595
11538	Sutherland - Kirrawee	16453	778.1	644.5	977.6	1280	1060	1608
11539	Goulburn	17653	1033.1	842.5	1279.9	1824	1487	2259
11540	Goulburn Region	9755	462.2	377.9	577.4	451	369	563
11541	Yass	4875	684.0	558.5	854.4	333	272	417
11542	Yass Region	8503	304.7	252.6	383.1	259	215	326
11543	Young	7742	1042.6	849.8	1287.4	807	658	997
11544	Young Region	5667	669.6	550.5	824.8	379	312	467
11545	Berkeley - Lake Heights - Cringila	10637	1118.5	905.3	1389.1	1190	963	1478
11546	Port Kembla - Warrawong	7645	1496.6	1213.3	1846.4	1144	928	1412
11547	Windang - Primbee	3513	830.6	680.2	1022.2	292	239	359
11548	Wollongong - East	12155	1600.0	1310.8	2014.3	1945	1593	2448
11549	Wollongong - West	13445	1546.2	1260.0	1942.4	2079	1694	2612
11550	Banora Point	12462	723.8	586.5	909.2	902	731	1133
11551	Terranora - North Tumblegum	2428	311.4	250.1	408.9	76	61	99
11552	Tweed Heads South	6745	1249.4	1017.5	1540.3	843	686	1039
11553	Castle Hill - Central	5856	504.5	418.8	655.6	295	245	384
11554	Castle Hill - Fast	4668	765.3	625.1	946.4	357	292	442
11555	Castle Hill - North	9228	317.9	262.4	412.6	293	242	381
11556	Castle Hill - South	7273	393.5	325.4	512.9	286	237	373
11557	Castle Hill - West	3000	218.0	180 5	288.8	87	72	115
11558	Cherrybrook	149/12	210.0	203.0	324 /	360	30/	
11559	Kellwille	17175	240.7	203.4	324.4	509	/17	660
11560	Riacktown (South)	1/1/2	293.0	660.6	10476		41/	009
11561	Blacktown (West)	10440	022.9 707 F	610 1	1097.0	002	002	1070
11562	Acacia Gardens	12447	797.5	040.4	1027.2	293	60/	12/9
11562		17060	207.4	ZZ1.3	349.2 70E E		700	1000
11564	Konsington (NSW)	12002	1100.0	407.2	1446 5	1450	1104	1060
11565	Kingsford	12923	16120	1201 2	2006 1	2154	1720	2706
11000	i in Baiora	10004	1012.0	1JU1.3	2000.1	∠±04	±/30	2/00

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGH	SA2 name	Unit-level_Probit_	probit_	RATE_	RAIE_	probit_	number_	number_
11566	Marcubra - North	7995	6/1 2	E0werci	0000000	506	420	647
11567	Maroubra - South	8533	1/18.8	1166.2	1764.0	1211	995	1505
11568	Maroubra - West	8303	083.5	803.2	1269.4	816	667	1054
11560	Pandwick - North	12659	963.2	710.7	1115 /	1100	007	1522
11570	Pandwick - South	10602	001.6	012.0	1070.0	1052	960	1261
11570	Rankotown North	10092	1469.2	1105.7	1061.0	1790	1457	2260
11571	Barkstown South	12107	1200.0	1045 5	1622.0	1571	1437	1001
11572	Lakamba	12100	1674.9	1045.5	2150.2	2001	1604	1991
11573	Lakemba Wiley Dark	12426	1074.8	1077.7	2150.2	2081	1694	2072
11574	Strathfield	21214	1307.7	790.0	1055.0	2040	1676	1521
11575	Strathfield South	21214	900.U	789.9	1200.2	2049	1670	2003
11570	Herpoly Fact	2010	1075.1	1027.7	1500.2	1177	074	1501
11577	Horrisby - East	9362	1234.2	1037.7	1099.5		974	1501
115/8	Hornsby - West	8335	651.9	537.2	825.2	543	448	688
115/9	Waltara - Wanroonga (West)	7401	/8/.1	652.5	1007.1	582	483	/45
11580	Colyton - Oxley Park	8/66	890.9	/21.1	1131.8	/81	632	992
11581	St Marys - North St Marys	12241	1040.1	1209.6	1610.3	1822	1481	2284
11582	Auburn - Central	13408	1240.1	1250.0	1013.7	1501	1005	2104
11583	Auburn - North	9081	1674.6	1359.9	21/1.8	1521	1235	1972
11584	Auburn - South	6459	881.4	/11.4	1130.0	569	459	/30
11585	Berala	/106	1088.8	883.9	1407.4	1.004	628	1000
11586	Lidcombe	16547	981.3	/99.3	12/2.2	1624	1323	2105
11587	Regents Park	3956	1286.3	1042.9	1634.7	509	413	647
11588	Pendie Hill - Girraween	9692	924.1	/55.6	11/8.5	896	/32	1142
11589	Wentworthville - Westmead	12014	1244.1	1022.0	1580.3	1495	1228	1899
11590	Putney	3193	222.2	185.0	288.6	/1	59	92
11591	Ryde	21895	857.6	/08.5	1093.7	18/8	1551	2395
11593		5408	295.7	238.2	387.2	160	129	209
11594	Green valley	9635	/00./	562.9	899.8	6/5	542	867
11595	Hinchinbrook	9305	481.9	386.6	623.1	448	360	580
11596	Hoxton Park - Carnes Hill - Horningsea Park	8369	487.8	391.3	635.3	408	327	532
11597	West Hoxton - Middleton Grange	10851	386.2	312.0	506.9	419	339	550
11598		20850	1653.0	1341.1	2079.6	3447	2796	4336
11599	Lurnea - Cartwright	8659	1424.5	1148.5	1//3.9	1233	995	1536
11600	We wish Ferre	12728	388.2	1700.0	0017.5	494	399	1004
11600		4599	2108.4	716.1	2017.5	970	791	1204
11602	Caringban	9140	866.7	/16.1	1090.8	/92	654	997
11603	Cranulla Kurrall Duadaana	9231	215.3	178.0 575.0	277.2	1210	1000	200
11604	Cronula - Kurhell - Bundeena	18935	02.5	5/5.0	102.0	1310	1090	1007
11605	Weeleware Burreneer	2411 E01E	93.5	78.5	264.7	170	142	30
11607	Forgedine	10501	267.9	240.0	226.4	220	272	401
11609	Leftus Verrowerreb	12321 E40E	164.9	126.2	211.0		2/3	421
11600	Werenere Heighte	293	104.0	75.0	115.0	91	75	
01001	Alfred to a	2073	710.4	75.9	000.4	20	400	
21001	Rellerat	0303	1052.0	066.1	1207.7	090	905	1016
21002	Ballarat - North	17615	1033.2	000.1	1071.7	1012	1/07	2240
21003	Ballarat - South	19605	1/02 9.3	1220.4	1025.0	2700	2202	2/240
21004	Buninyong	5276	1491.2	270.5	EQ10	2700	2202	200
21005	Delacombe	5200	752.7	610 0	0/6 1	240	200	509
21000	Smythes Creek	2299	120.0	010.0	1/0.0	352		10
21007	Wendouree - Miners Rest	11042	1276.0	10/0.2	157/6	1/10	11/0	1720
21000	Bacchus Marsh Pagion	11042	200.9	21/ 0	471.0	170	149	21.09
21009	Creswick - Clunes	4000	5/0 F	314.9 AA1 0	6677	276	142	402
21010	Davlesford	6061	566.0	/67.1	600.6	305	207	/127
21012	Gordon (Vic.)	1300	276.7	202 0	340.0	110	00	1/17
21012	Δνοςα	2502	/121 5	220.2	540.9	125	102	15/
21014	Beaufort	3468	407.5	333.4	504.5	141	116	175
		0.00				- · -		1,0

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGH	SA2 name	Unit-level_Probit_	probit_	RAIE_	RAIE_	probit_	number_	number_
21015	Golden Plains - North	3407	217.6	179.6	269.5	74	61	opperci
21015	Manyborough (Vic.)	6276	1130 /	931.6	1302.1	715	585	874
21010	Manyborough Pagion	4101	1139.4	401.2	601.6	205	169	252
21017	Bendigo	11370	1/186.8	1213.7	18/36	1602	1381	2008
21010	California Gully - Eaglebawk	0000	1226.4	000.1	1516.0	11092	1301	1264
21019	East Bandiga, Kannington	10591	1002.1	999.1	1257.6	1104	014	1427
21020	Elora Hill - Spring Cully	7211	1204.0	11/25	1720.2	1005	944	12457
21021	Kangaraa Elat - Coldon Squara	15227	1042.6	052.0	120.2	1500	1200	1066
21022	Maidan Gully	2550	1043.0	150.1	221.2	1390	1299	1900
21023	Strathfieldsave	6083	258.8	212.0	320.7	157	120	201
21024	White Hills - Assot	9550	766.0	626.0	059.6	656	E25	201
21025	Rondigo Pagion - South	5292	100.9	154.6	220.0	000	00	126
21020	Castlemaina	9422	702.4	E79.0	239.2	502 E02	407	700
21027	Castlemaine Pagion	6674	201.2	212.0	471.0	255	200	214
21020	Heathcate	2607	491.0	204.0	47 1.0 500 /	172	142	212
21029	Kupatan	7451	401.0 502.2	475.9	726.0	173	254	541
21030	Weedend	5170	205.0	217.0	120.0	100	164	2/0
21031	Rendige Region - North	2226	252.0	2000	400.2	117	06	146
21032	Loddon	5/02	516.3	422.1	640.8	28/	232	352
21033	Bannockburn	/531	314.0	258.2	396.1	1/2	117	170
21035	Golden Plains - South	5067	237.3	195.5	297.4	120	00	151
21035	Winchelses	4342	237.3	326.1	/90.9	171	1/2	213
21030	Belmont	11029	1080.2	887.0	13/6.9	1101	978	1/85
21037	Corio - Norlane	20313	1523.6	12/15	1878 5	3095	2522	3816
21030	Geelong	10213	1149.5	945.2	1430.6	1174	965	1461
21040	Geelong West - Hamlyn Heights	15240	1035.0	852.8	1289.8	1577	1300	1966
21040	Grovedale	17943	764.7	625.0	959.6	1372	1122	1722
21042	Highton	16889	588.3	480.6	745 5	994	812	1259
21042	Lara	13780	501.8	410.9	634.4	692	566	874
21043	Leopold	9640	510.3	419.2	640.8	492	404	618
21045	Newcomb - Moolan	11679	1116.0	911.9	1376.3	1303	1065	1607
21046	Newtown (Vic.)	7662	714.3	588.5	894.3	547	451	685
21047	North Geelong - Bell Park	11689	885.9	726.7	1104.4	1035	849	1291
21048	Clifton Springs	10267	545.2	445.9	683.4	560	458	702
21049	Lorne - Anglesea	3710	585.0	484.9	733.6	217	180	272
21050	Ocean Grove - Barwon Heads	16797	533.7	440.2	668.9	896	739	1123
21051	Portarlington	5898	890.0	726.8	1105.3	525	429	652
21052	Point Lonsdale - Queenscliff	3149	481.9	399.3	599.0	152	126	189
21053	Torquay	12993	489.9	404.5	627.2	636	526	815
21054	Alexandra	4915	610.7	501.3	755.9	300	246	372
21055	Euroa	4940	644.8	528.0	795.4	319	261	393
21056	Kilmore - Broadford	10506	617.8	505.4	774.3	649	531	813
21057	Mansfield (Vic.)	6443	554.5	458.2	688.0	357	295	443
21058	Nagambie	3132	596.1	490.1	745.9	187	154	234
21059	Seymour	5034	1193.0	975.5	1460.7	601	491	735
21060	Seymour Region	3327	380.5	317.1	493.8	127	106	164
21062	Yea	2739	516.3	424.5	641.7	141	116	176
21063	Benalla	8080	1065.6	871.7	1301.3	861	704	1051
21064	Benalla Region	2764	311.0	256.2	390.2	86	71	108
21065	Rutherglen	2967	692.1	570.7	855.2	205	169	254
21066	Wangaratta	14314	1007.8	825.9	1238.6	1443	1182	1773
21067	Wangaratta Region	7272	358.7	294.0	444.8	261	214	323
21068	Beechworth	3484	603.9	498.3	743.3	210	174	259
21069	Bright - Mount Beauty	6111	655.2	540.3	813.9	400	330	497
21070	Chiltern - Indigo Valley	2355	363.8	295.5	456.6	86	70	108
21071	Myrtleford	3630	745.7	612.6	917.3	271	222	333
21072	Towong	4543	602.1	495.4	741.2	274	225	337

				Unit	level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	640	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name	totaipopulation	RATE	LowerCi	UpperCi	number	LowerCi	OpperCi
21073	West Wodonga	10932	1112.0	906.1	1389.3	1216	991	1519
21074	Wedenga	18042	1060.8	868.6	1317.4	1914	1567	2377
21075	Yackandandah	3325	421.5	347.7	524.4	140	116	1/4
21076	Drouin	12152	/04.4	577.6	8/3./	856	/02	1062
21077	Mount Baw Baw Region	4619	349.8	287.3	436.8	162	133	202
21078	Trafalgar (Vic.)	5765	568.7	465.9	706.2	328	269	407
21079	Warragul	14193	707.4	579.2	878.5	1004	822	1247
21081	Bairnsdale	11162	1051.7	856.6	1297.9	1174	956	1449
21082	Bruthen - Omeo	5884	398.6	327.6	497.5	235	193	293
21084	Lakes Entrance	7571	865.5	708.2	1059.7	655	536	802
21085	Orbost	4866	748.6	609.4	920.6	364	297	448
21086	Paynesville	4958	671.2	548.8	830.0	333	272	412
21087	Foster	6737	592.3	485.2	735.4	399	327	495
21089	Korumburra	6875	612.5	501.5	756.6	421	345	520
21090	Leongatha	8234	614.5	505.3	760.4	506	416	626
21091	Phillip Island	7717	860.1	706.1	1063.3	664	545	821
21093	Wonthaggi - Inverloch	17053	913.8	749.0	1125.3	1558	1277	1919
21094	Churchill	8712	631.2	515.6	775.8	550	449	676
21095	Moe - Newborough	12939	1157.7	942.2	1417.1	1498	1219	1834
21096	Morwell	10794	1318.5	1071.4	1618.3	1423	1156	1747
21097	Traralgon	20033	808.2	662.4	1002.3	1619	1327	2008
21098	Yallourn North - Glengarry	3405	327.1	269.6	402.5	111	92	137
21100	Longford - Loch Sport	3280	378.0	310.3	463.6	124	102	152
21101	Maffra	10364	615.0	503.7	760.2	637	522	788
21102	Rosedale	3789	347.1	286.4	438.9	132	109	166
21103	Sale	10862	1052.4	864.4	1297.7	1143	939	1410
21104	Yarram	4208	750.1	614.7	922.1	316	259	388
21105	Brunswick	21626	1228.0	1010.4	1574.1	2656	2185	3404
21106	Brunswick East	9399	1281.3	1058.5	1639.5	1204	995	1541
21107	Brunswick West	11319	1348.9	1111.7	1697.6	1527	1258	1921
21108	Coburg	20990	863.5	707.6	1106.1	1813	1485	2322
21109	Pascoe Vale South	7697	439.4	361.6	565.6	338	278	435
21110	Alphington - Fairfield	7124	897.6	744.3	1132.9	639	530	807
21111	Northcote	19668	882.6	728.8	1123.7	1736	1433	2210
21112	Thornbury	14816	1121.1	924.1	1416.1	1661	1369	2098
21113	Ascot Vale	11579	1087.1	894.4	1367.0	1259	1036	1583
21114	Essendon - Aberfeldie	22072	739.9	612.8	940.8	1633	1353	2077
21115	Flemington	8116	1969.8	1614.3	2458.5	1599	1310	1995
21116	Moonee Ponds	11437	781.4	647.6	990.1	894	741	1132
21117	Carlton	17101	2258.5	1822.1	2891.8	3862	3116	4945
21118	Docklands	9839	1189.3	980.1	1550.6	1170	964	1526
21119	East Melbourne	4385	862.1	720.9	1115.9	378	316	489
21121	Kensington (Vic.)	8823	1271.4	1049.3	1605.6	1122	926	1417
21122	Melbourne	34944	1975.8	1600.2	2550.2	6904	5592	8911
21123	North Melbourne	17906	1736.2	1417.3	2212.0	3109	2538	3961
21124	Parkville	6683	1091.9	894.8	1391.8	730	598	930
21125	South Yarra - West	5286	908.9	758.0	1175.1	480	401	621
21126	Southbank	16980	1243.0	1021.9	1619.5	2111	1735	2750
21128	Albert Park	12432	755.6	629.7	972.2	939	783	1209
21129	Elwood	12422	1113.1	929.8	1411.2	1383	1155	1753
21130	Port Melbourne	13197	898.1	748.4	1135.0	1185	988	1498
21132	South Melbourne	9659	1314.4	1087.8	1650.3	1270	1051	1594
21133	St Kilda	22941	1333.0	1109.0	1680.2	3058	2544	3854
21134	St Kilda East	13620	1314.6	1090.4	1663.3	1790	1485	2265
21135	Armadale	7271	959.2	795.7	1220.7	697	579	888
21136	Prahran - Windsor	17038	1169.9	974.0	1488.7	1993	1660	2536
21137	South Yarra - East	18207	1439.9	1194.3	1832.1	2622	2175	3336

				Unit	level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	SA2 name	Unit-level_Probit_	Probit_	RAIE_	RAIE_	probit_	number_	number_
21138	Toorak	10775	684.0	568.5	876 3	737	613	оррегсі
21130	Abbotsford	71/2	1100 /	916.5	1/11 8	786	655	1008
21135	Carlton North - Princes Hill	7142	1186.6	976.8	1530.7	837	689	1080
21140	Collingwood	7034	1675.4	1379.7	2110.6	1208	995	1522
21141	Eitzrov	9726	15/27	1069.4	1050.7	12/6	1107	1702
21142	Fitzrov North	10007	1072.7	1015.2	1557.6	12/2	1025	1572
21143	Pichmond (Vic.)	25020	1231.0	1013.2	1540.4	2161	2610	4016
21144	Varra - North	7252	762.4	622.2	076.2		450	709
21145	Ashburton (Vic.)	5709	506.1	1002.0	751.5	246	439	/08
21140	Balwyn	12700	570.4	469.6	729.8	724	596	927
21147	Balwyn North	15792	300.4	329.0	5166	631	520	816
21140	Cambanwall	16900	101 2	200 0	610.0	001	670	1042
21150	Glan Iris - East	12404	256.0	205.5	461.6	442	267	572
21150	Howthorn	10000	1100.4	017.6	1416.2	2005	1722	2674
21151	Hawthorn East	10002	019.4	795.0	1210.2	1155	1755	1475
21152	Kow	10695	572.0	/03.2	720.6	1106	930	1475
21154	Kew Fast	1965	/50 1	379.7	591.0	228	180	20/
21155	Surrey Hills (West) - Canterbury	12697	380 /	373.7	/00.8	101	410	635
21156	Bulleen	9037	/18.2	3/35	5/10	378	310	/89
21157	Doncaster	17104	710.2	589.4	925.8	1230	1008	158/
21150	Templestowe	13/80	262.9	216.9	339.0	354	202	1504
21159	Templestowel ower	10895	366.8	303.0	470.5	400	330	513
21160	Blackburn	16694	546.3	1/0 8	700.2	912	751	1169
21162	Blackburn South	8439	6/3.3	527.1	804.1	5/3	//15	679
21162	Box Hill	16/12	1323.0	1079.7	1683.0	2171	1772	2764
21164	Box Hill North	13852	728.6	596.0	035.3	1009	826	1296
21165	Burwood	10465	1306.2	1056.9	1670.7	1367	1106	1748
21166	Burwood Fast	8467	737.7	600.2	952.7	625	508	807
21167	Surray Hills (East) - Mont Albert	7921	521.0	440.7	679.0	416	245	521
21168	Beaumaris	10387	228.1	190.0	292.1	237	107	303
21160	Brighton (Vic.)	17603	/36.1	362.4	558.1	768	638	982
21105	Brighton Fast	12034	412.7	342.7	523.1	497	412	630
21170	Cheltenham - Highett (West)	8294	656.0	542.7	823.1	544	450	683
21172	Hampton	13408	652.1	538.0	815.7	874	721	1094
21173	Sandringham - Black Rock	12786	448.6	373.8	567.7	574	478	726
21174	Bentleigh - McKinnon	17261	620.2	511.9	789.1	1071	884	1362
21176	Carnegie	14814	1145 5	943.7	1456.7	1697	1398	2158
21177	Caulfield - North	16327	890.0	731.8	1137.5	1453	1195	1857
21178	Caulfield - South	13765	635.0	524.7	810.6	874	722	1116
21179	Elsternwick	8819	733.8	610.4	934.9	647	538	824
21180	Hughesdale	6036	885.9	730.4	1125.6	535	441	679
21181	Murrumbeena	7398	874.0	723.1	1112.1	647	535	823
21182	Ormond - Glen Huntly	10665	1088.9	897.6	1392.8	1161	957	1485
21183	Aspendale Gardens - Waterways	6924	218.4	179.8	278.5	151	124	193
21185	Carrum - Patterson Lakes	9088	591.3	487.5	739.3	537	443	672
21186	Chelsea - Bonbeach	11228	875.5	724.0	1090.4	983	813	1224
21187	Chelsea Heights	4119	421.7	347.7	525.5	174	143	216
21188	Cheltenham - Highett (East)	17548	656.2	541.0	829.6	1152	949	1456
21189	Edithvale - Aspendale	9682	450.8	373.8	569.8	436	362	552
21190	Mentone	10321	794.6	660.2	996.8	820	681	1029
21191	Moorabbin - Heatherton	6798	631.7	521.8	799.4	429	355	543
21193	Mordialloc - Parkdale	15345	605.6	501.3	759.7	929	769	1166
21194	Malvern - Glen Iris	15830	716.9	595.2	915.0	1135	942	1448
21195	Malvern East	16851	770.0	629.3	990.9	1298	1060	1670
21196	Bundoora - East	7938	636.3	518.0	811.2	505	411	644
21197	Greensborough	15919	444.6	365.4	558.4	708	582	889
21198	Heidelberg - Rosanna	11475	668.8	554.1	846.8	767	636	972

Valitiese Unitiese
BA2_SDIGIT Unit-level, Prob. Intelloguiation Prob. RATE RATE Prob. Prob. BATE Prob. Prob. BATE Prob. Prob. Prob. Display Prob. Prob. Prob. Display Prob. Prob. Prob. Display Prob. Prob. Prob. Display Prob. Prob. Display Prob.
SAZ_2001 Control Color TextL TextL <thtextl< th=""></thtextl<>
Construction 21200Marker
1112 1.100 1.100 1.100 1.0004 1.200 1.0004 1.200 1.2004 1.2004 1.2004 1.2004 1.2004 1.2004 1.2004 1.2004 1.2004 1.2004 1.2012
20201 Winko 203 0.41.3 0.41.3 0.51.3 0.52.3 1.72 21202 MontmoercyBrain Hill 12420 402.1 333.1 506.1 6.76 556 21203 Wexbank - Vallambie 1415.1 4477.5 392.9 606.1 6.76 556 21204 Wexbank - Vallambie 1415.1 497.75 392.9 606.1 6.76 556 21205 Kingsbury 943.1 920.6 7.57.9 2.40 185.1 110.8 138.2 2.42.3 1 2.20.9 Elham 1.71.7 2.72.9 1.31.7 1.74.9 2.64.3 3.65 6.7 2.21.2 Finth West 1.92.4 1.83.1 3.62.1 3.2.1 </td
2100 Munka Lagunani 1220 Automorency Barly 1220 123 1242 123 1242 123 1242 123 1242 1242 1242 1242 1242 1242 1242 1242 1244 1242 1244 1242 1244 1243 1244 1233 1274 1275 1275 1225 1275 1275 1225 1275 1275 1225 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1275 1271 1749 2649 61 50 12717 Hurshrige 2870 2117 1749 2649 61 50 1313 1206 132 1313 1206 1314 120 121 1116 11 11 11 11 11 11 11 11 11 11 11 11 11 11
Line Multicity Dual Thim 1.44 3.33.2 <t< td=""></t<>
21204 Watconia 7121 617.4 505.9 1040 30.0 21204 Watconia 7122 617.4 505.9 718.5 877 77.4 1 21207 Reservoir - East 22020 1225.1 1020.0 157.1.2 2788 2284 33.2 21208 Reservoir - West 19241 875.9 718.5 1110.8 1685 1382 2 21200 Hirsthridge 2613 2268.2 212.2 331.9 70 57 21210 Hursthridge 263.3 163.2 135.3 206.9 61.5 54 21212 Panton Hill - St Andrews 3962 163.2 135.3 206.6 65.5 54 21213 Pienty - Yarambat 1923 137.1 124.4 137.7 121.4 645.0 649.3 151.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1 11.1
21204 WitsOffa 11.2 0.17.4 300.2 7.17.5 440 300 21205 Kingsbury 9431 9296 75.6 1135.0 877 77.4 1 21207 Reservoir-Kest 22029 1252.1 1023.0 1571.2 2758 2278 21208 Reservoir-West 19241 875.9 771.85 1110.8 1685 1328 2 21200 Eitham 17471 2240 185.1 283.4 391 323 2 21210 Kinglake 2870 211.7 177.4 264.9 61 50 21212 Panton Hill-St Andrews 3962 163.2 135.3 206.3 665 54 21214 Ringlake 10482 212.3 174.6 270.2 223 183 21214 Bundoora - North 1591 865.2 659.5 1091.2 444 361 222 21210 Mill Park - North 1803 476.4 430.4 534 501 431 430 21220 Mil
2400 Ningsoury 39-31 92-30 758-9 1157-12 2758 2244 3 21207 Reservoir - West 120241 822521 1102.3 1157-12 2758 2244 3 21208 Reservoir - West 12041 875.9 718.5 111.08 1685 1382 2 2120 Hurstbridge 2613 268.2 219.2 331.9 70 57 2121 Manch Hill - St Andrews 3962 163.2 133.2 206.3 65 54 21218 Pienty - Yarambat 7237 153.7 126.4 197.7 111 91 21216 Wattle Glen - Diamond Creek 10632 133.2 102.7 846.6 665 493 21217 Mundora - West 1910 852.7 696.9 1091.2 1101 1 21219 Lalor 1307 1012.7 846.6 617 501 21217 Bundora - West 1600 665.2 498
24207 Reservoir - Vest 1024.0 1024.0 1024.0 1051.1 27.98 2249 3 21208 Reservoir - Vest 1024.1 875.9 718.5 1110.8 1685 1382 22 21200 Hursbridge 261.3 268.2 219.2 331.9 70 57 2121 Hursbridge 261.3 268.2 219.2 331.9 70 57 21212 Panton Hill - St Andrews 396.2 163.2 135.3 206.3 66 54 21213 Plenty - Varambat 737 153.7 112.7 82.0 88 201 223 183 21216 Bundoora - North 5971 1012.7 82.5 128.4 605 493 220 1118 31.4 201 444 361 101 1 111.2 111.4 31.1 111 111 111 111 111 111 111 111 111 111 111 111 111
24008 Heservoir west 112/21 87.93 7.18.5 11110.8 10885 1.482 2 21209 Hurstbridge 2813 2840 2112 2111 1110.8 10851 2834 391 323 21210 Hurstbridge 2813 2662 2192 2813 2663 65 54 21212 Panton Hill -St Andrews 3962 115.2 135.3 2063 66 54 21214 Research - North Warandyte 5053 163.2 134.2 207.0 82 68 21215 Wattle Glen - Diamond Oreek 10482 212.3 174.6 270.2 223 183 21217 Bundoora - North 1597 101.2 825.2 665.9 1001.2 444 361 21220 Mill Park - North 14358 4641.3 379.3 592.8 666 545 21223 Mill Park - South 1932 264.9 236.5 510.4 255 209
21A09 Etham 1/4/1 2/4A0 185.1 383. 391 323 21210 Hurstbridge 2613 268.2 219.2 331.9 70 57 21211 Kinglake 2870 211.7 174.9 264.9 61 50 21212 Panton Hill<-St Andrews
21210 Hurstonoge 240.3 240.3 240.4 241.9 240.4 31.9 7.0 97 21211 Kinglake 2870 211.7 174.9 264.9 61 50 21212 Panton Hill - St Andrews 3962 163.2 135.3 206.3 65 54 21213 Plenty - Varambat 7237 155.7 124.4 197.7 111 91 21214 Research - North Warandyte 5053 163.2 134.2 207.0 82 68 21217 Bundoora - North 5971 1012.7 825.2 1284.6 605 4493 21217 Bundoora - Worth 18007 753.4 6112.9 662.3 1357 1101 1 21220 Mill Park - North 14358 464.1 379.3 592.8 666 545 21224 Wallan 11893 427.6 394.4 509 416 21224 Wallan 11893 427.6 394.5
2121 Ninglake 28/0 21/1 17.49 26.49 6.1 5.0 2122 Panton Hill - St Andrews 3962 135.3 125.4 197.7 111 91 21214 Research - North Warandyte 5053 165.2 134.2 207.0 82 6.6 21215 Watte Gien - Diamond Creek 10482 212.3 174.6 270.2 223 183 21216 Bundoora - North 5971 101.7 825.2 128.6 605 493 21217 Bundoora - North 1800 753.4 611.2 962.3 135.7 1101 1 21220 Mill Park - North 14358 464.1 379.3 592.8 666 545 21221 Mill Park - South 9512 649.2 526.9 825.3 1017 1015.7 21224 Walan 11893 422.6 349.4 539.4 509 416 21225 Whitlesea 6225 409.2 335.5
21212 Parton Hill St Andrews 3962 16.5.2 138.3 206.3 65 54 21213 Plenty - Yarmabat 7237 153.7 111 91 21214 Research - North Warrandyte 5053 163.2 134.2 207.0 82 68 21215 Wattle Glen - Diamond Creek 10482 212.3 174.6 270.2 223 183.3 21216 Bundoora - North 5971 1012.7 825.2 1284.6 606 493 21217 Bundoora - North 18007 753.4 611.2 962.3 1357 1101 1 21220 Mill Park - North 14358 464.1 379.3 592.8 666 505 21223 Thomastown 16455 812.8 659.7 1037.2 1337 1085 1 21224 Wallan 11893 427.6 349.4 530.4 250 92 21225 Whitelesa 622 400.2 36.5 570.7
21213 Plenty-Varrambat 7237 153.7 1254.4 197.7 111 91 21214 Research-North Warrandyte 5053 163.2 134.2 270.0 82 68 21215 Wattle Glen - Diamond Creek 10482 212.3 174.6 270.2 223 183 21216 Bundoora - North 15971 1012.7 825.2 1284.6 605 493 21217 Bundoora - North 15971 1012.7 825.2 1284.6 605 493 21219 Lalor 18007 753.4 611.2 962.3 1357 1101 1 21220 Mill Park - North 14358 464.1 373.7 1085 1 21221 Mill Park - South 9512 649.2 52.9 82.5 6107 501 1 21224 Walta 11893 427.6 349.4 539.4 509 416 1 21225 Whitlesea 6100 605.2 498.2 570.7 947 778 1 21226 Kellor
21214 Research North Warrandyte 505 163.2 114.2 207.0 82 68 21215 Watte Glen - Diamond Creek 10482 212.3 174.6 270.2 223 183 21216 Bundoora - North 5971 1012.7 825.2 1284.6 605 443 21217 Bundoora - North 18007 753.4 611.2 962.3 1357 1101 1 21220 Mill Park - North 14358 464.1 379.3 592.8 666 545 21221 Mill Park - South 9512 649.2 526.9 825.3 61.7 501 21224 Walian 11893 427.6 439.4 539.4 509 41.6 21224 Walian 11893 427.6 439.4 539.4 509 41.6 21224 Walian 1893 427.6 439.4 506 208 171 21225 Whitlesea 6100 655.1 395.6 208
21215 Wattle Clein - Diamond Creek 10482 212.3 174.6 270.2 223 188 21216 Bundoora - North 5971 1012.7 825.2 1284.6 605 493 21217 Bundoora - North 5191 855.2 665.9 1091.2 444 361 21219 Lalor 18007 753.4 611.2 952.3 1357 1101 1 21220 Mill Park - North 1455 812.8 659.7 1037.2 1337 1085 1 21221 Mill Park - South 116455 812.8 659.7 1037.2 1337 1085 1 21224 Wallan 11893 427.6 349.4 539.4 509 416 21225 Whittlesea 6622 409.2 336.5 510.4 255 209 21226 Keilor 6692 311.1 255.1 395.6 208 171 21228 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie
Bundoora - North 5971 1012.7 825.2 1284.6 605 493 21217 Bundoora - West 5191 855.2 695.9 1091.2 444 361 21219 Lalor 18007 753.4 611.2 962.3 1357 1101 1 21220 Mill Park - North 14358 464.1 379.3 592.8 666 545 21221 Mill Park - South 9512 649.2 536.9 825.3 617 501 21224 Wallan 11893 427.6 349.4 539.4 509 416 21225 WhittBesa 6225 409.2 336.5 510.4 255 209 21226 Airport West 6100 605.2 498.2 771.1 369 304 21229 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 493.0 672.2 <td< td=""></td<>
2127 Bundoora - West 5191 855.2 665.9 1091.2 444 361 2129 Lalor 18007 753.4 611.2 962.3 1357 1101 1 2120 Mill Park - North 13358 464.1 379.3 592.8 666 545 21221 Mill Park - North 13458 464.1 379.3 592.8 666 545 21224 Wallan 11893 427.6 365.5 510.4 255 209 21226 Alrport West 6100 605.2 498.2 771.1 369 304 21228 Kellor East 6100 605.2 498.2 771.1 369 304 21230 Niddrie - Essendon West 5389 51.4 439.0 679.2 286 237 21231 Strathmore 7221 299.6 248.0 383.5 216 179 21232 Gisborne 3979 316.9 261.0 400.7 289
21219 Lalor 18007 753.4 611.2 962.3 1357 11.1 1 21220 Mill Park - North 14358 464.1 379.3 592.8 666 545 21221 Mill Park - South 9512 649.2 526.9 825.3 617 501 21223 Thomastown 16455 812.8 659.7 1037.2 1337 1085 1 21224 Wallan 11893 427.6 349.4 539.4 509 416 2 21225 Whittlesea 6225 409.2 371.1 369 304 2 21226 Airport West 6100 605.2 498.2 771.1 369 304 2 21228 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 439.0 638.5 216 179 21232 Gisborne 721 299.
21220 Mill Park - North 1438 464.1 379.3 592.8 666 545 21221 Mill Park - South 9512 649.2 526.9 825.3 617 501 21223 Thomastown 16455 812.8 659.7 1037.2 1337 1085 1 21224 Wallan 11893 427.6 349.4 539.4 559 409 21225 Whittbesaa 6225 409.2 336.5 510.4 255 209 21226 Airport West 6100 605.2 498.2 771.1 369 304 21228 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 21231 Strathmore 7221 299.6 248.0 338.5 216 179 21233 Macedon 2486 202.8 168.0 257.3 50 42 2123 21234 Riddells Creek 2984
21221 Mill Park - South 9512 649.2 526.9 825.3 617 501 21223 Thomastown 16455 812.8 659.7 1037.2 1337 1085 1 21224 Wallan 11893 427.6 349.4 539.4 509 416 21225 Whittlesa 6225 409.2 336.5 510.4 255 209 21226 Airport West 6100 605.2 498.2 771.1 369 304 21228 Kelor 6692 311.1 255.1 395.6 208 171 120 21230 Niddre - Essendon West 5389 531.4 439.0 67.72 248 237 2123 21231 Strathmore 7221 299.6 248.0 383.5 216 179 245 21234 Riddells Creek 294 197.1 162.6 248.8 59 49 2123 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North
21223 Thomastown 16455 8128 6697 1037.2 1337 1085 1 21224 Wallan 11893 427.6 349.4 539.4 509 416 21225 Whittlesea 6225 409.2 336.5 510.4 255 209 21226 Airport West 6100 605.2 498.2 771.1 369 304 21228 Keilor 6692 311.1 255.1 395.6 208 171 21220 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 1 21231 Strathmore 7221 299.6 248.0 383.5 216 179 1 21233 Macedon 2486 202.8 168.0 257.3 50 42 21234 Riddells Creek 2984 177.1 162.6
21224 Wallan 11893 427.6 349.4 539.4 509 416 21225 Whittlesea 6225 409.2 336.5 510.4 255 209 21226 Airport West 6100 6692 311.1 255.1 395.6 208 171 21229 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 233 21231 Strathmore 7221 299.6 248.0 338.5 216 179 2123 21233 Macedon 2486 202.8 168.0 257.3 50 42 21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 91 1235 Romsey 7039 324.7 268.3 406.1 229 189 118 116 116 113 116 116 116 113 113 113 113 113 113 114 114 114<
21225 Whittlesea 6225 409.2 336.5 510.4 255 209 21226 Airport West 6100 605.2 498.2 771.1 309 304 21228 Keilor 6692 311.1 255.1 395.6 208 171 21229 Keilor East 21047 450.0 369.5 570.7 947 78 1 21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 21231 Strathmore 7221 299.6 248.0 383.5 216 179 245 21232 Gisborne 9379 316.9 261.0 400.7 297 245 21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 21235 Romsey 7039 324.7 268.3 406.1 229 139 140 1 21236 Coburg North 6081 793.5 613.6 947.8 1382 1140 1 21237 Fawkner
21226 Airport West 6100 605.2 498.2 771.1 369 304 21228 Kellor 6692 311.1 255.1 395.6 208 171 21229 Kellor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 21231 Strathmore 7221 299.6 248.0 383.5 216 179 245 21232 Gisborne 9379 316.9 261.0 400.7 297 245 243.0 443.5 449.0 443.0 44.0 443.0 443.0 443.0 443.0 443.0 443.0 443.0 443.0 443.0 443.0 443.0 444.0 443.0 444.0 444.0
21228 Keilor 6692 311.1 255.1 395.6 208 171 21229 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 21231 Strathmore 7221 299.6 248.0 383.5 216 179 21232 Gisborne 9379 316.9 261.0 400.7 297 245 21233 Macedon 2486 202.8 1680 257.3 50 42 21234 Riddells Creek 2984 197.1 162.6 248.8 59 499 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 2123 21237 Fawkner 10467 838.0 681.3 1077.3 877 71.3 1 21240 Sunbury Sunbury 901
21229 Keilor East 21047 450.0 369.5 570.7 947 778 1 21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 21231 Strathmore 7221 299.6 248.0 383.5 216 179 21232 Gisborne 9379 316.9 261.0 400.7 297 245 21233 Macedon 2486 202.8 168.0 257.3 50 42 21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawher 10467 838.0 681.3 1077.3 877 713 1 21239 Pascoce Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury - South 20538 614.7
21230 Niddrie - Essendon West 5389 531.4 439.0 679.2 286 237 21231 Strathmore 7221 299.6 248.0 383.5 216 179 21232 Gisborne 9379 316.9 261.0 400.7 297 245 21233 Macedon 2486 202.8 168.0 257.3 50 42 21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21240 Sunbury 9711 353.3 289.5 444.9 343 281 440 1 21240 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070
21231 Strathmore 7221 299.6 248.0 383.5 216 179 21232 Gisborne 9379 316.9 261.0 400.7 297 245 21233 Macedon 2486 202.8 168.0 257.3 50 42 21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21240 Sunbury Sunbury 9711 353.3 289.5 444.9 343 281 1 <t< td=""></t<>
21232 Gisborne 9379 316.9 261.0 400.7 297 245 21233 Macedon 2486 202.8 168.0 257.3 50 42 21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21239 Pascoe Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury Sunbury 9711 353.3 289.5 444.9 343 281 1 21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 199.6 1606 1302 2 21245 Gladsto
21233 Macedon 2486 202.8 168.0 257.3 50 42 21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21239 Pascoe Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury 9711 353.3 289.5 444.9 343 281 142 21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 199.6 1606 1302 22 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245
21234 Riddells Creek 2984 197.1 162.6 248.8 59 49 21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21239 Pascoe Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury 9711 353.3 289.5 444.9 343 281 140 1 21240 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 199.6 1606 1302 2 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 949 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629
21235 Romsey 7039 324.7 268.3 406.1 229 189 21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21239 Pascoe Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury 9711 353.3 289.5 444.9 343 281 122 21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 199.6 1606 1302 2 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183
21236 Coburg North 6081 799.4 656.0 1009.2 486 399 21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21239 Pascoe Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury 9711 353.3 289.5 444.9 343 281 1 21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 1999.6 1606 1302 22 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 1 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182
21237 Fawkner 10467 838.0 681.3 1077.3 877 713 1 21239 Pascoe Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury 9711 353.3 289.5 444.9 343 281 21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 1999.6 1606 1302 22 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046
21239 Pascoe Vale 18582 743.5 613.6 947.8 1382 1140 1 21240 Sunbury 9711 353.3 289.5 444.9 343 281 21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 1999.6 1606 1302 22 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 12146 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3
21240 Sunbury 9711 353.3 289.5 444.9 343 281 21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 1999.6 1606 1302 22 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 21246 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841
21241 Sunbury - South 20538 614.7 504.5 772.5 1262 1036 1 21242 Broadmeadows 10070 1595.2 1293.1 1999.6 1606 1302 2 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 5
21242 Broadmeadows 10070 1595.2 1293.1 1999.6 1606 1302 2 21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21243 Campbellfield - Coolaroo 12154 1016.8 817.5 1288.3 1236 994 1 21245 Gladstone Park - Westmeadows 14119 547.7 445.6 695.5 773 629 21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21245 Gladstone Park · Westmeadows 14119 547.7 445.6 695.5 773 629 21246 Greenvale · Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park · Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21246 Greenvale - Bulla 12693 177.3 144.6 231.2 225 183 21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21247 Meadow Heights 11043 1069.9 859.6 1349.5 1182 949 1 21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21249 Roxburgh Park - Somerton 15779 662.8 530.1 852.0 1046 836 1 21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21250 Tullamarine 5290 1011.4 828.8 1270.3 535 438 21251 Bayswater 9625 874.2 717.6 1095.2 841 691 11 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21251 Bayswater 9625 874.2 717.6 1095.2 841 691 1 21254 Knoxfield - Scoresby 11762 464.3 381.1 597.0 546 448
21254 Knoxfield - Scoreshy 11762 464 3 381 1 597.0 546 448
11/02 TOT.3 301.1 337.0 340 440
21255 Lysterfield 5107 136.4 113.2 173.0 70 58
21256 Rowville - Central 12148 359.5 296.7 460.6 437 360
21257 Rowville - North 6092 363.0 296.6 461.3 221 181
21258 Rowville - South 8297 202.9 166.6 264.5 168 138
21259 Wantirna 11151 513.6 419.5 655.0 573 468
21260 Wantirna South 14632 503.2 411.2 640.0 736 602
21261 Donvale - Park Orchards 12469 271.6 223.9 347.4 339 279
21261 Donvale - Park Orchards 12469 271.6 223.9 347.4 339 279 21262 Warrandyte - Wonga Park 7745 151.0 125.0 190.6 117 97
21261 Donvale - Park Orchards 12469 271.6 223.9 347.4 339 279 21262 Warrandyte - Wonga Park 7745 151.0 125.0 190.6 117 97 21263 Bayswater North 9176 527.2 433.0 662.1 484 397

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
CODE 2016	SA2 name	Unit-level_Probit_	Probit_	RAIE_	RAIE_	probit_	number_	number_
21266	Pingwood	13/82	1008.2	830.8	1269.6	1350	1120	1712
21267	Ringwood Fast	15732	651.9	535.3	825.0	1026	8/2	1/12
21269	Pingwood North	7247	266.1	210.0	226.1	1020	162	247
21260	Forest Hill	8/97	7// 3	610.8	038.1	632	510	797
21209	Mitcham (Vic.)	12567	627.0	E10.0	700.9	790	652	1005
21270		12307	722.0	0.010	799.0	709	 	1005
21271	Neura ent	9323	/ 33.2	220.0	928.0	200	203	417
21272	Vermont	7900	412.4	338.9	528.3	320	208	41/
21273	Vermont South	9510	303.5	249.5	391.8	289	237	3/3
21274	Belgrave - Selby	7652	209.5	1/2.4	264.7	160	132	203
21275	Chirnside Park	/663	330.6	271.0	421.4	253	208	323
21276	Healesville - Yarra Glen	10506	495.6	404.7	618.2	521	425	649
21277	Kilsyth	/161	552.3	453.1	691.5	396	324	495
21278	Lilydale - Coldstream	14391	555.7	454.1	697.7	800	653	1004
21279	Monbulk - Silvan	4259	363.7	299.4	457.0	155	127	195
21280	Montrose	5241	275.6	226.4	344.8	144	119	181
21281	Mooroolbark	16906	483.5	396.0	614.1	817	669	1038
21282	Mount Dandenong - Olinda	7437	240.5	198.5	302.6	179	148	225
21283	Mount Evelyn	7341	304.7	249.6	380.7	224	183	279
21284	Upwey - Tecoma	7398	322.8	265.2	404.2	239	196	299
21285	Wandin - Seville	5725	221.8	183.6	279.8	127	105	160
21286	Yarra Valley	12367	501.6	410.3	621.7	620	507	769
21287	Beaconsfield - Officer	9724	424.6	349.3	545.7	413	340	531
21288	Bunyip - Garfield	6585	327.8	268.6	414.7	216	177	273
21289	Emerald - Cockatoo	13534	227.7	187.2	285.4	308	253	386
21290	Koo Wee Rup	5658	488.8	402.0	610.7	277	227	346
21291	Pakenham - North	13346	945.2	774.8	1190.3	1261	1034	1589
21292	Pakenham - South	20408	812.8	665.2	1027.0	1659	1358	2096
21293	Berwick - North	18015	500.4	411.3	631.4	901	741	1137
21294	Berwick - South	18249	509.9	419.1	656.6	931	765	1198
21295	Doveton	8799	1323.9	1073.3	1671.0	1165	944	1470
21297	Hallam	8364	691.0	559.4	884.9	578	468	740
21299	Narre Warren North	6145	101.6	83.2	129.3	62	51	79
21300	Cranbourne	15138	891.4	726.8	1119.3	1349	1100	1694
21301	Cranbourne East	17955	495.9	406.5	636.1	890	730	1142
21302	Cranbourne North	14472	590.2	481.6	751.9	854	697	1088
21303	Cranbourne South	6722	208.8	171.7	267.1	140	115	180
21304	Cranbourne West	10838	536.4	438.8	681.2	581	476	738
21305	Hampton Park - Lynbrook	19197	721.6	586.8	920.1	1385	1127	1766
21306	Lynbrook - Lyndhurst	10867	317.3	260.6	411.4	345	283	447
21308	Pearcedale - Tooradin	5877	299.0	245.2	374.9	176	144	220
21309	Clarinda - Oakleigh South	9676	504.7	413.7	642.4	488	400	622
21310	Clayton South	10322	1065.2	869.0	1373.4	1100	897	1418
21311	Dandenong	24048	1592.9	1294.9	2030.2	3831	3114	4882
21312	Dandenong North	17776	834.4	677.3	1059.5	1483	1204	1883
21313	Dingley Village	8075	251.4	207.4	319.1	203	167	258
21314	Keysborough	20226	424.5	346.3	544.6	859	700	1101
21316	Noble Park North	5986	806.6	657.2	1021.0	483	393	611
21317	Springvale	17694	1140.7	924.0	1462.8	2018	1635	2588
21318	Springvale South	10015	701.0	569.8	897.0	702	571	898
21319	Ashwood - Chadstone	14559	1021.1	836.0	1290.4	1487	1217	1879
21320	Clayton	19784	1680.1	1358.5	2163.1	3324	2688	4279
21321	Glen Waverley - East	16813	481.2	396.5	621.8	809	667	1045
21322	Glen Waverley - West	15531	682.3	558.3	883.8	1060	867	1373
21323	Mount Waverley - North	12230	520.3	428.2	672.3	636	524	822
21324	Mount Waverley - South	14553	529.8	435.6	682.7	771	634	994
21325	Mulgrave	15450	517.9	423.7	665.1	800	655	1028
21326	Oakleigh - Huntingdale	17154	829.1	680.0	1061.5	1422	1166	1821

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGH	SA2 name	Unit-level_Probit_	probit_	RAIE_	RAIE_	probit_	number_	number_
21327	Wheelers Hill	15985	352.8	289.6	451.0	564	163	721
21327	Ardoor Albion	6249	1227.0	1000.9	1560.1	770	625	000
21320	Caimlaa	7202	254.6	2000.5	1500.1	250	200	222
21329	Door Pork - Dorrimut	10200	740.4	600.0	455.5	1446	1175	1950
21330	Deleher	19300	640.9	501 E	900.0	1440	240	E 20
21331		0090	540.8	521.5	604.4	429	349	
21332		10017	544.5	441.9	089.4	5/8	469	/32
21333	Kings Park (Vic.)	10834	696.5	562.7	883.9	/55	010	958
21334	St Albans - North	16027	1112.2	903.9	1416.1	1/83	1449	2270
21335	St Albans - South	13880	980.6	/96.3	1245.1	1361	1105	1/28
21336	Sunshine	7722	1225.4	998.0	1566.9	946	//1	1210
21337	Sunshine North	9272	828.5	6/2./	1062.0	/68	624	985
21338	Sunshine West	14853	821.5	667.6	1047.1	1220	992	1555
21339	Sydenham	9382	719.8	590.9	921.9	675	554	865
21340	laylors Lakes	14141	238.4	194.5	305.1	337	275	431
21341	Altona	10116	730.0	603.4	918.2	738	610	929
21342	Altona Meadows	15362	730.7	598.2	922.7	1122	919	1417
21343	Altona North	11086	800.7	655.8	1015.2	888	727	1125
21344	Newport	13341	626.8	519.4	799.1	836	693	1066
21345	Seabrook	3860	376.2	304.8	490.1	145	118	189
21346	Williamstown	11890	586.2	485.0	734.3	697	577	873
21347	Braybrook	14571	1437.5	1172.0	1810.1	2095	1708	2637
21348	Footscray	13916	1673.7	1371.2	2117.4	2329	1908	2947
21349	Maribyrnong	10012	856.2	705.8	1100.8	857	707	1102
21350	Seddon - Kingsville	7206	998.1	826.1	1257.6	719	595	906
21351	West Footscray - Tottenham	9162	1181.3	968.2	1501.7	1082	887	1376
21352	Yarraville	11504	688.1	571.0	874.5	792	657	1006
21353	Bacchus Marsh	15363	650.4	531.1	810.8	999	816	1246
21355	Hillside	14983	284.0	231.9	366.4	425	347	549
21356	Melton	14272	878.9	714.9	1095.2	1254	1020	1563
21357	Melton South	17152	860.4	700.8	1078.2	1476	1202	1849
21358	Melton West	12655	710.5	578.3	895.6	899	732	1133
21359	Rockbank - Mount Cottrell	2672	392.7	321.6	491.1	105	86	131
21360	Taylors Hill	13253	324.2	264.7	418.2	430	351	554
21361	Hoppers Crossing - North	14866	557.8	454.6	710.8	829	676	1057
21362	Hoppers Crossing - South	15094	769.7	626.2	980.3	1162	945	1480
21363	Laverton	6928	1072.1	870.6	1383.6	743	603	959
21365	Tarneit	23965	686.0	558.8	889.5	1644	1339	2132
21366	Truganina	16482	645.1	527.3	838.3	1063	869	1382
21368	Werribee - South	9021	868.2	711.3	1091.4	783	642	985
21369	Wyndham Vale	16303	735.8	601.3	932.7	1200	980	1521
21370	Carrum Downs	15873	748.3	613.9	944.6	1188	974	1499
21371	Frankston	18031	1385.9	1138.3	1717.1	2499	2052	3096
21372	Frankston North	15134	1263.9	1031.7	1570.6	1913	1561	2377
21373	Frankston South	14101	533.6	438.3	665.9	752	618	939
21374	Langwarrin	18279	471.3	388.3	589.3	861	710	1077
21375	Seaford (Vic.)	13066	1042.8	856.1	1297.4	1362	1119	1695
21376	Skye - Sandhurst	9582	368.9	303.5	474.8	353	291	455
21377	Dromana	8633	790.4	648.8	991.0	682	560	856
21378	Flinders	4022	322.3	267.6	408.0	130	108	164
21379	Hastings - Somers	16835	795.8	652.0	988.9	1340	1098	1665
21380	Mornington	18670	728.9	599.1	907.6	1361	1118	1694
21381	Mount Eliza	13267	205.1	168.8	261.0	272	224	346
21382	Mount Martha	13548	336.6	277.0	428.9	456	375	581
21383	Point Nepean	12828	689.4	565.9	857.9	884	726	1100
21384	Rosebud - McCrae	16649	985.0	804.7	1219.6	1640	1340	2031
21385	Somerville	14070	462.8	379.9	579.8	651	534	816
21386	Ararat	6622	824.6	669.5	1026.4	546	443	680

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGH	SA2 name	Unit-level_Probit_	probit_	RAIE_	RAIE_	probit_	number_	number_
21387	Ararat Region	2339	453.6	373.6	571 5	106	87	13/
21307	Horsham	121/2	433.0	770 1	1165.0	1152	0/5	1/16
21388	Hereham Degion	2542	250.0	200.1	441.7		76	1410
21200	Nhill Pagion	5270	574.2	470.5	711.0	200	252	202
21390	St Arpoud	3570	620.6	470.5 E07.7	711.0	172	200	210
21391	St Amadu	2096	039.0	527.7	1010.0	1/5	142	210
21392	Stawell	6402	820.9	666.9	1018.8	526	427	052
21393	West wimmera	2097	587.0	485.7	/26.3	123	102	152
21394	Yarriambiack	5150	549.8	451.5	6/3./	283	233	347
21395	Irympie	5149	470.2	383.8	585.3	242	198	301
21396	Merbeln	35/3	597.0	486.4	/36.2	213	1/4	263
21398	Mildura Region	2877	653.0	537.1	815.2	188	155	235
21399	Red Cliffs	4432	/06.5	5/6.2	877.8	313	255	389
21400	Buloke	4824	554.3	455.7	679.4	267	220	328
21401	Gannawarra	5178	624.5	510.7	776.9	323	264	402
21402	Kerang	3043	807.5	661.4	993.3	246	201	302
21403	Robinvale	2494	1000.9	807.7	1256.5	250	201	313
21404	Swan Hill	8198	1079.3	880.3	1336.6	885	722	1096
21405	Swan Hill Region	4821	464.8	380.2	579.8	224	183	280
21406	Echuca	11026	908.7	742.7	1124.7	1002	819	1240
21407	Kyabram	8272	748.4	610.6	929.9	619	505	769
21408	Lockington - Gunbower	2826	436.6	359.5	548.5	123	102	155
21409	Rochester	2954	655.8	535.7	808.3	194	158	239
21410	Rushworth	3241	516.2	423.6	635.5	167	137	206
21411	Cobram	4781	965.0	787.6	1197.3	461	377	572
21412	Moira	1969	426.0	352.3	524.6	84	69	103
21413	Numurkah	9327	665.2	545.5	821.7	620	509	766
21414	Yarrawonga	5873	820.9	674.0	1013.5	482	396	595
21415	Mooroopna	6067	1195.7	968.8	1470.8	725	588	892
21416	Shepparton - North	13888	1098.6	896.4	1365.9	1526	1245	1897
21417	Shepparton - South	17193	942.4	765.8	1177.6	1620	1317	2025
21418	Shepparton Region - East	2842	344.3	282.2	431.7	98	80	123
21419	Shepparton Region - West	7709	586.2	477.2	735.8	452	368	567
21420	Glenelg (Vic.)	6767	520.0	426.2	639.4	352	288	433
21421	Hamilton (Vic.)	7669	816.5	670.5	1008.7	626	514	774
21422	Portland	8240	986.8	806.8	1215.4	813	665	1001
21423	Southern Grampians	4528	484.4	398.3	605.8	219	180	274
21424	Doncaster East (North)	11785	302.8	248.5	392.3	357	293	462
21425	Doncaster East (South)	11129	739.7	607.7	945.7	823	676	1052
21426	Bentleigh East (North)	11146	522.1	431.3	665.8	582	481	742
21427	Bentleigh East (South)	10179	459.8	379.3	588.9	468	386	599
21428	Preston - East	16282	1201.5	982.4	1514.9	1956	1599	2467
21429	Preston - West	9624	863.8	710.4	1099.8	831	684	1058
21430	Doreen	14249	512.2	421.6	652.2	730	601	929
21431	Epping - East	10251	700.8	570.2	891.0	718	585	913
21432	Epping - South	6625	958.0	783.8	1209.7	635	519	801
21433	Epping - West	7659	682.9	560.5	870.9	523	429	667
21434	Mernda	11649	702.8	575.5	894.2	819	670	1042
21435	South Morang (North)	8608	404.9	330.1	523.8	349	284	451
21436	South Morang (South)	9195	530.7	435.6	675.5	488	401	621
21437	Wollert	6428	517.3	421.7	667.3	333	271	429
21438	Glenroy	17628	992.5	810.5	1266.0	1750	1429	2232
21439	Gowanbrae	2179	347.3	288.4	438.1	76	63	95
21440	Hadfield	4449	736.8	600.3	931.9	328	267	415
21441	Craigieburn - Central	6316	738.9	597.3	944.5	467	377	597
21442	Craigieburn - North	7945	570.3	465.4	736.1	453	370	585
21443	Craigieburn - South	12062	753.4	610.2	962.8	909	736	1161
21444	Craigieburn - West	9816	884.1	720.4	1135.1	868	707	1114

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	640	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name	totalpopulation	RATE	LowerCi	UpperCi	redmun	LowerCi	UpperCi
21445	Mickienam - Yuroke	2574	152.5	124.7	196.4	39	32	51
21446	Boronia	1/548	/35./	603.1	925.2	1291	1058	1623
21447	Ferntree Gully (North)	11019	616.5	509.2	766.9	679	561	845
21448	Ferntree Gully (South) - Upper Ferntree Gully	11412	422.2	347.6	531.9	482	397	607
21449	The Basin	3217	267.1	220.7	334.6	86	/1	108
21450	Croydon - East	11862	862.1	/09.2	1082.2	1023	841	1284
21451	Croydon - West	10495	664.0	543.9	835.6	697	571	877
21452	Croydon South	3621	488.3	402.0	613.8	177	146	222
21453	Endeavour Hills - North	9423	487.9	395.9	624.3	460	373	588
21454	Endeavour Hills - South	10605	473.2	382.1	605.1	502	405	642
21455	Narre Warren - North East	10312	494.1	403.1	629.8	509	416	649
21456	Narre Warren - South West	10836	799.6	652.6	1012.8	866	707	1097
21457	Narre Warren South (East)	9681	197.8	160.9	259.5	191	156	251
21458	Narre Warren South (West)	12203	482.1	389.0	623.9	588	475	761
21459	Noble Park - East	10006	1322.8	1085.9	1675.4	1324	1087	1676
21460	Noble Park - West	14867	1060.2	863.5	1346.2	1576	1284	2001
21461	Burnside	3647	332.2	272.0	414.0	121	99	151
21462	Burnside Heights	4144	425.9	346.6	555.5	177	144	230
21463	Caroline Springs	14268	497.8	408.0	639.9	710	582	913
21464	Point Cook - East	8696	630.7	518.9	823.7	548	451	716
21465	Point Cook - North	16236	536.7	441.2	697.8	871	716	1133
21466	Point Cook - South	9825	586.5	483.1	766.3	576	475	753
21467	Werribee - East	15193	1086.3	884.0	1367.7	1650	1343	2078
21468	Werribee - West	9248	627.4	512.2	791.6	580	474	732
21469	Mildura - North	13711	1487.0	1209.7	1836.2	2039	1659	2518
21470	Mildura - South	11073	1063.6	866.0	1321.3	1178	959	1463
21471	Camperdown	2666	771.4	632.9	944.6	206	169	252
21472	Colac	9291	901.5	737.3	1106.6	838	685	1028
21473	Colac Region	3982	425.8	350.4	530.9	170	140	211
21474	Corangamite - North	4085	672.4	551.1	831.6	275	225	340
21475	Corangamite - South	5342	630.9	518.6	788.5	337	277	421
21476	Otway	2567	719.6	595.5	890.1	185	153	228
21477	Moyne - East	4884	540.8	444.6	682.0	264	217	333
21478	Moyne - West	7005	547.7	451.6	680.2	384	316	476
21479	Warrnambool - North	15780	944.3	773.9	1170.5	1490	1221	1847
21480	Warrnambool - South	10086	1055.7	866.0	1306.8	1065	873	1318
31001	Alexandra Hills	12502	662.4	540.0	829.3	828	675	1037
31002	Belmont - Gumdale	5591	323.7	264.6	420.0	181	148	235
31003	Birkdale	11509	526.5	431.4	666.9	606	496	768
31004	Capalaba	13662	765.6	624.6	958.0	1046	853	1309
31005	Thorneside	2915	945.3	776.7	1186.1	276	226	346
31006	Wellington Point	8843	542.1	445.4	685.9	479	394	607
31007	Cleveland	11965	1001.5	820.6	1247.8	1198	982	1493
31008	Ormiston	4563	522.1	429.9	658.7	238	196	301
31009	Redland Bay	11504	576.4	469.9	736.6	663	541	847
31011	Sheldon - Mount Cotton	5685	238.9	196.9	309.2	136	112	176
31012	Thornlands	11099	552.0	452.4	703.0	613	502	780
31013	Victoria Point	11725	769.1	626.1	975.0	902	734	1143
31015	Manly - Lota	5674	728.3	597.1	916.0	413	339	520
31016	Manly West	8572	678.3	555.2	852.9	581	476	731
31017	Murarrie	3086	704.8	577.9	904.8	218	178	279
31018	Tingalpa	6642	616.6	508.2	784.0	410	338	521
31019	Wakerley	6062	438.6	365.1	567.1	266	221	344
31020	Wynnum	10221	1020.9	836.7	1273.8	1043	855	1302
31021	Wynnum West - Hemmant	11264	793.2	649.5	1005.3	893	732	1132
31022	Bald Hills	5520	596.6	489.6	762.0	329	270	421
31023	Bridgeman Downs	6320	259.0	213.2	333.9	164	135	211

				Unit	level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGH	SA2 name	Unit-level_Probit_	probit_	RAIE_	RAIE_	probit_	number_	number_
21024	Carcoldina	7252	660 F	E0werCr	0pper Ci	1000	207	622
21025	Evorton Park	6010	009.3	7177	1104.9	602	407	764
21025	MeDowall	 	0/1.3	202.0	1104.0	202	169	265
31020		5/11	300.5	293.9	404.0	203	100	203
31027	Chauraaida	9828	1005.0	5/9.4	895.3	1464	1000	1000
31028	Chermside	//6/	1885.2	1544.6	2303.0	1464	1200	1830
31029		4923	440.8	361.6	5/3.3	217	1/8	282
31030	Geebung	3286	645.7	529.4	830.9	212	1/4	2/3
31031	Kedron - Gordon Park	10534	1026.6	847.5	1302.2	1081	893	13/2
31032	Stafford	5131	1426.1	11/1.9	1//9.8	/32	601	913
31033	Stafford Heights	53/4	859.8	699.3	1075.6	462	3/6	5/8
31034	Wavell Heights	7287	584.3	481.3	745.0	426	351	543
31035	Boondall	7273	720.7	585.6	922.5	524	426	671
31037	Eagle Farm - Pinkenba	705	844.6	709.0	1075.1	60	50	76
31038	Northgate - Virginia	5129	929.5	766.0	1173.9	477	393	602
31039	Nudgee - Banyo	7393	674.2	553.5	858.2	498	409	634
31040	Nundah	10064	1437.7	1191.2	1812.1	1447	1199	1824
31041	Bracken Ridge	12955	630.6	514.0	806.1	817	666	1044
31042	Brighton (Qld)	7189	632.3	517.6	793.4	455	372	570
31043	Deagon	2843	1034.1	842.6	1291.3	294	240	367
31044	Sandgate - Shorncliffe	5326	865.4	710.6	1065.3	461	378	567
31045	Taigum - Fitzgibbon	9550	1001.7	819.4	1270.4	957	783	1213
31046	Zillmere	7093	1778.8	1449.8	2235.6	1262	1028	1586
31047	Camp Hill	8177	596.3	492.7	763.6	488	403	624
31048	Cannon Hill	4436	687.6	567.4	885.2	305	252	393
31049	Carina	8703	787.0	646.3	1007.7	685	563	877
31050	Carina Heights	5217	1221.0	1002.5	1533.1	637	523	800
31051	Carindale	12449	302.4	248.7	392.9	376	310	489
31052	Annerley	9464	1511.6	1241.0	1908.7	1431	1174	1806
31053	Coorparoo	12853	1060.0	875.4	1348.3	1362	1125	1733
31054	Fairfield - Dutton Park	3922	1451.9	1187.9	1839.6	569	466	721
31055	Greenslopes	7522	1399.0	1153.8	1774.6	1052	868	1335
31056	Holland Park	6177	992.7	817.4	1230.3	613	505	760
31057	Holland Park West	4971	804.7	662.9	1025.1	400	330	510
31058	Woolloongabba	4729	1555.4	1274.8	1975.7	736	603	934
31059	Yeronga	7648	1013.4	836.5	1272.7	775	640	973
31060	Eight Mile Plains	12154	837.0	684.0	1083.5	1017	831	1317
31061	Macgregor (Qld)	4918	995.7	803.1	1294.7	490	395	637
31062	Mansfield (Qld)	6655	696.4	568.7	884.3	463	378	588
31063	Mount Gravatt	11669	1065.2	872.6	1337.8	1243	1018	1561
31064	Rochedale - Burbank	4716	313.8	255.8	407.7	148	121	192
31065	Upper Mount Gravatt	7673	1200.9	974.7	1535.0	921	748	1178
31066	Wishart	8292	521.6	427.8	674.0	432	355	559
31067	Coopers Plains	4439	1433.0	1163.0	1813.5	636	516	805
31068	Moorooka	8238	1162.1	956.8	1458.3	957	788	1201
31069	Robertson	4219	892.7	721.8	1168.0	377	305	493
31070	Salisbury - Nathan	5608	765.1	623.8	974.2	429	350	546
31071	Tarragindi	7874	439.2	361.0	563.8	346	284	444
31072	Algester	6484	687.3	565.0	876.4	446	366	568
31073	Calamvale - Stretton	16412	636.1	519.6	824.5	1044	853	1353
31074	Pallara - Willawong	3460	497.1	409.9	652.1	172	142	226
31075	Parkinson - Drewvale	11438	458.6	373.0	601.6	525	427	688
31076	Rocklea - Acacia Ridge	7382	1520.6	1230.3	1911.9	1122	908	1411
31077	Kuraby	6214	678.4	549.2	876.7	422	341	545
31078	Runcorn	11309	996.4	808.8	1294.4	1127	915	1464
31079	Sunnybank	7355	1118.9	905.3	1441.8	823	666	1060
31080	Sunnybank Hills	14438	754.2	612.2	972.3	1089	884	1404
31081	Jindalee - Mount Ommaney	5844	376.8	309.0	489.3	220	181	286

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name	totalpopulation	RATE	LowerCI	UpperCi	number	LowerCi	UpperCi
31082	Middle Park - Jamboree Heights	5440	470.6	385.0	610.1	256	209	332
31083	Riverhills	3017	536.7	443.3	693.4	162	134	209
31084	Seventeen Mile Rocks - Sinnamon Park	7217	359.2	296.5	463.8	259	214	335
31085	Westlake	3372	201.1	167.0	262.3	68	56	88
31086	Bellbowrie - Moggill	7446	393.6	323.0	509.6	293	241	379
31087	Brookfield - Kenmore Hills	5247	221.0	181.5	284.6	116	95	149
31088	Chapel Hill	7849	323.4	266.6	417.3	254	209	328
31089	Fig Tree Pocket	2933	204.9	170.1	269.1	60	50	79
31090	Kenmore	6602	370.3	304.1	482.5	244	201	319
31091	Pinjarra Hills - Pullenvale	4006	192.9	158.0	248.7	77	63	100
31092	Chelmer - Graceville	5388	407.8	337.7	527.9	220	182	284
31093	Corinda	3619	815.5	673.4	1019.7	295	244	369
31094	Indooroopilly	9829	1239.9	1013.0	1593.2	1219	996	1566
31095	Sherwood	4325	872.4	723.3	1100.6	377	313	476
31096	St Lucia	10966	1560.0	1259.5	2002.5	1711	1381	2196
31097	Taringa	7072	1554.2	1273.1	1982.9	1099	900	1402
31098	Enoggera	6378	1182.4	973.4	1482.7	754	621	946
31100	Keperra	5457	1125.9	917.6	1400.3	614	501	764
31101	Mitchelton	6218	920.3	755.0	1161.2	572	469	722
31103	The Gap	12338	334.8	275.3	430.5	413	340	531
31104	Upper Kedron - Ferny Grove	7202	450.9	370.9	584.9	325	267	421
31105	Brisbane City	9148	1322.0	1078.8	1717 3	1209	987	1571
31106	Fortitude Valley	6437	1666.2	1379.5	2110.9	1073	888	1359
31107	Highgate Hill	5200	1376.3	1127.7	1747.3	716	586	909
21109	Kangaraa Point	7264	1206.1	1070.5	165/ 1	0/1	770	1202
31100	Now Form	10010	1102.0	1070.3	1407.9	1201	1070	1624
31109	New Farm	10912	1000.0	10047	1497.0	700	1070	1034
31110	South Brisbane	6194	1289.0	1004.7	8.7001	/99	714	11027
31111	Spring Hill	5363	1628.1	1331.0	2087.7	8/3	/14	1120
31112	West End	/899	1293.6	1067.4	1645.1	1022	843	1299
31113	Balmoral	3157	685.9	568.8	878.9	217	180	277
31114	Bulimba	5100	646.4	539.8	831.2	330	275	424
31115	East Brisbane	4697	1387.5	1143.2	1758.9	652	537	826
31116	Hawthorne	3675	738.6	614.5	941.7	271	226	346
31117	Morningside - Seven Hills	9794	1053.6	870.1	1344.0	1032	852	1316
31118	Norman Park	4686	693.2	573.9	890.3	325	269	417
31119	Albion	2297	1076.6	894.3	1379.8	247	205	317
31120	Alderley	4592	1010.8	834.7	1278.1	464	383	587
31121	Ascot	4109	1012.6	837.2	1278.0	416	344	525
31122	Clayfield	8361	1019.2	844.7	1297.7	852	706	1085
31123	Grange	3024	472.4	392.4	602.0	143	119	182
31124	Hamilton (Qld)	5207	972.5	809.2	1239.1	506	421	645
31125	Hendra	3512	486.7	402.8	631.3	171	141	222
31126	Kelvin Grove - Herston	8412	1704.2	1384.2	2188.6	1434	1164	1841
31127	Newmarket	3980	1230.6	1012.0	1558.0	490	403	620
31128	Newstead - Bowen Hills	9302	1176.8	981.4	1503.0	1095	913	1398
31129	Wilston	2923	673.0	557.7	861.7	197	163	252
31130	Windsor	5841	1275.4	1053.2	1620.8	745	615	947
31131	Wooloowin - Lutwyche	7742	1191.1	982.0	1513.3	922	760	1172
31132	Ashgrove	9729	583.9	483.2	744.5	568	470	724
31133	Auchenflower	4508	1105.0	910.3	1425.7	498	410	643
31134	Bardon	7058	489.9	405.2	630.0	346	286	445
31135	Paddington - Milton	8622	1037.1	855.3	1340.3	894	737	1156
31136	Red Hill (Old)	4599	1058.8	871.3	1356.2	487	401	624
31137	Toowong	9086	1353.2	1107 5	1737.2	1230	1006	1578
31138	Brinsmead	3880	488.1	394.2	640.0	189	153	248
31139	Clifton Beach - Kewarra Beach	8245	907.0	745 0	1145 5	748	615	944
31140	Freshwater - Stratford	2666	820.2	677.2	1024.7	219	181	273
-	· · · · · · · · · · · · · · · · · · ·							

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name	totalpopulation	RATE -	LowerCi	UpperCi	number	LowerCi	OpperCi
31141	Redlynch	9024	585.4	477.5	/48.9	528	431	6/6
31142	Irinity Beach - Smithfield	10386	951.8	//9.5	1201.4	989	810	1248
31143	Yorkeys Knob - Machans Beach	4870	1381.8	1131.5	1/13./	6/3	551	835
31144	Bentley Park	5430	1081.1	866.1	1371.9	587	470	745
31145	Cairns City	9451	1500.8	1230.0	1877.6	1418	1162	1774
31146	Earlville - Bayview Heights	6308	998.9	812.2	1231.5	630	512	777
31147	Edmonton	7437	1215.8	973.7	1517.9	904	724	1129
31148	Gordonvale - Trinity	6310	858.6	685.9	1069.0	542	433	675
31149	Kanimbla - Mooroobool	7326	1008.2	803.6	1280.4	739	589	938
31151	Manoora	4454	2496.8	2001.6	3075.2	1112	892	1370
31152	Manunda	4190	2141.5	1728.4	2641.0	897	724	1107
31153	Mount Sheridan	5986	835.3	668.4	1072.8	500	400	642
31154	Westcourt - Bungalow	5178	1983.4	1603.4	2468.4	1027	830	1278
31155	White Rock	3421	1252.5	1000.1	1575.8	428	342	539
31156	Whitfield - Edge Hill	6149	1092.0	889.5	1365.8	671	547	840
31157	Woree	3628	1839.0	1486.2	2270.4	667	539	824
31158	Babinda	3257	787.1	634.4	980.1	256	207	319
31159	Innisfail	7139	1504.7	1200.9	1878.6	1074	857	1341
31160	Johnstone	5983	713.8	579.2	889.9	427	347	532
31161	Tully	8281	997.2	805.0	1251.9	826	667	1037
31163	Yarrabah	1620	4248.1	3041.4	5659.6	688	493	917
31164	Daintree	4800	1078.3	863.3	1347.7	518	414	647
31165	Port Douglas	4337	836.6	693.0	1055.2	363	301	458
31166	Atherton	8193	1124.2	905.6	1397.3	921	742	1145
31167	Herberton	4248	915.3	736.0	1133.6	389	313	482
31168	Kuranda	3410	874.9	686.4	1102.5	298	234	376
31169	Malanda - Yungaburra	6434	708.8	577.3	876.9	456	371	564
31170	Mareeba	8378	1121.4	896.2	1400.4	940	751	1173
31171	Balonne	3096	1021 5	818.7	1293.4	316	253	400
31172	Chinchilla	5796	1021.9	838.2	1272.0	592	486	737
31173	Goondiwindi	4594	954.7	779.6	1199.8	439	358	551
31174	Inglewood - Waggamba	3102	949.9	773.1	1191.0	295	240	369
31175	Miles - Wandoan	2967	867.7	712.3	1093.6	257	211	324
31176	Roma	4884	940.3	769.7	1184 5	459	376	578
31177	Roma Region	4176	599.8	487.1	757.5	250	203	316
31178	Тага	3132	797.6	646.7	990.5	250	203	310
31179	Crows Nest - Rosalie	6427	683.7	556.0	850.0	/30	357	546
21190		5562	005.7	717.1	1110.0	402	200	622
21101	Millmorran	2546	745.1	600.7	0/1 7	100	155	240
21100	Pittoworth	4022	646.4	529 E	941.7	274	224	240
21102	Wamba	12102	1020.4	027.7	1207.7	1256	1021	1570
2110.0	Clifton - Groopmount	2721	622.4	500.7	775.0	220	1021	200
21104	Cilitori - Greenmount	3721	402 E	402.2	616 5	161	190	209
31185	Southern Downs - East	3261	493.5	402.3	010.5	101	131	201
31186	Southern Downs - West	35/4	645.1	523.4	804.6	231	187	288
31187	Stanthorpe	4144	1176.4	959.7	1450.7	487	398	601
31188	Stanthorpe Region	4400	679.6	555.1	848.1	299	244	3/3
31189	Warwick	11325	1250.9	1011.6	1556.4	1417	1146	1763
31190	Central Highlands - East	5015	1420.6	1119.8	1828.8	712	562	917
31191	Central Highlands - West	5788	599.0	496.4	770.8	347	287	446
31192	Emerald	9080	903.4	741.8	1152.7	820	674	1047
31205	Berserker	5188	1523.4	1233.2	1888.0	790	640	980
31206	Bouldercombe	1333	419.2	343.0	525.1	56	46	70
31207	Emu Park	4017	1134.5	921.2	1413.1	456	370	568
31208	Frenchville - Mount Archer	6695	823.4	672.2	1025.7	551	450	687
31209	Glenlee - Rockyview	3729	98.0	80.7	124.0	37	30	46
31210	Gracemere	7766	1213.1	986.9	1523.4	942	766	1183
31211	Lakes Creek	3530	1161.8	942.6	1440.9	410	333	509

SAU JUNCIT Unitation (beak and partial sector) Unitation (beak and partial sector					Unit	-level SAEs			
Sch 20011 Unit level, Proti, Italico, Maria Unit level, Proti, RATE Warts Unit level, Proti, RATE Warts Unit level, Proti Warts					Unit-level_	Unit-level_		Unit-level_	Unit-level_
Ded Subil Det Les Prob.				Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
Name Name <th< td=""><td>SA2_5DIGIT</td><td>SA2 name</td><td>Unit-level_Probit_</td><td>Probit_</td><td>RAIE_</td><td>RAIE_</td><td>probit_</td><td>number_</td><td>number_</td></th<>	SA2_5DIGIT	SA2 name	Unit-level_Probit_	Probit_	RAIE_	RAIE_	probit_	number_	number_
Nomman Gardeins 238 138 138 139 139 139 139 139 139 139 139 139 139 139 139 139 139 139 139 131 139 131 139 131 139 131 139 131 139 131 139 131 139 131 139 131	31212	Mount Morgan	2322	1103.0	877.2	1358.0	256	204	315
Jack Park Avenue 209 1200	21012	Norman Cardons	720/	002.0	715.6	1104.7	652	E204	916
Jahra Park Average Sand 1973 9730 128.13 448.13 437.1 377 0.75 J1216 Parkhungtan City 250 218.1 302.0 128.1 302.0 482.3 1200.0 487.2 381. 307 480.3 131.1 301.1 301.1 301.1 301.1 301.1 301.1 301.1 301.1 301.1 301.1 301.1 301.1 301.1 501.1 147.1 301.1 501.1 147.1 301.1 501.1 147.1 301.1 501.1 147.1 301.1 501.1 147.1 301.1 501.1 147.1 301.1 501.1 147.1 301.2 147.1 301.2 147.1 301.2 147.1 301.2 147.1 301.2 147.1 301.2 147.1 301.2 147.1 301.2 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3 301.3	21213	Porte Avenue	2970	1107 5	072.0	1401.0	462	220	610 E74
3/10 Patholini - Maniha 4200 1/11.1 802.3 1/10.10 444 345 720 3/10 Rockhampton (by 25/0 1/48.3 1/20.40 1/21.2 381 309 4/10 3/12 Rockhampton Region - East 265.3 326.6 22.2 405.0 1.21 6 5.4 3/12 Rockhampton Region - North 315.1 372.2 305.4 408.0 1.1 7.96 5.6 6.8 3/12.2 Rockhampton Region - North 316.1 988.7 7.82.1 1144.4 12.6 10.6 5.7 7.97.7 66 6.5 6.8 3/12.2 Burleigh Headn 7.139 980.6 7.97.4 10.85 6.70 560 186.2 3/12.2 Mermal Boach - Broadoeach 10.05 136.46 112.1 171.73 137.8 6.70 560 186.2 10.22 3/12.2 Mermal Boach - Broadoeach 10.05 136.46 112.11 171.73 137.8 138.6	21214	Parkhurat Kawana	3870	1016 1	975.0	1401.9	602	377	752
Jacka Rockhampton (Ty) 1702 1703 1714 1704 1713 1713 <td>31215</td> <td></td> <td>4902</td> <td>1210.1</td> <td>965.9</td> <td>1000.0</td> <td>003</td> <td>409</td> <td>7.52</td>	31215		4902	1210.1	965.9	1000.0	003	409	7.52
alzi Packinampon Region - East 250/0 148.8.3 1204.0 182.72 831 630 440 3128 Rochhampton Region - North 3151 372.9 305.4 468.0 117 66 147 3120 Rochhampton Region - North 3151 372.9 305.4 468.0 117 66 153 84 3122 Rochhampton Region - North 13161 98.7 78.9 1194.4 1262 1203 155 67.9 550 856 3122 Broadbaech Waters 10055 578.6 4751 788.2 129.4 1202 80.0 1272 Mernaid Scalesch - Broadbaech 10153 136.6 1121.1 117.17.3 1218 1249 642 1052 3122 Mernaid Waters 5548 1103.2 908.3 1386.3 1612 129.7 184.20 740 765 1163 3122 Curumbin Tugen 741 730.8 91.1 499 476 1153	31210	Rockhampton - West	4502	985.5	802.8	1220.0	444	301	549
alcis Modunamyon Region Last 20:0 30:00 20:1/2 4000 137 80 81 104 3120 Rockhampton Region 1314 215.1 372.9 305.4 46.80 117 505 48.3 731.3 31222 The Range - Allenstown 60.66 97.11 735.6 120.1 50.1 50.9 43.0 119.4 120.2 10.03 120.2 Range-Allenstown 60.66 97.11 781.6 119.2 32.2 32.2 32.2 32.2 State 119.2 119.8 10.44 119.2 32.8 66.4 10.32 119.8 119.4 119.8 119.4 119.8	31217	Rockhampton City	2570	1483.3	1204.0	1827.2	381	309	470
alch abcs abcs <td< td=""><td>31218</td><td>Rockhampton Region - East</td><td>2551</td><td>326.6</td><td>267.2</td><td>409.5</td><td>83</td><td>68</td><td>104</td></td<>	31218	Rockhampton Region - East	2551	326.6	267.2	409.5	83	68	104
JACA JALIA JALIA <thj< td=""><td>31219</td><td>Rockhampton Region - North</td><td>3151</td><td>372.9</td><td>305.4</td><td>468.0</td><td></td><td>96</td><td>147</td></thj<>	31219	Rockhampton Region - North	3151	372.9	305.4	468.0		96	147
JAZZ Interlange-Autersidown Bobe 9/1.1 74.8.5 1201.1 791.4 1201.1 791.4 1201.1 791.4 1201.1 791.4 1201.1	31220	Rockhampton Region - West	2144	310.1	255.7	391.7	66	55	84
alaza repioon 13161 984.7 742.9 1194.4 1126.7 126.7 1304 156.7 1393.7 432.0 694.2 332 127.3 1393.7 432.0 694.2 332.7 430.0 13226 Burleigh Maters 10055 578.6 475.1 178.2 634 521 699.9 31227 Mermaid Bach-Broadbaech 10153 1366.8 1121.1 171.3 137.8 138.4 174.4 31228 Marmi 564.8 103.2 908.3 138.6.3 612.2 629.9 749 614.4 928.5 31230 Corumbin-Tugun 894.3 103.2 70.8 70.9 991.1 516.4 420.6 665.1 31233 Curumbin Vaters 701.4 70.9 57.9 991.1 516.4 420.6 665.6 31234 Palm Beech 1140.4 129.9 126.4 127.9 128.4 67.6 137.3 31235 Aurodr 157.9	31222	The Range - Allenstown	6086	9/1.1	/93.6	1201.1	591	483	/31
Brazze Brinadbasch Waters 6156 530,7 4430 6492 3232 2132 620 St225 Burlegh Madas 1309 550.6 747.7 1198.5 634 551.6 B1226 Burlegh Madas 10055 578.6 475.1 172.7 137.4 513.8 B1227 Marni 5548 1103.2 598.3 138.3 6.82 4.82 701.9 31229 Colongita 5548 1103.2 598.3 138.4 6.12 71.9 71.9 6.12 137.9 6.10 4.92 8.32 6.10 4.82 70.1 71.9 7.99 7.6 1.13 31230 Colongita 10.40 12.89 1.400 12.92 10.204 1.44 1.46 1.78 31234 Falm Beach 11400 12.92 1.0204 1.414 1.768 3.82 31235 Arundel 8034 1.1200 1.615 1.920 1.83 3.138 3.13	31223	Yeppoon	13161	958.7	/82.9	1194.4	1262	1030	15/2
Burleigh Haces 7139 980.6 784.7 11985. 678.6 679 671 674 678 679 679 671 673 672 675 1161 3123 Curumbin Yugun 894 1034 7014 759 891 449 408 7014 7109 579 891 449 408 7014 7109 579 401 440 460 470 453 446 7014 7109 779 401 400 453 446 7014 7104 7104 7104 7104 7104 7104 7104 7104 710 1103 4114 1146 1178 31235 Lanora 7014 71630 1163 701	31224	Broadbeach Waters	6156	539.7	443.0	698.2	332	273	430
Bitteligh Waters 10965 57.8 6 475.1 73.8 2 63.4 52.1 80.9 Bitteligh Waters 964 863.6 708.4 1002.3 83.2 68.2 102.2 Bitteligh Waters 964 863.6 708.4 1002.3 83.2 68.2 102.5 Bitteligh Waters 964 803.6 1210.7 184.0 74.9 64.4 789.3 Bitteligh Waters 503.8 114.01 109.3 79.9 89.11 44.9 40.6 66.5 Bitteligh Waters 704.1 17.09 57.9.9 89.11 44.9 40.6 66.5 Bitteligh Waters 704.1 153.0 106.0 16.4.0 166.8 11.13 Bitteligh Waters 704.1 153.0 112.0 116.2 112.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3 12.3	31225	Burleigh Heads	7139	950.6	784.7	1198.5	679	560	856
Mermaid Beach - Broadbeach 10153 1356.8 1121.1 1171.3 1378 1131 1138 1131 1133 1138 1138 1133 1138 1133 1133 1133 1133 1133 1133 1133 1133 1133 1133 1133 1133 1133 1133 1133	31226	Burleigh Waters	10955	578.6	475.1	738.2	634	521	809
31228 Mermaid Waters 9643 863.6 708.4 1002.2 83.2 6.82 1062 31229 Mamin 5548 1103.2 90.83 138.63 6.16 90.94 97.95 31230 Currumbin Tugun 89.43 103.87 855.0 129.85 92.99 7.65 1161 31231 Currumbin Tugun 89.44 10.140 127.92 120.24 154.08 14.14 11.042 11.033 11.033 11.033 11.033 11.033 11.033 11.034 11.	31227	Mermaid Beach - Broadbeach	10153	1356.8	1121.1	1717.3	1378	1138	1744
31229 Mami 5548 1103.2 906.3 1386.3 612 964 9769 31230 Corrumbin Tugun 8943 1038.7 885.0 1298.5 929 765 11161 31232 Currumbin Waters 7014 710.9 579.9 891.1 499 400 628 31234 Palm Beach 11409 1239.2 1000.4 1340.8 101.4 1164 1758 31235 Arundel 8067 763.6 683.7 1066.0 174 633 882 1357 31235 Biggera Waters 7041 1536.9 1261.6 192.9 182 488 1357 31237 Corombabah 8133 14670 1697.7 132.4 1200.0 2544 2044 1173 31238 Labrador 1173 3236 4448 382.5 667.1 150 123 189 31240 Reandy Graphin - Hollywell 7563 442.8 200.7 33	31228	Mermaid Waters	9634	863.6	708.4	1092.3	832	682	1052
31230 Coolangata 503 1448.2 121.7 144.0 74.9 61.4 928 31231 Currumbin Yugun 8943 101.9 57.9 891.1 499 40.7 65.6 31232 Elanora 9344 55.19 448.8 70.7 51.6 42.0 65.65 31234 Palam Beach 11400 1123.2 106.0 67.7 55.3 88.62 31235 Arundel 8087 83.66 66.37 106.0 67.7 55.3 88.62 31236 Biggera Waters 704 153.69 126.1 140.32 93.7 76.6 11.33 31237 Combabah 836.1 116.0 173.2 140.0 143.0 165.5 77.6 11.33 31240 Runaway Bay 7530 81.67 67.01 103.01 155 75.6 31241 Guaraba - Springbrock 33.84 44.93 38.45 55.61 40.02 61.6 31.48 <t< td=""><td>31229</td><td>Miami</td><td>5548</td><td>1103.2</td><td>908.3</td><td>1386.3</td><td>612</td><td>504</td><td>769</td></t<>	31229	Miami	5548	1103.2	908.3	1386.3	612	504	769
3123 Currumbin Tugun 894 1038.7 855.0 1295 929 765 1161 31222 Currumbin Waters 7014 7109 7599 891.1 499 407 625 31233 Elanora 9348 551.9 448.8 701.7 516 420 656 31234 Palm Beach 11400 1239.2 1006.0 767 533 862 31235 Arundel 8067 836.6 680.7 1066.0 767 513 848 1373 31236 Arundel 8169.7 1392.4 1200.0 2544 204 1313 31236 Labrador 14497 1697.7 1392.4 1505 776.6 31240 Runawy Bay 7530 816.7 670.1 1303.1 615 505 776.6 31242 Tamborine -Canurgra 1109 441.9 362.4 453.2 490.9 402 405.9 31244 Mudgeraba- Bonogin	31230	Coolangatta	5038	1486.2	1219.7	1842.0	749	614	928
31222 Currumbin Waters 7014 71.9 57.9 891.1 499 407 665 31233 Elanora 948 551.9 448.8 701.4 151.6 123.0 151.6 124.0 151.6 123.2 1026.0 167.7 153.2 826.2 31236 Elagera Waters 7041 153.69 121.51 192.9 1082 838.6 113.3 31237 Coombabah 8361 1120.6 916.2 140.32 93.7 76.6 113.3 31239 Paradise Point Hollywell 7600 74.7 67.73 948.4 55.4 77.6 31240 RunawayBay 7300 81.6.7 67.01 1030.1 61.5 50.5 77.6 31244 Guanaba - Springbroch 333.8 444.8 368.5 49.01 73.8 93.0 24.8 93.1 31244 Mudgeraba - Bonogin 133.2 75.8 33.0 24.8 93.1 33.9 27.8 93.1 <t< td=""><td>31231</td><td>Currumbin - Tugun</td><td>8943</td><td>1038.7</td><td>855.0</td><td>1298.5</td><td>929</td><td>765</td><td>1161</td></t<>	31231	Currumbin - Tugun	8943	1038.7	855.0	1298.5	929	765	1161
31233 Elanora 948 55.9 44.88 70.7 51.6 420 645.8 3124 Palm Beach 11409 1239.2 1020.4 154.8 1414 1164 175.8 3123 Arundel 0807 0836.6 663.7 1066.0 677 55.3 682 3123 Labrador 14970 1699.7 1392.4 210.9 2544 2084 1173 3123 Labrador 14970 1699.7 1392.4 210.9 2544 20.8 1173 3123 Labrador 14970 1699.7 167.1 103.1 615.5 505.1 150 123 126 31240 Ruaway Bay 763.0 313.6 449.8 368.5 567.1 150 123 189 31242 Tamborine-Canungra 11365 449.2 483.5 483.1 151 113 31244 Mudgeraba Ebongin 1338 536.2 493.2 682.8 3157	31232	Currumbin Waters	7014	710.9	579.9	891.1	499	407	625
31234Palm Beach114091232910204154031414117831235Arundel8078366837106067755386231236Biggera Waters704115369916.219791082888137731238Labrador149701699.71392.42103.025.4420.84313731239Paradise Point Hollywell7500617.3948.457.447.375.6731241Guanaba Springbroch3336449.8368.556.7110.912.831242Tamborine - Canungra1109441.9362.455.649040.261.631243Curumbin Valley - Tallebudgera56325.74200.733.0914.111.518.131244Mudgeraba - Borogin133853.62449.266.8373.453.634.994.931245Reedy Creek - Andrews57458.9443.175.833.973.263.113.624.731247Highland Park616179.913.6167013.624.713.613.624.713.613.624.713.613.624.713.613.624.713.613.624.713.613.624.713.614.113.613.624.713.614.613.624.713.614.614.714.814.614.714.814.614.714.814.6 <td< td=""><td>31233</td><td>Elanora</td><td>9348</td><td>551.9</td><td>448.8</td><td>701.7</td><td>516</td><td>420</td><td>656</td></td<>	31233	Elanora	9348	551.9	448.8	701.7	516	420	656
31225 Arundel 8087 8086 683.6 1261.5 1066.0 677 58.3 882 31236 Biggera Waters 7041 1536.9 1261.5 1927.9 1082 883 1137 31237 Coombabah 866 1120.6 1916.2 1927.9 766 1173 31238 Labrador 14970 167.3 040.8 200.9 2544 407.3 726 31240 Runaway Bay 7530 816.7 670.1 1030 615 505 776 31241 Gunawa Springbrook 3336 449.8 3656.5 567.1 150 1618 31242 Tamborine - Canungra 1105 441.9 362.4 430.9 73.3 228 4313 31244 Mudgeraba - Bongin 13382 556.2 409.1 151.5 1511 31245 Carrara 9661 79.9.1 656.1 107.9 313.6 477 532 1313 1142 <td< td=""><td>31234</td><td>Palm Beach</td><td>11409</td><td>1239.2</td><td>1020.4</td><td>1540.8</td><td>1414</td><td>1164</td><td>1758</td></td<>	31234	Palm Beach	11409	1239.2	1020.4	1540.8	1414	1164	1758
31226Biggern Waters7041158.9126.5192.791082888135731237Combabah83611120.6916.21403.2937766117331238Labrador149701699.71392.42108.420842084315731240Runawa Bay750816.7670.11030.1615550.577631241Gunaba - Springbrook3336448.8686.5551.115012318931242Tamborine - Canungra11095441.9362.4555.6490402616131243Currumbi Valley - Tallebudgera5463257.4209.733.914115118131244Mudgeraba - Bonogin3132536.2439.2638.5772636.497231244Mudgeraba - Bonogin3132536.2439.2638.5313.514332331244Mudgeraba - Bonogin3135799.1655.11005.8772636.497231247Highland Park6161105.5410.1155.2131.514322331248Neragr - Mourt Nathan1581105.931.9151123135131250Coomera13105529.9432.6674.466456788931254Jacobs Well - Mberton238518.0505.671.875.414322331254Jacobs Well - Mberton238.5518.0	31235	Arundel	8087	836.6	683.7	1066.0	677	553	862
31227 Coombabah 8861 1120.6 9162.2 1403.2 937 766 1173 31238 Labrador 14970 1699.7 1312.4 2109.0 2544 2084 3157 31240 Runawa Bay 7530 816.7 670.1 1030.1 615 505 776 31241 Guanaba Springbrook 3336 449.8 362.4 555.6 490 402 616 31242 Tamborine - Canungra 11095 441.9 362.4 753.7 330 411 115 818 31242 Currumbin Valley - Tailebudgera 5463 257.4 209.7 30.9 114 115 813 31244 Mudgeeraba - Bonogin 13382 55.62 493.1 75.37 339 278 437 31245 Carara 961 179.1 156.5 100.58 375 1316 1470 1685 31249 Pacific Pines - Gaven 13153 755.9 519.1 <td< td=""><td>31236</td><td>Biggera Waters</td><td>7041</td><td>1536.9</td><td>1261.5</td><td>1927.9</td><td>1082</td><td>888</td><td>1357</td></td<>	31236	Biggera Waters	7041	1536.9	1261.5	1927.9	1082	888	1357
31238Labrador149701592,71392,42109.025442084315731239Paradise Point - Hollywell760749.7617.3948.457.447372631240Runawa JBay75081.67.670.1101.01150123118931242Guanaba - Springbrook3336449.8368.5567.1150123118931243Currumbin Valley - Tallebudgera1563253.2439.2682.871755.894947331244Mudgeraba - Bonogin1382536.2439.2682.871751.894131245Reedy Creek - Andrews57.6589.3483.175.3.733.927.843331246Carrara961799.1650.5100.5136.2208131247Highland Park618600.5491.0758.635.6136.2208131248Nerarg. Mount Nathan158411053.9859.7131.61670136.2208131250Coomera131652.9431.667.8469.49657.5138131254Jacobs Well - Alberton288616.057.578.514.4762.931254Jacobs Well - Alberton288614.252.583.4419.914.420.931254Jacobs Well - Alberton27.9917.774.8118.614.4762.751.931254Jacobs Well - Alberton	31237	Coombabah	8361	1120.6	916.2	1403.2	937	766	1173
31239 Paradise Point - Hollywell 7660 749.7 617.3 9448 574 473 7266 31240 Runawa Bay 7530 816.7 6101 1030.1 615 505 776 31241 Guanaba - Springbrook 336 444.9 368.5 567.1 150 123 1109 31242 Tamborine - Canungra 11095 441.9 362.4 555.6 490 402 616 31243 Currumbin Valley - Tallebudgera 5463 257.4 209.7 339 217 588 914 31245 Reedy Creek - Andrews 5746 593 4431 753.7 393 278 433 31246 Carrara 9661 799.1 656.1 1005.8 772 634 972 31247 Highland Park 618 600.5 4431 753.7 1313 6167 1629 31249 Parcific Pines - Gaven 13153 755.9 151 122 151	31238	Labrador	14970	1699.7	1392.4	2109.0	2544	2084	3157
31240 Runawy Bay 7530 816.7 6701 10301 615 505 776 31241 Guanab - Springbrook 3336 449.8 362.5 567.1 150 123 183 31242 Tamborine - Canungra 1055 449.8 362.4 555.6 450 141 115 181 31244 Currumbin Valley - Tallebudgera 5663 257.4 209.7 330.9 141 115 181 31244 Mudgeeraba - Bonogin 13382 556.6 493.0 758.6 376 343 31246 Carrara 9661 190.5 491.0 758.6 385 315 487 31248 Nerage - Mount Nathan 15841 1053.9 879.7 1312.6 1047 4685 1315 31249 Pacific Pines - Gaven 13165 529.9 465.0 122 990 155.2 31250 Worongary - Talla 1300 55.5 410.6 767.8 514 427 <td>31239</td> <td>Paradise Point - Hollywell</td> <td>7660</td> <td>749.7</td> <td>617.3</td> <td>948.4</td> <td>574</td> <td>473</td> <td>726</td>	31239	Paradise Point - Hollywell	7660	749.7	617.3	948.4	574	473	726
31241 Guanaba - Springbrook 3336 449.8 368.5 567.1 150 123 1199 31242 Tamborine - Canungra 11905 441.9 362.4 555.6 400 401 1515 31243 Currumbin Valley - Tallebudgera 5636 2536.2 439.2 682.8 717 588 914 31245 Reedy Creek - Andrews 5746 559.3 483.1 753.7 339 278 4333 31246 Carrara 9661 799.1 656.1 1005.8 772 648 787 31247 Highland Park 1584 1053.9 859.7 131.6 1670 1362 2081 31249 Pacific Pines - Gaven 13153 795.9 650.1 1027.2 1047 855 1315 31250 Worongry - Tallai 1010 247.5 200.5 131.5 1208 990 155 31250 Comera - Valla 13105 529.9 432.6 676.4 469 469.7 8389 31251 Comera - Valla 13105	31240	Runaway Bay	7530	816.7	670.1	1030.1	615	505	776
3124 Tamborine - Canungra 11095 441.9 362.4 555.6 490 402 616 31243 Currumbin Valley - Tallebudgera 5463 257.4 209.7 30.9 1.11 158 111 31244 Mudgeeraba - Bonogin 13382 563.2 483.2 763.7 339 278 633 31245 Carrara 9661 799.1 656.1 1005.8 772 634 972 31246 Carrara 9661 799.1 656.1 1005.8 772 634 972 31247 Highland Park 6418 600.5 491.0 758.6 385 315 487 31249 Pacific Pines - Gaven 13153 795.9 650.1 102.7 1047 855 1315 31250 Worongary - Tallai 1016 247.5 200.5 319.7 151 142 195 31254 Jacobs Well - Alberton 283 618.0 576.6 784 495	31241	Guanaba - Springbrook	3336	449.8	368.5	567.1	150	123	189
31243Currumbin Valley - Tallebudgera5463257.4209.733.09141115118131244Mudgeeraba - Bonogin13382556.2439.2682.871755891431245Reedy Creek - Andrews576589.3483.1753.733927843331246Carrara6761799.1656.11005.877263497231247Highland Park6418600.5491.0758.638531548731248Nerang - Mount Nathan15811053759.9650.11027.21047855131531250Worongary - Tallai1016247.5200.5319.9151.5122990155231251Coomera90441336.21094.91715.81208990155231252Helensvale13105529.9432.6678.4694567.469431254Jacobs Well - Alberton6835618.0565.6785.517514322331255Ormeau - Yatala13830644.2526.5834.4891728116431254Jacobs Well - Alberton2139917.7732.61919935765117531255Ormeau - Yatala13830644.2526.5834.4891728116431257Pinpama2211497732.6191.9935166.2257931258Upper Coomera - Wil	31242	Tamborine - Canungra	11095	441.9	362.4	555.6	490	402	616
31244 Mudgeeraba - Bonogin 13382 536.2 439.2 682.8 717 588 914 31245 Reedy Creek - Andrews 5746 589.3 483.1 753.7 339 2278 433 31246 Carrara 9661 799.1 656.1 1005.8 772 634 972 31247 Highland Park 6418 600.5 749.0 755.6 365.5 1315.5 1365 1362 2081 31249 Pacific Pines - Gaven 1315.3 795.9 650.1 1027.2 1047 855 13151 31250 Worogary - Tallai 6106 247.5 200.5 319.7 151 122 99 31252 Helensvale 13105 52.9 432.6 678.4 6494 568.9 3125 1447 6989 3253 31252 Helensvale 13105 52.9 431.6 675.4 6414 4478 574 4474 694 523 3125 1447 640 523 3125 175 1143 527 3135	31243	Currumbin Valley - Tallebudgera	5463	257.4	209.7	330.9	141	115	181
31245 Reedy Creek - Andrews 5746 589.3 483.1 753.7 339 278 433 31246 Carara 9661 799.1 656.1 1005.8 772 6634 972 31247 Highand Park 6418 600.5 491.0 758.6 385 315 487 31248 Nerang - Mount Nathan 15841 1053.9 850.7 1313.6 1670 1362 2081 31249 Pacific Pines - Gaven 1315.5 795.9 650.1 1027.2 1047 855 175 31250 Worongary - Tallai 6106 247.5 200.5 319.7 151 122 195 31252 Helensvale 13105 529.9 432.6 678.4 694 567.7 839 31254 Jacobs Well - Alberton 2835 618.0 567.5 175 143 6189 31255 Ormear - Yatala 11704 644.0 527.1 821.4 199.9 1626 2679 31254 Pinpama 6241 1497.8 1226.5 <	31244	Mudgeeraba - Bonogin	13382	536.2	439.2	682.8	717	588	914
31246Carara9661799.1656.11005.877263497231247Highland Park6418600.5491.0758.638531568731248Nerag - Mount Nathan158411059.9859.7131361027.210478162208131249Pacific Pines - Gaven13153795.9859.71012.21047812291531250Worongary - Tallai1016247.5200.5319.715112291531251Coomera90441336.21094.91715.81608496.9859.531252Helensvale13105529.9432.6678.4694656.7889.931254Jacobs Well - Alberton2835644.2526.5884.48912728911431255Ormeau - Yatala1300644.2526.5884.4891278116431254Ormeau - Yatala1300644.2526.5884.4891626116431255Ormeau - Yatala13041407.8122.6191.993576.5116431254Opper Coomera - Willow Vale217.3917.7748.21164.4149.5257.531255Opper Coomera - Willow Vale136376.9145.7146.4149.516631261RobinaMaters148.4702.6650.8101.6145.7161.6257.531262Nebrina538 <td>31245</td> <td>Reedy Creek - Andrews</td> <td>5746</td> <td>589.3</td> <td>483.1</td> <td>753.7</td> <td>339</td> <td>278</td> <td>433</td>	31245	Reedy Creek - Andrews	5746	589.3	483.1	753.7	339	278	433
31247Highland Park6418600.5491.0758.638531548731248Nerang - Mount Nathan158411053.9859.71313.616701362208131249Pacific Pines - Gaven13153799.9650.11027.21047855135131250Worongary - Tallai6106247.5200.5310.712112219931251Comera9044131621099.9171.51208909155331252Helensvale1310552.9.9432.6678.464466788931253Jacobs Well - Alberton2835618.0505.6785.517514322331254Jacobs Well - Alberton2835618.0505.6785.517514322331255Ormeau - Yatala1380644.2526.5834.4891728115431256Oxenford - Maudsland11704644.0527.1821.3754617616131257Pimpama62411174642.5118.419916652931258Upper Comera' Willow Vale21739117.7748.2118.619661652031260Merrimac5528115.995.81457.164152780631261Robina1164574.2472.1732.611611651831262Varsity Lakes1164148112091	31246	Carrara	9661	799.1	656.1	1005.8	772	634	972
31248 Nerang · Mount Nathan 15841 1053.9 859.7 131.36 1670 1362 2081 31249 Pacific Pines · Gaven 13153 795.9 650.1 1027.2 1047 855 1351 31250 Worongary - Tallai 6106 247.5 200.5 319.7 1151 122 195 31251 Coomera 9044 1336.2 1094.9 1715.8 1208 900 1552 31252 Helensvale 13105 529.9 432.6 678.4 694 567 889 31253 Hope Island 0908 555.5 491.6 676.7 541 447 689 31254 Jacobs Well - Alberton 2835 618.0 505.6 785.5 115 143 223 31255 Ormeau - Yatala 13830 644.2 526.5 834.4 891 728 1154 31259 Ormeau - Yatala 13830 644.2 526.5 191.9 935 766 1161 31259 Okenford - Maudsfand 1170.4 644.0	31247	Highland Park	6418	600.5	491.0	758.6	385	315	487
31249 Pacific Pines - Gaven 13153 795.9 650.1 1027.2 1047 855 13151 31250 Worongary - Tallai 6106 247.5 200.5 319.7 151 122 195 31251 Coomera 9044 1336.2 1094.9 1715.8 1208 909 1552 31252 Helensvale 13105 529.9 432.6 678.4 694 647 688 31253 Hope Island 9089 595.5 491.6 767.8 541 447 698 31254 Jacobs Well - Alberton 2835 618.0 505.6 785.5 175 143 223 31255 Ormeau - Yatala 13104 644.0 527.5 834.4 617 641 1497 31256 Oxenford - Maudsland 11704 644.0 527.1 821.3 755 1118 31257 Pimpama 6241 1497.8 1226.5 191.9 935 765 1198 31250 Clear Island Waters 3418 574.2 472.1 732	31248	Nerang - Mount Nathan	15841	1053.9	859.7	1313.6	1670	1362	2081
31250Worongary - Tallai6106247.5200.5319.715112219531251Coomera90441336.21094.91715.81208990155231252Helensvale13105529.9432.6678.469456788931253Hope Island9089595.5491.6767.854144769831254Jacobs Well - Alberton2835618.0505.6785.517514322331255Ormeau - Yatala13830644.2526.5834.4891728115431256Oxenford - Maudsland11704644.0527.1821.375461796131257Pimpama62411497.8122.61919.9935765119831258Upper Coomera - Willow Vale21739917.7748.21186419951626257931260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81033.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.6537<	31249	Pacific Pines - Gaven	13153	795.9	650.1	1027.2	1047	855	1351
31251Coomera90441336.21094.91715.81208990155231252Helensvale13105529.9432.6678.469456788931253Hope Island9089595.5491.6767.854144769831254Jacobs Well - Alberton2835618.0505.6785.517514322331255Ormeau - Yatala13830644.2526.5834.4891728115431256Oxenford - Maudsland11704644.0527.1821.375461796131257Pimpama62411497.81226.51919.9935765119831258Upper Coomera - Willow Vale21739917.7748.21186.419951626257931250Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.0389320 <td>31250</td> <td>Worongary - Tallai</td> <td>6106</td> <td>247.5</td> <td>200.5</td> <td>319.7</td> <td>151</td> <td>122</td> <td>195</td>	31250	Worongary - Tallai	6106	247.5	200.5	319.7	151	122	195
31252Helensvale13105529.9432.6678.469456788931253Hope Island9089595.5491.6767.854144769831254Jacobs Well - Alberton2835618.0505.6785.517514322331255Ormeau - Yatala13830644.2526.5834.4891728115431256Oxenford - Maudsland11704644.0527.1821.375461796131257Pimpama62411497.81226.51919.9935765119831258Upper Coomera - Willow Vale21739917.7748.21186.419951626257931260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031265Parkwood6900778.7631.2999.653743669031265Parkwood6900778.7631.2999.6537436<	31251	Coomera	9044	1336.2	1094.9	1715.8	1208	990	1552
31253Hope Island9089595.5491.6767.854144769831254Jacobs Well - Alberton2835618.0505.6785.517514322331255Ormeau - Yatala13830644.2526.5834.4891728115431256Oxenford - Maudsland11704644.0527.1821.375461796131257Pimpama62411497.81226.51919.9935765119831258Upper Coomera - Willow Vale21739917.7748.21186.419951626257931259Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3367933.7772.51181.6314260	31252	Helensvale	13105	529.9	432.6	678.4	694	567	889
31254Jacobs Well - Alberton2835618.0505.6785.517514322331255Ormeau - Yatala13830644.2526.5834.4891728115431256Oxenford - Maudsland11704644.0527.1821.375461796131257Pimpama62411497.81226.51919.9935765119831258Upper Coomera - Willow Vale21739917.7748.21186.419951626257931259Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3367933.7772.51181.631426039831269Main Beach3367933.7772.51181.6314260	31253	Hope Island	9089	595.5	491.6	767.8	541	447	698
31255Ormeau · Yatala13830644.2526.5834.4891728115431256Oxenford · Maudsland11704644.0527.1821.375461796131257Pimpama62411497.81226.51919.9935765119831258Upper Coomera · Willow Vale21739917.7748.21186.419951626257931259Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31254	Jacobs Well - Alberton	2835	618.0	505.6	785.5	175	143	223
31256Oxenford - Maudsland11704644.0527.1821.375461796131257Pimpama62411497.81226.51919.9935765119831258Upper Coomera - Willow Vale21739917.7748.21186.419951626257931259Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31255	Ormeau - Yatala	13830	644.2	526.5	834.4	891	728	1154
31257Pimpama62411497.81226.51919.9935765119831258Upper Coomera - Willow Vale21739917.7748.21186.419951626257931259Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31256	Oxenford - Maudsland	11704	644.0	527.1	821.3	754	617	961
31258Upper Coomera - Willow Vale21739917.7748.21186.419951626257931259Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31257	Pimpama	6241	1497.8	1226.5	1919.9	935	765	1198
31259Clear Island Waters3418574.2472.1732.619616125031260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31258	Upper Coomera - Willow Vale	21739	917.7	748.2	1186.4	1995	1626	2579
31260Merrimac55281159.2953.81457.164152780531261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31259	Clear Island Waters	3418	574.2	472.1	732.6	196	161	250
31261Robina18384792.6650.81019.614571196187431262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.6537436690031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31260	Merrimac	5528	1159.2	953.8	1457.1	641	527	805
31262Varsity Lakes116451271.81038.41616.414811209188231263Ashmore9433766.9625.6971.872359091731264Molendinar50021033.0841.11313.151742165731265Parkwood6900778.7631.2999.653743669031267Benowa6779574.4472.1732.038932049631268Bundall3514649.3533.8830.122818829231269Main Beach3367933.7772.51181.6314260398	31261	Robina	18384	792.6	650.8	1019.6	1457	1196	1874
31263 Ashmore 9433 766.9 625.6 971.8 723 590 917 31264 Molendinar 5002 1033.0 841.1 1313.1 517 421 657 31265 Parkwood 6900 778.7 631.2 999.6 537 436 690 31267 Benowa 6779 574.4 472.1 732.0 389 320 496 31268 Bundall 3514 649.3 533.8 830.1 228 188 292 31269 Main Beach 3367 933.7 772.5 1181.6 314 260 398	31262	Varsity Lakes	11645	1271.8	1038.4	1616.4	1481	1209	1882
31264 Molendinar 5002 1033.0 841.1 1313.1 517 421 657 31265 Parkwood 6900 778.7 631.2 999.6 537 436 690 31267 Benowa 6779 574.4 472.1 732.0 389 320 496 31268 Bundall 3514 649.3 533.8 830.1 228 188 292 31269 Main Beach 3367 933.7 772.5 1181.6 314 260 398	31263	Ashmore	9433	766.9	625.6	971.8	723	590	917
31265 Parkwood 6900 778.7 631.2 999.6 537 436 690 31267 Benowa 6779 574.4 472.1 732.0 389 320 496 31268 Bundall 3514 649.3 533.8 830.1 228 188 292 31269 Main Beach 3367 933.7 772.5 1181.6 314 260 398	31264	Molendinar	5002	1033.0	841.1	1313.1	517	421	657
31267 Benowa 6779 574.4 472.1 732.0 389 320 496 31268 Bundall 3514 649.3 533.8 830.1 228 188 292 31269 Main Beach 3367 933.7 772.5 1181.6 314 260 398	31265	Parkwood	6900	778.7	631.2	999.6	537	436	690
31268 Bundall 3514 649.3 533.8 830.1 228 188 292 31269 Main Beach 3367 933.7 772.5 1181.6 314 260 398	31267	Benowa	6779	574.4	472 1	732.0	389	320	496
31269 Main Beach 3367 933.7 772.5 1181.6 314 260 398	31268	Bundall	3514	649 3	533.8	830.1	228	188	292
	31269	Main Beach	3367	933.7	772 5	1181.6	314	260	398
31270 Surfers Paradise 20557 1563.7 1283.8 1973.7 3215 2639 4057	31270	Surfers Paradise	20557	1563.7	1283.8	1973.7	3215	2639	4057

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name	totalpopulation	RATE	LowerCi	UpperCi	number	LowerCi	UpperCi
31271	Darra - Sumner	3805	1059.6	860.9	1358.6	403	328	517
31272	Durack	6136	1039.9	843.5	1308.8	638	518	803
31273	Forest Lake - Doolandella	20707	709.0	578.1	913.3	1468	1197	1891
31274	Inala - Richlands	13246	2004.9	1617.1	2496.0	2656	2142	3306
31275	Oxley (Qld)	5901	693.6	568.5	881.6	409	335	520
31276	Wacol	5026	867.5	695.6	1082.9	436	350	544
31277	Boonah	9166	614.3	500.1	765.8	563	458	702
31278	Esk	4036	857.0	696.5	1055.7	346	281	426
31280	Lockyer Valley - East	15104	771.5	621.6	968.0	1165	939	1462
31281	Lowood	10327	914.3	740.7	1137.9	944	765	1175
31282	Rosewood	9090	633.2	513.8	793.3	576	467	721
31283	Brassall	8020	1442.8	1172.5	1803.8	1157	940	1447
31284	Bundamba	6827	1265.9	1025.7	1589.8	864	700	1085
31285	Churchill - Yamanto	4912	887.5	721.6	1128.9	436	354	555
31286	lpswich - Central	5073	1344.5	1090.1	1666.5	682	553	845
31287	lpswich - East	13618	1443.0	1171.6	1788.6	1965	1595	2436
31288	Ipswich - North	3421	472.2	383.3	602.7	162	131	206
31289	Karalee - Barellan Point	4026	201.4	166.9	258.6	81	67	104
31290	Karana Downs	4428	267.0	218.5	344.2	118	97	152
31291	Leichhardt - One Mile	5466	1929.2	1559.4	2390.3	1054	852	1307
31292	North Ipswich - Tivoli	4909	1078.7	873.5	1343.4	530	429	659
31293	Raceview	11013	1120.5	908.2	1412.4	1234	1000	1555
31294	Ripley	3374	476.6	394.1	610.3	161	133	206
31295	Riverview	2264	1834.4	1476.2	2269.6	415	334	514
31296	Bellbird Park - Brookwater	9722	824.7	672.7	1062.5	802	654	1033
31297	Camira - Gailes	7044	708.5	574.7	889.6	/002	405	627
21200	Collingwood Park - Podbank	6046	1000.0	000.6	1202.0	659	======================================	027
21200	Goodpa	7702	1604.0	1275.7	2004.5	1221	002	1544
31300	Badhardy Dising	12040	1510.0	1002.1	1000.0	1070	1505	1344
31302	Redbank Plains	13040	1510.9	1223.1	1928.8	1970	1292	2010
31303		4/59	/82.1	637.1	1011.4	3/2	303	481
31304	Springfield Lakes	10576	890.4	/32.6	1160.7	942	//5	1228
31305	Beaudesert	10554	1169.9	947.4	1456.5	1235	1000	1537
31306	Beenleigh	6289	1888.5	1535.2	2329.6	1188	965	1465
31307	Eagleby	9929	1/20.4	1397.5	2142.2	1/08	1388	2127
31308	Edens Landing - Holmview	5395	1099.5	891.0	1401.0	593	481	756
31309	Mount Warren Park	4361	810.6	658.5	1015.6	354	287	443
31310	Wolffdene - Bahrs Scrub	4551	563.9	462.7	726.9	257	211	331
31311	Boronia Heights - Park Ridge	9340	968.9	783.6	1220.6	905	732	1140
31312	Browns Plains	5441	1193.3	971.0	1512.6	649	528	823
31313	Chambers Flat - Logan Reserve	3855	645.3	524.8	826.5	249	202	319
31314	Crestmead	8256	1230.5	992.2	1564.3	1016	819	1291
31316	Hillcrest	6083	733.4	596.3	937.4	446	363	570
31317	Marsden	9861	1421.5	1147.4	1806.7	1402	1131	1782
31318	Munruben - Park Ridge South	3570	247.2	195.9	326.6	88	70	117
31319	Regents Park - Heritage Park	11787	623.0	505.4	802.3	734	596	946
31320	Greenbank	9369	255.9	206.3	331.4	240	193	310
31321	Jimboomba	18367	450.2	366.2	577.1	827	673	1060
31322	Logan Village	5304	279.2	229.5	352.8	148	122	187
31323	Bethania - Waterford	8280	993.4	808.0	1260.3	823	669	1044
31324	Cornubia - Carbrook	6497	304.4	247.5	392.0	198	161	255
31325	Loganholme - Tanah Merah	8276	662.4	541.3	841.7	548	448	697
31326	Loganlea	7760	1540.9	1237.8	1959.1	1196	961	1520
31327	Shailer Park	8994	432.6	354.3	555.6	389	319	500
31328	Waterford West	5431	1361.9	1101.5	1702.6	740	598	925
31329	Daisy Hill	4970	617.4	503.6	784.8	307	250	390
31330	Kingston (Old.)	7611	1662.3	1333.8	2094 7	1265	1015	1594
31331	Logan Central	4494	2110.3	1695.9	2650.4	948	762	1191
	-						. –	

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	C40	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_name	totalpopulation	RATE	LowerCI	UpperCi	number	LowerCi	UpperCi
31332	Rochedale South - Priestdale	11692	636.2	519.8	806.2	/44	608	943
31333	Slacks Creek	7737	1452.5	1171.7	1822.6	1124	907	1410
31334	Springwood	7246	737.2	601.8	945.2	534	436	685
31335	Underwood	4690	731.1	597.8	940.8	343	280	441
31336	Woodridge	9155	2099.3	1691.6	2642.8	1922	1549	2420
31337	Bowen	6877	1318.0	1068.1	1647.1	906	735	1133
31338	Broadsound - Nebo	6066	724.9	604.0	947.6	440	366	575
31339	Clermont	2575	671.0	557.5	859.4	173	144	221
31340	Collinsville	2576	588.6	484.2	738.5	152	125	190
31341	Moranbah	5758	963.2	802.2	1271.8	555	462	732
31342	Andergrove - Beaconsfield	10519	1089.5	886.5	1355.7	1146	932	1426
31343	East Mackay	2664	943.8	773.9	1183.4	251	206	315
31344	Eimeo - Rural View	8103	1025.7	835.3	1303.2	831	677	1056
31346	Mackay	2747	2053.4	1688.5	2515.7	564	464	691
31348	Mount Pleasant - Glenella	7704	541.9	445.3	690.2	417	343	532
31349	North Mackay	4557	1347.2	1092.4	1677.0	614	498	764
31350	Ooralea - Bakers Creek	3615	534.4	438.6	694.9	193	159	251
31351	Pioneer Valley	5589	534.9	437.6	675.9	299	245	378
31352	Sarina	8381	693.5	560.0	876.1	581	469	734
31353	Seaforth - Calen	5979	435.1	356.4	538.8	260	213	322
31354	Shoal Point - Bucasia	3801	896.7	734.0	1122.3	341	279	427
31355	Slade Point	2/12	1168.2	9/2/	1/// 8	282	275	3/8
31356	South Mackay	5081	1254.1	1024.8	15/07	637	521	787
21257	Walkerston - Eton	6087	471.0	204 7	507.5	207	224	264
21250	West Mackay	4569	1010.2	926.6	1260.7	465	200	576
21250	Airlia Whiteundous	4308	1010.2	600.7	1067.4	400	502	1041
21201	Ainie - Whitsundays	9750	720.7	5099.7	011.7	020	262	1041
31301	Proserpine Sandatana Daint	11627	/30./	593.5	911.7	1000	303	1004
31362	Beachmere - Sandstone Point	11637	938.2	/62.1	11/2.1	1092	887	1364
31363	Brible Island	15211	1084.9	882.0	1340.9	1650	1342	2040
31364	Burpengary - East	3045	197.9	160.0	256.8	60	49	78
31365	Caboolture	20098	1603.6	1300.7	1994.6	3223	2614	4009
31366	Caboolture - South	14526	1737.4	1405.7	2180.3	2524	2042	3167
31367	Elimbah	3037	208.6	168.7	275.1	63	51	84
31368	Morayfield - East	6157	1323.3	1071.1	1670.2	815	660	1028
31369	Wamuran	3011	294.1	240.0	380.7	89	72	115
31370	Kilcoy	4088	759.9	618.4	958.0	311	253	392
31371	Woodford - D'Aguilar	6273	489.2	396.1	614.8	307	249	386
31372	Burpengary	10557	782.4	636.6	979.0	826	672	1034
31373	Deception Bay	16927	1267.1	1022.6	1586.2	2145	1731	2685
31374	Morayfield	3808	218.5	173.5	291.3	83	66	111
31375	Narangba	12973	579.0	473.3	740.8	751	614	961
31376	Upper Caboolture	2309	201.7	162.3	265.6	47	37	61
31377	Clontarf	6502	1101.1	898.8	1365.2	716	584	888
31378	Margate - Woody Point	9290	1608.9	1311.6	1991.1	1495	1218	1850
31379	Redcliffe	8345	1641.8	1340.6	2029.3	1370	1119	1693
31380	Rothwell - Kippa-Ring	13244	1205.2	978.3	1509.1	1596	1296	1999
31382	Albany Creek	12046	370.4	304.1	472.5	446	366	569
31383	Cashmere	13561	431.3	355.7	560.3	585	482	760
31384	Dayboro	6297	223.2	183.3	283.7	141	115	179
31385	Eatons Hill	5776	188.6	155.2	250.7	109	90	145
31386	The Hills District	17422	370.7	305.3	474.1	646	532	826
31387	Samford Valley	8761	173.5	143.0	221.6	152	125	194
31388	Dakabin - Kallangur	17738	1183.6	965.8	1485.2	2099	1713	2634
31389	Murrumba Downs - Griffin	12663	934.0	767 7	1194 5	1183	972	1513
31390	North Lakes - Mango Hill	2003	803 5	733.0	1153.8	1860	1535	241/
31391	Bray Park	7636	744 9	605.5	941 9	569	462	710
31392	Lawnton	4650	1124.0	919.2	1397.5	523	427	650
		-050		212.2	1007.0	525		000

				Unit	level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
		Unit Invel Deckit	Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
CODF 2016	SA2 name	totalpopulation	RATE	LowerCl	UpperCl	number	l owerCl	UpperCl
31393	Petrie	6421	717.0	585.1	901.8	460	376	579
31394	Strathpine - Brendale	9416	1013.6	828.9	1274.7	954	781	1200
31395	Aurukun	832	5040.0	3799.0	6347.7	419	316	528
31396	Cape York	5300	2509.0	1904.1	3206.2	1330	1009	1699
31397	Croydon - Etheridge	791	542.6	438.6	696.2	43	35	55
31398	Kowanyama - Pormpuraaw	1184	4749.9	3585.3	6014.6	562	425	712
31399	Northern Peninsula	1634	4210.0	3145.4	5412.6	688	514	884
31400	Tablelands	4813	547.0	446.3	678.7	263	215	327
31401	Torres	2331	2017.3	1487.9	2726.2	470	347	635
31402	Torres Strait Islands	2640	4337.0	3205.7	5615.0	1145	846	1482
31403	Weipa	2635	725.4	577.3	1003.5	191	152	264
31404	Carpentaria	3183	3088.0	2296.4	4008.7	983	731	1276
31405	Mount Isa	12892	981.1	782.1	1260.1	1265	1008	1625
31406	Mount Isa Region	2485	1028.7	806.7	1327.8	256	200	330
31407	Northern Highlands	2297	761.0	627.2	956.8	175	144	220
31408	Barcaldine - Blackall	3408	799.7	657.0	999.6	273	224	341
31409	Charleville	3085	877.6	715.0	1087.9	271	221	336
31410	Far Central West	1578	1077.4	866.5	1349.8	170	137	213
31411	Far South West	2011	1078.2	856.4	1339.5	217	172	269
31412	Longreach	2665	904.6	742.3	1140.3	241	198	304
31413	Buderim - North	12973	730.6	597.5	914.6	948	775	1186
31414	Buderim - South	12359	732.3	600.0	927.8	905	742	1147
31415	Mountain Creek	8106	990.5	813.6	1262.8	803	660	1024
31416	Sippy Downs	7755	1178.0	957.5	1493.6	914	743	1158
31417	Aroona - Currimundi	7576	773.9	633.2	971.3	586	480	736
31418	Buddina - Minyama	5013	868.5	711.7	1095.0	435	357	549
31419	Caloundra - Kings Beach	5626	1604.4	1312.8	1996.1	903	739	1123
31420	Caloundra - West	14908	815.4	664.5	1039.0	1216	991	1549
31421	Golden Beach - Pelican Waters	9464	782.8	640.1	982.2	741	606	930
31422	Moffat Beach - Battery Hill	6128	1035.2	849.4	1289.0	634	520	790
31423	Parrearra - Warana	7363	906.5	743.6	1149.9	667	547	847
31424	Wurtulla - Birtinya	5989	1016.3	835.8	1281.9	609	501	768
31425	Coolum Beach	11053	973.1	797.5	1226.0	1076	881	1355
31426	Marcoola - Mudjimba	8440	998.5	818.2	1265.1	843	691	1068
31427	Maroochydore - Kuluin	15780	1385.0	1138.0	1727.1	2186	1796	2725
31428	Mooloolaba - Alexandra Headland	9647	1192.8	982.4	1492.8	1151	948	1440
31434	Noosa Heads	3635	770.1	633.2	972.8	280	230	354
31435	Noosaville	7072	973.6	798.8	1220.2	689	565	863
31437	Sunshine Beach	5009	908.0	750.5	1137.1	455	376	570
31438	Tewantin	8203	991.7	808.8	1236.5	813	663	1014
31439	Beerwah	6184	852.0	695.2	1067.0	527	430	660
31440	Caloundra Hinterland	6849	703.8	574.9	874.0	482	394	599
31441	Glass House Mountains	4513	458.4	373.9	581.2	207	169	262
31442	Landsborough	7640	585.0	477.2	736.3	447	365	563
31443	Maroochy Hinterland	5012	524.3	428.8	652.0	263	215	327
31444	Palmwoods	7994	504.6	411.0	638.8	403	329	511
31445	Cambooya - Wyreema	4843	372.8	306.0	470.4	181	148	228
31446	Darling Heights	10398	1388.3	1127.6	1748.6	1444	1172	1818
31447	Drayton - Harristown	7867	1443.7	1172.7	1788.3	1136	923	1407
31448	Gatton	5862	1372.8	1116.6	1728.8	805	655	1013
31449	Gowrie (Qld)	4454	310.4	250.4	397.6	138	112	177
31450	Highfields	9429	326.0	268.1	418.1	307	253	394
31451	Lockyer Valley - West	8457	473.2	385.9	592.8	400	326	501
31452	Middle Ridge	5275	397.9	327.3	513.5	210	173	271
31453	Newtown (Qld)	7339	1610.5	1317.3	1980.9	1182	967	1454
31454	North Toowoomba - Harlaxton	4436	1503.6	1226.1	1859.3	667	544	825
31455	Rangeville	6357	722.7	591.6	911.6	459	376	580

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	SA2 nome	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
2145C	SA2_name	totalpopulation	1401 E	LowerCI	opperCi	number	LowerCi	UpperCi 1041
31450	Toowoomba - Central	104/1	1421.5	750.5	1140.6	1488	1218	1841
31457	Toowoomba - East	/353	923.8	759.5	1149.6	679	558	845
31458	Toowoomba - west	9481	642.9	526.2	817.9	610	499	//5
31459	Wilsonton	10178	13/1.1	1111./	1/04.1	1395	1131	1/34
31460	Ayr	7094	1032.6	838.5	1271.7	733	595	902
31461	Burdekin	6116	664.4	544.3	830.4	406	333	508
31462	Charters Towers	5896	1156.3	931.7	1429.5	682	549	843
31463	Dalrymple	2692	442.3	364.8	557.0	119	98	150
31464	Ingham	3509	1049.0	848.5	1295.4	368	298	455
31465	Ingham Region	5145	622.4	506.0	773.3	320	260	398
31466	Palm Island	1561	4622.4	3364.0	6048.1	722	525	944
31467	Aitkenvale	3626	1551.0	1255.5	1938.6	562	455	703
31468	Annandale	7756	458.6	373.8	595.8	356	290	462
31469	Belgian Gardens - Pallarenda	2529	1010.3	828.9	1242.8	255	210	314
31470	Bohle Plains	5042	533.4	440.1	696.2	269	222	351
31471	Condon - Rasmussen	7617	1434.8	1154.9	1786.6	1093	880	1361
31472	Cranbrook	4624	1123.3	907.0	1402.2	519	419	648
31473	Deeragun	15139	872.0	710.8	1115.4	1320	1076	1689
31474	Douglas	6143	1217.1	994.0	1553.0	748	611	954
31475	Garbutt - West End	5074	1841.0	1506.2	2246.6	934	764	1140
31476	Gulliver - Currajong - Vincent	5717	1456.8	1170.0	1814.8	833	669	1038
31477	Heatley	3070	1445.5	1161.9	1794.3	444	357	551
31478	Hermit Park - Rosslea	3985	1770.8	1452.4	2186.8	706	579	871
31479	Hyde Park - Pimlico	3529	1780.6	1453.2	2189.2	628	513	773
31480	Kelso	7480	1177.6	944.5	1464.5	881	706	1095
31481	Kirwan - East	5858	1338.7	1073.7	1667.3	784	629	977
31482	Kirwan - West	11318	877.8	710.5	1124.1	994	804	1272
31483	Magnetic Island	1873	1301.8	1075.3	1577.8	244	201	296
31484	Mount Louisa	6562	895.4	728.1	1146.5	588	478	752
31485	Mundingburra	2833	1172.4	958.8	1443.9	332	272	409
31486	Northern Beaches	4836	466.5	381.3	583.4	226	184	282
31487	Oonoonba	4784	868.4	717.0	1106.3	415	343	529
31488	South Townsville - Railway Estate	4153	1355.6	11111	1681.2	563	461	698
31489	Townsville - South	3284	293.7	241.4	369.1	96	79	121
31/100	Townsville City - North Ward	7300	1323.6	1095.2	1657.9	966	700	1210
31401	Wulguru Decenesth	1020	067.7	609.7	1076.0	400	244	E 21
21402	Achfield Kenneck	4930	1169.0	050.7	1440.9	420	274	551
21402	Rergara Rurpett Heads	10707	045.4	769.7	1105.0	1001	077	1506
21495	Bargara - Burnett Heads	12/0/	943.4	/00./		1201	977	1500
31494	Branyan - Kensington	3406	2050.4	457.0	0765.0	1000	100	238
31495	Bundaberg	4836	2258.0	1838.5	2/05.2	1092	204	
31496	Bundaberg East - Kaikle	4046	1199.9	974.8	1480.1	485	394	599
31497	Bundaberg North - Gooburrum	5679	995.4	807.1	1235.8	565	458	702
31498	Bundaberg Region - North	6762	605.8	490.8	/58.6	410	332	513
31499	Bundaberg Region - South	7612	672.5	548.2	832.2	512	417	633
31500	Millbank - Avoca	5812	1127.5	915.9	1398.9	655	532	813
31501	Svensson Heights - Norville	4384	1387.6	1129.3	1701.0	608	495	746
31502	Walkervale - Avenell Heights	8192	1402.9	1137.2	1729.4	1149	932	1417
31503	Gayndah - Mundubbera	5157	872.9	711.3	1089.9	450	367	562
31504	Gin Gin	4015	682.8	554.6	843.6	274	223	339
31505	Kingaroy	7565	1365.5	1110.9	1694.5	1033	840	1282
31506	Kingaroy Region - North	7068	1484.3	1164.8	1843.0	1049	823	1303
31507	Kingaroy Region - South	2988	483.5	389.0	618.0	144	116	185
31508	Monto - Eidsvold	2825	813.2	666.9	995.6	230	188	281
31509	Nanango	7526	892.4	723.2	1096.8	672	544	825
31511	Cooloola	5021	1182.4	963.0	1453.9	594	484	730
31512	Gympie - North	10658	1506.4	1226.6	1852.6	1605	1307	1974
31513	Gympie - South	5000	1121.2	912.6	1377.7	561	456	689

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_
CODE_2016	SA2_hame	totalpopulation	FALL	LowerCi	OpperCi	number	LowerCi	OpperCi
31514		14165	543.4	440.4	6/8.8	//0	624	962
31515		2790	689.0	563.6	846.9	192	157	236
31516	Booral - River Heads	3496	034.0	515.1	/89.2	222	180	270
31517	Craignish - Dundowran Beach	3644	372.4	299.8	4/6.8	136	109	1/4
31518	Pialba - Eli Waters	10884	1197.8	969.8	1493.8	1304	1056	1626
31519	Point Vernon	4409	1171.1	948.6	1450.9	516	418	640
31520	Torquay - Scarness - Kawungan	11869	1549.5	1260.7	1899.7	1839	1496	2255
31521	Urangan - Wondunna	9652	1201.1	977.8	1485.0	1159	944	1433
31522	Burrum - Fraser	7363	890.3	720.2	1102.3	656	530	812
31523	Granville	2428	1160.4	946.0	1407.3	282	230	342
31524	Maryborough (Qld)	14215	1308.3	1060.5	1603.2	1860	1507	2279
31525	Maryborough Region - South	6720	579.4	471.2	713.1	389	317	479
31526	Tinana	4139	682.6	555.8	850.6	283	230	352
31527	Redland Islands	7282	1397.9	1138.3	1699.6	1018	829	1238
31528	Banana	6222	664.7	546.3	840.7	414	340	523
31529	Biloela	4149	799.6	656.4	1011.4	332	272	420
31530	Agnes Water - Miriam Vale	4524	636.2	519.7	786.7	288	235	356
31531	Boyne Island - Tannum Sands	6880	708.0	580.9	898.8	487	400	618
31533	Clinton - New Auckland	9290	1037.1	847.4	1311.0	963	787	1218
31534	Gladstone	4579	1500.0	1226.1	1868.6	687	561	856
31535	Gladstone Hinterland	8297	490.4	397.1	628.8	407	329	522
31536	Kin Kora - Sun Valley	2589	795.7	651.0	1011.8	206	169	262
31538	Telina - Toolooa	4247	878.5	718.6	1112.7	373	305	473
31539	West Gladstone	3540	1261.4	1028.8	1568.8	447	364	555
31540	Southport - North	12507	2115.2	1731.2	2644.8	2646	2165	3308
31541	Southport - South	14124	1468.4	1199.9	1842.9	2074	1695	2603
31542	Scarborough - Newport - Moreton Island	9791	909.9	742.8	1132.2	891	727	1109
31543	Peregian Beach - Marcus Beach	2838	885.7	729.6	1110.1	251	207	315
31544	Peregian Springs	4991	844.0	694.9	1083.3	421	347	541
31545	Bli Bli	6290	570.7	466.3	716.8	359	293	451
31546	Diddillibah - Rosemount	2883	409.6	333.7	518.6	118	96	150
31547	Eumundi - Yandina	7925	568.7	463.6	714.8	451	367	566
31548	Nambour	15156	1109.5	904.4	1374.9	1682	1371	2084
31549	Noosa Hinterland	16600	511.4	417.9	641.4	849	694	1065
41001	Adelaide	13549	1706.8	1389.5	2167.1	2313	1883	2936
41002	North Adelaide	6122	1027.2	844.9	1306.8	629	517	800
41003	Adelaide Hills	5338	244.3	201.3	306.0	130	107	163
41004	Aldgate - Stirling	13151	219.0	180.9	276.6	288	238	364
41005	Hahndorf - Echunga	3459	368.4	303.2	463.6	127	105	160
41006	Lobethal - Woodside	6967	481.5	395.8	603.2	335	276	420
41007	Mount Barker	12961	966.5	792.7	1201.8	1253	1027	1558
41008	Mount Barker Region	4801	313.2	257.5	390.6	150	124	188
41009	Nairne	3720	670.6	551.7	837.2	249	205	311
41010	Uraidla - Summertown	4163	291.0	240.9	367.1	121	100	153
41011	Burnside - Wattle Park	14584	570.6	469.9	721.7	832	685	1053
41012	Glenside - Beaumont	7524	352.9	290.5	454.0	265	219	342
41013	Toorak Gardens	12471	811.6	666.4	1022.5	1012	831	1275
41014	Athelstone	7357	351.4	289.3	440.4	259	213	324
41015	Paradise - Newton	15912	1005.4	823.7	1252.9	1600	1311	1994
41016	Rostrevor - Magill	17267	886.0	726.7	1109.3	1530	1255	1915
41017	Norwood (SA)	8324	1424.2	1174.0	1778.2	1186	977	1480
41018	Payneham - Felixstow	10066	1199.8	982.8	1499.3	1208	989	1509
41019	St Peters - Marden	10349	944.5	777.1	1182.6	977	804	1224
41020	Nailsworth - Broadview	4726	994.3	820.5	1242.6	470	388	587
41021	Prospect	11367	922.2	755.1	1166.3	1048	858	1326
41022	Walkerville	6073	781.4	641.0	982.5	475	389	597
41023	Goodwood - Millswood	13964	894.0	736.9	1121.3	1248	1029	1566

				Unit	-level SAEs			
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
		Unit Invel Deckit	Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
CODE 2016	SA2 name	totalpopulation	Probit_ RATE	RATE_	RAIE_	probit_ number	numper_	numper_
41024	Unley - Parkside	16131	816.6	671.5	1027.9	1317	1083	1658
41025	Gawler - North	6796	475.4	391.8	596.0	323	266	405
41026	Gawler - South	15474	1081.8	884.1	1333.9	1674	1368	2064
41020	Lewiston - Two Wells	4289	294.1	239.7	367.4	126	103	158
41028	Craigmore - Blakeview	13303	785.5	641 3	983.3	1045	853	1308
/1020	Davoren Park	12100	1754.3	1/23/	2173.0	2140	1736	2652
41020	Elizabeth	7882	23// 1	1808.3	2175.5	18/8	1/96	2052
41030	Elizabeth Fast	0803	1208.2	1053.4	159/ 2	1284	1042	1577
41031	Munno Para West - Angle Vale	9095	11290.2	020.0	1/02 7	052	770	1102
41032		1002	120.0	105.0	162.0	355	21	22
41033	Smithfield - Elizabeth North	0127	2042.4	1660.4	2405.6	1966	1517	2200
41034	Virginia - Waterlee Corpor	2256	420.2	251.6	E40.0	144	110	102
41035	Enfield Plair Athel	19122	1500.0	1007.1	1070.0	2960	2224	2500
41030	Northgata Oakdan Cillas Diaina	10132	1302.2	770.1	1170.4	1920	1405	2000
41037	Northgate - Oakden - Gilles Plains	19410	1046.0	1000.0	11/2.4	1829	1495	2276
41030	India Form	11710	1240.3	724.0	1110 /	1057	1030	1210
41040	Para Hilla	11/12	674.4	734.2	040.2	1057	600	
41041	Para Hills	11274	0/4.4	550.0	1100.0	1050	1017	1550
41045	Paraleuria	12992	904.0	763.U	1017.0	1015	1017	1070
41044	Paralowie	12512	1440.5	1172.0	1705.7	1015	1610	1272
41040	Salisbury	13724	1442.3	11/5.2	1/05./	1960	1010	1260
41047	Salisbury East	13666	801.4	652.9	995.4	1095	892	1360
41048		12579	1255.0	1023.1	1545.0	1579	1287	1943
41049	Golden Grove	8095	706.2	5/8.8	8/8.0	572	469	/11
41050	Greenwith	6759	078.4	200.0	477.0	458	375	202
41051	Highbury - Dernancourt	8201	379.2	311.5	477.8	311	255	392
41052	Madhum Laishta	13267	1055.9	862.0	1313.2	1401		1/42
41053		14859	245.2	452.2	424.1	818	0/2	1014
41054	Characa Bidasha an	12301	545.3	283.1	434.1	425	348	534
41055	St Agnes - Ridgenaven	9973	5/8.1	4/4.9	/19.3	577	4/4	/1/
41056	Brighton (SA)	11080	724.9	595.2	907.8	803	660	1006
41057	Gleneig (SA)	10242	1019.2	1100.0	1269.9	1400	1300	2063
41058	Edwardstown	10917	1342.7	1100.9	1667.8	1466	1202	1821
41059	Maria Cove	9691	362.7	299.5	458.0	352	290	444
41060	Mitch all Dark	10272	445.2	1040.0	1000 5	323	205	404
41061		12373	1517.9	1242.0	1809.5	1878	1010	2313
41062		11866	1247.4	1022.0	1541.0	1480	1213	1829
41063	Sheldow Park - Iroll Park	/586	1202.0	203.0	404.1	1575	200	1001
41064	Palain	12098	1302.0	1065.3	1020.9	105	1289	1961
41065	Bellair Dellauria Llaighta	3043	342.0	280.4	428.4	125	102	
41066	Bellevue Heights	6068	0/5.0	061.0	200.0	410	333	200
41067		9090	317.9	201.2	398.2	289	237	1050
41068	Mitcherry (CA)	11965	701.8	5/6.8	6/8.8	640	690 517	1052
41069	Mitcham (SA)	12354	506.9	418.0	035.1	626	517	785
41070	Panorama	6465	917.6	/51.6	1150.0	593	486	/43
41071	Abertoyle Park	9152	500.8	410.4	625.5	458	3/6	5/2
41072	Alulinga	7100	1762.0	814.8	1238.5	1114	911	1385
41073	Christie Downs	/192	1/63.2	1438.5	2148.9	1268	1035	1545
410/4	Clarenden	8060	1299.9	1063.5	105.0	1048	857	1293
410/5		20/7	153.5	126.8	195.9	32	26	41
410/6		3223	1//.0	147.0	225.6	57	47	/3
41077		8218	308.1	252.6	390.5	253	208	321
410/8	Hacknam - Onkaparinga Hills	4915	5/1.1	466.5	/05.3	281	229	347
410/9	Hacknam West - Huntfield Heights	5839	1595.0	1303.8	1939.3	931	761	1132
41080	mappy valley	10544	485.1	397.7	606.4	511	419	639
41083		4651	410.6	338.8	513.8	191	158	239
41004	Morphett Vale - East	10/31	1007.0	1002.0	1505 5	1110	913	1110
41000	worphett vale - west	/434	1227.0	1003.8	1005.5	912	746	1113

				Unit	-level SAEs					
				Unit-level_	Unit-level_		Unit-level_	Unit-level_		
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_		
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_		
CODE_2016	SA2_name	totaipopulation		LowerCi	OpperCi	number	LowerCi	UpperCi		
41086	Reynella	/984	/41.4	608.5	918.5	592	486	/33		
41087	Seatord (SA)	16/21	948.2	//6./	1180.3	1586	1299	1974		
41088	Willunga	2661	350.9	289.4	436.9	93	//	116		
41089	Woodcroft	8779	518.5	425.5	646.9	455	374	568		
41090	Beverley	6106	1030.0	844.8	1281.4	629	516	782		
41091	Flinders Park	11642	977.1	801.6	1216.9	1138	933	1417		
41092	Henley Beach	11829	740.9	610.4	926.6	876	722	1096		
41093	Hindmarsh - Brompton	14355	1333.2	1091.6	1663.6	1914	1567	2388		
41094	Royal Park - Hendon - Albert Park	4743	1092.7	892.7	1342.3	518	423	637		
41095	Seaton - Grange	13103	1103.3	902.1	1367.8	1446	1182	1792		
41096	West Lakes	11750	800.3	655.9	994.1	940	771	1168		
41097	Woodville - Cheltenham	13873	1188.8	970.1	1484.2	1649	1346	2059		
41099	Largs Bay - Semaphore	11612	986.1	807.8	1224.3	1145	938	1422		
41100	North Haven	11412	1019.0	832.1	1255.3	1163	950	1433		
41101	Port Adelaide	8744	1338.5	1092.5	1650.6	1170	955	1443		
41102	The Parks	14656	1627.7	1322.7	2021.2	2386	1938	2962		
41105	Fulham	2149	662.0	545.7	819.6	142	117	176		
41106	Lockleys	10325	998.4	821.1	1251.7	1031	848	1292		
41107	Plympton	19808	1219.6	1001.5	1528.8	2416	1984	3028		
41108	Richmond (SA)	13478	1402.1	1145.2	1762.7	1890	1543	2376		
41109	West Beach	3952	699.6	578.1	883.8	276	228	349		
41110	Barossa - Angaston	4670	527.0	433.9	656.5	246	203	307		
41111	Light	6779	483.3	395.6	602.0	328	268	408		
41112	Lyndoch	4597	368.0	302.3	460.1	169	139	212		
41113	Mallala	2465	404.4	329.4	514.0	100	81	127		
41114	Nuriootpa	5078	882.1	723.6	1092.4	448	367	555		
41115	Tanunda	3556	717.7	592.1	890.8	255	211	317		
41116	Clare	3001	838.9	691.4	1035.7	252	207	311		
41117	Gilbert Valley	3733	581 5	478 5	7193	217	179	269		
41118	Govder	3160	627.0	514.8	779.6	198	163	246		
41119	Wakefield - Barunga West	7179	741 7	609.4	917.8	532	437	659		
41120	lamestown	3521	601.4	494 3	747.6	212	174	263		
41121	Peterborough - Mount Remarkable	4206	600.9	490.8	740.6	253	206	311		
41122	Port Pirie	10722	1251 5	1017.0	1534.7	1342	1090	1646		
41123	Port Pirie Region	2492	624.3	510.2	772.2	156	127	192		
41124	Kadina	4014	838.4	68/ 1	1038.9	337	275	/17		
41125	Moonta	3772	936.9	762.2	1157.9	353	2,3	/37		
41126	Wallaroo	2205	1206.0	1057.0	1505.7	415	200			
41120	Varka Baningula - North	5/22	771.6	626.0	052.5	413	240			
/1127	Vorke Peninsula - North	2020	F06.2	490.0	725.0	101	1/0	202		
41120	Codupa	1945	1250.6	409.0	1502.7	101	19/	223		
41129	Evro Boninsula	1045	651.0	522.7	01/1/	232	257	292		
41130	Kimba Clava Franklin Harbour	4624	604 F	400.0	751.0	107	154	293		
41131	Kimba - Cieve - Franklin Harbour	3096	604.5	499.0	/51.8	187	154	233		
41132	Le Hunte - Elliston	1638	655.1	542.6	815.3	107	89	134		
41133	Port Lincoln	11443	1136.2	925.5	1400.2	1300	1059	1602		
41134	West Coast (SA)	2506	905.0	/15.4	1152.7	227	1/9	289		
41136	Whyalla	16301	1442.6	1176.0	1762.0	2352	1917	2872		
41138	APY Lands	1629	3996.4	2934.7	5231.0	651	478	852		
41139	Coober Pedy	1361	965.0	759.1	1238.4	131	103	169		
41140	Quorn - Lake Gilles	1596	703.2	567.7	872.0	112	91	139		
41141	Outback	2099	1000.8	798.4	1268.7	210	168	266		
41142	Port Augusta	10005	1305.9	1043.8	1613.1	1307	1044	1614		
41143	Roxby Downs	2691	724.0	609.4	963.6	195	164	259		
41144	Goolwa - Port Elliot	8796	999.2	816.2	1232.1	879	718	1084		
41145	Kangaroo Island	3503	785.3	650.3	956.6	275	228	335		
41146	Strathalbyn	5447	787.9	644.4	977.0	429	351	532		
41147	Strathalbyn Region	5685	407.2	332.6	513.6	232	189	292		
			Unit-level SAEs							
------------	---------------------------------	--------------------	-----------------	-------------	-------------	-------------	-------------	-------------	--	--
				Unit-level_	Unit-level_		Unit-level_	Unit-level_		
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_		
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_		
CODE_2016	SA2_name	totalpopulation	RATE	LowerCI	UpperCi	number	LowerCi	UpperCi		
41148	Victor Harbor	11438	1025.4	839.1	1260.9	11/3	960	1442		
41149	Yankalilla	4459	702.2	575.6	869.9	313	257	388		
41150	Grant	4416	388.2	320.9	482.6	171	142	213		
41151	Kingston - Robe	2800	821.8	677.6	1021.3	230	190	286		
41152	Millicent	4044	973.0	795.5	1192.1	393	322	482		
41154	Naracoorte	4550	813.6	671.4	1019.1	370	305	464		
41155	Naracoorte Region	1594	589.6	489.6	742.6	94	78	118		
41156	Penola	2284	718.8	593.3	899.3	164	136	205		
41157	Tatiara	4964	692.5	571.3	870.2	344	284	432		
41158	Wattle Range	2400	401.6	331.0	503.1	96	79	121		
41159	Barmera	5027	877.0	714.0	1076.6	441	359	541		
41160	Berri	3124	1604.8	1311.8	1962.7	501	410	613		
41161	Karoonda - Lameroo	2305	582.6	482.1	725.8	134	111	167		
41162	Loxton	4090	866.7	709.5	1068.9	354	290	437		
41163	Loxton Region	1282	577.4	478.1	712.2	74	61	91		
41164	Mannum	4921	688.8	565.2	847.0	339	278	417		
41165	Murray Bridge	13741	1375.2	1117.8	1700.8	1890	1536	2337		
41166	Murray Bridge Region	2806	448.4	363.7	568.7	126	102	160		
41167	Renmark	3587	1474.1	1205.6	1812.0	529	432	650		
41168	Renmark Region	3674	474.8	390.7	595.8	174	144	219		
41169	The Coorong	4065	898.9	732.7	1110.4	365	298	451		
41170	Waikerie	5227	798.8	654.7	982.2	418	342	513		
41171	Mawson Lakes - Globe Derby Park	10229	970.2	796.8	1243.1	992	815	1272		
41172	Pooraka - Cavan	6107	1046.2	851.0	1303.5	639	520	796		
41173	Mount Gambier - East	10805	1096.0	896.8	1349.5	1184	969	1458		
41174	Mount Gambier - West	10481	1271.9	1042 5	1560.9	1333	1093	1636		
51001		3808	753.0	622.0	9/10	20/	2/2	367		
51001	Russelton	10022	020.6	752.6	11/6 5	1752	1/2/	2102		
51002	Busselton Derien	19055	500.0	/00.0	1140.5	200	204	2102		
51003	Mangapat Diver	7030	047.0	433.0	1007.4	508	304	470		
51004	Margaret River	6068	561.0	698.7	1067.4	514	424	048		
51005	Australind - Leschenault	12334	561.0	458.7	/07.2	692	566	8/2		
51007		3779	545.7	449.4	6/8.5	206	1/0	256		
51008	College Grove - Carey Park	5232	1325.6	1078.4	1636.1	694	564	856		
51009	Collie	6576	/90.0	639.3	974.2	519	420	641		
51010	Dardanup	2298	421.3	344.8	536.3	97	/9	123		
51012	Eaton - Pelican Point	8504	663.4	542.1	839.1	564	461	714		
51014	Harvey	6709	692.6	563.8	873.7	465	378	586		
51015	East Bunbury - Glen Iris	5228	1024.3	838.0	1271.4	535	438	665		
51016	Waroona	3082	637.1	516.7	801.1	196	159	247		
51017	Bridgetown - Boyup Brook	4780	641.4	526.2	793.2	307	252	379		
51018	Donnybrook - Balingup	4390	495.5	406.6	616.0	218	178	270		
51019	Manjimup	4097	955.4	775.6	1190.9	391	318	488		
51020	Pemberton	3788	638.3	524.5	787.4	242	199	298		
51021	Dawesville - Bouvard	5101	541.5	442.4	678.6	276	226	346		
51022	Falcon - Wannanup	6545	782.4	638.7	983.7	512	418	644		
51023	Greenfields	7500	1195.5	965.1	1494.7	897	724	1121		
51024	Halls Head - Erskine	13773	706.1	576.1	887.7	973	793	1223		
51025	Mandurah	7264	1859.1	1517.5	2294.9	1350	1102	1667		
51026	Mandurah - East	4375	599.8	489.7	755.6	262	214	331		
51027	Mandurah - North	12651	689.6	562.6	871.5	872	712	1102		
51028	Mandurah - South	8000	1056.9	858.0	1310.5	846	686	1048		
51029	Pinjarra	7078	801.5	651.5	1002.0	567	461	709		
51030	City Beach	4994	288.3	238.6	372.1	144	119	186		
51031	Claremont (WA)	6576	725.4	597.6	921.2	477	393	606		
51032	Cottesloe	5577	468.8	392.2	603.1	261	219	336		
51033	Floreat	5661	199.7	165.9	263.1	113	94	149		
51034	Mosman Park - Peppermint Grove	8037	793.1	655.5	992.3	637	527	798		

			Unit-level SAEs					
				Unit-level_	Unit-level_		Unit-level_	Unit-level_
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_
CODE 2016	SA2 name	Unit-level_Probit_	Probit_	RATE_	RAIE_	probit_	number_	number_
51035	Nedlands - Dalkeith - Crawley	14767	768.9	628 3	0pperCi 081.1	1135	928	11/19
51035	Swaphourpo - Mount Claromont	6521	146.7	271.6	557.0	201	242	262
51030	Mount Howthern Londonville	0321	657.0	5/1.0	020.2	E22		505
51036		12205	0001	545.7	1000.0	1002	445	1060
51039	Mount Lawley - Inglewood	13365	810.1	669.8	1023.1	1083	895	1367
51040	North Perth	/050	692.9	5/1.8	886.8	489	403	625
51041	Perth City	27369	1241.5	1026.0	1588.1	3398	2808	4347
51042	Subiaco - Shenton Park	13059	924.5	764.9	1167.1	1207	999	1524
51043	Wembley - West Leederville - Glendalough	13955	954.0	789.5	1212.7	1331	1102	1692
51044	Bassendean - Eden Hill - Ashfield	11757	826.5	672.6	1036.6	972	791	1219
51045	Bayswater - Embleton - Bedford	18059	835.7	683.8	1051.7	1509	1235	1899
51046	Maylands	10329	1318.3	1089.8	1658.9	1362	1126	1714
51047	Morley	17389	773.1	631.3	986.8	1344	1098	1716
51048	Noranda	6471	415.4	338.9	530.4	269	219	343
51049	Chidlow	4014	119.3	98.1	151.5	48	39	61
51050	Glen Forrest - Darlington	5365	195.6	161.9	245.8	105	87	132
51051	Helena Valley - Koongamia	4079	440.1	360.0	549.7	180	147	224
51053	Mundaring	9703	265.2	216.4	334.6	257	210	325
51054	Swan View - Greenmount - Midvale	9464	706.5	571.3	883.4	669	541	836
51056	Ballajura	14392	555.8	448.6	703.9	800	646	1013
51057	Beechboro	13692	575.9	466.9	728.0	788	639	997
51058	Bullsbrook	3902	319.2	261.2	408.3	125	102	159
51059	Ellenbrook	25161	518.5	423.6	657.8	1305	1066	1655
51060	Gidgegannun	2091	185.9	154.0	235.6	39	32	49
51061	Hazelmere - Guildford	31/2	470.8	385.7	595.0	1/8	121	187
51062		9002	644.0	505.7	000 /			647
51062 E106E	Middle Swen, Horne Hill	4171	702.7	521.5	007.6	202		270
51065	Middle Swall - Herlie Hill	41/1	1000.0	1020.2	1571.0	1005	240	1207
51066	Midiarid - Guildiord	8446	1260.8	1032.3	15/1.3	1065	8/2	1327
51067	Stratton - Jane Brook	5033	603.2	489.9	/5/.0	304	247	381
51068	The Vines	7217	276.9	226.6	355.1	200	164	256
51070	Craigie - Beldon	7473	652.0	538.0	818.5	487	402	612
51071	Currambine - Kinross	10455	441.2	363.6	565.0	461	380	591
51072	Duncraig	11421	250.4	206.3	321.5	286	236	367
51073	Greenwood - Warwick	10260	402.0	330.1	512.1	412	339	525
51074	Heathridge - Connolly	8016	500.1	411.0	634.1	401	329	508
51075	Hillarys	8305	285.1	236.0	367.7	237	196	305
51076	lluka - Burns Beach	6475	111.6	93.5	148.8	72	61	96
51077	Joondalup - Edgewater	10949	784.7	645.0	998.3	859	706	1093
51078	Kingsley	10088	321.5	264.4	406.2	324	267	410
51079	Mullaloo - Kallaroo	8468	297.2	245.1	381.7	252	208	323
51080	Ocean Reef	6089	218.5	181.0	285.8	133	110	174
51081	Padbury	6167	440.4	363.2	563.0	272	224	347
51082	Sorrento - Marmion	7440	247.3	204.8	317.6	184	152	236
51083	Woodvale	7271	216.6	178.9	278.5	158	130	203
51084	Balcatta - Hamerslev	12254	786.6	646.0	990.3	964	792	1213
51085	Balga - Mirrabooka	15154	1349.8	1092.8	1702.9	2045	1656	2581
51086	Dianella	19385	685.0	560.6	864.9	1328	1087	1677
51080		12010	046.2	770.1	1196.5	1250	1020	1569
51088	Karringun Guelun Carina	15212	220.0	272.2	4100.0	1230	410	1300
51009	Nollamara - Westminster	14020	10071	1054.0	1600 1	1000	1500	002
51090		10204	1287.1	1054.8	1121 7	1001	1502	2318
51092	Scarporougn	12304	886.7	/35.8	1131.7	1091	905	1392
51093	Stirling - Osborne Park	10979	719.6	593.8	910.3	790	652	999
51094	Trigg - North Beach - Watermans Bay	5753	673.1	555.2	841.6	387	319	484
51095	Tuart Hill - Joondanna	9780	1221.1	1006.9	1538.6	1194	985	1505
51096	Wembley Downs - Churchlands - Woodlands	10508	385.0	319.3	492.7	405	336	518
51097	Yokine - Coolbinia - Menora	12855	928.1	763.9	1164.8	1193	982	1497
51098	Alexander Heights - Koondoola	9131	761.3	616.2	957.0	695	563	874
51099	Butler - Merriwa - Ridgewood	16534	1005.2	817.3	1269.8	1662	1351	2100

			Unit-level SAEs						
				Unit-level_	Unit-level_		Unit-level_	Unit-level_	
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_	
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_	
CODE_2016	SA2_name	totalpopulation	RATE	LowerCi	UpperCI	number	LowerCi	UpperCi	
51100	Carramar	11/49	488.1	399.3	619.7	5/3	469	/28	
51101	Clarkson	9622	909.0	741.2	1152.8	875	713	1109	
51102	Girrawheen	6603	1190.1	960.5	1501.1	786	634	991	
51103	Madeley - Darch - Landsdale	18522	314.0	256.5	406.6	582	475	753	
51104	Marangaroo	8263	585.2	474.5	738.3	484	392	610	
51105	Mindarie - Quinns Rocks - Jindalee	13899	445.1	366.0	569.6	619	509	792	
51107	Tapping - Ashby - Sinagra	9373	355.1	292.8	457.9	333	274	429	
51108	Wanneroo	19336	544.7	445.1	693.0	1053	861	1340	
51110	Armadale - Wungong - Brookdale	14082	1280.8	1038.7	1588.0	1804	1463	2236	
51112	Camillo - Champion Lakes	4207	783.4	636.4	982.5	330	268	413	
51113	Forrestdale - Harrisdale - Piara Waters	13584	319.9	264.4	417.1	435	359	567	
51114	Kelmscott	8142	819.2	668.2	1024.7	667	544	834	
51115	Mount Nasura - Mount Richon - Bedfordale	6169	218.5	179.2	274.7	135	111	169	
51116	Roleystone	5366	158.9	130.8	200.2	85	70	107	
51117	Seville Grove	7209	634.4	512.1	807.7	457	369	582	
51118	Belmont - Ascot - Redcliffe	11271	1034.9	846.9	1304.6	1166	955	1470	
51119	East Victoria Park - Carlisle	13271	1167.8	958.6	1475.1	1550	1272	1958	
51122	Rivervale - Kewdale - Cloverdale	20032	1162.8	948.4	1478.7	2329	1900	2962	
51123	Victoria Park - Lathlain - Burswood	11877	1125.0	928.8	1437.3	1336	1103	1707	
51124	Bentley - Wilson - St James	16909	1640.7	1333.0	2071.8	2774	2254	3503	
51125	Canning Vale - West	7740	262.9	214.6	344.0	203	166	266	
51127	Cannington - Queens Park	14075	1149.9	939.8	1475.8	1618	1323	2077	
51128	Parkwood - Ferndale - Lynwood	10975	604.5	493.5	770.4	663	542	846	
51129	Riverton - Shelley - Rossmovne	10496	619.4	507.8	792.8	650	533	832	
51131	Willetton	13878	447.0	366.3	577.5	620	508	801	
51132	Beckenham - Kenwick - Langford	14557	884.8	720.3	1122.9	1288	1049	1635	
51133	Canning Vale - East	17381	383.8	314.8	498.9	667	547	867	
51134	Gospells	15331	992.0	805.9	1236.4	1521	1236	1895	
51125	Huntingdala - Southarn Pivor	12670	441.7	250.9	E62.7	604	102	771	
51135	Maddington Orange Crove Martin	10404	976 5	710 5	1007.0	004	7492	1150	
51130	Therefice	10494	670.5	/12.3	1097.9	10920	005	1132	
51137		1/0/0	000.0	494.0	770.1	1007	600	1000	
51130	Lish Weenshe	13955	500.5	402.0		/95	401	1008	
51139	Kalamunda Maida Vala Casaahauni Lill	9201		433.2	077.5		401	027	
51140	Kalamunua - Malua Vale - Gooseberry Hill	11008	296.3	245.0	377.0	040	200	215	
51141	Lesmurdie - Bickley - Carmel	8/34	284.5	231.9	360.9	248	203	315	
51142	Bytora	11119	329.1	270.1	422.3	366	300	470	
51143	Mundijong	4800	221.7	182.0	285.2	106	8/	13/	
51144	Serpentine - Jarrandale	3430	267.8	218.7	344.4	92	/5	118	
51145	Como	11570	1098.2	903.8	1388.0	12/1	1046	1606	
51146	Manning - waterford	9081	808.9	658.4	1017.8	/35	598	924	
51147	South Perth - Kensington	13298	840.1	693.5	1072.0	1117	922	1426	
51148	Banjup	12306	404.5	332.5	524.6	498	409	646	
51152	Coogee	6817	300.1	246.7	385.7	205	168	263	
51153	Coolbellup	6392	978.8	800.6	1217.5	626	512	778	
51154	Hamilton Hill	8282	1080.6	887.3	1342.9	895	735	1112	
51158	North Coogee	1890	311.2	261.1	405.8	59	49	77	
51159	South Lake - Cockburn Central	9092	701.4	574.4	886.0	638	522	806	
51160	Spearwood	8089	773.4	636.3	972.5	626	515	787	
51161	Success - Hammond Park	10652	566.8	465.8	730.3	604	496	778	
51163	Yangebup	5647	590.1	481.6	737.1	333	272	416	
51164	East Fremantle	5628	447.7	370.4	569.6	252	208	321	
51165	Fremantle	12027	943.7	778.7	1174.5	1135	937	1413	
51166	Fremantle - South	11381	859.7	703.6	1073.0	978	801	1221	
51169	Bertram - Wellard (West)	9727	608.0	497.6	773.4	591	484	752	
51170	Calista	5699	1136.7	924.3	1403.3	648	527	800	
51174	Parmelia - Orelia	8202	986.7	802.9	1226.2	809	659	1006	
51175	Applecross - Ardross	8686	479.8	396.7	620.8	417	345	539	

			Unit-level SAEs						
				Unit-level_	Unit-level_		Unit-level_	Unit-level_	
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_	
SA2_5DIGIT	542 nome	Unit-level_Probit_	probit_	RATE_	RAIE_	probit_	number_	number_	
E1176	SAZ_Name	2061	42E 0	LOWERCI	ECE 0	120	LOWERCI	169	
51176	Bateman Dilawa	2961	435.0	358.8	202.9	129	106	108	
51177	Bicton - Paimyra	10589	/26.5	599.7	905.7	769	635	959	
51178	Booragoon	11438	580.7	4/7.7	/38.0	664	546	844	
51179	Bull Creek	6156	603.8	494.8	766.7	372	305	472	
51180	Leeming	8511	255.9	211.7	330.1	218	180	281	
51181	Melville	12364	427.3	354.6	542.3	528	438	670	
51182	Murdoch - Kardinya	10263	618.0	503.5	792.7	634	517	814	
51183	Willagee	3640	1420.3	1157.9	1745.0	517	421	635	
51184	Winthrop	4736	204.7	168.3	270.1	97	80	128	
51185	Baldivis	22379	516.3	422.9	664.5	1156	946	1487	
51186	Cooloongup	6564	838.4	678.3	1053.9	550	445	692	
51187	Port Kennedy	9642	676.5	550.5	858.6	652	531	828	
51188	Rockingham	12352	1093.7	893.5	1359.8	1351	1104	1680	
51190	Safety Bay - Shoalwater	8855	815.2	667.6	1017.0	722	591	901	
51191	Singleton - Golden Bay - Secret Harbour	13158	474.7	390.1	607.4	625	513	799	
51192	Waikiki	9115	706.0	575.2	889.3	644	524	811	
51193	Warnbro	7945	790.7	644.6	991.4	628	512	788	
51225	Albany	10893	1199.3	984.7	1477.0	1306	1073	1609	
51226	Albany Region	2542	474.8	392.8	597.2	121	100	152	
51227	Bayonet Head - Lower King	3442	587.8	480.8	743.8	202	166	256	
51228	Denmark	4337	812.8	671.0	1002.8	353	291	435	
51229	Gnowangerup	2043	696.9	577.2	873.8	142	118	179	
51230	Katanning	3348	866.4	701.2	10923	290	235	366	
51230	Kolonun	2997	706.5	574.8	802.3	210	172	267	
51231	Little Grove - Elleker	2001	206.5	226.7	102.0	110	1/2	120	
51232	Malfail Wilhung	7500	00E 1	702.0	1000.0	672	52	135	
51233	Nicrail - Wilyung	7599	7147	723.2	1099.0	073	000	000	
51234	Plantagenet	3862	/14./	584.8	892.4	276	226	345	
51236	Chittering	4072	262.0	215.9	331.5	107	88	135	
51237	Cunderdin	3084	751.8	610.9	937.0	232	188	289	
51238	Dowerin	2929	794.7	653.0	987.8	233	191	289	
51239	Gingin - Dandaragan	6268	536.6	441.0	679.6	336	276	426	
51240	Merredin	3768	851.8	693.3	1072.6	321	261	404	
51241	Moora	3519	728.5	595.9	915.9	256	210	322	
51242	Mukinbudin	2389	667.1	547.5	839.4	159	131	201	
51243	Northam	8410	791.6	637.1	990.4	666	536	833	
51244	Toodyay	3479	363.9	298.6	451.8	127	104	157	
51245	York - Beverley	4038	569.3	461.6	713.5	230	186	288	
51246	Brookton	2743	772.3	626.8	959.1	212	172	263	
51247	Kulin	3059	727.8	598.2	910.2	223	183	278	
51248	Murray	1874	661.4	540.8	835.8	124	101	157	
51249	Narrogin	3436	939.2	760.2	1168.8	323	261	402	
51250	Wagin	3624	647.0	531.8	809.9	234	193	294	
51251	Dalyellup	6082	789.9	644.8	994.4	480	392	605	
51252	Gelorup - Stratham	2201	87.3	72.6	112.1	19	16	25	
51253	South Bunbury - Bunbury	9327	973.2	800.7	1211.8	908	747	1130	
51254	Withers - Usher	3855	1647.4	1330.9	2028.1	635	513	782	
51255	Alkimos - Eglinton	5586	567.3	468.2	720.7	317	262	403	
51256	Carabooda - Piniar	596	539.5	440.4	710.3	32	26	42	
51257	Two Rocks	2185	579.8	474.9	720.5	127	104	157	
51258	Yanchen	6227	657.4	525.2	827 R	400	333	515	
51259	Beeliar - Wattleun	6024	557.9	157.4	704.6	226	276	104	
51255	landakat	0024	0150	177.0	704.0		270	+24 E7	
51200		2058	215.3	104.0	277.7	44	3/	140	
51201		48/3	233.9	194.0	299.8	114	95	140	
51202	Droutile	9829	1215.4	972.2	1551.4	1195	956	1525	
51263	Derby - West Kimberley	5246	2997.7	22/1.5	3815.9	15/3	1192	2002	
51264	Halls Creek	2134	3214.0	2429.3	4059.8	686	518	866	
51265	Kununurra	4965	1823.8	1409.0	2330.0	905	700	1157	

			Unit-level SAEs						
				Unit-level_	Unit-level_		Unit-level_	Unit-level_	
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_	
SA2_5DIGH	SA2 name	Unit-level_Probit_	probit_	RAIE_	RAIE_	probit_	number_	number_	
51266	Boebuck	1524	3286.8	2495.6	4130 3	501	380	629	
51200	Fast Pilbara	5900	7/0 2	EE2.0	074.5	124	201	665	
51207	East Filbara	3056	042.0	765.9	1070.0	434		200	
51200	Newman Dert Hedland	2171	942.9	600.7	1000.9	200	234	246	
51209		51/1	1057.1	1000.0	1090.8	201	210	1004	
51270		6616	1257.1	1000.2	1053.2	832	002	1094	
51271	Ashburton (wA)	10569	457.2	369.6	610.9	483	391	1500	
51272	Narratha	10859	1059.1	864.1	1402.4	1150	938	1523	
51273	Roebourne	4236	1033.1	806.1	1357.7	438	341	5/5	
51274	Esperance	8/61	830.1	675.9	1044.3	/2/	592	915	
51275		2667	654.8	541.2	836.9	1/5	144	223	
51276	Carnarvon	3/22	1252.4	993.1	15/9.1	466	370	588	
51277	Exmouth	3139	918.5	/4/.0	1176.2	288	234	369	
51278	Boulder	5109	840.2	675.1	1069.5	429	345	546	
51279	Kalgoorlie	10094	758.4	617.1	974.3	766	623	984	
51280	Kalgoorlie - North	6166	656.9	538.9	849.9	405	332	524	
51282	Kambalda - Coolgardie - Norseman	3354	833.6	668.1	1057.0	280	224	355	
51283	Leinster - Leonora	3531	2077.6	1555.6	2693.6	734	549	951	
51285	Geraldton	9060	1359.8	1100.5	1673.4	1232	997	1516	
51286	Geraldton - East	5704	813.2	641.0	1020.8	464	366	582	
51287	Geraldton - North	5384	660.0	532.8	843.0	355	287	454	
51288	Geraldton - South	7087	780.4	636.1	989.8	553	451	701	
51289	Irwin	2637	837.1	686.8	1034.4	221	181	273	
51290	Meekatharra	2400	1125.1	863.1	1438.4	270	207	345	
51291	Morawa	2939	837.7	682.1	1053.3	246	200	310	
51292	Northampton - Mullewa - Greenough	4392	738.4	597.5	922.5	324	262	405	
61001	Bridgewater - Gagebrook	5074	2313.1	1857.5	2837.3	1174	942	1440	
61002	Brighton - Pontville	4012	580.0	475.2	716.6	233	191	287	
61003	Old Beach - Otago	3284	290.5	241.0	365.0	95	79	120	
61004	Bellerive - Rosny	4650	866.9	712.0	1077.2	403	331	501	
61005	Cambridge	5728	247.7	203.6	310.1	142	117	178	
61006	Geilston Bay - Risdon	2478	546.2	447.2	674.0	135	111	167	
61007	Howrah - Tranmere	7989	483.5	395.9	606.7	386	316	485	
61008	Lindisfarne - Rose Bay	5832	708.5	578.5	884.0	413	337	516	
61009	Mornington - Warrane	3654	1592.2	1294.2	1957.5	582	473	715	
61010	Risdon Vale	2412	927.5	755.7	1132.1	224	182	273	
61011	Rokeby	4393	1691.7	1364.3	2092.2	743	599	919	
61012	South Arm	3130	246.0	201.9	310.3	77	63	97	
61013	Austins Ferry - Granton	3011	545.0	439.0	686.7	164	132	207	
61014	Berriedale - Chigwell	4190	1066.8	870.5	1305.3	447	365	547	
61015	Claremont (Tas.)	5962	1293.4	1053.9	1586.5	771	628	946	
61016	Derwent Park - Lutana	3200	1427.4	1164.0	1765.1	457	372	565	
61017	Glenorchy	8594	1659.2	1349.2	2030.9	1426	1159	1745	
61018	Montrose - Rosetta	3862	957.0	780.5	1170.8	370	301	452	
61019	Moonah	4145	1523.1	1246.4	1870.0	631	517	775	
61020	New Norfolk	5075	1184.6	960.6	1452.5	601	487	737	
61021	West Moonah	2986	1336.9	1090.4	1659.4	399	326	495	
61022	Kingston - Huntingfield	8436	985.0	803.7	1219.7	831	678	1029	
61023	Kingston Beach - Blackmans Bay	7846	615.0	503.3	768.8	483	395	603	
61024	Margate - Snug	5538	451.0	369.1	565.1	250	204	313	
61026	Taroona - Bonnet Hill	2683	442.3	366.4	549.0	119	98	147	
61027	Hobart	6547	1592.2	1307.3	1989.8	1042	856	1303	
61028	Lenah Valley - Mount Stuart	6437	674.5	553.5	846.5	434	356	545	
61029	Mount Nelson - Dynnyrne	3694	839.0	685.1	1056.0	310	253	390	
61030	New Town	4832	1223.9	1006.6	1509.4	591	486	729	
61031	Sandy Bay	9539	1202.4	981.9	1517.0	1147	937	1447	
61032	South Hobart - Fern Tree	4698	886.3	726.0	1110.3	416	341	522	
61033	West Hobart	4554	1046.7	861.6	1309.1	477	392	596	

			Unit-level SAEs							
				Unit-level_	Unit-level_		Unit-level_	Unit-level_		
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_		
SA2_5DIGIT	640 mm	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_		
CODE_2016	SA2_harne	totaipopulation	RATE	LowerCi	OpperCi	number	LowerCi	UpperCi		
61034	Dodges Ferry - Lewisnam	5578	650.4	529.6	805.4	363	295	449		
61035	Sorell - Richmond	6634	/41.0	604.3	915.2	492	401	607		
61036	Invermay	2476	2110.5	1/2/.5	2584.8	523	428	640		
61037	Kings Meadows - Punchbowl	3242	1157.1	939.3	1439.4	375	305	467		
61038	Launceston	3997	1323.3	1089.4	1641.4	529	435	656		
61039	Legana	3098	409.6	336.1	518.1	127	104	161		
61040	Mowbray	2941	2072.7	1680.9	2585.3	610	494	760		
61041	Newnham - Mayfield	7007	1616.6	1313.6	1986.7	1133	920	1392		
61042	Newstead	3858	1143.6	941.0	1398.0	441	363	539		
61043	Norwood (Tas.)	2964	643.2	523.9	793.5	191	155	235		
61044	Prospect Vale - Blackstone	4968	769.0	629.7	945.7	382	313	470		
61045	Ravenswood	2715	2111.6	1712.4	2568.6	573	465	697		
61046	Riverside	4923	775.0	633.6	964.9	382	312	475		
61047	South Launceston	3603	1535.5	1256.2	1900.3	553	453	685		
61048	Summerhill - Prospect	3566	1096.3	893.9	1351.4	391	319	482		
61049	Trevallyn	3384	753.1	620.7	934.6	255	210	316		
61050	Waverley - St Leonards	2656	1046.2	855.7	1280.4	278	227	340		
61051	West Launceston	3113	887.4	730.7	1097.1	276	227	342		
61052	Youngtown - Relbia	3577	707.5	577.0	876.1	253	206	313		
61053	Beauty Point - Beaconsfield	2937	735.3	595.8	906.1	216	175	266		
61054	Deloraine	4344	819.6	671.0	1007.7	356	291	438		
61055	Grindelwald - Lanena	4376	423.0	347.2	522.8	185	152	229		
61056	Hadspen - Carrick	2447	507.5	417.2	626.8	124	102	153		
61057	Westhury	3116	680.5	555.6	844.6	212	173	263		
61059	Dilston - Librdala	2020	224.7	264.0	406.2		01	102		
61050	Coorgo Town	5039	1172.0	204.9	1400.5	99	402	742		
61059		5159		955.0	1010.1	200	493	202		
61060	Longford	3136	984.9	802.5	1218.1	309	252	382		
61061	Northern Midlands	2785	862.9	/08.5	1078.2	240	197	300		
61062	Perth - Evandale	3895	529.2	432.4	654.7	206	168	255		
61064	St Helens - Scamander	4675	916.3	750.0	1116.4	428	351	522		
61065	Central Highlands	1580	747.2	607.9	935.4	118	96	148		
61066	Derwent Valley	2368	460.7	374.0	575.1	109	89	136		
61067	Southern Midlands	4637	553.9	451.4	684.9	257	209	318		
61069	Bruny Island - Kettering	2248	420.8	347.8	517.7	95	78	116		
61070	Cygnet	3264	615.8	501.2	762.2	201	164	249		
61071	Geeveston - Dover	2852	677.5	549.6	839.6	193	157	239		
61072	Huonville - Franklin	6303	606.2	494.2	747.6	382	312	471		
61073	Forestier - Tasman	1807	568.8	464.5	701.5	103	84	127		
61074	Triabunna - Bicheno	3312	853.7	696.3	1052.6	283	231	349		
61075	Acton - Upper Burnie	2410	1634.2	1335.4	1991.3	394	322	480		
61076	Burnie - Ulverstone Region	3814	425.3	347.9	530.1	162	133	202		
61077	Burnie - Wivenhoe	2810	1575.7	1287.9	1922.5	443	362	540		
61078	Parklands - Camdale	4790	1299.0	1055.0	1591.7	622	505	762		
61079	Penguin - Sulphur Creek	3833	673.8	550.8	828.3	258	211	317		
61080	Romaine - Havenview	2594	843.8	686.4	1036.5	219	178	269		
61081	Somerset	2949	1051.1	853.9	1289.2	310	252	380		
61082	Ulverstone	5217	1123.5	914.1	1371.6	586	477	716		
61083	West Ulverstone	3224	1114.8	908.1	1355.0	359	293	437		
61084	Wynyard	4683	1266.1	1026.4	1543.3	593	481	723		
61085	Devonport	10517	1537.2	1254.4	1876 1	1617	1319	1973		
61086	East Devopport	10211	1582.0	1270 1	19/17.2	560	160	700		
610.97	Latrobe		1050 1	12/3.1	1200.2	203	201	100		
61000	Miandotta - Don	3370	1009.1	002.8 E22.0	0110	35/	100	438		
61090	Port Soroll	2001	600.0	533.6	814.0	707	130	208		
61000		4314	450.0	0.000	804.3	299	244	3/3		
01090	Quoipa - Spreylon	2202	452.2	3/0.0	566.6	100	81	125		
01091	Snemeld - Kaliton	4/14	542.1	439.5	670.7	256	207	316		
61092	iurners Beach - Forth	2342	425.3	344.5	539.8	100	81	126		

			Unit-level SAEs							
				Unit-level_	Unit-level_		Unit-level_	Unit-level_		
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_		
SA2_5DIGIT	CA0	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_		
CODE_2016	SA2_hame	totalpopulation	RATE	LowerCi	OpperCi	number	LowerCi	OpperCi		
61093	King Island	11/9	668.1	557.1	841.1	/9	66	99		
61094	North West	2901	6/2.1	548.1	847.0	195	159	246		
61095	Smithton	2906	1079.4	8/5./	1329.3	314	254	386		
61096	Waratah	2715	510.7	411.9	636.2	139	112	173		
61097	West Coast (Tas.)	3132	887.8	727.8	1099.5	278	228	344		
61099	Flinders and Cape Barren Islands	678	1335.6	1083.3	1657.9	91	73	112		
61100	Scottsdale - Bridport	5019	851.5	695.5	1051.8	427	349	528		
71002	Darwin City	5478	901.9	754.4	1181.5	494	413	647		
71004	Fannie Bay - The Gardens	2683	765.4	637.2	987.0	205	171	265		
71005	Larrakeyah	2971	829.7	696.9	1087.8	247	207	323		
71006	Ludmilla - The Narrows	1965	1254.7	980.7	1600.5	247	193	315		
71007	Parap	2061	888.1	741.9	1155.9	183	153	238		
71008	Stuart Park	3341	836.0	697.6	1099.9	279	233	367		
71009	Woolner - Bayview - Winnellie	2197	633.1	534.6	848.0	139	117	186		
71010	Alawa	1610	659.9	534.7	869.0	106	86	140		
71011	Anula	1670	566.1	455.1	733.0	95	76	122		
71012	Berrimah	924	1012.6	800.3	1280.5	94	74	118		
71013	Brinkin - Nakara	2805	544.4	444.2	713.8	153	125	200		
71016	Coconut Grove	2432	1387.7	1136.5	1735.7	337	276	422		
71018	Jingili	1300	523.5	423.6	676.8	68	55	88		
71019	Karama	3615	989.0	792.4	1253.7	358	286	453		
71020	Leanyer	3516	711.7	581.4	913.0	250	204	321		
71021	Lyons (NT)	3175	576.2	488.2	772.4	183	155	245		
71022	Malak - Marrara	3489	803.6	650.7	1016.0	280	227	354		
71023	Millner	1969	965.4	797.6	1227.2	190	157	242		
71024	Moil	1465	718.4	580.2	932.5	105	85	137		
71025	Nightcliff	2957	1014.3	840.1	1307.8	300	248	387		
71026	Rapid Creek	2506	1007.1	826.1	1288.4	252	207	323		
71027	Tiwi	1944	755.1	603.6	978.6	147	117	190		
71028	Wagaman	1624	842.2	676.4	1107.6	137	110	180		
71029	Wanguri	1404	553.4	449.1	702.9	78	63	99		
71030	Wulagi	1745	672.6	545.4	863.8	117	95	151		
71031	Howard Springs	5962	157.2	126.1	202.2	94	75	121		
71032	Humpty Doo	6393	268.9	220.8	351.0	172	141	224		
71034	Virginia	2550	482.0	397.3	629.8	123	101	161		
71035	Weddell	3363	365.1	298.3	461.4	123	100	155		
71036	Bakewell	2235	817.4	667.2	1060.4	183	149	237		
71037	Driver	2085	976.7	785.7	1251.8	204	164	261		
71038	Durack - Marlow Lagoon	3022	595.3	491.8	804.8	180	149	243		
71039	Grav	2364	1483.1	1201.2	1819.3	351	284	430		
71040	Moulden	2050	1637.8	1302.5	2025.7	336	267	415		
71041	Palmerston - North	2910	560.1	466.1	760.9	163	136	221		
71042	Palmerston - South	2101	628.7	524.9	817.9	132	110	172		
71043	Rosebery - Bellamack	4457	819.3	682.2	1072.2	365	304	478		
71044	Woodroffe	2338	1019.2	831.9	1265.8	238	195	296		
71045	Charles	2987	1069.3	839.6	1366.9	319	251	408		
71046	Fast Side	3725	1048.6	837.0	1338.9	391	312	499		
71040	Elvon (NT)	3120	9/86	764.9	1203.4	296	230	375		
71047		3354	918.7	733.2	1175.4	308	235	30/		
710/0	Mount Johns		8U0 3	133.2 667.6	1054.0	300	100	200		
71050	Patermann - Simpson	1027	000.3	1640 4	2004.2	410	210	502		
71050		1937	2130.4	1049.4	2/4/.9	413	319	532		
71051	RUSS	1896	935.4	/2/.4	1192.6	1//	138	226		
71052	Sanuover - Pienty	2963	2/45.3	2034.3	3531.4	813	603	1046		
71053		1911	3852.6	2900.9	4896.4	/36	554	936		
71054	ruendumu - Anmatjere	1324	4597.3	3403.1	5918.1	609	451	/84		
/1055	Barkiy	1663	3494.2	25/6.4	4537.1	581	428	/55		
/1056	rennant Creek	2123	2208.7	1668.0	2858.6	469	354	607		

			Unit-level SAEs							
				Unit-level_	Unit-level_		Unit-level_	Unit-level_		
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_		
SA2_5DIGIT	640	Unit-level_Probit_	probit_	RATE_	RATE_	probit_	number_	number_		
CODE_2016	SA2_name	totalpopulation	RATE	LowerCi	UpperCi	number	LowerCI	UpperCi		
/105/	Alligator	3382	11/4.0	915.3	1500.9	397	310	508		
71058	Daly	1209	3101.7	2302.7	3990.2	375	278	482		
71059	Ihamarrurr	1621	4136.7	3049.5	5351.0	671	494	867		
71060	Tiwi Islands	1757	4813.3	3661.7	6018.6	846	643	1057		
71061	West Arnhem	3288	4135.7	3018.5	5440.7	1360	992	1789		
71062	Anindilyakwa	1731	2768.4	1963.9	3868.2	479	340	670		
71063	East Arnhem	4936	4538.0	3275.4	6000.3	2240	1617	2962		
71064	Nhulunbuy	2011	1012.4	841.5	1357.1	204	169	273		
71065	Elsey	1588	3539.6	2641.7	4529.9	562	420	719		
71066	Gulf	2688	3627.0	2625.4	4808.5	975	706	1293		
71067	Katherine	6967	1085.4	852.1	1394.6	756	594	972		
71068	Victoria River	1608	3350.7	2468.8	4357.5	539	397	701		
81001	Aranda	1772	445.1	364.9	576.0	79	65	102		
81002	Belconnen	5771	1470.1	1211.6	1873.6	848	699	1081		
81003	Bruce	5996	1100.3	905.6	1417.1	660	543	850		
81004	Charnwood	2231	1053.9	863.5	1305.3	235	193	291		
81005	Cook	2180	620.2	509.7	789.1	135	111	172		
81006	Dunlop	5100	451.0	370.8	568.2	230	189	290		
81007	Fvatt	4005	524.6	427.2	668.9	210	171	268		
81008	Florey	3747	1043.6	855.1	1303.7	391	320	489		
810.09	Elvnn (ACT)	2514	377.1	309.3	481.9	95	78	121		
81010	Fraser	1504	2/10	108 /	303.3	36	30			
91011	Giralang	2462	495.0	205.0	625.5	110	07	154		
91012	Howker	2402	614.0	595.9 E10.2	769.0	119	116	175		
01013		2277	614.2	510.5	700.9	140	100	1/5		
01014		2203	035.4	323.0	1104.0	226	076	100		
81015	Holt	3552	945.0	778.0	1164.9	330	276	414		
81016	Kaleen	5642	635.3	518.2	811.0	358	292	458		
81017	Latham	2694	586.3	482.7	/30.2	158	130	197		
81019	Macgregor (AC1)	4928	468.6	385.9	598.1	231	190	295		
81020	Macquarie	2064	1129.8	930.7	1419.1	233	192	293		
81021	McKellar	2142	522.3	423.9	663.7	112	91	142		
81022	Melba	2321	614.3	501.5	775.8	143	116	180		
81023	Page	2395	998.3	815.9	1261.1	239	195	302		
81024	Scullin	2213	1015.5	831.9	1280.0	225	184	283		
81025	Spence	1910	609.1	496.0	769.3	116	95	147		
81026	Weetangera	1917	300.8	247.7	389.1	58	47	75		
81034	Amaroo	4005	420.3	348.6	542.7	168	140	217		
81035	Bonner	4432	523.5	434.7	677.3	232	193	300		
81036	Casey	4117	406.9	339.5	528.8	168	140	218		
81037	Crace	3264	503.9	421.4	653.7	164	138	213		
81038	Forde	2890	348.8	290.1	460.9	101	84	133		
81039	Franklin	4800	832.3	688.5	1075.4	400	330	516		
81040	Gungahlin	4733	1059.0	872.7	1376.4	501	413	651		
81044	Harrison	5463	803.1	665.9	1045.4	439	364	571		
81046	Ngunnawal	7696	636.8	527.9	807.1	490	406	621		
81047	Nicholls	5258	261.3	216.1	340.1	137	114	179		
81048	Palmerston	4235	685.0	564.0	874.3	290	239	370		
81049	Acton	2018	0.0	0.0	0.0	0	0	0		
81050	Ainslie	3986	1163.1	950.3	1450.9	464	379	578		
81051	Braddon	4912	1359.0	1122.1	1736.8	668	551	853		
81053	Civic	3967	596.1	493.7	779.2	236	196	300		
81054	Dickson	1750	1200.2	11/0 0	1704 4	230	790			
91055	Downor	1129	1107 4	077.0	1501.0	240	202	314		
01000 010E6	Hackott	2868	770 5	9/7.6	1521.0	170	280	430		
01030	lunchem	2225	1005 5	040.6	9/6.6	1/3	143	21/		
0105/		4210	1285.5	1061.8	1625.6	541	447	684		
81058		4279	1196.4	980.8	1509.9	512	420	646		
81060	lurner	3505	1457.7	1198.7	1865.1	511	420	654		

			Unit-level SAEs							
				Unit-level_	Unit-level_		Unit-level_	Unit-level_		
			Unit-level_	probit_	probit_	Unit-level_	probit_	probit_		
CODE 2016	SA2 name	totalpopulation	Probit_ RATE	RAIE_	RAIE_	probit_ number	numper_	numper_		
81061	Watson	4448	987.8	815.5	1254.0	/30	363	558		
81062	Deakin	2167	/73.8	393.6	598.7	103	85	130		
91062	Forroct	1201	E02.1	422.0	6/0.9	65	54 54	20		
91064	Griffith (ACT)	2650	0110	702.7	1064.1	200	257	200		
91067	Narrahundah	4572	1010.7	021.2	1256.6	462	200	575		
91060		4373	620.2	E10.2	704.0	1402	100	107		
01009	Ked Hill (ACT)	2301	400.0	100.1	(10.0	140	122	10/		
01070	Panko	2220	400.0	274.9	E 70.1	109	126	210		
01071	Banithan	2027	740.2	574.0 614 E	050.9	200	190	210		
01072	Colwell	2937	/49.2	241.5	930.8	190	140	279		
81073	Chickeler	4356	413.8	341.0	524.9	180	149	229		
81074	Constroim	3906	033.5 400 F	430.2	505.4	208	170	260		
81075	Conder	3857	420.5	349.7	535.4	201	135	206		
81076	Placen	2247	121.1	101.4	159.8	27	23	36		
81077	Gilmore	2044	690.7	566.2	861.3	141	116	1/6		
81078	Gordon (ACT)	5814	205.7	467.5	727.0	334	2/2	423		
81079	Gowne (ACT)	2303	395.7	325.2	500.4	91	/5	115		
81080	Greenway	1560		838.9	1321.9	158	131	206		
81081	Isabella Plains	11004		422.5	701.1	170		210		
81082	Kamban	11224	104.1	512.3	141.1	107	5/5	10		
81083	Macarthur	1107	104.1	87.3	141.1	12	10	10		
81084	Monash	4312	4/8.3	392.6	609.9	206	169	263		
81086	Oxley (ACT)	1296		539.3	852.6	86	/0	110		
81087	Richardson	2255	/59.6	620.9	942.2	1/1	140	212		
81088	I neodore	2861	4/2.7	385.4	599.8	135	110	1/2		
81090	Vanniassa	5720	592.7	482.6	747.0	339	276	427		
81091	Chapman	2018	196.8	163.4	251.8	40	33	51		
81092	Dully	2310	514.4	423.0	648.5	119	98	150		
81093	Fisher	2189	512.2	425.0	635.1	112	93	139		
81094	Holder	1950	489.0	402.9	627.8	95	104	122		
81095	Riveu	2355	450.7	097.1	1001.8	201	104	250		
81096	Stirling	1073	459.7	377.4	1061.0	1.00	100	98		
01097	Westen	2741	476.0	205.6	1001.0	121	100	165		
01090 91000	Chifford	1974	470.9 04E 4	600.0	1070.0	151	100	201		
91100	Curtin	2069	196.0	402.7	622.0	102	160	201		
91101	Forror	2477	400.9	220.0	622.0 E16.4	195	100	100		
01101	Carran	2477	525 Q	120.2	669.0	120	115	120		
01102	Hughos	2017	547.7	450.5	600.0	104	102	175		
81104	lease	1858	360.0	302.8	484.6	69	56	90		
81105	Lyons (ACT)	2455	1102.3	985.4	1/04.0	203	242	367		
81106	Mawson	2556	1005.6	828.5	1270.6	255	242	325		
81107	O'Malley	775	133.6	112.4	179.8	10	9	14		
81108	Pearce	1965	640.4	528.5	805.4	126	104	158		
81100	Phillip	2455	1150.6	960.1	1/180 1	282	236	363		
81110	Torreps	1679	576.1	472.7	735.1	97	79	123		
81113	Canberra Fast	10/9	1306.6	1079.6	1500.2	97	79	117		
81124	Campbell	2523	643.2	528 5	831.0	162	122	210		
81125	Duntroon	1577	135.0	119.2	180 7		10	210		
81127	Reid	1362	1722 5	1/03/	21170	225	10/	20		
81129	Barton	1100	663.6	556.6	888.7	200 RN	67	107		
81131	Kingston (ACT)	37/12	885.0	741 8	1158.2	332	278	107		
81135	Coombs	1288	248 /	205.3	318.7	302	2,0	 		
81139	Wright	2151	2024	200.0	310.7	65	55	26		
		2131	505.9	200.1	555.5	00	55			

Table A5: SA3 level estimates

			Unit-level SAES						Area-level SAEs						
				Unit-	Unit-		Unit-	Unit-							
				level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
SA3_	SAD NAME 2016	Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
CODE_2016	SAS_NAME_2016	totalpopulation		LowerCi	opperCi	number	LowerCi	UpperCi			LowerCi	OpperCi		LowerCi	opperCi
80110	Wolongio	3448	298.0	249.2	387.0	103	1500	133	3602.00	201.0	/.8	1540.0	/2	3	233
80109	Woden valley	26924	/14./	589.2	908.7	1924	1586		28617.00	934.6	453.2	1548.0	26/5	1297	4430
80108	Weston Creek	1/193	5/1./	469.4	716.7	983	807	1232	18340.00	382.5	134.4	677.0	702	247	1242
80107	Tuggeranong	64/41	560.1	457.5	707.0	3626	2962	4577	68450.00	536.8	111.6	1056.8	36/5	764	/234
80106	North Conherra	21282	1047.9	040.3	1220.0	4571	2750	2089	23076.00	2020.6	1050.7	2011.1	1003	4016	14907
80105	North Canberra	43628	1047.8	861.7	1329.9	4571	3/59	5802	46393.00	2030.6	1059.7	3211.1	9420	4916	14897
80104	Gunganiin	51619	624.5	516.2	805.2	3224	2665	4156	53955.00	381.5	56.8	921.8	2058	307	4974
80103	Canberra East	1384	865.3	/14.6	1071.5	120	99	148	1448.00	5328.4	3750.4	/015.0	112	543	1016
80101	Belconnen	/3/23	/6/.0	628.8	970.8	5655	4636	/15/	77996.00	905.6	495.0	1898.0	/063	3861	14803
70205	Katherine	12853	2218.7	1656.9	2886.6	2852	2130	3/10	13903.00	2842.5	1807.1	3572.5	3952	2512	4967
/0204	East Arnhem	8679	3366.4	2448.7	4498.5	2922	2125	3904	9303.00	4583.3	3134.7	5420.5	4264	2916	5043
/0203	Daly - Tiwi - West Arnhem	11264	3265.9	2433.1	4209.4	3679	2/41	4742	11996.00	5302.0	3757.0	6414.2	6360	4507	/694
70202	Barkly	3776	2/93.0	2084.1	3616.7	1055	787	1366	4158.00	4524.0	3168.0	5621.9	1881	1317	2338
/0201	Alice Springs	26079	1688.3	1298.4	2160.3	4403	3386	5634	28347.00	901.7	401.3	1620.9	2556	1137	4595
70104	Palmerston	23560	940.5	766.3	1203.2	2216	1806	2835	25019.00	1869.5	661.2	3283.6	4677	1654	8215
70103	Litchfield	18282	286.8	233.5	370.8	524	427	678	19345.00	1472.2	658.2	2279.3	2848	1273	4409
70102	Darwin Suburbs	40129	850.6	691.5	1088.5	3413	2775	4368	42669.00	1402.3	769.7	2308.1	5983	3284	9849
70101	Darwin City	20717	880.8	728.5	1150.8	1825	1509	2384	22252.00	409.0	130.7	1009.7	910	291	2247
60403	West Coast	12824	811.2	660.2	1008.6	1040	847	1293	13967.00	1037.9	465.5	2160.7	1450	650	3018
60402	Devonport	33609	1047.4	851.6	1288.3	3520	2862	4330	36503.00	1016.4	335.7	2130.0	3710	1225	7775
60401	Burnie - Ulverstone	36338	1102.3	896.7	1347.7	4005	3259	4897	39209.00	1472.7	643.7	2298.8	5774	2524	9013
60303	South East Coast	5121	736.8	601.3	908.6	377	308	465	5903.00	899.4	369.2	1511.5	531	218	892
60302	Huon - Bruny Island	14672	607.8	493.1	754.1	892	724	1106	15819.00	2016.0	870.7	3254.0	3189	1377	5147
60301	Central Highlands (Tas.)	8596	588.1	477.7	729.6	506	411	627	9193.00	1145.4	590.9	1949.0	1053	543	1792
60203	North East	28400	857.5	699.5	1056.2	2435	1987	3000	30863.00	1225.6	626.8	2184.1	3782	1934	6741
60202	Meander Valley - West Tamar	17217	638.9	521.7	789.3	1100	898	1359	18675.00	1089.8	562.7	1798.1	2035	1051	3358
60201	Launceston	62086	1180.5	963.3	1456.1	7329	5981	9040	66508.00	1210.9	715.2	1992.4	8053	4757	13251
60106	Sorell - Dodges Ferry	12210	698.6	569.0	864.2	853	695	1055	13128.00	1449.5	826.5	2202.8	1903	1085	2892
60105	Hobart Inner	40301	1104.4	904.9	1382.8	4451	3647	5573	43320.00	1371.0	754.3	2326.4	5939	3268	10078
60104	Hobart - South and West	24514	688.8	562.9	857.7	1688	1380	2103	26168.00	1036.8	564.3	1824.6	2713	1477	4775
60103	Hobart - North West	41027	1288.8	1048.2	1584.4	5288	4301	6500	43407.00	2817.9	1681.9	3788.8	12232	7301	16446
60102	Hobart - North East	40275	783.2	637.6	971.0	3154	2568	3911	43111.00	1052.3	592.7	1659.2	4537	2555	7153
60101	Brighton	12373	1259.0	1016.2	1545.9	1558	1257	1913	13092.00	2809.4	1602.3	4168.5	3678	2098	5457
51104	Mid West	39599	939.6	755.2	1176.6	3721	2991	4659	43347.00	1492.0	897.3	2621.8	6468	3890	11365
51103	Goldfields	28255	928.5	736.6	1193.1	2624	2081	3371	30419.00	1343.0	709.5	2033.9	4085	2158	6187
51102	Gascoyne	6864	1096.7	878.4	1387.8	753	603	953	7543.00	1369.2	662.5	2240.5	1033	500	1690
51101	Esperance	11421	800.1	653.8	1007.9	914	747	1151	12751.00	1522.9	1261.4	1852.2	1942	1608	2362

		Unit-level SAES							Area-level SAEs						
				Unit-	Unit-		Unit-	Unit-							
				level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
SA3_		Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
CODE_2016	SA3_NAME_2016	totalpopulation	probit_RATE	LowerCI	UpperCl	number	LowerCI	UpperCl	totalpopulation	FH_RATE	LowerCl	UpperCl	FH_number	LowerCI	UpperCI
51003	West Pilbara	25665	814.5	657.1	1077.0	2090	1687	2764	27464.00	436.5	109.3	908.7	1199	300	2496
51002	East Pilbara	18642	976.8	771.7	1287.5	1821	1439	2400	20021.00	738.3	339.3	1275.1	1478	679	2553
51001	Kimberley	23697	2073.4	1596.9	2636.5	4913	3784	6248	25987.00	3236.7	2289.8	4389.1	8411	5950	11406
50903	Wheat Belt - South	14747	776.2	632.3	967.7	1145	933	1427	16240.00	2222.5	1373.1	3262.1	3609	2230	5298
50902	Wheat Belt - North	41963	650.6	528.9	815.6	2730	2219	3422	45804.00	1312.6	790.5	1954.8	6012	3621	8954
50901	Albany	43894	858.5	702.9	1066.5	3768	3085	4681	48071.00	764.6	316.4	1533.3	3676	1521	7371
50705	Rockingham	90017	711.5	580.6	897.5	6405	5226	8079	97184.00	1266.5	672.8	2121.4	12308	6538	20617
50704	Melville	79341	553.9	455.1	702.3	4395	3611	5572	83497.00	510.8	173.4	1102.9	4265	1448	9209
50703	Kwinana	28583	766.4	624.4	958.9	2191	1785	2741	30238.00	1859.5	1049.9	2875.4	5623	3175	8695
50702	Fremantle	29054	817.3	671.4	1021.5	2374	1951	2968	31126.00	1242.9	537.3	2305.5	3869	1672	7176
50701	Cockburn	77256	642.6	526.8	811.8	4964	4070	6272	81501.00	483.6	105.2	1013.5	3942	857	8260
50607	South Perth	33950	934.2	767.1	1182.7	3172	2604	4015	35943.00	952.7	341.3	1460.3	3424	1227	5249
50606	Serpentine - Jarrahdale	19351	303.7	248.5	390.3	588	481	755	20468.00	798.7	187.3	1589.9	1635	383	3254
50605	Kalamunda	43626	436.3	356.0	554.4	1904	1553	2419	46286.00	610.6	239.0	1211.1	2826	1106	5606
50604	Gosnells	89314	682.1	555.3	862.6	6092	4959	7704	93418.00	908.5	289.9	1879.1	8487	2708	17554
50603	Canning	74087	885.8	722.1	1129.1	6562	5350	8365	77477.00	597.4	185.5	1198.2	4629	1438	9283
50602	Belmont - Victoria Park	56474	1131.7	926.9	1436.5	6391	5235	8113	59971.00	696.3	345.9	1279.5	4176	2074	7673
50601	Armadale	58771	676.4	550.1	848.7	3975	3233	4988	61891.00	1029.2	439.0	1779.1	6370	2717	11011
50503	Wanneroo	137619	624.6	508.9	792.2	8595	7003	10902	144789.00	454.3	162.2	886.4	6577	2349	12834
50502	Stirling	151494	861.8	707.1	1087.8	13055	10712	16480	159599.00	766.9	278.8	1286.8	12240	4450	20537
50501	Joondalup	118873	387.4	318.8	494.2	4606	3790	5875	125174.00	265.6	69.2	558.1	3324	866	6986
50403	Swan	95279	594.1	483.2	749.4	5660	4604	7140	100505.00	675.5	214.5	1181.6	6789	2156	11876
50402	Mundaring	32631	391.1	317.5	491.1	1276	1036	1602	34638.00	908.3	373.6	1621.5	3146	1294	5617
50401	Bayswater - Bassendean	64001	857.5	701.9	1083.2	5488	4492	6932	67401.00	1017.0	500.9	1708.5	6855	3376	11516
50302	Perth City	82931	979.3	809.6	1246.0	8122	6714	10333	88025.00	899.0	519.2	1436.2	7914	4571	12642
50301	Cottesloe - Claremont	52147	593.5	488.5	754.5	3095	2547	3935	55283.00	586.7	172.2	1218.8	3243	952	6738
50201	Mandurah	72283	913.6	743.1	1141.7	6604	5372	8253	79174.00	1577.5	845.1	2470.5	12490	6691	19560
50103	Maniimup	17056	685.7	560.0	851.1	1170	955	1452	18683.00	1292.5	525.5	2359.1	2415	982	4408
50102	Bunbury	75208	804.2	656.1	1003.4	6048	4934	7546	81577.00	842.0	539.1	1230.7	6869	4397	10039
50101	Augusta - Margaret River - Busselton	36039	821.4	674.5	1028.4	2960	2431	3706	40311.00	931.1	501.7	1632.9	3753	2022	6582
40703	Murray and Mallee	53875	1005.2	819.5	1241.5	5415	4415	6689	57715.00	885.2	676.4	1158.0	5109	3904	6683
40702	Limestone Coast	48327	918.4	753.5	1135.1	4439	3641	5485	52480.00	843.5	374.9	1510.0	4427	1967	7924
40701	Eleurieu - Kangaroo Island	39321	848.7	693.9	1048.3	3337	2728	4122	42945.00	1394.4	518.4	2180.6	5988	2226	9365
40602	Outback - North and Fast	19386	1379.8	1083.3	1745.1	2675	2100	3383	21126.00	2425 5	1578.0	3354.0	5124	3334	7086
40601	Evre Peninsula and South West	41728	1132.6	920.7	1207 2	4726	3842	5203	45609.00	19776	1397.8	2591.6	9124	6375	11820
40504	Yorke Peninsula	10/57	887.6	720.7	1095.9	1707	1406	2122	21497.00	2597.5	1884 5	2363.0	5584	4051	7220
40503	Mid North	20031	951 3	77/ 3	1168 7	1001	1621	2132	22589.00	2067.7	1151.0	3313 /	4671	2600	7485
40502	Lower North	17076	717 0	580 5	880.1	1226	1021	1518	18527.00	1760 3	765.9	3083.0	3261	1410	5710
.0002	201101 110101	1,010	/ 1/.9	509.5	009.1	1220	1001	1010	10027.00	1,00.0	,00.0	3003.0	5201	1-19	3712

$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Area-level SAEs						
Level_probitlevel_probitUnit-levelVnit-levelRATERATERATElevel_probitnumbernumberArea-levelArea-levelFH_RATEArea-levelF							
SA3_ Unit-level_Probit Unit-level_Probit Unit-level_Probit RATE_ RATE_ RATE_ number_ number_ Area-level_FH_ Area-level_FH_ Area-level_FH_ Area-level_FH_ Area-level_FH_ FH_RATE_ FH_RATE_ FH_number_ FH_number_N FH_num	ea-level_						
CODE/2016 SA3_NAME_2016 totalpopulation probl_KATE LowerCl UpperCl totalpopulation PH_RATE LowerCl UpperCl FH_RATE	number_						
40501 Barossa 2146 583.6 4/8.7 726.3 1584 1299 19/2 28/34.00 104.5 1.3 288.9 300 4 40003 West Torrens 49726 1164.9 955.1 1461.7 5793 4749 7268 52220.00 1293.5 650.5 2185.5 6755 3397 40402 Port Adelaide - West 46423 1265.6 1031.6 1566.4 5875 4789 7272 48869.00 638.3 289.5 974.1 3119 1415 40401 Charles Sturt 87399 1046.3 856.5 1302.2 9144 7486 11381 91757.00 1232.0 468.7 2284.1 11304 4301 40304 Onkaparinga 129378 852.0 697.1 1052.9 11023 9018 13622 136586.00 1133.2 583.5 2002.5 15478 7970 40303 Mitcham 49599 587.7 481.6 737.7 2915 2389 3659 52355.00 319.0 47.7 737.1 1670 250	UpperCl						
40403 West forrens 49/26 1164.9 955.1 1461.7 5/93 4/49 7/268 5/220.00 1293.5 650.5 2185.5 6/755 3397 40402 Port Adelaide - West 46423 1265.6 1031.6 1566.4 5875 4789 7272 48869.00 638.3 289.5 974.1 3119 1415 40401 Charles Sturt 87399 1046.3 856.5 1302.2 9144 7486 11381 91757.00 1232.0 468.7 2284.1 11304 4301 40304 Onkaparinga 129378 852.0 697.1 1052.9 11023 9018 13622 136586.00 1133.2 583.5 2002.5 15478 7970 40303 Mitcham 49599 587.7 481.6 737.7 2915 2389 3659 52355.00 319.0 47.7 737.1 1670 250 40304 Marion 71778 1024.5 839.4 1271.1 7353 6025 9124 75478.00 1271.4 601.1 1953.2 9641 <t< td=""><td>830</td></t<>	830						
40402 Port Adelaide - West 46423 1265.6 1031.6 1566.4 5875 4789 7272 48869.00 638.3 289.5 974.1 3119 1415 40401 Charles Sturt 87399 1046.3 856.5 1302.2 9144 7486 11381 91757.00 1232.0 468.7 2284.1 11304 4301 40304 Onkaparinga 129378 852.0 697.1 1052.9 11023 9018 13622 136586.00 1133.2 583.5 2002.5 15478 7970 40303 Mitcham 49599 587.7 481.6 737.7 2915 2389 3659 52355.00 319.0 47.7 737.1 1670 250 40304 Marion 71778 1024.5 839.4 1271.1 7353 6025 9124 75478.00 1271.4 605.1 195.2 9641 4575 4030 40301 Heidfast Bay 23724 904.7 745.6 1138.2 2472 2037 2038 2372.00 1271.4 605.1 195.2 9064	11413						
40401 Charles Sturt 87399 1046.3 856.5 1302.2 9144 7486 11381 91757.00 1232.0 468.7 2284.1 11304 4301 40304 Onkaparinga 129378 852.0 697.1 1052.9 11023 9018 13622 136586.00 1133.2 583.5 2002.5 15478 7970 40303 Mitcham 49599 587.7 481.6 737.7 2915 2389 3659 52355.00 319.0 47.7 737.1 1670 250 40302 Marion 71778 1024.5 839.4 1271.1 7353 6025 9124 75478.00 1277.4 601 195.2 9641 4575 40304 Heidfiet Pay 23724 904.7 745 1128.2 2027 2037 2038 23728.00 1271.4 2032 2037 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 2035 <td< td=""><td>4760</td></td<>	4760						
40304 Onkaparinga 129378 852.0 697.1 1052.9 11023 9018 13622 136586.00 1133.2 583.5 2002.5 15478 7970 40303 Mitcham 49599 587.7 481.6 737.7 2915 2389 3659 52355.00 319.0 47.7 737.1 1670 250 40302 Marion 71778 1024.5 839.4 1271.1 7353 6025 9124 75478.00 1277.4 606.1 1953.2 9641 4575 40301 Holdfast Bay 23724 904.7 745.6 1128.2 2472 2037 3083 28230.00 1011.2 317.8 205.8 205.5 00	20958						
40303 Mitcham 49599 587.7 481.6 737.7 2915 2389 3659 52355.00 319.0 47.7 737.1 1670 250 40302 Marion 71778 1024.5 839.4 1271.1 7353 6025 9124 75478.00 1277.4 606.1 1953.2 9641 4575 40301 Holdfart Bay 27324 904.7 745.6 1128.2 2472 2037 2083 28230.00 1011.2 217.8 2025.8 2055 000	27352						
40302 Marion 71778 1024.5 839.4 1271.1 7353 6025 9124 75478.00 1277.4 606.1 1953.2 9641 4575 40301 Holdfart Bay 27324 904.7 745.6 1128.2 2472 2037 2083 29230.00 1011.2 217.8 2025.8 205	3859						
40301 Holdfact Ray 27324 004 7 745.6 1128.2 2472 2037 3083 20220.00 1011.2 217.9 2025.0 2056 020	14743						
TUSUT I TUTUTASE Day 2/324 304.7 743.0 1126.2 2472 2037 3063 23223.00 1011.2 317.6 2036 2330 329	5950						
40205 Tea Tree Gully 73453 627.5 514.0 781.4 4609 3775 5740 77190.00 559.4 194.3 1069.2 4318 1500	8253						
40204 Salisbury 10488 993.4 808.5 1237.0 10419 8480 12974 109630.00 1052.0 661.0 1613.3 11533 7246	17687						
40203 Port Adelaide - East 53592 1257.0 1025.2 1569.1 6737 5494 8409 55947.00 1373.5 811.7 2107.8 7684 4541	11792						
40202 Playford 66143 1415.3 1150.0 1747.3 9361 7607 11557 69498.00 3214.8 1955.6 4337.0 22342 13591	30142						
40201 Gawler-Two Wells 2656 797.5 652.5 986.9 2119 1733 2622 28047.00 1064.8 173.6 2227.1 2986 487	6246						
40107 Unley 30091 855.8 704.1 1075.7 2575 2119 3237 31736.00 659.9 154.6 1404.2 2094 491	4456						
40106 Prospect - Walkerville 22173 90.4 738.7 1134.3 1996 1638 2515 23482.00 677.5 196.6 1500.1 1591 462	3522						
40105 Norwood - Payneham - St Peters 28732 1179.6 969.6 1474.0 3389 2786 4235 30306.00 1155.8 560.4 1671.5 3503 1698	5066						
40104 Campbelltown (SA) 40538 841.1 689.5 1050.6 3410 2795 4259 42271.00 1113.6 327.1 1968.3 4707 1383	8320						
40103 Burnside 34573 615.1 505.6 778.0 2126 1748 2690 36414.00 675.2 197.5 1279.7 2459 719	4660						
40102 Adelaide Hills 54566 492.0 403.7 615.1 2685 2203 3356 57959.00 917.0 355.8 1686.6 5315 2062	9775						
40101 Adelaide City 19668 1496.9 1220.6 1902.3 2944 2401 3741 20851.00 1737.2 857.0 2846.5 3622 1787	5935						
31905 Maryborough 34865 1010.2 818.8 1241.8 3522 2855 4329 37411.00 1045.8 547.9 1819.1 3912 2050	6806						
31904 Hervey Bay 43956 1182.2 959.6 1462.4 5196 4218 6428 47102.00 1891.0 1120.0 2818.8 8907 5276	13277						
31903 Gympie - Cooloola 37632 1000.8 813.4 1235.7 3766 3061 4650 40444.00 1869.7 868.9 2963.9 7562 3514	11987						
31902 Burnett 37146 1055.4 849.3 1308.2 3920 3155 4860 39779.00 2003.2 1278.1 2934.0 7969 5084	11671						
31901 Bundaberg 67366 1104.2 896.5 1366.6 7439 6039 9206 72182.00 1808.7 1218.0 2638.1 13056 8792	19042						
31802 Townsville 139056 1105.1 897.7 1384.8 15367 12483 19257 149084.00 1452.0 633.4 2341.8 21647 9443	34913						
31801 Charters Towers - Ayr - Ingham 32011 1055.9 837.3 1324.0 3380 2680 4238 34165.00 452.8 187.9 943.3 1547 642	3223						
31701 Toowoomba 112186 999.9 814.4 1249.2 11217 9136 14014 119244.00 1216.8 595.9 2154.1 14510 7105	25686						
3608 Noosa Hinterland 16600 511.4 417.9 641.4 849 694 1065 17848.00 1039.5 675.1 1520.5 1855 1205	2714						
3607 Nambour 32262 808.2 658.4 1007.9 2608 2124 3252 34296.00 635.8 194.6 1242.3 2180 667	4261						
3606 Sunshine Coast Hinterland 38190 627.1 511.2 785.7 2395 1952 3001 40650.00 947.5 422.5 1713.5 3852 1718	6965						
31605 Noosa 31744 928.4 761.5 1166.6 2947 2417 3703 33993.00 794.9 265.8 1645.9 2702 904	5595						
3603 Maroochy 44926 1178.6 967.5 1477.3 5295 4346 6637 48062.00 870.8 387.3 1465.4 4185 1861	7043						
31602 Caloundra 62060 945.3 773.3 1189.2 5866 4799 7380 66073.00 873.6 212.1 1838.0 5772 1402	12144						
31601 Buderim 41196 868.5 709.8 1098.8 3578 2924 4527 43800.00 1014.7 361.2 1759.2 4444 1582	7705						
31503 Outback-South 12750 945.5 767.3 1180.5 1206 978 1505 14250.00 1772.3 1187.1 2673.3 2526 1692	3809						
31502 Outback-North 20871 1289.1 1003.8 1659.4 2691 2095 3463 2264.00 2038.8 1099.3 2940.7 4617 2440	6660						
31501 Far North 22153 2327.4 1755.3 3000.9 5156 3889 6648 24140.00 5245.2 3490.8 6641.1 12662 8427	16032						

SA3 Unit-level_probit Unit-level_probit Unit-level_probit Unit-level_probit Varite RATE RATE Varite Varite <					Un	it-level SAES						Ar	ea-level SAEs			
SA3_ CODE_2016Unit-level_probit totapopulationUnit-level_probit ProbL-ATEUnit-level_probit RATEUnit-level_probit RATEUnit-level_probit Para-levelUnit-level_probit Para-levelArea-level Para-level<					Unit-	Unit-		Unit-	Unit-							
SA3_ Unit-level_Probit Unit-level_ RATE_ RATE_ level_probit number, Area-level_FH_ Area-level_FH_RATE Area					level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
CODE 2016 SX3.NAME 2016 Codepoint of calpopulation PEARLE LowerCl OpperCl FEARLE LowerCl Code Cdde Cdde Cdde Cdde <td>SA3_</td> <td>CAR NAME 2016</td> <td>Unit-level_Probit_</td> <td>Unit-level_</td> <td>RATE_</td> <td>RATE_</td> <td>level_probit_</td> <td>number_</td> <td>number_</td> <td>Area-level_FH_</td> <td>Area-level_</td> <td>FH_RATE_</td> <td>FH_RATE_</td> <td>Area-level_</td> <td>FH_number_</td> <td>FH_number_</td>	SA3_	CAR NAME 2016	Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
Aldo3Strattpine28129902.2736.81131.425382072318229516.001496.9657/42382.9441.8188170331402North Lakes513271007.4825.41282.351704236658253763.001299.1821.92000.3669854419107531401The Hills District63866331.3272.5425.721161741271867102.00160.642.8365.5107828724531305Redcliffe471751285.71047.41597.760654941753749649.002138.11313.53011.6106156522149531304Narangba · Burpengary46576832.1673.71048.33876313848834906.00748.3251.11211.73667123159331302Caboolture Hinterland10371585.9475.8738.360849376610926.001669.2822.2256.7182489828031303Bribie · Beachmere26843102.9829.21268.027402226340428621.001923.11100.62666.25504315076331203Whitsunday15864810.5665.31017.912861055161517401.00588.5153.91554.6102426827031204Mackay82244886.1722.41108.6728859	CODE_2016	SA3_NAME_2016	totalpopulation		LowerCi	UpperCi	number	LowerCi	UpperCi	totalpopulation	FH_RATE	LowerCi	UpperCi	FH_number	LowerCI	UpperCi
3H02Norm Lakes5132/1007.4829.41282.351704236668253763.001299.1821.9200.369854419107531401The Hills District63866331.3272.5425.721161741271867102.00160.642.8365.5107828724531305Redcliffe471751285.71047.41597.76065494175374964.00218.11313.53011.6106156522149531304Narangba - Burpengary46576832.1673.71048.33876313848834900.0218.11313.53011.6106156522149531303Caboolture Hinterland10371585.9475.8738.360849376610926.001669.2822.2256.7182489828031304Bribie - Beachmere268431020.9829.21268.027402226340428621.001923.11100.62666.25504315076331203Whitsunday15864810.5665.31017.912861055161517401.00588.5153.91554.6102426827031202Mackay8244886.1722.41108.672885941911891208.00641.6295.81181.258522698107731201Bowen Basin - North23860938.9772.21201.82240 <t< td=""><td>31403</td><td>Strathpine Nexth Lakes</td><td>28129</td><td>902.2</td><td>/36.8</td><td>1131.4</td><td>2538</td><td>2072</td><td>3182</td><td>29516.00</td><td>1496.9</td><td>637.4</td><td>2382.9</td><td>4418</td><td>1881</td><td>/033</td></t<>	31403	Strathpine Nexth Lakes	28129	902.2	/36.8	1131.4	2538	2072	3182	29516.00	1496.9	637.4	2382.9	4418	1881	/033
3HOIThe Hills District63866331.3272.5445.721161741271867102.00160.642.8365.5107828724531305Redcliffe471751285.71047.41597.760654941753749649.002138.11313.53011.6106156522149531304Narangba - Burpengary46576832.1673.71048.338763138488349006.00748.3251.11211.73667123159331303Caboolture Hinterland10371585.9475.8738.360849376610926.001669.2822.22562.7182489828031302Caboolture498851369.21108.91714.268305532855152314.002579.41639.53570.0134948577186731301Bribie - Beachmere26843102.9829.21268.027402226340428621.001923.11100.62666.25504315076331203Whitsunday15864810.5665.31017.912861055161517401.00588.5153.91554.6102426827031202Mackay82244886.1722.41108.672885941911891208.00641.6295.81181.258522698107731201Bowen Basin - North23860938.9772.21201.82240<	31402	North Lakes	51327	1007.4	825.4	1282.3	51/0	4236	6582	53763.00	1299.1	821.9	2000.3	6985	4419	10754
3305Redclifte471751285.71047.41597.760654941753749649.002138.11313.53011.6106156522149531304Narangba - Burpengary46576832.1673.71048.338763138488349006.00748.3251.11211.73667123159331303Caboolture Hinterland10371585.9475.8738.360849376610926.001669.2822.22562.7182489828031302Caboolture498851369.21108.91714.268305532855152314.002579.41639.53570.0134948577186731301Bribie - Beachmere26843102.9829.21268.027402226340428621.001923.11100.62666.25504315076331203Whitsunday15864810.5665.31017.912861055161517401.00588.5153.91554.6102426827031202Mackay82244886.1722.41108.672885941911891208.00641.6295.81181.258522698107731201Bowen Basin - North23860938.9772.21201.822401842286825913.00846.6291.81514.721947563923106Springwood - Kingston575891251.41011.31579.0 <t< td=""><td>31401</td><td>The Hills District</td><td>63866</td><td>331.3</td><td>2/2.5</td><td>425.7</td><td>2116</td><td>1741</td><td>2/18</td><td>67102.00</td><td>160.6</td><td>42.8</td><td>365.5</td><td>1078</td><td>287</td><td>2452</td></t<>	31401	The Hills District	63866	331.3	2/2.5	425.7	2116	1741	2/18	67102.00	160.6	42.8	365.5	1078	287	2452
3304Narangba - Burpengary465/6832.16/3.71048.338/6313848834900.000748.3251.11211.7366/12315933103Caboolture Hinterland10371585.9475.8738.360849376610926.001669.2822.22562.7182489828031302Caboolture498851369.21108.91714.268305532855152314.002579.41639.53570.0134948577186731301Bribie - Beachmere26843102.9829.21268.027402226340428621.001923.11100.62666.25504315076331203Whitsunday15864810.5665.31017.912861055161517401.00588.5153.91554.6102426827031202Mackay82244886.1722.41108.672885941911891208.00641.6295.81181.258522698107731201Bowen Basin - North23860938.9772.21201.822401842286825913.00846.6291.81514.721947563923106Springwood - Kingston575891251.41011.31579.072075824909360031.001762.31026.7259.510579616315583105Loganlea - Carbrook45243863.4699.71094.8 </td <td>31305</td> <td>Redcliffe</td> <td>4/1/5</td> <td>1285.7</td> <td>1047.4</td> <td>1597.7</td> <td>6065</td> <td>4941</td> <td>7537</td> <td>49649.00</td> <td>2138.1</td> <td>1313.5</td> <td>3011.6</td> <td>10615</td> <td>6522</td> <td>14952</td>	31305	Redcliffe	4/1/5	1285.7	1047.4	1597.7	6065	4941	7537	49649.00	2138.1	1313.5	3011.6	10615	6522	14952
31303Caboolture Hinterland10371585.9475.8738.360849376610926.001669.2822.22562.7182489828031302Caboolture498851369.21108.91714.268305532855152314.002579.41639.53570.0134948577186731301Bribie - Beachmere26843102.9829.21268.027402226340428621.001923.11100.62666.25504315076331203Whitsunday15864810.5665.31017.912861055161517401.00588.5153.91554.6102426827031202Mackay82244886.1722.41108.672885941911891208.00641.6295.81181.258522698107731201Bowen Basin - North23860938.9772.21201.822401842286825913.00846.6291.81514.721947563923106Springwood - Kingston575891251.41011.31579.072075824909360031.001762.31026.7259.510579616315583105Loganlea - Carbrook45243863.4699.71094.839063166495347317.00982.1589.21860.446472788880	31304	Narangba - Burpengary	46576	832.1	673.7	1048.3	3876	3138	4883	49006.00	748.3	251.1	1211.7	3667	1231	5938
31302Caboolture498851369.21108.91714.268305532855152314.002579.41639.53570.0134948577186731301Bribie - Beachmere26843102.9829.21268.027402226340428621.001923.11100.62666.25504315076331203Whitsunday15864810.5665.31017.912861055161517401.00588.5153.91554.6102426827031202Mackay82244886.1722.41108.672885941911891208.00641.6295.81181.258522698107731201Bowen Basin - North23860938.9772.21201.822401842286825913.00846.6291.81514.721947563923106Springwood - Kingston575891251.41011.31579.072075824909360031.001762.31026.7259.510579616315583105Loganlea - Carbrook45243863.4699.71094.839063166495347317.00982.1589.21860.44647278880	31303	Caboolture Hinterland	10371	585.9	475.8	738.3	608	493	766	10926.00	1669.2	822.2	2562.7	1824	898	2800
31301 Bribie - Beachmere 26843 102.9 829.2 1268.0 2740 2226 3404 28621.00 1923.1 1100.6 2666.2 5504 3150 763 31203 Whitsunday 15864 810.5 665.3 1017.9 1286 1055 1615 17401.00 588.5 153.9 1554.6 1024 268 270 31202 Mackay 82244 886.1 722.4 1108.6 7288 5941 9118 91208.00 641.6 295.8 1181.2 5852 2698 1077 31201 Bowen Basin - North 23860 938.9 772.2 1201.8 2240 1842 2868 25913.00 846.6 291.8 1514.7 2194 756 392 3106 Springwood - Kingston 57589 1251.4 1011.3 1579.0 7207 5824 9093 60031.00 1762.3 1026.7 259.5 10579 6163 1558 3105 Loganlea - Carbrook 45243 863.4 699.7 1094.8 3906 3166 4953	31302	Caboolture	49885	1369.2	1108.9	1714.2	6830	5532	8551	52314.00	2579.4	1639.5	3570.0	13494	8577	18676
31203 Whitsunday 15864 810.5 665.3 1017.9 1286 1055 1615 17401.00 588.5 153.9 1554.6 1024 268 270 31202 Mackay 82244 886.1 722.4 1108.6 7288 5941 9118 91208.00 641.6 295.8 1181.2 5852 2698 1077 31201 Bowen Basin - North 23860 938.9 772.2 1201.8 2240 1842 2868 25913.00 846.6 291.8 1514.7 2194 756 392 3106 Springwood - Kingston 57589 1251.4 1011.3 1579.0 7207 5824 9093 60031.00 1762.3 1026.7 259.5 10579 6163 1558 3105 Loganlea - Carbrook 45243 863.4 699.7 1094.8 3906 3166 4953 47317.00 982.1 589.2 186.04 4647 278 880	31301	Bribie - Beachmere	26843	1020.9	829.2	1268.0	2740	2226	3404	28621.00	1923.1	1100.6	2666.2	5504	3150	7631
31202 Mackay 82244 886.1 722.4 1108.6 7288 5941 9118 91208.00 641.6 295.8 1181.2 5852 2698 1077 31201 Bowen Basin - North 23860 938.9 772.2 1201.8 2240 1842 2868 25913.00 846.6 291.8 1514.7 2194 756 392 3106 Springwood - Kingston 57589 1251.4 1011.3 1579.0 7207 5824 9093 60031.00 1762.3 1026.7 2595.5 10579 6163 1558 3105 Loganlea - Carbrook 45243 863.4 699.7 1094.8 3906 3166 4953 47317.00 982.1 589.2 186.0 4647 278 880	31203	Whitsunday	15864	810.5	665.3	1017.9	1286	1055	1615	17401.00	588.5	153.9	1554.6	1024	268	2705
31201 Bowen Basin - North 23860 938.9 772.2 1201.8 2240 1842 2868 25913.00 846.6 291.8 1514.7 2194 756 392 3106 Springwood - Kingston 57589 1251.4 1011.3 1579.0 7207 5824 9093 60031.00 1762.3 1026.7 2595.5 10579 6163 1558 31105 Loganlea - Carbrook 45243 863.4 699.7 1094.8 3906 3166 4953 47317.00 982.1 589.2 1860.4 4647 2788 880	31202	Mackay	82244	886.1	722.4	1108.6	7288	5941	9118	91208.00	641.6	295.8	1181.2	5852	2698	10774
31106 Springwood - Kingston 57589 1251.4 1011.3 1579.0 7207 5824 9093 60031.00 1762.3 1026.7 2595.5 10579 6163 1558 31105 Loganlea - Carbrook 45243 863.4 699.7 1094.8 3906 3166 4953 47317.00 982.1 589.2 1860.4 4647 2788 880	31201	Bowen Basin - North	23860	938.9	772.2	1201.8	2240	1842	2868	25913.00	846.6	291.8	1514.7	2194	756	3925
31105 Loganlea - Carbrook 45243 863.4 699.7 1094.8 3906 3166 4953 47317.00 982.1 589.2 1860.4 4647 2788 880	31106	Springwood - Kingston	57589	1251.4	1011.3	1579.0	7207	5824	9093	60031.00	1762.3	1026.7	2595.5	10579	6163	15581
	31105	Loganlea - Carbrook	45243	863.4	699.7	1094.8	3906	3166	4953	47317.00	982.1	589.2	1860.4	4647	2788	8803
3104 Jimboomba 33039 367.8 299.1 471.1 1215 988 1556 34702.00 663.3 174.4 1468.8 2302 605 509	31104	Jimboomba	33039	367.8	299.1	471.1	1215	988	1556	34702.00	663.3	174.4	1468.8	2302	605	5097
3103 Browns Plains 58198 947.8 767.1 1205.6 5516 4464 7017 60677.00 2513.9 183.3 3496.9 15253 11124 2121	31103	Browns Plains	58198	947.8	767.1	1205.6	5516	4464	7017	60677.00	2513.9	1833.3	3496.9	15253	11124	21218
3102 Beenleigh 30534 1338.9 1087.6 1674.3 4088 3321 5112 32119.00 2607.8 1728.3 3749.1 8376 5551 1204	31102	Beenleigh	30534	1338.9	1087.6	1674.3	4088	3321	5112	32119.00	2607.8	1728.3	3749.1	8376	5551	12042
3101 Beaudesert 10554 1169.9 947.4 1456.5 1235 1000 1537 11150.00 1972.0 1259.3 2723.3 2199 1404 303	31101	Beaudesert	10554	1169.9	947.4	1456.5	1235	1000	1537	11150.00	1972.0	1259.3	2723.3	2199	1404	3036
31004 Springfield - Redbank 58890 1108.4 899.3 1416.6 6527 5296 8342 61537.00 2249.3 1008.4 3437.4 13842 6205 2115	31004	Springfield - Redbank	58890	1108.4	899.3	1416.6	6527	5296	8342	61537.00	2249.3	1008.4	3437.4	13842	6205	21153
31003 lpswich Inner 77346 1157.8 938.4 1446.7 8955 7258 11190 81369.00 2234.9 1599.5 3195.9 18185 13015 2600	31003	lpswich Inner	77346	1157.8	938.4	1446.7	8955	7258	11190	81369.00	2234.9	1599.5	3195.9	18185	13015	26005
31002 lpswich Hinterland 47729 756.0 612.1 943.4 3609 2921 4503 50392.00 1713.2 937.1 2540.6 8633 4722 1280	31002	Ipswich Hinterland	47729	756.0	612.1	943.4	3609	2921	4503	50392.00	1713.2	937.1	2540.6	8633	4722	12803
31001 Forest Lake • Oxley 54817 1104.3 894.3 1393.2 6053 4902 7637 56977.00 1856.3 864.5 2892.1 10576 4926 1647	31001	Forest Lake - Oxley	54817	1104.3	894.3	1393.2	6053	4902	7637	56977.00	1856.3	864.5	2892.1	10576	4926	16478
30910 Surfers Paradise 34209 1213.3 996.6 1534.6 4151 3409 5250 36121.00 428.2 65.0 1101.1 1547 235 397	30910	Surfers Paradise	34209	1213.3	996.6	1534.6	4151	3409	5250	36121.00	428.2	65.0	1101.1	1547	235	3977
30909 Southport 47959 1358.3 1109.3 1708.8 6514 5320 8195 50198.00 1414.0 699.7 2338.4 7098 3513 1173	30909	Southport	47959	1358.3	1109.3	1708.8	6514	5320	8195	50198.00	1414.0	699.7	2338.4	7098	3513	11738
30908 Robina 38969 970.8 795.6 1237.0 3783 3100 4820 40788.00 873.2 317.1 1751.3 3561 1294 714	30908	Robina	38969	970.8	795.6	1237.0	3783	3100	4820	40788.00	873.2	317.1	1751.3	3561	1294	7143
30907 Ormeau - Oxenford 87583 827.3 676.4 1063.9 7246 5924 9318 91622.00 988.9 523.7 1803.3 9061 4799 1652	30907	Ormeau - Oxenford	87583	827.3	676.4	1063.9	7246	5924	9318	91622.00	988.9	523.7	1803.3	9061	4799	16522
30906 Nerang 51175 786.5 642.2 995.0 4025 3287 5092 53528.00 737.4 342.3 1124.4 3947 1832 601	30906	Nerang	51175	786.5	642.2	995.0	4025	3287	5092	53528.00	737.4	342.3	1124.4	3947	1832	6019
30905 Mudgeeraba - Tallebudgera 24594 490.6 401.4 625.9 1207 987 1539 25757.00 38.7 9.9 90.7 100 26 23	30905	Mudgeeraba - Tallebudgera	24594	490.6	401.4	625.9	1207	987	1539	25757.00	38.7	9.9	90.7	100	26	234
30904 Gold Coast Hinterland 14425 446.2 365.6 561.9 644 527 811 15166.00 443.0 145.6 866.4 672 221 131	30904	Gold Coast Hinterland	14425	446.2	365.6	561.9	644	527	811	15166.00	443.0	145.6	866.4	672	221	1314
30903 Gold Coast · North 53646 1200.0 983.3 1502.7 6437 5275 8061 56428.00 1227.1 480.2 2398.9 6924 2710 1353	30903	Gold Coast - North	53646	1200.0	983.3	1502.7	6437	5275	8061	56428.00	1227.1	480.2	2398.9	6924	2710	13537
30902 Coolangatta 41756 990.8 813.0 1236.5 4137 3395 5163 44386.00 629.3 193.2 1439.6 2793 858 639	30902	Coolangatta	41756	990.8	813.0	1236.5	4137	3395	5163	44386.00	629.3	193.2	1439.6	2793	858	6390
30901 Broadbeach - Burleigh 49582 911.1 749.8 1153.9 4517 3718 5721 52507.00 555.8 227.6 970.1 2918 1195 509	30901	Broadbeach - Burleigh	49582	911.1	749.8	1153.9	4517	3718	5721	52507.00	555.8	227.6	970.1	2918	1195	5094
30805 Gladstone 43967 892.2 727.8 1123.8 3923 3200 4941 47685.00 693.4 248.7 1537.3 3307 1186 733	30805	Gladstone	43967	892.2	727.8	1123.8	3923	3200	4941	47685.00	693.4	248.7	1537.3	3307	1186	7331
30804 Biloela 10364 731.0 600.2 923.2 758 622 957 11147.00 421.6 147.4 1194.6 470 164 133	30804	Biloela	10364	731.0	600.2	923.2	758	622	957	11147.00	421.6	147.4	1194.6	470	164	1332
30803 Rockhampton 84979 973.7 790.5 1212.0 8274 6718 10299 92558.00 1624.0 1076.5 2464.4 15032 9964 2281	30803	Rockhampton	84979	973.7	790.5	1212.0	8274	6718	10299	92558.00	1624.0	1076.5	2464.4	15032	9964	22810
30801 Central Highlands (Old) 19882 957.0 774.9 1226.4 1903 1541 2438 21713.00 1274.4 526.9 2143.5 2767 1144 465	30801	Central Highlands (Old)	19882	957.0	774.9	1226.4	1903	1541	2438	21713.00	1274.4	526.9	2143.5	2767	1144	4654
30703 Granite Belt 30426 942.5 765.5 1171.4 2868 2329 3564 32557.00 1304.1 620.9 2023.5 4246 2021 658	30703	Granite Belt	30426	942.5	765.5	1171.4	2868	2329	3564	32557.00	1304.1	620.9	2023.5	4246	2021	6588
30702 Darling Downs - East 30958 868.4 705.3 1088.5 2688 2183 3370 33283.00 726.7 365.7 1322.6 2419 1217 440	30702	Darling Downs - East	30958	868.4	705.3	1088.5	2688	2183	3370	33283.00	726.7	365.7	1322.6	2419	1217	4402
30701 Darling Downs (West) - Maranoa 31744 912.5 743.7 1143.4 2897 2361 3630 34562.00 1267.6 567.4 2242.0 4381 1961 774	30701	Darling Downs (West) - Maranoa	31744	912.5	743.7	1143.4	2897	2361	3630	34562.00	1267.6	567.4	2242.0	4381	1961	7749

bit bit<					Un	it-level SAES						Ar	ea-level SAEs			
Ball Unit event built Name Unit event built Name Name Name Name					Unit-	Unit-		Unit-	Unit-							
Sh3 Unit level (Protit) Unit level (Protit) NUMBer Avail-selle FH, AFL Markeler FH aumber Haraber FH avail-seller FH avail-seller					level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
CLOCE, ON SUB_INNE_CLOS Caperal Caperal Caperal Caperal Cameral Cameral Caperal Caperal Cameral Caperal Capera Capera Capera	SA3_	CAR NAME 2016	Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
36000 Indefands Lastly Mundral 300es 994.8 794.9 1402 3006 4842 38000 252.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.041 322.1 1.042 322.1 1.031 3000 1.022 2.212 2.212 1.051 3000 2.242.8 1.040.5 3000 2.242.8 1.040.5 3000 2.242.8 1.040.7 3000 1.022 2.212 1.031 3000 1.022 2.212 1.021 1.031 1.002 2.211 4.241 4.140.0 4.844 4.164.9 4.164.9 4.164 4.163 4.167 4.162 1.021 2.211 2.211 4.341 1.041 4.341 4.341 3.348 3.221 4.341 4.341 3.341 3.212 3.213	CODE_2016	SA3_INAME_2016	totalpopulation		LowerCi	UpperCi	number	LowerCi	UpperCi	totalpopulation	FH_RATE	LowerCi	UpperCi	FH_number	LowerCi	UpperCi
Bindle Pert Dangles - Lamtree 93.6 94.4 77.4 120.2 87.4 708 709 94.06 23.5.6 245.6 95.6 195.0 3302 299000 22.5.6 95.6 1950 3302 299000 22.6.8 145.6 305.6 1950 3005 160.0 3005 160.0 3005 160.0 3005 160.0 3005 160.0 3005 160.0 3005 160.0 3005 160.0 300.0 160.0 300.0 160.0 300.0 170.0 140.0 140.0 98.0 272.0 160.0 98.0 170.0	30605	lablelands (East) - Kuranda	30658	996.8	799.9	1240.2	3056	2452	3802	32890.00	2332.1	1296.1	3229.7	/6/0	4263	10622
30003 Innetal Cassonary Locatt 212% 126%	30604	Port Douglas - Daintree	9136	956.4	775.4	1202.8	8/4	708	1099	9706.00	325.6	205.6	455.5	316	200	442
36602 Came - South 727 138.4.8 1070.3 1070	30603	Innisfail - Cassowary Coast	26275	1256.5	986.3	1593.0	3302	2592	4186	27990.00	2242.8	1430.5	3006.2	6278	4004	8414
3060 Carris - North 3906 87.8 709.4 1075 4281 41792.00 74.5 27.8 158.16 31.32 10.77 4501 30504 Britabare Inner - North 6930 11.19 923.5 76.16 11.89 4033 164.00 98.65 27.0 14.3.0 58.04 10.77 45.01 19.39 30504 Britabare Inner - North 6930 11.13 91.05 72.83 24.84 161.7 32.82 0.484 10.84 10.61 10.93 30404 The Gap - Engegera 3760 72.08 99.1 91.0 27.11 22.23 34.25 396.0 97.24 32.4 132.2 36.61 13.5 24.02 13.61 40.44 13.8 40.84 13.8 14.8 13.8 14.8 13.8 14.8 13.8 13.8 14.8 13.8 14.8 13.8 14.4 13.8 14.4 13.8 14.4 13.8 14.4 13.8 14.8 13.8	30602	Cairns - South	75277	1364.6	1099.6	1702.9	10272	8277	12819	80185.00	1586.6	939.9	2369.8	12723	7537	19003
38564 Brisbare Inner, West 4865 925. 761.6 1188 9321 5184 44437.00 948.6 41.30 164.07 4572 162 7616 30503 Brisbare Inner, West 63300 11138 91.05 75.2 1162.7 7384 782 3289.00 788.5 227.0 143.0 108.7 105.4 30504 The Gap - Enoggera 37607 72.08 991.1 910.7 271 223 3425 9625.00 77.2 88.4 132.9 961.1 151.5 524.9 30403 Sherwood - Indocoroopilly 4119 120.4 982.2 146.1 4046 6345 4354.00 97.2 50.8 166.8 426.4 132.9 961.1 17.1 203.1 11.1 108.1 436.6 41.01 3858.00 17.8 44.0 138.3 46.16 11.5 34.7 14.3 17.3 2.00.3 1.00.1 45.8 12.4 12.8.3 14.12 12.8.3 34.5	30601	Cairns - North	39065	867.6	709.4	1095.9	3389	2771	4281	41792.00	749.5	257.8	1581.6	3132	1077	6610
38050 Brisbane Inner-North 6930 1113 9232 1426.9 7760 6400 9888 7361.200 788.6 27.0 1431.0 5604 1505 30502 Brisbane Inner-Satt 3111 910.5 73.2 112.7 2833 2844 3161 521.00 73.8 132.9 364 1362.9 1362.9 1362.9 1362.9 1362.9 1362.9 1362.9 1362.9 1362.9 151.5 524.2 30404 The Gap-Enorgera 770.7 720.8 591.1 910.7 221.4 464.6 465.4 456.400 979.2 50.8 166.88 456.6 132.9 306.1 151.5 524.2 30404 Centerary 2480.9 398.8 582.8 51.9 958 188 124.2 148.3 148.4 178.3 161.2 53.3 175.4 147.7 4694.0 184.3 138.3 163.0 178.3 153.3 151.5 51.6 137.3 153.3 151.5	30504	Brisbane Inner - West	43605	925.5	761.6	1188.9	4036	3321	5184	46437.00	984.6	413.9	1640.7	4572	1922	7619
36050 Brisbane Inver- East 3113 9105 73.2 116.2 2833 2844 3617 33289.00 484.4 106.4 107.7 107.7 107.9 4331 30501 Brisbane Inver- East 37607 720.8 591.1 910.7 221 223 3425 3962.00 772.4 382.4 132.9 306.1 151.5 524.2 30403 Sherwood-Indoorcopiliy 4119 102.4 992.2 154.02 446.1 436.5 4356.40 97.92 50.8 168.8 412.9 210.4 211.4 30402 Kenmore-Brood-Hindongajiii 340.0 31.3 260.1 411.1 108.1 868 128.4 128.8 404.4 138.8 481.6 113.3 31.1 270.6 200.0 445.4 138.3 75.3 404.4 138.3 75.3 120.3 115.6 688.1 6040.0 162.8 424.4 138.3 162.1 57.3 30304 Nathan 3038 767.9	30503	Brisbane Inner - North	69300	1119.8	923.5	1426.9	7760	6400	9888	73612.00	788.5	227.0	1431.0	5804	1671	10534
30501 Brishane Inner 584.4 136.1.3 112.7 173.8 792.2 62.64 10.55 62.15.00 77.84 382.0 136.6.7 4492 4492 152.5 30404 The Gap - Enorgera 31607 72.0.8 591.1 92.0 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 342.5 340.5 340.5 340.5 343.5 340.5 343.5 340.5 343.5 <td< td=""><td>30502</td><td>Brisbane Inner - East</td><td>31113</td><td>910.5</td><td>753.2</td><td>1162.7</td><td>2833</td><td>2344</td><td>3617</td><td>33289.00</td><td>484.4</td><td>168.4</td><td>1078.7</td><td>1612</td><td>560</td><td>3591</td></td<>	30502	Brisbane Inner - East	31113	910.5	753.2	1162.7	2833	2344	3617	33289.00	484.4	168.4	1078.7	1612	560	3591
3044 The Gape Enongegera 37607 720.8 91.1 91.1 92.17 2223 8425 8425 9326.0 72.4 832.6 132.2 930.6 151.5 52.42 50403 Shewmod - Indoorsopilly 3407 317.3 260.1 411.1 1081 866 140.0 580.5 500.8 168.8 40.6 252.3 400 580.5 500.8 141.4 210.0 30401 Centenary 2489 939.8 258.8 114.5 383 222.4 4094.00 142.4 188.8 816.4 115.3 574.0 30305 Rockea - Accaia Ridge 451.7 738.0 601.0 946.7 333.4 271.5 427.7 4894.00 313.5 124.3 735.5 161.2 583.9 330.4 Nathan 333.8 Nathan 333.8 Nathan 333.8 137.0 1394.5 499.6 131.7 139.5 499.6 131.8 138.9 601.1 30304 Karwat	30501	Brisbane Inner	58414	1361.3	1120.7	1738.4	7952	6546	10155	62154.00	738.9	283.0	1356.7	4592	1759	8433
30403 Sherwood indoorcopily 4119 12042 9822 1441 1081 8466 14354 9722 5000 168.8 4266 2122 7270 30402 Kenwore incorkinge incorkinge incorkinge 3406 317.3 3261 4111 1081 886 1401 35864.00 972.2 50.00 168.8 426 1153 61.1 2140 30306 Centerary 39307 886.2 718.1 1465 3433 2222 4503 40948.00 108.28 41.3 1439 1759 5128 3131 4134 1738 774 30304 Nathan 5076 851.2 693.7 1081 4773 3890 6101 5860.00 81.0 137.0 1835 4960 1857 1837 1332 30301 Carinalae 5076 851.2 693.7 1083.1 4764 6831 6340.00 151.3 1303 144 1478 1313.2 1632 1439 <	30404	The Gap - Enoggera	37607	720.8	591.1	910.7	2711	2223	3425	39625.00	772.4	382.4	1322.9	3061	1515	5242
30402 Kermore Brockfield - Moggill 3007 317.3 2601 411.1 1081 886 1401 3586.00 252.3 40.0 589.5 905 144 2114 30010 Centenary 24990 399.8 328.8 912.8 994.8 228.4 2601.00 44.4 1338.8 961.6 113.3 361.6 224.0 30305 Sumylank 3032 862.6 71.8 1145.5 3483 282.2 427.7 46942.00 343.5 124.3 735.5 161.2 583.8 345.2 30304 Nathan 3032 910.3 743.2 175.9 276.6 2258 351.8 3185.20 815.7 318.7 179.5 469.4 133.5 409.5 415.7 133.2 30303 McGravatt 507.8 121.2 1003.0 1541.6 698.5 574.6 8331 6030.0 1157.0 692.4 187.5 133.2 30304 Kadnale 4493 953.3 778.1 122.0 207.4 539.9 47054.00 666.9 295.3	30403	Sherwood - Indooroopilly	41199	1204.2	982.2	1540.2	4961	4046	6345	43564.00	979.2	500.8	1668.8	4266	2182	7270
b040 Centenary 2480 9988 3288 5159 996 818 1284 26000 44.44 138.8 86.16 113 36.1 2240 30306 Rockla- Acaia Ridge 4157 730 60.0 9467 334 2215 4472 494020 8455 1013.3 4434 188.8 86.16 115.3 543 755 513 514 5630 5150 514 513 5630 5150 5150 5150 5150 5150 5150 5150 5150 5150 5150 5150 5150 5150 5150 5150 5160 5150 5150 5160 5150 5160 5151 5161 5161 5161 5161 5161 5161 5161 5161 5161 5161 5161 5161	30402	Kenmore - Brookfield - Moggill	34076	317.3	260.1	411.1	1081	886	1401	35864.00	252.3	40.0	589.5	905	144	2114
50006Sunnybank39078862718.11145.53483282245034094.80108284244193.744341738775430305Rocklea-Acacia Ridge45175738.060.10946.73334275542774694.20343.5124.3735.51612583583343.230304Nathan3082910.3452.21157.92766228.8518.83185.20875.6181.71793.5495.0185.71133.230303Mt Gravatt5607.6851.2693.7108.1477.3389.06101588.00.0845.0317.0193.5495.0185.71133.230304Holland Park-Yeronga572.8121.2100.3.0154.6698.5574.6883.16038.0115.7692.4178.5698.1141.781132.330304Sandgate389.7646.853.2.1825.1825.8539.9470.6666.9255.3138.2038.1604.130204Sandgate397.9646.853.2.1825.1245.1339.32401.0802.0128.0138.2138.96051.130204SandgateMunah307.5985.9811.9124.1303.0249.5383.932401.0802.0128.0138.2101.1550.230205Chermsde541.8967.776.978.2188.0144.4231.0331.50.0549.8 <td>30401</td> <td>Centenary</td> <td>24890</td> <td>399.8</td> <td>328.8</td> <td>515.9</td> <td>995</td> <td>818</td> <td>1284</td> <td>26001.00</td> <td>443.4</td> <td>138.8</td> <td>861.6</td> <td>1153</td> <td>361</td> <td>2240</td>	30401	Centenary	24890	399.8	328.8	515.9	995	818	1284	26001.00	443.4	138.8	861.6	1153	361	2240
B0305 Rocklea - Acacia Ridge 4517 738.0 6010 946.7 3334 2715 4277 46942.00 343.5 124.3 735.5 1612 583 3452 30304 Nathan 3032 910.3 743.2 1157.9 2766 2258 318 31852.00 875.6 318.7 1793.5 2789 1015 5713 30303 MtGravatt 5607 851.2 693.7 1088.1 4773 3890 6101 5850.00 845.0 317.0 193.5 6681 1132 30304 Polland Park Yeronga 35728 121.2 100.0 154.6 695.7 6881 6493.00 115.7 669.8 143.4 103.0 2048 560.8 122 126.0 3138 139 6051 30204 Sandgate 44953 953.3 778.1 1201.0 4285 3498 5399 47054.00 666.9 295.3 128.6 3138 1399 6051 30202 Chermide 3073 985.9 811.9 124.31 3030 2441 <td>30306</td> <td>Sunnybank</td> <td>39307</td> <td>886.2</td> <td>718.1</td> <td>1145.5</td> <td>3483</td> <td>2822</td> <td>4503</td> <td>40948.00</td> <td>1082.8</td> <td>424.4</td> <td>1893.7</td> <td>4434</td> <td>1738</td> <td>7754</td>	30306	Sunnybank	39307	886.2	718.1	1145.5	3483	2822	4503	40948.00	1082.8	424.4	1893.7	4434	1738	7754
9304 Nathan 30382 9103 743.2 1157.9 2766 2258 3518 3185.00 875.6 318.7 1793.5 2789 1015 5713 30303 Mt Gravatt 56076 851.2 693.7 1088.1 4773 3890 6101 58580.00 845.0 317.0 1934.5 4950 1857 11332 30302 Holland Park - Yeronga 5728 1219.2 1003.0 1541.6 6985 5746 881 60340.00 1157.0 692.4 1876.5 6981 4178 1323 30301 Carindale 3897 646.8 532.1 8256 2521 204 3818 60340.00 1157.0 692.4 138.5 981.8 1389 6051 30204 Sandgate 44953 953.3 778.1 1201.0 4285 3498 5399 32401.00 862.0 312.2 1704.5 2598 1011 5523 522 5020 666.9 253.3 132.2 1014 523 523 523 523 532.5 523	30305	Rocklea - Acacia Ridge	45175	738.0	601.0	946.7	3334	2715	4277	46942.00	343.5	124.3	735.5	1612	583	3452
30303Mt Gravatt56076851.2693.71088.147733890610158580.00845.0317.01934.5495018571133230302Holland Park - Yeronga57288121.9.21003.01541.669855746883160340.001157.0692.41876.5698141781132330301Carindale38979646.8532.1825.62521207432184093.00500.8143.41033.02048566422430204Sandgate44953953.3778.11201.042853498539947054.00666.9295.31286.0318811856930202Chermside54143986.7809.21245.053424381674156801.00961.3417.11800.8546023691022930202Chermside54143986.7809.21245.053424381674156801.00961.3417.11800.8546023691022930203Bald Hills - Everton Park31711570.0467.9728.518081444231033155.0549.8211.91083.7182.5703359730102Cleveland - Stradbroke63804753.2615.0950.4387934490662667563.0091.3442.9159.8615729810613010Capalaba55016630.0514.8792.53466283	30304	Nathan	30382	910.3	743.2	1157.9	2766	2258	3518	31852.00	875.6	318.7	1793.5	2789	1015	5713
30302Holland Park - Yeronga572881219.21003.01541.669855746883160340.001157.0692.41876.5698141781132330301Carindale38979646.8532.1825.625212074321840893.00500.8143.41033.02048586422430204Sandgate44953953.3778.11201.042853498539947054.00666.9295.31286.031381389605130203Nundah30735985.9811.91249.130302495383932401.00802.0312.21704.525981011552330202Chermside54143986.7809.21245.053424381674156801.00961.3417.11800.85460295339530201Bald Hills - Everton Park31711570.0467.9728.518081484231033195.0549.8211.91083.7182.5703359730102Cleveland - Stradbroke63804753.2615.094.44806392.4602.667563.00911.3442.9159.66157299.21080130101Capalaba5501.6630.0514.8792.5346.6283.243605771.30673.4305.4116.03887176.2674721704Warrambool37749850.8697.91055.9321.2	30303	Mt Gravatt	56076	851.2	693.7	1088.1	4773	3890	6101	58580.00	845.0	317.0	1934.5	4950	1857	11332
30301Carindale38979646.8532.1825.625212074321840893.00500.8143.4103.02048586422430204Sandgate44953953.3778.11201.042853498539947054.00666.9295.3128.031381389605130203Nundah30735985.9811.91249.130302495383932401.00802.0312.21704.525981011552330202Chermside54143986.7809.21245.053424381674156801.00961.3417.11800.8546023691022930201Bald Hills - Everton Park31711570.0467.9728.518081484231033195.00549.8215.3185.236411227736830102Cleveland - Stradbroke63804753.2615.0944.44806392460266756.30911.3442.91598.6615729921080130101Capalaba55016630.0514.8792.53466283243605771.300673.4305.41169.038871762674721704Warrambol37749850.8697.9105.93212263539864062.10802.0502.3973.532582040395521703Colac - Corangamite27951726.0951.1897.4202916632505	30302	Holland Park - Yeronga	57288	1219.2	1003.0	1541.6	6985	5746	8831	60340.00	1157.0	692.4	1876.5	6981	4178	11323
30204Sandgate44953953.3778.11201.042853498539947054.00666.9295.31286.031381389605130203Nundah30735985.9811.91249.130302495383932401.00802.0312.21704.525981011552330202Chermside54143986.7809.21245.053424381674156801.00961.3417.11800.8546023691022930201Bald Hills - Everton Park31711570.0467.9728.518081484231033195.00549.8211.91083.71825703359730103Wynnum - Manly51520752.7616.9950.438783179489754454.00668.6225.31353.236411227736830102Cleveland - Stradbroke63804753.2615.0944.448063924602667563.00911.3442.91598.6615729921080130101Capalaba55016630.0514.8792.53466283243605771.300673.4305.41169.038771762674721704Warnambool37749850.8697.91055.932122635396640621.00802.0502.3973.532582040395221703Colac - Corangamite27951726.0595.1897.420291663<	30301	Carindale	38979	646.8	532.1	825.6	2521	2074	3218	40893.00	500.8	143.4	1033.0	2048	586	4224
30203Nundah30735985.9811.91249.130302495383932401.00802.0312.21704.525981011552330202Chermside54143986.7809.21245.053424381674156801.00961.3417.11800.8546023691022930201Bald Hills - Everton Park31711570.0467.9728.518081484231033195.00549.8211.91083.71825703359730103Wynnum - Manly51520752.7616.9950.438783179489754454.00668.6225.31353.236411227736830102Cleveland - Stradbroke63804753.2615.0944.448063924602.667563.00911.3442.91598.6615729921080130101Capalaba55016630.0514.8792.534662832436057713.00673.4305.41169.038871762674721704Warrambool37749850.8697.91055.932122635398640621.00802.0502.3973.532582040395921703Colac - Corangamite27951726.0595.1897.42029166325083040.00805.528.4196.62918659821701Glenelg - Southern Grampians27203745.3609.8920.92027<	30204	Sandgate	44953	953.3	778.1	1201.0	4285	3498	5399	47054.00	666.9	295.3	1286.0	3138	1389	6051
30202Chermside54143986.7809.21245.053424381674156801.00961.3417.11800.8546023691022930201Bald Hills - Everton Park31711570.0467.9728.518081484231033195.00549.8211.91083.71825703359730103Wynnum - Manly51520752.7616.9950.438783179489754454.00668.6225.31353.236411227736830102Cleveland - Stradbroke63804753.2615.0944.448063924602667563.00911.3442.91598.6615729921080130101Capalaba55016630.0514.8792.534662832436057713.00673.4305.41169.038871762674721704Warrnambool37749850.8697.91055.932122635398640621.00802.0502.3973.532582040395521703Colac - Corangamite27951726.0595.1897.420291663250830400.0095.6284196.62918659821701Glenelg - Southern Grampians27203745.3609.8920.920271659250529626.001461.6917.72292.643302719679221603Shepparton47714930.7757.01158.74	30203	Nundah	30735	985.9	811.9	1249.1	3030	2495	3839	32401.00	802.0	312.2	1704.5	2598	1011	5523
30201Bald Hills - Everton Park31711570.0467.9728.518081484231033195.00549.8211.91083.71825703359730103Wynum - Manly51520752.7616.9950.438783179489754454.00668.6225.31353.236411227736830102Cleveland - Stradbroke63804753.2615.0944.448063924602667563.00911.3442.91598.6615729921080130101Capalaba55016630.0514.8792.534662832436057713.00673.4305.41169.038871762674721704Warrnambool37749850.8697.91055.932122635398640621.00802.0502.3973.532582040395521703Colac - Corangamite27951726.0595.1897.420291663250830400.0095.6284196.62918659821701Glenelg - Southern Grampians27203745.3609.8920.920271659250529626.001461.6917.72292.643302719679221603Shepparton47714930.7757.01158.744413612552850999.001357.5704.52004.5692335931022321602Moira21959764.7625.7946.11679 </td <td>30202</td> <td>Chermside</td> <td>54143</td> <td>986.7</td> <td>809.2</td> <td>1245.0</td> <td>5342</td> <td>4381</td> <td>6741</td> <td>56801.00</td> <td>961.3</td> <td>417.1</td> <td>1800.8</td> <td>5460</td> <td>2369</td> <td>10229</td>	30202	Chermside	54143	986.7	809.2	1245.0	5342	4381	6741	56801.00	961.3	417.1	1800.8	5460	2369	10229
30103Wynnum - Manly51520752.7616.9950.438783179489754454.00668.6225.31353.236411227736830102Cleveland - Stradbroke63804753.2615.0944.448063924602667563.00911.3442.91598.6615729921080130101Capalaba55016630.0514.8792.534662832436057713.00673.4305.41169.038871762674721704Warnambool37749850.8697.91055.932122635398640621.00802.0502.3973.532582040395521703Colac - Corangamite27951726.0595.1897.420291663250830400.0095.628.4196.62918659821701Glenelg - Southern Grampians27203745.3609.8920.920271659250529626.001461.6917.72292.643302719679221603Shepparton47714930.7757.01158.74441361255285099.001357.5704.52004.5692335931022321602Moira21959764.7625.7946.116791374207823970.001033.2289.02098.52620693503021601Campaspe28305754.2615.8935.021351743	30201	Bald Hills - Everton Park	31711	570.0	467.9	728.5	1808	1484	2310	33195.00	549.8	211.9	1083.7	1825	703	3597
30102Cleveland - Stradbroke63804753.2615.0944.448063924602667563.00911.3442.91598.6615729921080130101Capalaba55016630.0514.8792.534662832436057713.00673.4305.41169.038871762674721704Warnambool37749850.8697.91055.932122635398640621.00802.0502.3973.532582040395521703Colac - Corangamite27951726.0595.1897.420291663250830400.0095.628.4196.62918659821701Glenelg - Southern Grampians27203745.3609.8920.920271659250529626.001461.6917.72292.643302719679221603Shepparton47714930.7757.01158.74441361255285099.001357.5704.52004.5692335931022321602Moira21959764.7625.7946.116791374207823970.001033.2289.02098.52620693503021601Campaspe28305754.2615.8935.021351743264630565.001307.0730.42355.339952232719921604Moira210.0210.0210.0210.0210.0210.021	30103	Wynnum - Manly	51520	752.7	616.9	950.4	3878	3179	4897	54454.00	668.6	225.3	1353.2	3641	1227	7368
30101Capalaba55016630.0514.8792.534662832436057713.00673.4305.41169.038871762674721704Warrnambool37749850.8697.91055.932122635398640621.00802.0502.3973.532582040395521703Colac - Corangamite27951726.0595.1897.420291663250830400.0095.628.4196.62918659821701Glenelg - Southern Grampians27203745.3609.8920.920271659250529626.001461.6917.72292.643302719679221603Shepparton47714930.7757.01158.744413612552850999.001357.5704.52004.5692335931022321602Moira21959764.7625.7946.116791374207823970.001093.2289.02098.52620693503021601Campaspe28305754.2615.8935.021351743264630565.001307.0730.42355.3399522327199	30102	Cleveland - Stradbroke	63804	753.2	615.0	944.4	4806	3924	6026	67563.00	911.3	442.9	1598.6	6157	2992	10801
21704Warnambool37749850.8697.91055.932122635398640621.00802.0502.3973.532582040395521703Colac - Corangamite27951726.0595.1897.420291663250830400.0095.628.4196.62918659821701Glenelg - Southern Grampians27203745.3609.8920.920271659250529626.001461.6917.72292.643302719679221603Shepparton47714930.7757.01158.744413612552850999.001357.5704.52004.5692335931022321602Moira21959764.7625.7946.116791374207823970.001093.2289.02098.52620693503021601Campaspe28305754.2615.8935.021351743264630565.001307.0730.42355.3399522327199	30101	Capalaba	55016	630.0	514.8	792.5	3466	2832	4360	57713.00	673.4	305.4	1169.0	3887	1762	6747
21703Colac · Corangamite27951726.0595.1897.42029166325083040.0095.628.4196.62918659821701Glenelg · Southern Grampians27203745.3609.8920.920271659250529626.001461.6917.72292.643302719679221603Shepparton47714930.7757.01158.744413612552850999.001357.5704.52004.5692335931022321602Moira21959764.7625.7946.116791374207823970.001093.2289.02098.52620693503021604Campaspe28305754.2615.8935.021351743264630565.001307.07042355.3399522327199	21704	Warrnambool	37749	850.8	697.9	1055.9	3212	2635	3986	40621.00	802.0	502.3	973.5	3258	2040	3955
21701 Glenelg - Southern Grampians 27203 745.3 609.8 920.9 2027 1659 2505 29626.00 1461.6 917.7 2292.6 4330 2719 6792 21603 Shepparton 47714 930.7 757.0 1158.7 4441 3612 5528 50999.00 1357.5 704.5 2004.5 6923 3593 10223 21602 Moira 21959 764.7 625.7 946.1 1679 1374 2078 23970.00 1093.2 289.0 2098.5 2620 693 5030 21602 Moira 21959 764.7 625.7 946.1 1679 1374 2078 23970.00 1093.2 289.0 2098.5 2620 693 5030 21602 Moira 21959 764.7 625.7 946.1 1679 1374 2078 23970.00 1093.2 289.0 2098.5 2620 693 5030 21602 Campaspe 28305 754.2 615.8 935.0 2135 1743 2646 305650.0 1307.	21703	Colac - Corangamite	27951	726.0	595.1	897.4	2029	1663	2508	30400.00	95.6	28.4	196.6	291	86	598
21603 Sheparton 47714 930.7 757.0 1158.7 4441 3612 5528 50999.00 1357.5 704.5 2004.5 6923 3593 10223 21602 Moira 21959 764.7 625.7 946.1 1679 1374 2078 23970.00 1093.2 289.0 2098.5 2620 693 5030 21602 Moira 28305 754.2 615.8 935.0 2135 1743 2646 30565.00 1307.0 734 2355.3 3995 2232 7199	21701	Glenelg - Southern Grampians	27203	745.3	609.8	920.9	2027	1659	2505	29626.00	1461.6	917.7	2292.6	4330	2719	6792
21602 Moira 21959 764.7 625.7 946.1 1679 1374 2078 23970.00 1093.2 289.0 2098.5 2620 693 5030 21602 Campaspe 28305 754.2 615.8 935.0 2135 1743 2646 30565.00 1307.0 730.4 2355.3 3995 2232 7199	21603	Shepparton	47714	930.7	757.0	1158.7	4441	3612	5528	50999.00	1357.5	704.5	2004.5	6923	3593	10223
21601 Campaspe 28305 754.2 615.8 935.0 2135 1743 2646 30565.00 1307.0 730.4 2355.3 3995 2232 7199	21602	Moira	21959	764.7	625.7	946.1	1679	1374	2078	23970.00	1093.2	289.0	2098.5	2620	693	5030
	21601	Campaspe	28305	754.2	615.8	935.0	2135	1743	2646	30565.00	1307.0	730.4	2355.3	3995	2232	7199
21503 Murray River - Swan Hill 28568 /69.0 627.2 954.5 2197 1792 2727 30726.00 1791.7 1016.3 2485.3 5505 3123 7636	21503	Murray River - Swan Hill	28568	769.0	627.2	954.5	2197	1792	2727	30726.00	1791.7	1016.3	2485.3	5505	3123	7636
21502 Mildura 40835 1034.5 842.2 1280.7 4224 3439 5230 43652.00 1281.1 938.7 1712.3 5592 4098 7474	21502	Mildura	40835	1034.5	842.2	1280.7	4224	3439	5230	43652.00	1281.1	938.7	1712.3	5592	4098	7474
21501 Grampians 45358 738.0 603.7 910.9 3348 2738 4132 44992.00 2469.9 1559.0 320.3 1210. 7638 15777	21501	Grampians	45358	738.0	60.3 7	910.9	3348	2738	4132	48992.00	2469.9	1559.0	3220 3	12100	7638	15777
2402 Mornington Peninsula 118519 627.2 514.3 782.5 7434 6096 9274 128160.00 987.2 514.6 17533 1265 6504 22471	21402	Mornington Peninsula	118519	627.2	514 3	782.5	7434	6096	9274	128160.00	987.2	514.6	1753 3	12652	6594	22471
1401 Frankston 10043 863.8 70.8 1007.7 8889 7369 11215 100108.00 1188.8 605.1 1886.4 130.7 66.2 205.8	21401	Frankston	104063	863.8	708 1	1077 7	8989	7369	11215	109108.00	1198.8	605.1	1886.4	13079	6602	20582
21305 Wyndham 161854 725.5 592.2 929.0 11742 9585 15036 167283.00 718.6 359.1 1367.3 12022 6007 22872	21305	Wyndham	161854	725.5	592.2	929.0	11742	9585	15036	167283.00	718.6	359.1	1367.3	12022	6007	22872

				Un	it-level SAES						Ar	ea-level SAEs			
				Unit-	Unit-		Unit-	Unit-							
				level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
SA3_		Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
CODE_2016	SA3_INAME_2016	totalpopulation		LowerCi	UpperCi	number	LowerCi	UpperCi	totalpopulation	FH_RATE	LowerCI	UpperCi	FH_number	LowerCi	UpperCi
21304	Melton - Bacchus Marsh	112403	592.7	483.2	747.1	6662	5431	8398	116248.00	539.6	160.4	1178.5	62/3	1865	13700
21303	Maribyrnong	66358	1187.2	974.1	1504.2	7878	6464	9981	69094.00	904.3	444.4	1425.8	6248	30/1	9851
21302	Hobsons Bay	65654	679.1	558.6	859.3	4458	3667	5642	68460.00	1056.6	447.1	1868.7	/233	3061	12/93
21301	Brimbank	146370	779.5	633.7	992.9	11410	9275	14533	151388.00	487.5	264.1	810.3	/381	3999	12267
21205	Monash	142051	769.9	628.7	988.3	10936	8930	14039	147480.00	957.8	475.3	1631.7	14126	7009	24064
21204	Dandenong	148701	950.9	773.8	1212.6	14140	11506	18032	153682.00	1177.4	495.7	2119.4	18095	7618	32571
21203	Casey - South	122963	530.2	432.1	676.3	6520	5314	8316	127070.00	1027.9	578.4	1799.7	13061	7350	22869
21202	Casey - North	100749	597.4	486.7	760.0	6019	4904	7657	104395.00	598.4	208.6	1186.5	6247	2178	12387
21201	Cardinia	69243	600.9	492.3	758.6	4161	3409	5253	72534.00	532.9	208.2	1023.4	3866	1510	7423
21105	Yarra Ranges	114049	411.0	336.6	515.9	4688	3839	5883	120454.00	603.7	195.6	1210.2	7272	2356	14578
21104	Whitehorse - East	47794	578.3	475.9	734.6	2764	2274	3511	49821.00	799.9	230.7	1422.0	3985	1149	7085
21103	Maroondah	85505	629.5	517.3	793.6	5383	4423	6786	89430.00	348.0	118.8	733.1	3112	1062	6556
21102	Manningham - East	20211	226.4	186.8	288.3	458	378	583	21290.00	300.0	47.2	722.5	639	100	1538
21101	Knox	121987	509.2	417.8	643.8	6212	5096	7854	127094.00	497.4	208.5	891.1	6321	2651	11326
21005	Tullamarine - Broadmeadows	120027	783.9	633.8	996.0	9409	7607	11955	123769.00	1034.2	335.3	1777.3	12801	4150	21997
21004	Sunbury	30247	535.5	439.0	673.3	1620	1328	2037	31608.00	849.6	405.6	1389.1	2685	1282	4391
21003	Moreland - North	59381	832.6	681.4	1061.4	4944	4046	6303	61452.00	992.4	359.9	1878.9	6098	2212	11546
21002	Macedon Ranges	21883	302.8	248.8	382.1	663	544	836	23256.00	409.8	119.5	730.0	953	278	1698
21001	Keilor	46459	438.8	361.0	557.9	2039	1677	2592	48513.00	217.7	92.8	499.5	1056	450	2423
20904	Whittlesea - Wallan	162260	645.2	525.9	821.7	10468	8533	13333	167699.00	682.1	254.2	1228.8	11438	4262	20607
20903	Nillumbik - Kinglake	49697	206.9	170.3	261.9	1028	846	1302	52274.00	468.5	167.7	965.1	2449	877	5045
20902	Darebin - North	76596	1064.3	870.3	1344.1	8152	6666	10295	79663.00	1323.5	634.2	2121.0	10543	5052	16896
20901	Banyule	95327	642.4	527.6	809.3	6124	5030	7714	99847.00	958.8	445.9	1650.7	9574	4452	16482
20804	Stonnington - East	32687	750.0	617.4	961.0	2452	2018	3141	34290.00	460.7	171.9	1018.4	1580	589	3492
20803	Kingston	91100	623.1	514.6	782.8	5676	4688	7132	95525.00	621.8	152.5	1369.2	5940	1457	13079
20802	Glen Eira	116413	786.9	649.0	1003.3	9161	7556	11680	121354.00	755.7	226.7	1387.5	9171	2751	16838
20801	Bayside	74513	471.1	390.5	595.8	3510	2910	4439	78680.00	463.7	125.9	879.0	3648	991	6916
20703	Whitehorse - West	82140	859.7	702.0	1097.6	7062	5766	9016	85601.00	1241.6	476.6	2127.0	10629	4079	18207
20702	Manningham - West	73432	488.5	401.1	628.1	3587	2945	4612	76315.00	852.4	171.8	1576.0	6505	1311	12027
20701	Boroondara	131937	614.4	507.8	787.9	8107	6700	10395	138435.00	823.7	396.2	1396.5	11402	5485	19333
20607	Yarra	73403	1251.8	1034.1	1590.9	9189	7590	11678	77661.00	1240.5	573.1	2299.6	9634	4451	17859
20606	Stonnington - West	53285	1138.5	945.4	1450.1	6066	5038	7727	56678.00	1099.2	386.4	1845.9	6230	2190	10462
20605	Port Phillip	84267	1144.7	951.9	1447.6	9646	8021	12199	89081.00	989.2	613.0	1609.4	8812	5461	14337
20604	Melbourne City	122014	1634.2	1331.4	2101.2	19939	16245	25637	127239.00	1576.4	703.6	2542.9	20059	8953	32355
20603	Essendon	53205	1007.9	831.0	1270.9	5363	4421	6762	55665.00	766.3	244.2	1456.4	4266	1359	8107
20602	Darebin - South	41605	976.8	806.3	1237.4	4064	3354	5148	43635.00	1058.9	390.0	2412.9	4620	1702	10529
20601	Brunswick - Coburg	71019	1070.8	880.8	1366.5	7605	6255	9705	74336.00	1101.0	427.7	1824.5	8185	3179	13563
20505	Wellington	32509	735.2	602.2	908.9	2390	1958	2955	35261.00	1934.8	1153.5	2759.0	6822	4067	9729

				Un	it-level SAES						Ar	ea-level SAEs			
				Unit-	Unit-		Unit-	Unit-							
				level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
SA3_	SAD NAME 2016	Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
CODE_2016	SAS_NAME_2016	totalpopulation		LowerCi	UpperCi	number	LowerCi	OpperCi	colarpopulation	1051.0	LowerCi	opperCi		LOWERCI	UpperCi
20504	Cippeland South West	55669	935.7	703.1	045.2	3229	4205	6436	59864.00	1351.3	914.5	1614.0	4415	1602	13112
20503	Gippsland - South West	46700	765.0	020.9 CEE C	945.5	0771	2927	4415	38002.00	1260 5	530.7	1014.0	4415	1092	0450
20502	Gippsiand - East	26720	604.7	6000.0 507.0	700.0	2771	1036	3424	38002.00	1209.5	565.5	2224.1	4824	2225	7074
20501	Daw Daw	50/29	643.7	327.2	1072.4	2304	1936	2935	59339.00	1244.0	504.4	2001.0	4890	2299	11050
20403	Wengerette Benelle	52414	863.0	700.7	1072.4	4324	3704	3510	38155.00	1199.5	142.6	1760.6	0632	5020	6705
20402	Wangaratta - Denalia	41184	606.6	520.1	993.9	2803	2345	3319	38155.00	1005.4	143.0	2106.0	2497	2020	0/25
20401	Opper Goulburn valley	41184	657.7	539.1	817.2	2709	2220	3366	44657.00	1095.4	456.5	2106.8	4892	2039	9408
20303	Surf Coast - Bellarine Peninsula	52816	5/4.3	472.2	720.9	3033	2494	3808	57897.00	645.1	198.5	1127.5	3/35	1149	6528
20302	Geelong	146081	930.2	761.3	1158.7	13588	11122	16927	154468.00	619.0	388.1	1069.2	9562	5995	16516
20301	Barwon - West	13932	307.0	252.1	385.7	428	351	537	14778.00	341.6	63.9	863.2	505	94	1276
20203	Loddon - Elmore	8806	467.1	381.7	580.6	411	336	511	9466.00	1798.6	1096.8	2642.6	1703	1038	2501
20202	Heathcote - Castlemaine - Kyneton	36616	483.6	396.6	599.2	1771	1452	2194	39069.00	900.3	451.2	1362.3	3517	1763	5322
20201	Bendigo	71597	1043.3	851.8	1295.1	7470	6099	9272	76248.00	2110.7	1206.9	2903.9	16093	9202	22141
20103	Maryborough - Pyrenees	19941	640.0	522.4	786.2	1276	1042	1568	21251.00	1520.9	1036.8	2205.6	3232	2203	4687
20102	Creswick - Daylesford - Ballan	21796	464.7	381.3	574.0	1013	831	1251	23424.00	935.6	514.1	1645.0	2191	1204	3853
20101	Ballarat	78510	1055.6	863.7	1306.7	8288	6781	10259	83857.00	1169.5	760.2	1689.6	9807	6375	14168
12802	Sutherland - Menai - Heathcote	83054	351.7	289.9	444.9	2921	2408	3695	86301.00	312.8	98.0	755.5	2699	846	6520
12801	Cronulla - Miranda - Caringbah	85960	529.0	437.5	670.6	4547	3761	5764	90052.00	607.9	247.7	1203.2	5475	2230	10835
12703	Liverpool	88361	940.5	763.3	1188.1	8311	6745	10498	91094.00	1341.3	673.5	2179.4	12218	6135	19853
12702	Fairfield	146092	1097.2	882.3	1390.2	16029	12890	20309	150689.00	1812.2	1135.6	2772.4	27308	17112	41777
12701	Bringelly - Green Valley	76457	727.3	585.6	926.0	5561	4477	7080	78800.00	656.4	255.6	1523.8	5173	2014	12007
12602	Ryde - Hunters Hill	108433	808.1	666.2	1029.1	8762	7224	11159	112295.00	1109.7	304.8	2094.7	12462	3423	23523
12601	Pennant Hills - Epping	37613	487.7	401.5	632.4	1834	1510	2379	38919.00	546.6	123.0	1199.7	2127	479	4669
12504	Parramatta	110240	1013.4	833.6	1298.3	11172	9189	14313	113536.00	800.8	441.1	1112.2	9092	5008	12627
12503	Merrylands - Guildford	114769	1085.1	878.9	1374.2	12454	10087	15772	118534.00	1503.1	669.2	2386.9	17817	7932	28293
12502	Carlingford	52057	805.9	659.3	1019.6	4195	3432	5308	53856.00	1047.3	486.4	1914.7	5641	2620	10312
12501	Auburn	71856	1092.6	888.7	1415.0	7851	6386	10168	74016.00	1417.4	886.1	2055.2	10491	6558	15211
12405	St Marys	41332	823.3	667.8	1042.6	3403	2760	4309	42869.00	804.0	363.9	1362.6	3447	1560	5841
12404	Richmond - Windsor	28457	865.5	705.9	1086.4	2463	2009	3091	29628.00	1574.7	720.5	2771.0	4666	2135	8210
12403	Penrith	105636	733.8	598.4	926.5	7751	6321	9787	109650.00	1015.8	480.3	1933.8	11139	5266	21204
12401	Blue Mountains	59253	547.1	447.1	683.0	3242	2649	4047	62660.00	296.3	119.2	525.1	1857	747	3290
12303	Wollondilly	30745	412.4	336.0	521.7	1268	1033	1604	32182.00	340.6	105.2	752.5	1096	338	2422
12302	Campbelltown (NSW)	120009	953.0	771.1	1200.3	11436	9254	14404	124384.00	1610.4	879.1	2520.9	20031	10935	31357
12301	Camden	45862	439.7	358.8	563.0	2017	1645	2582	47524.00	25.7	0.8	84.8	122	4	403
12203	Warringah	115292	516.1	428.3	659.2	5951	4938	7600	120331.00	558.5	247.1	1080.2	6721	2974	12998
12202	Pittwater	45813	335.3	277.9	431.9	1536	1273	1979	48686.00	384.9	99.7	926.6	1874	486	4511
12201	Manly	32313	549.6	460.2	712.3	1776	1487	2302	34024.00	263.8	46.3	551.9	898	158	1878
12104	North Sydney - Mosman	76589	717.1	601.9	926.9	5492	4610	7099	80745.00	663.2	226.0	1430.2	5355	1825	11548

				Un	it-level SAES						Ar	ea-level SAEs			
				Unit-	Unit-		Unit-	Unit-							
				level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
SA3_		Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
10102	SAS_NAME_2016			LowerCi	opperCi	number	LowerCi	OpperCi		201 7	LowerCi			LOwerCI	
12103	Ku-ring-gai	90693	301.6	249.9	392.9	2736	2267	3564	94429.00	321.7	53.5	1264.2	3038	1062	7042
12102	Hornsby	61/60	547.9	452.7	698.7	3384	2796	4315	64157.00	/20.4	165.7	1364.3	4622	1063	8/53
12101	Chatswood - Lane Cove	87461	648.7	539.1	838.9	5674	4715	/33/	91068.00	470.0	157.2	965.1	4280	1431	8/89
12003	Strathfield - Burwood - Ashfield	125532	963.5	/90.9	1240.5	12095	9929	15572	130015.00	965.8	421.6	1675.7	12557	5481	21/8/
12002	Leichnardt	43432	745.1	620.1	947.0	3236	2693	4113	45808.00	609.0	153.3	1284.0	2790	702	5882
12001	Canada Bay	68377	686.6	567.6	884.9	4695	3881	6050	/12/0.00	497.4	110.4	965.6	3545	/86	6882
11904	Kogarah - Rockdale	111965	850.5	697.3	1095.1	9522	7807	12262	115516.00	/81.4	289.0	1716.4	9026	3339	19827
11903	Hurstville	102796	851.9	695.8	1085.4	8757	7152	11157	106030.00	948.7	582.9	1444.5	10059	6180	15316
11902	Canterbury	104969	1092.8	890.5	1394.7	11471	9347	14640	108032.00	610.2	407.4	979.4	6592	4401	10581
11901	Bankstown	130524	960.3	779.1	1210.0	12535	10169	15793	134745.00	1110.9	705.0	1749.7	14969	9500	23577
11802	Eastern Suburbs - South	115003	1024.2	840.5	1308.0	11779	9666	15042	119685.00	1458.8	689.6	2347.9	17460	8253	28100
11801	Eastern Suburbs - North	101384	719.4	599.8	930.3	7293	6081	9432	106580.00	664.7	345.0	1105.7	7084	3676	11784
11703	Sydney Inner City	190312	1330.2	1092.7	1706.1	25315	20796	32470	199577.00	1223.6	512.1	1881.2	24421	10221	37544
11702	Marrickville - Sydenham - Petersham	44901	936.9	771.3	1201.6	4207	3463	5395	46958.00	880.4	452.1	1715.6	4134	2123	8056
11701	Botany	37425	1029.6	845.2	1308.9	3853	3163	4898	38781.00	1265.1	508.2	2365.3	4906	1971	9173
11603	Mount Druitt	82501	1138.7	914.9	1440.6	9395	7548	11885	85036.00	2023.0	1175.7	2769.6	17203	9997	23551
11602	Blacktown - North	68221	452.1	369.0	588.9	3085	2517	4017	70000.00	333.4	64.6	1181.5	2334	452	8270
11601	Blacktown	104046	887.1	721.1	1125.6	9230	7503	11712	107287.00	813.3	365.4	1379.3	8726	3921	14798
11504	Rouse Hill - McGraths Hill	24204	287.0	235.7	377.0	695	571	912	25062.00	67.4	0.0	300.8	169	0	754
11503	Hawkesbury	18791	259.6	212.5	329.0	488	399	618	19728.00	279.0	38.3	924.4	550	76	1824
11502	Dural - Wisemans Ferry	20371	290.4	238.1	372.9	592	485	760	21274.00	332.3	80.5	749.1	707	171	1594
11501	Baulkham Hills	111204	341.6	280.8	442.4	3799	3123	4919	114755.00	115.2	8.1	327.6	1322	93	3759
11402	Southern Highlands	37041	554.3	453.9	695.1	2053	1681	2575	39471.00	407.4	88.6	1021.6	1608	350	4032
11401	Shoalhaven	76919	870.8	707.5	1079.7	6698	5442	8305	83207.00	1640.7	922.1	2415.7	13652	7672	20100
11303	Wagga Wagga	69711	912.5	743.8	1134.5	6361	5185	7908	74810.00	1168.1	597.0	1783.7	8738	4466	13344
11302	Tumut - Tumbarumba	10901	762.2	623.1	942.4	831	679	1027	11835.00	1365.4	1239.6	1495.1	1616	1467	1769
11301	Griffith - Murrumbidgee (West)	35760	858.7	698.9	1075.4	3071	2499	3845	38210.00	503.9	330.8	651.3	1925	1264	2489
11203	Tweed Valley	71750	897.3	729.7	1119.3	6438	5236	8031	76058.00	686.9	275.8	1175.4	5224	2098	8940
11202	Richmond Valley - Hinterland	54025	1015.5	823.6	1253.9	5486	4450	6774	57190.00	1778.0	1043.6	2782.3	10169	5968	15912
11201	Richmond Valley - Coastal	61097	934.4	763.5	1165.4	5709	4665	7120	65267.00	1469.7	705.9	2457.4	9592	4607	16038
11103	Newcastle	128143	1086.4	887.1	1356.3	13921	11368	17380	136131.00	736.5	322.6	1333.5	10026	4391	18153
11102	Lake Macquarie - West	57854	760.8	616.8	949.0	4402	3569	5490	61526.00	677.6	230.5	1402.9	4169	1418	8631
11101	Lake Macquarie - East	92549	763.9	622.6	949.2	7070	5762	8784	98048.00	319.1	78.0	667.1	3128	764	6541
11004	Tamworth - Gunnedah	60067	979.1	791.0	1218.6	5881	4751	7320	64215.00	1741.3	923.2	2515.4	11182	5928	16153
11003	Moree - Narrabri	18565	1172.0	933.5	1462.0	2176	1733	2714	20053.00	2616.8	1422.7	4245.4	5247	2853	8513
11002	Inverell - Tenterfield	29078	976.4	789.3	1205.4	2839	2295	3505	31299.00	1682.7	1047.9	2649.6	5267	3280	8293
11001	Armidale	27918	1055.1	855.2	1314.8	2946	2388	3671	30331.00	2154.9	1272.8	3065.7	6536	3861	9299
10903	Upper Murray exc. Albury	31833	748.7	612.5	929.2	2383	1950	2958	34725.00	898.8	297.0	1658.8	3121	1031	5760

				Un	it-level SAES						Ar	ea-level SAEs			
				Unit-	Unit-		Unit-	Unit-							
				level_probit_	level_probit_	Unit-	level_probit_	level_probit_			Area-level_	Area-level_		Area-level_	Area-level_
SA3_		Unit-level_Probit_	Unit-level_	RATE_	RATE_	level_probit_	number_	number_	Area-level_FH_	Area-level_	FH_RATE_	FH_RATE_	Area-level_	FH_number_	FH_number_
CODE_2016	SA3_NAME_2016	totalpopulation	probit_RATE	LowerCl	UpperCl	number	LowerCl	UpperCl	totalpopulation	FH_RATE	LowerCl	UpperCl	FH_number	LowerCl	UpperCl
10902	Lower Murray	9348	848.7	686.3	1053.1	793	642	984	10187.00	1535.8	943.1	2213.0	1564	961	2254
10901	Albury	45948	1036.7	847.5	1283.3	4764	3894	5897	49457.00	816.6	345.0	1774.2	4038	1706	8775
10805	Taree - Gloucester	41902	1033.8	835.5	1274.4	4332	3501	5340	44886.00	1608.7	953.6	2225.6	7221	4281	9990
10804	Port Macquarie	61226	926.2	754.5	1150.0	5671	4620	7041	65460.00	1167.1	612.6	1917.9	7640	4010	12554
10802	Kempsey - Nambucca	37509	1015.8	816.2	1252.4	3810	3062	4698	39985.00	2244.5	1548.7	2974.4	8975	6193	11893
10801	Great Lakes	24870	965.1	783.7	1190.7	2400	1949	2961	26846.00	1238.9	427.0	2141.1	3326	1146	5748
10704	Wollongong	100502	1020.2	833.5	1274.2	10253	8377	12806	106157.00	893.2	260.0	1465.1	9482	2760	15553
10703	Kiama - Shellharbour	68727	748.4	608.8	935.7	5143	4184	6431	72629.00	349.7	73.9	665.7	2540	537	4835
10701	Dapto - Port Kembla	58251	872.8	708.0	1084.1	5084	4124	6315	60941.00	1153.3	601.9	1691.9	7028	3668	10311
10604	Upper Hunter	22317	989.5	804.8	1234.8	2208	1796	2756	23663.00	1462.2	823.6	2225.5	3460	1949	5266
10603	Port Stephens	54721	836.9	680.3	1046.6	4580	3723	5727	58826.00	839.2	438.8	1457.9	4936	2581	8576
10602	Maitland	54878	881.9	718.3	1101.1	4840	3942	6043	57920.00	614.5	227.1	1269.2	3559	1315	7351
10601	Lower Hunter	65801	819.5	665.2	1020.0	5392	4377	6712	69736.00	921.1	584.8	1498.4	6424	4078	10449
10503	Dubbo	51277	1000.3	802.0	1243.0	5129	4112	6374	55312.00	1417.3	631.9	2133.2	7839	3495	11799
10502	Broken Hill and Far West	15324	874.4	702.1	1081.5	1340	1076	1657	16795.00	2013.6	777.5	3301.2	3382	1306	5544
10501	Bourke - Cobar - Coonamble	17400	1286.9	1015.0	1602.8	2239	1766	2789	19044.00	3338.0	2011.5	4752.1	6357	3831	9050
10402	Coffs Harbour	65874	1028.0	836.0	1277.1	6772	5507	8413	70387.00	1128.0	591.1	1659.5	7939	4161	11681
10401	Clarence Valley	39315	950.9	771.3	1171.4	3738	3032	4605	42035.00	1772.5	985.6	2768.2	7451	4143	11636
10304	Orange	42401	864.7	703.2	1078.7	3667	2982	4574	45312.00	925.6	464.4	1769.7	4194	2104	8019
10303	Lithgow - Mudgee	35446	841.7	684.1	1044.5	2983	2425	3702	37861.00	1814.6	1055.8	2772.1	6870	3997	10495
10302	Lachlan Valley	41416	901.3	729.7	1111.9	3733	3022	4605	44539.00	1684.7	1000.3	2485.9	7504	4455	11072
10301	Bathurst	35186	898.2	731.2	1117.4	3160	2573	3932	37544.00	944.3	575.5	1568.8	3545	2161	5890
10202	Wyong	121812	903.4	733.3	1129.3	11004	8932	13757	128498.00	1788.2	794.5	2563.1	22978	10209	32935
10201	Gosford	131454	795.5	649.1	995.0	10457	8532	13080	138799.00	864.4	481.4	1212.3	11997	6682	16827
10106	Young - Yass	26788	674.4	551.0	837.3	1806	1476	2243	28694.00	948.4	445.9	1565.0	2721	1279	4491
10105	Goulburn - Mulwaree	27402	832.7	679.2	1034.2	2282	1861	2834	29164.00	1209.9	599.1	1860.4	3529	1747	5426
10104	South Coast	54930	869.2	707.0	1074.6	4775	3884	5903	60036.00	1237.8	592.4	1815.9	7431	3556	10902
10103	Snowy Mountains	14827	719.9	592.3	894.4	1067	878	1326	16092.00	682.2	205.9	1218.1	1098	331	1960
10102	Queanbeyan	43414	639.9	526.1	806.3	2778	2284	3501	46099.00	745.7	140.3	1583.1	3438	647	7298



Australian Housing and Urban Research Institute

Level 12, 460 Bourke Street Melbourne VIC 3000 Australia +61 3 9660 2300 information@ahuri.edu.au ahuri.edu.au twitter.com/AHURI_Research facebook.com/AHURI.AUS

in Australian Housing and Urban Research Institute